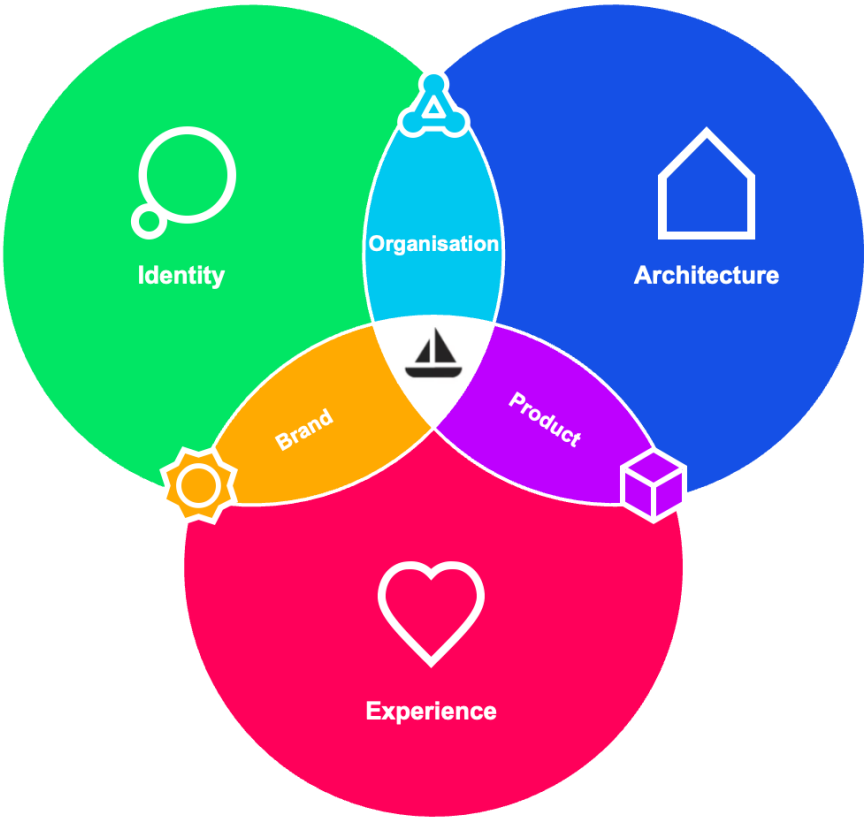
Enterprise Design with EDGY

Cookbook



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EDGY
Cookbook
Patterns & Examples

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1. Introduction

This book covers the **Enterprise Design** approach and related **EDGY (Enterprise Design Graph Interplay)** notation. The EDGY is an open-source tool designed by the **Intersection Group** [1]. This book introduces example diagrams to inspire people to use EDGY language for enterprise design purposes. The content in this document is based on material by the Intersection Group. ([1], [2], [3]) and the EDGY course ([4]). This book is updated continuously.

Blog: https://hosiaisluoma.fi/design/enterprise-design-with-edgy-cookbook/

1.1 Enterprise



Enterprise

"An enterprise is an endeavour of people with a shared ambition" [3]. An enterprise is a human-centric entity of behavior and structure, a *coherent whole* with something in common. It consists of people and assets for performing behavior for a reason. Typically, we tend to consider an enterprise as single *organisation*. However, it is often bigger than that: cooperation of several organisations in a *network*, or collaboration in an *ecosystem*.

An **enterprise** serves a clear purpose, is useful to people, and delivers on its promises. [3]

1.2 Enterprise Design

ENTERPRISE DESIGN

The Enterprise Design is a holistic, coherent, and human-centric approach for designing better enterprises. Enterprise Design utilizes the EDGY language to enable collaboration between disciplines, leverages on collaboration and encourages to co-design. [3]



The Enterprise Design approach is based three facets: 1) identity, 2) experience and 3) architecture, together with their intersections: a) organisation, b) brand and c) product. All these facets and their intersections exist in typical enterprises, no matter the size or scope. These facets and intersections form the **Facet Model**, which can be used for asking questions for designing and reframing all kinds of design challenges. The Facet Model can be used as an analysis tool to shift perspectives and reframe challenges into new ideas - from different angles.

Enterprise Design covers enterprise facets: identity, experience and architecture.

Problem space and the solution. As a holistic, coherent, human-centric and collaborative approach, the Enterprise Design tackles the following problems: isolated design disciplines, diverse methods and separated tools, different terminologies, different visualisation languages, lack of communication over practices and organisation units, different substance- and subject matter experts etc. Fortunately, the Enterprise Design approach provides shared understanding with a common language - to innovate and transform.

The Enterprise Design enables people in enterprises to collaborate, communicate and create shared designs, in all the change activities and business transformations, no matter of the scale or size of those efforts, for making better decisions - for creating better enterprises.

Enterprise Design facilitates holistic, human-centric and collaborative co-design.

1.3 EDGY - Enterprise Design Graph InterplaY

EDGY

EDGY provides an easy yet expressive language that everyone can use. EDGY offers a simple but powerful language that is accessible to all stakeholder groups within an enterprise. Visualisations with EDGY are simple and attractive, and everyone can interpret them intuitively and quickly. EDGY can be used as a common language for different professionals of diverse disciplines (such as service designers, UX- and CX-designers, product owners, business analysts, architects etc.). EDGY is a simple, colorful and appealing language. It has a limited set of concepts, which are easy to learn and easy to use. Everyone can understand EDGY right away, without a long learning curve.

EDGY provides an easy yet expressive language that everyone can use.

EDGY tool support. The EDGY language is supported by many tools such as Draw.io, Miro, QualiWare, PlantUML and more to come. The EDGY diagrams can also be modelled with the *Plain Old* PowerPoint. Free EDGY stencils are available via Enterprise Design pages: EDGY Tools.

Try free, browser-based EDGY modelling tool ED Interplay Tool Lite.

2. References

[1] Intersection Group pages, (intro, tools, learning, events etc.) https://intersection.group

[2] Enterprise design pages, https://enterprise.design/

[3] *EDGY language foundations*, book, 2023, (available as pdf), link

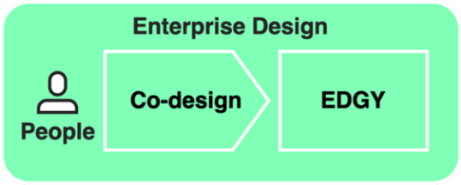
[4] EDGY 23 Language Foundations, Online course (4 weeks), Milan Guenther & Wolfgang Goebl, 2023 https://intersection.group/learning/intersection-academy/

[5] *Enterprise Design Patterns*, Intersection Group book, 2020, (available as pdf) link

[6] EDGY 23 product release, launch on 29th March 2023, webinar recording, Milan Guenther & Wolfgang Goebl, link.

EDGY is Intersection Group's Open Source tool designed to help people create better enterprises. [3]

People co-design with the EDGY for creating enterprise design for better enterprise.



Better Enterprises pursue a clear purpose, are useful for people and their lives, perform and deliver on their promises.

Disclaimer

- This book is not an “official" document of the Intersection Group.
- This book is a practitioner’s document for inspiring people to use the EDGY.
- This is a “*cookbook”* rather than a “*handbook”*, as the examples provided are more like adaptable "*recipes*," which can change based on different contexts, rather than fixed instructions that you might find in a "*handbook*".

See also these links::

- ***Enterprise Desgin blog*** (by Eero): https://hosiaisluoma.fi/design/ see what’s NEW, e.g.
  - ***Enterprise Wheel*** – a 360-degree navigator tool:
    - https://hosiaisluoma.fi/design/enterprise-wheel/
  - **EDGY Fast Track** – an easy intro:
    - https://hosiaisluoma.fi/design/edgy-fast-track/
- ***Liiketoiminnan kehittäminen -blogi*** suomeksi: https://www.hosiaisluoma.fi/blogi/ sis. mm.
  - ***Liiketoiminnan kyvykkyydet***:
    - https://www.hosiaisluoma.fi/blogi/liiketoiminnan-kyvykkyydet/

3. Enterprise Design Approach

3.1 Enterprise Design Facet Model

Enterprise Design approach is based on the Facet Model, which consists of three facets and their intersections.

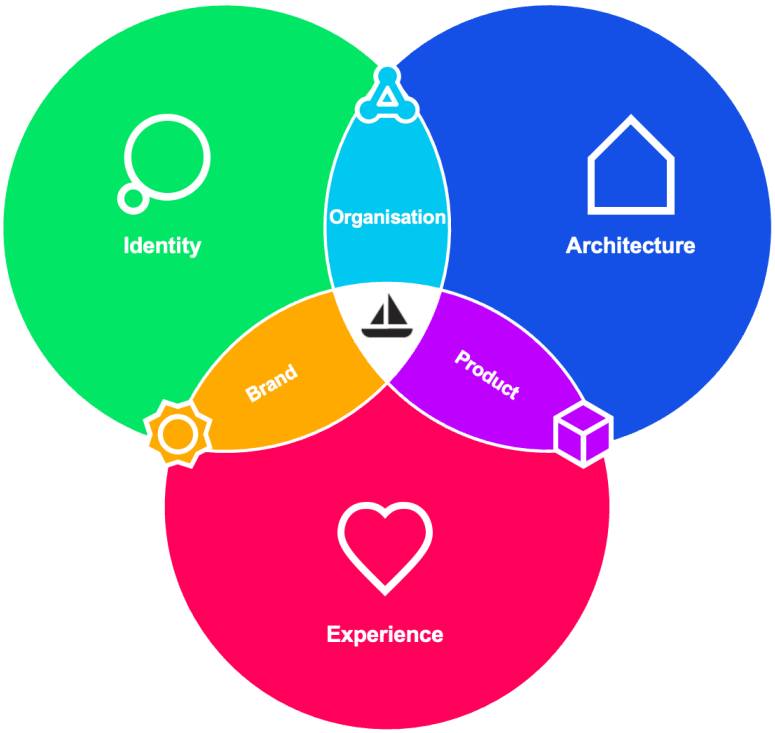


Figure 1: The Enterprise Design Facet Model.

These facets exist in all enterprises and all types of business. They are characteristics and qualities, that enterprises have by their nature, regardless of the size, whether they are intentionally designed or not. The facets represent the perspectives or viewpoints from which an enterprise can be observed holistically.

The facets are:

- **Identity** – why do we[1] and our enterprise exist, what motivates and drives us?
- **Experience** – what people[2] need, feel and want to get done with our help?
- **Architecture** – how and with what we are running our enterprise?

The intersections[3] are:

- **Organisation** – how are we organised?
- **Brand** – what is our reputation and image?
- **Product** – what do we make and offer for people's benefit?

The Facet Model scales to different levels within an enterprise [4].

---

[1] '**We** are the people', so it is all about us. We are the people who make the enterprise happen. Human-centrism is the fundamental characteristic of the Enterprise Design with EDGY.

[2] **People** refer to customers, employees, partners, owners, investors, and other stakeholder groups that are interested in or influenced by the enterprise.

[3] **Intersections** connect the facets. Intersections are shared between adjacent facets. So the suggestion is: when observing a facet, two intersections on the edges are to be observed too. The facets are interconnected via the intersections.

[4] **Scaling**. An enterprise is fractal. These same qualities, characteristics, the facets, exist and appear, not only in the enterprise itself but also in all of its parts. E.g. in an organisation unit, in a capability, or in a product-/service area etc. These same facets and their intersections can be seen in each and every design challenge, no matter of the size and scope (e.g. large business transformation program, program/project, concept etc.).

3.1.1 Facets

Facets are the perspectives which altogether cover the whole enterprise. Faces are the lenses, through which we can zoom into details. When we change the perspective from one facet to another, and then we can observe other aspects and meaningful interconnections between the elements.

3.1.1.1 Identity Facet



Identity[5] defines what is going on in and around the enterprise [3][4]. It defines what is the mission and purpose of the enterprise, what is story and goals, and beliefs and values. Identity motivates people and drives the enterprise and all its change activities. Identity defines the fundamental, crucial, reason for being.

Identity is covering existential matters and questions: why something exists, where it comes from, where it is now, and where it is going. Identity covers the past, the present and the future of the enterprise.

The values and beliefs enterprises exhibit through their messages and actions. [3]

3.1.1.2 Experience Facet



Experience defines people's tasks and journeys, and with which channels they interact with the products and/or services of the enterprise. The tasks define what people are doing: what are their needs, what are the *jobs to be done*, and what they want to achieve. Through journeys it is possible to define what are the activities, and the steps they are taking when they are achieving their tasks.

Experience is a personal view of the enterprise, which is observed from a person's perspective, focusing on the value created for people. Experience is supported by architecture, which is needed to create products and services, which are supporting people's tasks in their journeys.

The impact through interactions the enterprise has on people and their lives. [3]

3.1.1.3 Architecture Facet



Architecture[6] defines how the enterprise operates. How are all the parts working together in the enterprise and around it. With architecture, the enterprise is capable of producing outcomes. This is performed by business processes and assets they are using, those of which together form the capabilities of the enterprise.

Architecture realises the products and/or services of the enterprise. With architecture, the enterprise delivers its products and/or services on its promises.

The structures needed to make an enterprise operate and connect to the ecosystem. [3]

3.1.2 Intersections

With the intersections, the facets overlap and are interconnected. The intersections make the Facet Model complete, a coherent whole, by connecting the dots - the elements of the enterprise. With the help of the Facet Model, the enterprise can be viewed as a holistic system in which the elements are interconnected with each other, either directly or indirectly. This makes it possible to explore and analyse cause and effects, how a change in an element in one facet affects other elements in other facets via intersections.

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[5] **Identity** covers existential matters and questions related to an enterprise: why something exists in the first place, where it comes from, where it is now, and where it is going? Why we do what we do? Identity defines the purpose of an entity, whether it is an enterprise or any part of it. Identity drivers the enterprise. Identity covers the past, the present and the future of an entity. Every entity has an identity, or identification, characteristics of the purpose, and reason for being. Person, organisation, system, product etc. Identity comes to life in *culture*. The icon, the thought bubble, refers to what people are having their heads.

[6] **Architecture**, in this context, refers to business architecture - that is, how the enterprise operates: how it functions, how processes run, and how capabilities are organised. This is distinct from physical or construction architecture, which is not the focus here. However, the *house* icon symbolising architecture represents how the enterprise is structured and built. The Facet Model can be applied to various kinds of architectures, including business, information, and technology architectures.

3.1.2.1 Organisation Intersection

Organisation structure is needed so that an enterprise can perform its activities that are needed for business operations, and for realizing the products and services for serving the customers. Organisation structure defines how people are organized in units, groups or teams etc. So organisation defines how people communicate and interact with each other, and how the work and responsibilities are shared between the people.

Organisation structure defines how people are organized to perform the activities.

3.1.2.2 Product Intersection

Products and services are what the enterprise makes and provides to people. Products and/or services are the results of the work of the employees, those of which comprise the organisation of the enterprise. Products and/or services appear in people's lives, as they go on their journeys when doing their tasks. Products and/or services are realized (delivered) by the architecture. It can be said the products and/or services are the reason why the architecture is needed in the first place. Products and services are what customers can use when doing their tasks. Products and services are what an enterprise provides for people's benefit. Products and services are important because they concretize what an enterprise offers: what is the added value for customers (*customer value*) and value for business owners and investors (*business value*).

Products and services are what the enterprise makes, offers and delivers for people's benefit

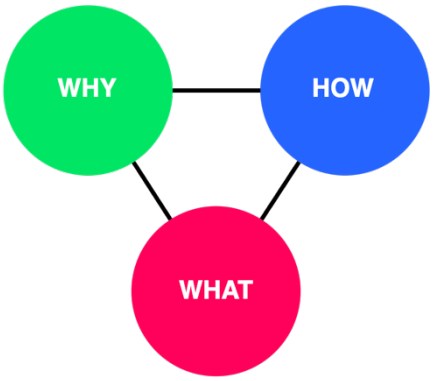
3.1.2.3 Brand Intersection

The brand represents the identity of the enterprise internally and externally in the business environment. Brand reflects the organisation's identity in the experiences of people, in and around the enterprise. Brand is an 'actor' in people's lives. It manifests the story of the enterprise and makes its identity visible. The brand is the first impression we get when we see or hear the name of the enterprise or some of its products or services. The brand is the 'face of the enterprise' or 'fingerprint' with which we can identify the enterprise.

Brand reflects the identity of an enterprise as it is perceived in people's experience.

3.2 Using the Facet Model

3.2.1 Designing the Enterprise



An enterprise is constantly changing. Everything moves, everything changes, all the time. Conditions in the business environment are continuously changing, which requires infinite intervention: change activities by managers and mandated change agents (e.g. enterprise designers).

Enterprise Design approach with the Facet Model tackles any design challenges[7] from strategic challenges to operational change challenges. This helps enterprises of all sizes to innovate and transform. The Facet Model can be used as an analysis tool in any kind of design challenges, problems to be solved, business transformations of any kind, size and scope etc.

The Facet Model can be used for asking fundamental questions: ***why*** does the enterprise exist, ***what*** is its role in people's lives and ***how*** it is working?

The facets can be used as 'lenses', through which people can get into any design challenge.

[7] A **design challenge** represents a need for change (change demand) that can be initiated or triggered by any event or change in the enterprise's environment. It may involve solving a problem or pursuing a desire to make things better. A design challenge can encompass any aspect of the enterprise, including new business ideas or innovations, or addressing problematic issues (e.g., complexity or inefficiency in business operations). The Facet Model can be used to reframe the challenge and explore it from different perspectives, helping enterprise designers find better solutions. A design challenge can trigger various activities, such as a change initiative, concept design, innovation planning, or a business transformation of any size and scope.

3.2.2 Asking Questions, Considering and Thinking Differently

The Facet Model can be used to ask questions from different perspectives and take a holistic approach when co-designing solutions.

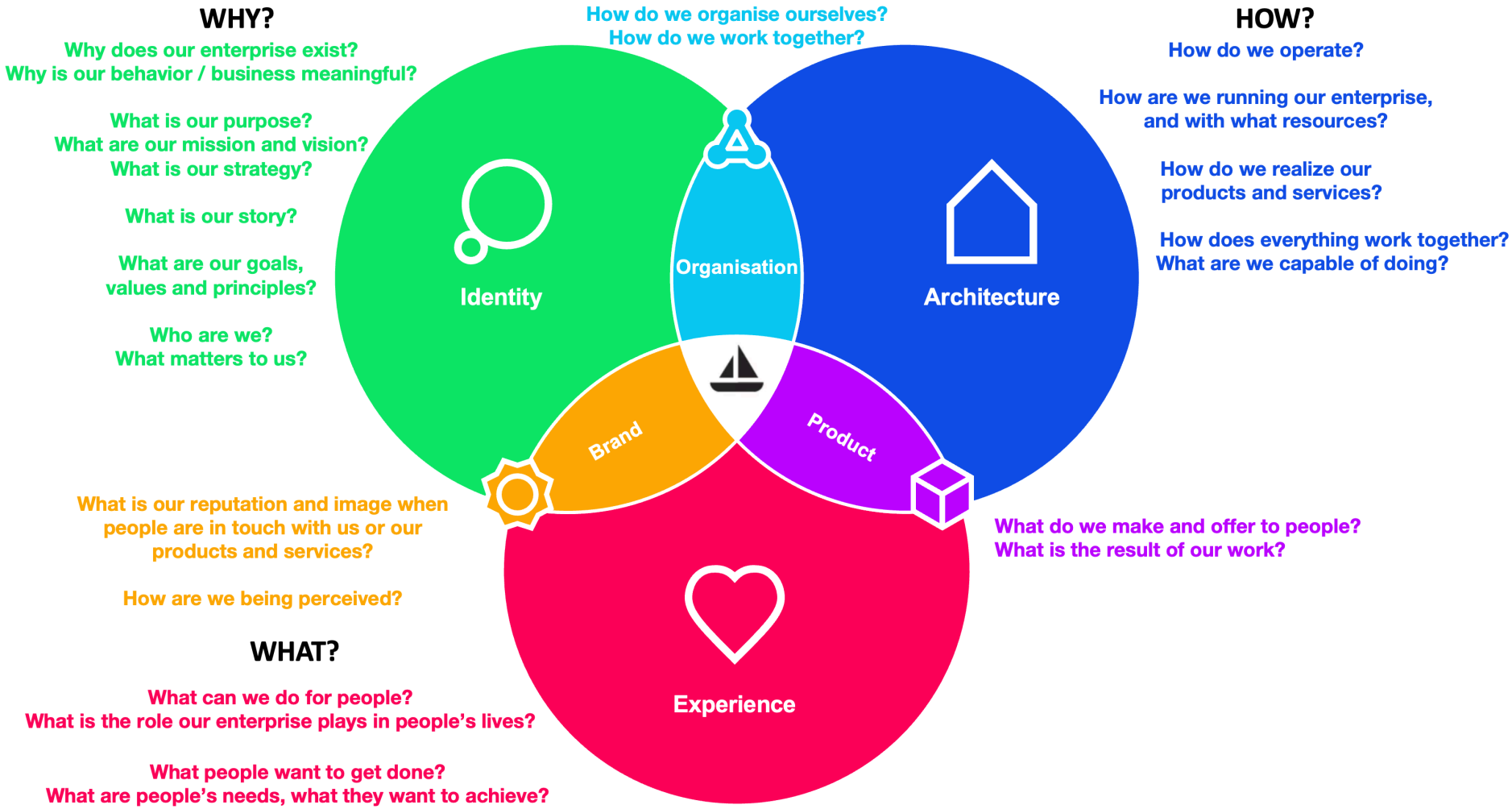


Figure 2: The Facet Model helps designers ask questions from different perspectives.

3.2.3 Holistic Approach

Reframing design challenges by perspective switching. *Reframing* means changing the perspectives, thinking differently and holistically to clarify what needs to be done and why. The Facet Model can be used for reframing, thinking differently from different perspectives. The perspectives refer to facets Identity, Experience and Architecture.

The Facet Model can be used for asking questions from different perspectives to analysing and finding alternative designs & solutions for creating better outcomes. The facets answer to questions of *why*, *what* and *how* things are happening in and around the enterprise.

Any of these perspectives can be taken as a starting point, depending on the context of the initial design challenge. A challenge is what has been given to be designed.

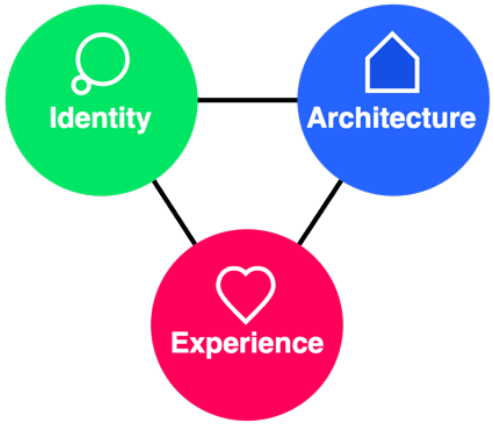


Figure 3: Facets as perspectives.

Design Challenge is a certain matter or issue to be resolved. It can be anything from the strategic level to the operational level. For example, to "design a new *digital-first* strategy based on a vision", or "define strategic goals and course of actions for business transformation", or "plan product portfolio roadmap for digitalization", or "consolidate complex application landscape for digital transformation" etc.

Reframing encourages co-designers to think of other aspects instead of only considering the most obvious perspective. Typically, we tend to think of the most obvious solution first [8]. However, reframing enables us to think of other ways to solve the problem. We can challenge ourselves e.g. by using the *how might we* (HMW) -technique to find alternative opportunities to think and do things differently.

Holistic thinking. Reframing with the help of the Facet Model makes it possible to see the whole enterprise at once, and change the perspective for exploring the adjacent facets and/or intersections. The Facet Model broadens and inspires us to think holistically and creatively, eliminating the need for distinct 'boxes'. The perspectives can be used in any order, according to what is appropriate in the context of the design challenge. With the Facet Model, we can change the thinking from the enterprise level (*Identity*, *Architecture*) to the personal level (*Experience*). The Facet Model helps co-designers ask the right questions to get the best insight. Such deeper questions help co-designers find the fundamental reasons and root causes behind the design challenges, which in turn leads to better designs. The Facet Model is the best available tool for reframing.

Shared understanding. Different perspectives are relevant but restricted, meaningful but have limited scope (*an sich*). Some may focus on customer experience, some may focus on business insight, operations or organisational structures etc. However, these specialised approaches of different disciplines are somewhat overlapping: they share the same elements but use specialised terminology. Reframing the design challenges with the EDGY Facet Model helps co-designers to change perspectives, discuss, and find common, shared understanding.

- *Our way of thinking or understanding of things can change when we shift our perspective.*

Reframing is looking at a challenge from different perspectives and thinking holistically.

[8] **Obvious choices**. It's in human nature to take the most obvious, the straightest and shortest path first, because of the many biases we have, e.g. confirmation bias, anchoring bias etc. Biases are psychological mechanisms to make new things easier for ourselves, and for our mental models. Biases are natural, as our brains are 'lazy' by their default 'factory settings'. Biases are obstacles to open, unprejudiced, and fresh thinking. In addition, we tend to jump straight to conclusions because we think we know enough. It is a good practice "not to suppose anything". Don't *think* about what needs to be done, instead, come and *see and ask* what is needed. "Everything can change if we change our perspective."

3.2.4 Collaboration

Enterprise Design and EDGY facilitate collaboration and cooperation between people from different disciplines to co-design better enterprises.

Co-design is a collaborative approach to designing products, services, applications, or experiences. In co-design, stakeholders such as users, customers, designers, and other relevant parties actively participate in the design process. The goal of co-design is to ensure that the final, ultimate outcome meets the actual needs and preferences of the end-users.

Enterprise Design and the Facet Model enable, encourage and facilitate co-design, which is a collaborative, conversational, coherent approach for design challenges of any kind. Co-design integrates and involves people from different disciplines (co-designers) and stakeholder groups (co-creators) to work together and speak the same language, the EDGY.

Co-design integrates co-designers to collaborate and speak the same EDGY language.

The Enterprise Design Facet Model can be used to evaluate if the enterprise is well-designed, and if is it producing well-designed outcomes, according to these principles (figure beside).

Well-designed Enterprise

- Serves a clear purpose
- Is useful to people and their lives
- Deliver on their promises

The facets can be used as 'lenses', in any order, through which people can get into any design challenge when co-designing. This can be done e.g. by zooming into a specific perspective first and then switching to another. This helps people to consider all the aspects at once, without covering them separately. All the elements of an enterprise are interconnected to each other, directly or indirectly, they interact simultaneously and continuously. That is why the Facet Model can help people to analyse design challenges, change their perspective and communicate when co-designing and re-designing the enterprise together.

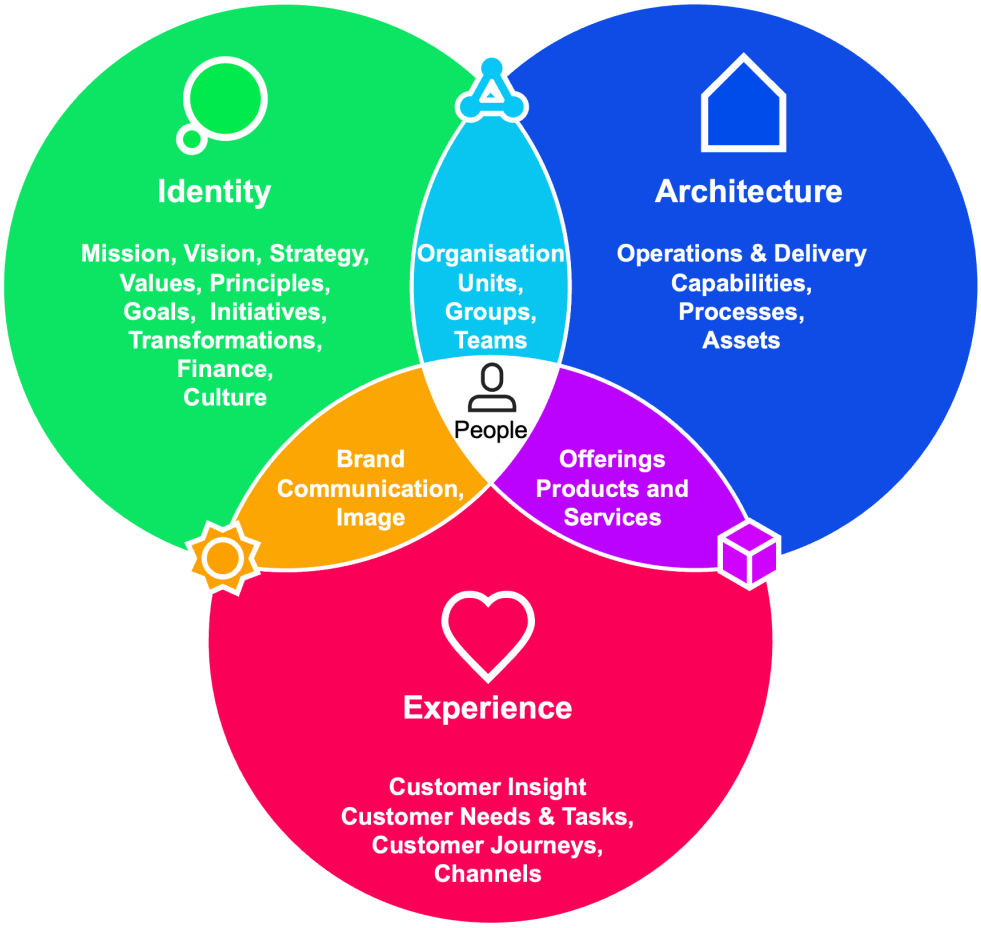


Figure 4: Facet Model as an analysis tool.

3.2.5 Human-Centrism

Enterprise Design is a human-centric, holistic, coherent, conversational and collaborative approach. This encourages and improves agile development, as people start discussing all the aspects right from the start together. Enterprise Design boost Agile[9] Development.

The Enterprise Design facilitates co-design sessions at the beginning of design challenges. This shifting focus from "*Big Design Up-Front*" to collaborative co-design improves the overall end-to-end development and building cycle from ideas to production, as there is more time for high-value collaboration, and less need for producing documentation needed for organisational handovers and knowledge transfers. In addition, co-design increases cooperation over organisational units and silos.

Co-designers. Enterprise Design involves and influences several stakeholder- and interest groups, practices, professions, and disciplines, that are communicating and/or working together as co-creators.

An example stakeholder map of co-designers, partners and other interest groups is illustrated beside. Some groups are at the heart of co-design (inner circle), and some groups are somewhat involved or influenced (middle circle), some groups are just interest groups (on the outer circle).

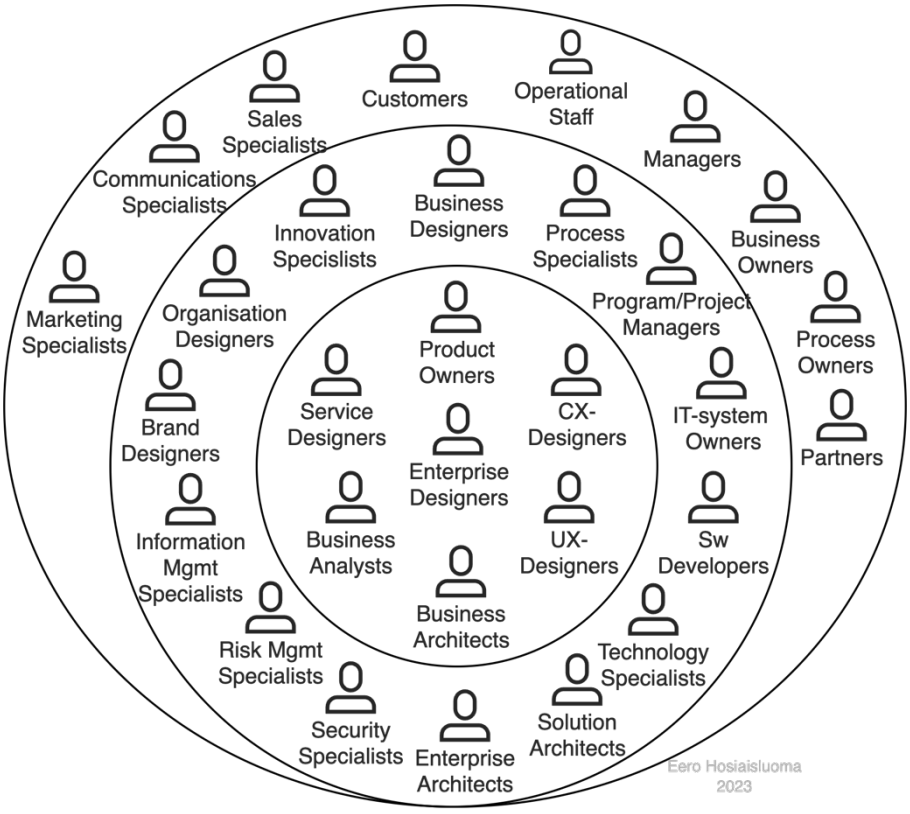


Figure 5: Examples of enterprise co-designers.

What. Co-design with EDGY enables a common language for different disciplines. With the same terminology, people can understand each other better.

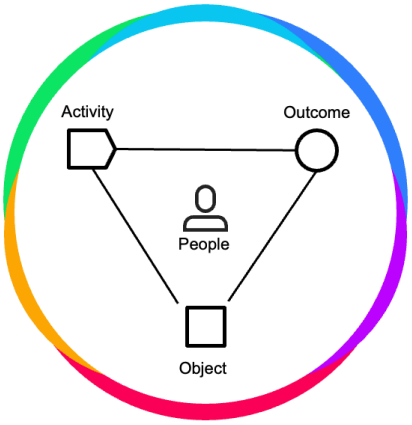
Why. People from diverse practices and backgrounds have their focus on different areas. They have somewhat restricted views of the enterprise. Each discipline has interpretations of its own about what is important. Every group has specialised language and jargon of their own. This is causing suboptimal decisions and designs, unclear communication, inefficient knowledge sharing, general unawareness of the problems, and misunderstandings because of the different names for the same things.

How. Enterprise Design with the EDGY is a collaborative co-design approach to be applied to design challenges of any size and scope. The EDGY provides a comprehensive Facet Model, which is a useful and practical tool for changing perspectives to get the most out of the cooperation of various disciplines. The EDGY provides shared vocabulary and easy, colorful notation that everybody can understand.

EDGY provides a language that encourages specialists and experts to explore and communicate together to enable a coherent enterprise co-design. [3]

[9] **Agility** is the ability to easily and quickly respond to change. Agile methods cover a wide range of tools and methods such as Scrum, Kanban and SAFe (Scaled Agile Framework).

4. Enterprise Design Elements



4.1 EDGY Elements

4.1.1 Base Elements

EDGY is based on four elements called *Base Elements*:

1. People
2. Outcome
3. Activity
4. Object

With these four base elements[10] only, it is possible to describe all (!) enterprises. Using these base elements [11], it is possible to describe any enterprise and everything that is going on in and around them in an ecosystem, with sentences like this:

- ***People*** *perform* ***activities****, using and creating* ***objects*** *to achieve* ***outcomes***. [3]

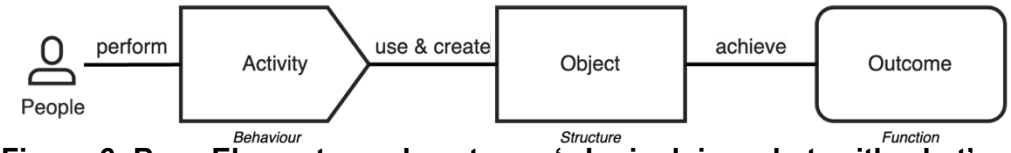


Figure 6: Base Elements, and sentence 'who is doing what, with what'.

Bsse Elements	
Element	Description
People	The **individuals** involved in co-creating or influencing the enterprise, influenced by the enterprise, or using/consuming its products [3]. All the people who are connected to the enterprise or its ecosystem. Examples: customers (external & internal), employees, partners, owners, and investors. Use: identify stakeholders, customer segments and -personas, and employee profiles (skills, competencies, professional roles).
Outcome	A **result** or change to be achieved, or state change that occurs within the enterprise or its ecosystem [3]. Outcomes are the results of activities (intentional or emergent). Outcomes are important concepts as they represent the valuable things in and around the enterprise, they drive the enterprise and deliver its value propositions. Outcomes explain the existential and fundamental and questions of the enterprise: why, what and how [12]. Examples: goals, qualitative or measurable, drivers for change, intentional results or diverse business events (changes in business conditions). Use: identify strategic goals, operational goals, and measurable end results.
Activity	**What is being done or going on** in the enterprise or its ecosystem [3]. Activities are actions that are happening or taken by certain actors. Activities represent behaviour; the enterprise in motion. Examples: activities happening, taken, or performed; roadmap of steps to be taken, story (or history) of some entity or initiative. Use: provide the story of the enterprise and define streams of activities.
Object	A **structure** that is relevant to the enterprise [3]. An object is a tangible or intangible structural entity, that is part of the enterprise, used in the enterprise activities or produced/provided by the enterprise activities. Examples: facility, device, machine, equipment, application, sw, hw, information/data, tool, product, service, document, infrastructure, interface, channel. Use: define a glossary of terms used in the enterprise.

The outcome defines the *ends* whereas the activity defines the *means* to get there [13]. The base elements Activity, Object and Outcome are specialized in facets and intersections.

[10] The classification of the generic base elements is inspired by the FBS (Function, Behavior, Structure) ontology.

[11] **Shapes** of the elements: rounded elements are outcomes (functions), arrowed elements are activities (behavior), and square elements are objects (structures). These shapes are used in base elements, facet and intersection elements.

[12] Fundamental questions: why, what and how, are answered by the facets Identity, Experience and Architecture.

[13] Ends, outcomes or goals, are what we aim to achieve, and means are the activities we do when we are pursuing our goals. The purpose of an end or goal is not to achieve some desired future state, but rather to resolve some present challenge.

4.1.2 Facet Elements

4.1.2.1 Identity Elements



Our enterprise establishes shared **stories** communicated through **content** to live up to and achieve given **purposes**. This identity is pursued by its **organisation** and evoked by the perception of its **brands**. [3]

Identity	
Element	Description
Purpose	The reason **why** an enterprise exists and what people pursue and believe in. [3] An enterprise's purpose expresses what its people believe in, consider valuable, and are striving for, usually expressed as outcomes/goals the enterprise aspires to achieve. [3]
Story	The way we make sense of our enterprise and communicate to people what it does. [3] An enterprise story is a **narrative** about the enterprise in the ecosystem context. Stories help us make sense of complex ideas, concepts and situations and share that sense with other people. Stories about past or future events can illustrate shared values, assumptions and beliefs and what people can expect when interacting with an enterprise. [3]
Content	What is being communicated to people. [3] Content refers to the **information and data that is being communicated** between and to people, when communicating within the enterprise and its ecosystem, via different channels and media. Content represents all the material that is used in internal and external communication. [3]

4.1.2.2 Experience Elements



People interact with the enterprise via **channels** along their **journeys** to complete their **tasks**. Enterprises reach out to people through their **brands**, and make **products** to be offered to them. [3]

Experience	
Element	Description
Task 	What people want to achieve and get done. [3] Tasks to be done / Jobs to be done. People have numerous tasks they want to accomplish every day. Those tasks are about the *outcomes* people want to achieve, not the *means* to get there. Tasks can be seen as a stable expression of **people's needs**, motivations and intent. [3] Enterprises appear in people's experiences as brands offering products to help them accomplish their tasks as they go through their journeys. [3] By gathering *customer insight* information with help of identifying tasks, the enterprise gets clarity and understanding about people's most important needs and motivations.
Journey 	The events and activities people experience in their lives. [3] 'Moments' in life / over time, moments of interaction. A journey describes what a person does, feels, thinks, or otherwise experiences over time as they live a specific portion of their life, in particular when interacting with the enterprise. It is captured as a simplified sequential and chronological representation of activities and events people experience, and tasks they want to accomplish. Journeys are commonly documented using a storytelling format, describing a 'slice of life' of an exemplary person or persona. Aspects that are typically captured are motivation, activities, tasks, channels of interaction, physical or digital environments, emotional states, first-hand observations and analytics data related to the journey. [3]
Channel 	The means people use to engage and interact with us [3]. Channels are the means of communication between people and the enterprise. They are where moments of interaction between people and the enterprise take place. They include media, devices, communication systems, or physical environments used to facilitate interactions. [3] Interfaces between people and services of an enterprise.

4.1.2.3 Architecture Elements



Employees and other people, together with **assets**, perform **processes** to enable **capabilities**. They are developed by its **organisation** and are required to make and deliver the **products** and/or **services** it offers. [3]

Architecture	
Element	Description
Capability 	What we are able to do by orchestrating people and assets. [3] Enterprises strive to achieve their purpose by creating products and/or services, that feature in people's experiences. For that, they must design and realise their capabilities by orchestrating meaningful combinations of people and assets. Each capability produces well-defined outputs (or outcomes) for internal or external business use and contributes directly or indirectly to product and/or service creation. [3] Capabilities guide the modularisation of the enterprise by defining boundaries around what "belongs together" and what is distinct from other capabilities. By deriving the realising processes and assets (such as the required organisation, applications and data), a well-designed capability model leads to enterprises and organisations that are adaptive to change. Capabilities can be decomposed into sub-capabilities (usually levels 1-3) to create a hierarchy. Each capability must have a clearly assigned business owner to ensure its strategic development and the effective creation of intended outputs. [3] A capability is an *outcome* as it is an operational ability, readiness to do something and deliver on promises. A capability is an organisational ability or readiness to do something.
Process 	A set of related activities our enterprise carries out. [3] Processes are the flows of activities needed for product or service creation (either directly or indirectly). They transform a set of inputs into a set of products or services or intermediary outputs, and consist of a set of activities that are performed in coordination in an organisational or technical environment. [3] A process is composed of activities connected by flow relationships. It can be strictly structured or less structured. Processes can run across several organisational units or can be performed within one organisational unit only. [3] Well-designed processes lead to enterprises that operate efficiently and effectively across all required organisational units. [3]
Asset 	An object needed and used to perform capabilities [3]. Synonym = Resource. Enterprises need to develop, buy and manage a broad range of tangible or intangible assets (such as buildings, machines, raw materials, software applications, financial assets and know-how) to perform the capabilities needed to run their business. Assets as a concept are rooted in economics, strategic management and finance. [3] To differentiate assets, tags can be used to describe the type (e.g. application, data).

Examples of assets (a.k.a. resources) of different types are shown in the figure below.

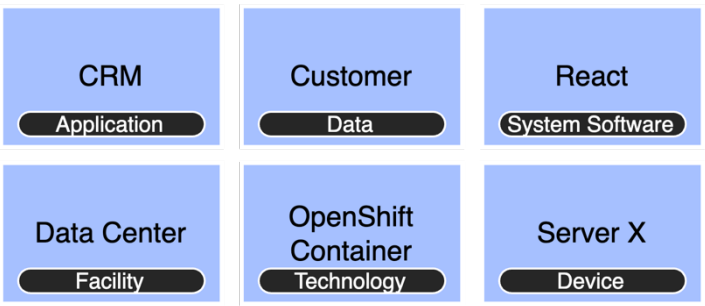


Figure 7: Assets of different types (expressed by tag).

4.1.3 Intersection Elements

4.1.3.1 Organisation, Brand and Product Elements



Intersections are areas where two facets overlap. These intersections are perspectives of their own, but more likely, they are bridging the overlapping facets and related concepts and disciplines.

Intersections	
Element	Description
Organisation	A group of people working together. [3] An organisation is a complex **social structure**. People form organisations to collaborate and co-create. Organisations are fractal: they are made up of nested structures (e.g. business unit-department-group-team) that have similar attributes on each level, such as purpose, goals, capabilities and hierarchy. Organisations are complex adaptive systems. [3] People's complex behaviour causes emergence, which means that organisations are never fully predictable and deterministic. Organisational aspects that best to be designed are organisational structures, roles, responsibilities, formal collaboration and decision-making processes. Aspects that are much harder or impossible to design are organisational culture, responsiveness to unexpected situations, adaptability, resilience and robustness. [3]
Brand	Our name and what it stands for. [3] A brand is a symbolic representation that stands for our enterprise and its products and services. It is designed to communicate our identity, especially how we are differentiated from others. [3] Positive expectations about a brand pull people towards the products an enterprise offers, negative expectations push them away. That's why a brand is also a financial asset we invest in and obtain benefits from, by purposely creating awareness and improving or maintaining our reputation with our customers, partners and investors. [3]
Product	What we make, offer and deliver for people's benefit. [3] Products are the result of our enterprise activity and encompass **physical things** manufactured and delivered, or **services** rendered to people. A product can be composed of any combination of physical goods and other tangible and intangible objects. They usually refer to something we make, market and deliver to commercial customers, but can also refer to something we make for employees, co-creators or other people. [3] A product helps people complete a task, and thereby adds *value* to their lives when used in the right context. It can be physical or digital, and deliver practical, emotional or monetary value. [3]



Note! Intersection elements, Organisation, Brand and Product, are also *objects*. They are having the same sharp-cornered and square-shaped representation as the other objects in the facets: Content, Asset and Channel.

4.2 Relationships

The EDGY defines only three (3) types of relationship types that can connect elements.

Relation Type	Description	Notation
Link label	A meaningful (structural or dependency) association between two elements. [3] Line with optional label.	Element A — label — Element B
Flow label	An element influences another by passing objects. [3] The arrowhead line indicates direction, label represents the object.	Element A — label → Element B
Tree	An element is part of another element of the same type. [3] Hierarchy-, nesting-, or stacking of elements.	*Hierarchy*: Element A, Element B, Element C *Explicit Hierarchy*: Element A, Element B, Element C *Nesting / Stacking*: Element A, Element B, Element C

Elements can have different types of relationships such as a) structural-, b) dynamic- or c) dependency relationships. Every relationship can be modelled with these two relationship types of EDGY, examples shown below.

Structural relationships model the static construction or composition elements.

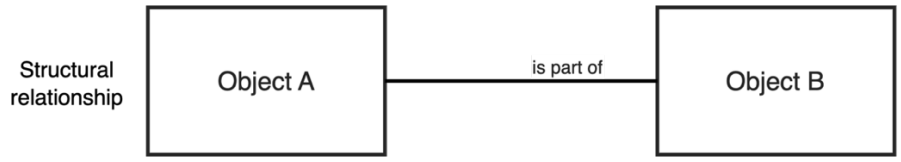


Figure 8: Structural relationship (the Link-relation).

Dependency relationships model associations between the elements.

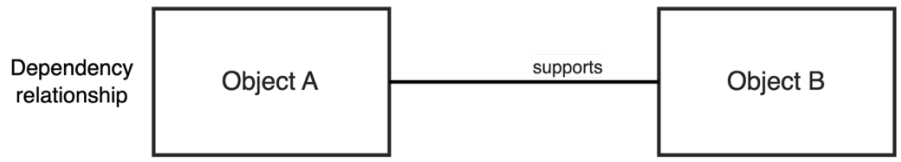


Figure 9: Dependency relationship (the Link-relation).

Dynamic relationships model information flows between the elements.

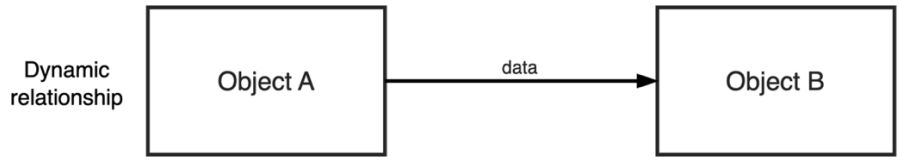


Figure 10: Dynamic relationship (the Flow-relation).

4.3 Labels

There are two kinds of labels to add to any EDGY element: Tags and Metrics.

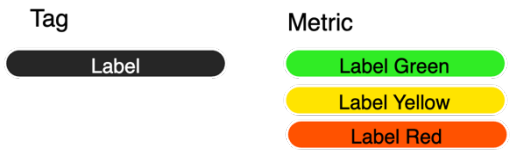


Figure 11: Labels: Tag and metrics.

These are the default, suggested colors that can be changed according to what is appropriate in the context. For example, an organisation can create default tag values (labels) and colors to fit for purpose.

4.3.1 Tags

Tags can be used for differentiating elements of the same type.

Tags can be used for depicting additional information about the elements, e.g. priorities. Several tags can be added to an element when appropriate.

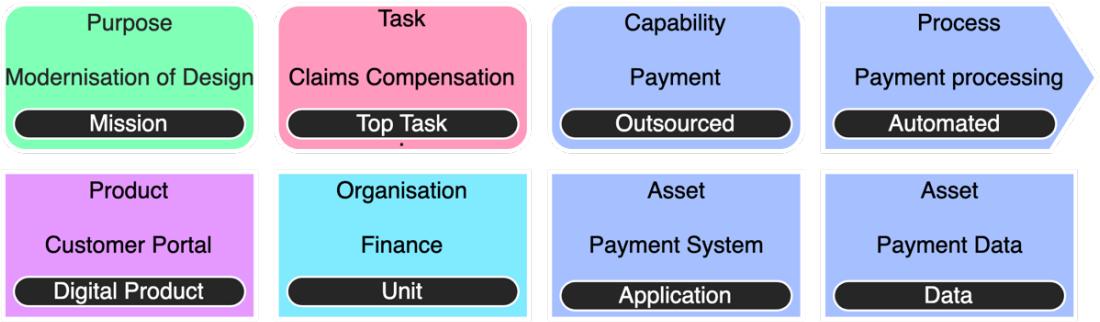


Figure 12: Labelling elements.

Asset types can be defined according to what is appropriate and fits the specific case in context. The minimum set of types (the shortlist below, the MVP) consists of types as follows: application, system software or data. These are the most common types that are enough for 80% of the cases. It is good practice to add some of these Legend -boxes into the diagrams that contain different types of assets. The suggestion is to create context-specific common tags that are used in all the diagrams for the sake of conformity.

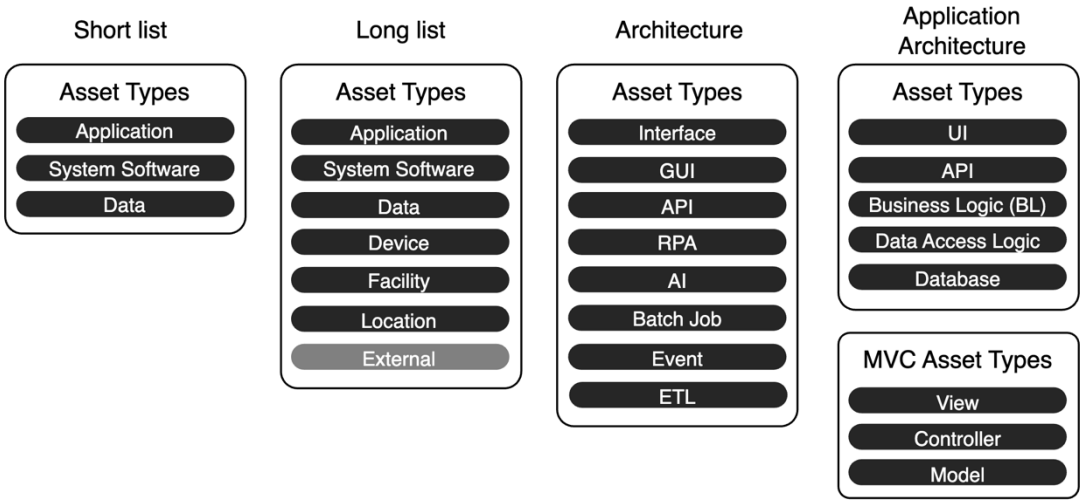


Figure 13: Examples of asset types.

Tags add extra semantics to elements. Tags can be used for differentiating elements of the same type. For example, the Asset is a multipurpose element, with which we can model e.g. applications or data objects.

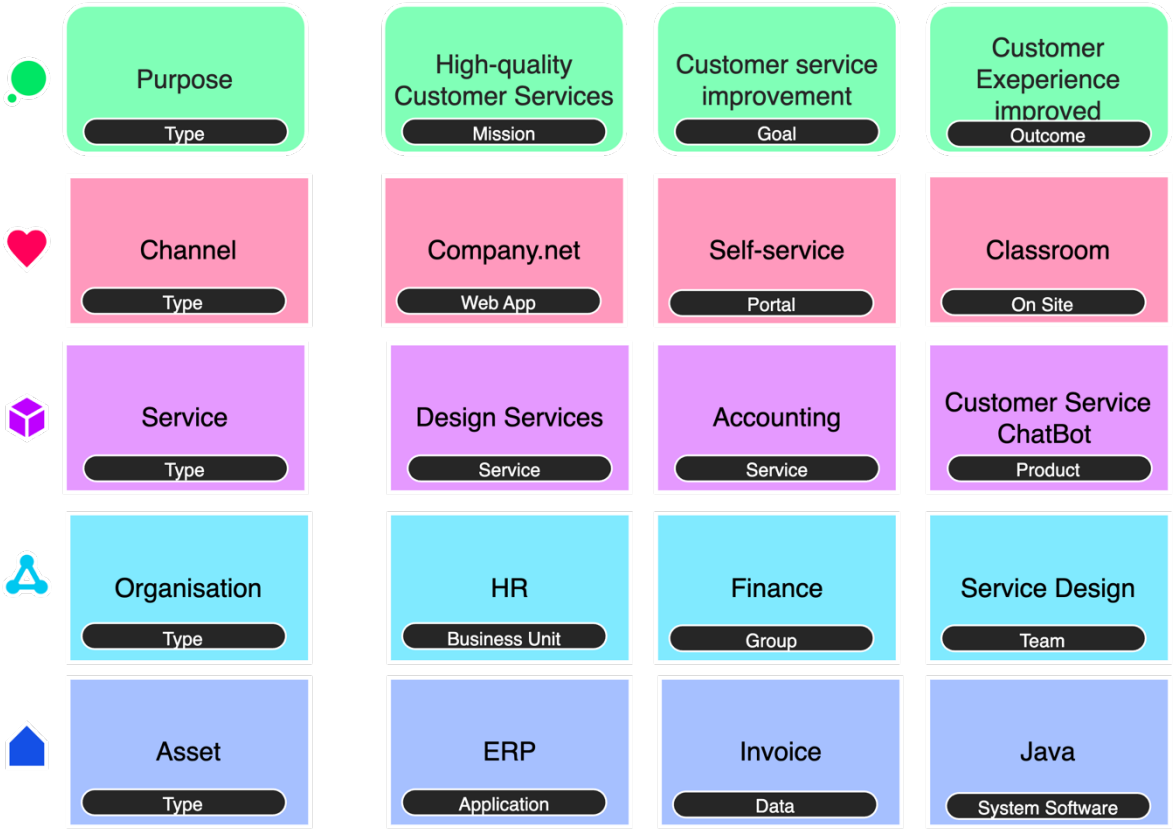


Figure 14: Tags of elements

4.3.2 Metrics

Metrics are quantitative and qualitative attributes of the elements, which can be depicted with colored labels. Typically, the traffic light coloring is an easy way to indicate certain metrics of elements.

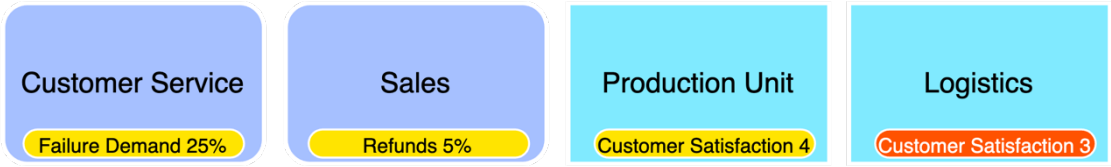


Figure 15: Metrics.

With metrics it is possible to add extra information to elements. Here are some examples of the legend boxes that can be added into diagrams to explain what criteria is used. A N/A (not applicable) metric can be used e.g. when we want to show to from which elements we have no information yet.

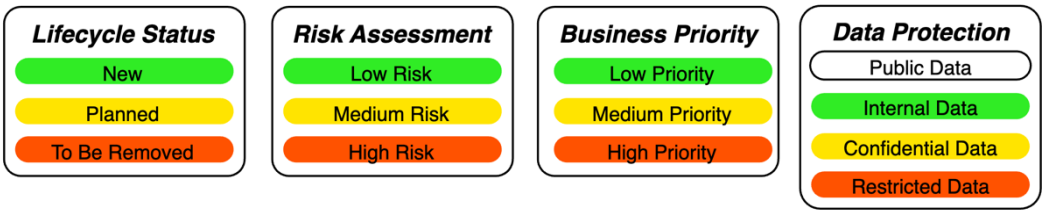


Figure 16: Examples of metrics.

4.4 Facet and Intersection Elements with Relations

EDGY elements and their 24 pre-defined dependency links that enrich the language.

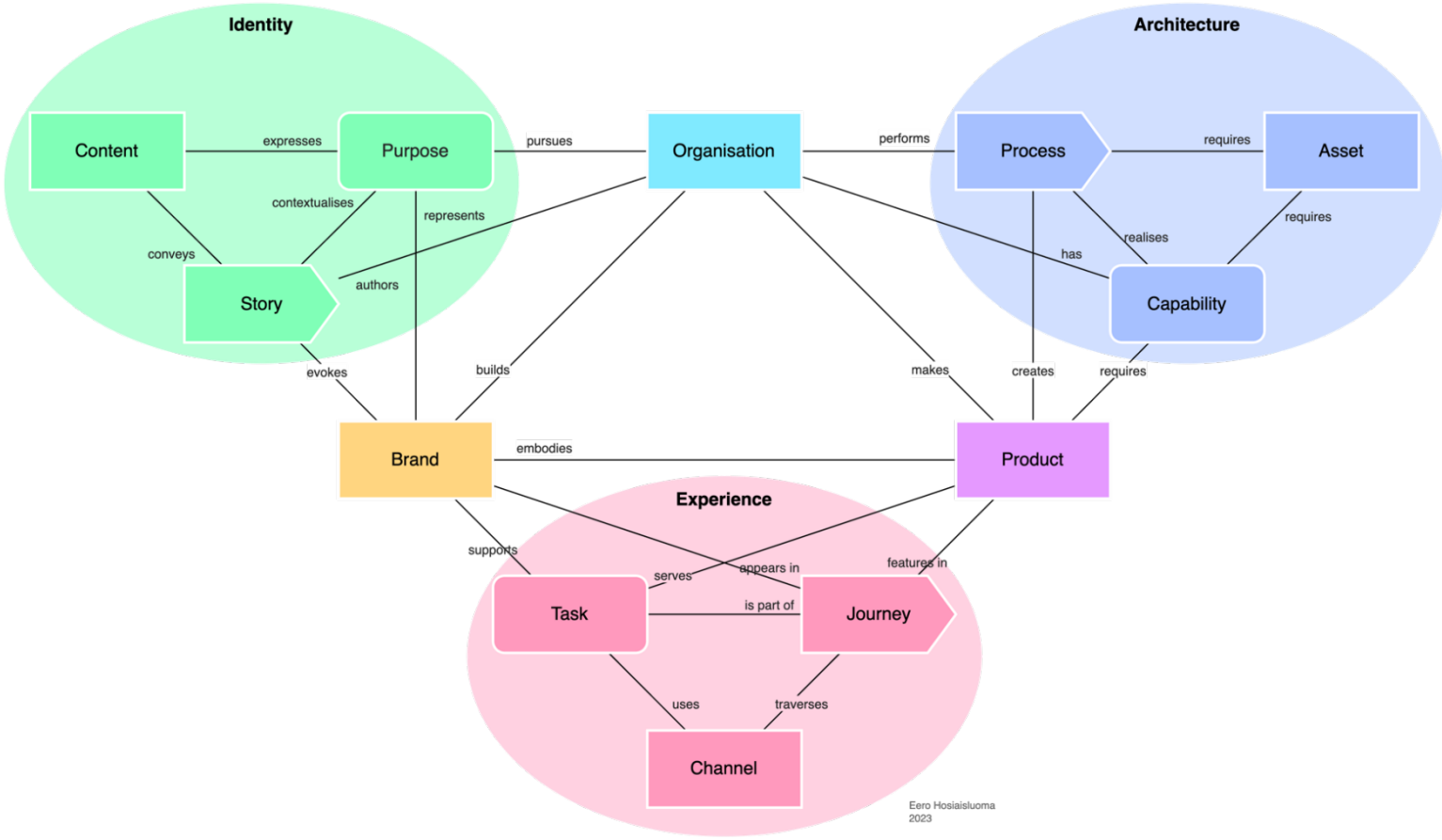


Figure 17: EDGY elements and relations.

With the elements and their dependency relations, it is possible to create sentences like “story contextualises purpose”, “organisation makes products”, “product serves tasks”, “an organisation performs processes”, “organisation has capabilities”, “process realises capability” or “process requires assets”.

4.5 Generic and Specific Depiction

All the base elements have specialised, faceted and colored counterparts in the Facet Model. A similar basic syntax and structure (activity-object-outcome) occurs in every facet. This makes it easy to translate and shift the focus from one facet to another, as the elements are related to each other. Such correspondence elements in all the perspectives make the Facet Model consistent, which eases co-design efforts.

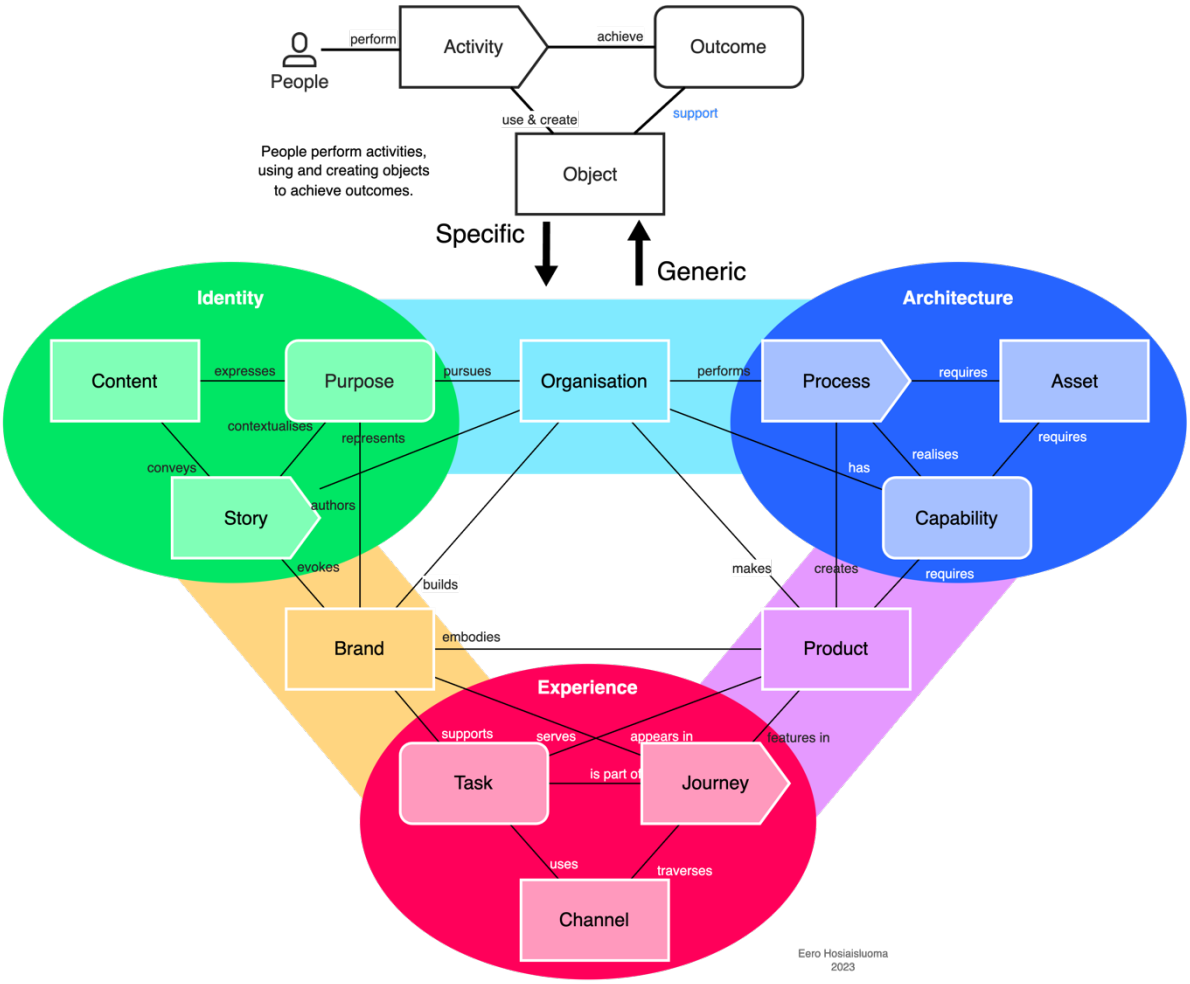


Figure 18: Generic base elements and specialised faceted elements.

EDGY introduces specialized variants of the base elements. This makes the EDGY language simple to learn and use, as the same triple of elements can be found in all the facets. It is possible to use the same analogy in all the perspectives:

- ***People*** *perform* ***activities****, using and creating* ***objects*** *to achieve* ***outcomes***. [3]

From which sentence we can formulate versions such as follows:

- ***Customers*** experience ***journeys***, using ***channels***, to achieve ***tasks***
- ***Organisations*** *perform* ***processes****, using and creating* ***assets*** *to enable* ***capabilities***
- ***Enterprises*** *and its initiatives*[14] *communicate* ***stories****, producing* ***content*** *to achieve* ***purposes****.*

The same generic observations can be turned into specialized elements, whenever it is appropriate to change the perspective in a design challenge. This simplicity of the EDGY language's syntax, and its vocabulary of limited concepts and relationships, and its small number of relation types, make the EDGY easy to learn and use, but expressive enough.

[14] An **initiative** can be e.g. an enterprise or ecosystem, business unit or -department, program, project or any change activity.

4.5.1 Specialisations

The core of each facet is the *outcome*, as the whole idea of the enterprise design is to produce well-designed outcomes. The outcome elements, *Purpose*, *Task* and *Capability*, are the most crucial elements, as they represent what is essential in the enterprise. The shape of the outcome element is rounded rectangle.

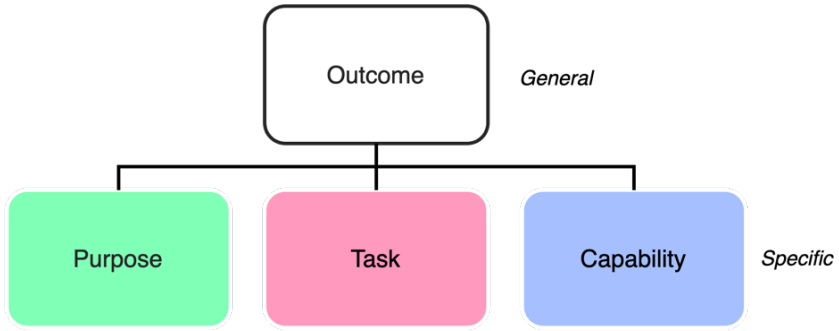


Figure 19: Outcome specialisations.

The behavior in the enterprise is depicted with the elements that represent activities, *Story*, *Process* and *Journey*. The activity is arrow shaped element.

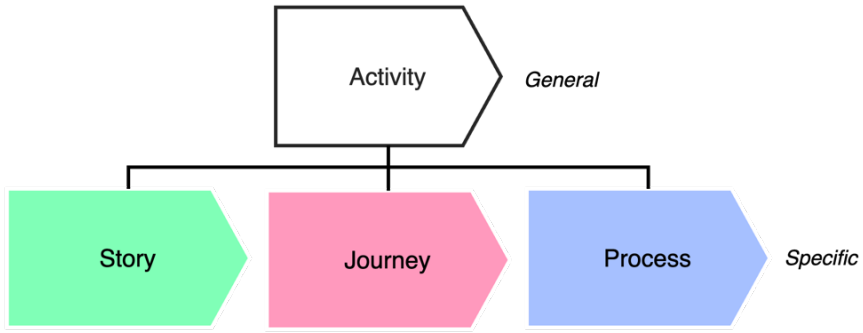


Figure 20: Activity specialisations.

The structural objects of the enterprise are the facet elements, *Content*, *Channel* and *Asset*, and also the Intersection elements *Organisation*, *Brand* and *Product*. The shape of the structural object element is sharp-angled rectangle.

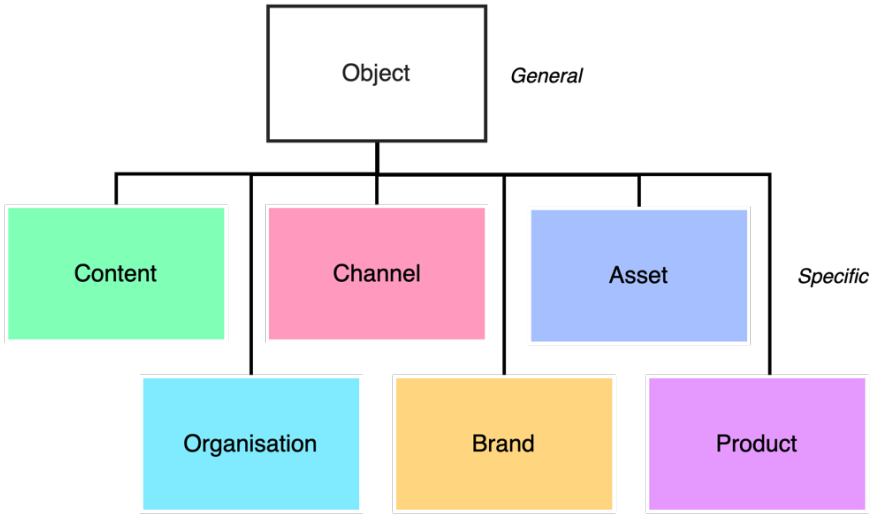


Figure 21: Object specialisations.

4.6 EDGY in nutshell

EDGY is:

- **Simple** and easy, so that everyone can quickly become familiar with its structure and meaning.
- **Beautiful**, colorful, and aesthetically appealing and comfortable for people to work with.
- **Flexible** enough, to leave space for people to interpret and extend it with their own elements, so they can focus on what makes the most sense in their design challenge[15].
- **Expressive**, rich, broad and comprehensive enough, so that all disciplines to hook into so they can tie their specialised insights into the holistic top-level views that hold them together.
- **General-purpose** to keep the conversations broad and to encourage more specialised languages to hook into it to provide the required specificity when needed.
- **Common**, multi-purpose language for all the various disciplines and stakeholder groups to support collaboration, cooperation and co-design.

EDGY is a simple, beautiful, flexible but expressive general-purpose common language. [3]

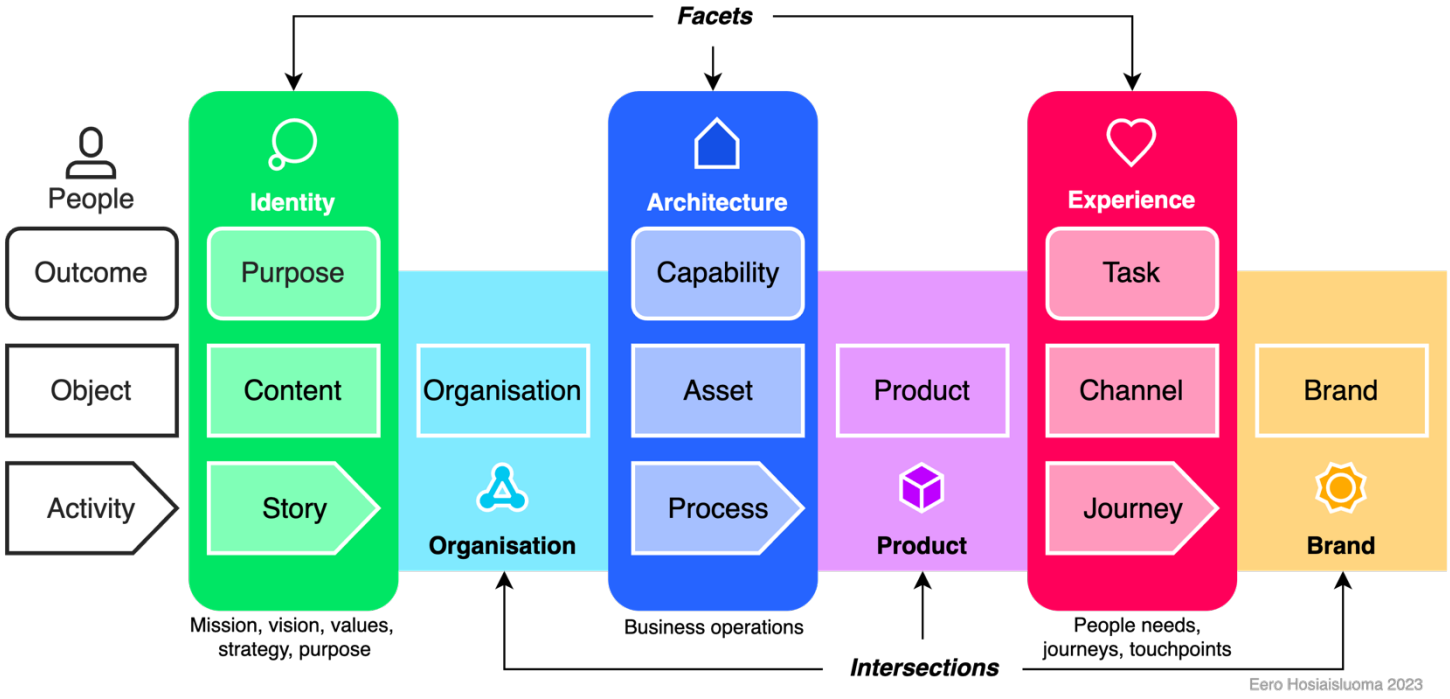


Figure 22: Shapes of the elements are derived from the base elements.

EDGY provides smooth shift and translation from one facet to another, because of the simple syntax and structure of elements *activities*, *objects* and *outcomes*, that occur in each facet

[15] EDGY is flexible, it can provide options for most of the enterprise modelling cases (80%). EDGY is suitable for high-level modelling on top of specialised notations such as BPMN, UML and ArchiMate®. However, the EDGY can be applied also for detailed modelling in cases where other notations are not appropriate (if there are no resources for studying other notations: no competence, no time, no tools or no need).

5. Enterprise Design Methods, Techniques, Tools and Patterns

5.1 Enterprise Design in Practice

Enterprise Design is a holistic and people-centered approach. It integrates customer-, business- and operational perspectives.

Enterprise Design covers all that is meaningful in the context of an enterprise. Here are some examples of different design disciplines done by certain professional and competence groups of people, that are incorporated in the enterprise design.



Figure 23: Enterprise Design approach integrates all the perspectives.

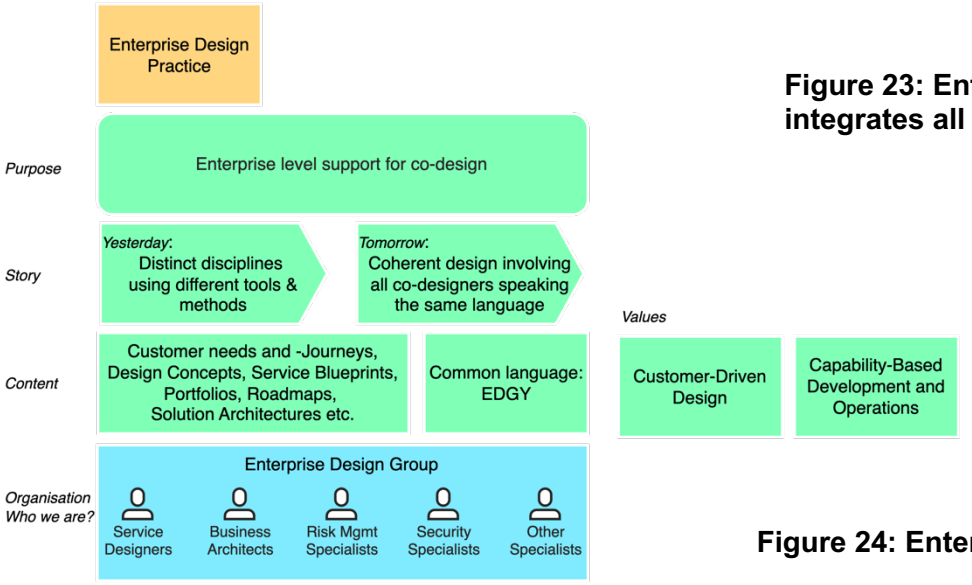


Figure 24: Enterprise Design practice.

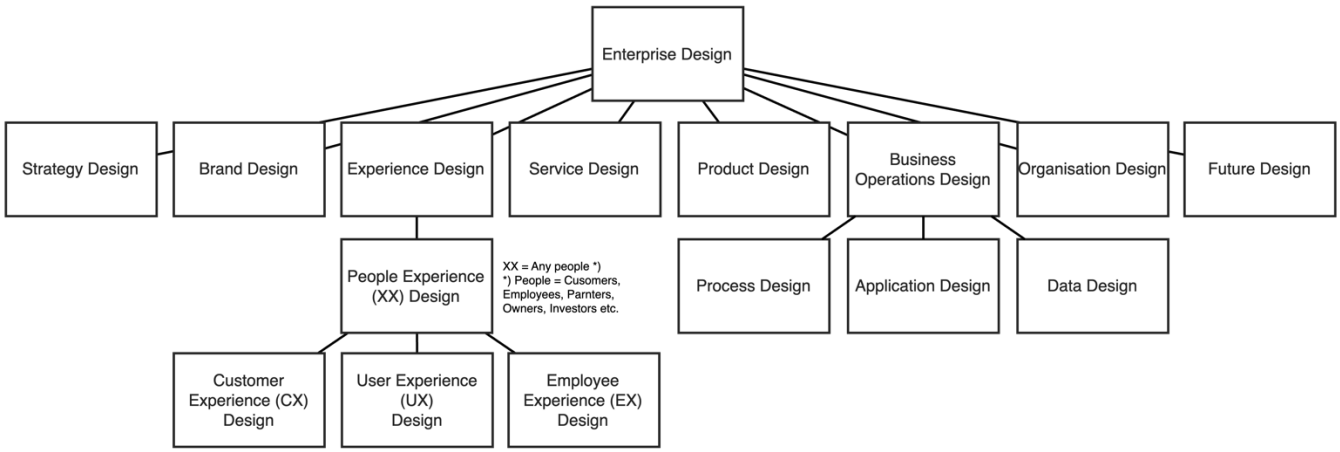


Figure 25: Enterprise Design covers all the design activities within an enterprise.

Enterprise Design practice is the cooperation and collaboration of different disciplines that work together. Enterprise Design practice is a way of organising people to provide overall design and planning support for business owners at the enterprise level. Enterprise Design practice provides service(s) such as facilitating co-design, providing tools and methods for enabling, inspiring and encouraging to ideation, innovation, analysis and concept design, as well as visualising the design with the appropriate tool(s) by using the EDGY as a common language.

5.2 Enterprise Design Perspectives

All the examples introduced here are mixing and matching together the elements of different facets and intersections of the Facet Model.

The relations between the elements help designers to catch the connections with adjacent facets or intersections.

The figures on this page introduce the elements and their relations per each facet. These facet-driven models can be used as starting points for all the modelling cases, and especially for reframing design challenges.

5.2.1 Identity Perspective

When exploring the Identity elements *Purpose*, *Story* and *Content*, it is useful to include *Brand*- and *Organisation* -elements in the picture too, for getting the most extensive overview.

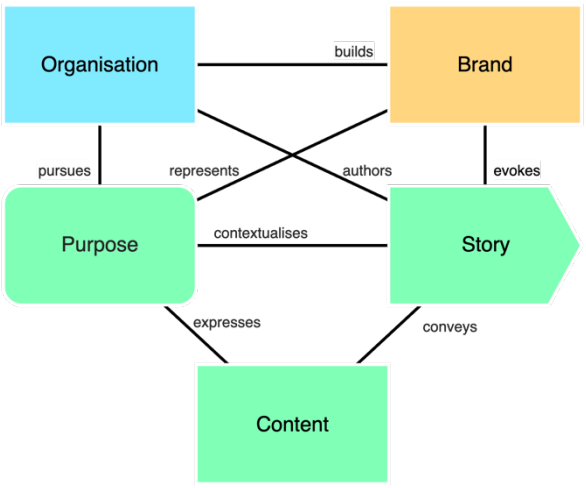


Figure 26: Identity-related elements.

5.2.2 Experience Perspective

When exploring the Experience elements *Task*, *Journey* and *Channel*, it is useful to include *Brand*- and *Product* -elements in the picture too, for getting the most complementary overview of people insight.

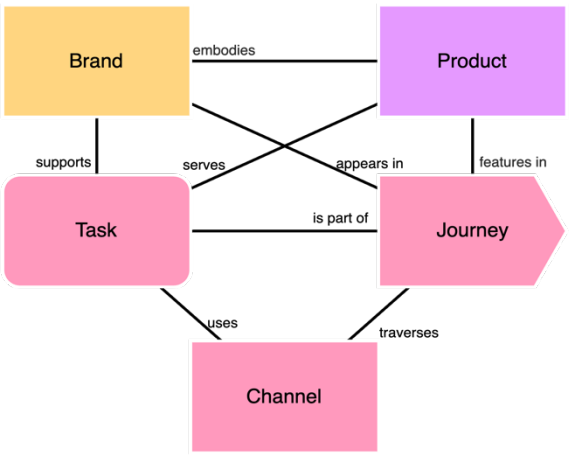


Figure 28: Experience-related elements.

5.2.3 Architecture Perspective

When exploring the Architecture elements *Capability*, *Process* and *Asset*, it is useful to include *Organisation*- and *Product* -elements in the picture too, for getting the most comprehensive overview.

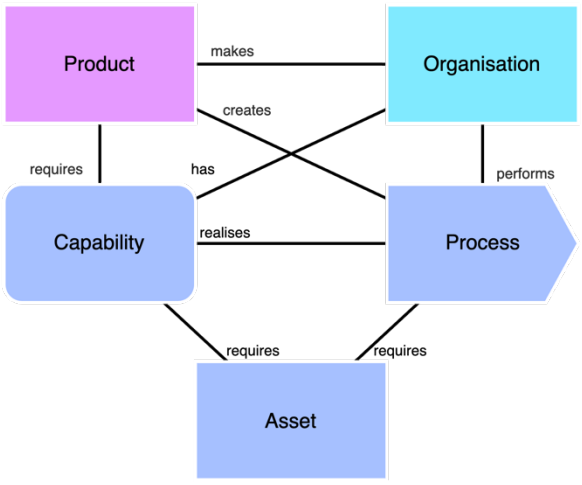


Figure 27: Architecture-related elements.

5.3 Changing the Perspectives

Perspective switching enables us to consider other aspects than the most obvious one. Usually, we tend to have a preconception, an initial idea, of how things are. We all have our mental models into which we typically set all the things what we see and experience. By changing the perspective by utilizing the Enterprise Design Facet Model as an analytical tool, we can easily shift perspective from one to another. This encourages us to consider other aspects and recognize all the impacts in the enterprise, even those we didn't pay attention in the first place at all.

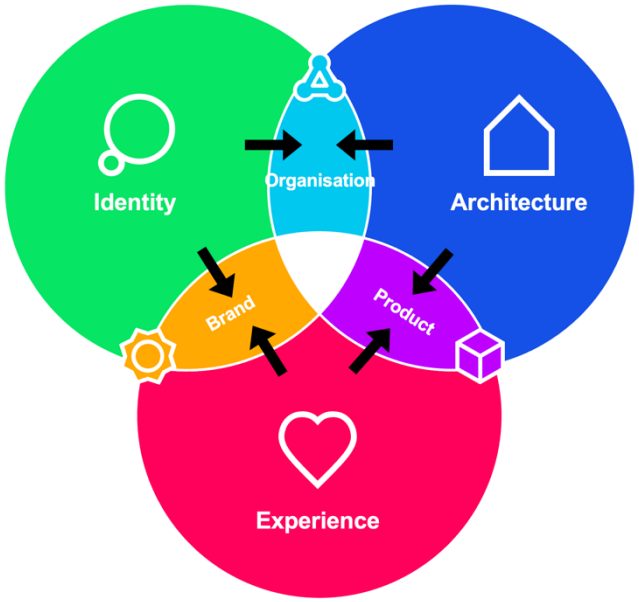


Figure 29: The Enterprise Design Facet Model.

Why changing the perspective? The first impression usually tight us with our existing conceptions (because of several cognitive biases[16] we have, such as *anchoring-* and *confirmation bias*). We typically see only one part or some parts of the whole enterprise. Sometimes we can't see the "forest from the trees".

It is just advantageous and practical to think differently, change the perspective and consider other aspects than the most obvious ones. This brings up new aspects, both positive and negative, and makes further decisions better. The fact is, that all the facets are involved, implicitly, anyhow, as "everything affects everything". By reframing we can consider all the parts of the enterprise, and all the things that affect or are affected. The is holistic view of the Enterprise Design Facet Model helps with this.

The facets are interconnected via intersections:

- The business purpose affects to customer experience, operations and delivery.
- The customer experience is affected by identity and architecture.
- The architecture exists because of the purpose and goals of the enterprise and customer needs to fulfill.

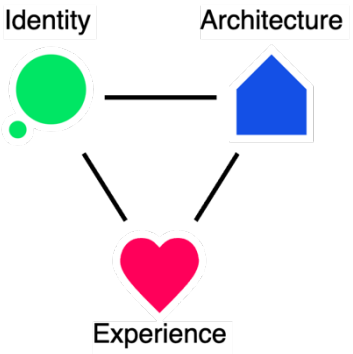


Figure 30: Facets.

The reason for reframing can be e.g. an event that has occurred in the business environment, which has changed some conditions or circumstances. Such an occurrence can be either internal or external, either positive or negative in its effects. An occurrence can be e.g. a new disruptive technology innovation, increased/decreased market share, or decreased customer satisfaction etc. Such a reason causes the need for change in the enterprise. By reframing we can consider all the parts of the enterprise holistically - as "everything affects everything".

The Enterprise Design Facet Model can be used as an analysis tool for perspective switching

[16] *Cognitive Biases*: People tend to have a number of subjective perceptions of the phenomena they face. See: link.

5.4 Reframing

By reframing with the Facet Model, we can take a holistic approach and figure out the most beneficial end results (outcomes) for the entire enterprise. Reframing involves asking questions from all perspectives to identify the behavioral or structural elements that can impact solving the initial design challenge or enable achieving the best possible outcome. Finally, everything is interconnected and related in one way or another, either directly or indirectly. The holistic approach considers all perspectives.

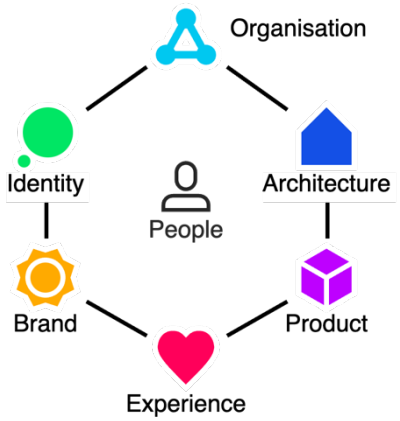


Figure 31: Facets and Intersections.

- By utilising the Facet Model we can change perspectives and ask "*how might we* do this and that" from other perspectives.
- By changing the perspective, we can ask other questions that take another viewpoint to the design challenge.
- By asking questions from different perspectives, we can discover new solutions and potential impacts – positive or negative.

Reframing is about asking questions from all perspectives to find solutions.

The change demand in the initial brief of a design challenge typically concerns certain aspects and elements only. Matters and issues are clustered around certain preconceptions or the most obvious choices. We tend to jump straight to conclusions quickly. However, maybe the given problem is not the real problem at all, and/or the solution is not the most successful for the enterprise. When further analysing and reframing the challenge, we can observe different causes and find completely new solutions. At least, we can find other elements that affect or are affected by the initial one.

Reframing, shifting perspectives, help us consider alternative solutions to find the best one for this specific situation, for this problem, based on the information at hand.

With the help of the Facet Model, we can view the challenge through different lenses. We can change our way of thinking and perspective, leading to a solution that might be entirely new and completely different from the first, the most obvious one. Reframing can be started from any facet or intersection, depending on the context of the initial design challenge.

Reframing forces us to change our perspective, consider other aspects, and think differently.

The Facet model can be used as an analysis model or common theoretical framework to start discussions with diverse stakeholder groups. Most people can relate to the perspectives and intersections of the Facet Model, making it a good starting point for collaboratively examining design challenges.

It is important to analyse what is really needed - behind what has been asked. To find the real needs behind the desires. By reframing with the Facet Model, we can take a holistic approach and figure out the most beneficial end results (outcomes) for the entire enterprise.

The Facet model serves as a holistic, common and general analysis model in co-design.

Reframing examples. For example, initial brief of a design challenge and possible solutions can be as shown in the table below.

Intial Challenge	Solution(s)
"Claim handling process takes too long"	• Streamline/Lean the process (RPA, AI) • Modernise application(s)
Reframing	Solution(s)
"Customers are ignorant of progress"	• Status updates via the user interface • Better customer service

Reframing the challenge can change the way we are trying to solve the problem – from architecture (blue) to experience (red) in this example above.

Initial challenge examples are as follows:

1) "Customer experience improvement", as customers have complained about services.
2) "Application portfolio modernisation", as application landscape is too complex.
3) "Vision refinement", as business environment has changed rapidly.

(Examples applied from the *EDGY 23 Language Foundations* [4] material.)

Reframing examples below.

1. Challenge: Customer experience improvement	
Step	Questions
Initial start	What are the customer needs? What are the customer journeys? What are the channels?
Adjacent Facets / Intersecions	What services and/or products customers are using? What we could offer to customers, to better serve their needs? How customers perceive our brand? How do we communicate our offerings to customers?
Reframing	What could/should/must be changed in our operations, to to affect the customer experience positively? New requirements to us… How customer orientation reflects to our identity and organisation? How we could enable more customer-centric culture?

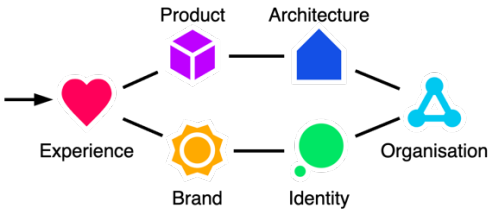


Figure 32: Reframing from Experience (Customer experience improvement).

2. Challenge: Application portfolio modernisation	
Step	Questions
Initial start	What is our current as-is application portfolio? How our applications support business capbailities (+ processes)? How we can reduce costs (licenses, maintenance)? Should we define and execute a cloud strategy?
Adjacent Facets / Intersecions	What services and/or products are supported by which applications? How organisation structures affect to the application landscape? Which organisational part owns or uses which applications? Why? Is this ownership is well-defined and optimally aligned with business operations?
Reframing	Which products and/or services support which customer journeys and customer tasks (needs)? How are the customer experience (CX) and user experience (UX) of our application interfaces, as part of our offerings? How our organisation structures deal with our identity and brand? How our strategic goals affect to how we are organised, and how is our application landscape ownership divided between units?

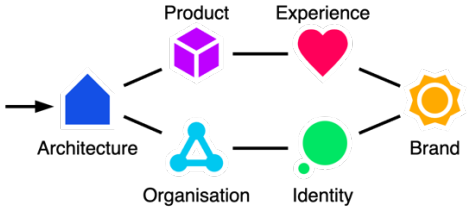


Figure 33: Reframing from Architecture (Application portfolio modernisation).

3. Challenge: Vision refinement	
Step	Questions
Initial start	What is our mission, our purpose? Should it be updated or redefined? What is our vision definition? What is our strategy from mission to vision? What are the steps to be taken? Course of actions? What are our goals? Strategic (high level) and more operational…
Adjacent Facets / Intersecions	What are organisational goals? Are we well organised to enable our vision and strategic goals? How our brand communicates our (new) vision?
Reframing	What should be changed in our operations and delivery to make the vision alive? How customer orientation (experience) reflects to our identity and our organisation with more customer-centric culture. How do our offerings support our new vision? Are our offerings aligned with the vision?

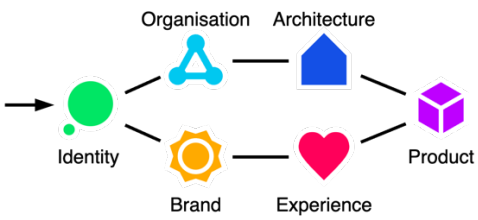


Figure 34: Reframing from Identity (Vision refinement).

5.4.1.1 Reframing Pattern Examples

Example patterns using the EDGY elements to illustrate the reframing procedure.

Pattern Example 1: Reframing Identity to Experience and Architecture.

Given that a challenge is initially concerning the Identity perspective, formulated e.g. “create a vision for digital transformation”. Then reframing starts from the vision statement, which is modelled with the content element. That expresses the purpose, after which the perspective can be changed via intersections of Brand and Organisation to other perspectives a) to Experience with Tasks, and b) to Architecture with Capabilities. Finally, the offered products and/or services can be evaluated.

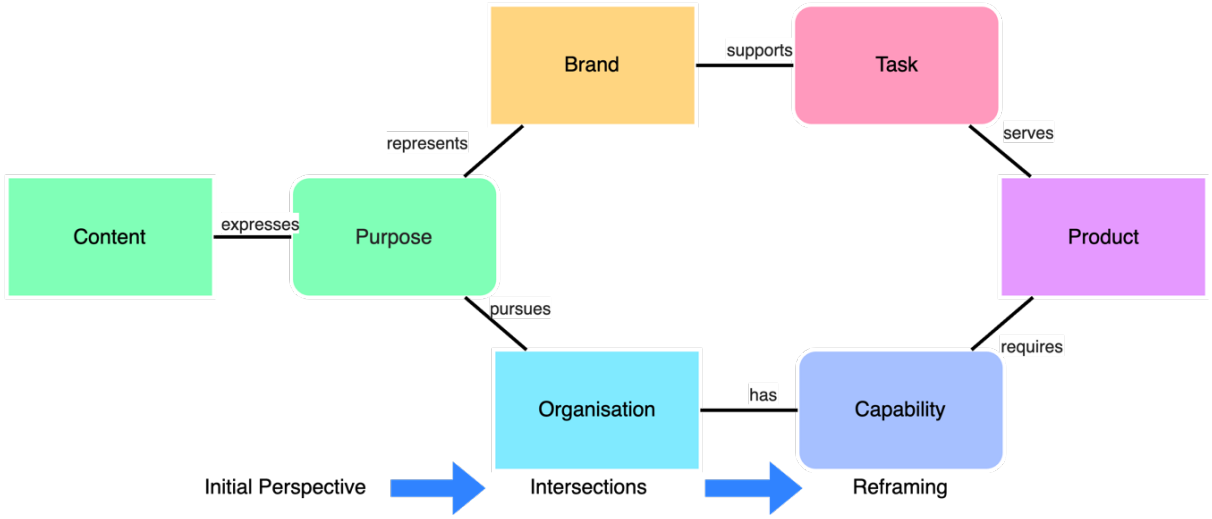


Figure 35: Reframing Identity to Experience and Architecture.

Pattern Example 2: Reframing Experience to Architecture and Identity.

Given that the challenge is related to the Experience perspective, the initial brief could be e.g. “design enterprise’s channel strategy for better customer experience”. Then reframing starts by identifying the channel(s), after which the tasks that customers are trying to achieve are evaluated. Then the perspective can be changed via intersections: a) Product(s) can be evaluated and then changed to the Architecture perspective to evaluate concerning capabilities; b) analyse the Brand and change to the Identity perspective and analyse the purpose(s) of the enterprise. Finally, the organisational structures can be analysed.

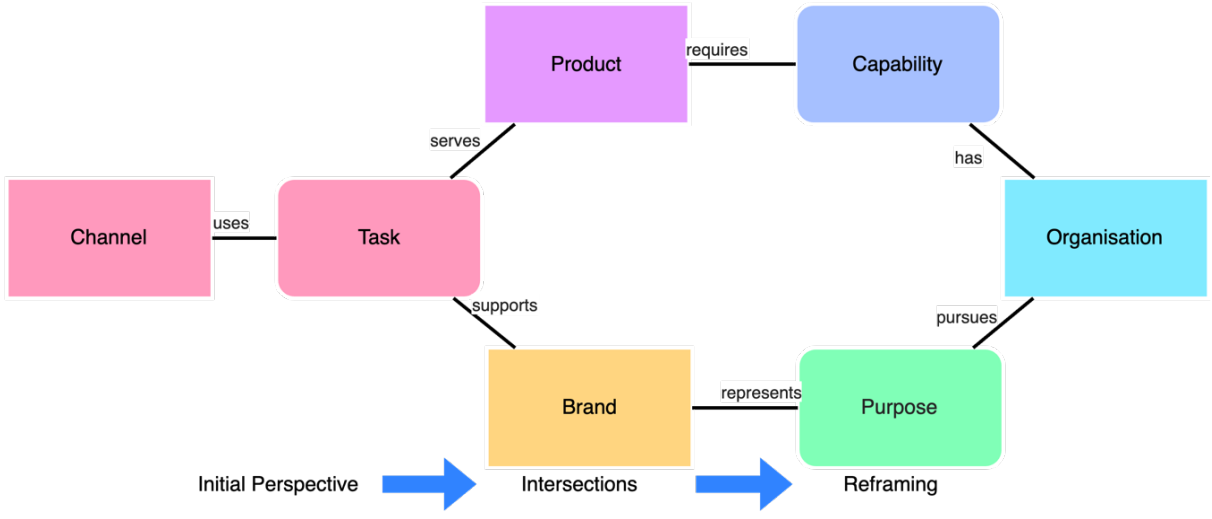


Figure 36: Reframing Experience to Architecture and Identity.

Pattern Example 3: Reframing Architecture to Identity and Experience.

Given that the challenge is covering the Architecture perspective, the initial design brief could be for example “consolidate complex legacy application landscape for digitalization”. Then reframing starts by identifying the application assets, from which we get into the capabilities that lead us to concerning products and organisation structures. Then we can change the perspective via these intersections. We can a) analyse purpose(s) and change to the Identity perspective. And, we can b) evaluate the tasks and change to the Experience perspective. Finally, we can end up analysing the brand of the enterprise.

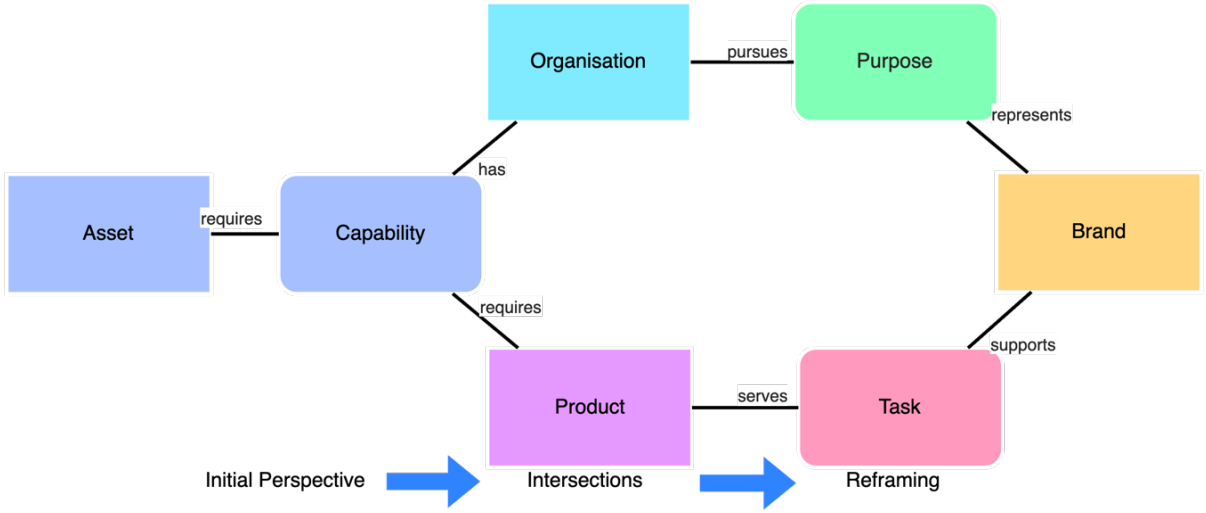


Figure 37: Reframing from Architecture to Identity and Experience.

Reframing with the Facet Model. Reframing can be started from any facet or intersection, from any element. The Facet Model can be used as a “checklist” for identifying all the affected adjacent elements when considering possible and potential cause-and-effect relationships.

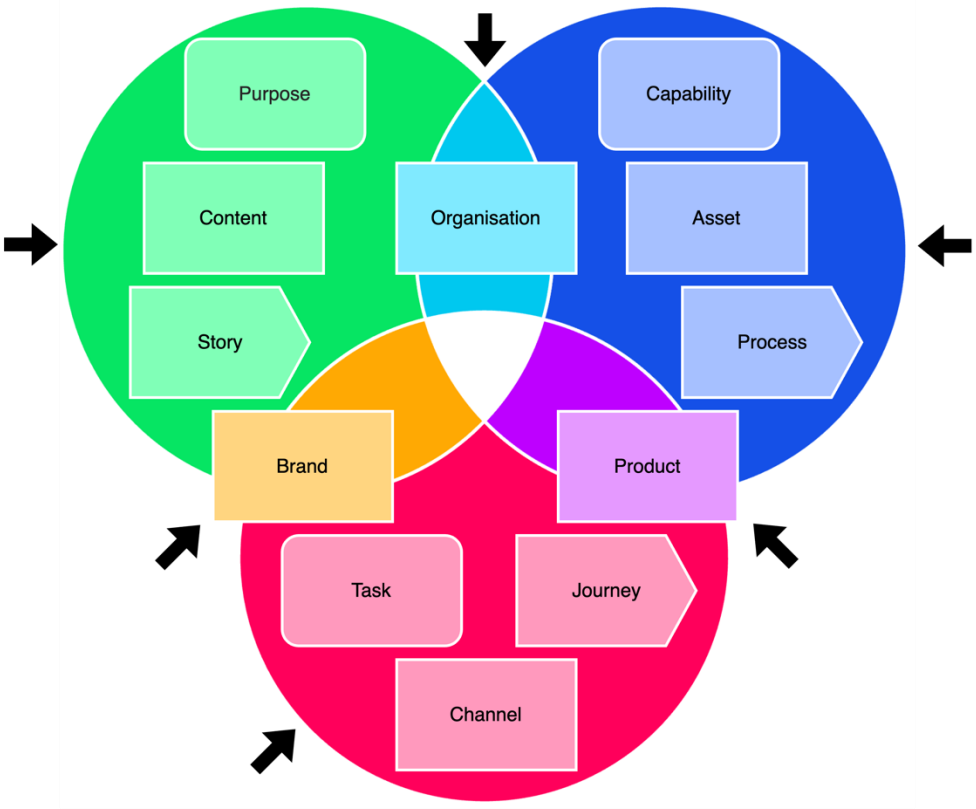


Figure 38: Reframing can be started from any element of the Facet Model.

Goal-orientation. It is always good practice to accurately formulate the need for change by setting clear goals and defining desired outcomes. To facilitate goal setting, it is practical to identify the drivers of change - what motivates us to make changes. Drivers, goals, and outcomes help clarify the challenge and provide a solid starting point for acting. A table format can serve as a useful tool, from which a visualization can easily be created when needed.

Drivers	Goals	Outcomes
Driver for change	Qualitative change to be achieved	Measurable achievement



Figure 39: Clarifying the need by 1) identifying the drivers, 2) setting the goals and 3) defining the concrete outcomes.

5.5 Business Design



Business is what an enterprise does. Typically, business is all about providing products and/or services for the benefit of customers. A business, or enterprise, is run through business operations. Business operations are the day-to-day activities that a business undertakes to produce, deliver, and manage its products or services, as well as to achieve its goals (objectives).

An enterprise exists to create value, serve customers, deliver services, fulfill its mission, and achieve its vision. Technology is just a tool that enable the fundamental purpose.

Understanding what customers value is a good starting point for business design. This is the customer insight, which relates to people's *experiences* and the role the enterprise plays in their lives. It also relates to the *identity* of the enterprise, explaining why it is meaningful to people and how the enterprise runs its business operations through its *architecture*.

The Enterprise Design Facet Model can be used to design and describe the core business in which an enterprise operates. The Enterprise Design and the EDGY language can be applied to design what the enterprise does, how it does it, and why. All the facets and their intersections together form the enterprise's business. Business is at the heart of the Facet Model, as shown in the figure beside.

When we design and develop the business, we address all these facets and their intersections. Conversely, when focusing on any of these facets or intersections, we are designing the enterprise's business.

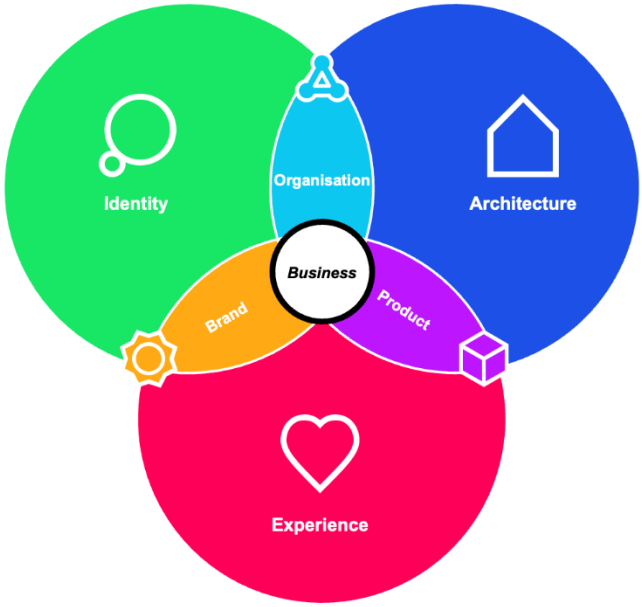
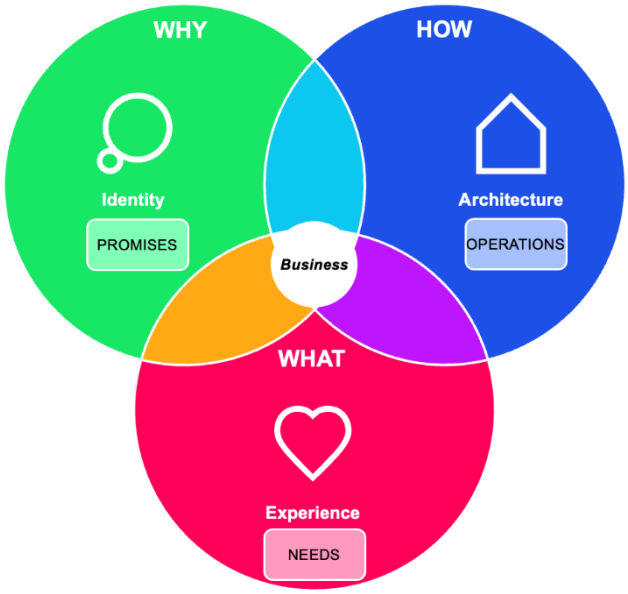


Figure 40: The business is what the enterprise is doing.

An enterprise exists to create value, serve customers, deliver services, fulfill its mission, and achieve its vision.

5.5.1 Business

What is a *business* all about?



I. A business refers to an *enterprising entity* or organisation comprised of people working together to achieve common goals, aligned with its identity and **promises**. These entities engage in commercial, industrial, public, or professional activities. Some businesses are for-profit, while others are non-profit, fulfilling a charitable mission or furthering a social cause. These promises explain ***why*** an enterprise exists and why it operates as it does, motivating and inspiring the people within the organization.

II. A business runs **operations** that produce products (items, goods) or offer services, making them available to customers (consumers, business actors, etc.). This aspect covers the structure and behavior that explains ***how*** an enterprise conducts its business operations.

III. A business is focused on meeting the particular **needs** of people. This aspect defines the needs that an enterprise aims to serve, fulfill, and support.

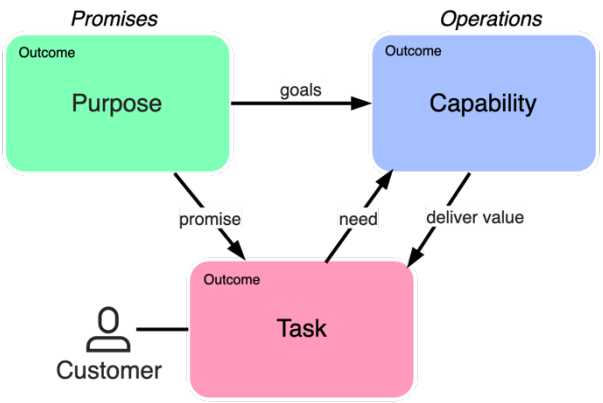
These fundamental elements of business can be translated into the core components of the Facet Model: *Purpose*, *Task*, and *Capability*. *Purpose* defines what people believe in and strive for, *Task* defines what people aim to achieve, and *Capability* defines what the enterprise can do. These are the *outcome* elements[17] of the facets. Business design can be simplified using these outcome elements, representing the outcome-driven view of the enterprise.

Focusing on these outcome elements when designing a business, we are:

a) describing the **identity** of the enterprise in terms of the **purpose**, which reflects the *promises* that we have stated in the form of stories and content - via the brand,

b) defining the **architecture** that is comprised of **capabilities** as composable business components, with which the business *operations* are enabled, and executed by the processes and supported by the assets and employees of the organisation, and

c) influencing the **experience,** specifically regarding *tasks* that represent customer needs. The experience is shaped by how well the customers' tasks are fulfilled during their journey, as they interact with the enterprise's products and/or services through various channels.



Business value can be created by delivering **customer value** on the promises of the enterprise. This simplification of the business fundamentals clarifies how the Facet Model and

[17] **Outcome elements** are goals or end results that we want to achieve. An outcome is a purpose to be served, a task to be supported, or a capability to be performed. While an *output* is a product or service that we create or deliver, an *outcome* is the actual end result, the benefit or advantage that can be achieved. An outcome is the concrete experience that we have at the end of the day. In addition, an *outcome* could be a demand to be served or a problem to be solved with the products or services and a set of activities. Outcome elements of the enterprise comprise the heart of business design.

its core elements, the outcomes, can be used for analysing and modeling the basic essence of business.

The purpose of the business is to provide goods (products and/or services) to customers, to fulfill their needs. The figure above illustrates how business capabilities deliver value on enterprise's promises according to customer's needs.

The purpose of the business is to provide goods to customers, to fulfill their needs.

Business basics. Customers have task(s) to do, which are served by the products and/or services that are produced by the capabilities of the organisation, which have a clear purpose that is made visible to customers via brand.

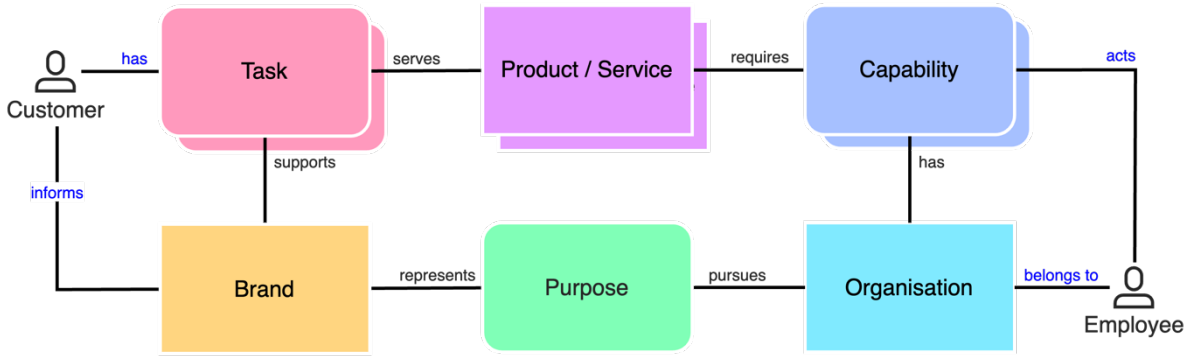


Figure 41: Business Basics.

Business Core. *Business operations*, the actual operational business, is defined by the *business architecture*, which defines how we run our business, and how are we produce our products and services to help customers accomplish their tasks throughout their journeys. Capabilities represent composable business components, with which the products and/or services are produced. Capabilities combine behavior and structure that belong together.

Business design is an approach to creating and improving businesses that emphasizes innovation, customer-centricity, and holistic thinking. It focuses on the strategic design of a business model, organisational structure, processes, and customer experiences to achieve better results and adapt to changing business environment (e.g. market) conditions. The goal of business design is to align an enterprise's strategy, operations, and customer value proposition in a way that creates sustainable competitive advantages. Here are key elements and principles of business design:

- **Customer-Centric Approach**: Business design places a strong emphasis on understanding the needs, preferences, and pain points of customers. It aims to design products, services, and experiences that meet or exceed customer expectations. Customer-centricity concretised in customer-driven design.
- **Design Thinking**: Business design often incorporates design thinking methodologies, which involve empathy, problem-solving, and iterative prototyping to create innovative solutions. It encourages a creative and user-centered approach to business challenges.
- **Business Model Innovation**: Business design focuses on rethinking and innovating the fundamental aspects of a business model, including revenue streams, value proposition, customer segments, distribution channels, and cost structure. Tools & methods: Business Model Canvas (BMC).
- **Process Optimisation**: It involves analysing and optimizing business processes for efficiency and effectiveness. This can lead to cost savings, improved customer experiences, and faster time to market. Tools & methods: e.g. Lean.
- **Organisational Design**: Business design may include redesigning the organisational structure, culture, and talent management strategies to support the desired business outcomes.

- **Cross-Functional Collaboration**: It encourages collaboration between different departments and functions within an organisation to break down silos and ensure a holistic approach to solving business challenges. Tools & methods: co-design, enterprise design, EDGY.
- **Prototyping and Experimentation**: Business design often involves creating prototypes or conducting experiments to test new ideas, strategies, and solutions before implementing them on a larger scale.
- **Adaptation and Resilience**: Business design acknowledges the need for businesses to be adaptable and resilient in the face of changing market conditions, disruptive technologies, and other external factors.
- **Sustainability and Social Responsibility**: Many business design approaches consider sustainability and social responsibility as integral components of a business's strategy and operations. (See Societal design).
- **Data-Driven Decision-Making**: The use of data and analytics plays a significant role in business design by providing insights for informed decision-making and continuous improvement.

Business design is employed by organisations seeking to remain competitive and innovative in a rapidly changing business environment. It is often used in industries where disruption and adaptation are essential, such as technology, retail, and finance. Design thinking and human-centered design principles are often integrated into business design processes to ensure a focus on the end user and their evolving needs.

Business design from the organisation perspective, is covered by the elements shown in the high-level simplification below. Customers use products and or services, that are produced by the capabilities of the organisation.

- Products and/or services are what is provided to customers.
- Capabilities represent the core operations of the business: what is required for creating and delivering products and/or services, what is needed for executing the business in which the enterprise operates.
- Organisation[18] makes products and/or services. There is an organisation behind every product or service.
- Employees belong to organisation structures, and they are acting in capabilities (to be more precise: employees are actors in the processes of capabilities, or employees play roles of certain profession, skills and competencies).

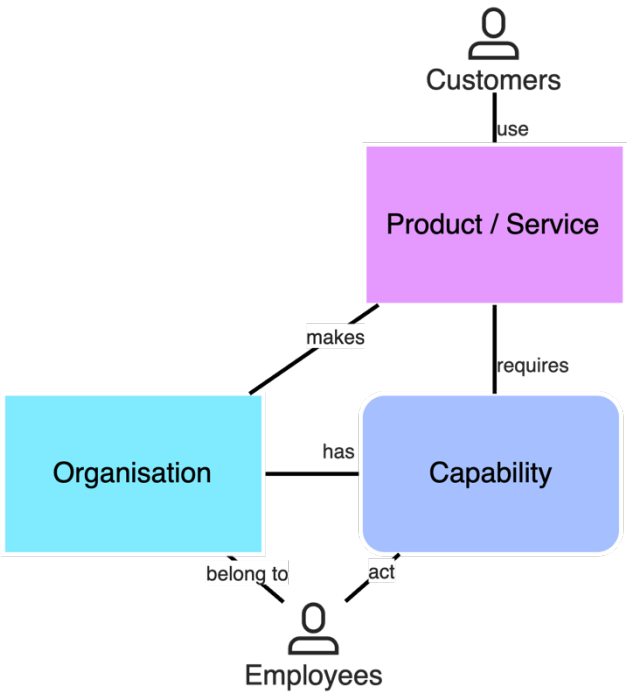


Figure 42: Business fundamentals: an organisation realises its offerings through its capabilities.

Capabilities represent the core of the business operations and delivery.

[18] **Organisation** can refer to e.g. the whole enterprise, or some of its parts such as business unit, group or team.

Capabilities are the basic building blocks of the business, the business DNA, Capabilities are composable business components from which the business is made of. Capabilities 'compose together what belongs together', e.g. people, processes and assets. Capabilities cover both business and IT aspects. To be more precise, capabilities are realized by processes that require assets (such as applications, data, technologies, devices or facilities etc.).

Capabilities bring together the people, processes, and assets needed for the enterprise to conduct business in line with its goals and deliver its offerings (products and/or services) to its customers. The capability "wireframe pattern" shown below.

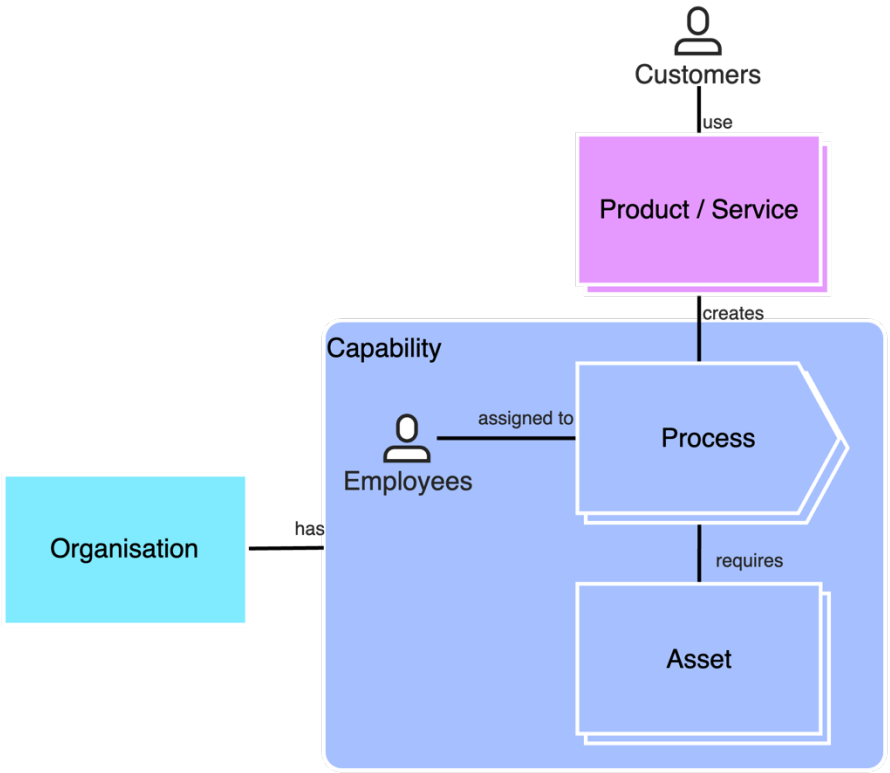


Figure 43: Capability is a composition of people, processes and assets.

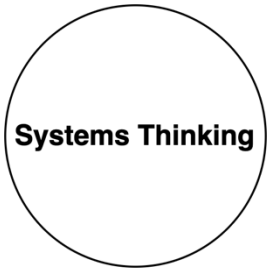
Capabilities are composable business components.

Architecture in this context, refers to *business architecture*, which encompasses an enterprise's operations: how everything works, how the business runs through processes, how assets are utilized, where and when, and how the organisation functions as a whole.

Business Architecture refers to an enterprise's operations and how it runs its business. In this context, architecture primarily covers the fundamental aspects of the business: people, processes, and assets, working together as a coherent whole of interconnected behavior and structure. Business architecture encompasses everything relevant to running a business. People, processes, and assets are organised into capabilities, which are carried out by organisational structures to produce products and/or services for customers. In contrast, IT architecture focuses primarily on applications and technologies, while business architecture addresses everything meaningful from a business perspective. (See "Business Architecture" 0)

Business architecture covers all that is relevant to run a business, including the alignment of people, processes, and assets to effectively produce and deliver products or services.

5.5.2 Systems Thinking - the Systemic Approach



"Systems Thinking is an approach of making inferences about behavior by developing an increasingly deep understanding of underlying structure." [19] So it is more like a learning method of getting insight of the enterprise's behavior and structure, both are sides of the same coin.

Behavior and Structure. A system consists of both behavior and structure[20]. At a large scale, an enterprise (or organisation) or an ecosystem is a system.



Figure 45: Behavior and Structure are two sides of the same coin.

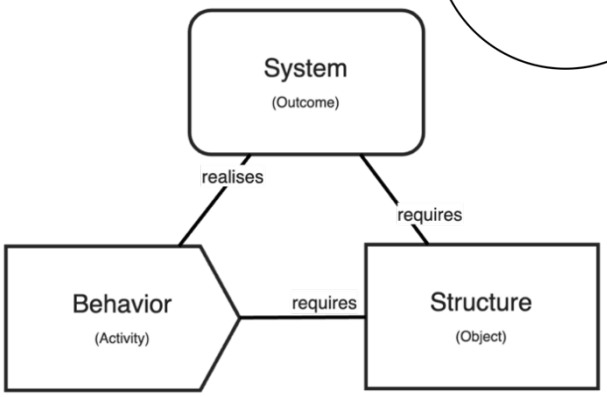


Figure 44: System consists of behavior and structure.

A system, such as an enterprise, exists for a reason. The reason, purpose, the outcome, the system itself, can be associated with the output(s) or outcome(s)t produces.

A system shares the same characteristics as each of its parts, making it fractal by nature. An enterprise is a system of (sub)systems that belong together.

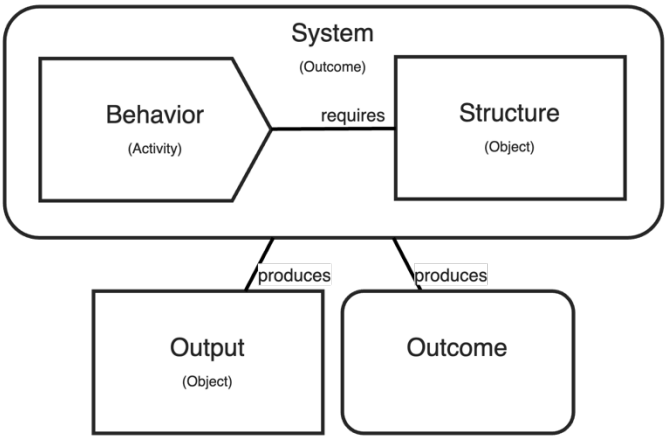


Figure 46: A system is associated with the output(s) or outcome(s) it produces.

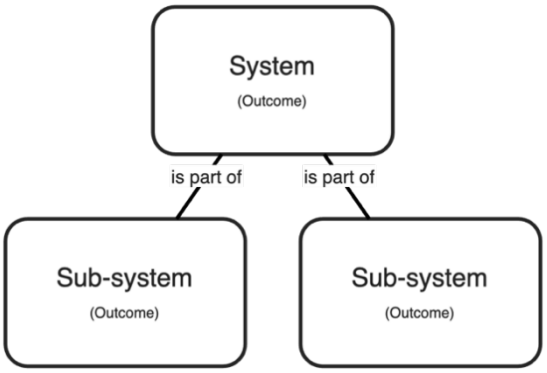


Figure 47: A system of systems.

In the enterprise context the behavior can be associated with the stories we tell about us, it can be associated with the journeys our customers experience, or it can be associated with operational activities such as processes. Structure

[19] **Systems Thinking**, Barry Richmond, Systems Dynamics Conference, 1994.

[20] **Behavior and Structure**. Chicken and egg question. Which comes first: behavior or structure? Operational business or organization? It can be argued that operational business comes first, followed by the organization. The initial purpose of an enterprise is driven by a specific behavior needed to fulfill a reason. Behavior is carried out by an organization.

can be associated with organisation or assets (of type such as application, data, facility or device).

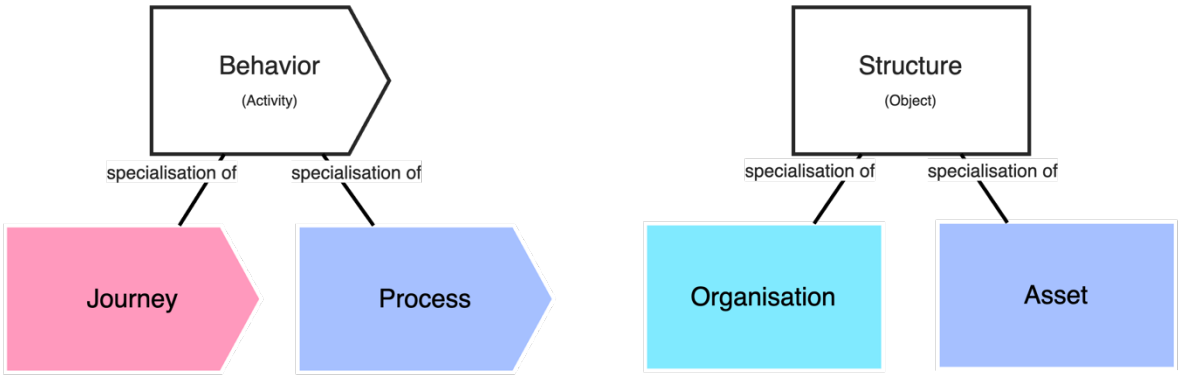


Figure 48: Abstract Behavior and Structure in the form of the specialised, concrete EDGY facet and intersection elements.

Behavior and structure in the form of the EDGY base elements (figure below). The *Activity* element describes behavior whose *efficiency* can be influenced, whereas the *Outcome* element describes the actual *effectiveness* that the behavior (or action) produces.

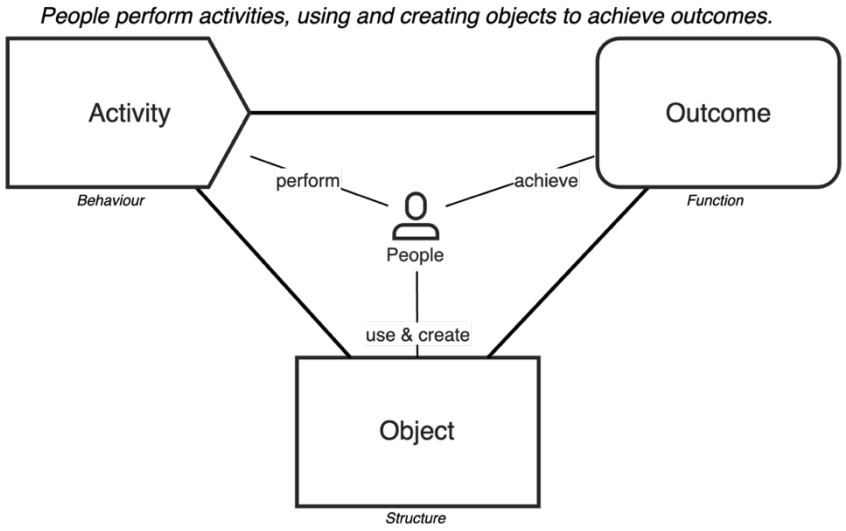
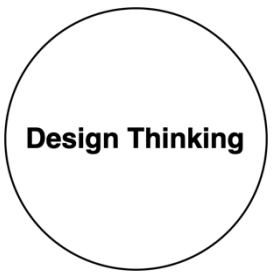


Figure 49: Systemic approach.

5.5.3 Design Thinking



Enterprise design is heavily based on the ***Design Thinking*** approach. The relationship between enterprise design and design thinking is rooted in their shared focus on solving complex problems through a human-centered, co-creative, and iterative process.

Design Thinking is a human-centered, iterative problem-solving approach used to innovate, develop, and refine products, services, or solutions. It emphasizes empathy with users, creativity in generating ideas, and a hands-on approach to prototyping and testing. This process helps teams focus on user needs, generate diverse solutions, and refine ideas based on real-world feedback. The core of Design Thinking is a deep understanding of the needs, behaviors, and motivations of customers (users). Solutions are designed with empathy to ensure they address real user challenges. Design Thinking encourages *multidisciplinary and interdisciplinary collaboration*, bringing together diverse perspectives from different fields or areas of expertise to generate more creative and comprehensive solutions.

- The phrase "From Design Thinking to Design Doing" refers to the transition from conceptualising and ideating solutions to actually implementing them in real-world business context.

6. Enterprise Perspectives

The Enterprise Design Facet Model introduces three facets (a.k.a. perspectives): Experience, Identity and Architecture. Since all enterprises have these properties, these facets act as lenses through which we communicate when designing. The following chapters introduce example diagrams of these facets.

6.1 Experience Examples

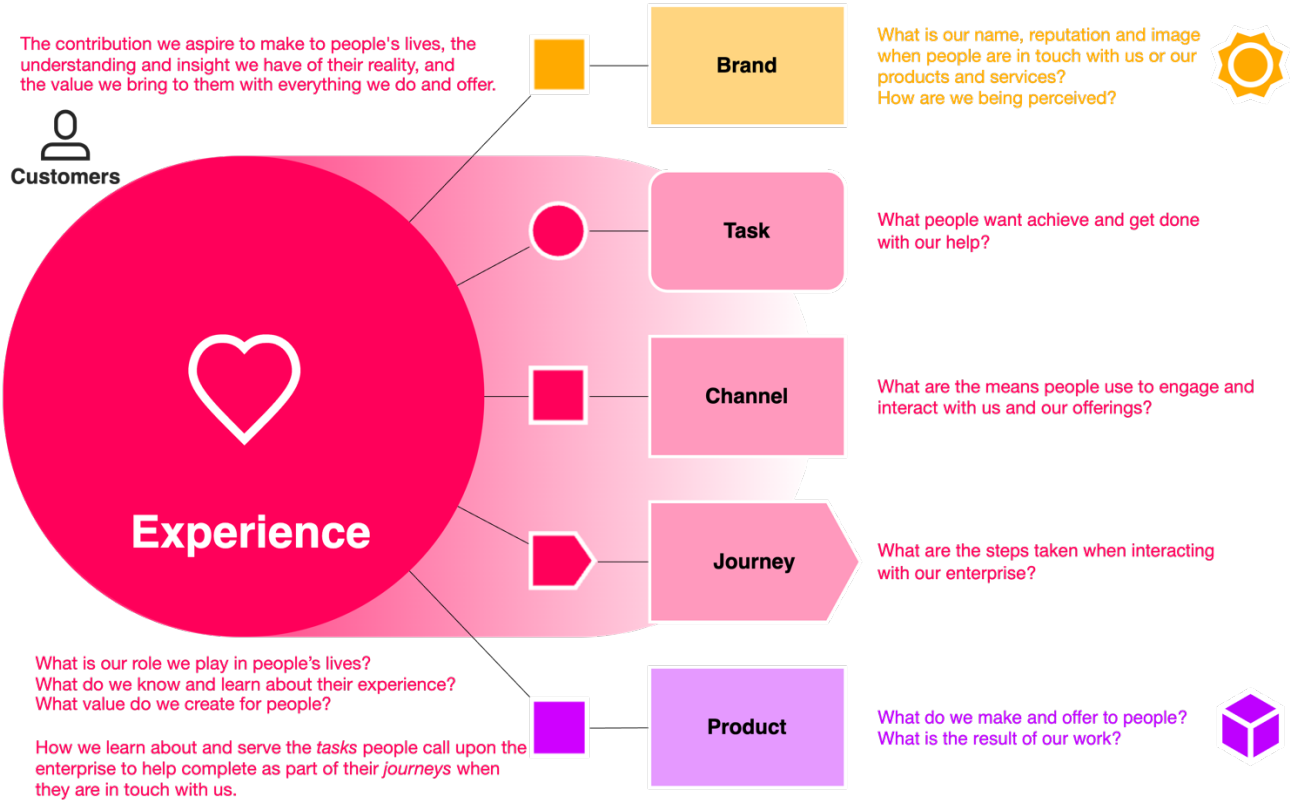


Figure 50: Experience Facet with Intersections Brand and Product.

Experience:

- *The impact through interactions the enterprise has on people and their lives*. [3]
- What various stakeholders (customers, owners, employees) perceive and interact with the organisation and its offerings, and how these interactions influence them.
- Experience covers following concepts: Customer Experience (CX), User Experience (UX), Employee Experience (EX), Brand Experience and Operational Experience (customers & employees).
- Experience van be modelled with EDGY elements ***Task***, ***Journey***, ***Channel***, ***Brand*** and ***Product***.
- Intersections:
    - Brand refers to collective image and reputation that an enterprise builds through consistent communication, behavior and customer experience.
    - Product refers to offerings that the enterprise produces and offers: Products or Services. The EDGY *Product* element can be used for modelling both products and services.

Key elements of architecture in enterprise design context are as follows:

- **Task**: What people want to achieve and get done [3].
- **Journey**: The events and activities people experience in their lives [3].
- **Channel**: The means of communication between people and the enterprise [3].

6.1.1 Customer Perspective



Enterprise design from the customer perspective covers elements as shown in the simplification below. EDGY provides concepts with which it is possible to visualize all that is meaningful in the context of enterprise. The customer perspective can be analysed with EDGY elements *Task*, *Journey* and *Channel*, which open up the important aspects from customer's point of view. These elements cover the outside-in view of enterprise's business. The inside-out view is then covered with the customer-facing elements *Brand* and *Product*, which are then connected to other elements of the enterprise, *Capability*, *Organisation* and *Purpose*.

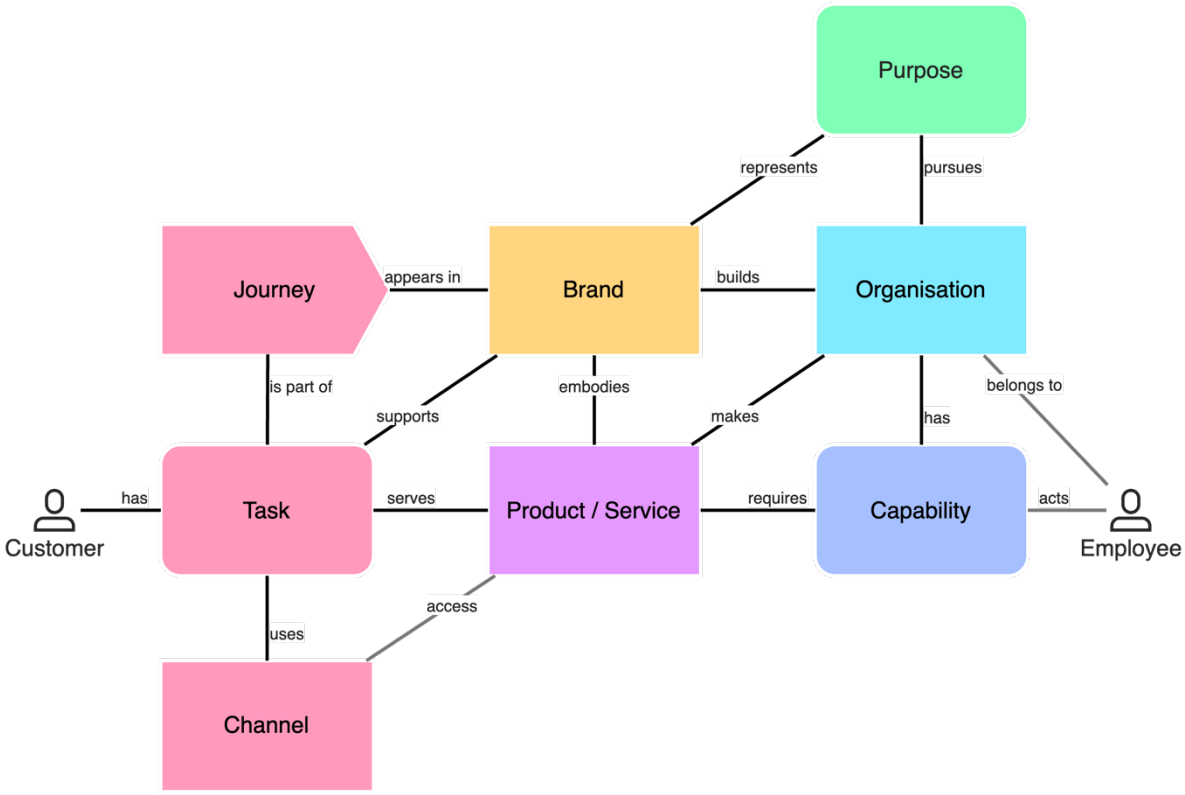


Figure 51: Customer experiences the Enterprise.

A customer has task(s) to do that are served by the products and/or services, which are produced by the capabilities of an organisation. A customer traverses a journey (of several steps), that represents what a customer *experiences* while doing task(s). The customer becomes aware of products and/or services with the help of the brand of the organisation. The customer contacts the products and/or services via channels.

Customers' access journey steps (stages, phases) via channels when they perform their tasks. Tasks are served by the products and/or services (offerings) that require certain capabilities from the organisation.

A *journey* represents what a customer *experiences.*

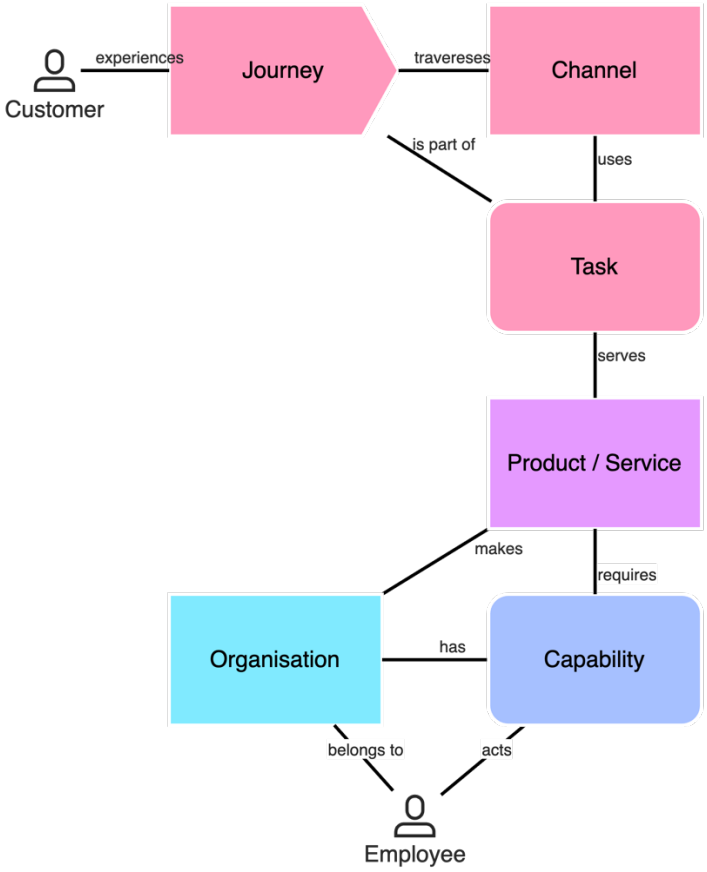


Figure 52: Business fundamentals from the Customer's point of view: customer needs (tasks) meet the offerings (products and/or services) of the enterprise.

Business value is created based on customer value, which occurs when the customer benefits from the products or services of the enterprise. So focusing on customer experience an enterprise can gain success in business.

A capability comprises all that belongs together: everything required to produce certain outputs in the form of offerings, such as products and/or services.

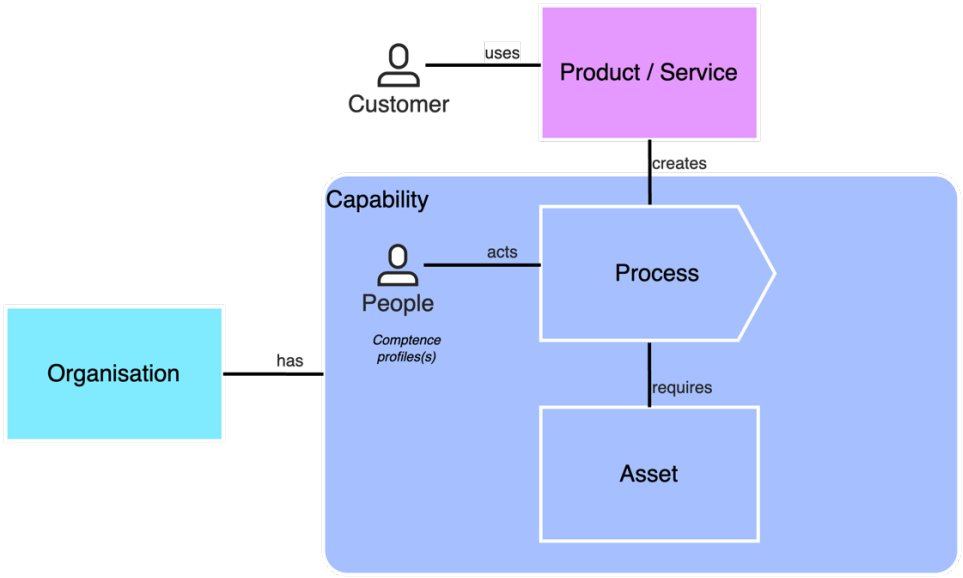


Figure 53: Capability is a composition of people, processes and assets that belong together.

6.1.2 Customer-Centricity as a Business Strategy



Customer-centricity (or customer-centrism) is an approach where the customer is put at the center of all designs and decisions when delivering products, services and experiences to create customer satisfaction and build long-term relationships.

Customer-first is a business strategy, where the customer is at the core of the business.

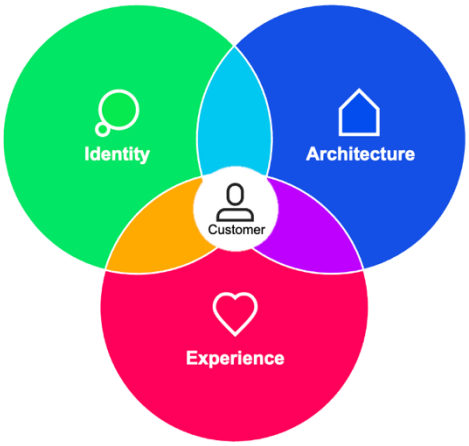


Figure 54: Customer-centrism.

Designers and design teams in the organization must stay in touch with what's happening in the customer's life. It is important for designers to develop awareness and understanding of the journeys customers are going through and the tasks they are trying to accomplish. All change activities within the enterprise must be subordinate to creating the best possible customer experience.

A customer-centric approach can be supported by the Facet Model by asking the right questions to prioritize designing the enterprise around customer-centrism. The ultimate goal is to provide well-designed products and services to deliver the best possible experience. This can be achieved by gaining customer insights, supported by the Facet Model and related tools, methods, and techniques.

Customer-centric Business Strategy:
The customer is at the center of all designs and decisions when delivering products, services, and experiences to create customer satisfaction.

6.1.3 Customer Transformation

The ***customer transformation*** concept refers to the approach introducing new and improving existing customer focused processes in an enterprise. It takes advantages of data analytics to better understand customer behavior. It also leverages on implementing digital transformation initiatives to create more personalised and seamless customer experiences across different channels.

6.1.4 Customer-Focused Business Design

Customer-focused business design is putting the customer first. Taking the customer-focused perspective, we can switch the Facet Model into the position, where the experience is on the top. This underlines the customer-oriented and customer-driven approach in the overall design. The Facet Model can be used in any position according to what is appropriate depending on the context.

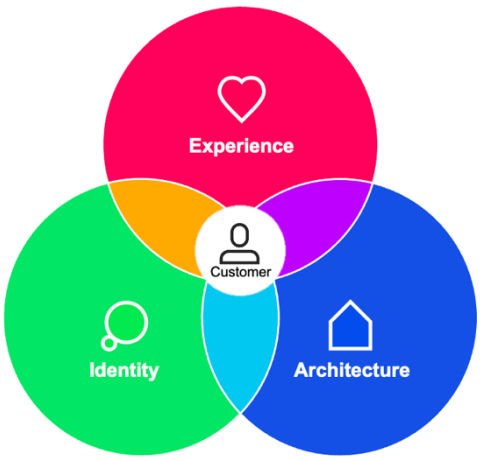
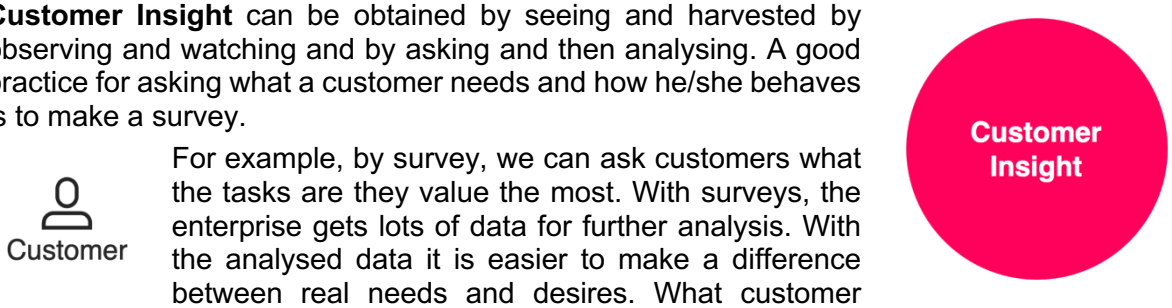


Figure 55: Customer-focused view.

Focusing on the customer, we can look at the enterprise from the customer's point of view. Then it is important to get an understanding of what is happening in the customer's life. What are the *tasks* a customer wants to achieve, and what are the *jobs to be done* that he/she needs to do? Answers to these questions we get by gathering information of customers' lives. This *customer insight* is crucial information that can be used when designing products and services for the customer's benefit. Customer insight clarifies what customer experiences and behaves, and what are the actual needs behind desires.

Customer-focused business design is putting the customer first.

Customer Insight can be obtained by seeing and harvested by observing and watching and by asking and then analysing. A good practice for asking what a customer needs and how he/she behaves is to make a survey.



For example, by survey, we can ask customers what the tasks are they value the most. With surveys, the enterprise gets lots of data for further analysis. With the analysed data it is easier to make a difference between real needs and desires. What customer really needs and what he/she wants, should be distinguished from each other. Data analytics [21] is an important part of service design, with which it is possible to analyse the customer-related data that is harvested. In EDGY the customer needs are represented with *Task* elements.

Getting customer insight into the customer's life is the predominant prerequisite for all the design efforts. With customer insight, it is possible to get information about the ultimate needs of the customers. By getting the right knowledge of customers' needs, the enterprise can focus on the right products and services at the right time, and provide the best possible customer experience.

Customer Journey is the path of activities during which the customer is completing tasks. Customer Journey Mapping is an important tool for matching customer's tasks to the enterprise's products and services. This includes the touchpoints and channels, with which the customers are interacting with the enterprise.



Customer Tasks are specific actions or activities the customer wants to complete. Outcomes that a customer wants to achieve. Analogous to jobs to be done (JTBD) focusing on the task or objective the customer wants to accomplish. Generally, a *task* refers to what a customer is engaged in during their journey while interacting with a service or product. *Tasks* represent the customer *needs*.



Needs and desires: Value Demand. There are always both functional needs and emotional desires. Both impact the experiences of a customer. Functional needs can be fulfilled by the right products and services. Emotional desires can be satisfied by quality when interacting with customers. As the emotions[22] of people are subjective, they are difficult to be altered.

Good quality in services means good *customer experience* as a response to the *value demand* [23].

---

[21] **Data Analytics** is a capability, that consists of specialized skills and competences, and specific tools and techniques such as Data science, machine-learning and AI. Data Analytics capability includes specific processes and assets (applications and data), provides certain products & services, that are performed and provided by particular organisation structure(s).

[22] **Emotions** are hard to get. Emotions of people are as slippery as the organisation culture. Both are somewhat emergent by their nature. They are like shadows what we see, but we can't touch them. Such an intangible things are difficult to design, compared to many other concrete tangible objects or activities that can be defined in detail. Emotions or culture cannot be directly altered or changed, but they can be indirectly affected by the design efforts. A dilemma is: a single product or service can cause thousands of emotions. So, there is this 'circular reasoning': experience is experience. Subjective experience refers to the emotional and cognitive impact of a human experience. However, with well-designed products and services an enterprise can produce good customer experience. Products and services can be well-designed by co-design, and supported by combination of customer insight and business insight.

[23] **Value Demand** refers to the types of requests or needs that customers or stakeholders bring to the enterprise, specifically seeking value in the form of services or products that address their goals or problems. Unsuccessful value demand may trigger *failure demand*, where customers contact the enterprise due to unmet expectations or errors.

Customer experience is a result of many things: interactions with service providers and employees. The most important factor for the experience is the outcome that the customer gets at the end of the *customer journey*. The outcome can be either beneficial and valuable, or it can be disappointing. Good customer experience is what an enterprise pursues, as good customer experience creates *customer value* that creates *business value*. Poor customer experience [24] is what should be avoided, as it can cause unwanted consequences for the business and the brand. Getting feedback from customers is important for analysing what can be done even better.



Taking the customer perspective, we can utilize the Facet Model as shown in the figure below.

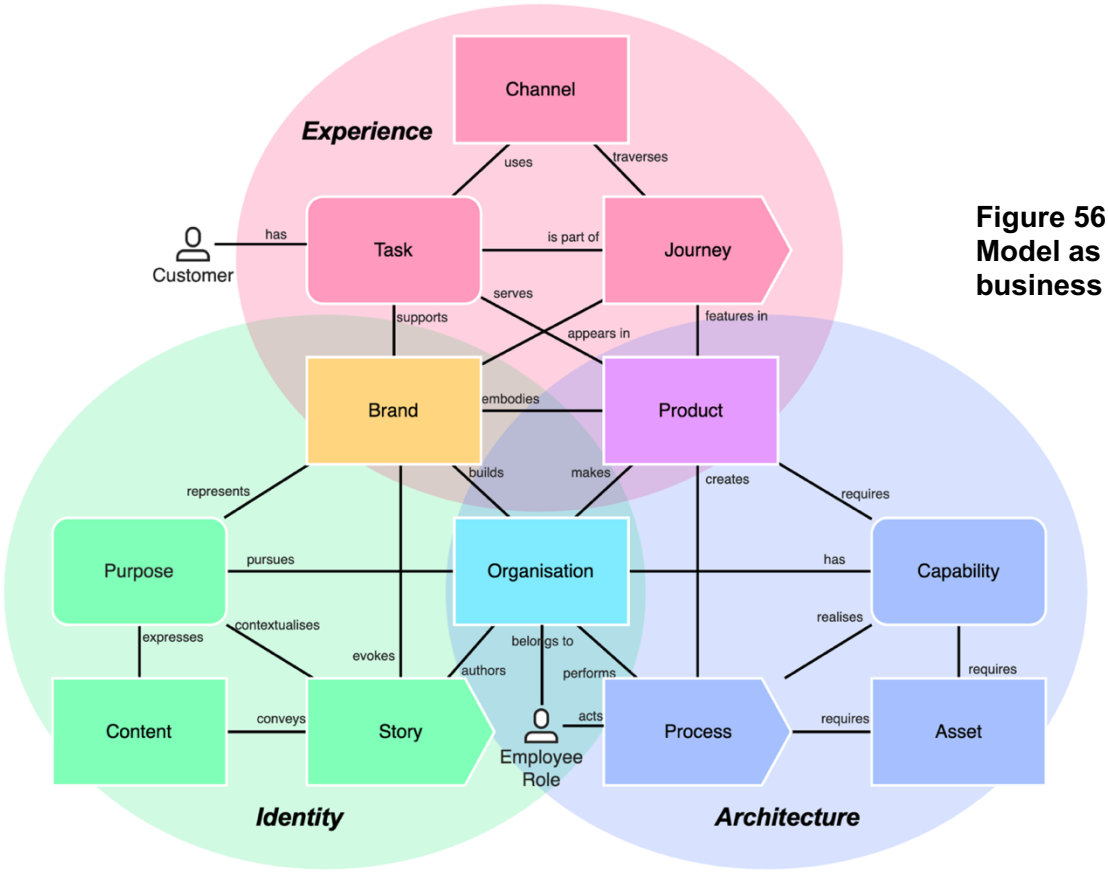


Figure 56: The Facet Model as a tool for business analyses.

Starting from the customer point of view, by following the relations between the enterprise elements, we can find the aspects that affect the customer experience:

- *Customer has Task(s) to do, that he/she experiences via Channel(s) during the Journey.*
- *Customer Journey is influenced by the Brand of the enterprise.*
- *Customer uses the Products / Services provided by the enterprise Capabilities.*
- *Processes and Assets of the enterprise realise capabilities.*
- *Processes are performed by the Organisation,*
- *Organisation has goals, mission, value propositions etc. with a story and content, which altogether constitute the Purpose of the enterprise.*
- *The purpose of the enterprise is made visible by the Brand.*
- *Brand influences the customer to use the Products and/or Services of the enterprise...*

The customer experience is made up of all this. Everything that a customer experiences while traversing through the journey is affecting to the emotions and feelings of the customer.

Good customer experience is the result of well-designed products and services.

[24] **Failure Demand** is a remarkable reason for poor customer experience. That occurs when customer experiences poor quality, poor service, unnecessary interactions, unfriendliness, little or no attention, gets incomplete or wrong products or information.

6.1.5 Customer-Centric Model

A customer-centric model is a business approach that prioritizes the needs, expectations, and satisfaction of the customer in every aspect of an organisation's operations, from product development to marketing, sales, and service. Instead of focusing solely on products or services or internal processes, a customer-centric organisation places the customer at the center of all decisions and actions, aiming to create value and long-term relationships.

Customer-centrism leads to customer-driven business is that focuses its strategies, products, services, and processes primarily around the needs, wants, and feedback of its customers. In this model, the business adapts and evolves based on customer input and behavior, with the goal of delivering value, fostering customer loyalty, and staying competitive in the market.

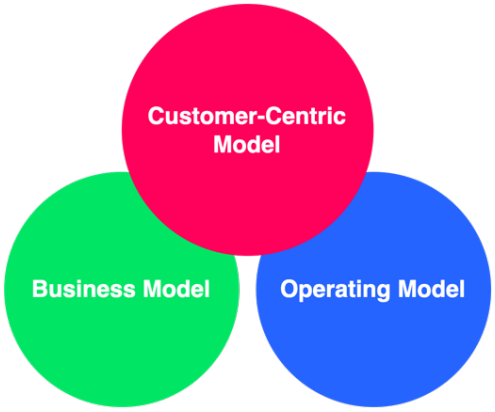


Figure 57: Customer-Centric Model.

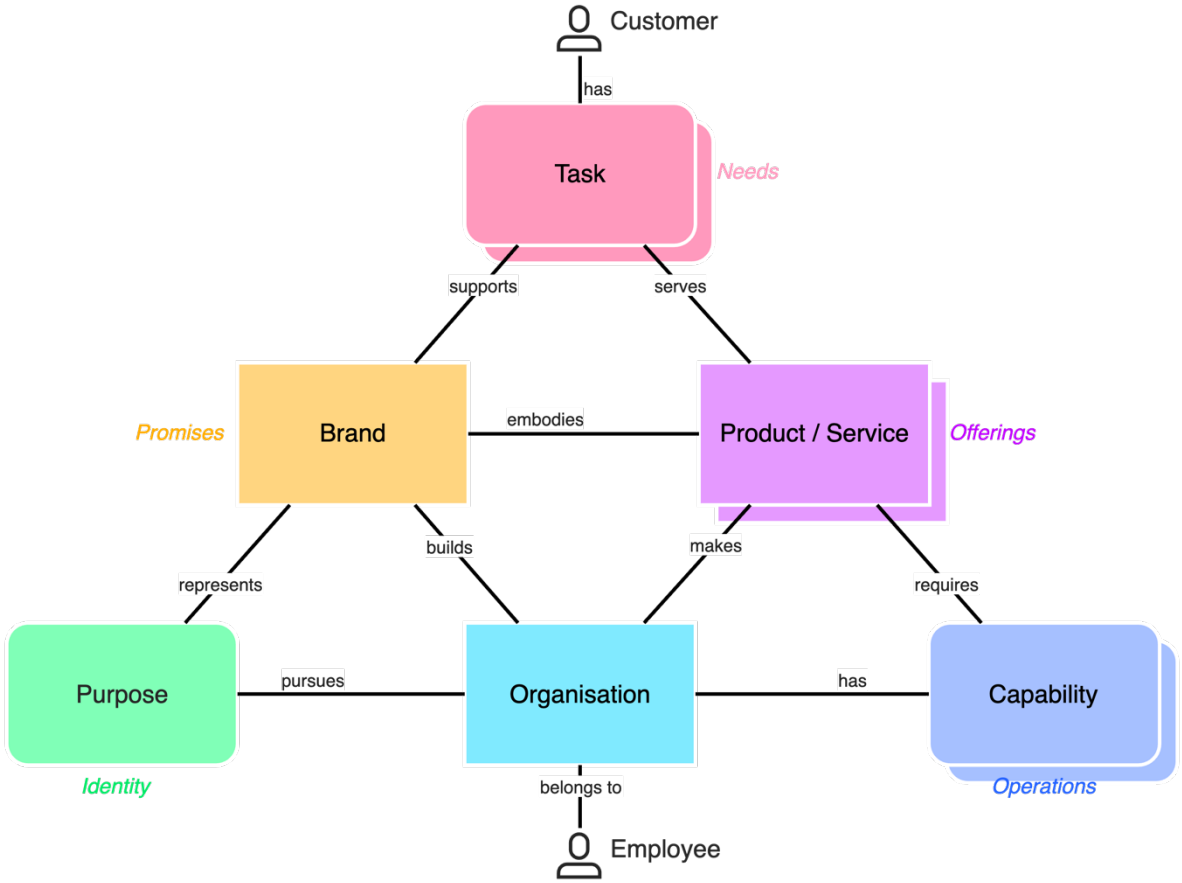


Figure 58: Customer-centric approach.

- **Customer-Centric Business**: Proactive, holistic, and long-term relationship-focused.
- **Customer-Driven Business**: Reactive, adaptive, and focused on immediate customer feedback and demands.

Both approaches aim to put the customer first and improve customer experience (satisfaction). They both emphasize the importance of listening to customers and delivering value based on their needs and preferences. Many customer-centric businesses are successful, as they consistently focus on customer satisfaction and innovation driven by user feedback. By embracing a customer-centric model, businesses not only improve their customer relations but also drive sustainable growth and long-term success.

6.1.5.1 Customer Engagement Model

Customer-centric business model, ***Customer Engagement Model***, enhances the traditional business model concept by focusing on customer[25]. Whereas the business model refers to the way in which an enterprise creates value for its stakeholders, the customer engagement model encompasses all the aspects and various elements with which an enterprise creates value to its customers via offerings (products and/or services). And when creating customer value with the offerings, the enterprise generates also business value. So the fundamental paradigm shift is related to the focus switching from organisation to customer. From inside-out thinking to outside-in thinking.

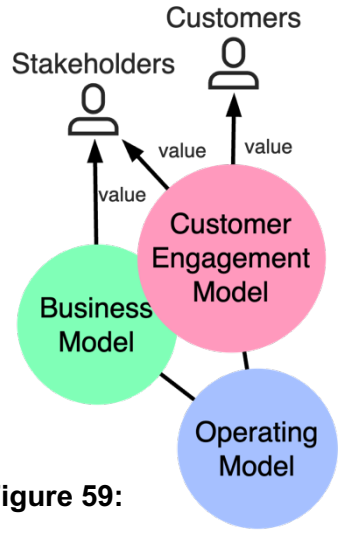


Figure 59: Customer Engagement Model.

The customer-centrism is a strategic choice taken by the enterprise, which puts the customer as a focal entity in all the business decisions, as well as in the operational business. Consequently, this customer engagement model forces to customer-driven design & development, where the customer needs are the basis for all the change initiatives and activities in the enterprise. The basic principle is "customer first", from which all the other principles are derived and subordinated from. Principles are as shown in the figure below.

Customer Insight and Business Insight (1 + 1 > 2).

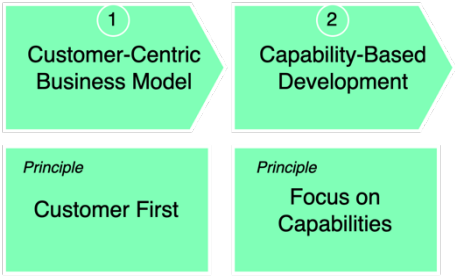


Figure 60: Principles of the Customer Engagement Model.

Think Big. *Customer insight* serves better the enterprise when used in conjunction with *business insight* - and *business foresight*. The most comprehensive insight can be accomplished when using these in-depth areas of knowledge together as a combined approach. This can be achieved by using the Facet Model, as its facets cover all the relevant aspects and all that is meaningful in the context of enterprises: people and their needs, existential purpose and story of promises, and operational abilities to deliver on promises.

Start Small. Take the most familiar perspective as a catalyst and then extend that with elements of other perspectives. Use the Facet Model as a map. Navigate to other territories with a curious and open mind. Take the changes [26]. Think differently. Change perspective. Discuss and learn with others. Calibrate your tools and methods with other disciplines. Discoveries and opportunities will soon appear.

Take the holistic view. The fact is that there is this only enterprise that we have, so why not design it all together in a holistic way? It is just reasonable to create a shared understanding of the entire enterprise, and not just an aspect of it. It is unwise to observe and develop the enterprise within separate practices. It is not the most optimal way to do things within many distinct groups of people with the ways of their own. Those various disciplines produce inconsistent, somewhat overlapping, and slightly contractionary outputs and outcomes. This causes unnecessary misconceptions and ineffectiveness on a large scale. Instead, utilise the enterprise design approach with the Facet Model and take the holistic view. Consider all the aspects and factors at once, so that nothing has to be added to the picture afterward.

Co-design. Take the holistic view by co-designing. Experience matters and Services are not exclusive areas of Service Designers only. Respectively, architecture is not the property of architects only, not mention IT. Instead, both experience and architecture are subjects that have synergy, so they'd better be done together, in combination.

Produce a coherent, holistic single source of truth in co-design with the Facet Model.

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[25] Hänti, Sirpa, *Asiakkaista ansaintaan – Asiakaskeskeinen liiketoimintamalli*, Alma Talent 2021.

[26] **Take the changes**. "Chance Favors The Prepared Mind". When you are curious and open to new ideas, when you appreciate different professions and their opinions, when you are ready to change your perspective and perception, then you can learn and find new things and get better in what you do.

6.1.6 Customer View and Organisation View

When customer meets the organisation, it is the moment of truth for the enterprise: customer needs should be fulfilled with the offerings, the products and/or services. This is the “normal, healthy” value demand that arises from the customer needs (tasks, jobs-to-be-done).

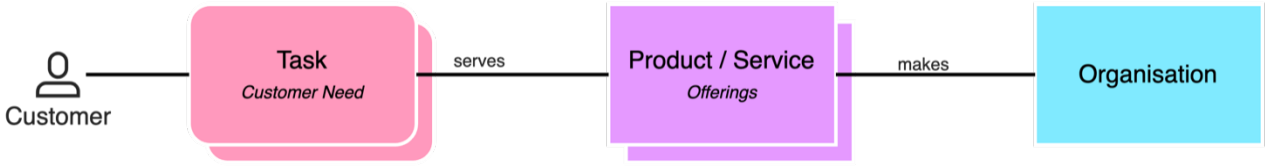


Figure 61: Customer needs meet the offerings of the organisation.

Customer gets information about the offerings the organisation by the brand communication.

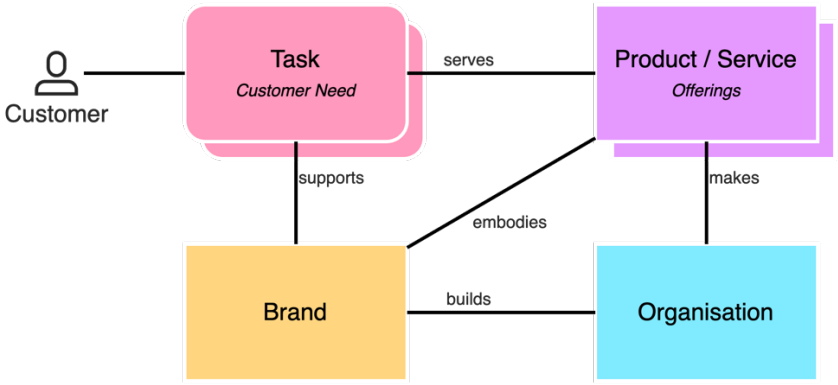


Figure 62: Customer is informed by the offerings via the brand.

EDGY helps to take the holistic view of an enterprise by combining experience, identity and architecture perspectives, which is a practical approach to consider both the customer and organisation viewpoints at the same time.

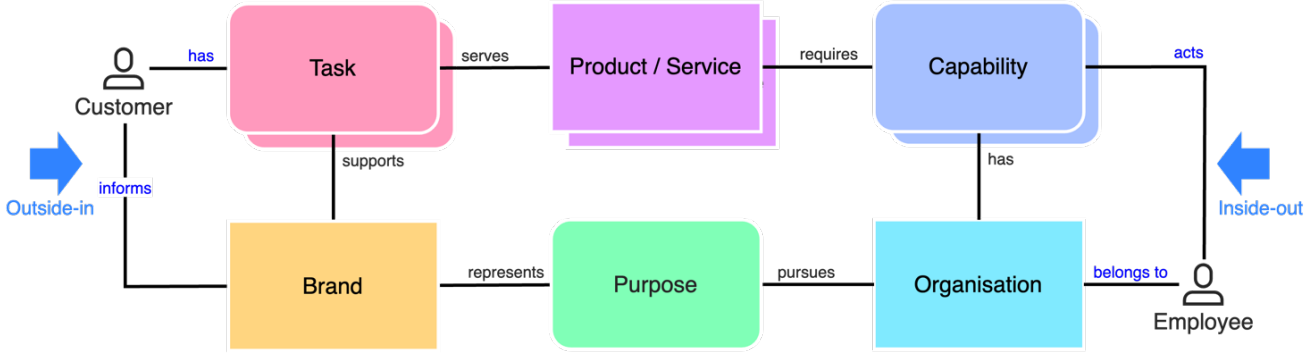


Figure 63: Outside-in and inside-out views.

Business-related design challenges can be analysed e.g. a) from the customer view or b) from the organisation view.

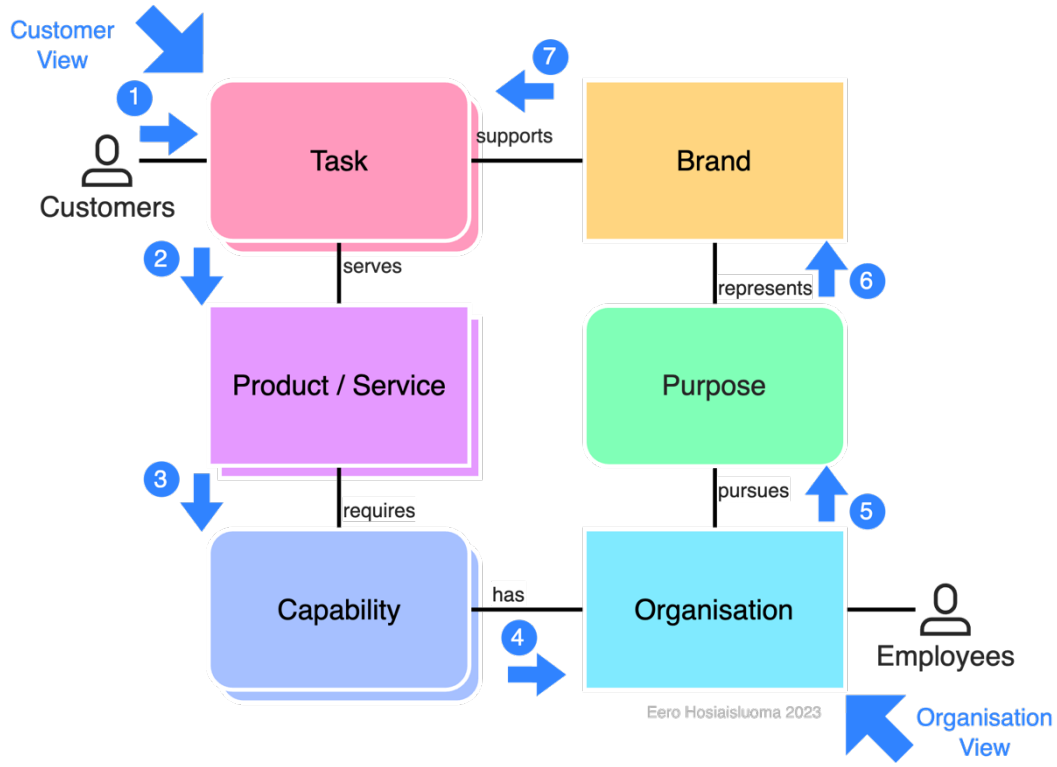
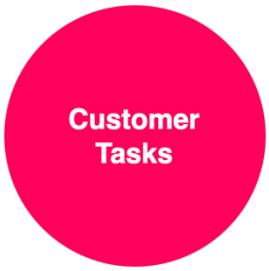


Figure 64: Wireframe model of business basics.

1. Customer has task(s) to do,
2. which are supported and served by the products and/or services,
3. that are produced by the capabilities
4. of the organisation,
5. that have a purpose
6. which is manifested by the brand
7. to the customers.

6.1.7 Customer Tasks (People Tasks)



Customer-oriented design can be started by analysing the customer tasks a.k.a. needs. Tasks are whatever a customer wants to do. Tasks are the customer's 'jobs to be done'. Tasks can be e.g. functional or emotional, they can be high-level and long-term tasks, or low-level and short-term tasks.

Tasks can be harvested e.g. with surveys, or just observing and interviewing the customers. When the tasks are harvested, they can be grouped for further analysis. When visualized, top tasks can be color-coded so that they can be easily recognized. Top tasks are the most important tasks for the customers, from which they gain the most benefit. From the enterprise's point of view, top tasks are the tasks to which to focus and put effort – for to enable the best possible customer experience.

Tasks are modelled with the EDGY *Task* element. A task represents the result people want, the outcome, rather than the actions taken to reach it.

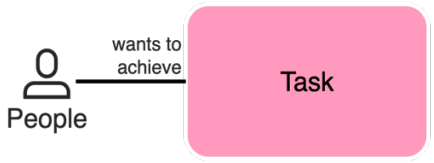


Figure 65: Task is the outcome people want to achieve, not the means to get there.

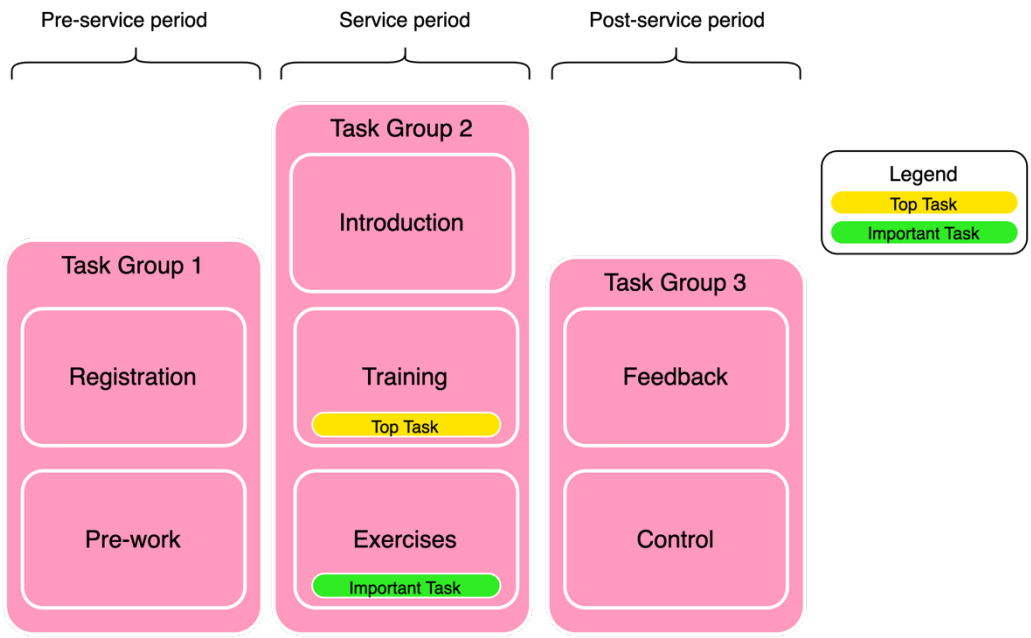


Figure 66: Tasks grouped in periods.

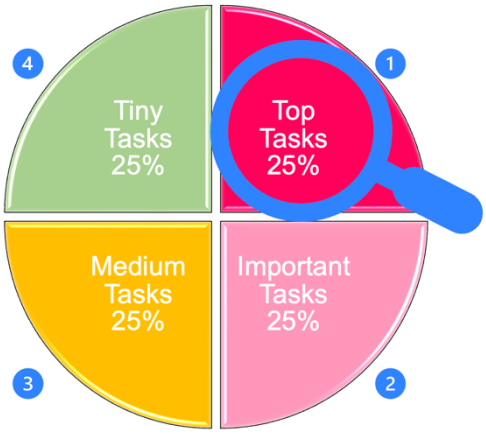
Tasks are what people want to achieve and get done. [3]

6.1.7.1 Top Tasks

According to the book Top Tasks by Gerry McGovern, a basic pattern can be identified when analysing tasks that customers want to accomplish. Tasks can be distinguished between top and tiny tasks based on their customer importance.

Top task survey - Asking customers what they want with a survey. If we ask customers by survey what tasks they value the most important to get done, there is a pattern that can be observed. According to that, there can be found four (4) categories of tasks, 25% of the votes each:

1. Top Tasks (25%), few tasks of them all (e.g. 2-3) really matter to customers,
2. Important Tasks (25%), a small amount of all tasks (e.g. 5-10), that are meaningful to customers, they appreciate getting them done
3. Medium Tasks (25%), quite meaningful and important, but not highly prioritized by customers
4. Tiny Tasks (25%), there are plenty of small tasks, not as meaningful to customers as to enterprise.



These are typical answers from customers when they value a given list of tasks.

Top tasks are the most important, primary, top priority long-term tasks, the 'must' tasks, from which customers get the most benefit, jobs that they want to get done. Top tasks affect the most customer experience and customer satisfaction. Finding these top tasks, focusing, designing and investing in them, the enterprise advantages the most.

Medium tasks are important, and highly valued by the customers, but not the absolute necessary jobs to get done. Customers appreciate them and they are meaningful, but not the highest priority tasks.

Small tasks are special tasks, quite meaningful but may not be necessary, perhaps nice to get done alongside the top or important tasks.

Tiny tasks are small low-level tasks, that are not so important to customers as they are for certain people inside the enterprise.

6.1.8 Customer Journey Map and Service Blueprint

Understanding customer experience from the customer's perspective is essential because it reveals how customers truly feel, interact, and perceive with the brand of an enterprise, not just how the business assumes they do. Seeing the experience through the customer's eyes helps businesses deliver seamless, intuitive, and meaningful interactions.

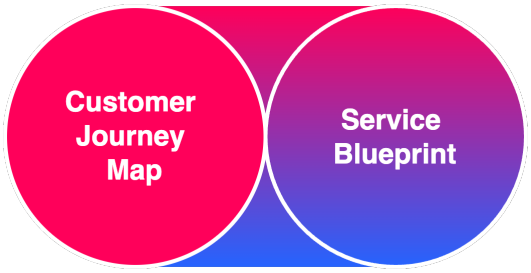
Why gaining insights into customer esxperience from the customer perspective is crucial?

- Identifies pain points & friction → Helps fix issues that frustrate customers and impact satisfaction.
- Enhances customer-centric decision-making → Ensures products, services, and processes align with real customer needs.
- Drives loyalty & competitive advantage → A great experience increases retention and differentiates brands.
- Optimizes business operations → Insights guide improvements in processes, technology, and service delivery.
- Supports innovation & growth → Understanding customer behaviors and expectations helps create better solutions.

Seeing the experience through the customer's eyes helps businesses deliver seamless, intuitive, and meaningful interactions.

When analyzing customer experience, two commonly used and complementary approaches are 1) Customer Journey Mapping and 2) Service Blueprinting. While closely connected, they focus on different but equally important aspects of the service experience:

1) **Customer Journey Map (CJM**) focuses on the customer's perspective, capturing their emotions, needs, and interactions as they engage with a service across different touchpoints.
   - **Service Blueprint (SB)** expands on the customer journey by mapping both the frontstage (customer-facing) and backstage (internal processes, systems, and roles) operations required to deliver the experience seamlessly.



Together, these approaches provide a holistic understanding of how customer experiences are created and supported, helping enterprises identify both customer-facing improvements and operational efficiencies to deliver better services end-to-end.

Best practices:

- Use them as a connected, layered system.
- Keep Customer Journey Mapping focused on the customer's emotional and experiential lens.
- Let the Service Blueprint build on that, adding detail about internal operations needed to deliver the experience.

Together, **Customer Journeys** and **Service Blueprints** provide a complete picture of the service from both the customer and organizational perspectives.

6.1.9 Customer Journey

Customer journeys are focal points of customer-centric enterprises. A customer journey is a specialisation of a journey, which expresses what people go through in their lives: what a person feels, does or experiences over time. A journey represents a 'slice of life'. It is a chronological and simplified representation of complex experiences. [4]



A customer journey is an end-to-end process that a customer is going through while accomplishing some task(s). A customer journey represents a coherent whole from the customer perspective in a certain context. It is a completeness that is meaningful to examine as a coherent whole.

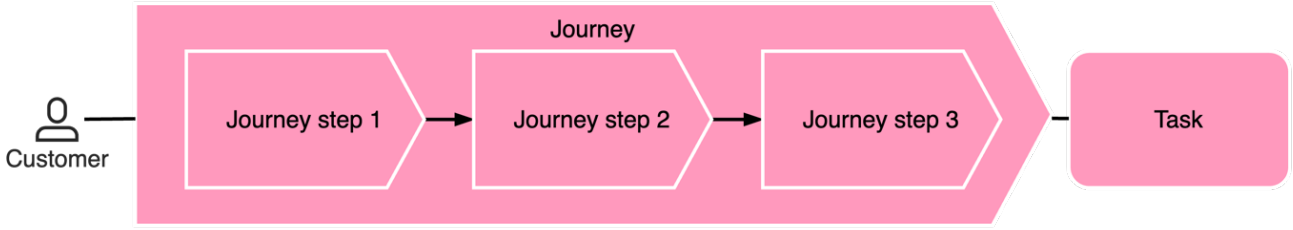


Figure 67: Customer Journey.

A customer journey is the *comprehensive experience* a customer has while interacting with an enterprise across all touchpoints, channels, and stages of engagement. It encompasses both frontstage interactions (what the customer sees) and backstage processes (internal processes and applications that support the experience).

A **Journey** consists of events and activities people experience in their lives. [3]

Journey Steps. A customer journey consists of a series of activities, journey steps, that a customer is taking when accomplishing certain task(s). Those journey steps represent events and activities a customer experiences and does during the journey. With journey steps, it is possible to make visible what a customer feels, does or experiences when trying to accomplish a task.

Customer Experience. The definite customer experience is an aggregation, combined influence, of all the journey steps of the customer journey. In addition, the customer experience is influenced, not only by moments in the customer journey, but also by the brand of the enterprise, and all the contacts and interactions with the enterprise, as well as all the marketing and media content that reach the customer. Customer experience can be divided into the following hierarchical levels: 1) functional, 2) emotional and 3) purposes. By addressing all three levels, businesses can create a holistic and impactful customer experience that meets needs, evokes positive emotions, and resonates with personal or societal goals.

Customer Value refers to the perceived benefit or worth that a customer derives from the enterprise's products or services. By focusing on the customer, adopting a customer-centric approach, and encouraging customer-driven design and development, an enterprise prioritises customer value according to the customer-first principle.

Touchpoints. The journey steps can consist of touchpoints, service moments, with the enterprise. These touchpoints can be associated with *journey* steps or *channels*, which represent the interactions with the products and/or services provided by the enterprise.

Tasks. The purpose of a customer journey is to accomplish some task(s). There can be an ultimate task that a customer wants to achieve, and several sub-tasks on the intermediate steps of the journey. Serving those tasks makes the customer journey interesting from the enterprise's point of view. The tasks represent the needs of a customer. The enterprise tries to fulfill the customer's needs by providing services and/or products.

A **Customer Journey** is the end-to-end path a customer takes when interacting with an enterprise's services.

6.1.9.1 Customer Journey Mapping



Customer Journey Mapping is the process of creating a visual representation of the end-to-end journey that a customer experiences when interacting with a product(s) or service(s) of an enterprise. It outlines the customer's interactions across various touchpoints, channels, and stages, capturing their emotions, pain points, and expectations at each step.

Customer journey mapping serves as a bridge between the customer-centric perspective and the enterprise's internal operations, structures, and technological systems. By fostering a deeper connection between customer needs and enterprise operations, customer journey mapping becomes an essential tool for improving customer satisfaction and long-term business success. In practice, customer journey mapping involves creating a visual representation (often a flowchart, diagram, or map) of the customer journey, highlighting key touchpoints, emotions, pain points, and backstage processes that influence the experience.

On the journey, and for the tasks, customers use products and/or services provided by the enterprise. Products and/or services are "what an enterprise makes, offers and delivers for people's benefit." A customer journey visualisation can be enriched with the services and/or products that are serving the tasks as shown in the figure below.

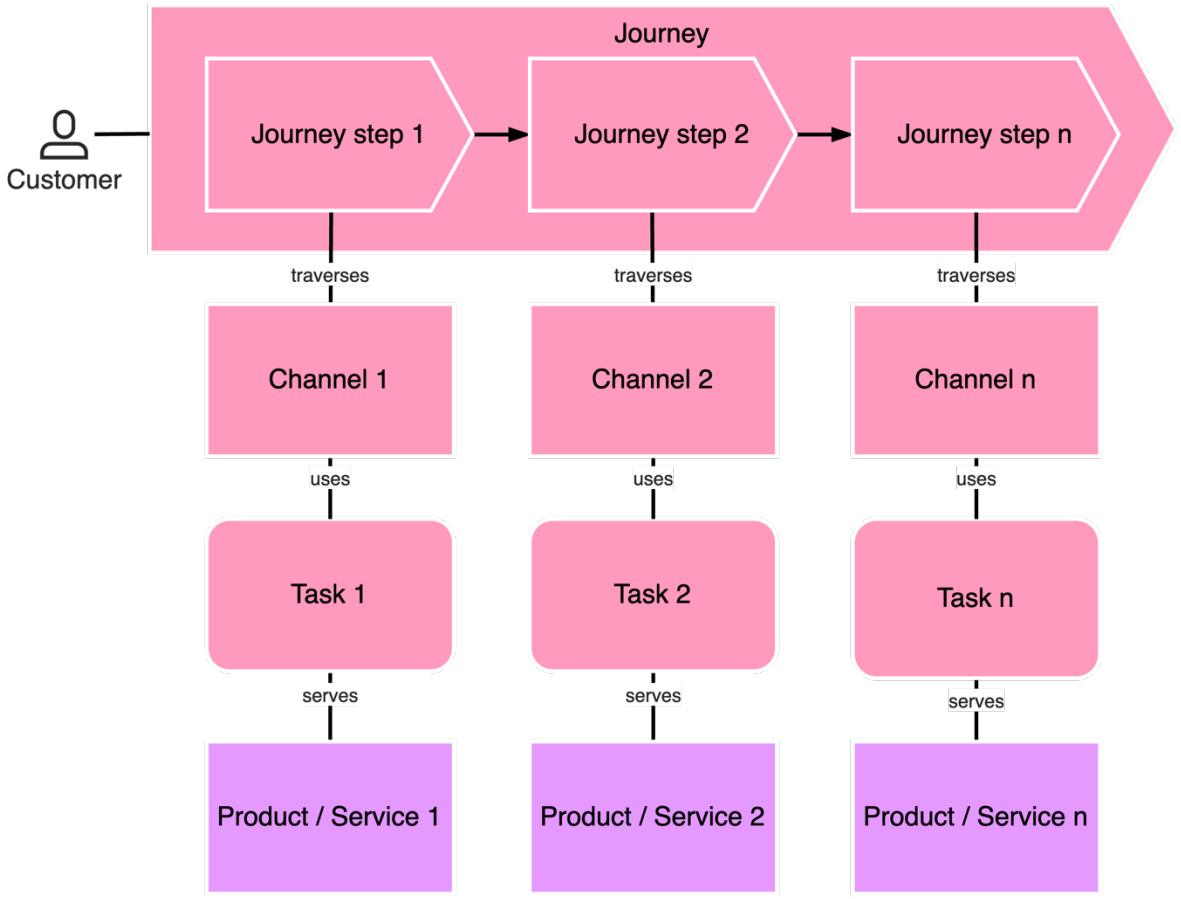


Figure 68: Customer Journey mapping to products/services.

Customer journey mapping is the process of visually outlining a customer's interactions with a business to understand and improve their overall experience.

6.1.9.2 Customer Journey Map

Mapping is matching. Matching parts together. Like matching actors to roles, people to profiles (skills & competencies), or tasks to products. This view can be used for positioning customer tasks (a.k.a. customer needs) in line with products and/or services the enterprise offers. With this analysis, it is possible to find opportunities for possible new products/services.

An example customer journey mapping shown below.

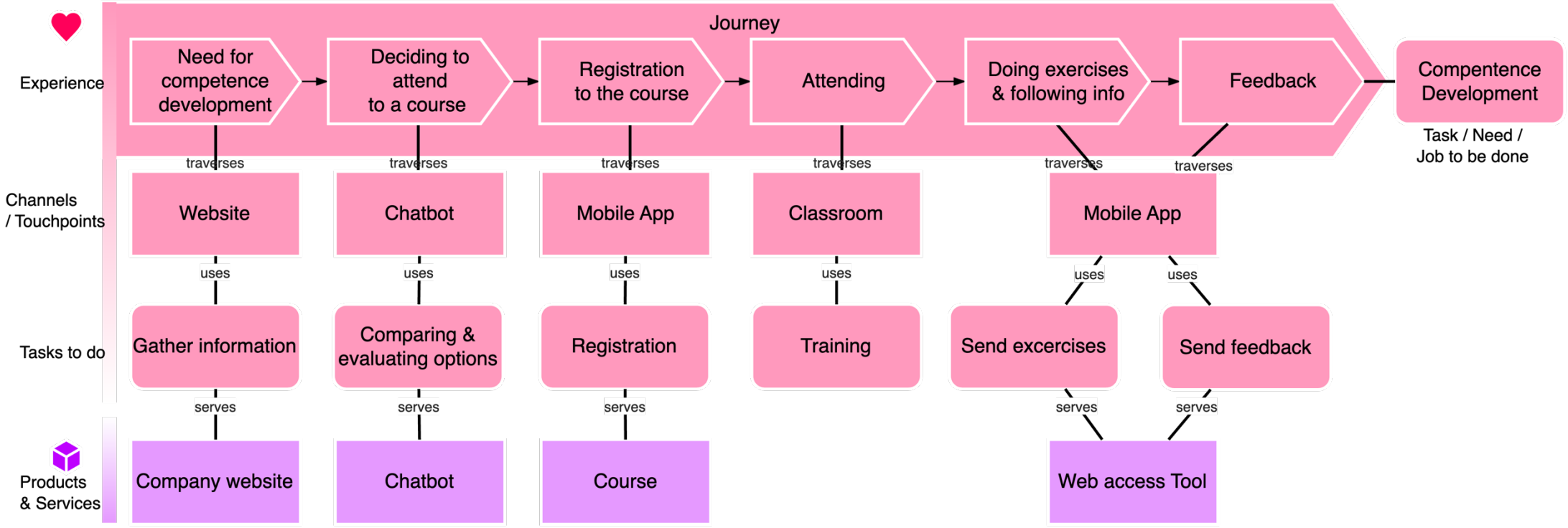


Figure 69: Customer Journey mapping to products/services.

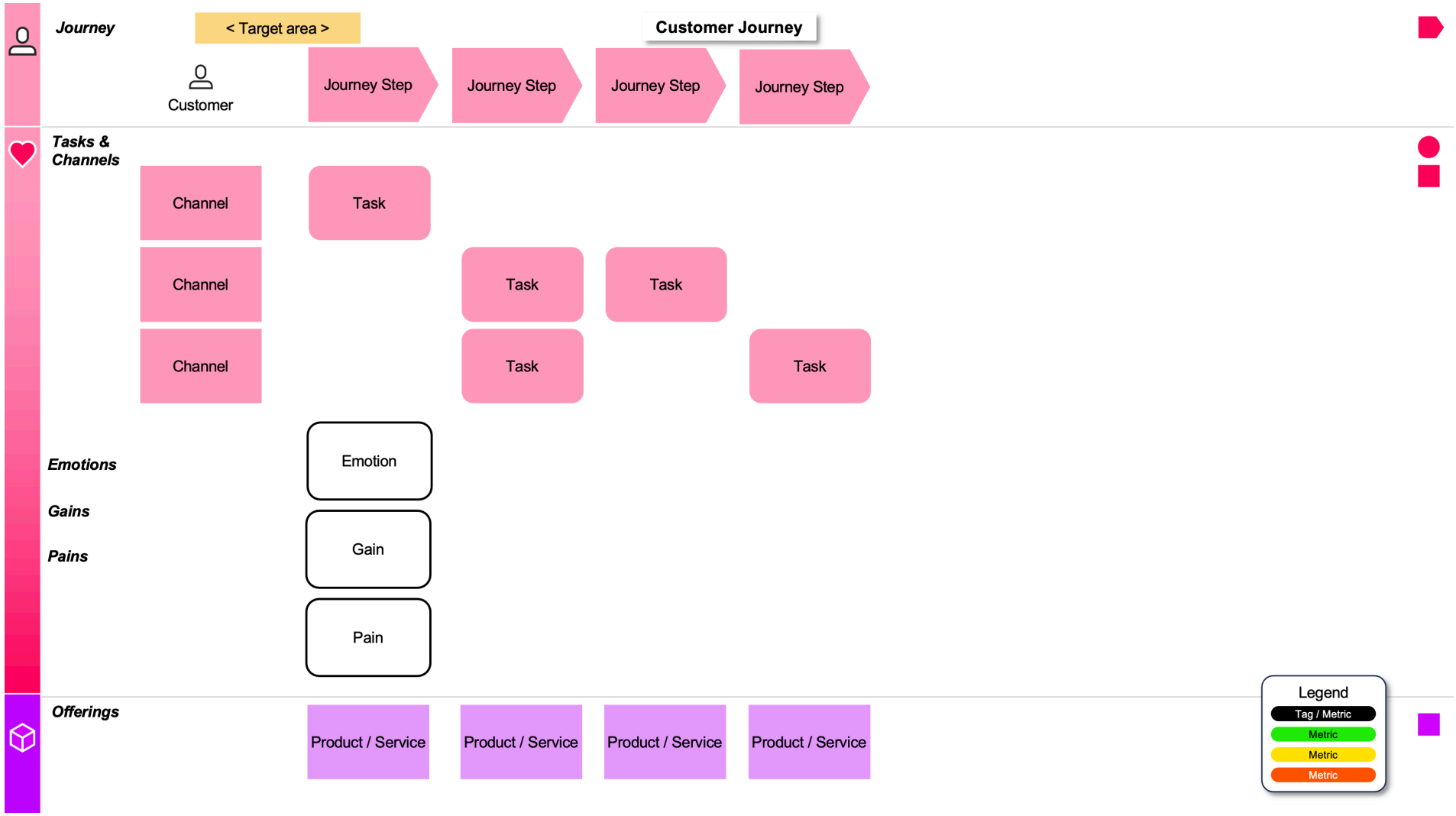


Figure 70: Customer Journey Map with emotions, gains and pains.

6.1.9.3 Customer Journey Analysis

The customer journey can be analysed in more detail by identifying all the tasks associated with each step of the journey. In this approach, tasks are identified and visualised from the bottom up, while the journey is read from left to right.

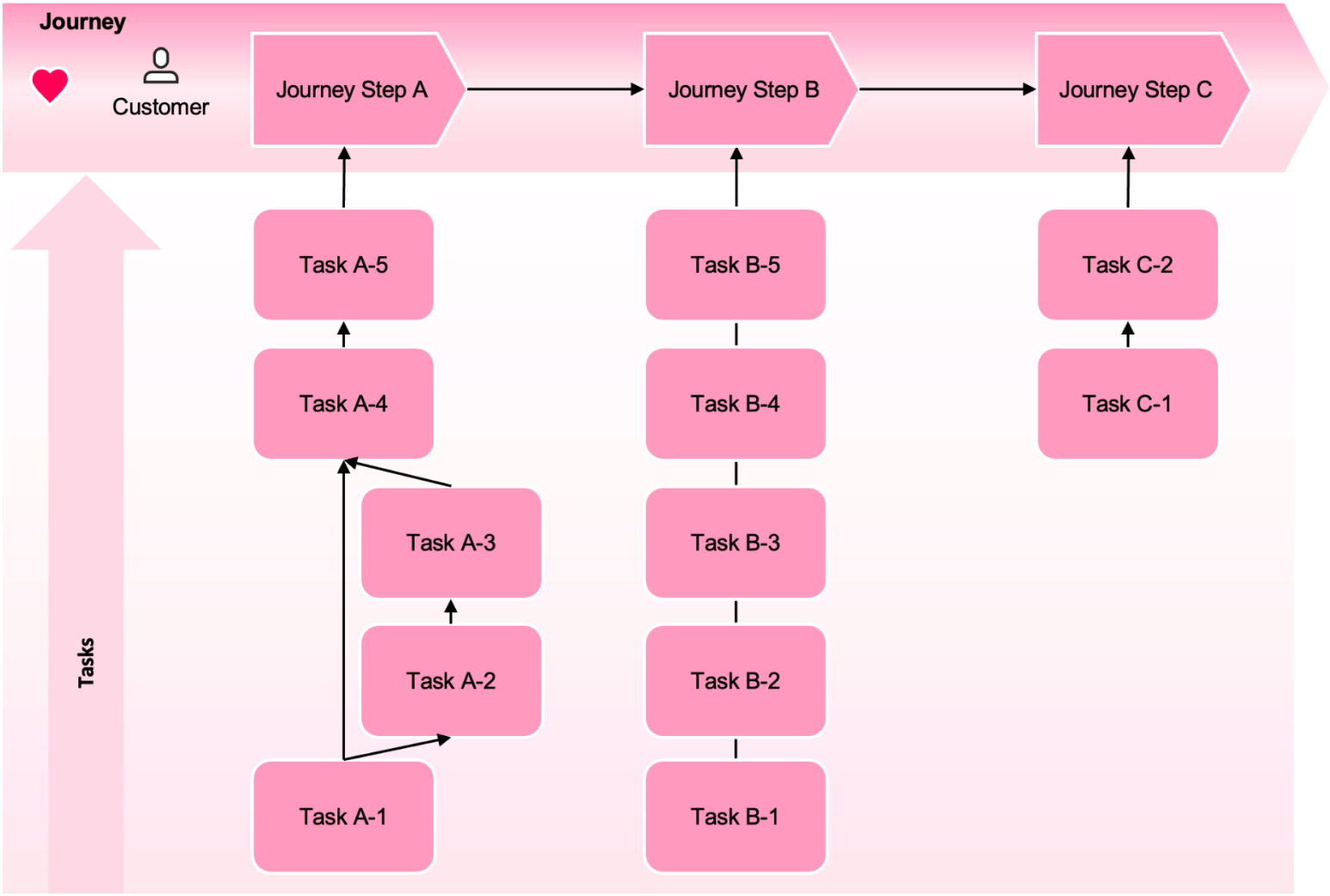


Figure 71: Journey analysis tool.

See the template *Customer Journey Analysis* (10.4.4).

A customer journey focuses on what a customer experiences and what tasks are to be accomplished with the help of products and/or services of the enterprise.

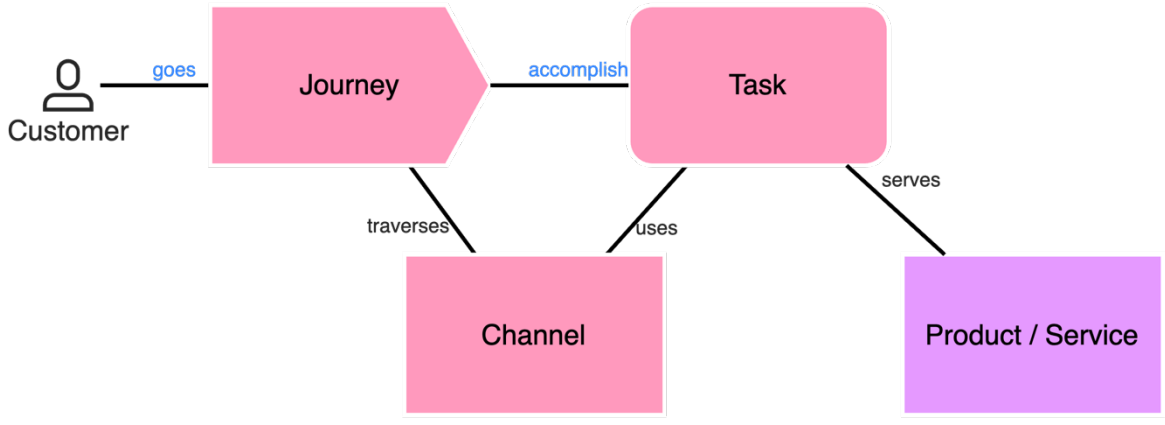


Figure 72: Products and/or services serves the tasks (via channels) on the journey.

6.1.9.4 Customer Journey Management (CJM)



Customer Journey Management refers to the practice of strategically designing, analyzing, and optimizing and managing the end-to-end journey that a customer experiences with an enterprise's products, services, or brand.

It ensures that customers have seamless, meaningful, and value-driven interactions across all touchpoints during their lifecycle with the organization. Customer Journey Management is a customer-centric, end-to-end approach that utilizes visualization and data-driven optimization. It is collaborative by default and fosters cross-functional cooperation by addressing both the customer perspective and intra-organizational aspects.

Customer Journey Management is closely related to concept of *Customer Journey Operations* (*Customer Journey Ops*) as both focus on enhancing the customer experience across their interactions with the enterprise.

- Customer Journey Management (CJM) focuses on designing and mapping the customer journey, identifying touchpoints, and optimizing the experience from a strategic perspective.
- Customer Journey Operations (CJO) focuses on the operational and executional side of the journey, ensuring processes, tools, and teams are aligned to deliver the designed journey effectively. It ensures that designed improvements are implemented and monitored.

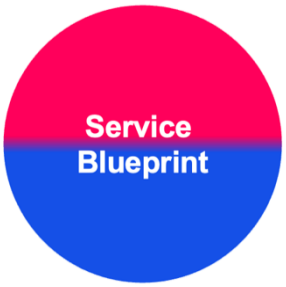
Customer Journey Management is customer-centric, end-to-end focused approach.

Customer Journey Management design steps:

1. Get Customer Insight – to Understand the Customer
   - Perform customer research (surveys, interviews, analytics) to gain deep insights into customer needs, behaviors, and pain points.
   - Create customer personas to represent different segments and their unique requirements.
2. Map the Customer Journey
   - Identify key touchpoints where customers interact with the enterprise (e.g., website, support, physical store).
   - Map the end-to-end journey from awareness to feedback (pre-service-, service- and post-service periods), visualizing each step and identifying gaps or inefficiencies.
3. Define Goals and Metrics
   - Set measurable goals for customer experience improvements.
   - Identify key performance indicators (KPIs) for monitoring the success of the customer journey.
4. Design the Ideal Journey
   - Create a future-state journey map
   - Address pain points and enhances the overall experience, including personalization.
5. Leverage Technology and Data-driven Decisions
   - Use journey analytics tools to manage, track, and analyze customer interactions.
   - Ensure data from all touchpoints is integrated into a single view for better decision-making.
6. Engage Stakeholders
   - Align teams (e.g. customer service, IT, support) to ensure a unified focus on customer-centric goals.
   - Communicate the benefits of journey management and secure buy-in from leadership and employees.
7. Iterate and Optimize
   - Continuously monitor customer feedback and analytics to identify areas for improvement.

Update journey maps and processes to adapt to changing customer needs and environment conditions.

6.1.10 Service Blueprint



The Service Blueprint defines the customer journey, detailing the customer's activities alongside the services, products, and activities of the enterprise. It enables the analysis of the entire stack, from the customer's perspective to the organizational perspective. The Service Blueprint provides a holistic, human-centric, and collaborative view of a service, integrating both customer and organizational perspectives. A simple basic structure is shown below.

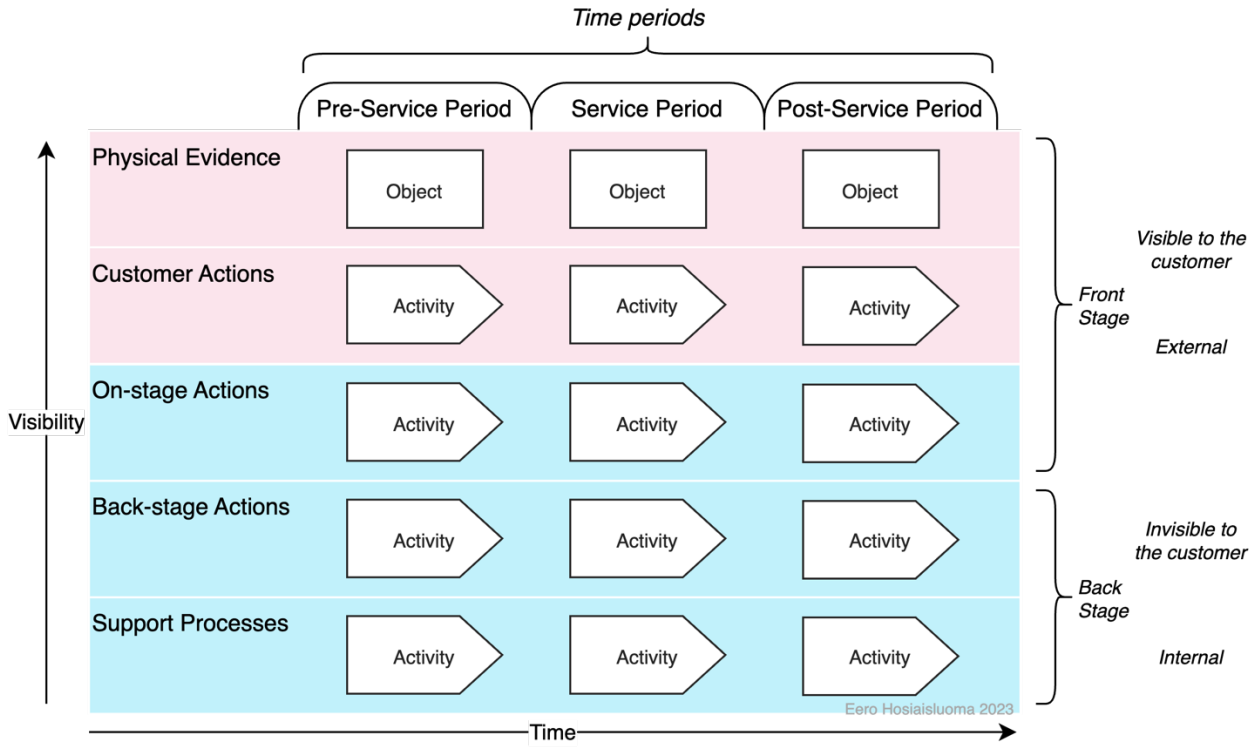


Figure 73: Simple basic structure.

A **Service Blueprint** is a detailed visual map that outlines a service's processes, touchpoints, and interactions from both the customer and organisational perspectives.

Service Blueprint		
1	Visual Map of Service Delivery	A visual representation that outlines the end-to-end process of a service. It maps all the touchpoints, interactions, and workflows involved in delivering the service from the customer's perspective to the backend processes.
2	Highlights Frontstage and Backstage Activities	It distinguishes between frontstage activities (direct customer interactions) and backstage activities (internal processes and applications that support the service). This dual perspective ensures both visible and behind-the-scenes elements are accounted for.
3	Enables Process Optimization and Collaboration	By identifying pain points, inefficiencies, and opportunities, a Service Blueprint helps enterprises improve service delivery. It also fosters collaboration across teams by providing a shared understanding of how different roles contribute to the overall service experience.

The Service Blueprint is one of the most comprehensive customer-driven visualisations. There are many variations of them. The main idea is to show what is the customer doing while trying to accomplish task(s), and how is he/she served by the enterprise. As such, a

Service Blueprint combines a) customer experience in the form of the journey with b) the task(s) to be accomplished, c) the products and/or services, provided by the enterprise, and d) the back-office processes and e) supporting applications.

Extended structure with layers shown below.

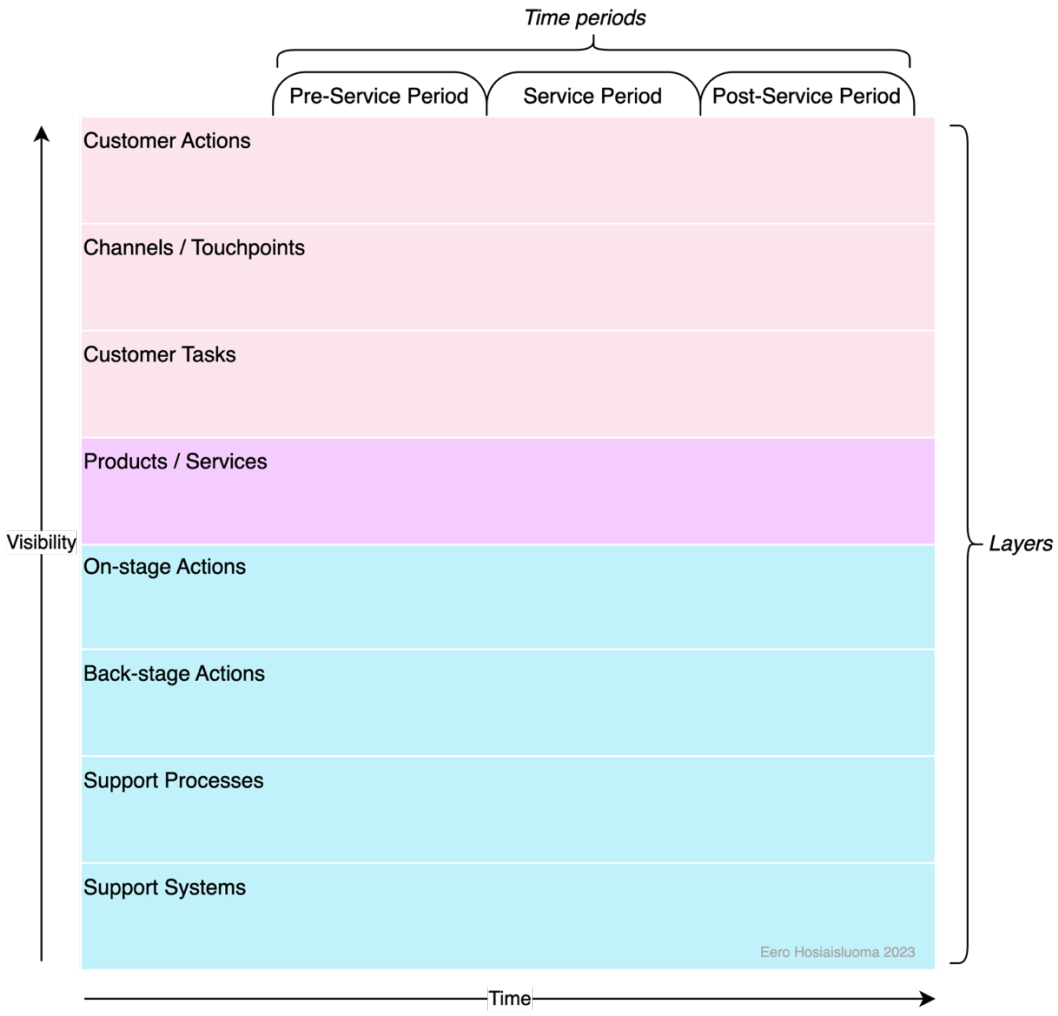


Figure 74: Extended structure.

The Service Blueprint is based on a customer journey that is a 'timeline' of customer experiences. The customer journey of the Service Blueprint can be divided into periods as follows:

1. Pre-Service Period,
2. Service Period and
3. Post-Service Period.

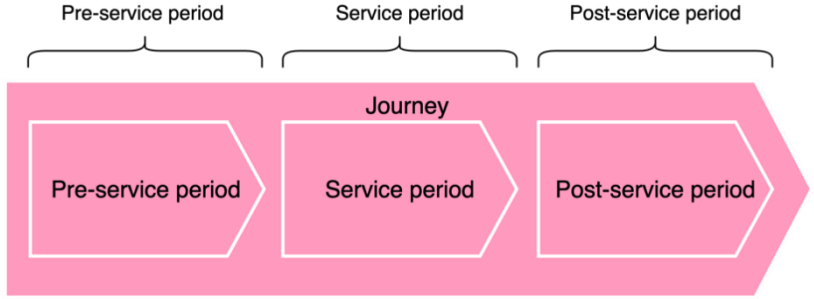


Figure 75: Periods of a customer service journey.

This simple division into phases makes the overall Service Blueprint easier to understand and design. This helps understanding a) what are the customer actions and needs before the decision to get into the service, b) what are the main needs within the service, and c) what is important for the customer after the service.

A Service Blueprint is visualised as a layered structure, where the customer actions and needs are introduced on top layers, and organisation's actions are introduced on the bottom layers. The service layer is visualised in between the customer and organisation activities.

Note! There is no typical or 'standard' Service Blueprint with commonly agreed terminology and visualization. Instead, there are many variations of it, some of which are shown here.

Service Blueprint examples below.

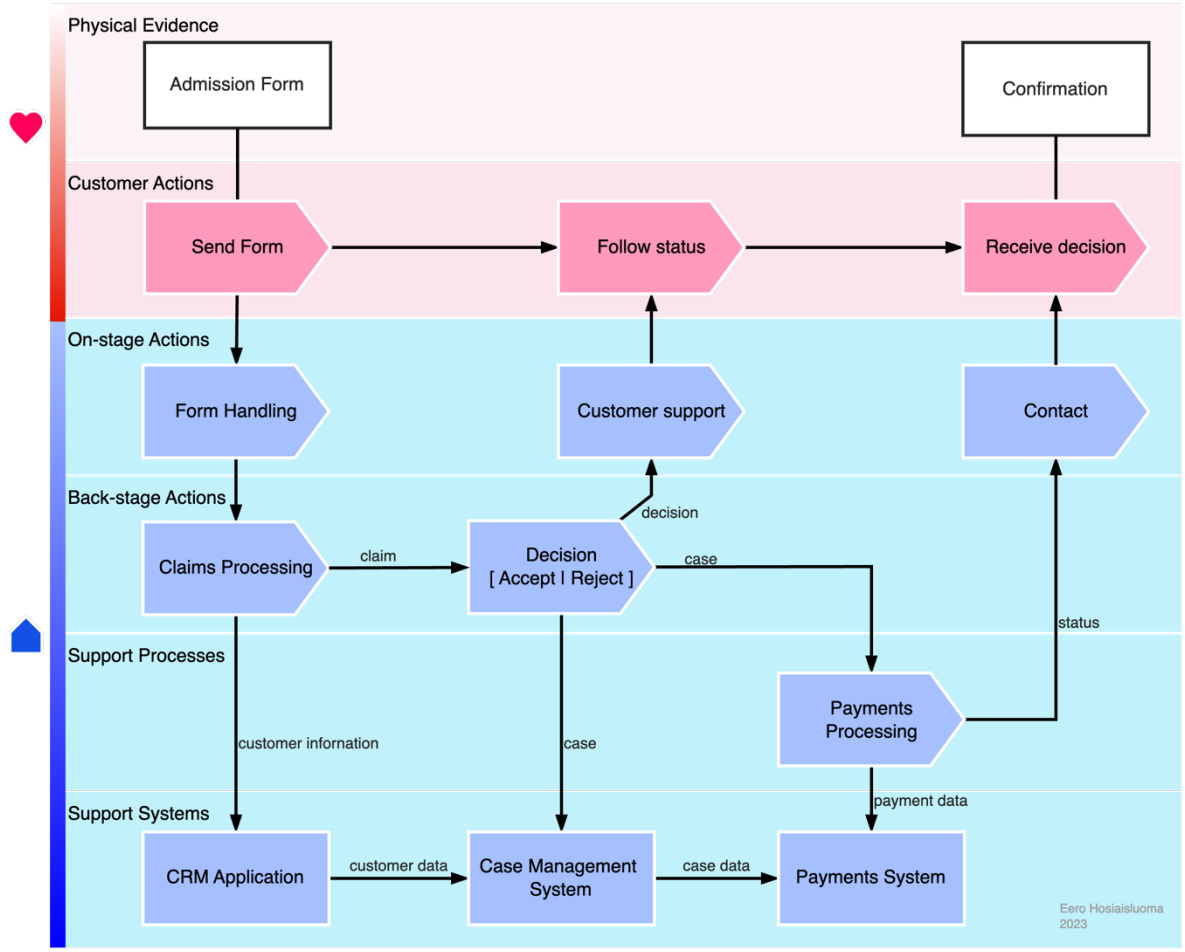


Figure 76: Service Blueprint – focus on activities: what is happening.

Using a service blueprint as a tool for service design and business architecture collaboration offers several key advantages, as it bridges customer experiences with internal operations, processes, and applications. It creates a shared understanding, highlights areas for improvement, and ensures that services are both customer-centric and operationally effective. This fosters better collaboration, more informed decisions, and a stronger alignment between customer needs and business goals.

The service blueprint is an essential tool for bridging the gap between service design and business architecture.

Organisation structures can be added to the Service Blueprint diagram (as swimlines) as shown below.

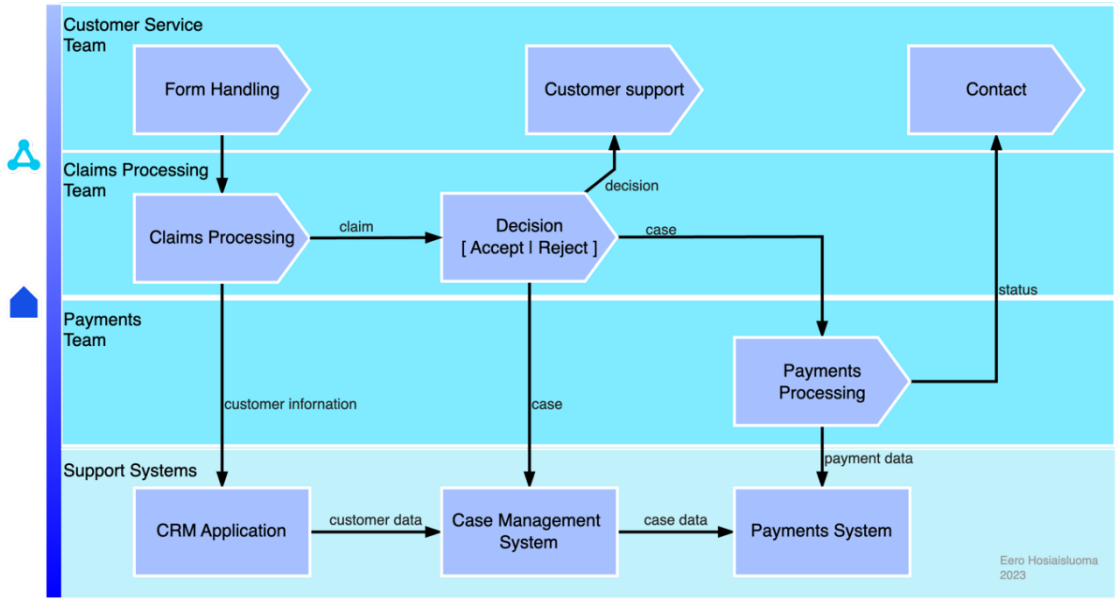


Figure 77: Back-stage activities with organisation structures (teams).

Service Blueprints can be used to define customer activities in contrast to the company's activities, and to map customer needs (tasks) against the products and/or services provided by the company. Additionally, they make visible what happens behind the scenes of these products and/or services: the back-end processes, the parts of the organization involved, and the supporting applications.

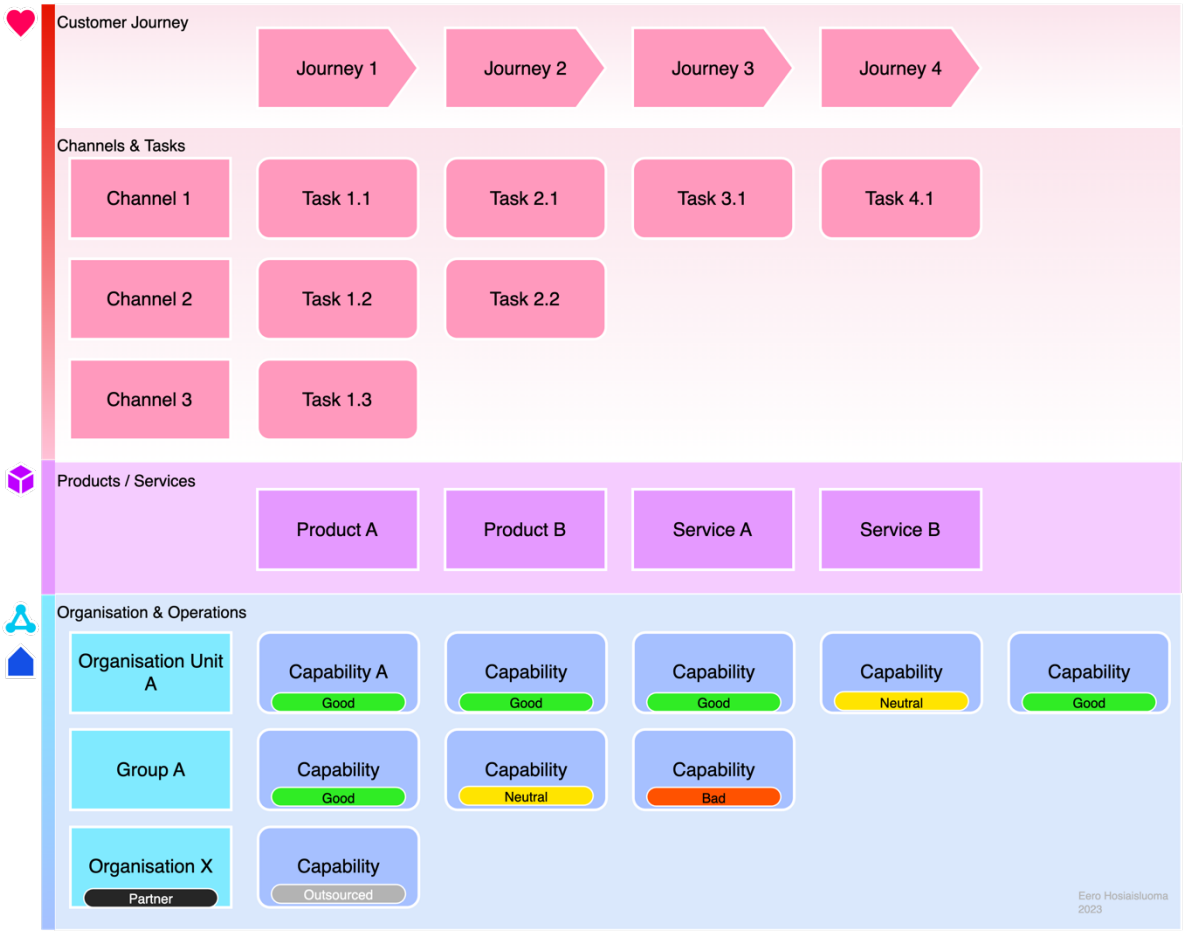


Figure 78: Journey steps as phases, tasks as actions to be taken.

Capabilities can be used as higher-level back-stage elements. Whether to use process or capability elements in the backstage depends on the level of abstraction, which in turn depends on the context and what is appropriate for the purpose.

Service Blueprint can contain an extra top layer (green) for defining high-level business story such as value propositions.

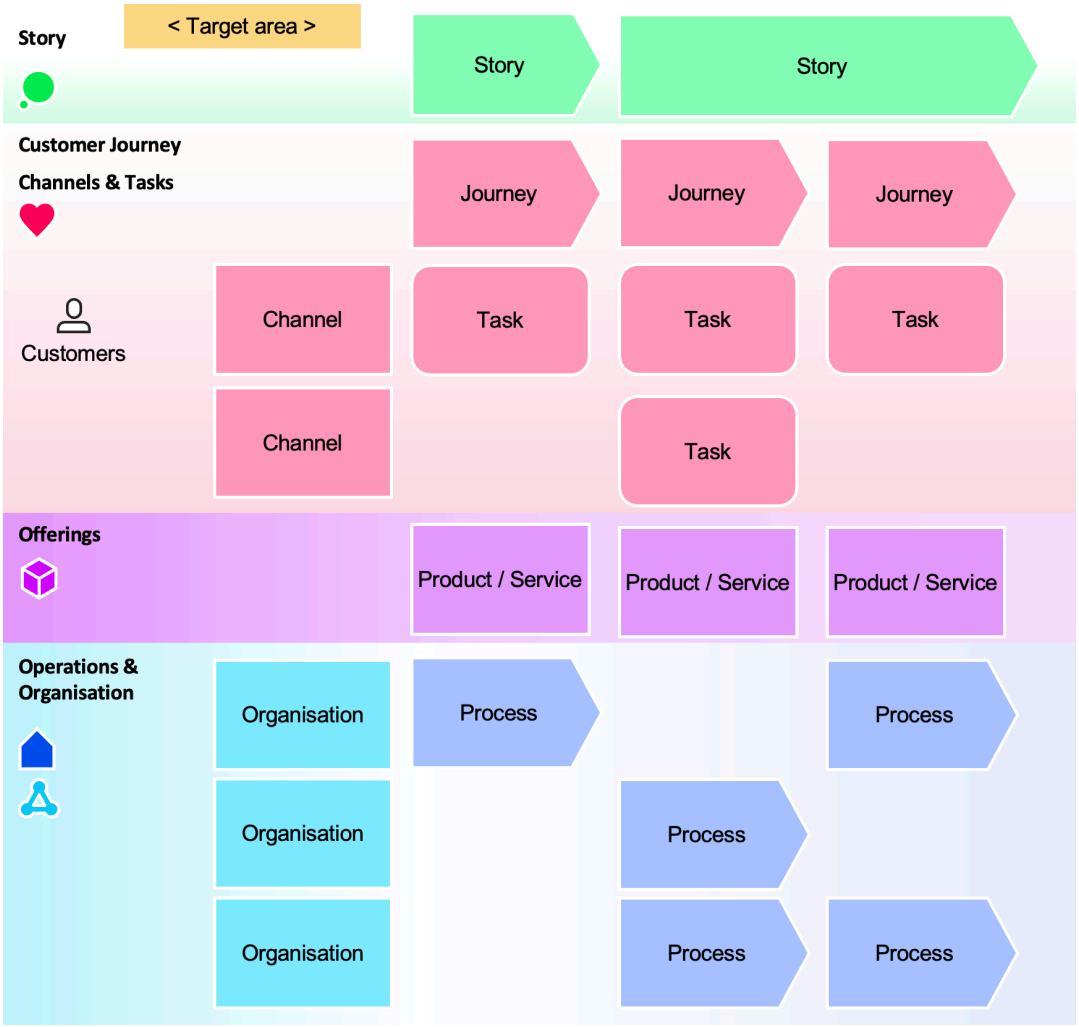


Figure 79: Service Blueprint with top layer of high-level business story.

Benefits of using a Service Blueprint in co-design and collaboration with customers, service designers, and business architects:

Benefits of Service Blueprint		
1	Shared Understanding Across Stakeholders	Provides a a common visual framework that bridges the perspectives and aligns diverse stakeholders, ensuring everyone, from customers to designers and business architects, has a clear understanding of the service, its goals, and the processes involved.
2	Identification of Issues (Pain Points) and Opportunities	By visualizing both frontstage (customer-facing) and backstage (behind-the-scenes) internal processes, it helps uncover inefficiencies, gaps, and pain points in the customer journey and service delivery, enabling collaborative problem-solving and potential areas for innovation.
3	Facilitates Effective Communication and Collaboration	Serves as a communication tool that simplifies complex processes , fosters teamwork, productive discussions, and informed decision-making, while encouraging meaningful stakeholder contributions.

An example of the Service Blueprint elements is introduced below.

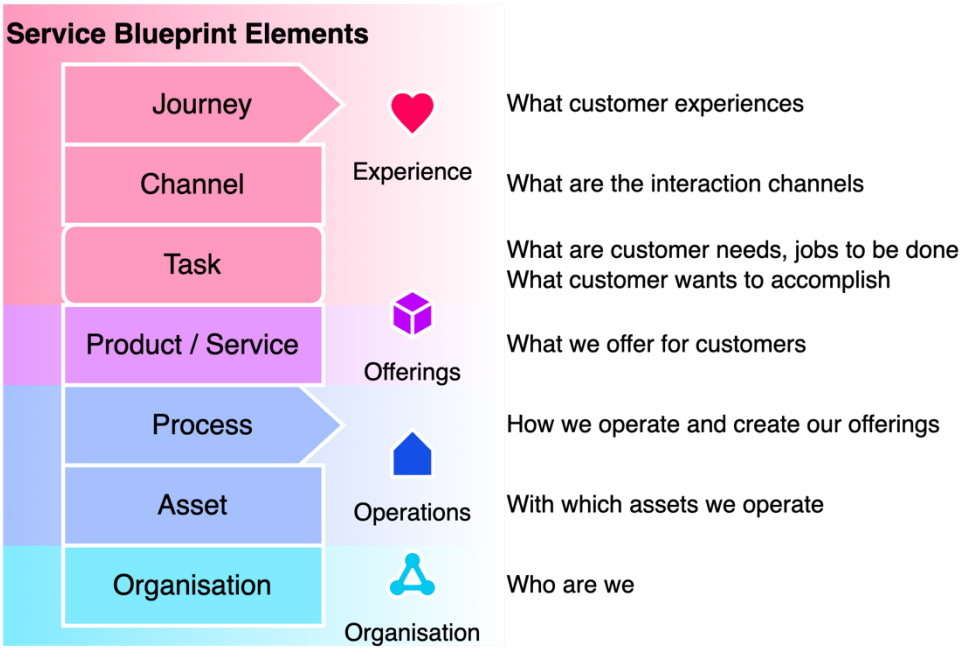


Figure 80: Service Blueprint elements.

Service Blueprint elements are introduced in the table below.

Service Blueprint elements		
Element		Description
Story		The high level story from the overall business point of view.
People		The actor, 'doer', person (or persona) whose journey and tasks are to be further explored. Typically a customer, but can also be e.g. employee.
Journey		Series of steps that a person takes, feels, does or experiences.
Task		What a person is trying to achieve; jobs to be done / needs.
Channel		Contact mechanisms and ways how people interact with the enterprise.
Product / Service		What the enterprise provides for people's benefit, what they use when doing their tasks while interacting with the enterprise.
Capability		What is required in the enterprise to produce products and services.
Process		How the enterprise operates.
Asset		With which assets (e.g. applications) the enterprise supports its processes.
Organisation		Which organisation parts (e.g. units, groups, teams) are involved in processes.

The elements to be used depend on the context and what is appropriate to fit the purpose.

Service Blueprint can be specified with 1) pre-service- , 2) service- and 3) post-service periods as shown below.

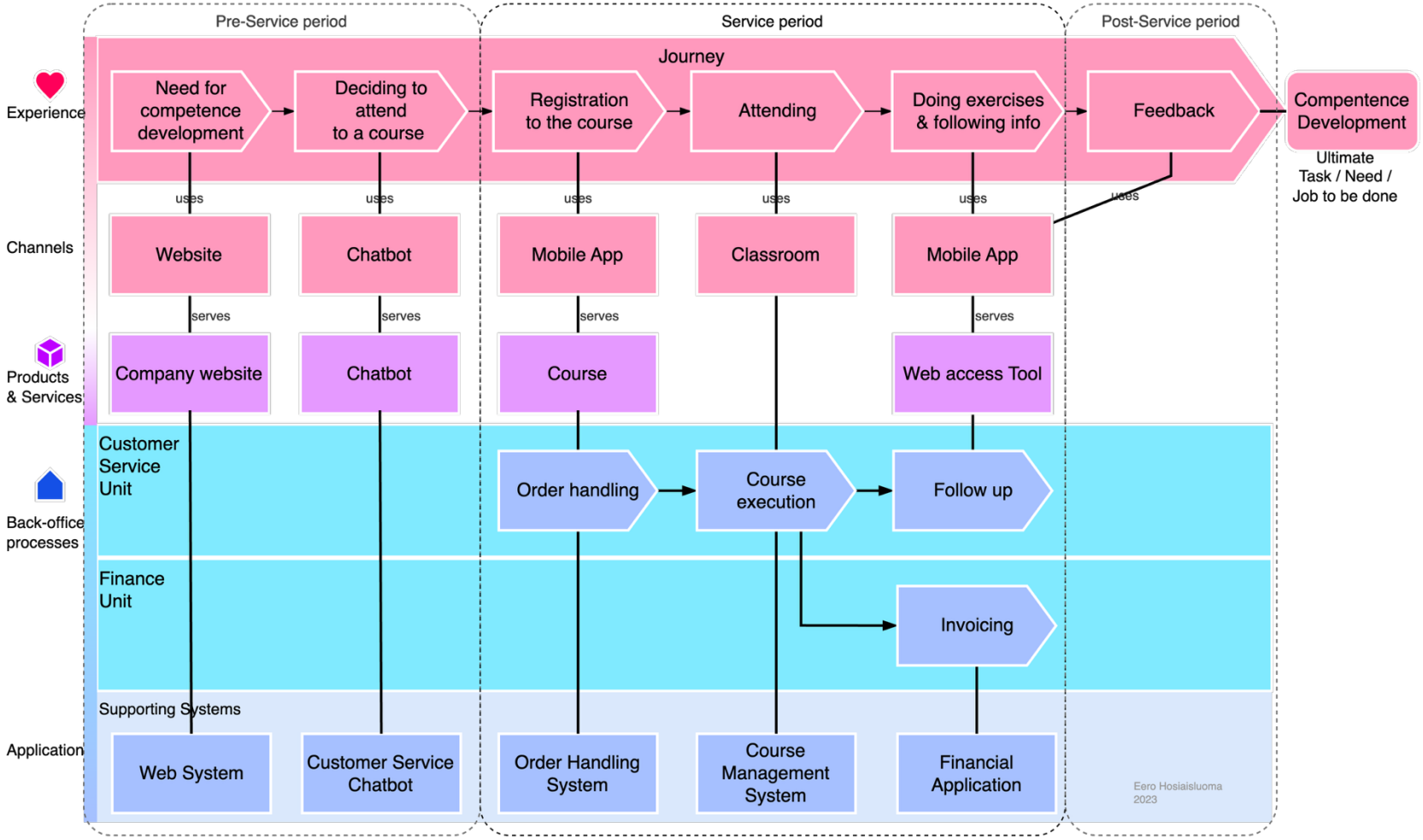


Figure 81: Service Blueprint - focus on customer journey and channels.

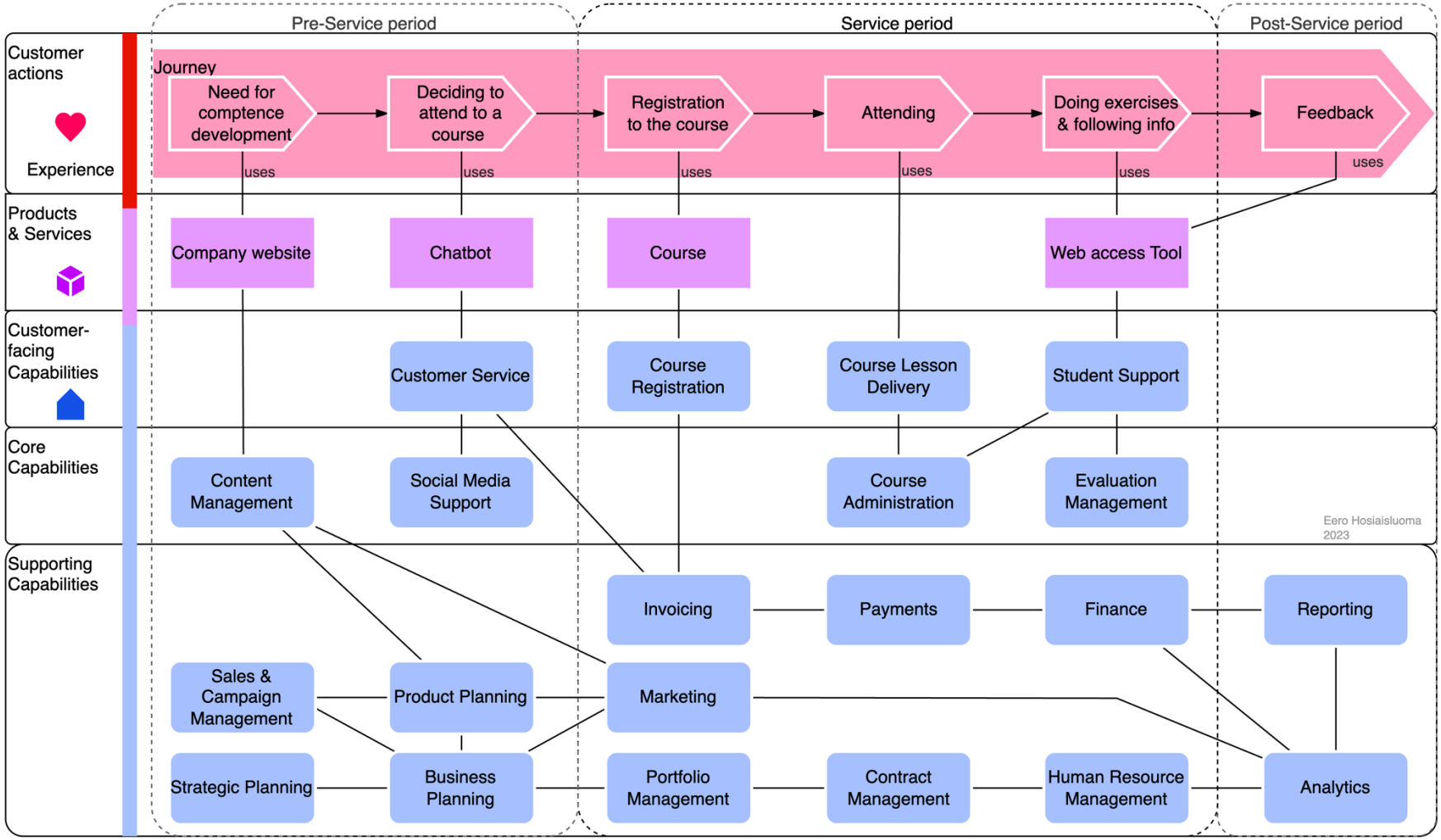


Figure 82: Service Blueprint with capabilities.

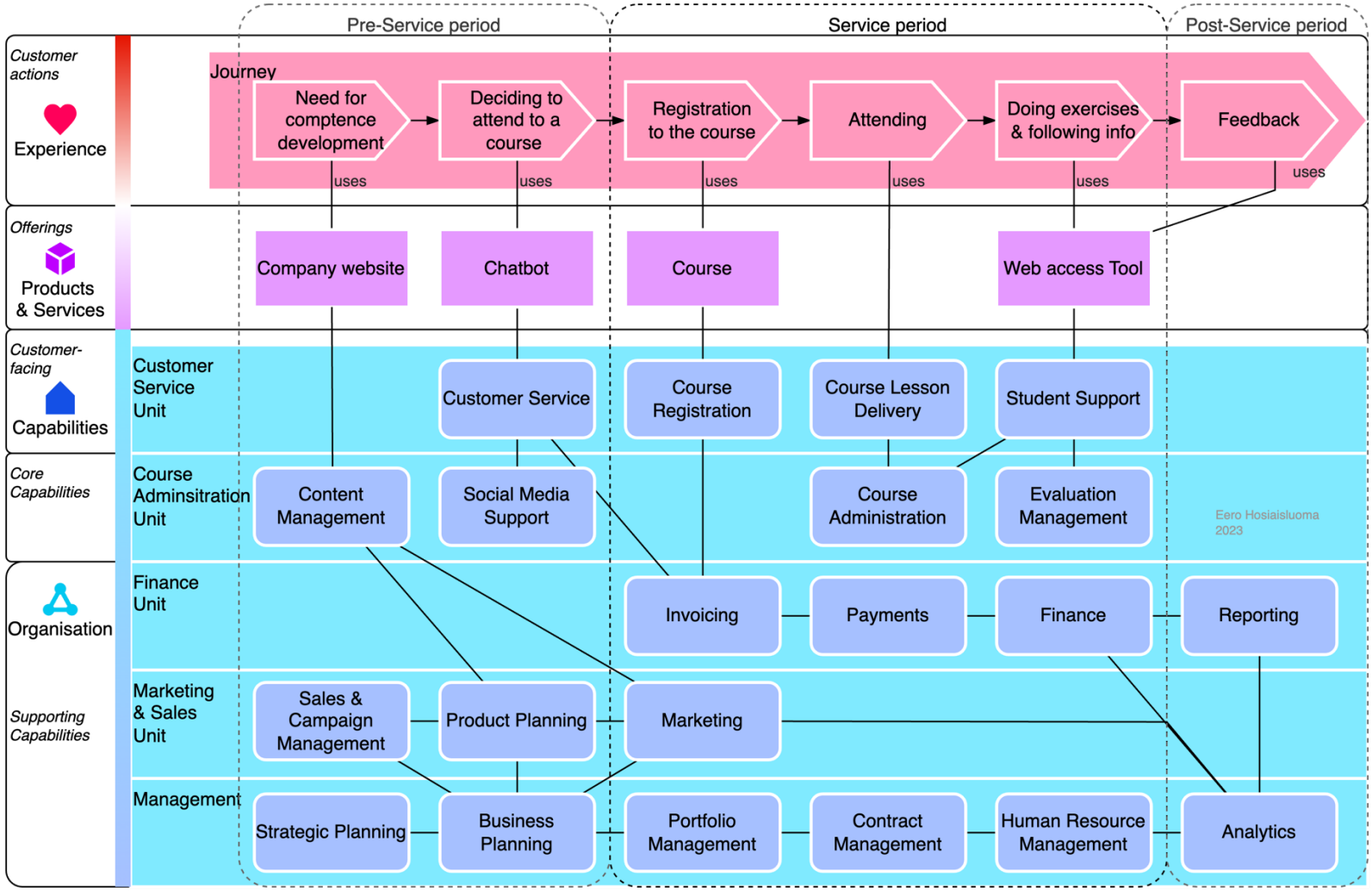


Figure 83: Service Blueprint with organisation units and capabilities.

6.1.10.1 Simplified Service Blueprint

A simplified version of a service blueprint can be modeled using only a few key elements.

Behavioral elements, *Journey* and *Process* (or *Activity*), can be used to depict what is happening. Structural elements *Channel*, *Organisation*, and *Asset* can be used to depict what is used or who is performing the action. These structural elements effectively function like swimlanes, representing responsibility or ownership.

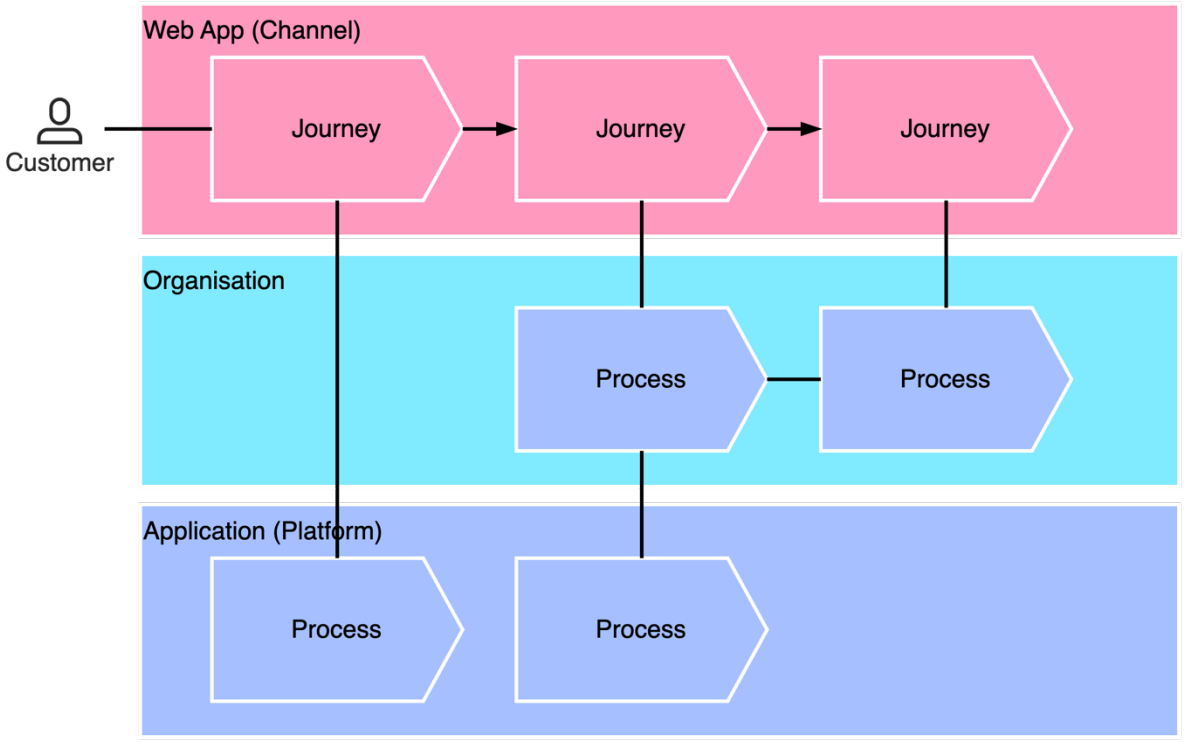


Figure 84: Simplified Service Blueprint.

6.1.11 Channels



Channels play an important role in serving the customers. Channels are the contact mechanisms via which the customers interact with the services of the enterprise. Channels serve as the delivery mechanism for touchpoints in the customer journey and play a critical role in bridging the gap between the enterprise and its external environment.

There can be several types channels e.g. as follows: 1) digital channels (websites, mobile apps, e-commerce platforms), 2) physical channels (retail stores, point-of-sales, service centers, delivery points), 3) human-interaction channels (call-centers, customer support), 4) third-party channels (resellers, distributors, marketplaces such as Amazon) and 5) hybrid channels (omnichannels).

In enterprise design, channels are the essential conduits for delivering experiences, value, and interactions to customers and stakeholders. Designing channels strategically ensures they align with the enterprise's goals, support seamless customer journeys, and provide value to both the customer and the enterprise.

Channels can be visualized on a map and then introduced in more detail e.g. in a table.

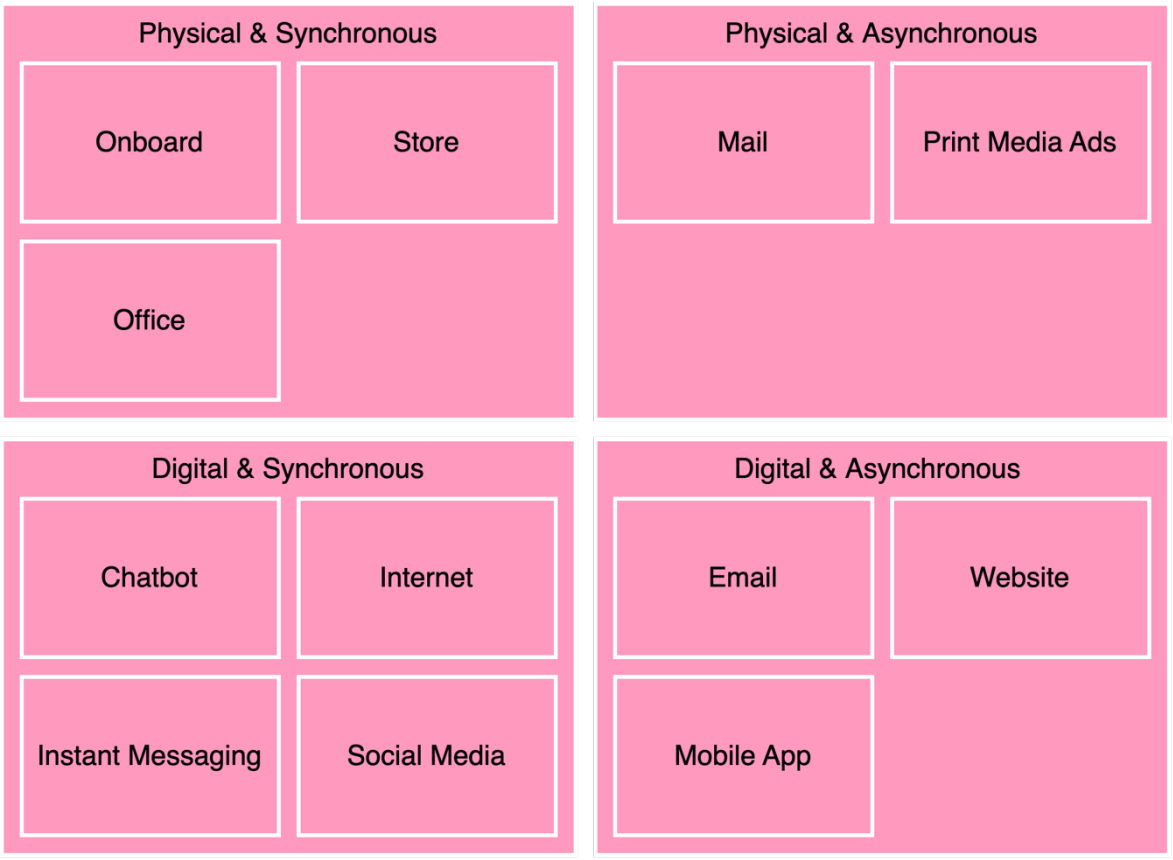


Figure 85: Channel Map.

Channels (as any other elements) can be listed in the table format, based on which the visualisation can be done easily.

Channel	Description
Name	Description

Channels are the means people use to engage and interact with us. [3]

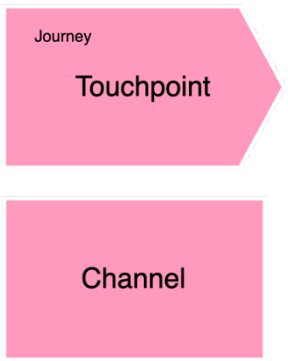
6.1.11.1 Touchpoints

In the enterprise design context, ***channels*** provide the framework for delivering enterprise value, while ***touchpoints*** are the specific moments where customers interact with that value.

A touchpoint is a moment of interaction between an enterprise and people. Touchpoints can be modelled using the enterprise element journey to represent moments over time, or channel to represent the means of interaction [3].

Touchpoints and channels must be designed together to ensure a seamless, human-centric, and cohesive customer experience across the entire enterprise ecosystem.

- **Touchpoints** are the specific "what" of customer interactions.
- **Channels** are the broader "how" those interactions happen.



Touchpoints can be modelled with the EDGY *Journey* element.

Channels can be modelled with the EDGY *Channel* element.

Characteristics of these two:

Touchpoints:

- Specific moments of interaction between a customer and the enterprise.
- Focused on what happens during an engagement.
- Example: Browsing a product, asking for support, completing a purchase, receiving a confirmation email, calling customer support, or visiting a store.
- Represents the steps or events in the customer journey.

Channels:

- The mediums or platforms through which the interactions (touchpoints) occur.
- Focused on where the interaction takes place.
- Example: Website, mobile app, physical store (on-site), chat, phone, email, social media, or call center.
- Represent the pathways that connect and enable touchpoints throughout the journey.

Comparing channels and touchpoints in the context of customer journey.

Examples in a Customer Journey		
Stage	Touchpoint	Channel
Pre-service period: • Awarness • Consideration	- Seeing a banner ad on social media. - Watching a product demo video	Social media platform. Enterprise website.
Service period: • Action • Support	Contacting, performing action, sending an application, starting a conversation/interaction, completing payment online etc. Interacting with customer service, calling a helpline for assistance.	Enterprise website. Self-service portal. E-commerce platform. Call center.
Post-service period: • Feedback	Submitting a review	Mobile app.

Touchpoints are the specific moments of interaction between a customer and an enterprise.

6.1.12 Product and Service Offerings



The offerings of an enterprise are designed to deliver value that meets customer needs, supports strategic goals.

The offerings of an enterprise are the products, services, and value propositions it provides to meet customer needs, solve problems, or create benefits. These offerings form the core of what the enterprise delivers to its customers, partners, and stakeholders.

The offerings can be modelled with the EDGY *Product* element.

Offerings encompass all value components within an umbrella concept, enabling enterprises to adopt a customer-centric view of their value proposition.

Offerings can be categorized as follows:

1. Products
    - Physical Products: Tangible goods that customers can buy, use, or consume, such as electronics, machinery, or consumer goods.
    - Digital Products: Software, apps, or digital platforms.
    - Customized Products: Tailored solutions to meet specific customer requirements.
2. Services
    - Intangible activities or support provided to customers.
    - Professional Services: Consulting, assistance, training, or other expertise-driven offerings.
    - Subscription or Managed Services: Ongoing services like cloud storage, maintenance, or content subscriptions.





The emotional and functional outcomes customers derive from interacting with the enterprise (e.g. a seamless user experience).

Enterprise offerings can be made visible within the Product/Service Map. It consists of products and/or services organized into hierarchies.

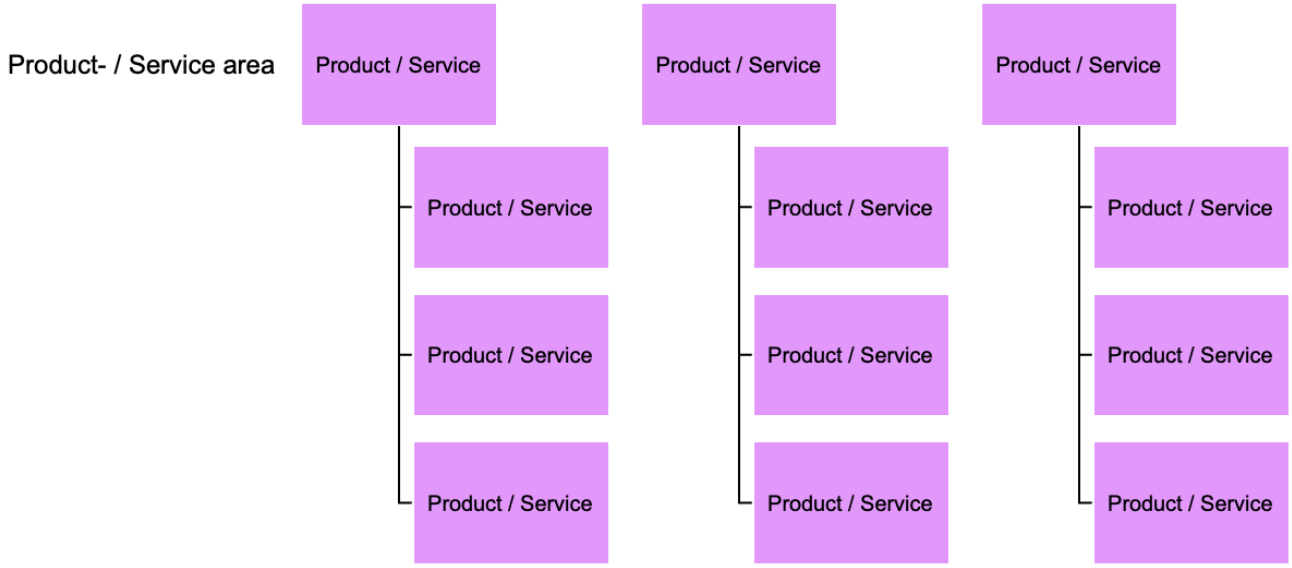


Figure 86: Product / Service Map.

Products and services can be described in a table (example below) together with the map diagram.

Name	Description	Customers
Name	Description	Customer segment name

When identified, products and/or services can be used to map customers' needs (Tasks) to the enterprise's offerings, e.g. in service blueprints. Then it is possible to analyse do we already have the right products and/or services to help customers accomplish their tasks, or whether should we design new or better products and/or services.

Products and/or services can be visualized in a map with metrics of certain criteria, such as customer satisfaction results as shown the figure below.

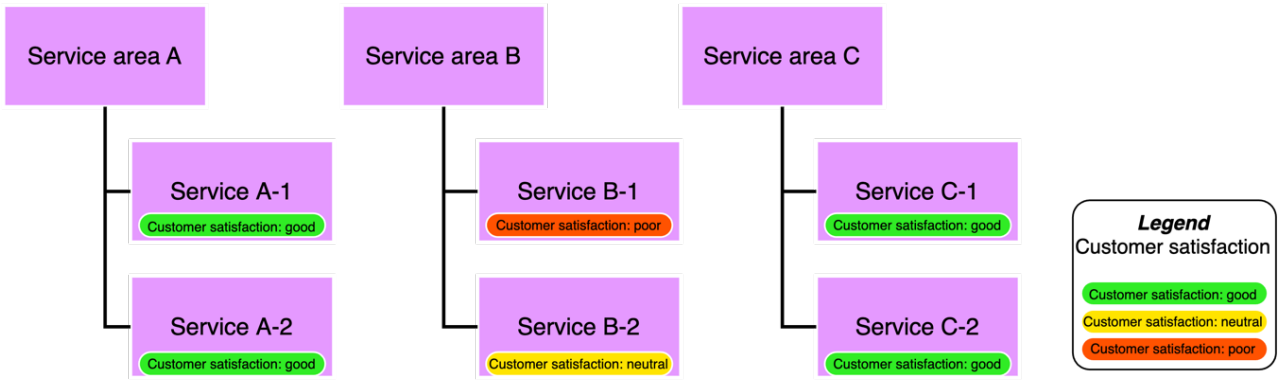


Figure 87: Service Map with metrics.

What are **Offerings** in the Enterprise context? Why use "Offerings" as an umbrella concept?

- Offerings, as an umbrella concept, unify products, services, and other value components under a single term. This perspective allows enterprises to design and deliver comprehensive, integrated solutions that align with customer needs and expectations in a holistic, adaptable way.
- In the enterprise context, offerings refer to the value propositions that an enterprise provides to its customers, stakeholders, or partners. These offerings encompass everything an enterprise delivers to satisfy customer needs, solve problems, or create benefits. They serve as the foundation of an enterprise's value creation and delivery. They include all the tangible and intangible elements that contribute to the value provided by the enterprise.
- By grouping products, services, and other value elements under the term "offerings," enterprises can take a customer-centric view of their value proposition.
- Modern enterprises often blur the line between products and services (e.g., product-as-a-service models), making "offerings" a more versatile and inclusive term.
- Referring to offerings allows enterprises to align their resources and capabilities with what they deliver, rather than focusing on isolated outputs.
- As enterprises expand into new areas (e.g., digital services, experiences, or ecosystems), "offerings" accommodates new forms of value without limiting the scope.

Offerings vs. Products and Services

Aspect	Products	Services	Offerings
Tangible/Intangible	Tangible goods	Intangible activities	Both tangible and intangible components
Focus	Focuses on physical items	Focuses on the experience or support	Encompasses all value elements
Scope	Limited to goods	Limited to services	Broader, inclusive of all value provided

Offerings, as an umbrella concept, unify products, services, and other value components under a single term.

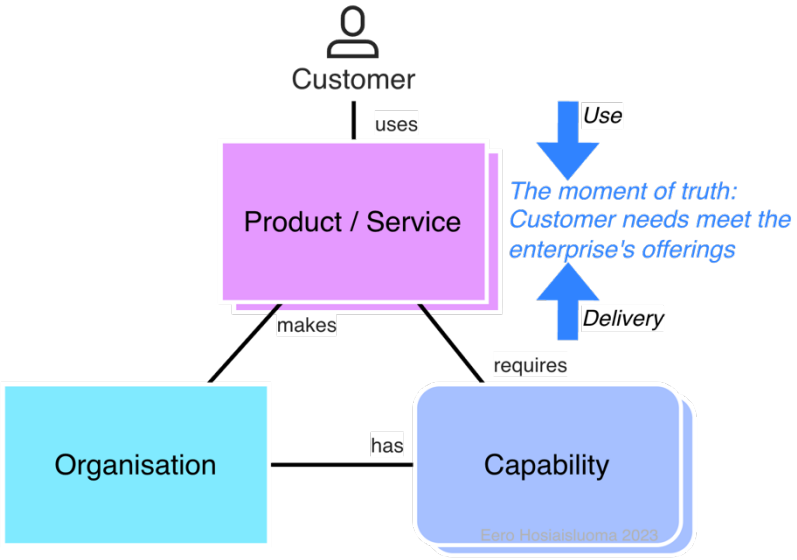
6.1.12.1 Product and/or Service

A product and/or service is what we make, offer and deliver for people's benefit [3]. As such, a product and/or service is what an enterprise (or some of its part) provides to its customers.



When modelling an enterprise's behavior and structure either from the customer perspective or from the organisation perspective, we can use the EDGY *Product* element for depicting what is delivered to customers. EDGY is a simple language, and the same element can be used for these purposes: to represent both tangible products and intangible services.

However, there are differences between a product and a service. When a product is provided, the ownership is changed for e.g. money. When a service is provided, it is done within the interaction of the customer and the service provider. Some characteristics and differences between products and services are introduced in the table below.



Characteristics & differences	
Service	Product
Intangible (mostly)	Tangible (mostly)
Transactions where no physical goods are transferred from the provider to the consumer.	Physical, virtual or digital objects or systems made available for customers.
Cannot be manufactured, stored, or transported	Manufactured, stored, and transported.
Cannot be returned or replaced.	Can be returned or replaced.
Each delivery of a service unique.	Products can be identical (or variants).
Dynamic by nature; can be used, consumed and experienced.	Static by nature; can be owned, rent / leased.
Based on the interaction between a customer and a service provider.	Based on prepared, configured object of certain type that is provided as instance to the owner.
Examples: specialist support or -help, car repair, cleaning, medical operation, furniture assembly.	Examples: car, electronic device, food, vehicle, furniture.

Product and/or Service is what an enterprise makes, offers and delivers for people's benefit.

6.1.13 Service Design

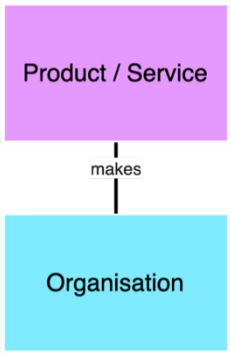
Service design is the process of creating and optimizing services to ensure they are user-centered, efficient, and aligned with both customer needs and business goals. Service Design is a human-centric approach that focuses on services.



The main focus is on the customer who uses the services (or products) of the enterprise. A service truly comes alive when a customer engages with it. In addition to the customer, there are typically employees of the enterprise who deliver the service. Therefore, a service can be seen as an interaction between the customer and the employees of the enterprise.

Interaction between the customer and the service provider is crucial in services.

Product or Service is what the enterprise makes and provides to customers. Services appear in people's lives, as they go on their journeys when doing their tasks. Services are realized (delivered) by the operations (business architecture) of the enterprise. Services are what the customers can use when doing their tasks. Services are what an enterprise provides for people's benefit.



Organisation. Behind every service, there is an organisation that produces the service. Depending on the business area, there are pure service organisations, and some product-oriented organisations. Quite typically there exists both products and services in the offerings of an enterprise. A typical service organisation (such as a consultancy firm) provides specialist services.

Figure 88: Products / services (offerings) are produced by an organisation.

Products and Services are what the enterprise makes and provides to customers' benefit.
Behind every service, there is an **organisation** that produces the service.

Service scene. According to theater analogy, customers see what is on the stage, the frontstage. Customers can't see what happens on the backstage, where are the supporting processes, people and assets with which the enterprise performs its services.

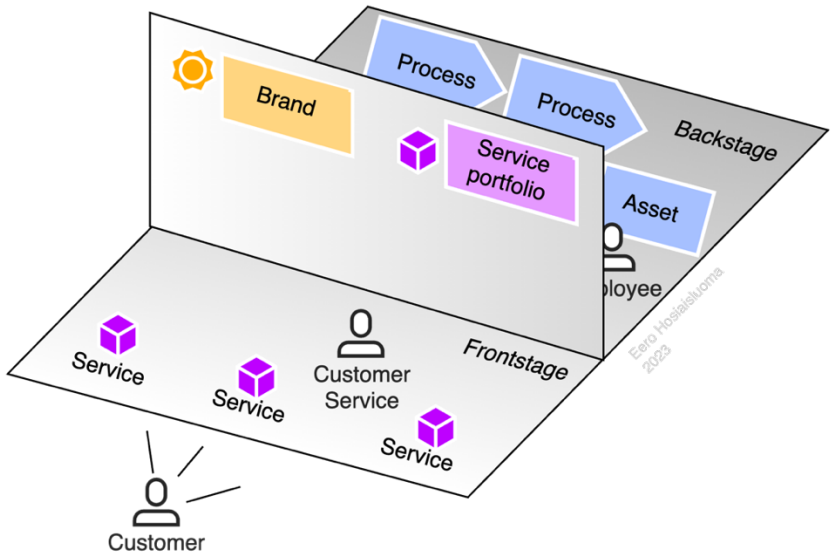


Figure 89: Service Design focus.

All the design should be driven by the goals. From the strategic goals at high-level, and from the operational business goals at detailed level.

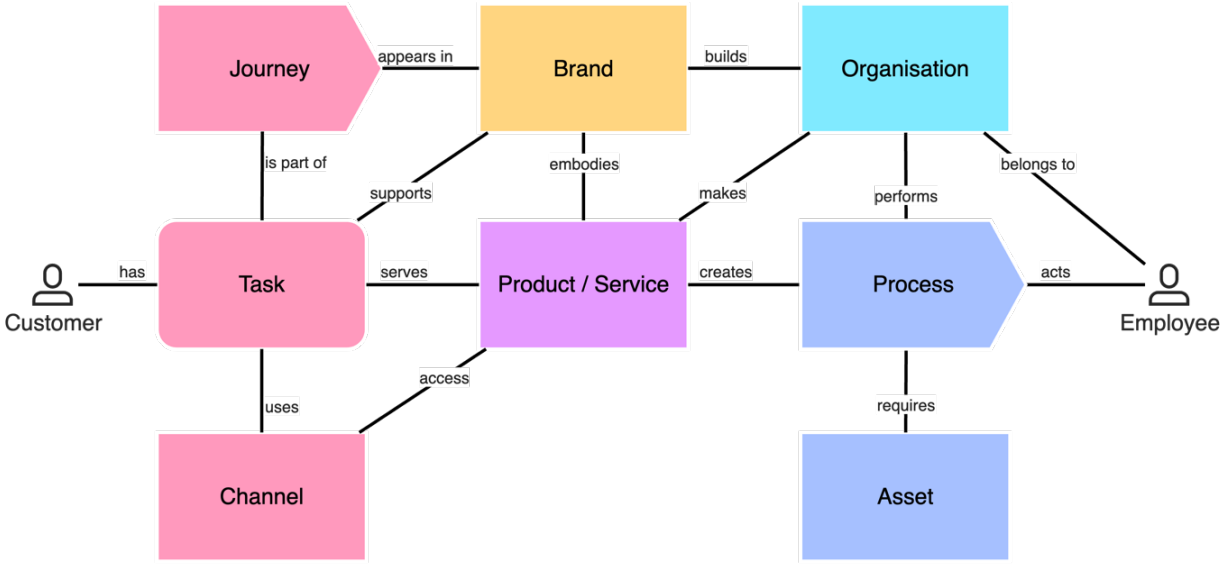


Figure 90: Customer view.

Service Design starts from the customer perspective. The “wireframe model” figure below illustrates how a customer is informed by the brand what products or services can be used for performing the tasks.

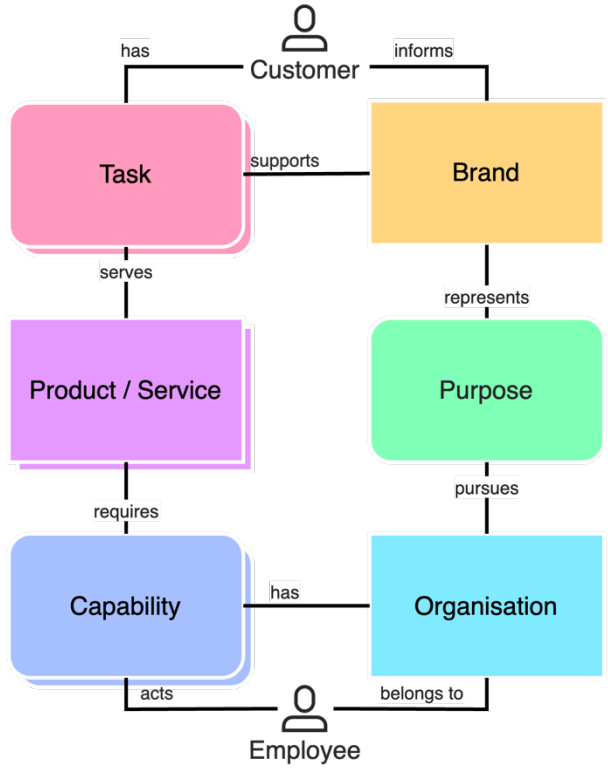


Figure 91: Wireframe model.

Enterprise Design approach is human-centric as shown in the figure below.

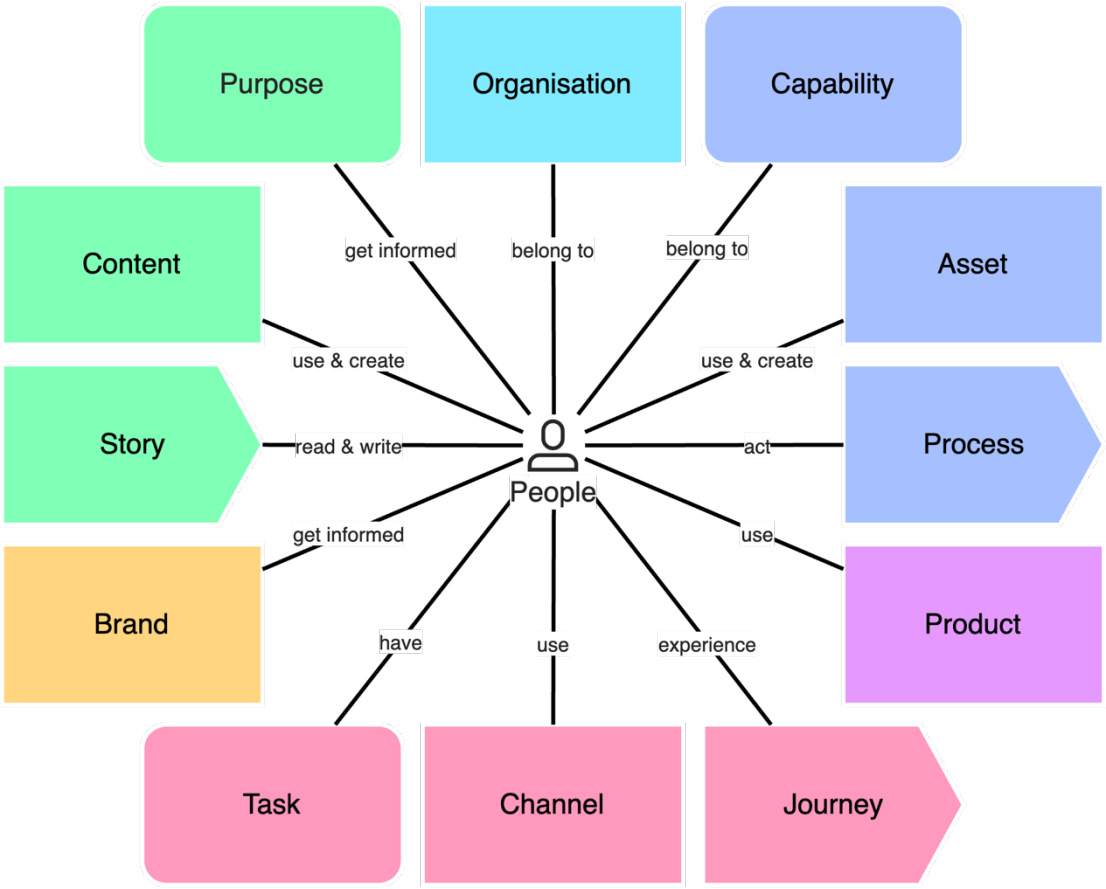


Figure 92: Enterprise Design is human-centric.

Service design covers the majority of enterprise elements as shown below. There is an infinite loop of dependencies between elements, “as everything affects everything else”.

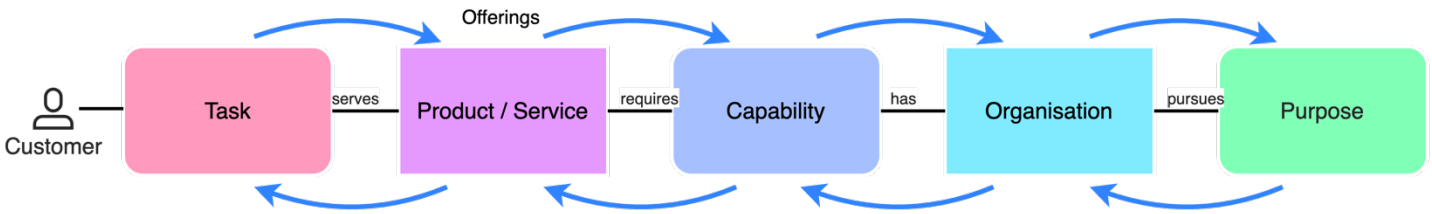


Figure 93: Flow and feedback loop.

Service Design aspects: focus on frontstage, but covers also the backstage.

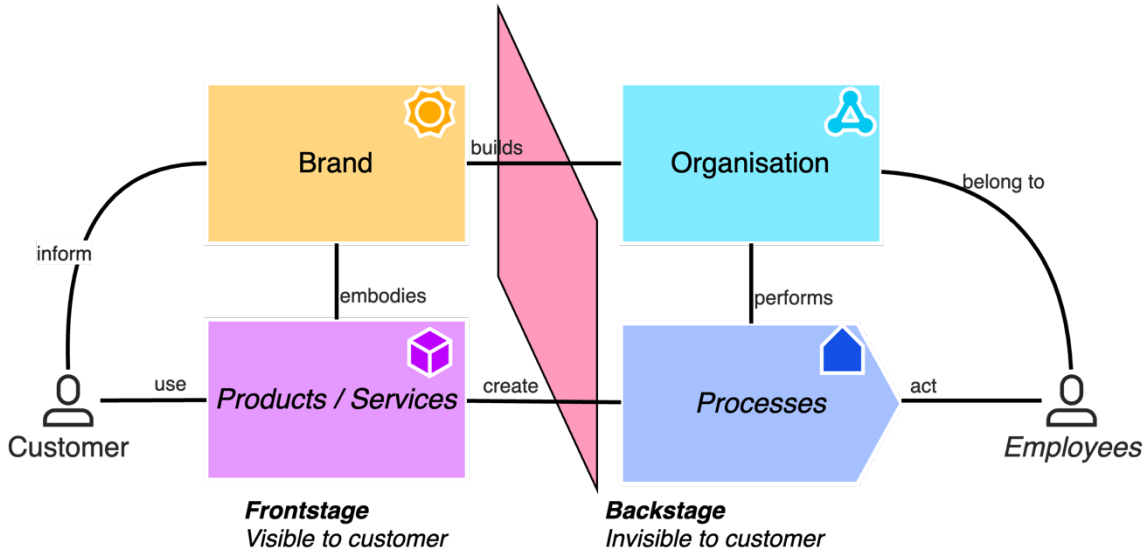


Figure 94: Products and/or services and brand are visible to customer.

6.1.14 Use Case and User Story - revisited

Use cases and user stories are both techniques used in software development and systems design to capture and describe functional requirements from the perspective of end users. Use Case is an earlier technique, and User Story came popular in the age of agile methods.

Use cases are indeed an earlier technique, originating in the 1980s and 1990s as part of more structured, traditional software development approaches like UML (Unified Modeling Language). They provide detailed scenarios that describe how a user interacts with a system (an application) to achieve a goal.

User stories, on the other hand, gained popularity with the rise of agile methodologies, particularly after the early 2000s. They are simpler and more flexible than use cases, designed to encourage collaboration and iterative development. Agile teams use user stories to capture short, high-level descriptions of features or functions from the user's perspective.

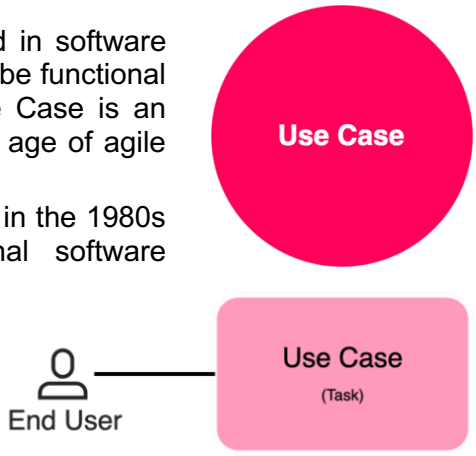


Figure 95: Use Case and/or User Story with the EDGY elements *People* and *Task*.

Both focuses on the user as a doer, typically against a system (an application) which is under construction. So they are both focused on system development.

End users can be considered as customers of the system. Therefore we can take the customer perspective and think that the use cases or user stories are tasks of a customer. Accordingly, we can model the use cases or user stories with the EDGY as shown below.

With EDGY it is possible to illustrate user tasks when using an application as shown in the figure beside.

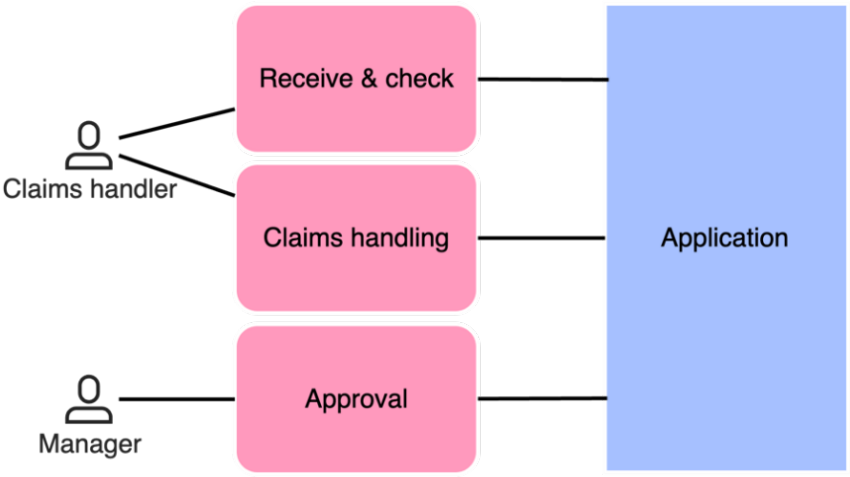


Figure 96: User task diagram / Use Case Diagram.

Tasks are customer or end user needs, the end results they want to achieve, jobs they want to get done. Those can represent the use cases as user's functional requirements towards an application are close to the tasks that a user wants to get done with the application.

The EDGY *Task* elements represent both use cases and user stories, modeled with a simple, easy, and visually elegant graphical notation. The description of a *Task* should be kept short and compact, simply defining what the user wants to accomplish. A *Task* represents the *outcome* that a user wants to achieve.

From the user perspective, tasks represent what users can do with the application.

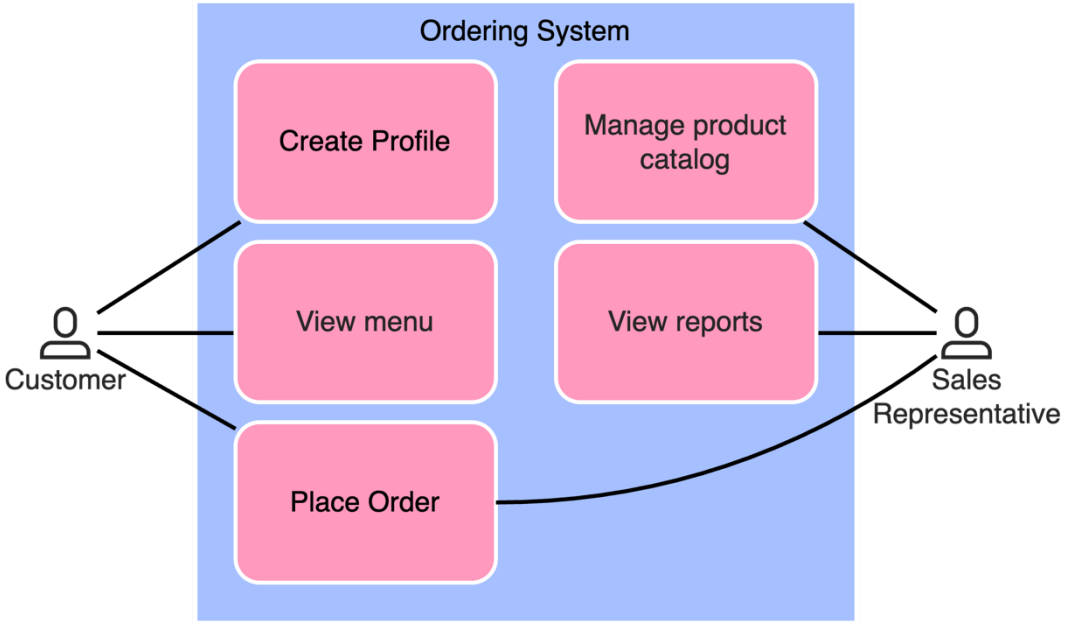


Figure 97: Tasks as use cases, application as a context.

From the development prsepective, *activities* (or *Process* elements) represent what an application can do (what are the functionalties of an application).

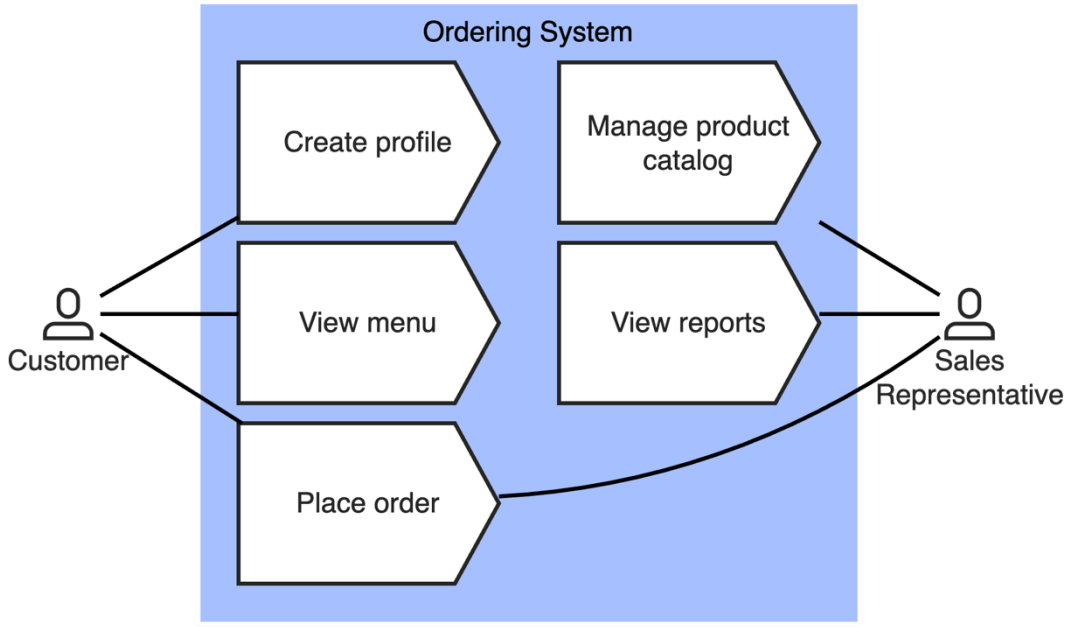


Figure 98: Activities as functionalities of an application.

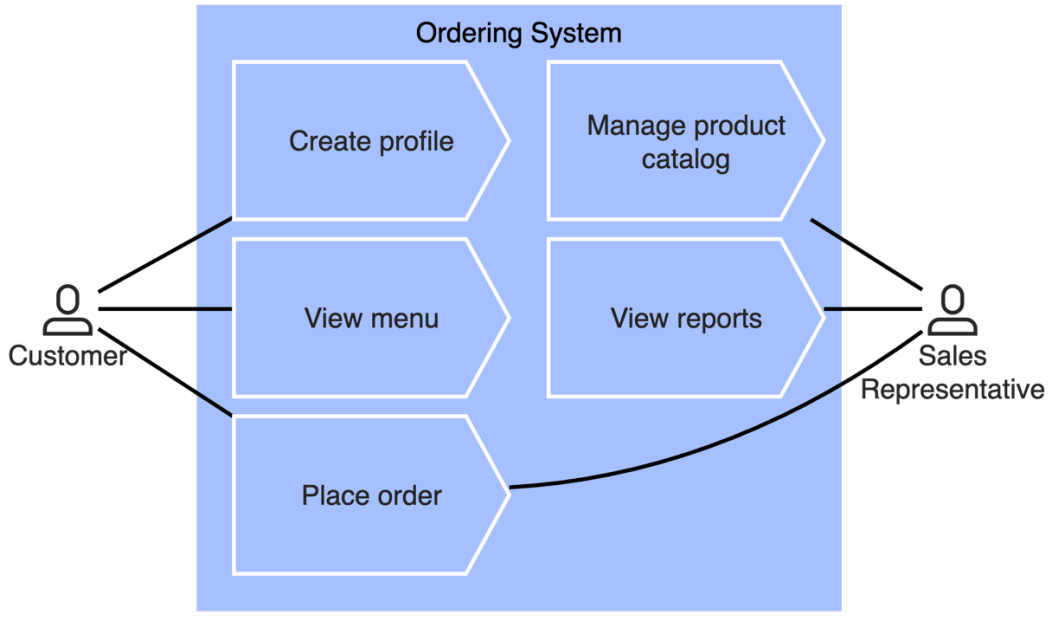


Figure 99: Process -elements as internal functionalities of an application.

The EDGY Task element is by definition: "*What people want to achieve and get done*. [3]"

A **Use Case** modeled as a ***Task*** represents the *outcome* that a user wants to achieve.

EDGY elements *People*, *Task*, and *Asset* can be used for modeling a whole sentence in simple terms that explains both use cases and user stories in a visual format, as shown in the figure above. This reflects how EDGY elements can visually represent key components of both use cases and user stories, breaking them down into roles (*People*), actions (*Task*), and tools or systems involved (*Asset*), to create an easy-to-understand visual representation of functional requirements.

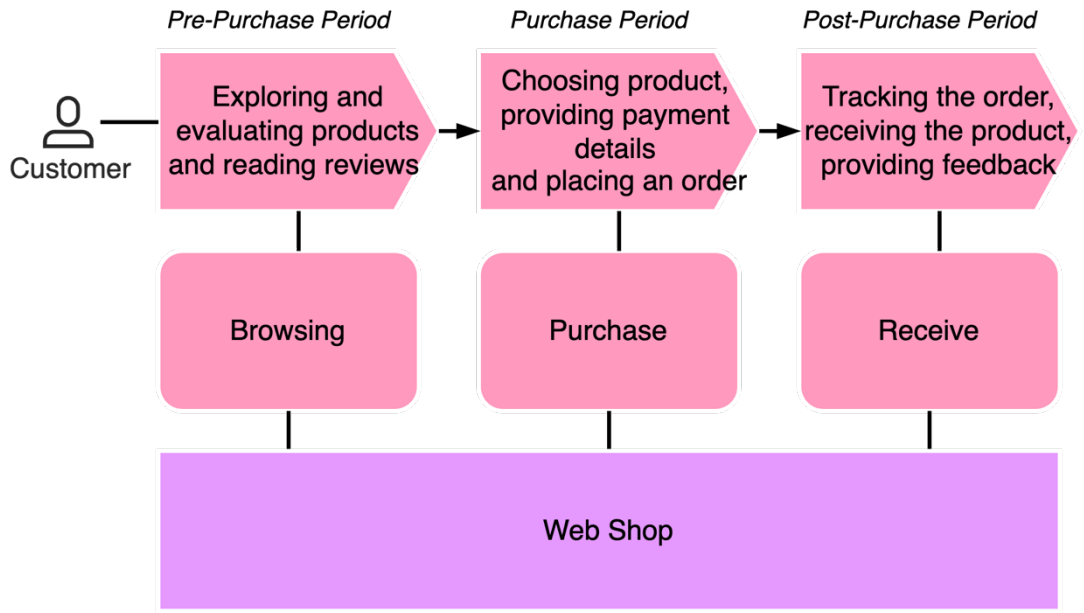


Figure 100: Use Case as a process.

In addition, we can formulate more detailed sentences with the EDGY base elements whenever appropriate as shown below.

- *People* performs activities, using or creating *objects*, to achieve *outcomes*.

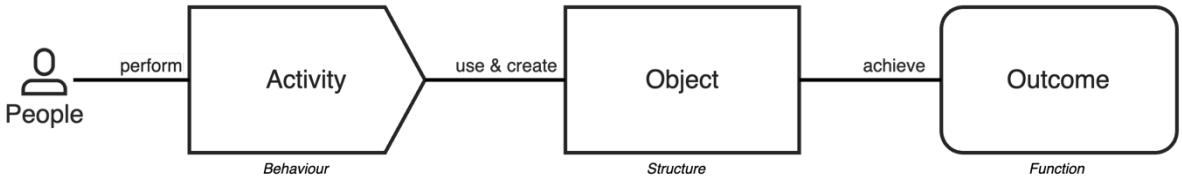


Figure 101: EDGY elements can be used for modelling sentences.

A Use Case is typically defined in structured document e.g. as follows:

- Name of the Use Case, ID, Description
- Actor, who is the user, what is the role of the user
- Precondition(s)
- Steps (main course, happy day scenario)
- Postcondition(s)
- Alternative steps
- Exceptions

A User Story is typically defined as a sentence as follows:

- “As a <role>, I want to <action>, so that <outcome>”

An example:

- As an ***author*** of an article I ***want to publish my data set***, so that ***it can be found and cited by other researchers***”

6.1.15 Customer Segment Map

Customer segments (or personas) can be identified and introduced in a customer segment map. This is a segmented representation that can be added with certain semantics: sizes of pies, and extra markings of certain criteria (such as importance, volume, costs etc.) with tags and metrics.



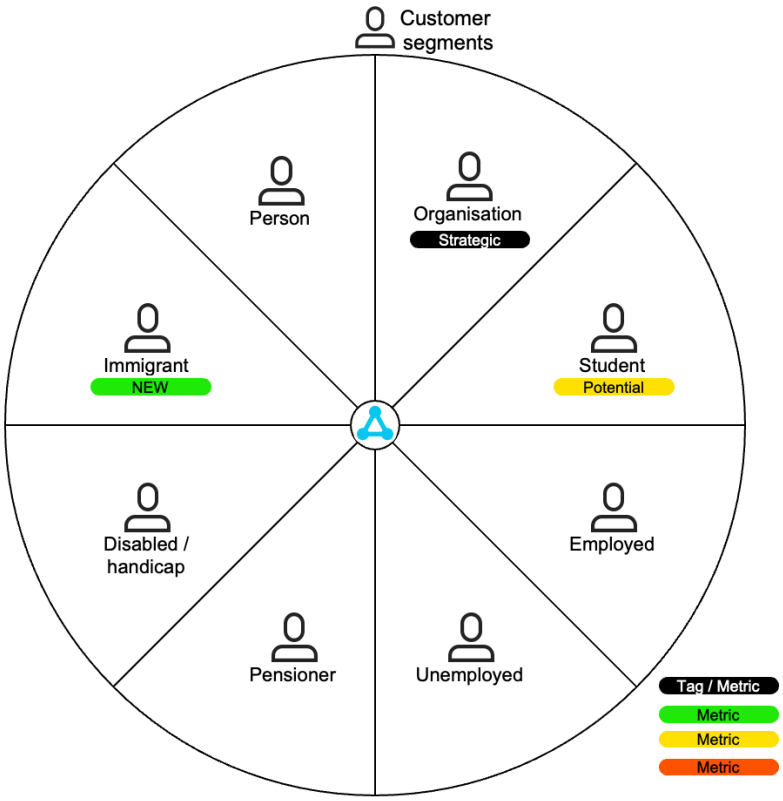


Figure 102: Customer segment map.

6.1.16 Stakeholder Map

A stakeholder map (a.k.a. *People Map*) can be defined e.g. for the enterprise, or some of its parts, such as for business area or product-/service area.

A typical stakeholder map consists of circles (like an onion), starting from the 'core' (inner circle), and then introducing other levels of stakeholders in other circles.

Identified stakeholders can be placed into a stakeholder map that can be visualized a) from the customer perspective or b) from the organisation perspective. The former is focused on the customer and the latter is focused on the target organisation.



The customer perspective puts the customer in the middle, and other stakeholders into circles depending on their visibility from the customer's point of view.

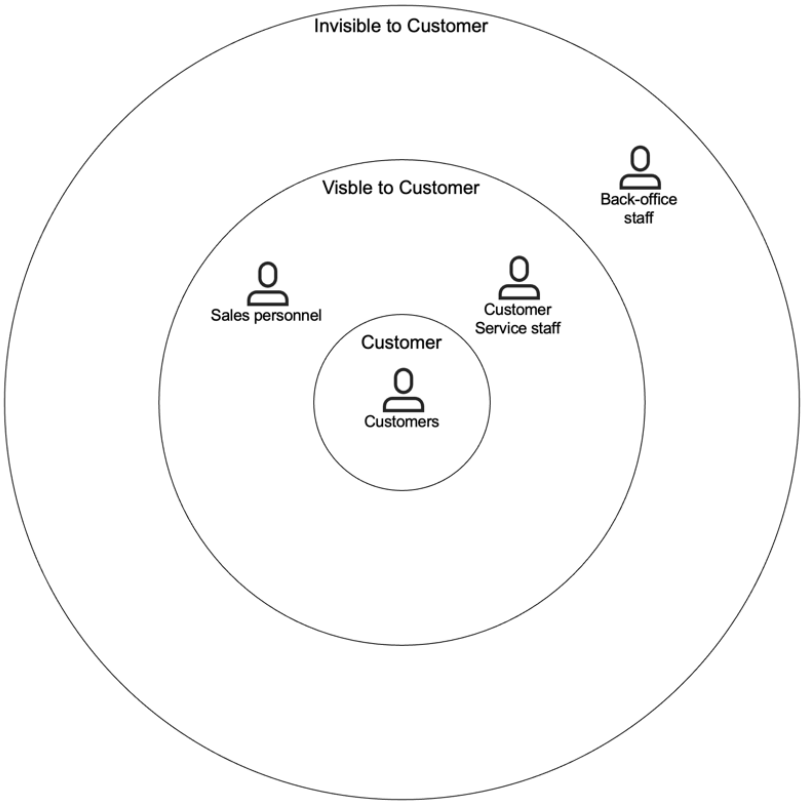


Figure 103:

Stakeholder Map – Customer View.

The organisation perspective is taken from the target organisation point of view. The target organisation is performing certain behavior and producing products and/or services with partners to customers.

Flat format. To save space we can squeeze the circles into a tighter form as shown in the figure below. An A4 landscape format fits better into laptop screens, with which we typically work in co-design sessions.

Example version 2 is partitioned in groups 1) organisation, 2) partners and 3) customers.

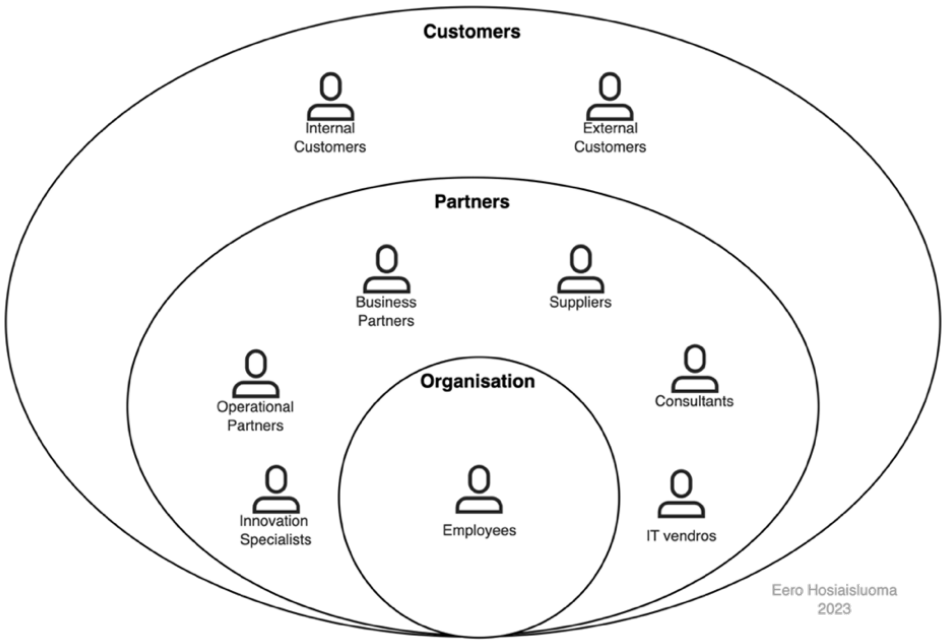


Figure 104: Stakeholder Map - Organisation perspective.

6.1.17 Jobs To Be Done (JTBD)

Jobs to be done are related to tasks that customers' want to accomplish (see People Tasks).

- A job is the outcome people are trying to achieve. A job represents the goal, the benefit, and the effect in their life or work, rather than the product, service, or means used to achieve it.

Certain needs must be met for the ultimate job to be done. A job is achieved when all underlying customer needs it encompasses have been fulfilled. It is not the product or service alone, nor their features, but the ultimate desired goal (or goals) to be achieved.

A **job** is the outcome people want to achieve.

A widely known metaphor[27] for this is:

- Nobody wants to buy a quarter-inch drill. They want a quarter-inch hole. The drill is the product, but the "job to be done" is creating a hole for a desired outcome, like hanging a picture.

The "jobs" cannot be found by asking the customer "what do you want?". That would cause they think what they can do, with currently known prdicts and services, with the current technology. All what is already known. [28]

The "jobs" can be found by asking the customers e.g. "what are you ultimately trying to get done or accomplish?", or "what is the final outcome or result you are seeking?", "the last time you did this <specific action>, what were you doing and why did you do it that way - what were the reasons?".

Focus on the problems customers want to solve. Talk with customers to gain insights. Finally, find solutions to their problems.

Focus on the customer problems they want solved

Segmentation. Jobs can be used to identify and differentiate customer groups and segments. Each customer group or segment (or persona) has different jobs to accomplish.

- The idea is that customers' jobs-to-be-done — what they are trying to accomplish — can serve as a basis for identifying and differentiating customer groups or segments. Instead of segmenting only by demographics (age, gender, education, occupation, income level, family situation, place of residence), segmentation can be based on what different groups want to achieve. Segments may therefore exist precisely because they have different jobs-to-be-done.

6.1.17.1 Jobs To Be Done (JTBD) elements

Elements of JTBD, according to Jim Kalbach (*The Jobs To Be Done Playbook*), are as follows:

1. Job performer (who)
2. Jobs (what)
3. Process (how)
4. Needs (why)
5. Circumstances (where / when)

[27] Theodore Levitt: "*People don't want a drill, they want a hole in the wall*".

[28] A classic example of this was what Henry Ford is said to have said: "*If I had asked people what they wanted, they would have said faster horses*'". Despite the lack of evidence, the quote has become popular in discussions about innovation and customer feedback. It is often used to suggest that customers may not always know what they truly need or want, highlighting the importance of visionary thinking in product development.

#	Elements	Description
1	Job performer (who)	The executor, actor, person or role (or entity) responsible for executing the job. Often but not always the customer. The ultimate end user.
2	Job(s) (what)	The aim of the performe what he/she wants to accomplish, independent of current solutions. Pattern: *verb* + *object* + *clarifier*.
3	Process (how)	Outlines steps involved in accomplishing the job, distinguishing between tasks and sub-jobs.
4	Needs (why)	Intended / desired outcome(s); ultimate needs. Focused on what the performer requires to accomplish the job. Explain why the performer acts in a certain way while executing the job. Pattern: *direction* + *unit of measure* + *object* + *clarifier*.
5	Circumstances (where / when)	Context / Situation; The circumstances under which the job arises (time, place).

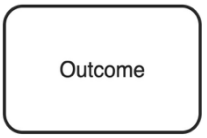
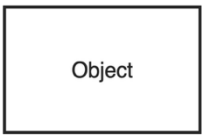
Other concepts concerning JTBD:

Elements	Description
Pain Point	Frictions or difficulties customers encounter while trying to get the job done.
Current Solutions	The methods, tools, or workarounds customers currently use to achieve the job.
Outcome	The specific result customer wants to achieve when executing a job. These can be functional (e.g., "complete the task quickly") or emotional (e.g., "feel secure").
Gain	Benefit, advantage, desired outcome.
Metrics	The success criteria or metrics customers use to judge whether the job is done well.
Job Driver / Event	The underlying motivation or trigger that causes a customer to seek a solution. For example, a life event (e.g., moving houses) or a change in circumstances (e.g., a new job).

6.1.17.2 Jobs To Be Done (JTBD) concepts

Experience and tasks.

Jobs to be done concepts can be modelled with EDGY elements as hown in the table below.

Concept	Description	EDGY element
Job	The fundamental, the ultimate task or goal the customer wants to accomplish, independent of current solutions.	Task 
Functional job	The practical, task-oriented part of the job (e.g., “transfer money securely”).	
Emotional job	How the customer wants to feel when doing the job (e.g., safe, confident, relaxed).	
Social job	How the customer wants to be perceived by others while doing the job (e.g., competent, professional).	
Related job	Secondary or adjacent jobs that happen before, after, or alongside the core job.	
Job Performer	The actor, person or role (or entity) responsible for executing the job. Often but not always the customer.	
Context / Situation	The circumstances under which the job arises (time, place).	
Pain Point	Frictions or difficulties customers encounter while trying to get the job done.	Outcome 
Current Solutions	The methods, tools, or workarounds customers currently use to achieve the job.	Object 
Outcome	The specific result customer wants to achieve when executing a job. These can be functional (e.g., "complete the task quickly") or emotional (e.g., "feel secure").	
Gain	Benefit, advantage, desired outcome.	
Metrics	The success criteria or metrics customers use to judge whether the job is done well.	
Job Driver / Event	The underlying motivation or trigger that causes a customer to seek a solution. For example, a life event (e.g., moving houses) or a change in circumstances (e.g., a new job).	

- There is a higher purpose, meaning, why these jobs to be done are necessary to achieve the ultime job.

6.1.17.3 Jobs To Be Done (JTBD) methods and tools

Tool	Description
Job Map	A structured sequence of steps a customer goes through to complete the job (define, prepare, execute, conclude, etc.).

6.2 Identity Examples

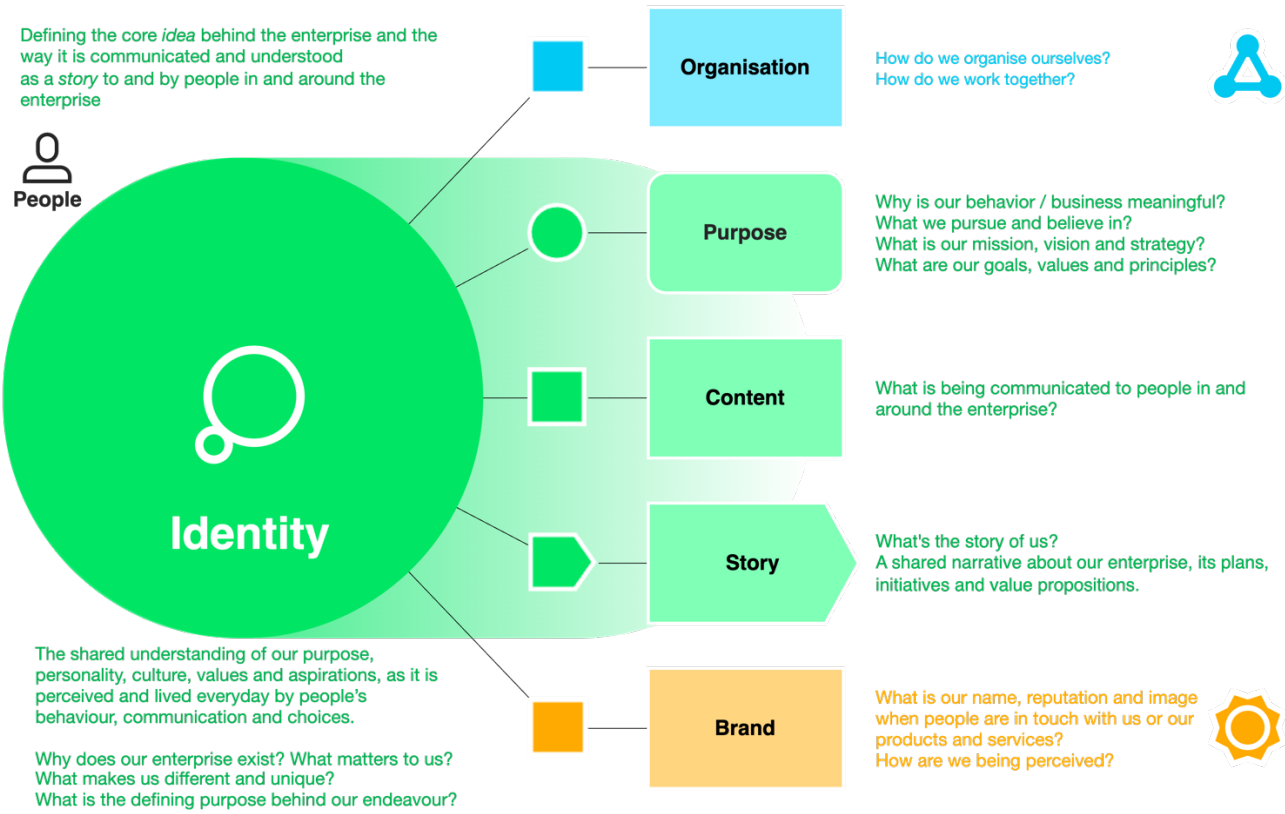


Figure 105: Identity Facet and Intersections Brand and Organisation.

Identity:

- "*The values and beliefs enterprises exhibit through their messages and actions.*" [3]
- Identity is concretised in the purpose.
- Identity refers to mission, vision, strategy and goals of an enterprise.
- Identity answers to fundamental *WHY* questions of an enterprise:
    - Why does our enterprise exist? Why is our behavior / business meaningful?
    - Why we do what we do?
    - What matters to us?
    - What is our purpose? What is our mission? What is our vision?
    - What is our strategy? What are our goals?
    - What we make and offer? What is our story? Who are we?
- Identity can be modelled with the EDGY elements ***Purpose***, ***Content***, ***Story***, ***Brand*** *and* ***Organisation***.

In the enterprise context, **identity** refers to the unique characteristics, values, mission, vision, culture, strategy, goals, and overall brand that define an organisation. It is the essence of what the enterprise stands for, what it aims to achieve, and how it is perceived both internally by employees and externally by customers, partners, and the broader market.

Key elements of an enterprise's identity include:

- **Mission**: The purpose of the organisation - why it exists and what it aims to accomplish.
- **Vision**: The long-term goals or aspirations that guide the enterprise's strategic direction.
- **Values**: The core beliefs and ideals that drive decision-making and behavior within the organisation. They reflect what the organisation stands for and what it prioritizes in its operations and interactions. Values represent heavily the *WHY*.

- **Principles**: The specific guidelines or rules that direct how the organisation operates in practice. They are derived from the organisation's values and provide more concrete instructions on how to act in various situations. Principles represent the *HOW*, as they operationalises values in daily practices. They translate values into actionable standards, expectations, and finally into change requirements.
- **Culture**: The shared attitudes, practices, and norms that shape how people within the organisation interact and work together.
- **Brand**: The perception of the organisation, shaped by how it presents itself to external customers, the market, and the public.

An enterprise's identity is crucial because it influences how stakeholders (employees, customers, partners, etc.) perceive and engage with the organisation. It also plays a key role in guiding strategic decisions, maintaining consistency in messaging and actions, and building trust and loyalty among stakeholders.

Identity reflects what the organisation stands for and what it prioritizes in its operations and interactions.

6.2.1 Identity View

The identity of an enterprise can be simplified with the elements shown below.



Identity expresses why an endeavour or an entity (such as an enterprise, an organisation or an unit) exists. Identity refers to the existential question of *why*. Identity defines why something is important, why we should care about it, and why it exists in the first place.

Identity elements can be used for analysing the reasons why, all the existential and deeper questions to clarify what actually matters.

With identity elements (purpose, story and content) and related intersection elements (brand and organisation), it is possible to focus on both of these aspects:

a) people, and describe the message around people's purpose and reason for being, or
b) behavior, the business reason of activities that people do.

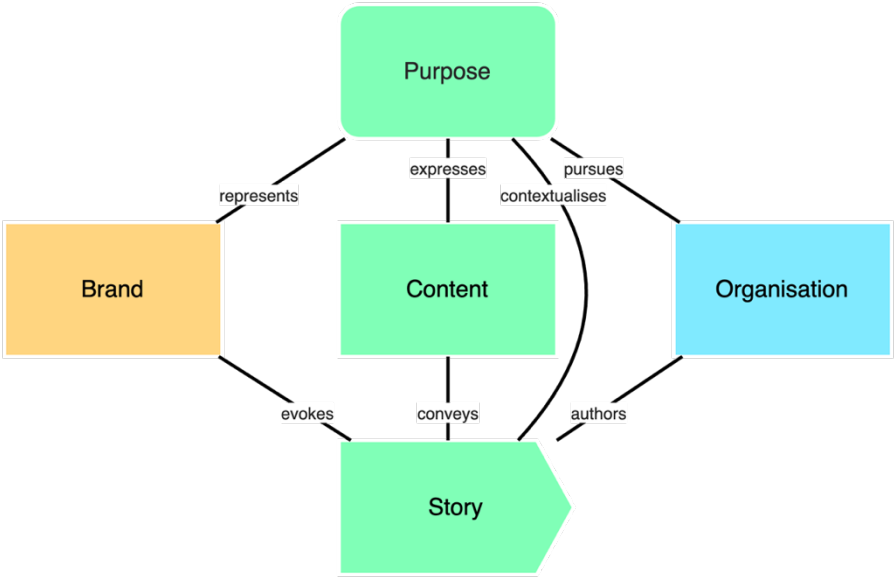


Figure 106: Identity elements of an Enterprise.

Identity clarifies all that is important to understand 'why we do what we do'. The identity can be co-designed by people who are involved, by using these elements shown below. The example below starts with the topic, and the brand of the subject matter (e.g. entity, change initiative etc.). Then its purpose [29] is introduced with the story and content. And finally, the organisation involved is

[29] **Purpose essentials** - the fundamental questions. Naïve question goes 'what is the meaning of life'. This philosophical question cannot be answered with rational, scientific method-based arguments, as the question is absurd. We cannot define what is the deepest meaning or purpose of existence itself (an sich), or what is the intrinsic value of life. Or in a cosmological perspective, 'why the cosmos bothers to exist at all in the first place', is something that we don't know. What we can do, instead,

introduced. These elements reflect the identity perspective and its intersections. Note that the people dimension is strongly emphasized in sentences: "we are, we exist, we do" etc., as the Enterprise Design approach is especially people-centric.

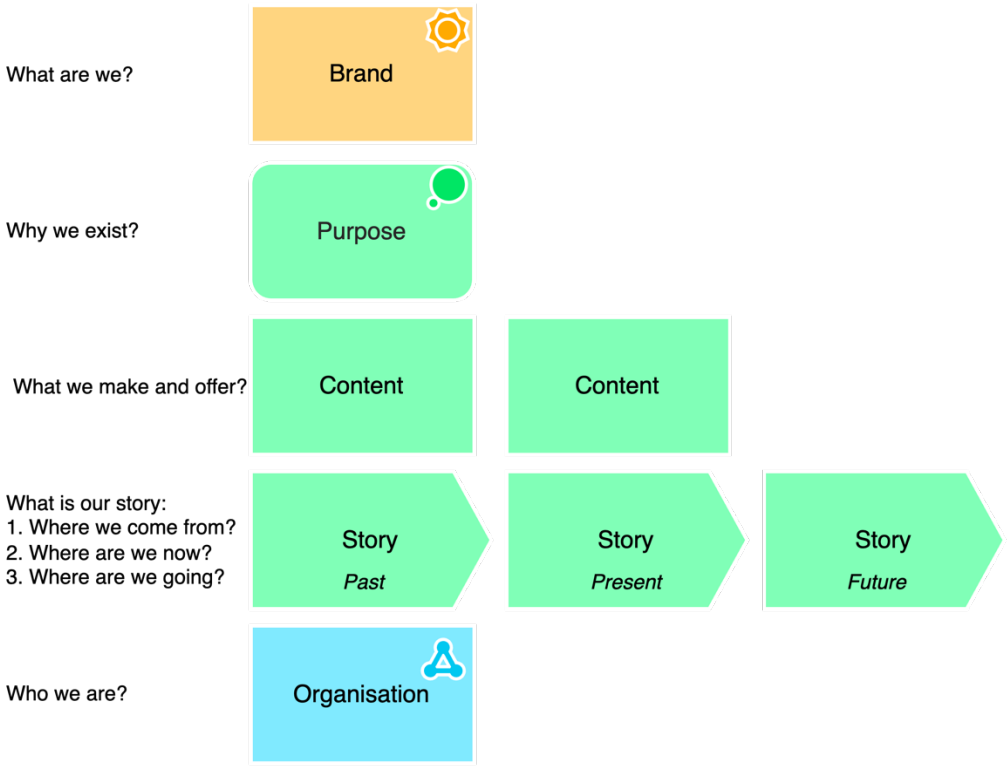


Figure 107: Identity view.

Identity view elements	
Element	**Description**
Brand	Expresses the title of the activity or change initiative (e.g. enterprise, unit, product- or service area/family, program, project, concept).
Purpose	Defines the idea behind: why this entity/behavior/activity is important; what is the reason for being, mission.
Story	Explains e.g. our narrative, what is our past, present and future. Can be used e.g. for depicting value propositions.
Content	Introduces what we do or what we are going to do; clarifies the substance.
Organisation	Introduces who we are, how the people involved are organised themselves.

Identity view use cases are e.g. as follows:

1) Identity and purpose of an entity or its part (e.g. enterprise, ecosystem, organisation, business unit, group, team).
2) Identity and purpose of a group of *people* working together.
3) Purpose and idea behind a *change* activity or -initiative (e.g. business transformation, concept, innovation etc.)

is to clarify the purpose of an entity such as an enterprise. We can state a purposeful meaning by using the Facet Model Identity elements as tools. It is possible to define and visualize what is important in the context of an enterprise.

Identity clarifies "'why we do what we do'.

6.2.2 Enterprise Analysis Levels

Enterprise and its behavior can be analysed in different levels from purpose to operations.

- The identity, the purpose, forms the basic idea of the business in which an enterprise operates: the mission and vision.
- The strategy level defines the goals and actions to be taken towards the vision.
- The business model defines how the enterprise creates value, what are the value propositions and to whom enterprise provides its products and/or services - who and what are the customers (people and/ or organisations).
- The operating model defines how the enterprise operates: what are the capabilities required for creating and delivering the offerings (products and/or services), with which processes and assets business is running.

Operational business (business operations) is defined by the operating model. Operating model defines how an enterprise is operates daily-basis. The operating model is derived from the business model, that is higher level representation of how an enterprise creates value.

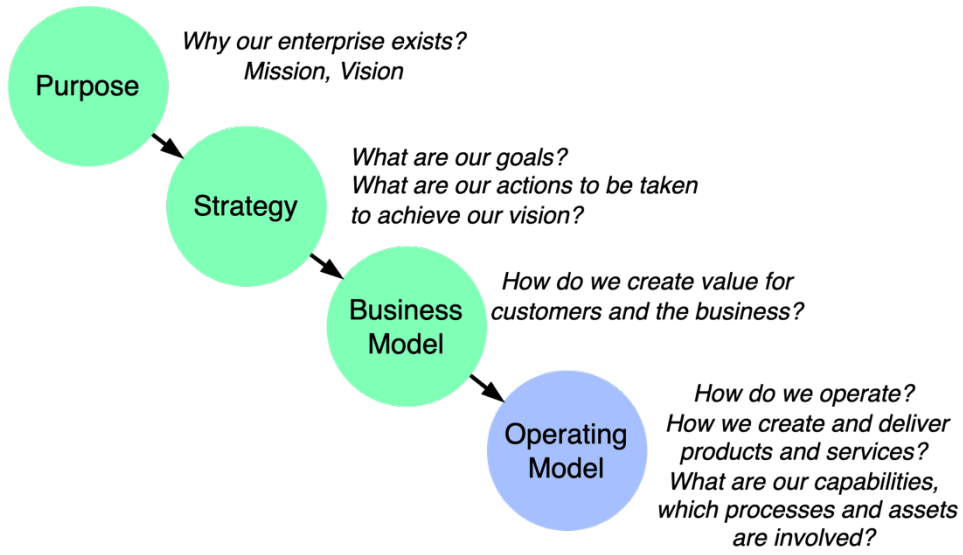


Figure 108: Enterprise Analysis Levels.

6.2.3 Mission, Vision, Values, Strategy

The enterprises's mission, vision and values can be expressed, in written format or in visualisation. However, it should be considered if the identity visualization, as illustrated in the previous figure above, can be adequate enough. It can be the most appropriate way to communicate the enterprise's purpose, mission, and future vision and related values within a single visualization, what we can call simply the 'identity'. The identity covers all that is important and meaningful in the context of an enterprise: mission, vision, values etc.



The ***purpose*** of a business of an enterprise is to create products or services that address customer needs, deliver value, and contribute and support long-term goals. Mission and vision both relate to an organisation's purpose. They are typically communicated in some written form.

- **Mission** statement communicates the organisation's reason for being. Mission answers questions about 'why we exist'. The mission statement is about what the enterprise does today and how it fulfills its core purpose. It focuses on the present.
- **Vision** statement, in contrast, is a future-oriented declaration of the organisation's long-term aspirations. Vision is based on the mission. Vision answers questions about 'where are we going', 'where do we want to be', and 'what we want to become'. The vision statement describes what the enterprise wants to achieve in the future.
- **Strategy** refers to the long-term plan or approach that an enterprise adopts to achieve its goals, and fulfill its mission and vision. It involves making choices about where, when, and how to allocate resources, and with which capabilities. Strategy answers questions about 'how we will achieve our vision'. As such, the mission and vision together guide the enterprise's strategy, decision-making, and direction.



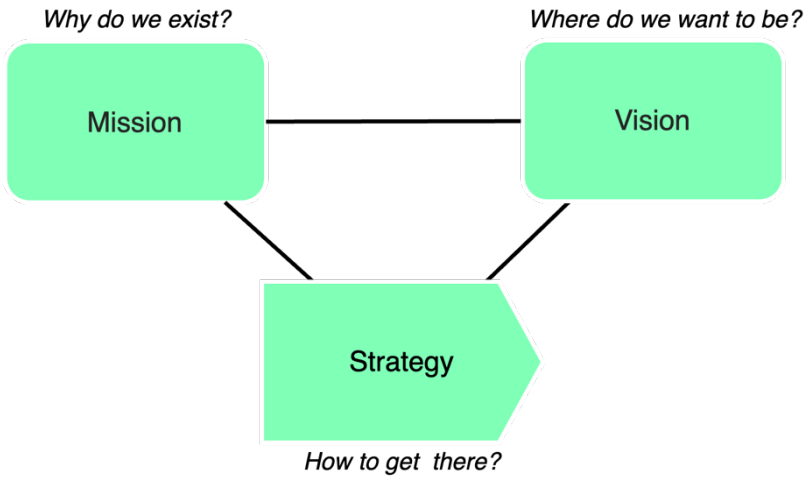


Figure 109: Mission, Vision, Strategy.

Mission defines ***why*** the enterprise exists. It is broad and *foundational* by nature.

Mission defines the enterprise's core purpose - why it exists and what it aims to achieve.

Vision defines ***where*** the enterprise wants to go. It is *aspirational* and *inspirational*.

Vision describes the enterprise's aspirational future - what it hopes achieve in the long term.

Strategy defines **how** the enterprise fulfills its mission and achieves its goals toward the vision. It is *actionable* and *directional*.

Strategy is the plan of action or roadmap that outlines how the enterprise will achieve its vision and fulfill its mission.

Aspect	Mission	Vision	Goals	Strategy	Outcomes
Focus	Why the enterprise exists. Present (what the enterprise does today).	What the enterprise aspires to be. Future (what the enterprise aims to become)	What needs to be achieved.	How goals will be achieved. Plan of action (course of action) to achieve the vision and fulfill the mission.	What measurable results are achieved.
Meaning	Defines the enterprise's current purpose, reason for being, core activities / responsibilities.	Defines the aspirational, long-term goals (and purpose).	Sets specific, actionable objectives. Break vision into actionable, measurable steps	Provides the *roadmap* for achieving the vision while fulfilling the mission. Bridges the mission and vision by turning the enterprise's goals into actionable steps.	Measure the success and impact of strategic goals and efforts.
Timeframe	Short to medium-term. Present and ongoing.	Long-term, future-oriented	Short- to medium-term.	Medium- to long-term (3-5 years)	Short-, medium-, or long-term.
Question answered	"Why do we exist?" "What do we do?"	"Where do we want to go?" "What do we want to achieve in the future?" "Where do we want to be?"	"What do we need to achieve?"	"How do we achieve our goals?" "How will we get there?" "How will we measure success?" "What risks might we face?" "What is the timeline for achieving our goals?"	"What results did we achieve?" "How do we measure success and impacts of efforts?"

Mission and vision define the destination and purpose, while strategy outlines the roadmap to get there.

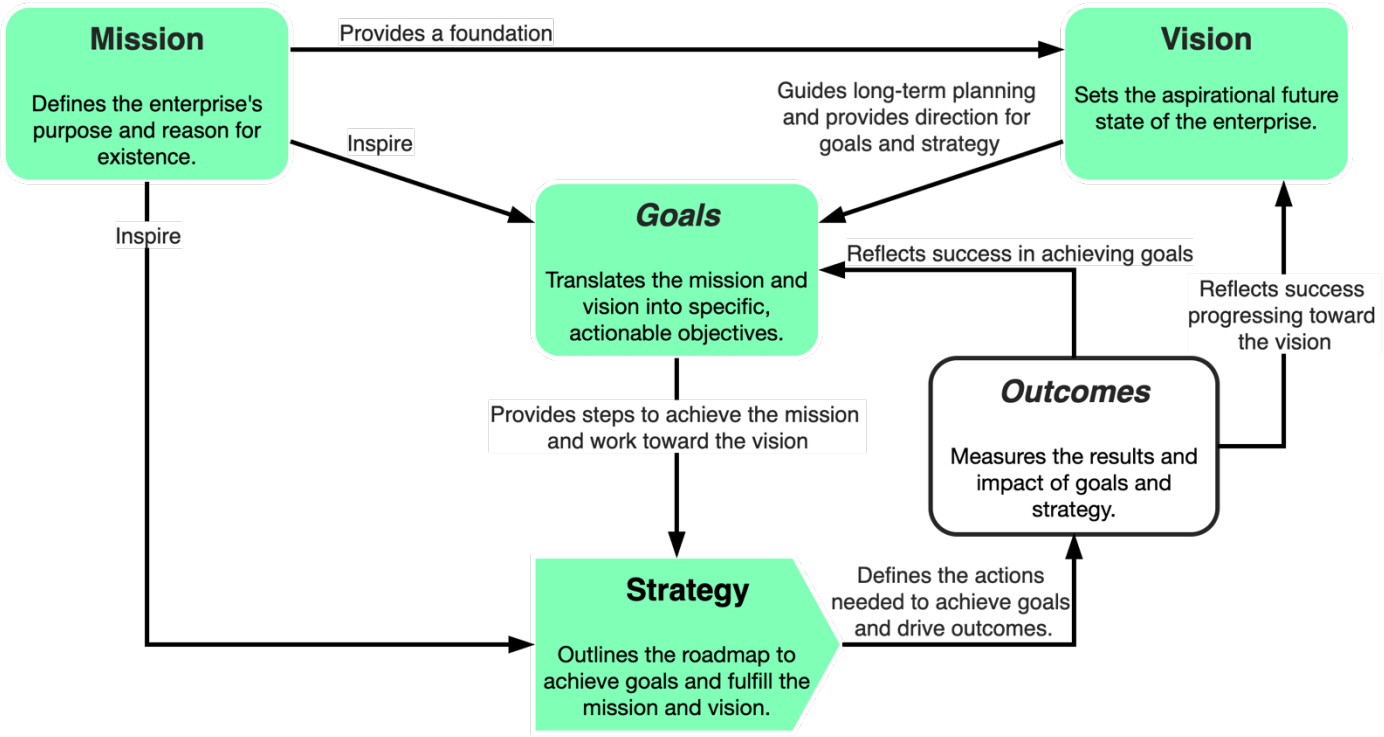


Figure 110: Relation of concepts.

A **roadmap** is a visual or strategic tool that outlines the planned actions, initiatives, or steps an enterprise intends to take over time to achieve specific goals. It serves as a high-level guide, providing a clear timeline and path for implementing strategies and reaching desired outcomes.

The figure below illustrates the relations between the mission, strategy and vision. A roadmap is the actual course of actions to be taken to achieve the outcomes.

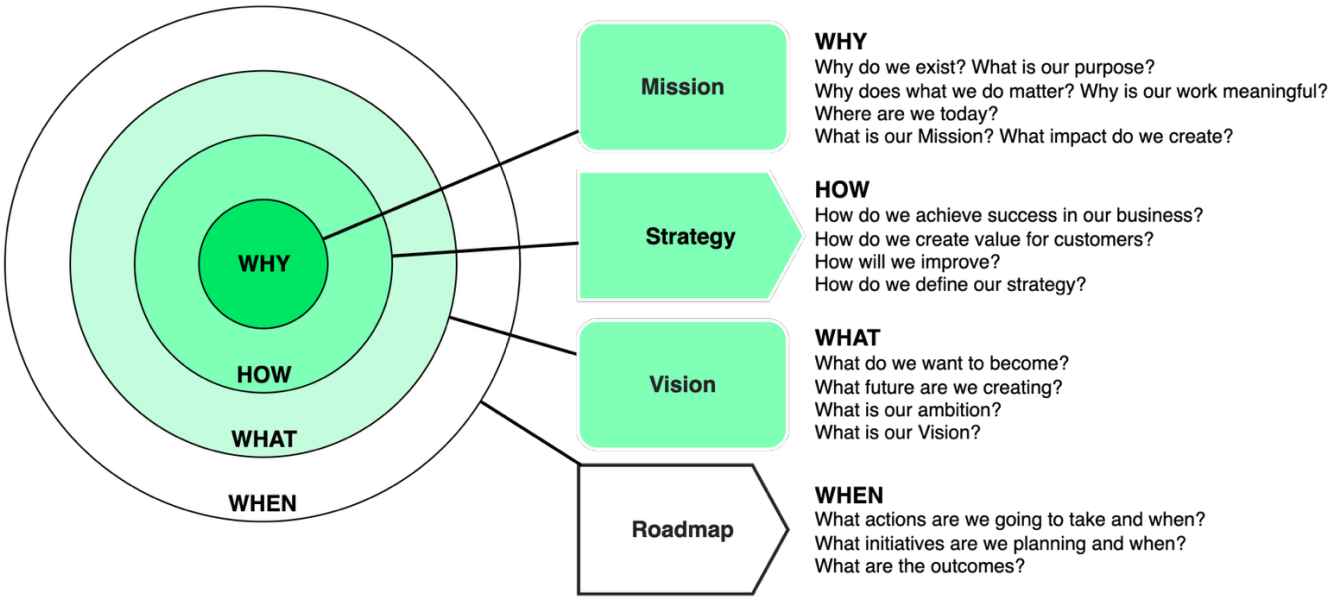


Figure 111: Mission, Strategy, Vision, and Roadmap.

The mission is the *purpose* why an enterprise exists in the first place - the reason for being. The vision is the future state that an enterprise wants to achieve. The strategy is the course of actions to be taken toward the vision.

The strategy is like a *playbook*, explaining how we play, what moves we make, and according to which values and principles. The roadmap is a detailed plan of when we do actions and what are the resulting outcomes.

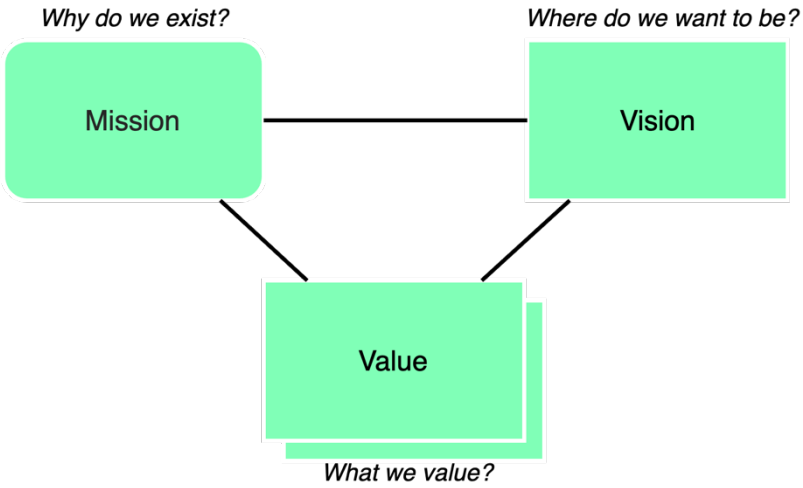


Figure 112: Mission, Vision, Values.

Strategy execution can be started by identifying high-level goals, from which the more detailed operational-level goals can be derived. After goal setting, it is possible to define concrete actions to be taken to achieve actual end results [30]. It is suggested that the results can be measured so that it is possible to control the progress of the strategy. According to Peter Drucker: "*You can't manage what can't measure*".

[30] **End results** are rather *outcomes* than *outputs*. *Outcome-driven* approach produces traceable deliverables according to the purpose of the enterprise.

Values are typically identified and made visible to guide decision-making and people's working in an enterprise. Values can be communicated and visualized in conjunction with the mission and vision statements. Values reflect what is important to the enterprise and help shape its identity. Values serve as a foundation for the enterprise's culture and influence how it interacts with stakeholders such as customers, employees, partners, and owners.

Values represent the guiding beliefs that shape the culture, behaviors, and decision-making.

Principles provide guiding rules or standards that help the enterprise consistently apply its values in day-to-day decision-making and operations. Principles ensure that the enterprise's values are put into action. Principles direct all the change activities in the enterprise to follow certain guidelines, in line with the values, to control and support people in design, development, decision-making and operations.

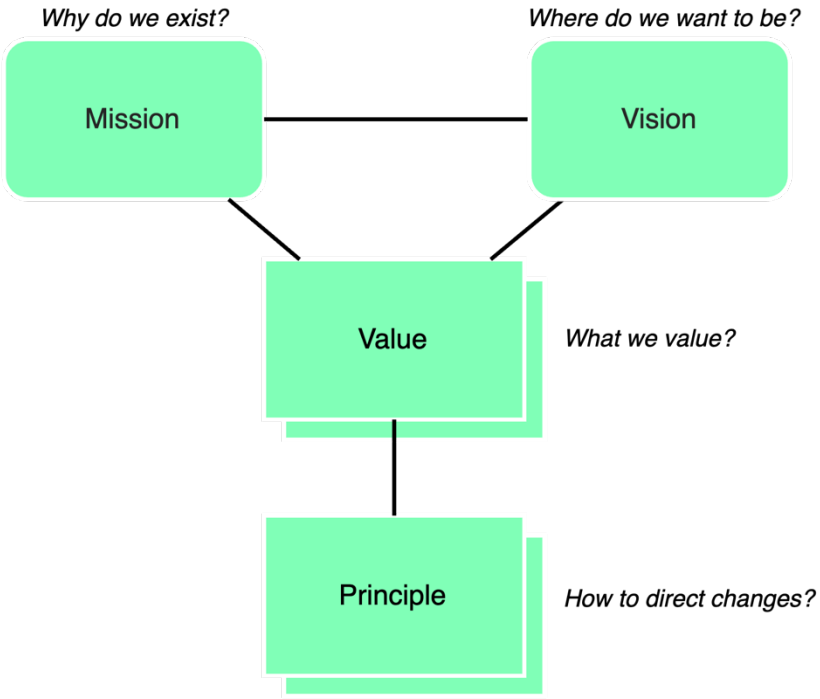


Figure 113: Principles.

Principles are the operational rules and guidelines that translate the values into action.

Values and principles guide cultural behavior and design in an enterprise context. Values affect overall development principles in an enterprise and requirements for development initiatives (such as programs, projects, business transformations etc.).

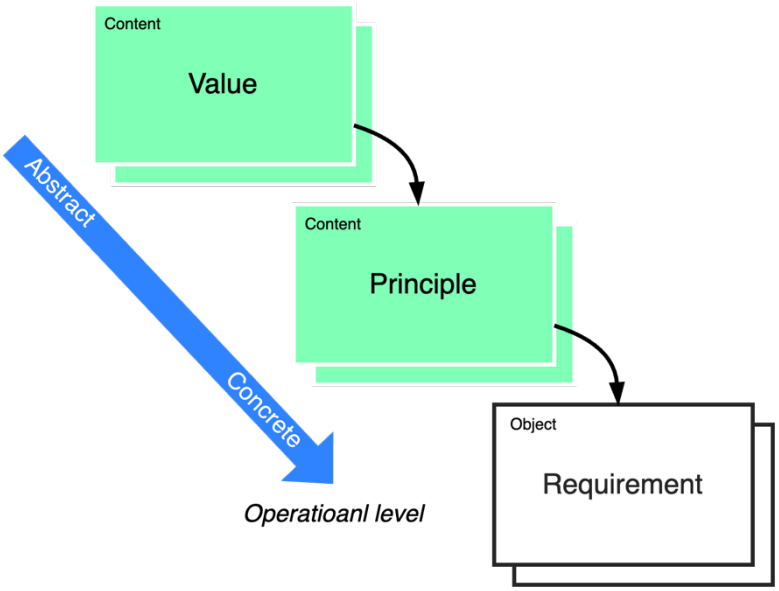


Figure 114: Values, Principles and Requirements.

An example one-pager with concise mission, vision, strategy statements, values, and goals for an enterprise that provides IT services to local customers.

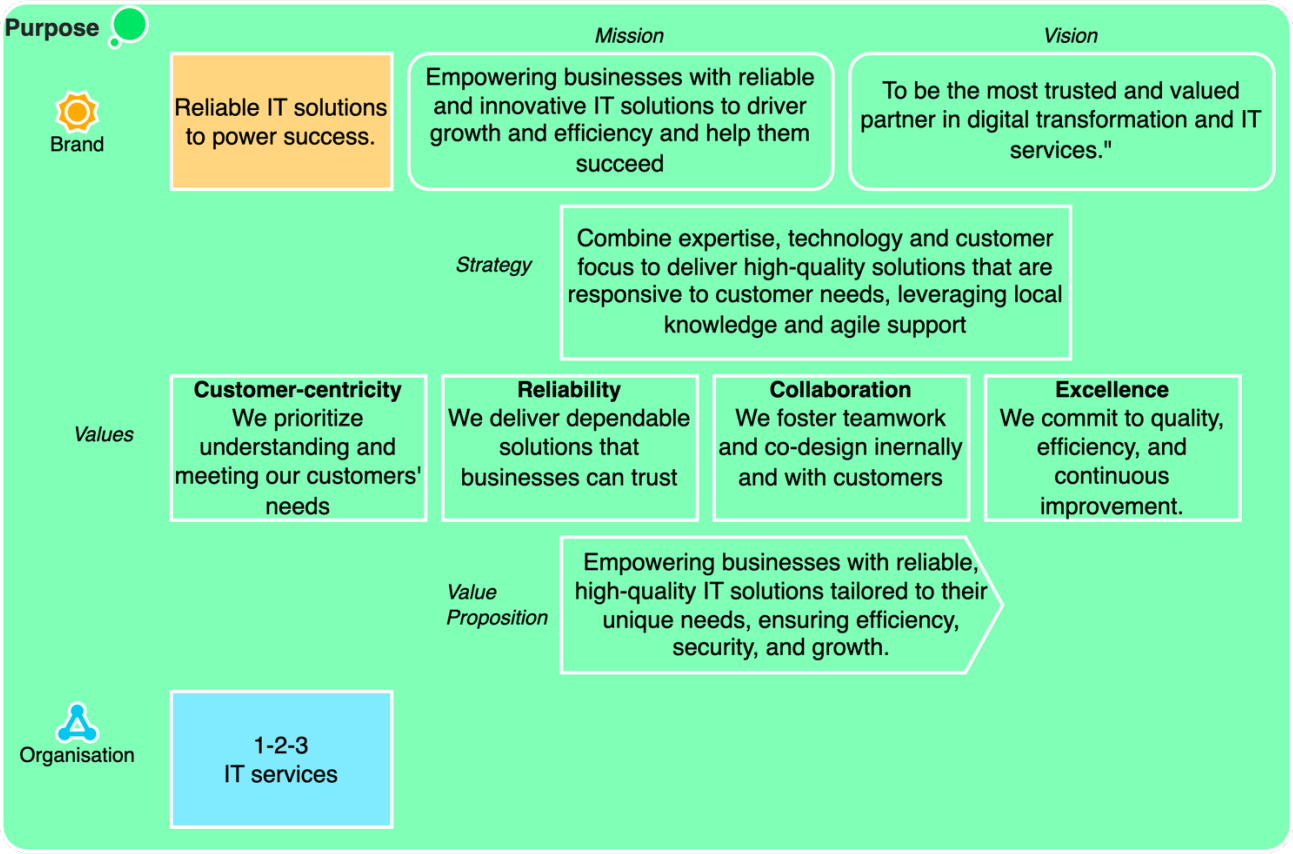


Figure 115: Example one-pager of mission, vision, strategy and values.

Note! A *visual-textual representation* combines visual elements (such as EDGY elements and icons) with textual information to communicate information more effectively. This type of representation merges visuals and text to provide context, clarify complex content, or enhance understanding by appealing to both visual and verbal processing. Visualisation makes the content easier to absorb and understand.

Which EDGY elements to use for modelling the Mission: *Purpose* or *Content*?

- Depends on the context and what is appropriate to fit the purpose.
- *Purpose* -element, an outcome, to represent why an enterprise is there for, what is its "outcome" for the business environment or society etc.
- *Content* -element can be used when the mission can be understood as a sentence only, just a content of the deeper purpose of an enterprise.

Which EDGY elements to use for modelling the Vision: *Purpose* or *Content*?

- Depends on the context and what is appropriate to fit the purpose.
- *Purpose* -element, an outcome, to represent what an enterprise wants to be, what is the desired "outcome" for the business environment or society etc.
- *Content* -element can be used when the vision can be understood as a sentence only, a content of the strategy of an enterprise.

The *Purpose* -element is suggested for modelling the mission and vision.

6.2.4 Goals

It is suggested that the goals define the qualitative changes, which can be measured by outcomes. The outcomes represent the actual achievements and are the end results of the goals.



An enterprise should have clear goals to guide its direction. If changes are needed, the goals define the specific changes we want to achieve.

For the sake of simplicity, it is suggested that there are 1) high-level strategic goals and 2) detailed operational goals.

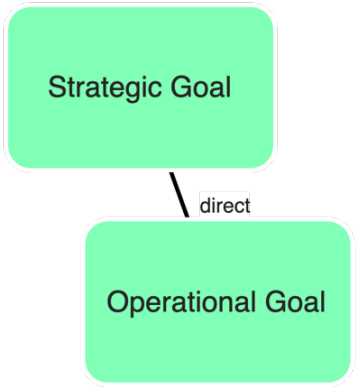


Figure 116: Goals hierarchy.

The strategic goals define why we want to change, and the operational goals define how we are going to change. The questions why and how are sufficient to specify the emotional and functional aspects that can be communicated to the people involved. This provides direction and concreteness. Once these are made clear, more detailed courses of action can be defined in the form of concrete outcomes and activities. These can be further specified within strategic plans, execution or action plans, or roadmaps.

All changes in the enterprise should be derived from the business goals, as these define the changes we aim to achieve. It is important that the goals are traceable both to (a) customer needs and (b) operational capabilities.

A goals hierarchy refers to the structure of goals in a way that illustrates their relationships and priorities. This often involves breaking down high-level, broad goals into smaller, more specific objectives that contribute to achieving the larger goals.

A goals hierarchy can typically be divided into the following levels, although it may be too complex for most cases: 1) Ultimate Goals (Top level), 2) Strategic Goals (Mid-level), 3) Operational Goals (Lower-Mid level), and 4) Tactical Goals (Bottom level).

Goals define what the enterprise wants to achieve.

6.2.5 Goal Map

Goals hierarchy can be visualized as shown below. Goals can be defined at high-level and operational level.

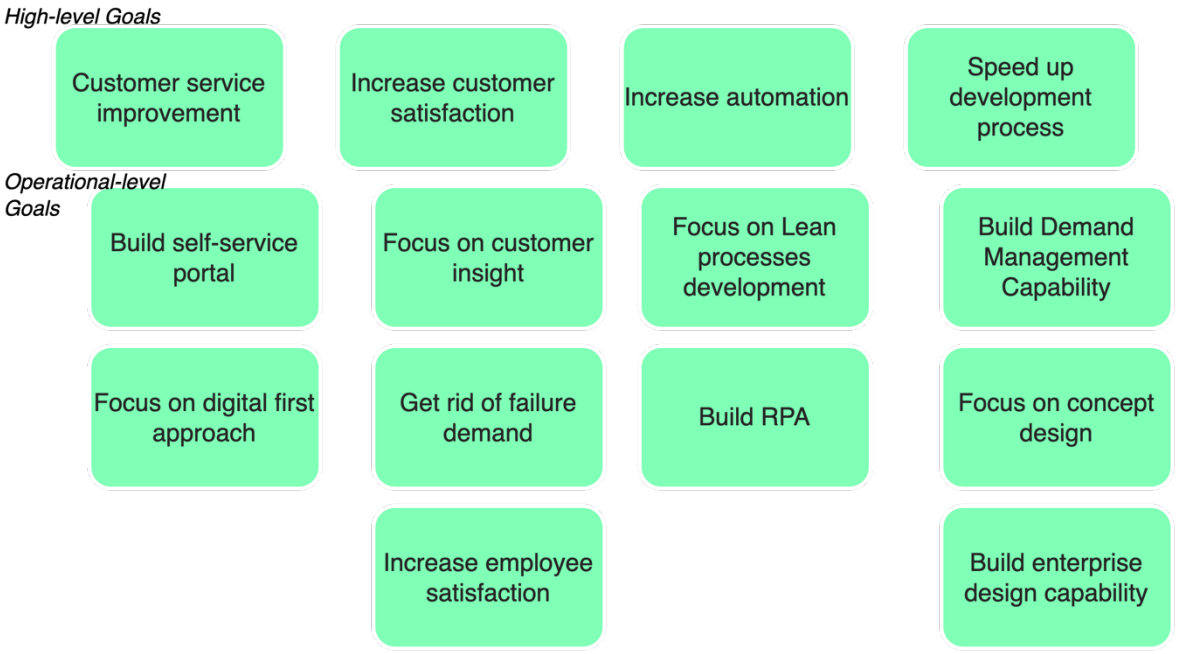


Figure 117: Goal Map.

High-level goals are usually emotional, whereas operational-level goals are functional by their nature. We can also break the goals into conventional categories of strategic-, tactical- and operational goals when appropriate.

6.2.6 Strategic Goals

Strategic goals are high-level goals that an enterprise want to achieve. The strategic goals represent what needs to be changed in the enterprise in the big picture. Note! Goals are not strategy, but strategy can be directed by clearly defined goals.

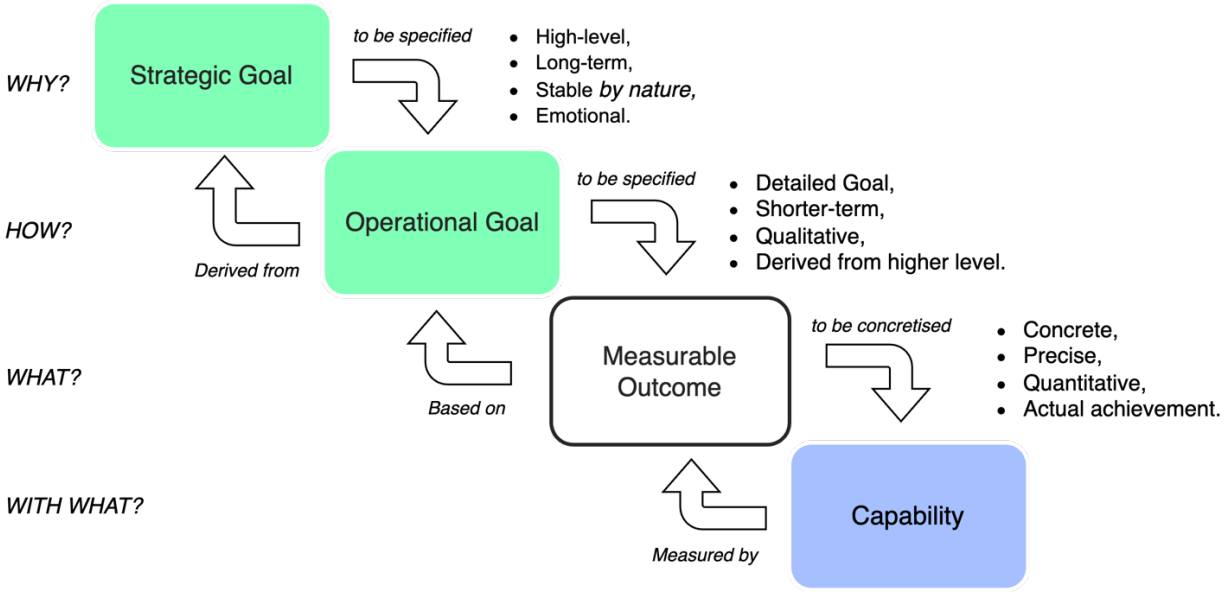


Figure 118: Traceability of Goals.

6.2.7 Goal Analysis

It is always good practice to define goals first, at least at a high level, before starting any work. Goals express what we aim to achieve. However, to be more precise, it is important to evaluate

why something needs to be done before delving into the details of what needs to be accomplished. Therefore, it is practical to identify the drivers before defining the goals. This approach makes it easier to find and articulate the goals, as drivers are the underlying causes of those goals. By collaboratively discussing the reasons and business conditions, it becomes possible to identify the root cause(s) for the change.

The *'why'* can be analysed by identifying the drivers for change: what drives us to make changes? These drivers can then be further analysed and defined in terms of goals. Goals represent the *qualitative changes* to be made as a result of the drivers. Finally, the concrete, measurable achievements, the outcomes, can be specified. These are the actual changes that will occur within the enterprise. (The steps and activities required to implement the outcomes should be defined separately.)

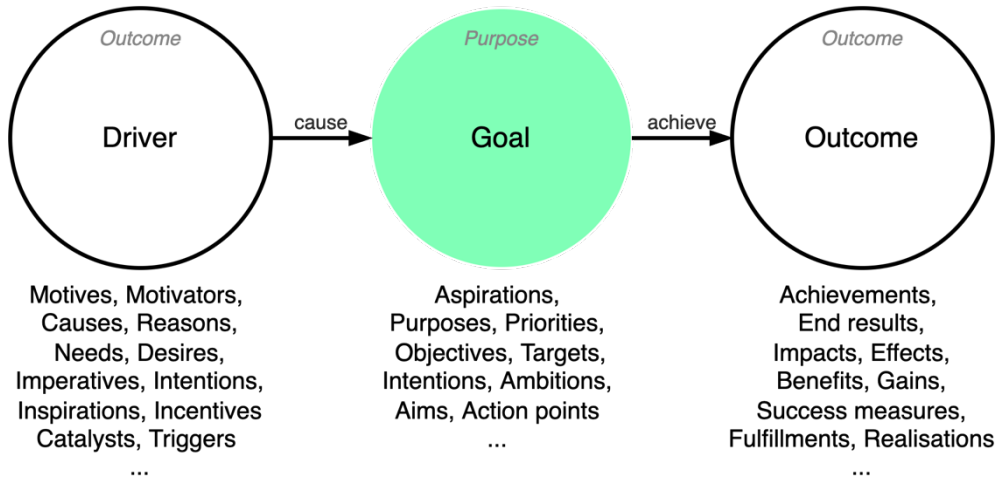


Figure 119: Relations between drivers, goals and outcomes.

The drivers, goals and outcomes can be identified in a table as shown below, and/or modelled with EDGY outcome and purpose elements as shown below.

Drivers	Goals	Outcomes
Driver for change	Qualitative change to be achieved	Measurable achievement

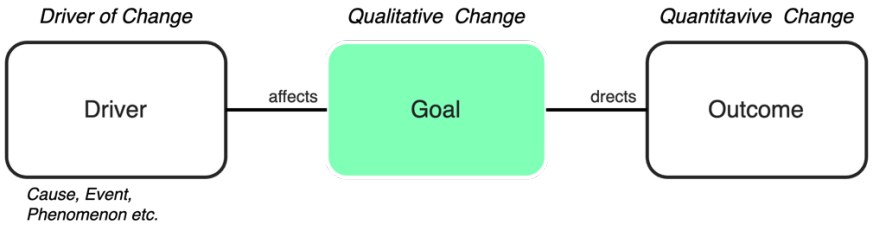


Figure 120: Drivers, goals and outcomes can be modelled and/or defined in a table.

Drivers are causes for the goals, which can be quantified by the measurable outcomes. Respectively, outcomes are derived from goals, which can be derived from the drivers. So there is traceability in both directions.

Drivers are the forces or motivations that trigger the need for change or action.
Goals define what the enterprise aims to achieve in response to those drivers.
Outcomes represent the value or impact realised when those goals are achieved.

Causality and Determinism. It can be said that in enterprise, organisational and business context, there is typically, if not always, a cause (reason, driver) for a goal. That is why it is advantageous to first clarify the drivers: what drives us to achieve change. In addition, most

events (and phenomena) in a business environment happen for some reason - according to causality and deterministic thinking.

- *Causality* refers to the relationship between cause and effect. It is the principle that an event (the cause) leads to another event (the effect), where the effect is a consequence of the cause
- *Determinism*: all events, including human actions, are determined by previously existing causes.
-

Cause and effect. Causal relation between causes and effects. A cause can be a driver that forces us to do some change(s). An effect can be e.g. a goal that we set.

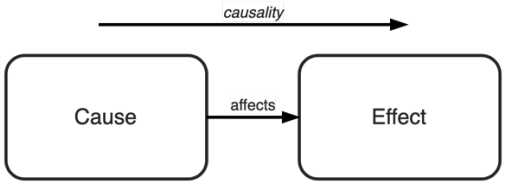


Figure 121: Causality.

Determinism is a causal chain of events.

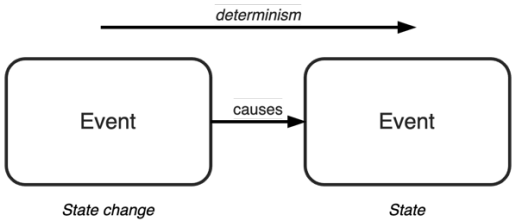


Figure 122: Determinism.

A change requirement represents the cause while change action represents the effect.

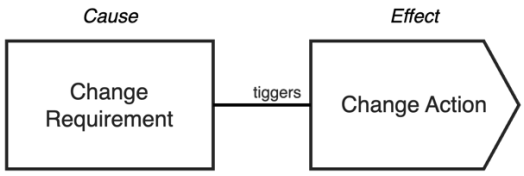


Figure 123: Change requirement and change action relation.

A change requirement:

- defines ***what*** needs to change, what needs to be done,
- identifies the areas that require modification,
- provides the reason for change.

A change action:

- specifies ***how*** to implement the change,
- introduces the activities to fulfill the requirement.

Goal-driven design / Design by Goals. All the designs shall be derived from the goals of the enterprise. The high-level strategic goals and detailed operational-level goals can be further specified into measurable goals or outcomes. There have to be connection and traceability between the goals and designs in both directions. Otherwise either the goals can be disconnected from the operational reality and change activities, or the designs can be disconnected from the enterprise's goals.

Goal analysis can be defined in more detail as shown below.

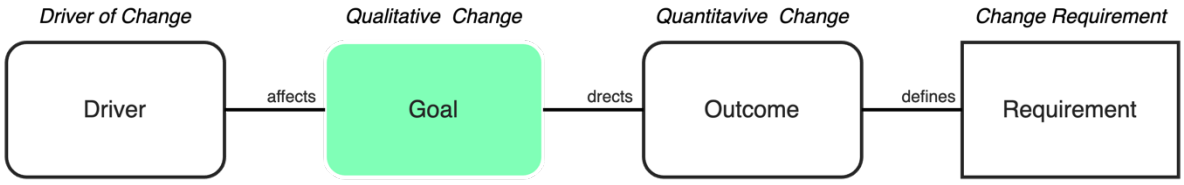


Figure 124: From drivers to requirements.

Finally, all the changes are directed towards business operations, operational business, that consists of capabilities. As such, all the changes can be traced to certain capabilities. Effectively, this means that a practical principle for business changes is the *capability first* -principle. In practice, this means that the capability map is a good starting point when analysing the effects of goals.

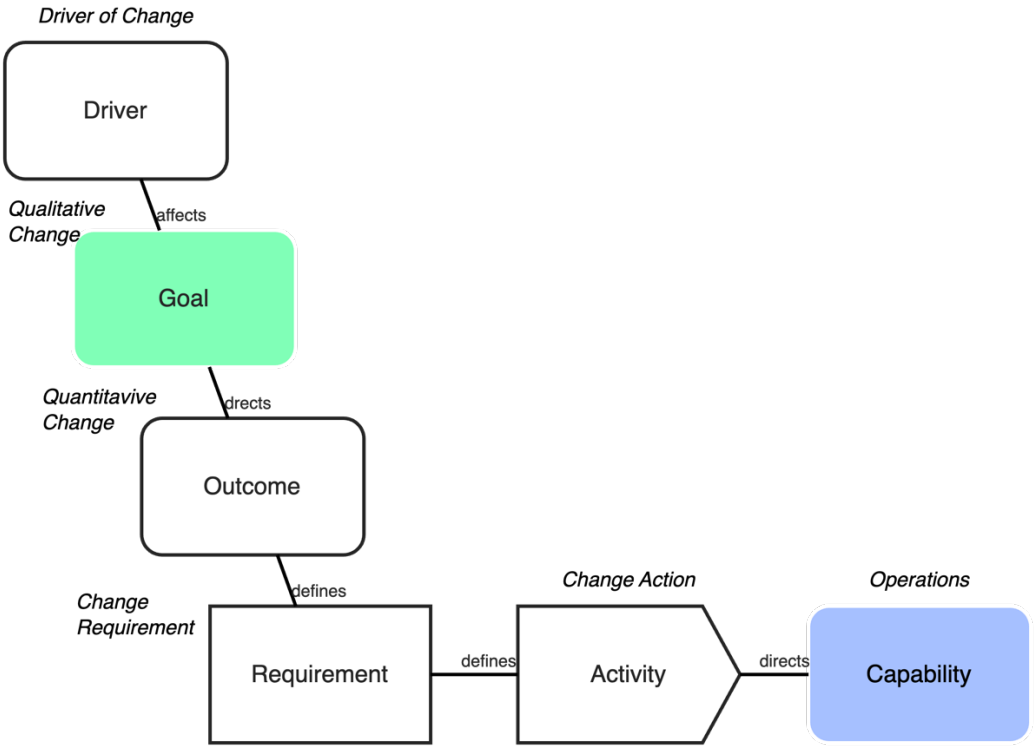
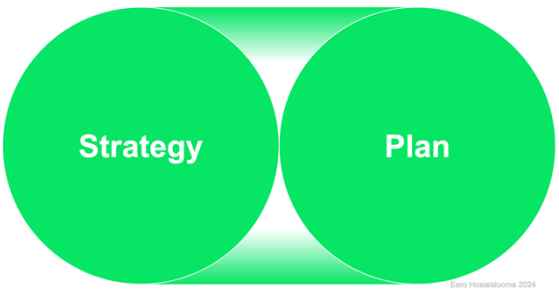


Figure 125: From drivers to operations: "all roads lead to capabilities".

Drivers act as the forces or motivations behind setting goals. **Goals** define what the enterprise wants to achieve. **Outcomes** represent the value realized from achieving goals.

6.2.8 Strategy and Plan

What is the difference between strategy and plan? Why a plan is not a strategy?



A strategy is distinct from a plan. Make distinction between a strategy and a plan. A strategy defines the purpose, the why. A plan, on the other hand, defines what actions needs to be taken to achieve strategic goals.

A strategy and a plan are often used interchangeably, but they serve different purposes in achieving goals. A strategy provides a high-level approach to ***why*** and ***what*** high-level goals will be achieved, while a plan provides the detailed steps for ***how*** to execute the strategy: ***what*** needs to be

done, what concrete actions needs to be taken to achieve strategic goals. A plan may cover operational-level goals that are derived from the strategic, high-level goals.

Note! A well-defined strategy outlines how technology enables and supports business goals. There is no need for a separate business strategy and technology strategy.

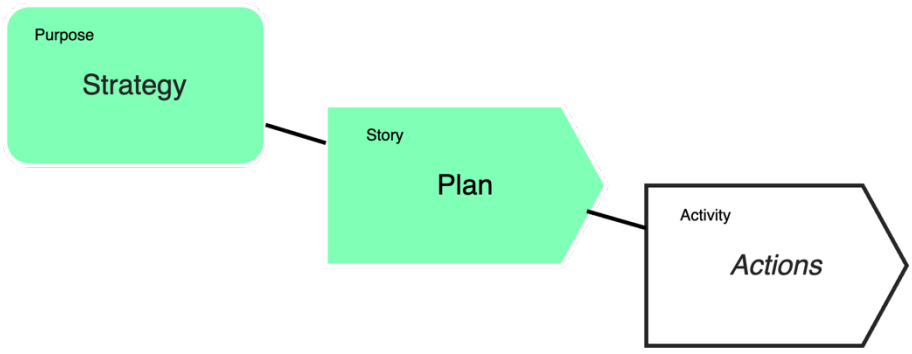
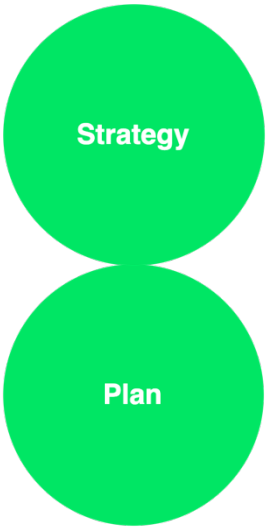


Figure 126: Strategy is executed by the plan that consists of actions to be taken.



What is the difference between strategy and plan? Putting it simply:

A strategy defines the *why* and the *what*:

- *Why* are we doing this?
- *What* are our high-level strategic goals and overall approach to achieving them?

A plan defines the *how*:

- *How* are we going to implement the strategy?
- *What* specific steps, operational-goals and concrete actions, and timelines (roadmaps) are needed to achieve the strategic goals?

Strategy is the "big picture" direction, while a plan breaks that direction into actionable steps. Both are essential and work together: a strategy without a plan lacks implementation, while a plan without a strategy lacks purpose and coherence.

Comparing a strategy and a plan	
Aspect	Description
Purpose and Focus	**Strategy**: Focuses on the big picture, the overall direction, and how an enterprise positions itself to achieve its goals. **Plan**: Focuses on the specific actions and steps to implement the strategy.
Level of Detail	**Strategy**: High-level, directional, and principle-driven. **Plan**: Detailed, time-bound, and task-driven.
Context and Vision	**Strategy**: Defines the **why** and **how** to achieve long-term goals and is deeply tied to mission, vision, and business environment circumstances. **Plan**: Focuses on the operational details, and lacks the broader vision.
Flexibility	**Strategy**: Adaptive and allows for adjustments based on external changes (business environment conditions, opportunities). **Plan**: More rigid and task-focused, changes often require re-planning.

Why a plan is not a strategy? A plan is not a strategy because it lacks the reasoning, vision, and adaptability that a strategy provides. A plan simply outlines actions, but without a solid strategy:

- Actions may lack purpose or alignment with broader, high-level goals.
- Plans become irrelevant if external, environmental circumstances change.

- By relying only on plans, enterprises can become task-focused rather than outcome-driven.

Here's how strategy and plan align with the questions "why," "what," "how," "who," and "when":

Question	Strategy	Plan
Why	Defines the purpose, the "why", or reason behind pursuing a specific direction.	Rarely addresses "why," as the purpose has already been defined by the strategy.
What	Defines high-level, broad goals. What do we want to achieve?	Specifies the concrete, operational goals and actions needed to implement the strategy. What will we do?
How	Describes the broad, general approach to achieving high-level goals. How will we achieve our goal(s)?	Details specific, concete methods and operational steps. How will we proceed, perform and execute?
Who	May outline key stakeholders or broad responsibilities. Who will lead the initiative?	Clearly assigns roles and responsibilities. Who will do what?
When	May provide a general timeline or milestones. General timeframe, e.g. by 2030. When should we achieve our goal(s)?	Defines a detailed schedule and deadlines for actions. Detailed, scheduled roadmap of actions and outcomes or outputs (deliverables) e.g. July 2025.

A strategy is like a map that sets the direction for a journey towards strategic goals.

A plan is like the route that details the specific stops, steps, and timing to reach the destination.

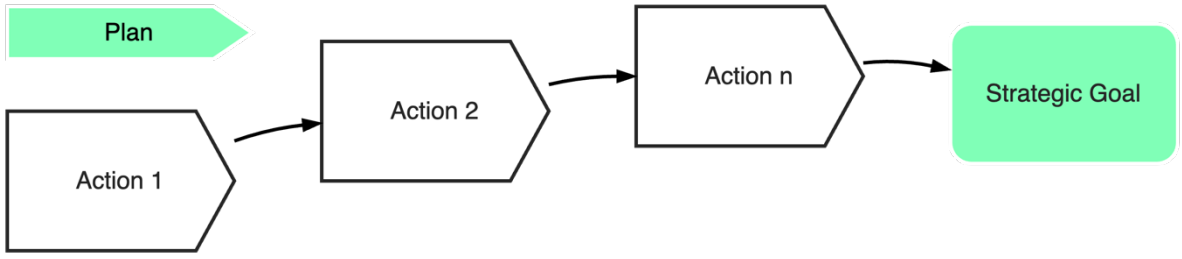


Figure 127: A strategy sets the high-level goals that can be achieved through operational actions according to a plan.

A strategy provides overarching purpose and direction.

A **strategy** is the "big picture" direction, defining the purpose, the **why**.

A plan translates strategy into concrete actions.

A **plan** defines actionable steps to execute the strategy.

6.2.9 Strategic Planning

Strategic planning (or strategy planning) is a process through which an enterprise defines its long-term goals, establishes the actions necessary to achieve those goals, and allocates resources to execute the plan. It involves setting a direction for the enterprise and determining how to best pursue future opportunities and tackle potential challenges. Strategic planning focuses on making decisions that guide the enterprise toward achieving its vision. Strategic planning creates roadmaps that can be executed.



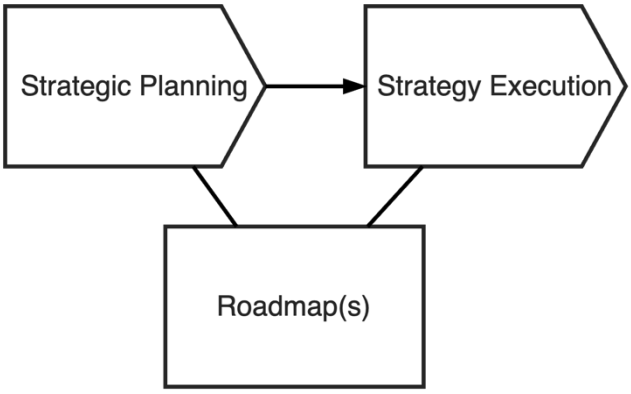


Figure 128: Strategic planning is executed with the help of roadmaps.

Strategy planning typically led by top-level (C-level) management but involves input from various parts of the enterprise. The primary goal of strategic planning is to provide a roadmap for adaptation to changing business environment (such as market) conditions, and efficient use of resources.

Elements of Strategic Planning:

- **Mission**: The purpose of the enterprise - what it aims to achieve.
- **Vision**: The long-term goal or desired future state of the organization.
- **Goals**: Specific, measurable targets that align with the mission and vision.
- **Values and Principles**: guide the enterprise's behaviors and decision-making.
- **Strategies**: Broad approaches or methods for achieving the set goals.
- **Action Plans**: Detailed steps, timelines, and responsibilities for implementing the strategies.
- **Resource Allocation**: Deciding how to allocate financial, human, and physical resources to support the strategies.
- **Measurements**: Key Performance Indicators (KPIs) to measure progress.
- **Risk Management**: Identify and mitigate potential enterprise risks.
- **Monitoring**: Evaluating progress and making necessary adjustments.

Strategic planning is making choices and decisions to achieve the enterprise's vision.

The **timeframe** of a strategy can vary depending on the enterprise's goals, industry, and the nature of the strategy itself. However, strategy is generally focused on long-term planning, typically spanning several years. Long-term strategies typically cover 3 to 5+ years, focusing on achieving the enterprise's overall vision and high-level goals. Medium-term strategies generally cover 1 to 3 years, focusing on implementing significant initiatives that support long-term goals. Short-term strategies cover a timeframe of 6 months to 1 year, focusing on immediate priorities, operational goals, and tactical actions.

Even though strategies typically have a long-term focus, enterprises often review and adjust their strategies on a yearly or quarterly basis. This allows them to stay responsive to changes in the business environment, technology, or internal factors.

How to define a strategy?

A well-defined strategy answers key questions about the enterprise's future direction:

- Where are we now? (Current state analysis about the mission)
- Where do we want to be? (Vision, long-term goals)
- How will we get there? (Strategic choices and actions)
- What capabilities and resources do we need? (Capability assessment and resource allocation)
- How do we measure performance and success? (Key performance indicators)

Steps for strategy planning:

1. **Current state analysis**: Assess the Current Situation with the tools such as the plain old SWOT analysis (Strengths, Weaknesses, Opportunities, Threats), which helps in understanding the internal and external factors affecting the enterprise.
2. **Clarify Mission, Vision, and Values**: Ensure that the strategy is aligned with the enterprise's mission (purpose), vision (long-term aspirations), and core values (guiding beliefs).
3. **Goal setting**: Set clear goals to provide clarity on what the enterprise aims to achieve over a specific period (e.g. 3-5 years or more). Prioritise goals.
4. **Define actions**: Based on the prioritised strategic goals, define actionable steps in an *action plan* (a roadmap of activities to be taken over time) that outlines how the enterprise will achieve its goals and within what timeframe.
5. **Identify affected Capabilities**: Identify which capabilities need to be changed or created, what resources they include (are to be allocated), and what are the associated costs.
6. **Define measurements**: Define measurements: Identify the outcomes with which to measure progress and success.
7. **Risk assessment**: analyse enterprise level risks.

Strategic planning is followed by strategy implementation and monitoring.

Strategy planning steps are illustrated in the figure below.

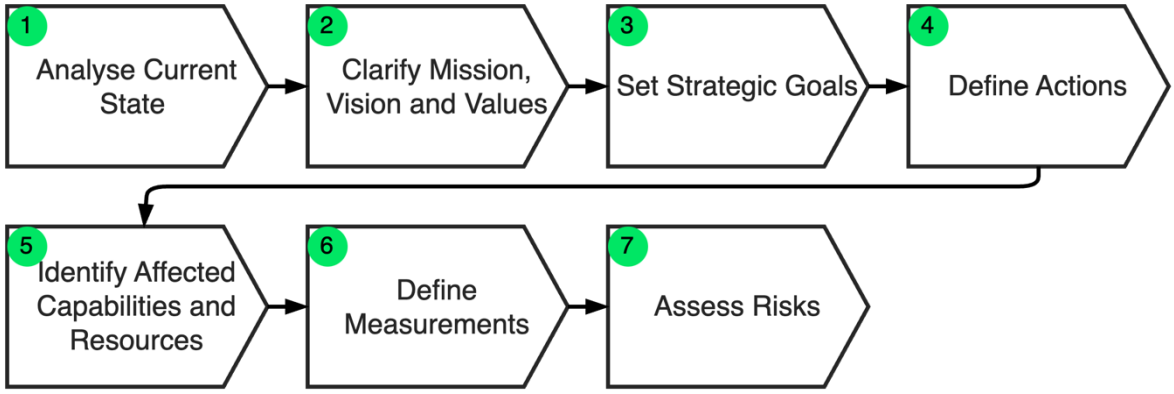


Figure 129: Strategy planning steps.

Strategic Management. Enterprise Design provides an overall holistic method for managing strategies at the enterprise level. The Facet Model can be used as a "theoretical framework" analysing e.g. following matters with appropriate tools (see templates, chapter 0):

- Environmental Analysis: Understanding the internal and external environment, which involves tools like SWOT (Strengths, Weaknesses, Opportunities, Threats) and PESTEL (Political, Economic, Social, Technological, Environmental, Legal) analysis.
- Strategy Formulation: This involves setting clear strategic goals, choosing the best strategic path (e.g., growth, stability, or retrenchment), and determining the competitive strategy (e.g., cost leadership, differentiation, or focus).

See template *Strategy Canvas* (one-pager Strategy Canvas) [10.2.13].

Strategy Plan or strategic plan outlines an enterprise's long-term goals and the actions needed to achieve them. It serves as a ***roadmap*** that guides an enterprise's decisions and priorities over a specific period, often 3–5 years, by focusing on its vision, mission, and key objectives Goals are not the strategy, but the course of actions. Actionable activities form the strategy.

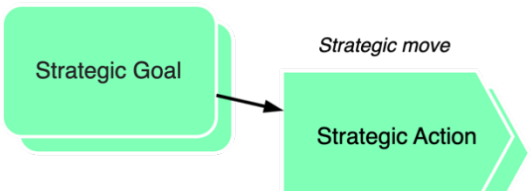


Figure 130: From strategic goals to strategic actions.

Simplified strategy plan:
A strategic plan does define both the outcomes to be achieved and the actions to be taken.

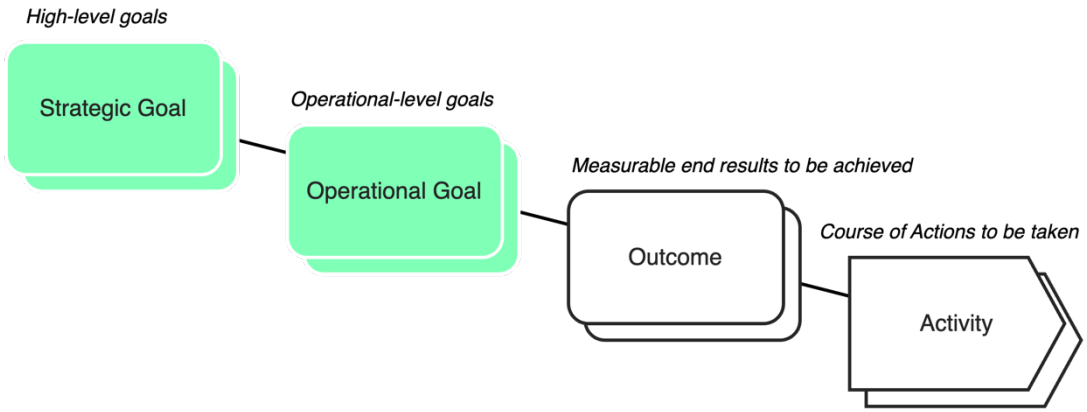
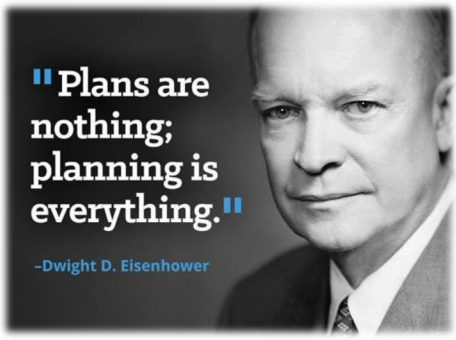
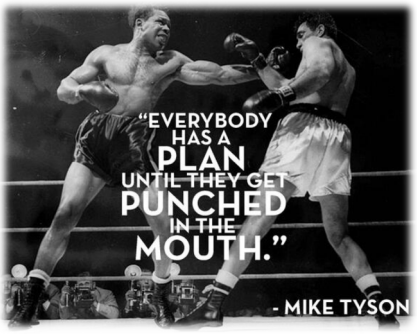


Figure 131: From strategic goals to activities.

Strategy Plan focuses on long-term goals.

"Plans are useless, but planning is indispensable.", Dwight D. Eisenhower.
"Everyone has a plan until they get punched in the mouth.", Mike Tyson.





"The essence of strategy is choosing what not to do", Michael. E. Porter.

Stop adding things. Start subtracting things.

Strategic Portfolio Management (SPM) bridges the gap between the strategy and value creation and -delivery. Strategic portfolio management operates at a higher level, ensuring that all initiatives, programs and projects across the enterprise contribute to strategic goals. In this way, SPM provides a strategic "big picture" view, focusing on overall value and alignment rather than on the specific details of project execution. Strategic Portfolio Management is a high-level approach to selecting, prioritizing, and managing an enterprise's programs and projects and to maximize their strategic impact. SPM helps ensure that every initiative undertaken contributes to the enterprise's strategy.

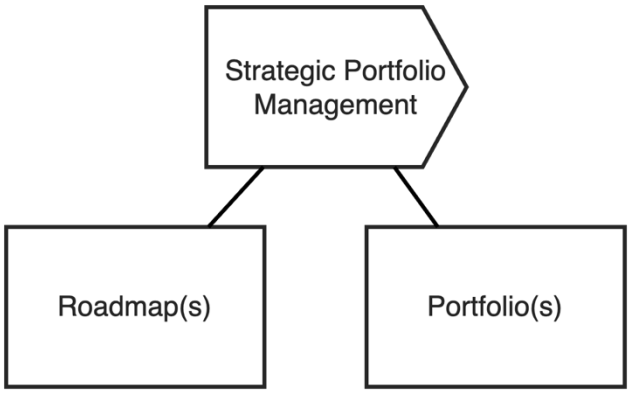


Figure 132: Portfolio Management.

There can be different level portfolios in an enterprise.

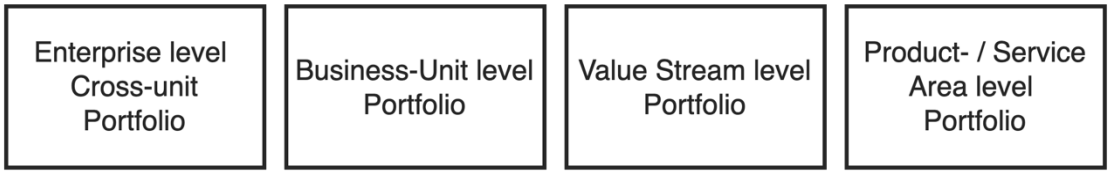


Figure 133: Portfolios at different levels.

Strategic Portfolio Management is selects and prioritises enterprise's portfolios.

Strategic Scenario Planning. "A scenario is a detailed and plausible view of how the business environment of an enterprise might develop in the future based on groupings of key environmental influences and drivers of change about which there is a high level of uncertainty." [31]

'Strategy without Scenario Planning is wishful thinking'.

6.2.9.1 Wardley Mapping

Strategic scenario planning can take advantage of *scenario mapping* with ***Wardley Mapping*** [32]. A Wardley Map represents the situational awareness and assumptions about a context, and illustrates which strategic scenarios are available, or have been recognized.



A Wardley map is a tool and an approach with which strategic scenarios can be made. The tool is simple, it consists of Y- and X-axes. The Y-axis represents the *visibility* towards the customer (activities needed to fulfill customer needs), and the X-axis represents the *evolution* (how activities change over time). The map is anchored to customer segment(s), related to which the strategic movements can be taken.

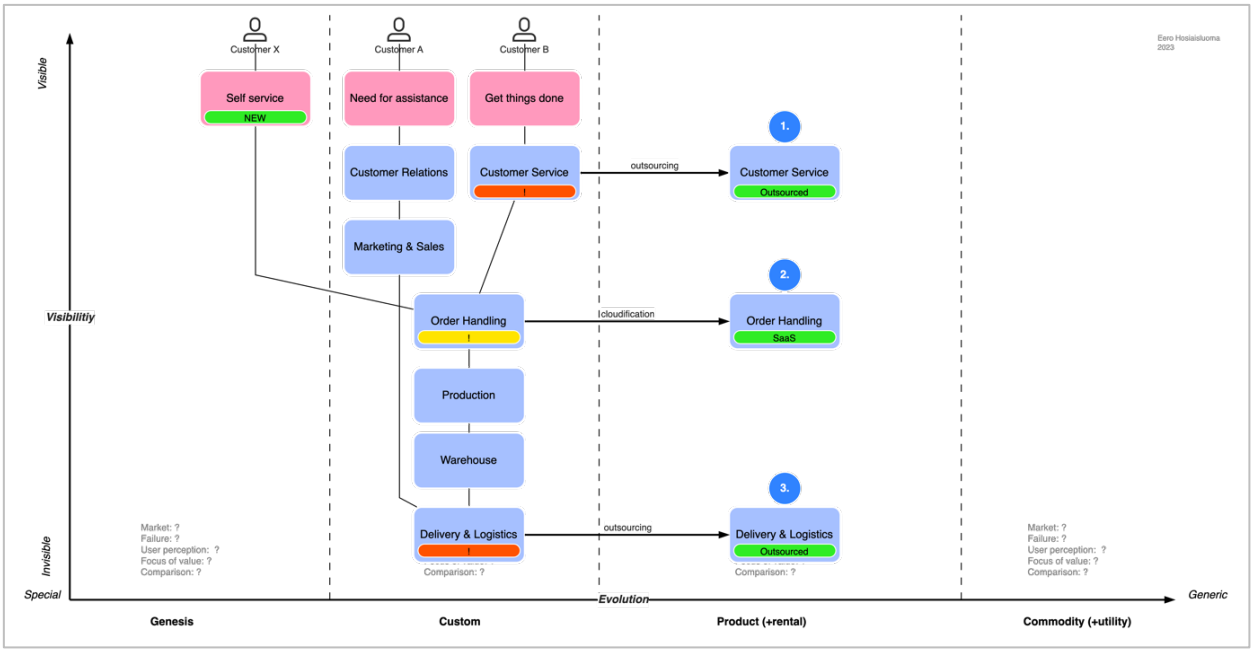


Figure 134: Strategic scenarios with Wardley map.

A Wardley Map is a representation of business operations in a certain context. The example above introduces an operational business landscape, in which certain strategic scenarios can be made by the management and specialists (C-level + professional advisors).

---

[31] Exploring Corporate Strategy, Johnson. G. and Scholes K.

[32] **Wardley map** method is created by Simon Wardley. See more information from here: https://learnwardleymapping.com/book/

The diagram represents the following strategic scenarios:

Scenario 1: Customer Service -capability is outsourced, for better customer service and cost-efficiency. The new service provider manages both personnel and concerned applications (e.g. CRM).

Scenario 2: Order Handling -capability is changed to utilize Order Handling application as a SaaS [33] cloud service from an external provider, for better and modernized features. This scenario is keeping the personnel and other applications within the organisation. Another option, scenario 2 B would e.g. outsource the whole Order Handling capability, not only parts of it.

Scenario 3: Delivery and Logistics -capability is outsourced, as it is not the core but supporting operations of the business of the organisation.

These scenarios can be executed sequentially, or alternative scenarios can be created for each main scenario. There is always a scenario 'no changes at all; nothing is to be changed', and then several alternative scenarios in what extent the target area is to be changed (from partly to completely changed).

A Wardley Map can be used for strategic scenario planning. See template *Wardley Map* (10.2.16).

6.2.10 SWOT-analysis (Strengths, Weaknesses, Opportunities, Threats)

Plain old SWOT analysis tool can be used for any kind of business analysis. For example, SWOT can be used for current state analysis to support strategy planning and other change activities within the entire enterprise, business unit or certain product- or service area etc.

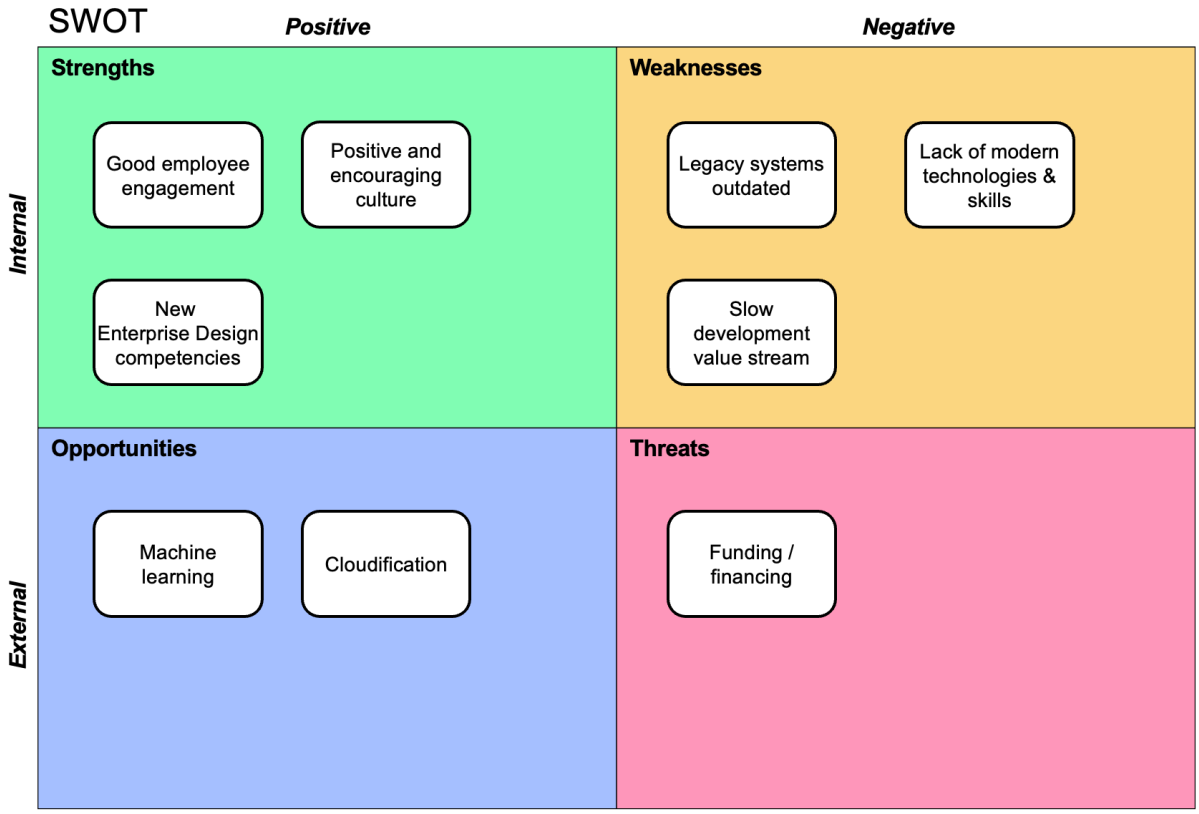


Figure 135: SWOT analysis.

[33] **SaaS** = *Software as a Service*. One of the cloud computing related "as a service" business models (*XaaS* models such as *Infrastructure as a Service/IaaS*, *Platform as a Service/PaaS*). SaaS is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted. Also known as on-demand software, web-based software, or web-hosted software. [Wikipedia]

SWOT analysis cover internal strengths and weaknesses together with external opportunities and threats. It is a technique for assessing these four aspects of the business.

SWOT analysis can be done by using EDGY *Outcome* base elements, as they represent states of affairs or business events that have occurred or may occur. These findings can be used e.g. as drivers for change within goal setting and creating a Goal Map and/or Strategy Map.

See the SWOT template 6.2.10 . Load free PowerPoint templates for EDGY from here: link.

6.2.11 Strategy Execution

Strategic planning forces the change in an enterprise. Strategy is implemented by the components such as initiatives, change programs, projects / products, work packages, change requirements and change actions.

An initiative can be e.g. a strategic level digital transformation. (Transformation is just another name for change).





Figure 136: An initiative executes strategy.

An initiative can consist of programs, projects, products, work packages or concepts, which direct concrete change actions that are derived from change requirements.

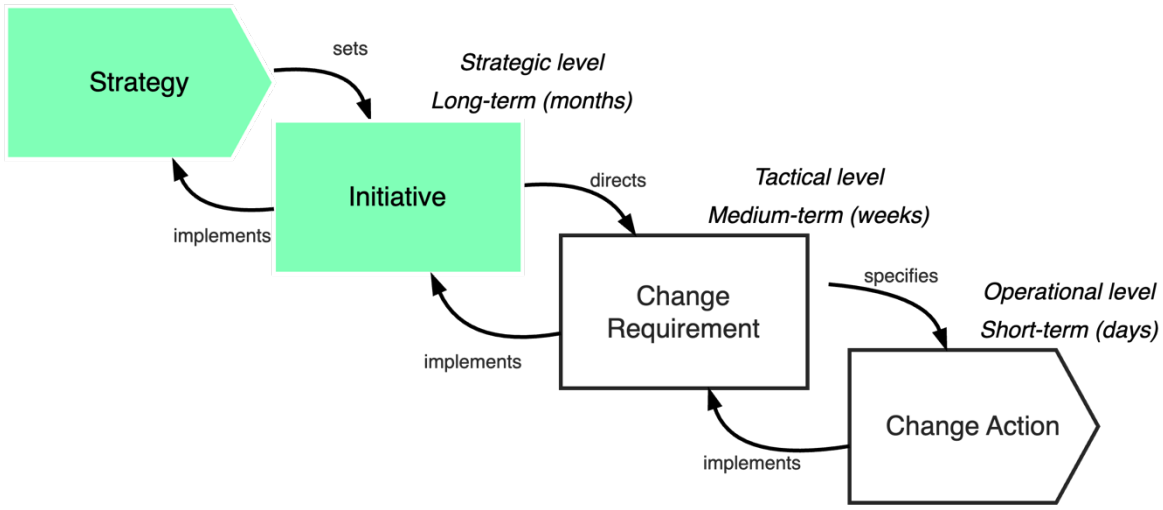


Figure 137: Strategy directs the change in an enterprise.

Components for strategy execution introduced in the table below.

Strategy execution components		
Component	Description	Level
Initiative	Sets the high level strategic direction according to strategic goals. E.g. a digital transformation	Strategic, long-term
Program	Manages related projects that contribute to the initiative. Consists of several projects.	Strategic / Tactical
Capability-Based Development	A holistic approach that focuses on identifying, building, and enhancing the business capabilities necessary for achieving strategic goals.	
Project	Delivers outcomes or outputs, such as products, that support programs or initiatives.	Tactical, medium-term
Product Development	Creates or enhances digital products that meet strategic goals.	Tactical, medium-term
Work package	Detailed *unit of work* within a project. Actionable task.	Operational, short-term
Change Requirement	Specifies what needs to change to meet the goals of initiatives, programs or projects.	Tactical, medium-term
Change Action	Steps to be taken to implement enterprise's strategy.	Operational, short-term

6.2.12 Strategy Process

Common strategy process[34] consists of phases with which we try to answer to following questions:



- **Insight**: Where we are now? (*as-is analysis*)
  - What we make and offer now?
  - How we operate now?
- **Vision**: Where do we want to go? (*to-be analysis*)
  - What are the changes we want to achieve?
  - Clarify the mission, vision, values and strategic goals.
- **Choices**: How to get there? (*Gap analysis & goals*)
  - What are our choices? Our strategic goals?
  - What are the changes we choose to implement?
- **Execution**: What actions are to be taken? (*Course of actions*)
  - How we implement the changes according to our goals?
  - What is our action plan? How we monitor/measure the progress?

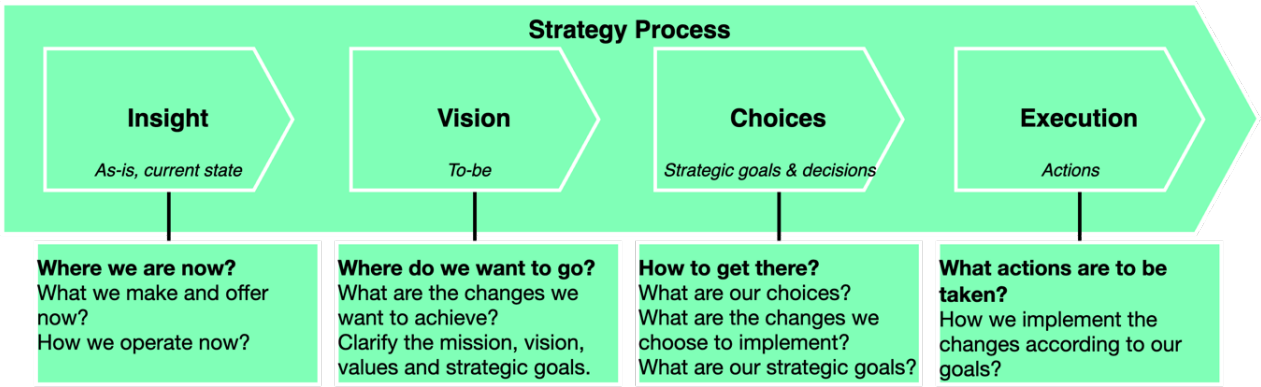


Figure 138: Strategy process.

Enterprise's strategy process can be defined in detail as shown below.

[34] **Strategy Process** is based on the book "*Pelastetaan strategia!*", by M. Sutinen and A. Haapakorva, 2021.

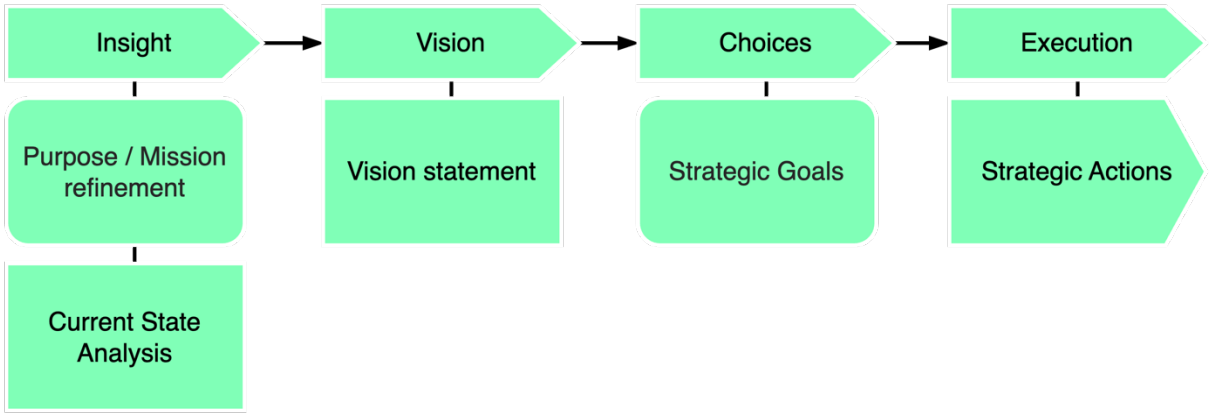
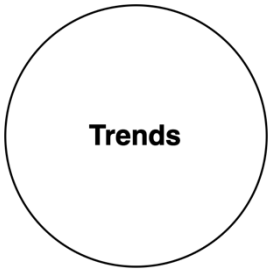


Figure 139: Strategy process implementation.

See the strategy map template [10.2.14].

6.2.13 Trends

Trends and phenomena are high-level change drivers for an enterprise. Trends are the external opportunities and threats that can be identified within SWOT analysis. There are many trends that affect nationwide, society and economy, people, businesses and organisations, and individuals. Here are some examples of megatrends or trends that can be considered when creating visions and strategies. These are modelled as EDGY outcomes, as they represent state changes, events, occurrences or phenomena that may appear or emerge.



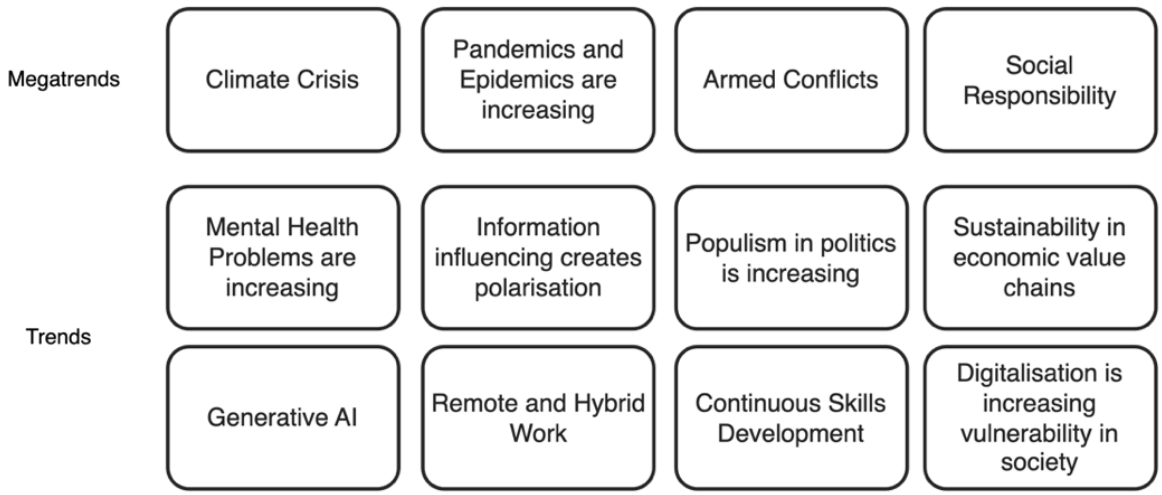
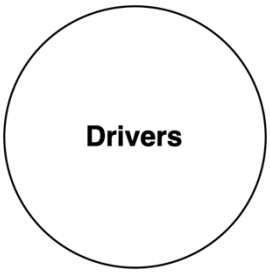


Figure 140: Trends (applied from the source: Sitra [35]).

6.2.14 Drivers of Change

Drivers represent certain context-specific events or occurrences, that act as triggers for changes. Drivers are causes (some of them are root causes) for change activities. It is practical to first identify change drivers before starting to define goals. Change drivers make it visible why some changes are needed. With the help of change drivers it is easier to find what needs to be changed.



[35] Sitra (Suomen itsenäisyyden juhlarahasto Sitra), https://www.sitra.fi/en/topics/megatrends/

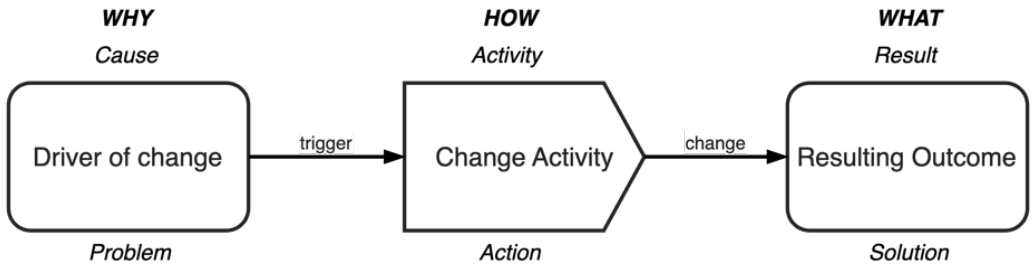


Figure 141: A driver triggers a change that results from an outcome.

According to Donald Rumsfeld "there are unknown unknowns". Concepts of “known knowns”, “known unknowns”, and “unknown unknowns” are concerning drivers, some of which we know, some are unpredictable.

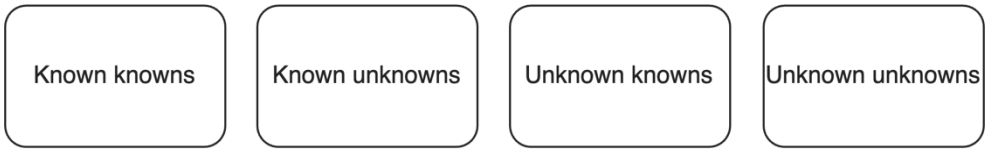


Figure 142: Some drivers are known, some are not.

Examples of sources, forces, and factors that influence an enterprise, its existence, and its changes.

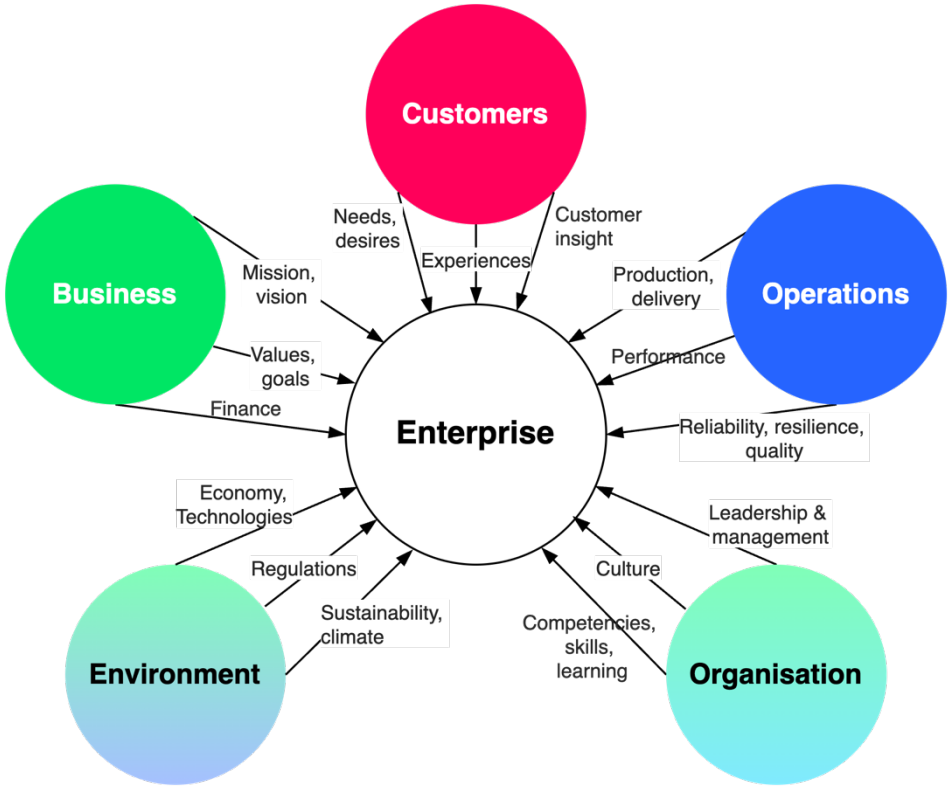


Figure 143: Sources, forces, and factors that influence an enterprise.

Change is only constant in life - [Heraclitus]

6.2.15 Change Activities



Drivers affect the business operations (operational business) of an enterprise that sets goals to implement changes. *Change activities* are structured efforts and tasks designed to transform the enterprise, its processes, applications, or culture to achieve a desired state - according to goals. These activities are typically part of change management, ensuring alignment between strategic goals, operational capabilities, employee readiness and customer needs.



Figure 144: Drivers of Change affect to business operations.

Since business operations are based on capabilities, all change activities are directed towards capabilities and their content (components): people, processes, and assets of the enterprise.

The change is performed by activities (actions) that are a) based on drivers and goals and b) directed to certain capabilities of the enterprise. At high-level, the business strategic goals are derived to more operational goals that define the desired outcomes. These outcomes are the drivers and demands for the changes required.

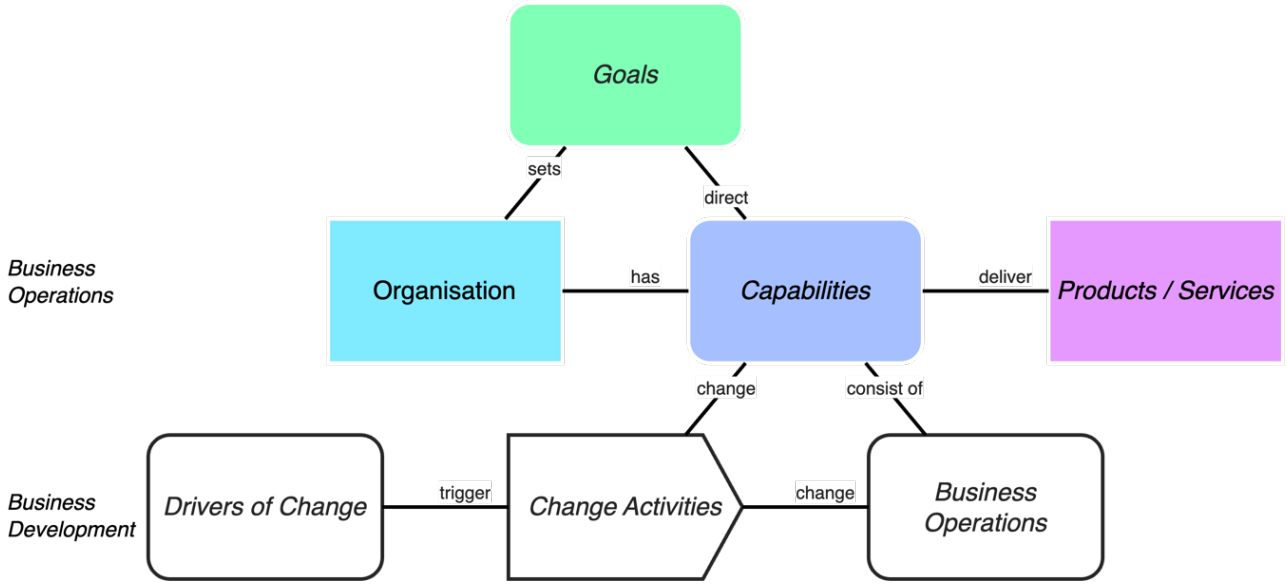


Figure 145: Drivers trigger change activities that affect to capabilities.

The diagram below illustrates how strategic and operational goals are directed towards operational business through capabilities. Ultimately, changes made to capabilities, and the related products and/or services, impact the customer experience.

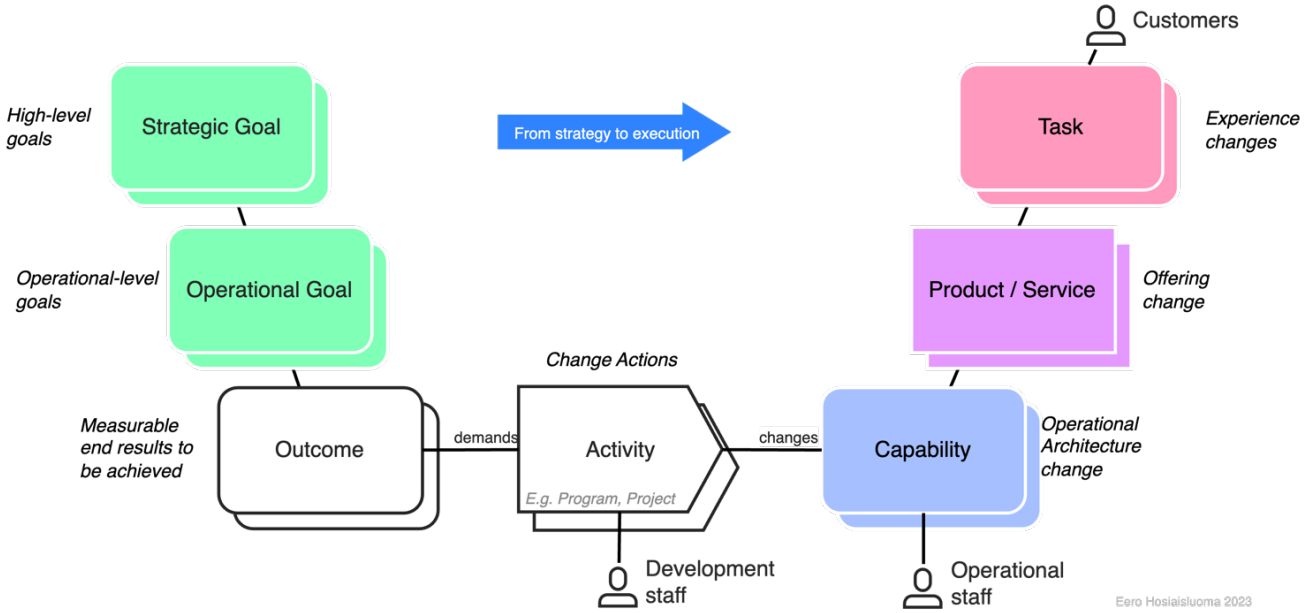


Figure 146: Change.

6.2.16 Business Change



The identity elements *Purpose*, *Content* and Story of EDGY and base elements *Activity*, *Object* and *Outcome* can be used for analysing the business case of a business change. This means making visible what is the 'beef' in a certain activity, or innovation, or new concept or in change initiative, or in *business transformation* (of any size from a small change to a large transformation program). The best way to do that is visualize the introduction into a compact 'one-pager' diagram. All this can be modelled into a compact intro one-pager with various elements. Lots of example templates and canvases introduced in this document (see chapter Templates 10.).

Compared to well-known business model analysing tools, such as the Business Model Canvas (BMC), this view is simplistic introduction to what the business is all about. The customer perspective can then be opened in more detail with e.g. stakeholder map and service blueprint. The latter describes the customer experience part of the story: what are the tasks/needs that this particular product or service fulfills.

Change Demand. The base element *Outcome* can be used for visualization of change demands that are to be further analysed e.g. in concept design.

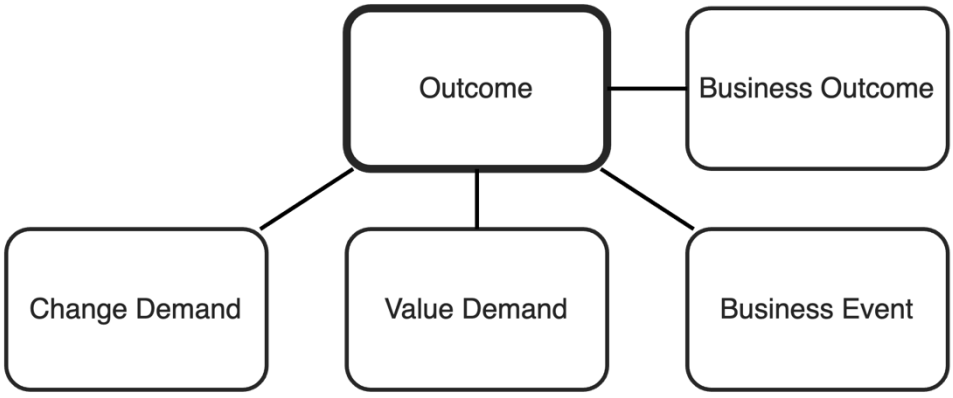


Figure 147: Outcome specialisation examples.

Change Initiative, program, project, concept, change requirement or other structural aspect of design or development can modelled with the EDGY *Object* element.

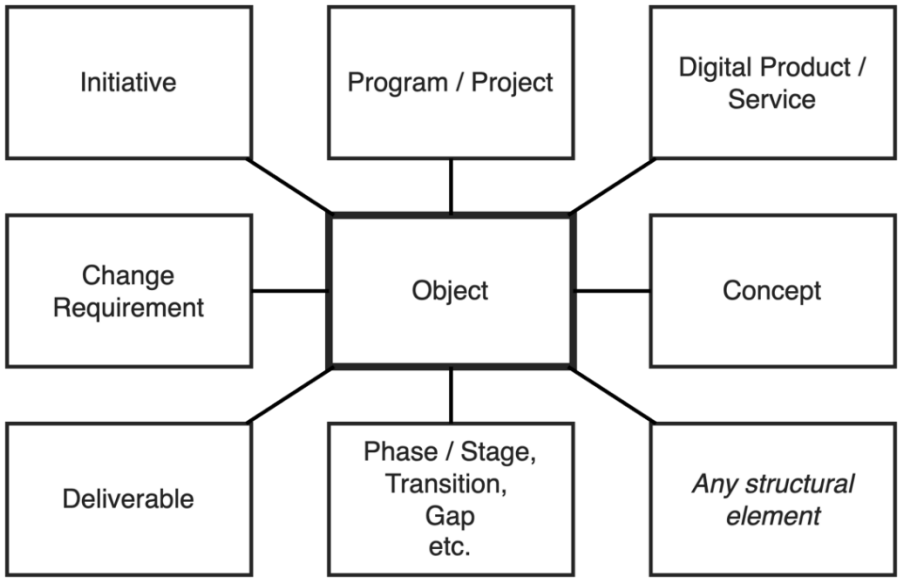


Figure 148: Object specialisation examples.

Change Activity. The base element *Activity* can be used for modelling any change activities or actions. Every activity in an enterprise can be defined in a few, short and clear sentences. Every activity has a reason to be, some story, something to offer, and some people who are organized themselves.

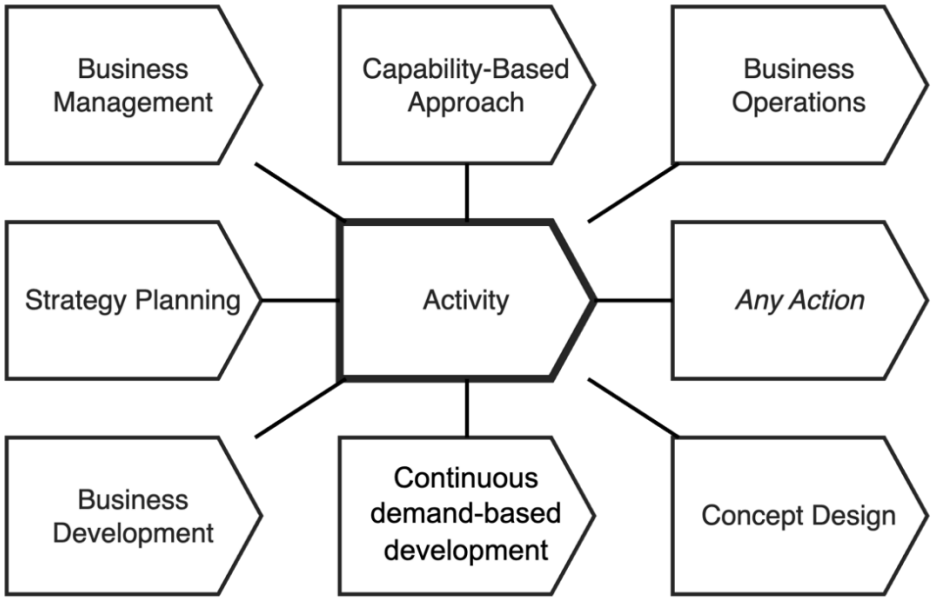


Figure 149: Activity specialisation examples.

6.2.17 Roadmap

A high-level strategic roadmap can be modelled with the EDGY *Story* element.



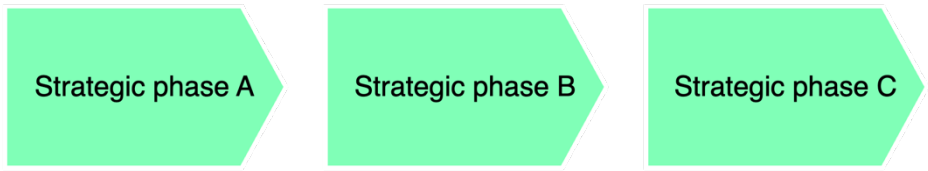


Figure 150: Strategic phases / steps to be taken.

Lean roadmap just shows what is planned now, next and later. The content of phases can be modelled with the EDGY *Content* element (or *Object*).

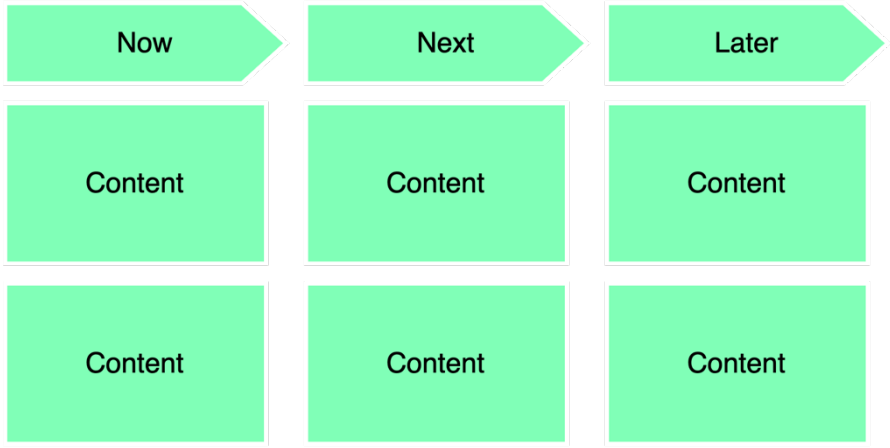


Figure 151: Lean Roadmap.

Alternatively, the content of phases can be modeled using the Purpose or Outcome elements to show goals and business outcomes - if preferred.

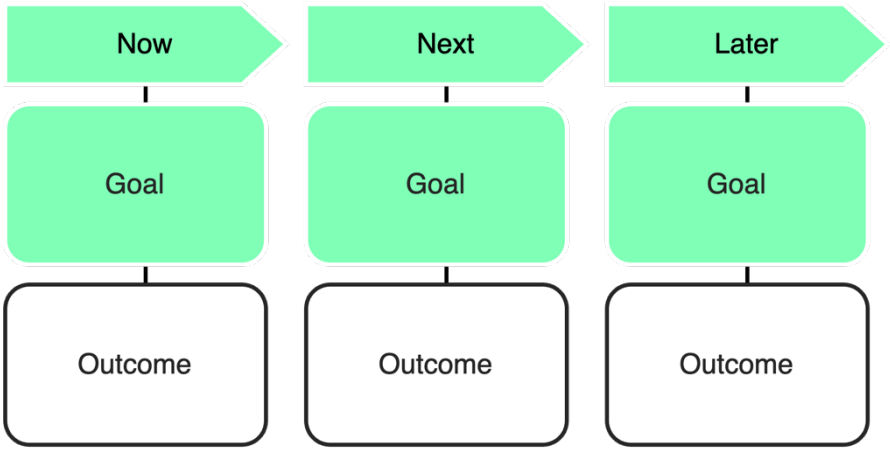


Figure 152: Lean Roadmap version (with e.g. goals and business outcomes).

A basic roadmap (Activity Map) can be created for any kind and size of change efforts and initiatives. EDGY *Activity* element can be used for depicting the stages or phases of a roadmap, the series of activities to be taken for achieving a certain ultimate target.

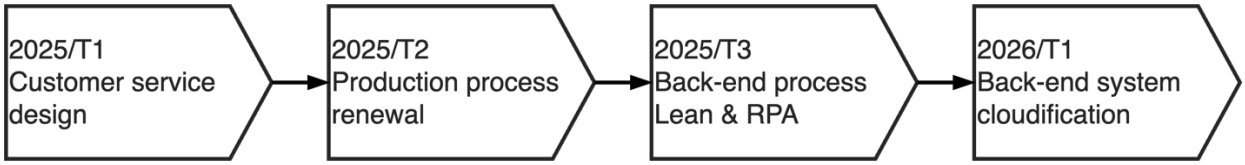


Figure 153: Roadmap example (with EDGY *Activity* elements).

A roadmap illustrates what has happened and what's next. An example below.

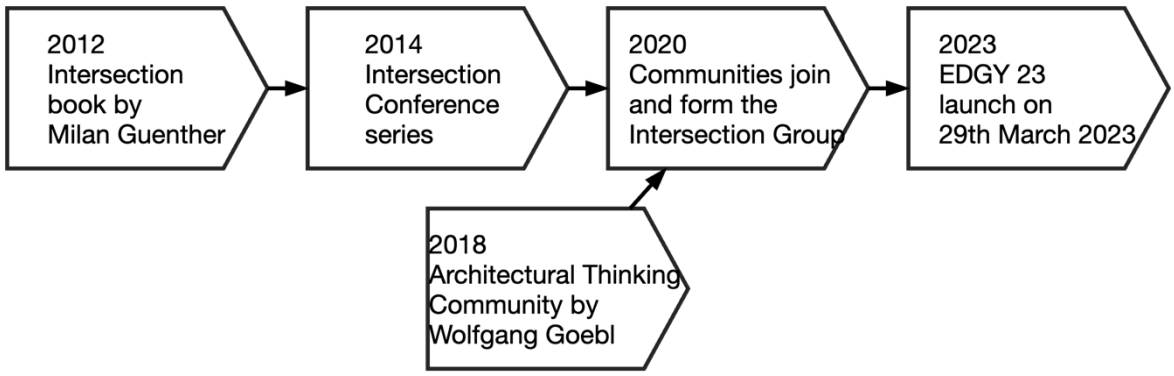


Figure 154: An example roadmap.

Another example below.

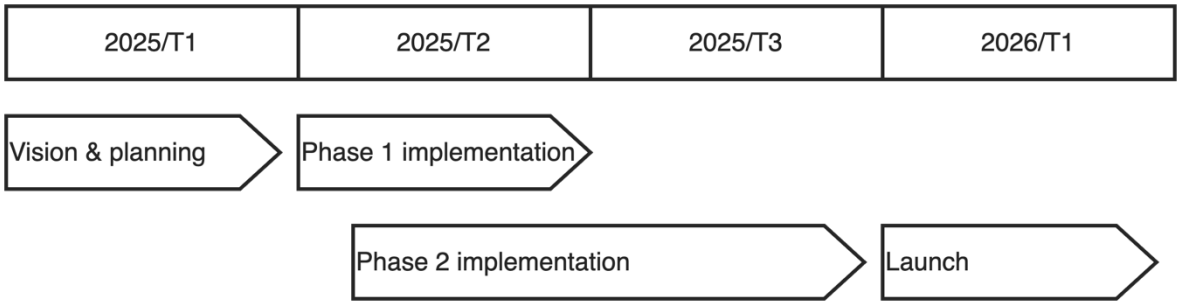


Figure 155: Roadmap example (with EDGY *Activity* and *Object* elements).

The EDGY base elements can be used for analysing the roadmap with outputs and outcomes.

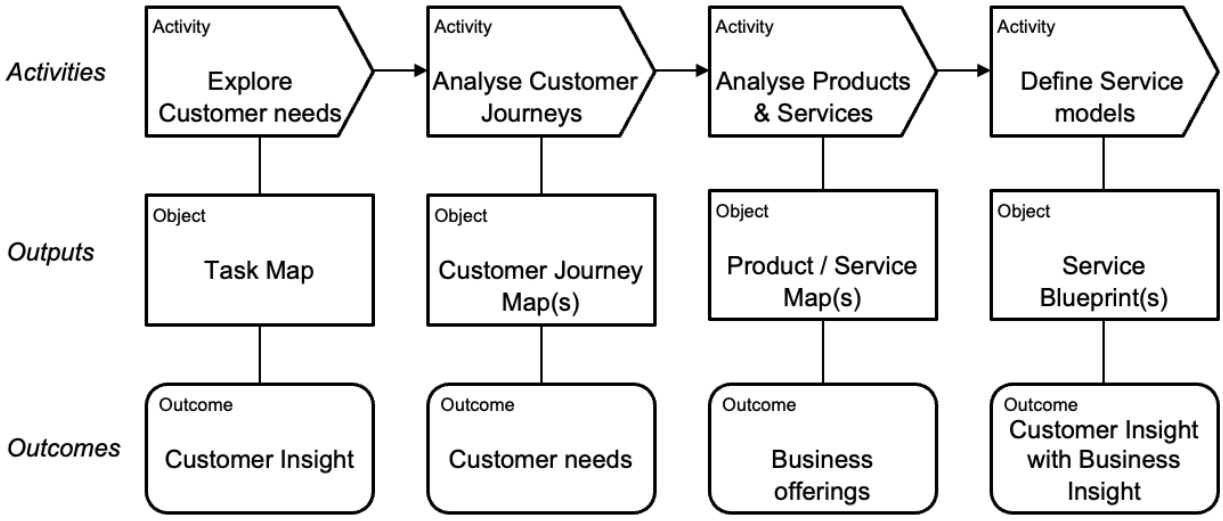


Figure 156: Roadmapping with the EDGY base elements.

6.2.17.1 Business Capability Roadmap

As capabilities represent the core components of the operational business, all change initiatives, such as business transformation programs, can target these capabilities. A business capability roadmap can be used to illustrate why and what changes are to be implemented, and in what order.

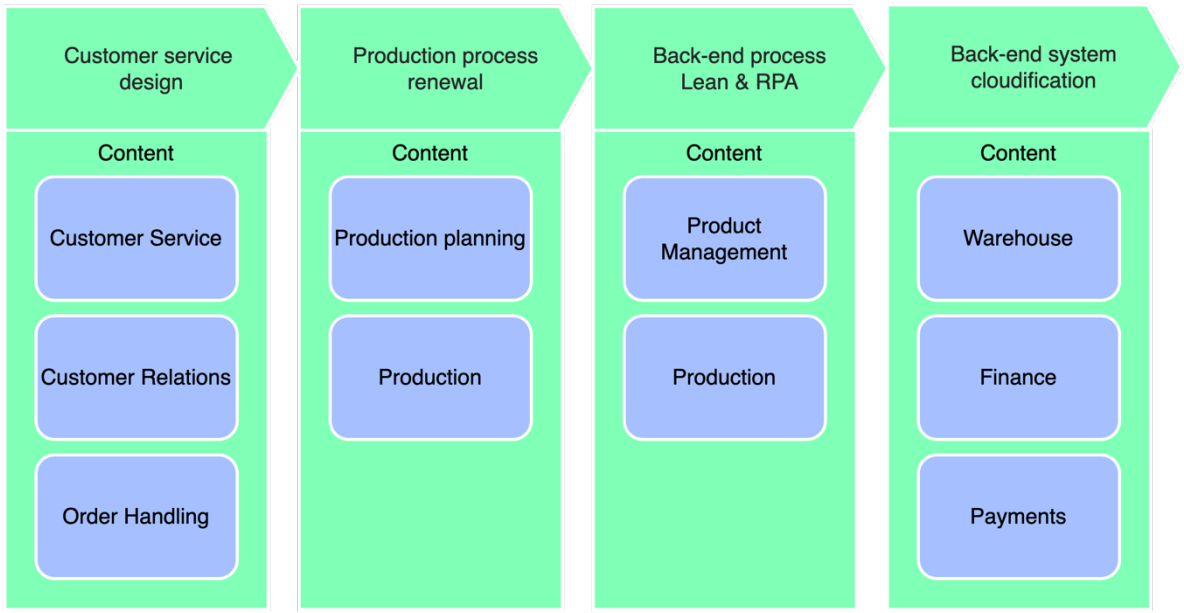


Figure 157: Business Capability Roadmap.

6.2.17.2 Business Transformation Roadmap

EDGY can be used for analysing, defining and visualizing business change programs. For example, a business transformation program can be illustrated in the roadmap as shown below.

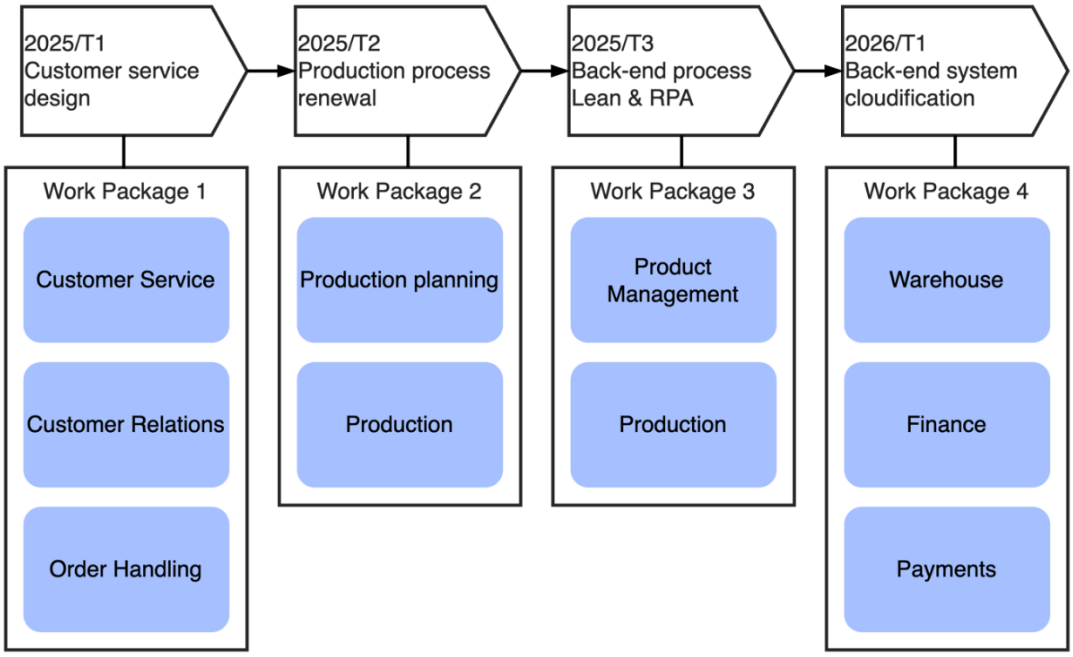


Figure 158: Business transformation roadmap.

Each phase of the roadmap represents a certain transition that is to be taken. In this case, the transitions impact certain capabilities that are to be changed. The exact changes can be defined and visualized in detailed diagrams per each capability, explaining which parts of the capability are to be changed and how. The prerequisite is that the capabilities of the business are identified, and as suggested, visualized in the capability map.

6.2.18 Organisation Map



Organisation structure can be represented in a map e.g. in a) a hierarchical format or b) nested format as shown below.

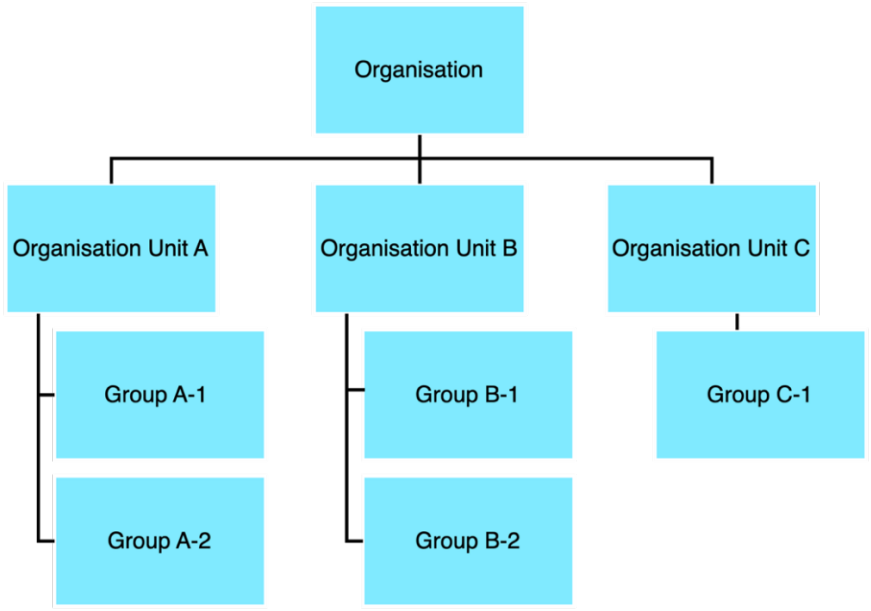


Figure 159: Organisation chart – tree representation.

Element hierarchy can be represented by nesting elements: parent elements contain child elements, that are positioned inside the parent. This style saves space in the diagram, and is intuitively easy to interpret.

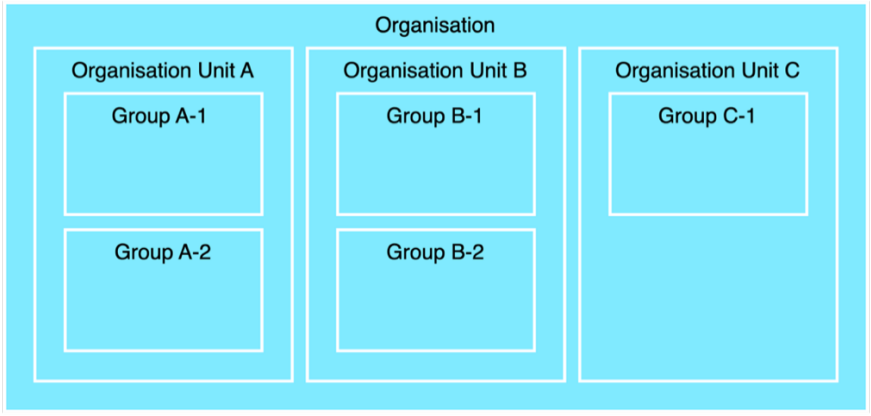
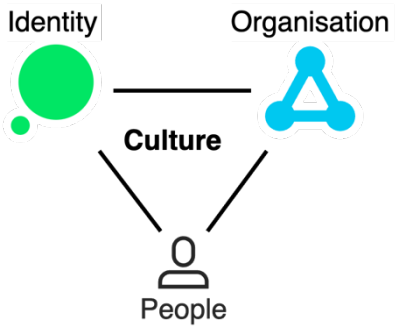


Figure 160: Organisation diagram – nested representation.

6.2.19 Organisation Culture



Organisation culture is what occurs when people interact with each other. Culture is an emergent occurrence of people's behavior, which starts growing whenever two or more people work together. Culture exists for sure, we can feel it, but we can't touch it. Organisational culture is the 'basic assumptions and beliefs' that are shared by members of an organisation.



Culture cannot be directly changed, but it can be influenced e.g. by mission, vision and values as well as and stories we tell about ourselves, and the content that we produce and share. Culture is much about communication and is reflected in the brand image.

Figure 161: Culture exists somewhere in between the identity, organisation and people of an enterprise.

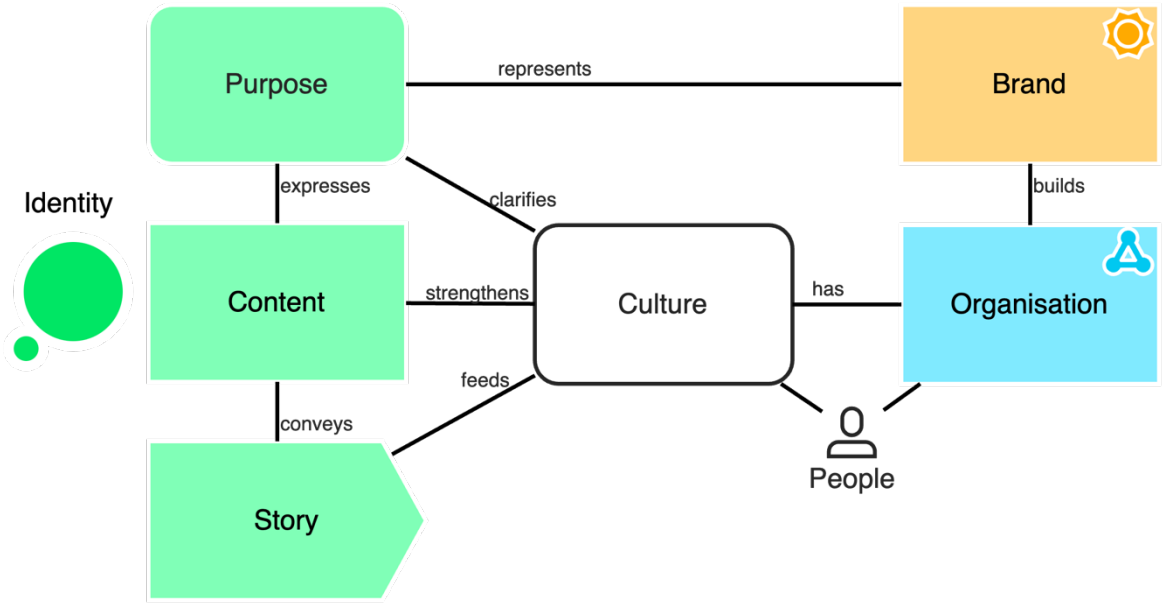
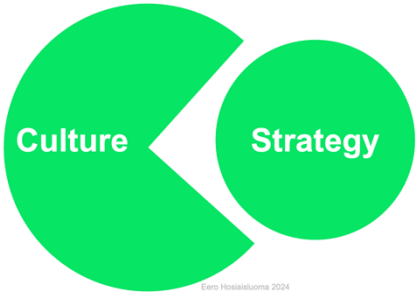


Figure 162: Culture is a result that can be influenced by the communication of identity through branding.

Good culture can be seeded by management by enforcing good spirit and encouraging and inspiring working atmosphere, where employees appreciate each other. Bad culture consists of discouraging and dismissive attitudes toward colleagues, which causes bad results in employee satisfaction and recruitment.

The phrase '*culture eats strategy for breakfast'* means that culture is what happens when nobody is seeing. Culture is how people behave, how they interact, communicate and do their tasks in practice. In contrast, the strategy is (hopefully) concretised and implemented in operations, processes how people should do their work.



Employee experience. Organisational culture affects the employee experience and well-being. When employees are well and employee satisfaction is high, they deliver a better customer experience. Since people (humans) are psycho-physical-social beings, many factors influence the employee experience. Management and leadership in

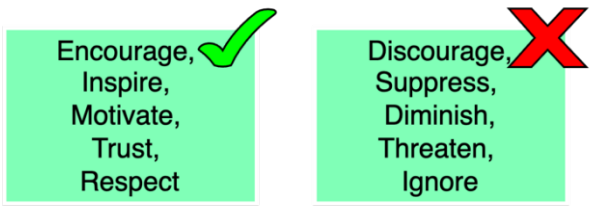


Figure 163: Cultural values, communication, and leadership impact the employee experience.

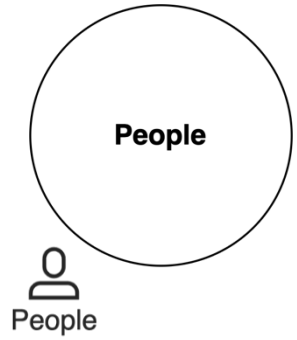
an organisation have a significant impact on employee satisfaction. An organisation's leadership can influence either positively or negatively through its actions, as organisational culture is shaped both top-down and bottom-up.

Management and leadership, through poor example or communication, can weaken an enthusiastic and encouraging atmosphere. However, if the organisation's management can create a functional physical work environment and a safe, inspiring, and supportive social work environment, then employees' mental well-being and employee satisfaction will be at a good level. It is important that employees' psychological workload (cognitive load) is at an appropriate level; otherwise, employee experience and well-being may suffer, leading to issues with endurance and absenteeism due to mental health reasons.

Poor management is the reason for a negative organizational culture and work atmosphere, leading to absenteeism and staff turnover. And conversely, good management encourages high performance, leads to a positive employee experience, effective business operations, and ultimately results in a good customer experience.

6.2.20 People-Focused Identity of an Enterprise

Identity - the Business reason. Identity explains the fundamental reasons why the business exists and why it involves people around it. That's why it is crucial to clarify why the business we do is important so that people can be motivated and to provide the best versions themselves.



Cold story. American economist Milton Friedman developed the doctrine as a theory of business ethics that states that "*an entity's greatest responsibility lies in the satisfaction of the shareholders*." Therefore, the business should always endeavor to maximize its revenues to increase returns for the shareholders.

The Friedman Doctrine, also known as the *Shareholder Theory*, provides insights on how to increase shareholder value. According to the doctrine, shareholder satisfaction is an entity's greatest responsibility. However, the doctrine also faces expansive criticism since it turns a blind eye to social responsibility activities.

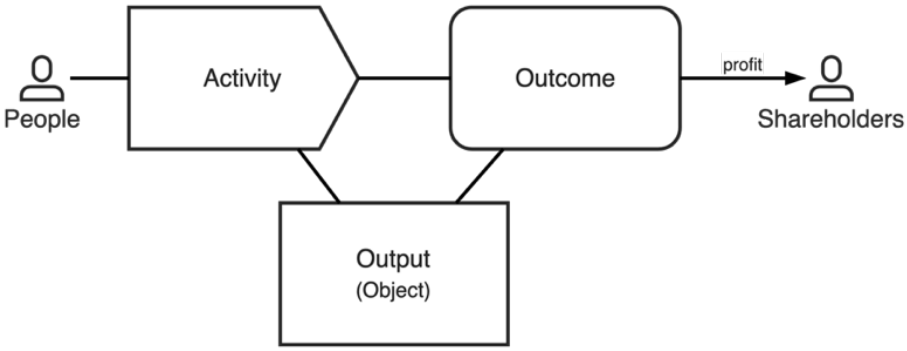


Figure 164: Cold story: The enterprise's purpose is to provide profit for shareholders.

Warm story. Now, what can or should be done is to adjust the focus on employees, as they are the ones who make things happen.

Satisfied employees enable good customer satisfaction. Moreover, an enterprise should shift its focus to people and social responsibility on a broader scale: all the people interested or involved in the operations of the enterprise should be prioritized - instead of focusing only on shareholders.

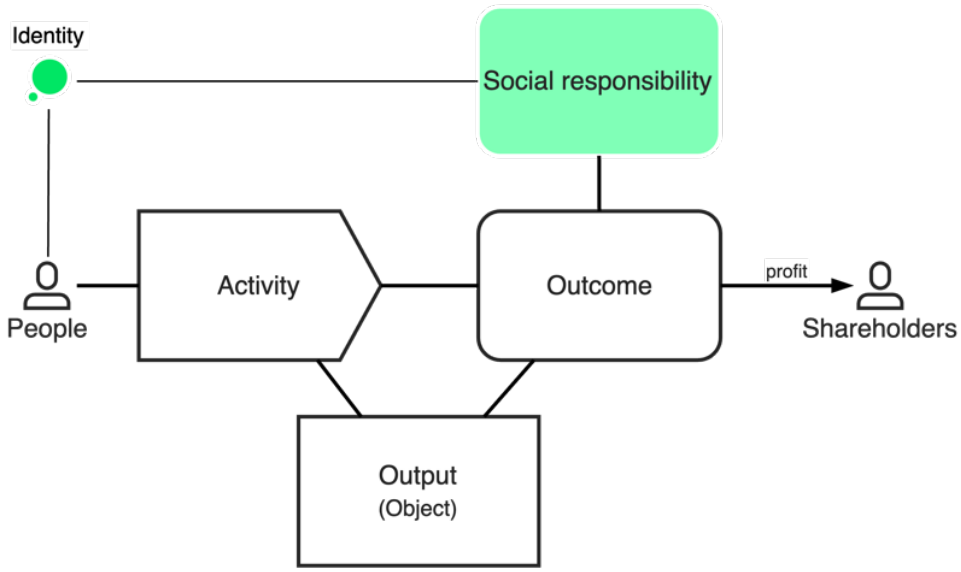


Figure 165: Warm story: Focus on people, and all that is good, will follow.

Shareholders benefit if all the people who experience the enterprise in some way can get the most out of it. That means:

- "*An entity's greatest responsibility lies in the satisfaction of all the people*."

So, it is important to adjust the focus to people and ask ourselves, 'What can we do for people?' - for customers, employees, partners, owners, etc. People do what they need to do when the conditions are good and the atmosphere is encouraging and inspiring - rather than discouraging and divisive. Organisation culture matters. Organisation culture must be nurtured.

Turn the clock to people's time.

6.2.21 Brand



The brand of an enterprise is the collective perception, identity, and reputation of the enterprise as understood by its stakeholders, including customers, employees, and diverse stakeholder groups (such as owners and partners). It represents the values, promises, and experiences associated with the enterprise and influences how it is recognized and remembered.

Elements of a brand:

1. **Identity**: The visual and verbal elements that distinguish the enterprise, such as its logo, colors, tagline, and name. Example: Apple's minimalist design and the iconic apple logo.
2. **Value Proposition**: The unique value or benefit the enterprise promises to deliver to its customers or stakeholders.
3. **Mission and Vision**: The purpose (mission) and long-term aspirations (vision) of the enterprise that define its reason for existence and direction.
4. **Customer Experience**: How customers interact with and experience the enterprise across touchpoints, including products, and services.
5. **Reputation**: The public perception of the enterprise, shaped by its actions, communication, and customer experiences over time.
6. **Emotional Connection**: The feelings and associations stakeholders have with the enterprise, often built through storytelling, consistent messaging, and meaningful customer engagement.
7. **Cultural Values**: The principles and ethics the enterprise stands for, including its stance on sustainability, inclusivity, or innovation, which resonate with its audience.



The brand of an enterprise is more than just a logo or tagline - it encapsulates the identity, reputation, and promises of the enterprise. It is a strategic asset that drives customer loyalty, builds trust, and creates differentiation in competitive markets. A strong, well-managed brand aligns all aspects of the enterprise with its mission, values, and goals, ensuring lasting impact and success.

The brand is an important element in shaping the customer perception. The brand is formed by every moment a customer sees, hears, and interacts with the company. The brand is made up of people's perceptions, shaped by its image and reputation.

The brand can be modelled with EDGY *Brand* element.

The **brand** of an enterprise is its identity and reputation as perceived by stakeholders, representing its values, promises, and the experiences it delivers.

Successful branding requires precise strategic planning and systematic actions. The formation of a brand image is influenced by an enterprise's promises, slogans, visual expression, values, organizational culture, and many other factors within the enterprise's control. In addition to these, the brand image is also shaped by factors beyond the enterprise's control, such as customer perceptions, the operational business environment and its actors, trends, experiences, hearsay, and attitudes. *[Venäläinen 2019]*

The image is the customer's mental representation of the enterprise, which the enterprise can influence through its actions, whereas the reputation is earned. The alignment of these two aspects is crucial for achieving the desired brand image. *[Peltomaa 2019]*

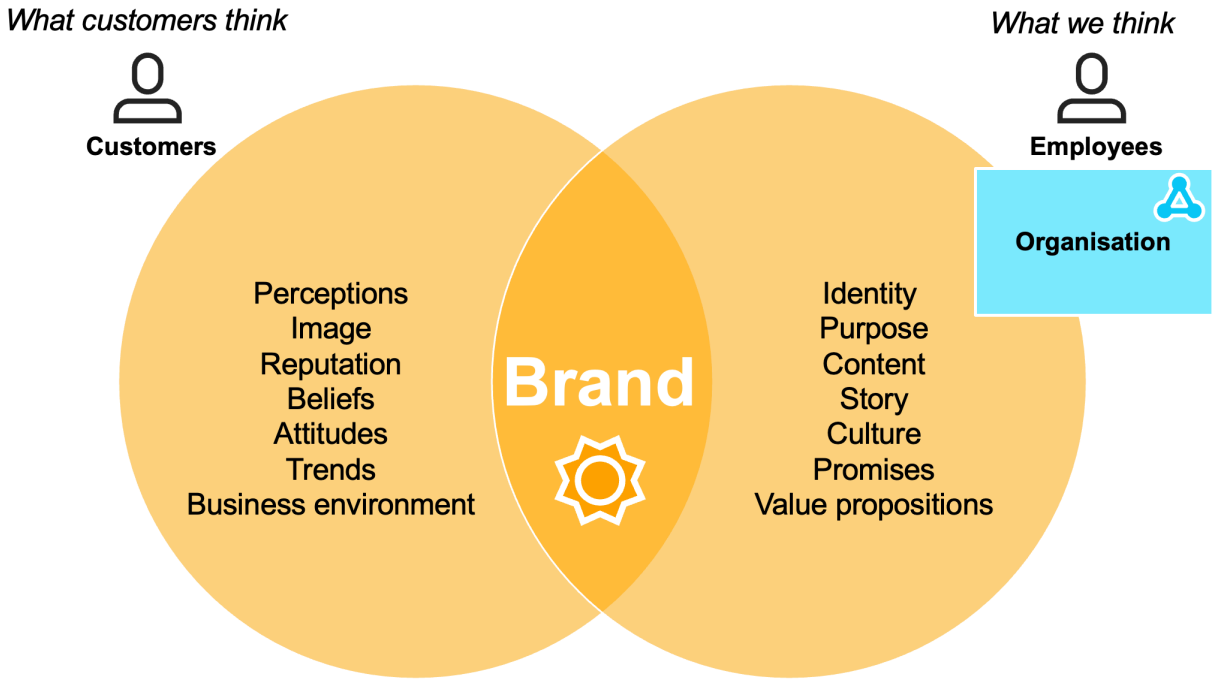


Figure 166: The formation of a brand from two perspectives. *[Venäläinen 2019]*

[Ref.: Business development through service design, Stenlund, P. & Golnick, L., 2020.]

A brand is a bridge between the identity of an enterprise and the experience of its customers.

This metaphor effectively captures the role of a brand in connecting how an enterprise defines itself (identity) with how customers perceive and interact with it (experience). It emphasizes the brand's function as a mediator that aligns internal purpose with external perception.

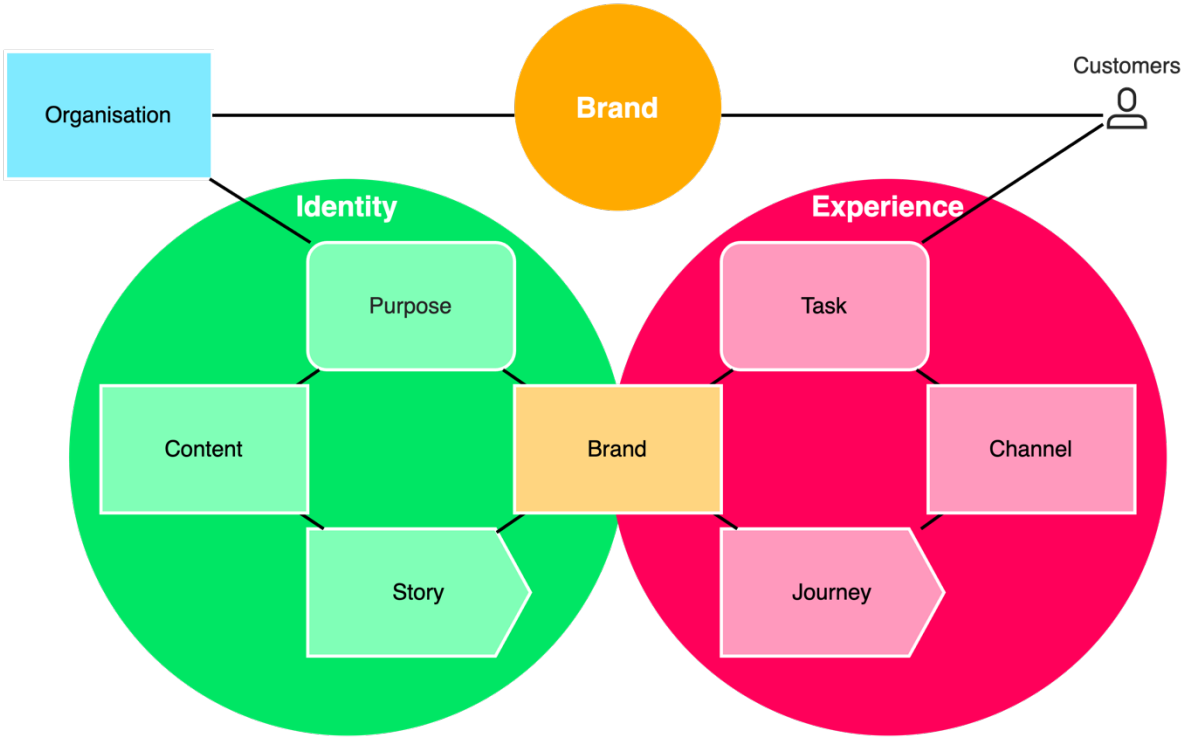


Figure 167: The brand connects the identity of the enterprise with the customer experience.

6.2.22 Business Object Map



When co-designing design challenge, it is good practice to identify the business concepts / -objects of the target area. The object map introduces business objects used in the target area (such as ecosystem, enterprise, business unit, product- / service area). This is a simple view that consists of object elements that are related with each other. This object map can also be called to Concept Map or Mind Map, depending on the context: how abstract or detailed things are concerned. This view can be modelled with the EDGY *Object* -elements with association relationship (with labels).

This object map can be further enriched with more details such as cardinalities between the objects (e.g. one-to-one, one-to-many etc.) as shown below.

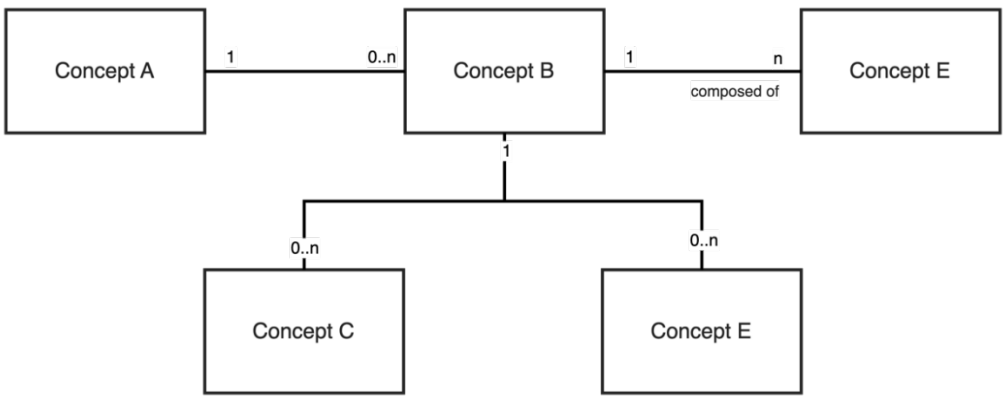


Figure 168: Object Map with cardinalities (e.g. one-to-one, one-to-many).

Master data objects can be marked e.g. with the labels as shown above. In the case of large models, a coloring scheme can be used to make a diagram more readable.

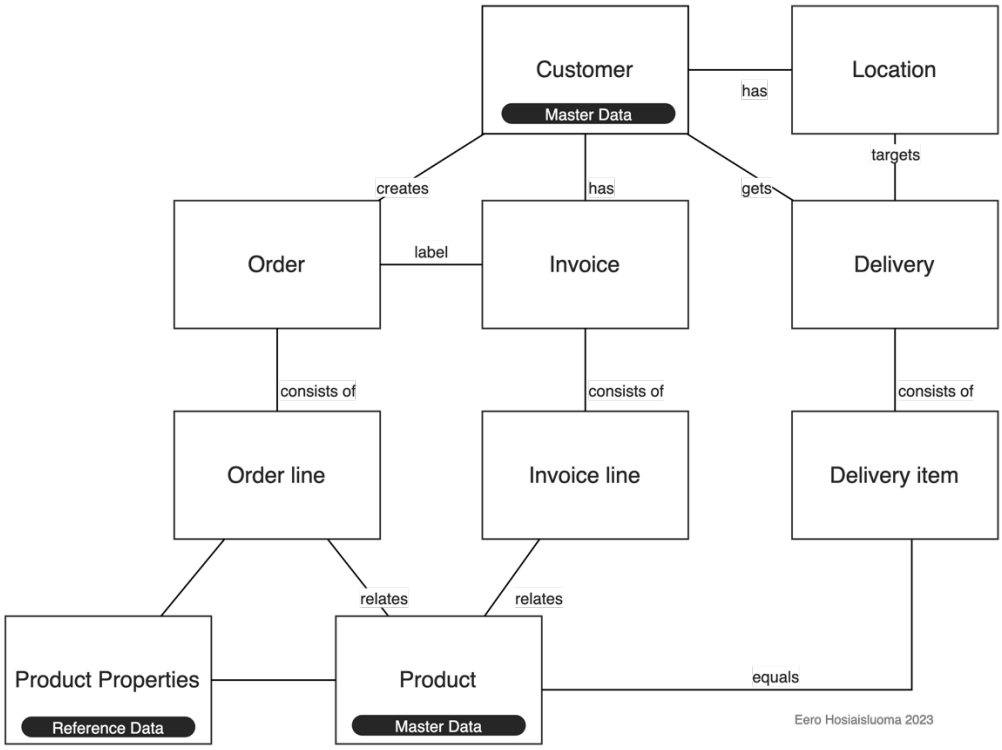


Figure 169: Object Map.

6.2.23 Business Map

Business Map can be used for analysing the business fundamentals: the customer perspective meets the organisation perspective. Customers and their needs are positioned on the outer circles, and the products and capabilities of the enterprise are positioned on the inner circles.

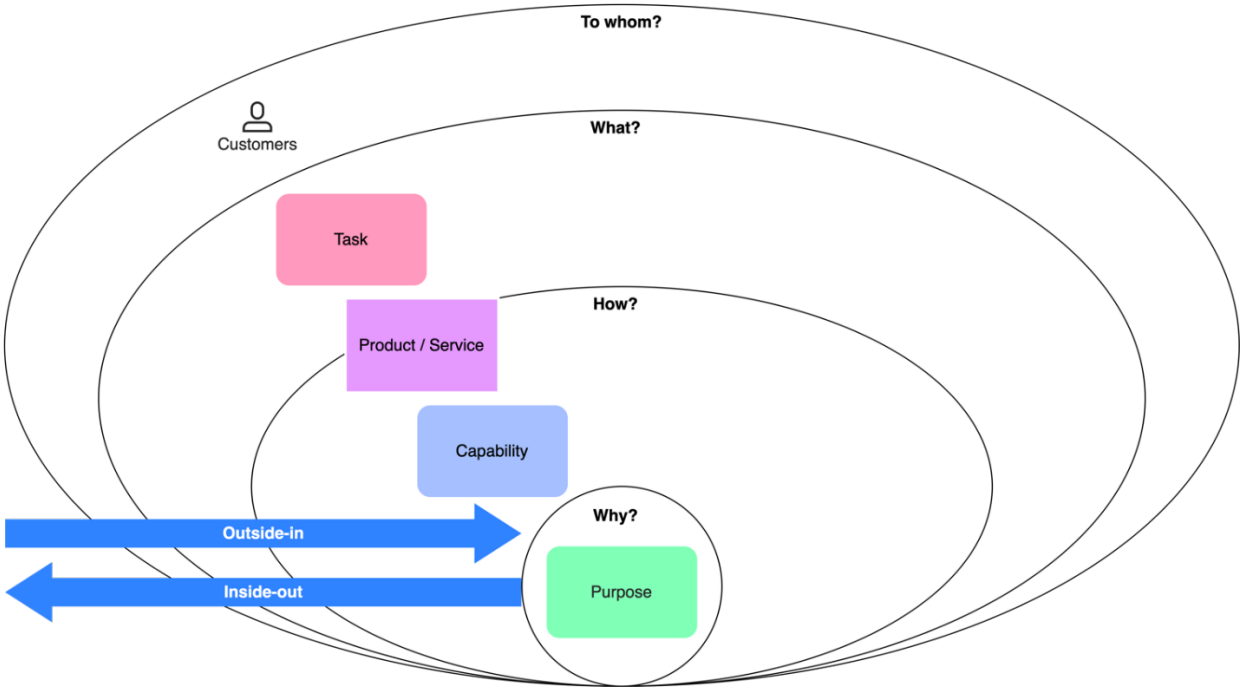


Figure 170: Business Map - customer needs (tasks to be done, TTBD) meet the delivery of offerings.

6.2.24 Context Diagram

Overview of the business environment explaining the context of the development target.

Outside-in & inside-out intersection as a layered overview, representing the context of specific subject matter area.

Purpose	Context Diagram a.k.a Overview
Use Case(s)	High-level overview of the business environment.
Operations	Overview of operational elements (such as processes and/or applications.

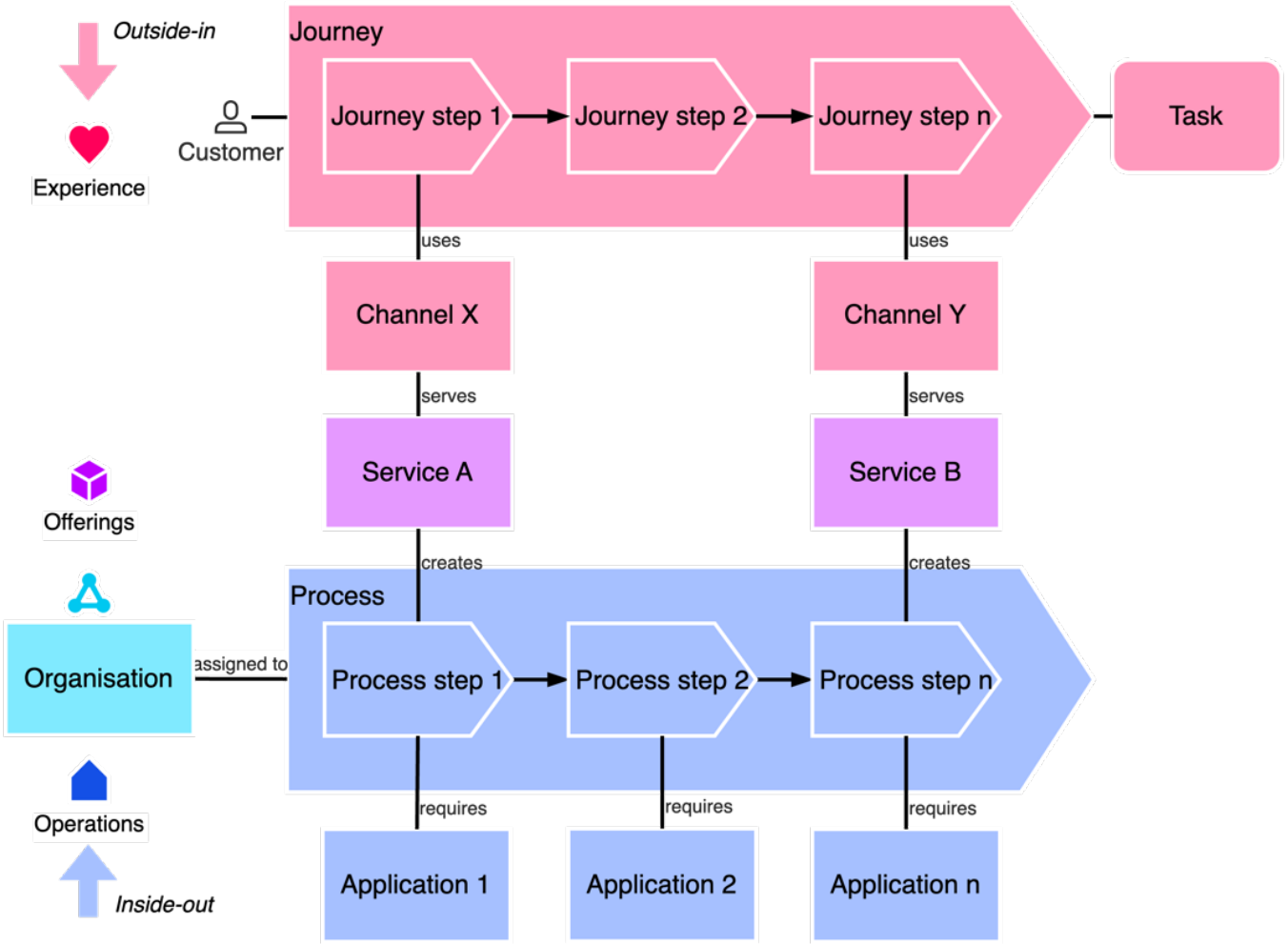


Figure 171: Context diagram.

6.2.25 Business Core



Business core refers to the fundamental aspects of a business that define its primary purpose, value proposition, and the essential elements that enable it to operate and succeed. The business core is the foundation on which an enterprise is built. It represents the essential components that define its identity, ensure its relevance, and enable it to create value for its stakeholders. Understanding the business core is crucial for strategic decision-making, innovation, and growth.

The business core is the essence of business, the "soul" or central defining quality of an enterprise. It provides clarity, direction, and purpose, ensuring that all actions and decisions align with what truly matters to the enterprise, its customers, and society at large.

The business core represents the essence of “what” the business does, “how” it does it, and “why” it exists. A well-defined and optimized business core enables an enterprise to deliver value to customers and adapt to changes in the business environment.

The business core is the foundation on which an enterprise is built.

These elements collectively represent the essence of an enterprise and align its purpose, operations, and value creation:

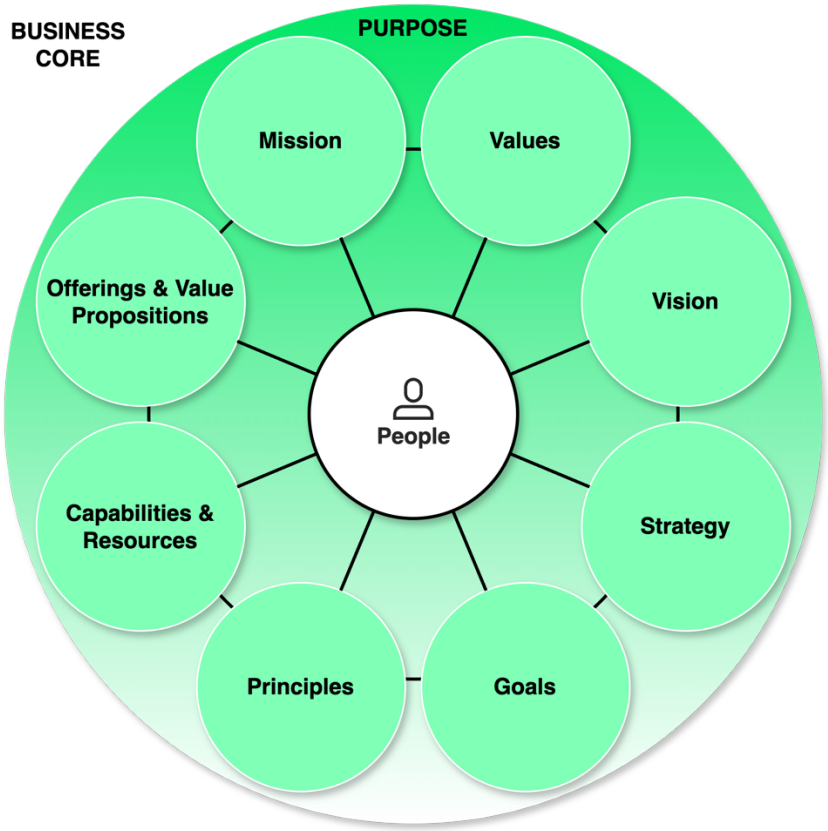


Figure 172: Elements of business core of an enterprise.

These elements work together to define the essence of the enterprise:

1. **Mission** and **Vision** provide the “why” and “where.”
2. **Values** and **Principles** guide the “how.”
3. **Strategy** and **Goals** map out the “what” and “when.”
4. **Capabilities & Resources** ensure the business has the means to execute.
5. **Offerings & Value Propositions** define the “what” delivered to the customer.

People. The role of people or stakeholders in the business core is essential, as they directly influence, shape, and enable key components such as the mission, values, vision, strategy, goals, principles, capabilities, resources, offerings, and value propositions.

When these elements are cohesive, they create a clear and robust business core that drives alignment, value creation, and sustained success.

Business Core	
Element	Description
People	People and stakeholders are central to the business core, serving as its foundation, enablers, and beneficiaries. Without their involvement, the business's mission, vision, and goals cannot be realized. By engaging and aligning these individuals effectively, enterprises ensure that their core elements remain relevant, actionable, and impactful.
Mission	The fundamental purpose of the business of the enterprise: why it exists. Provides direction and clarity, ensuring all activities align with the enterprise's ultimate purpose.
Values	Definition: The guiding principles and beliefs that shape the organization's culture and decisions. Role in the Core: Establishes ethical and operational boundaries, influencing behavior and decision-making across the enterprise. Example: Customer focus, and innovation.
Vision	Definition: The aspirational, long-term goal or future state the organization aims to achieve. Role in the Core: Acts as a motivational guide, driving strategic planning and long-term initiatives. Example: "To be the most customer-centric company in the world" (Amazon).
Strategy	Why are we doing what we are doing? The overarching approach for achieving the enterprise's mission and vision. Connects all elements by defining the roadmap for operational and competitive success.
Goals	Specific, measurable objectives the business sets to implement its strategy. Breaks the strategy into actionable and trackable outcomes.
Principles	The foundational rules or doctrines that govern the changes and how the business operates. Provides consistency and predictability in decision-making and behavior. Examples: "Customer-first," "Data-driven decision-making."
Capabilities & Resources	The internal strengths and abilities (competneces, skills, expertise, processes, assets, technology, capital, etc.) that enable the enterprise to create and deliver value. Forms the operational backbone of the business, enabling it to function effectively.
Offerings & Value Propositions	The products, services, and solutions the business provides, and the value they deliver to customers. Defines the direct customer-facing aspect of the business.

Management systems serve as the operational backbone that ensures the business core, its purpose, capabilities, and value creation, functions effectively. By aligning with the enterprises's goals and values, management systems not only support but also enhance the foundational elements that define the enterprise.

Management systems in the context of an enterprise are combinations of disciplines and governance structures. They integrate specialised areas of expertise (disciplines) with oversight mechanisms (boards, committees, meetings, etc.) to align enterprise operations with its mission, vision, and strategic goals. These systems provide a structured approach to managing complexity, ensuring consistency, and driving continuous improvement

The business core represents the essence of an enterprise and aligns its purpose, operations, and value creation.

6.3 Architecture Examples

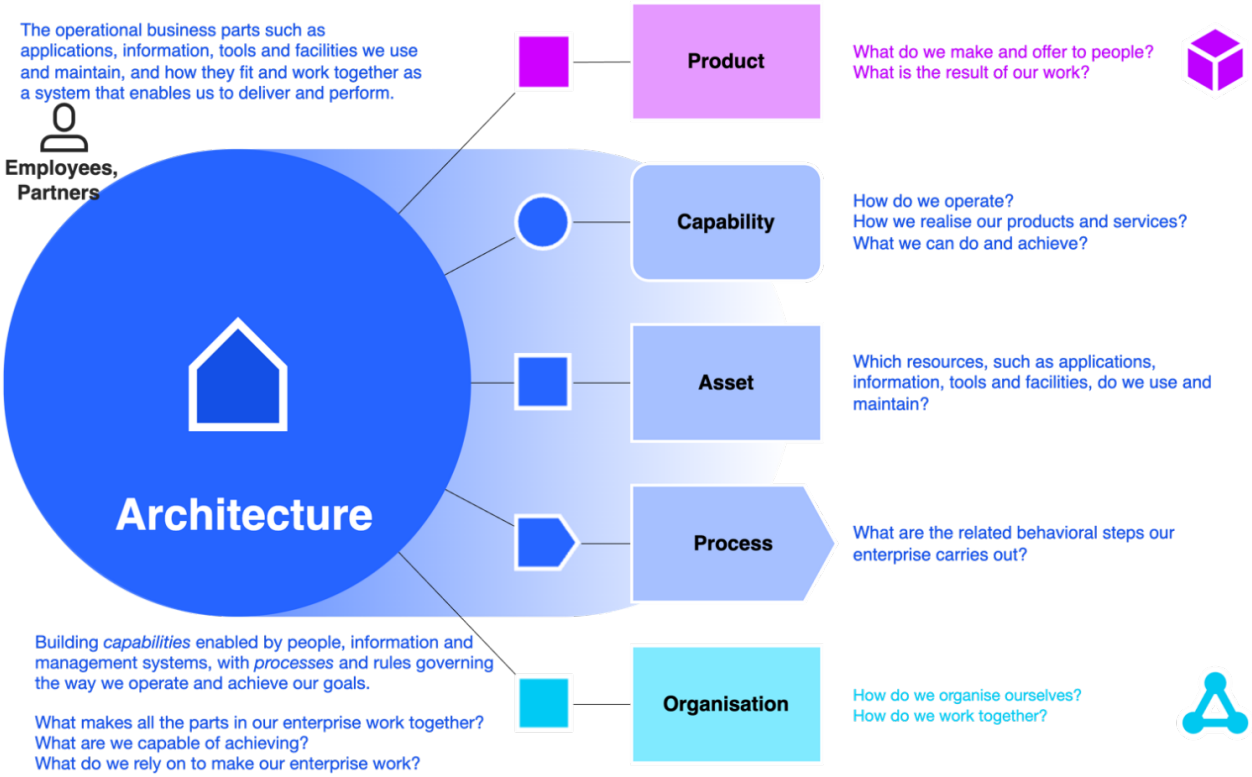


Figure 173: Architecture Facet and Intersections Organisation and Product.

Architecture [36]:

- *The structures needed to make an enterprise operate and connect to the ecosystem*. [3].
- Behavior and structure of the operational business.
- Architecture can be modelled with the following EDGY elements:
  - ***Capability***, ***Process***, ***Asset***, ***Product*** and ***Organisation***.
- Intersections:
  - Organisation refers to organisational structures (e.g. units, groups, teams);
  - Product refers to offerings that the enterprise produces and offers for people's benefit: Products and/or Services.
  - Note! The EDGY *Product* element can be used for modelling both products and services.

Key elements of architecture in enterprise design context are as follows:

- **Capability**: What we are able to do by orchestrating people and assets [3]. Modular business components from which the business operations are made of. The “DNA” of the business. Capabilities consist of Processes and Assets.
- **Process**: A set of related activities our enterprise carries out [3].
- **Asset**: An object we need and use to perform our capabilities [3].

[36] **Architecture**. In this context, not referring primarily to construction- or building ‘architecture’, but operational (business) architecture of an enterprise. The ‘real’ construction architecture of designing buildings is not the main focus area here, but it can be covered with the Enterprise Design approach and the EDGY Facet Model. The real estate, facility properties and assets are parts of the ‘architecture’ facet of the Facet Model. These elements of enterprise can be modelled with the Asset-element of EDGY. The EDGY Facet Model is flexible and expressive enough so that it can be used in all the use cases of when designing an enterprise. The Asset-element of the Architecture facet can be used for modelling any tangible or intangible object or resource or artifact in and around the enterprise, e.g. device, equipment, tool, instrument, switch, component, communication network, construction, building, location, electric system, lightning, heating-, plumbing- and air-conditioning (HPAC) systems, drains, software, hardware, applications, data etc.

6.3.1 Business Operations



Operational business encompasses the entire range of activities within a business, both strategic and operational. The operational business is run by the ***business operations*** that are defined by operational business architecture, simply just architecture [37].

Business operations[38] (often referred simply as “operations”) refer to the day-to-day activities that an organisation undertakes to produce and deliver its products or services, manage resources, and meet its goals. These operations are the ***core functions*** that keep a business running.

Examples of business operations are as follows: production and manufacturing, sales and marketing, procurement, customer service, finance and accounting, human resources (HR), information technology (IT), legal and compliance, facilities and asset management. Each business operation includes the people, processes and assets (e.g. equipment, applications) required to produce them.

Business operations is also referred to simply as a "business in operation" or “business in motion”. It is a healthy business of a healthy organisation, that runs its business operations to deliver products and services to its customers on its promises.

Operational business consists of business operations, each of which require certain ***business capabilities*** to execute those operations effectively and achieve the business goals. Operational business is the holistic view of an enterprise. That can be covered and designed with the Enterprise Design approach. Conceptual model shown below.



Figure 174: Operational business hierarchy.

Business capabilities represent the core behavior of business operations. As such, the business capabilities are the enablers of the entire operational business. Operations management is based on business capability management.

Business operations are run by underlying ***business capabilities***.

6.3.2 Operational Business Concepts

The following chapters introduce the main operational business concepts, with which an enterprise operates: Capabilities, Processes and Assets.

Business Components, the business capabilities, the modular units of operational business. Capabilities compose elements that belong together, such as people (roles, competences), processes, data, applications.



A **capability** refers to a specific ability of an enterprise to perform or achieve something, a combination of people skills and competences, processes, and assets. It represents a composition of elements that are needed altogether to perform certain behavior. A capability is a modular business component, that combines all the elements that have high cohesion with each other, but low-coupling with other elements (of other capabilities).

[37] **Architecture**. Not referring to construction- or building architecture, but *operational (business) architecture* of an enterprise.

[38] **Business Operations**; Operational Business; Operations and Delivery; shortly: *Operations*.

A **business process**[39] is a series of related activities that are performed in a specific sequence to achieve a particular business outcome. Typically a process is triggered by certain business events or inputs (such as information). Then process handles the inputs in the flow of steps (activities) to produce outputs.



Business processes are fundamental to how an enterprise operates and are often documented, analysed, and optimized to improve performance and achieve strategic goals. Processes belong to certain capabilities.



An **asset** is a resource that the enterprise owns or controls and that have economic value. Assets typically belong to certain capabilities. Assets are used in the operation of the business to create value, provide goods or services, or support the overall goals of the organisation.

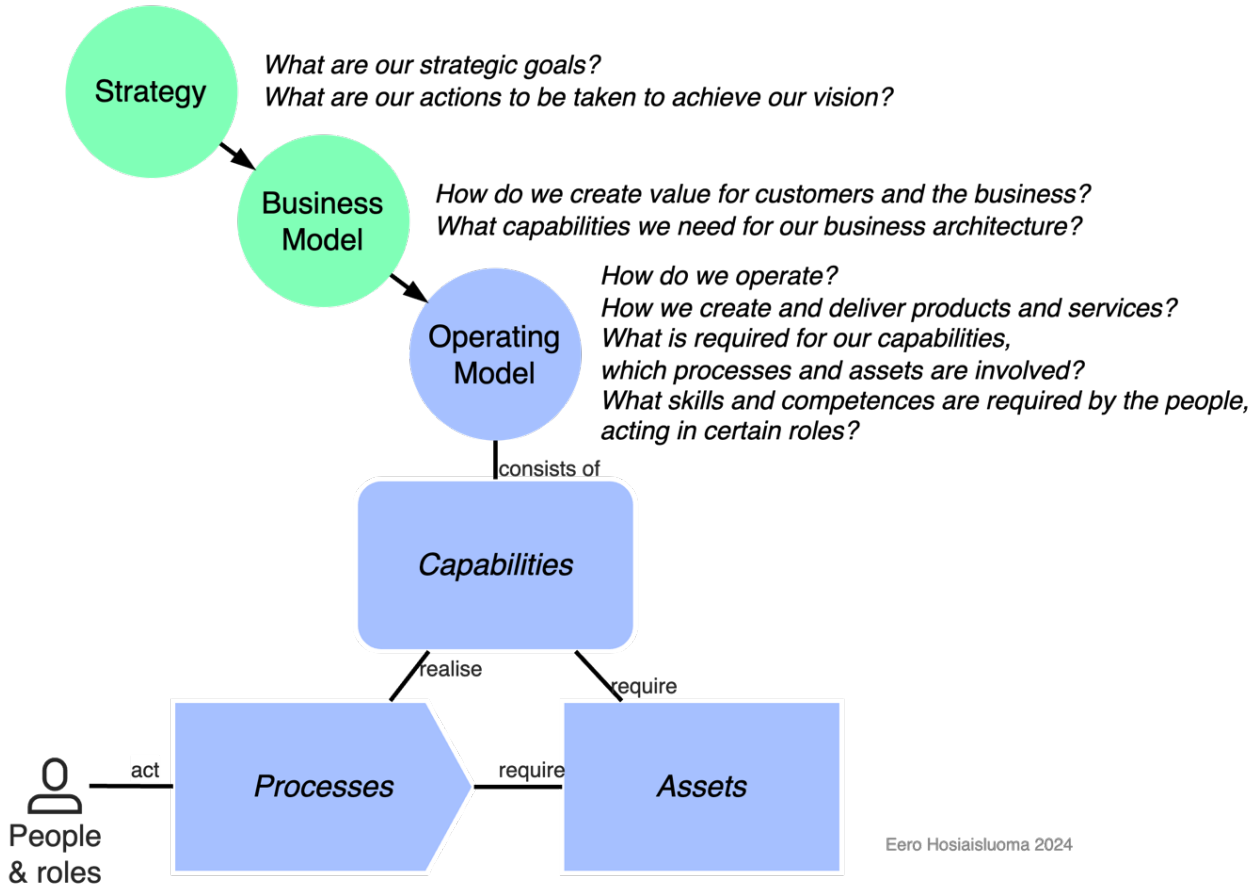


Figure 175: Operating model defines the operations.

6.3.3 Capability



A capability defines 'what we are able to do by orchestrating people and assets' [3]. As such, capabilities are organisational business components. They are containers for everything that belongs together and that is needed so that the enterprise is able to perform a certain *behavioral* part of its business.



A capability refers to the ability of an enterprise to perform a specific behavior or achieve a particular outcome through a combination of

[39] There can be e.g. a) high-level processes with wider scope such as order-to-cash that span over several business units (or functions), or b) processes that perform specific task(s) to produce a certain output such as a service as part of an end-to-end customer journey.

people, processes, technology, and assets / resources. It represents *what* a business can do, independent of *how* it does it, and serves as a building block for understanding, designing, and managing the enterprise.



Capabilities encapsulate the people, activities, and objects required to produce a certain outcome (or output). The figure below illustrates how activities and objects represent abstract behavior and structure, which are concretized in processes and assets.

1. People perform *activities* using and creating *objects*.
2. Activities are *behavioral* and objects are *structural* elements.
3. People perform *processes* and use or create *assets*.

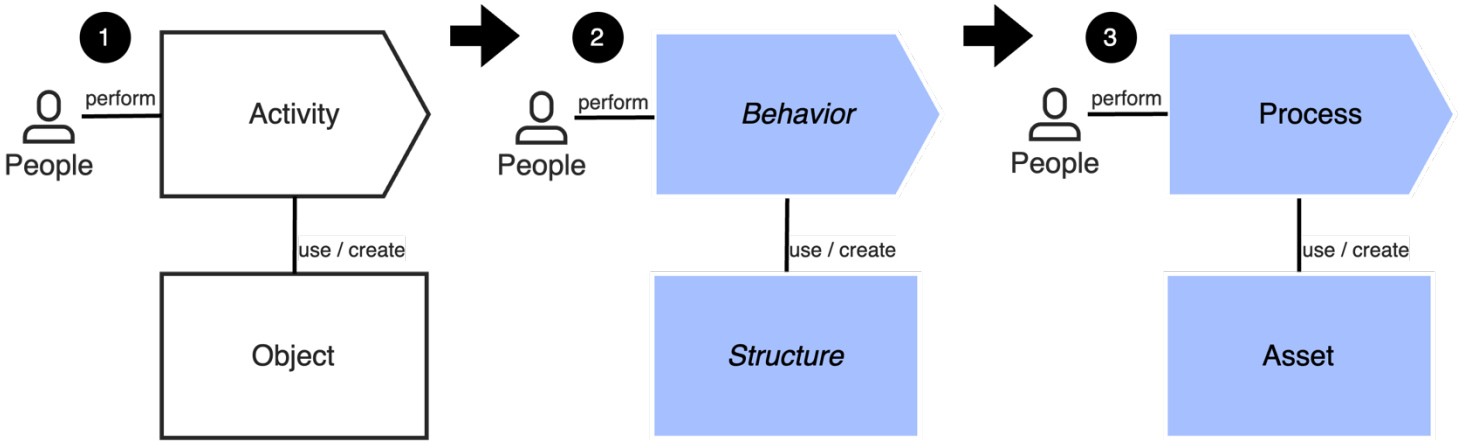


Figure 176: Abstractions of capability content.

Capabilities are components with which an enterprise runs its business operations. Capabilities define what a business can do, not solely what people can do [40]. Capabilities consist of people, activities and objects that belong together: people, processes and assets (resources such as applications, data, devices, facilities etc.).

Capabilities are typically business-focused and outcome-oriented: they represent what the enterprise does, not how it does it.

Capabilities are business- and outcome-oriented focusing on ***what*** the enterprise does.

Capabilities have well-defined outcomes or outputs, which are concrete and operational by their nature. These outcomes or outputs are associated with the business purposes and business values. In other words, an outcome or an output is the reason why a capability is needed. An outcome or output explains why a capability exists. The purpose of a capability is determined by the outcome(s) it produces. A capability can produce one or many outcomes or outputs. And, capabilities can be identified by the outcomes and/or outputs the enterprise produces with its business operations.

[40] A quite typical false assumption is to think that capabilities are people's skills and competencies only. But those are included in the capabilities.

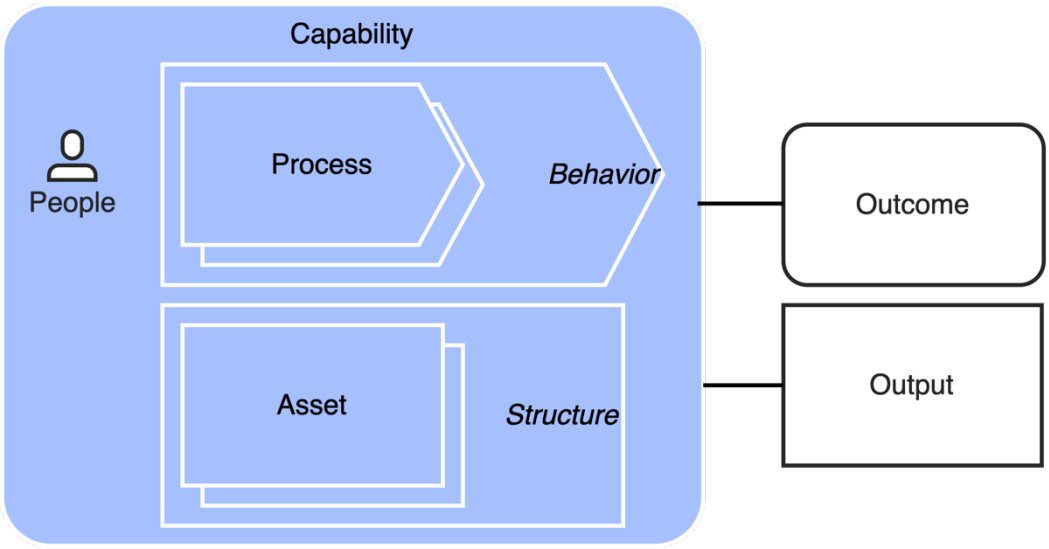


Figure 177: Capability consists of people and behavioral and structural elements.

Examples of outcomes and outputs: an outcome can be, for example, a payment that a customer receives from the Payment capability, while an output can be an application produced by the Development capability.

Capability contains all that belongs together.

Capabilities define the operational business. Not people, not processes, not applications or other resources solely, but them all together, composed into logically coherent groups: to capabilities. The operational business consists of capabilities. Capabilities are components of operational business – operational business components.

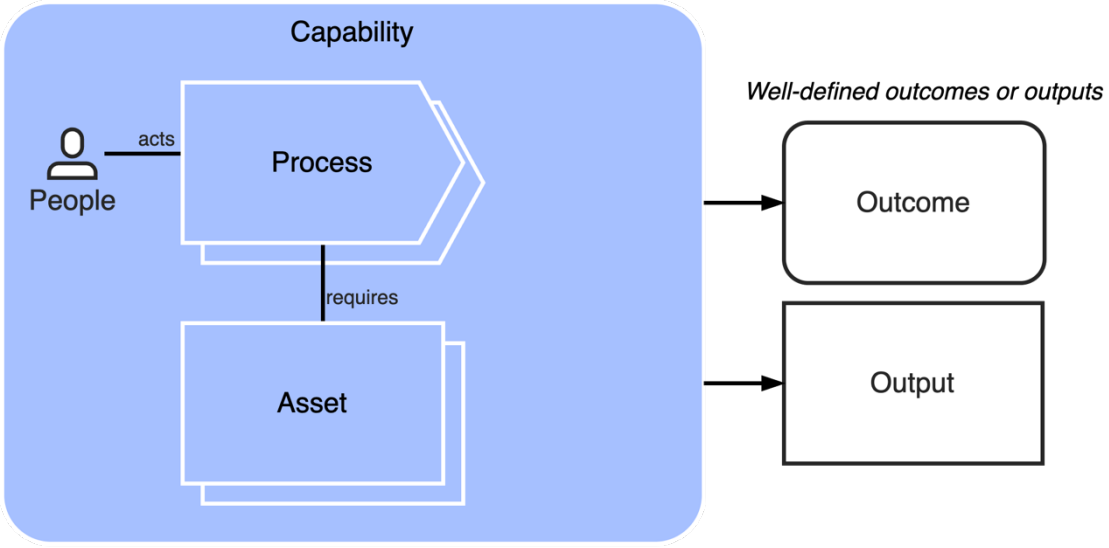


Figure 178: Anatomy of a capability.

Capabilities have well-defined outcomes or outputs.

Key elements of a capability:

1. **Behavioral**: Describes a specific behavior that an enterprise provides, such as "payment management" or "product development". A capability defines *what* an enterprise can do, not *how*.
2. **Outcome-oriented**: Defined by the outcome (or output) they produce

3. **Stable** over time: Capabilities tend to remain stable while business processes, roles, or technologies may change. For example, an enterprise's capability to handle "financial management" is a constant need, even if the processes or systems evolve.

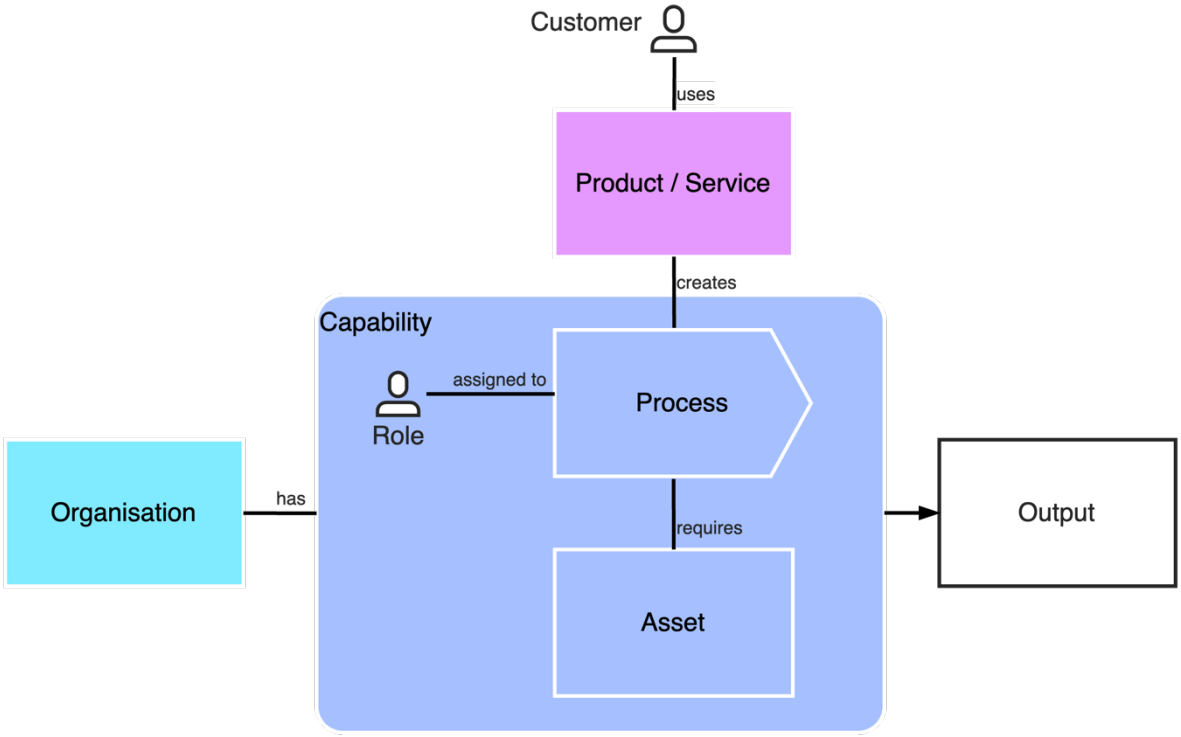


Figure 179: Capability modelling pattern.

With the *People* -element, it is possible to define skills and competencies, and professional profiles, roles, that are needed for performing the activities (with processes). Example below.

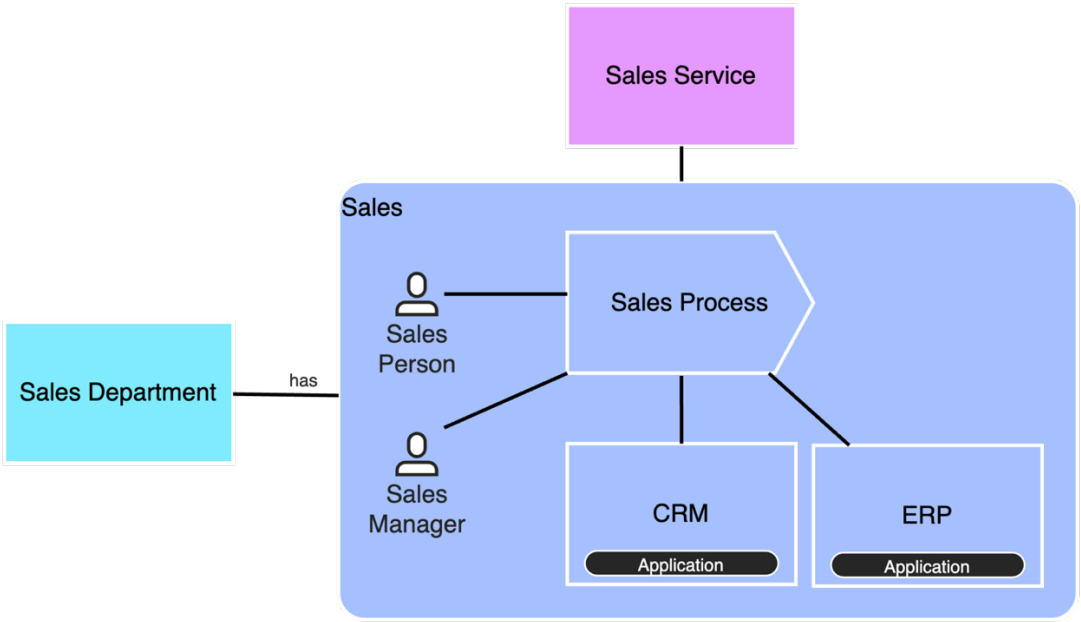


Figure 180: Capability example: Sales -capability with roles of competence profiles.

See the templates Capability Canvas (10.5.17) and Capability View (10.5.19).

- *Capability Canvas* contains the internal elements of the Architecture Facet, and also intersection elements product(s) and organisation structures (+ relevant people elements representing roles, skills or competences).

- *Capability View* -diagram can be used for illustrating also the external elements (such as goals, costs and risks).

Load free PowerPoint canvases for EDGY from here: link.

It is practical to open the content of a capability to understand what its purpose is. The content explains the meaning, as activities represent what is going on, and objects represent what assets are used in the performance.

When analysing and defining the content of a capability, it is practical to consider, not only the internal people, processes and assets, but also the concerned organisation structures and products and/or services.

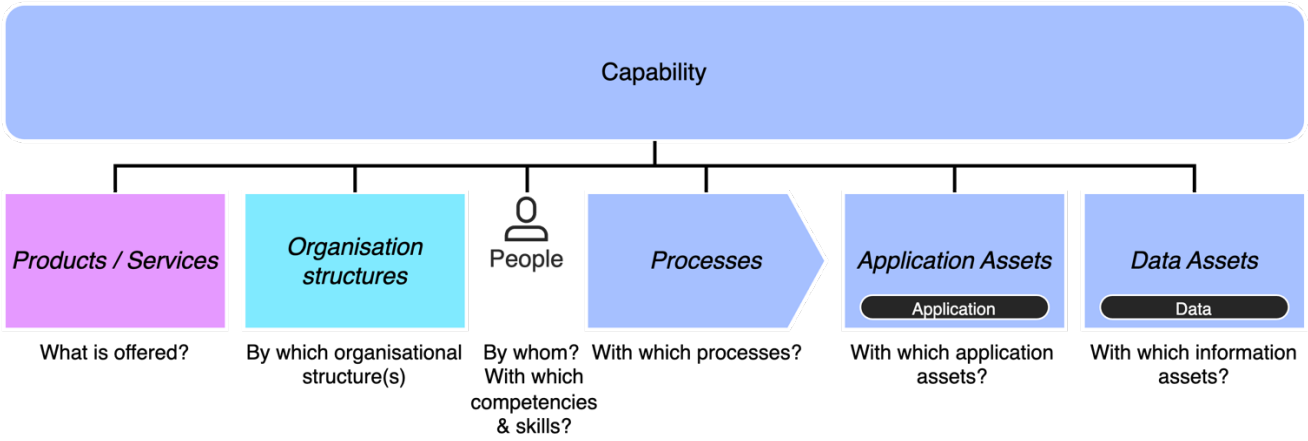


Figure 181: Capability extended content.

Capability can be decomposed into the different levels. It takes as many levels as it takes to find the atomic capabilities. Typically one to three (1-3) levels are enough - to keep the overall business structure simple.

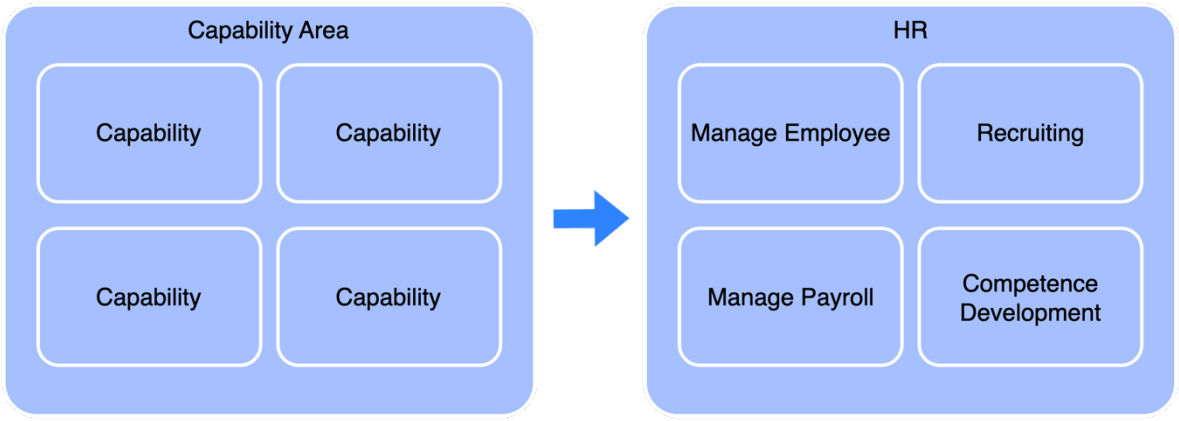


Figure 182: Capability levels. The capability area, "HR", represents the level 1 capability.

Capability as concept. A capability can refer to a group of elements that are belonging together. As such a capability element can be re-used for modelling any elements that compose a logical group. Examples are as follows: *domain* (e.g. business domain, business area), *function* (e.g. business function).

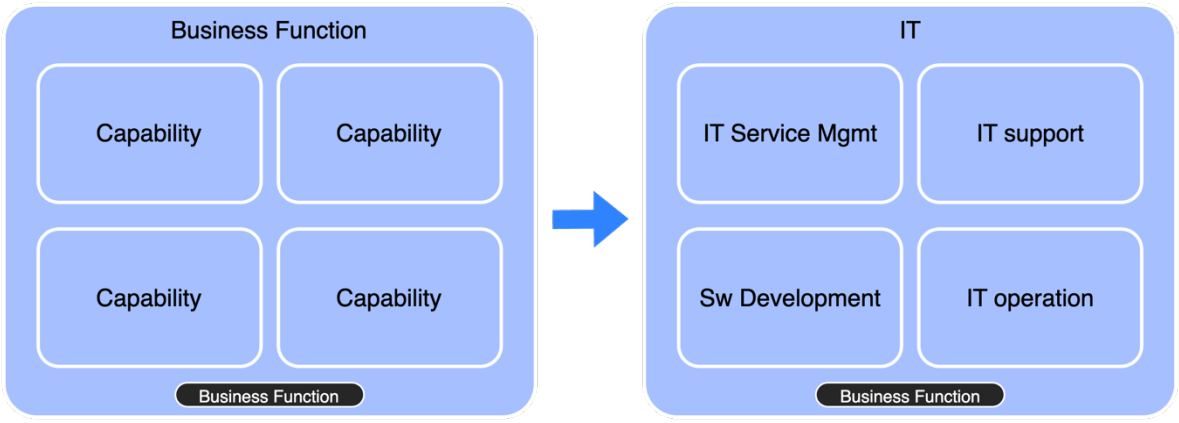


Figure 183: Capability element re-use.

Capability and Function. When modeling the enterprise, the capability concept can be used to represent a business function, which typically means certain behavioral part of an organisation.

A **function**[41] refers to specific tasks or areas of responsibility. It represents a specific area of responsibility or activity within the enterprise that contributes to its overall operations. Often represents a particular department or an area of the business (e.g. Finance, HR), which can contain certain service areas (each of which composed of atomic services).



Capabilities and business functions are quite similar concepts. It is common mistake to confuse capability and business function. Quite often a certain business unit is responsible of a business function. As such there is an association between an organisational structure and a business function. In addition, a business function is closely related to a process, as they both represent the behavioral aspects of a business. In contrast, a capability is also behavioral concept, but it consists of all the other necessary aspects too, elements such as people, data, applications, devices, facilities that belong together.

All in all, it is a matter of opinion whether to use the concepts of capability or business function when arranging the business into behavioral parts. Which one to use depends on the context and what is appropriate to fit the purpose in organisation's terminology.

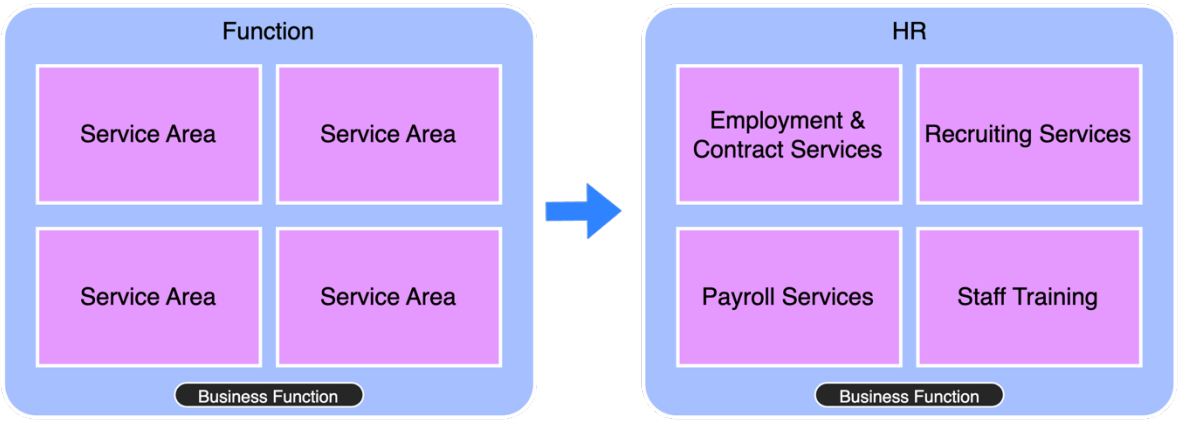


Figure 184: Capability element re-use.

[41] **Core functions** are the specific, mission-critical activities of a business, while capabilities are the underlying resources, skills, and competencies that empower the business to execute those core functions effectively. The relationship between the two is crucial for a business's success, as capabilities enable the execution of core functions in alignment with the overall business strategy, adaptability, and competitive advantage.

Capability characteristics
Capabilities represent the core behavior of a business within an enterprise / organisation.
Capability is a composition of people, processes, data and applications, etc. that belong together.
Capabilities (or their processes) produce the products or services of an enterprise / organisation.

Note! People skills and competencies are part of capabilities.

Capabilities
1) drive the core business operations,
2) facilitate product and service delivery and
3) enhance organisational competitiveness.

An organisation realises and delivers its offerings through its capabilities.

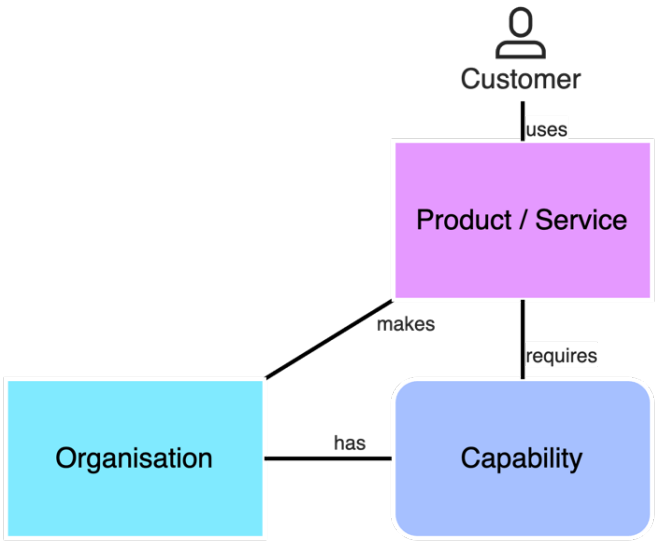


Figure 185: The wireframe model of the business.

An organisation realises and delivers its offerings through its capabilities.

Why Capabilities Matter:

- **Strategic Alignment**: Capabilities help align strategic goals with operations by clearly defining what the business needs to be able to do to achieve its objectives. This enables managers and leaders to focus on building or improving the capabilities that matter most to success.
- **Agility and Adaptability**: By focusing on capabilities, enterprises can adapt more quickly to changes in the customer needs, market or competition. A capability-driven "capability-first" approach enables more flexibility in how things get done.
- **Prioritisation of Investments**: Capabilities provide a framework for decision-making when it comes to resource allocation. Enterprises can prioritise investments in the most critical capabilities, ensuring that spending aligns with long-term strategic goals.
- **Clarity and Communication**: Capabilities offer a common language for business managers, leaders, business people, and IT professionals to discuss what the enterprise needs to achieve. This makes it easier to communicate across different units, groups, teams and functions and avoid siloed working.
- **Gap Analysis and Transformation**: Capabilities are often used in gap analysis to identify areas where the enterprise's current capabilities fall short of what's needed to meet future goals of enterprise's vision. This can inform transformation efforts and initiatives helping to improve or create new capabilities.

How to identify business capabilities?

- **Define capability**: First, define what we mean by business capability. What a capability means in context, in our business and organisational language. If not clear and not specified yet, take and use the Enterprise Design definition: a capability is '*what we are able to do by orchestrating people and assets*'. Capability is an organisational ability to do something and produce clear outcome(s) or well-defined output(s).
- **Identify business outcomes or outputs** the enterprise produces. These are good candidates for capabilities. These can be found by analysing the operational value streams (or core processes) of the enterprise.
- **Scan business processes** (such as process map) and find related processes that can be grouped logically. Processes that are closely related and tightly coupled may belong to the same capability.
- **Scan service or product offerings** (such as service- or product map)) and find logical groups that are realised with specific processes.

Create a capability map, iterate it with business management and business owners at different levels of the enterprise. Identify capability owners and make the capability map a key tool for all change activities in the enterprise – from strategic to operational level.

Summary of Business Capabilities

As a business capability is an important concept and a key element in structuring a business, here are the most essential points.

A business capability is an *abstraction*, not a *concrete* entity.
It represents **what** a business does or can do to achieve its objectives. Capabilities are high-level constructs that describe the business's ability to deliver value.

Understanding that a business capability is an abstraction allows enterprises to focus on aligning their resources and operations (concrete entities) to strengthen and optimize these capabilities, enabling better strategic outcomes.

Capability key characteristics		
1	Abstract in Nature	A business capability is a *conceptual representation* of the business's ability and capacity to perform a specific behavior, function, independent of how it is implemented.
2	Composed of Concrete Entities	While abstract, a capability is enabled or realised by various tangible elements, such as: • People (skills, competences, roles, teams) • Processes (workflows, operations) • Applications and Data (software, data elements, databases) • Devices and Facilities (hardware, infrastructure)
3	Stable Over Time	Capabilities focus on what the business does, rather than how it does it, which makes them relatively stable even as underlying technologies and processes evolve.
4	Business-Centric	They are defined in business terms, often at a level of granularity that makes sense to stakeholders across the enterprise.

Example capability like "Customer Relationship Management" (CRM) is an abstract concept. It encompasses:

Customer Relationship Management

- People (sales and customer service teams)
- Processes (customer onboarding, complaint resolution)
- Applications (CRM software)
- Data (customer information, interaction history)
- Devices and Facilities (customer service desks, communication devices)

Purpose of a business capability is to produce a business outcome

The purpose of a business capability is to drive business outcomes and outputs. This recognition ensures that capabilities are not just theoretical constructs but actionable drivers of value and success. It ties the abstract concept of capabilities to tangible results, making them central to effective enterprise architecture and strategic execution.

Recognizing that the purpose of a business capability is to produce a business outcome and/or output is extremely important. This understanding serves as the foundation for aligning organizational efforts with strategic goals, ensuring that the enterprise focuses on delivering value. Here's why this recognition is crucial:

1	Alignment with Business Strategy	Business capabilities are the building blocks that enable the execution of a enterprise's strategy. By focusing on outcomes/outputs, enterprises can ensure that capabilities are aligned with strategic priorities. Example: A capability like "Product Innovation" should deliver measurable outcomes, such as new product launches or improved market share.
2	Value Delivery	The ultimate purpose of any capability is to create value for the enterprise, customers, or stakeholders. Recognizing the link between capabilities and their outcomes/outputs ensures resources are directed toward activities that generate measurable business benefits.
3	Performance Measurement	When outcomes/outputs are clearly defined, capabilities can be evaluated and improved. Example: "Customer Relationship Management" can be measured by outcomes such as customer retention rates, satisfaction scores, or revenue per customer.
4	Resource Optimization	Understanding the purpose of a capability helps prioritize investments in people, processes, technology, and infrastructure. Resources can be directed toward capabilities that have the highest impact on desired business outcomes.
5	Adaptability and Continuous Improvement	As business environment conditions change, the focus on outcomes/outputs helps enterprises identify which capabilities need enhancement or transformation. Example: If a capability is not producing its intended outcome or output (e.g., slow product delivery), it signals the need for redesign.
6	Customer-Centric Approach	Capabilities tied to business outcomes often align directly with customer needs and expectations. Example: A capability like "Order Fulfillment" must ensure timely and accurate delivery, directly impacting customer satisfaction.

Practical Implications:

- Capabilities without outcomes are inefficient: If a capability exists without a clear purpose, it adds little to no value to the enterprise.
- Business outcome-driven capability design: Design and evolve capabilities to achieve specific, measurable business goals.
- Strategic discussions: Focus on how capabilities contribute to the bottom line, such as growth, efficiency, innovation, or risk management.

6.3.3.1 Capability Elements

A capability consists of people, process and asset elements. Assets can have many specialisations, as the EDGY *Asset* element can represent tangible or intangible elements.



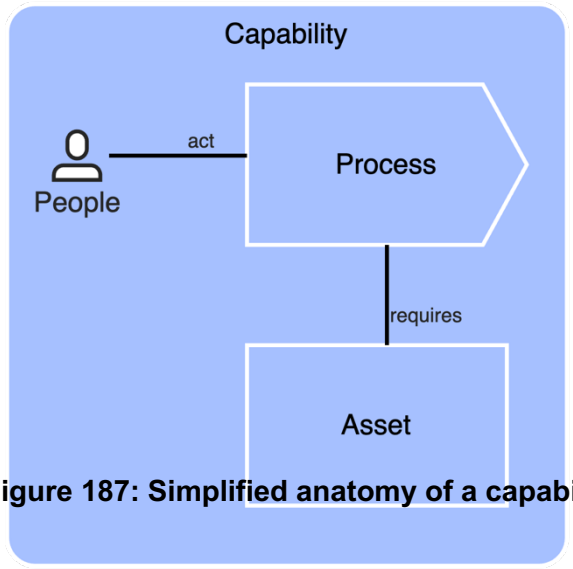


Figure 187: Simplified anatomy of a capability.

"*Enterprises need to develop, buy and manage a broad range of tangible or intangible assets (such as buildings, machines, raw materials, software applications, financial assets and know-how) to perform the capabilities needed to run their business. Assets as a concept are rooted in economics, strategic management and finance.*" [2]

Examples of elements composed in a capability shown below.

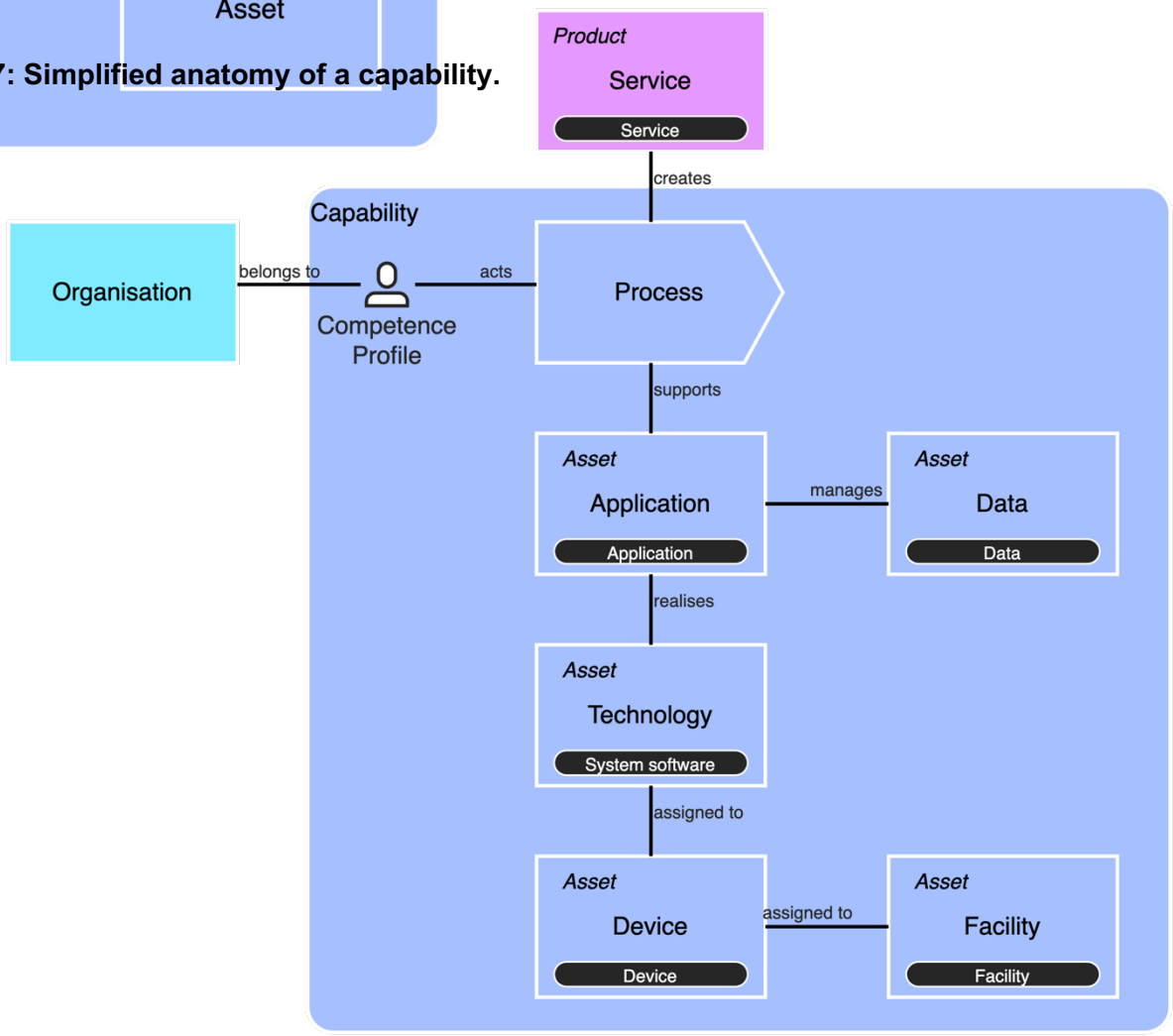


Figure 186: Example of capability elements.

A business capability is a business component that consists of:

- **Behavioral elements** - What the capability does (the processes, actions, workflows
- **Structural elements** - What the capability is made of (roles, assets, other resources).

Business Capabilities consist of people roles, processes, and assets that work together. People Roles belong to specific organisational structures (e.g. units, groups, or teams) that manage workforce competencies and responsibilities.

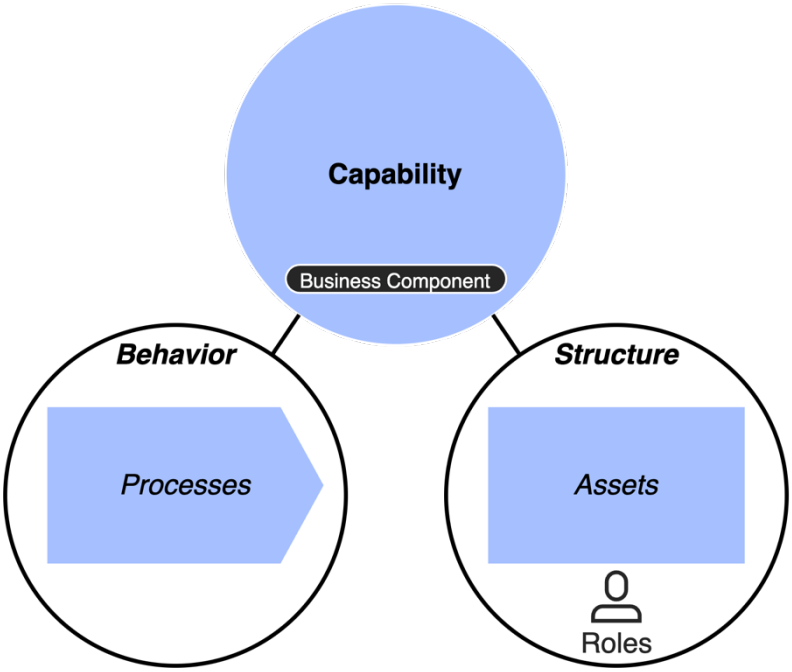


Figure 190: Capability consists of behavioral and strcutural elements that belong together.

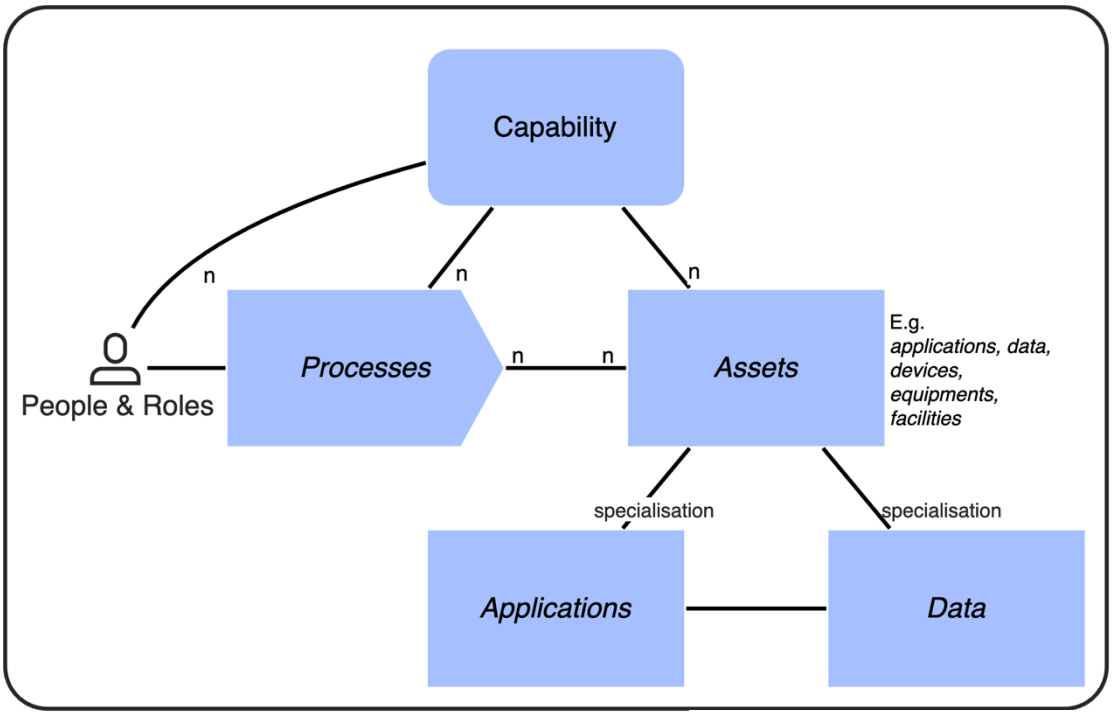


Figure 188: Capability elements (above).

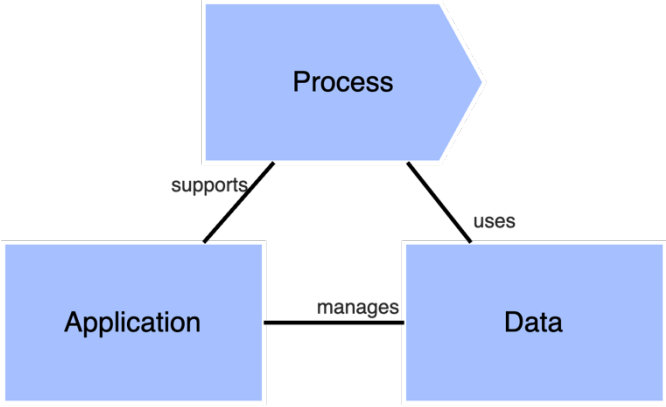


Figure 189: Architectural triple (left).

Capabilities typically consist of processes, applications and data that belong together.

Processes are supported by applications that manage data.

6.3.3.2 Capability View

Example *Claims* capability diagram that consists of competence roles, processes, application assets and data assets. Claims capability is performed by the Claims processing team. Claims capability provides Claims Handling Service.

Capability View

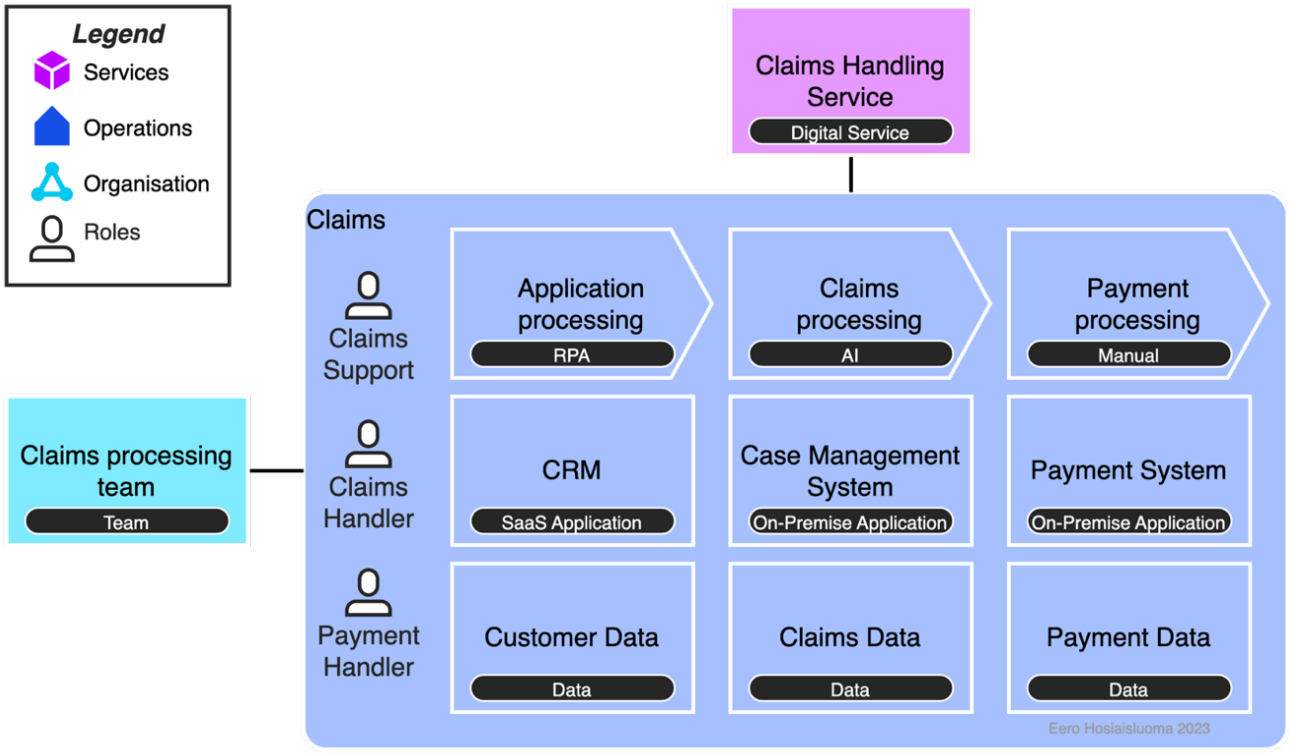


Figure 191: Claims Handling Capability.

6.3.3.3 Capability Assessment

Operational ability, readiness to do something, according to what has been promised to be delivered.

Capability Assessment

Capabilities are:

- The center of gravity of architecture
- Connecting all the other elements of architecture that belong together
- Capabilities are modules/components of the business, *business components*
- Capabilities include people with the right skills with assets to perform processes
- Capabilities are what an organisation is able to do by orchestrating people and assets

High Cohesion and Loose Coupling of Capabilities

When identifying the capabilities of an enterprise in the capability assessment, a good practice is to define the borders of capabilities based on high cohesion internally and loose coupling externally of the elements (such as processes and assets).

Capabilities have high cohesion internally and loose coupling externally.

A capability contains all that belong together, which means that all the elements that have tight interactions are closely related, so it is reasonable to keep them together. This high internal cohesion of elements justifies why certain elements belong together. Altogether they form a coherent whole, that represent certain operational entity. Such an entity includes all the activities and objects in the form of people, processes and assets, that are required so that certain behavior can be done. Capabilities are what is needed in an enterprise so that it can operate. Capabilities are fundamental building blocks of the business. They are composite business components, from which the business is made of.

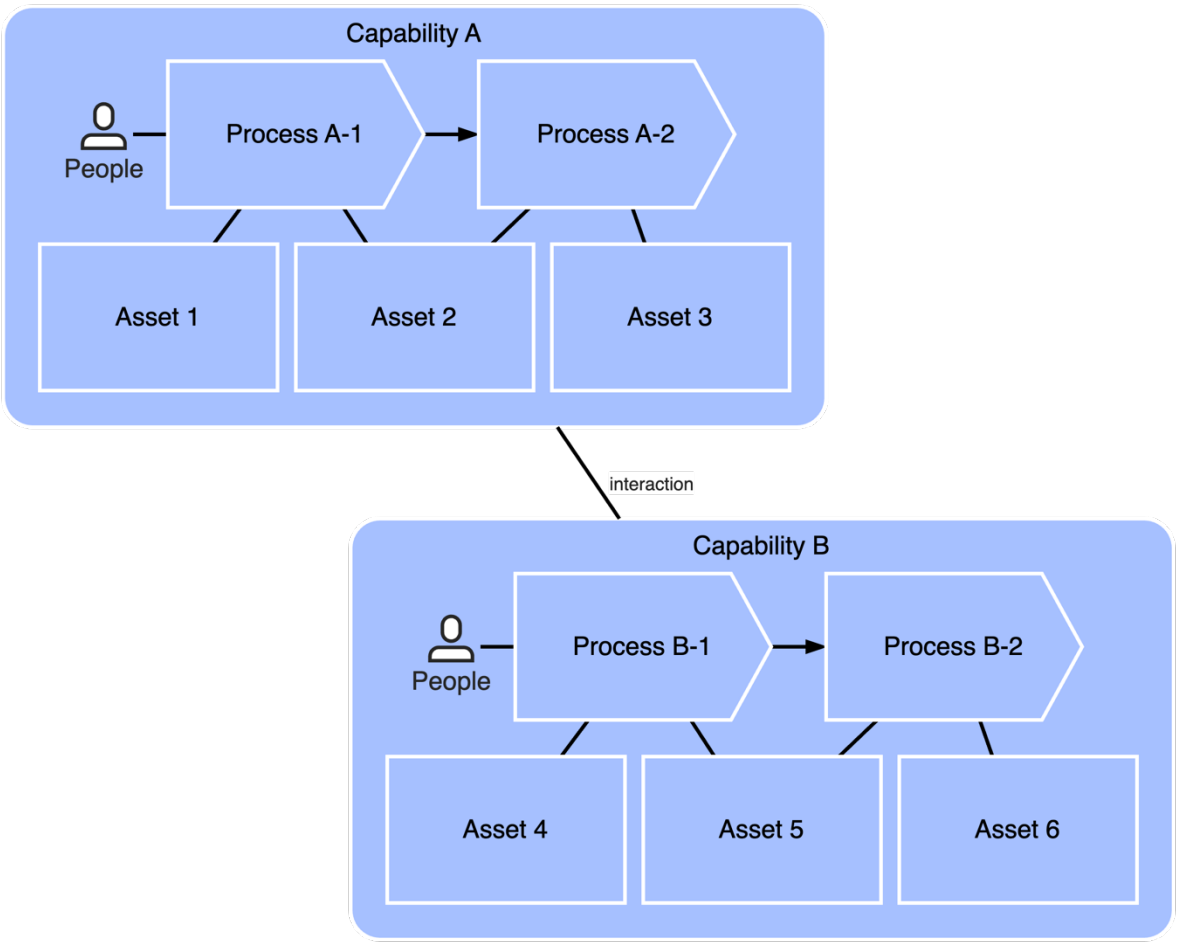


Figure 192: Capability interactions.

Business Agility. Real business agility can be achieved by having adaptable business components. Business agility is the ability to adapt to changing conditions in the business environment. Capabilities are the core building blocks of business.

Composable Business. (Analogous to previous *business agility*.) Capabilities are basic units of concept *composable business*, which refers to businesses that can adapt to changing conditions by utilising clearly defined functional business components. These components provide certain services and/or outputs. They have clear boundaries, as they are autonomous and largely self-contained. Capabilities meet those demands.

Capabilities are fundamental building blocks of the business.

See the template Capability Assessment (10.5.18). A capability can be analysed not only based on its content, but also other attributes such as purpose, goals, costs and risks, as well as customer related aspects such as customer needs and benefits.

6.3.3.4 Capability Attributes and Properties



A capability is a composition of elements that belong together: all what is needed so that an enterprise can perform certain capability. As such, a capability consists of people with skills and competences, processes and assets such as applications and data. Capability-Based planning extends the core content of a capability to other aspects such as ownership- and financial aspects. This enables us to connect all the relevant elements around a capability to make visible all what affects or is affected by a capability.

A capability can be connected with aspects such as ownership, costs, risks, goals etc. as shown in the figure below.

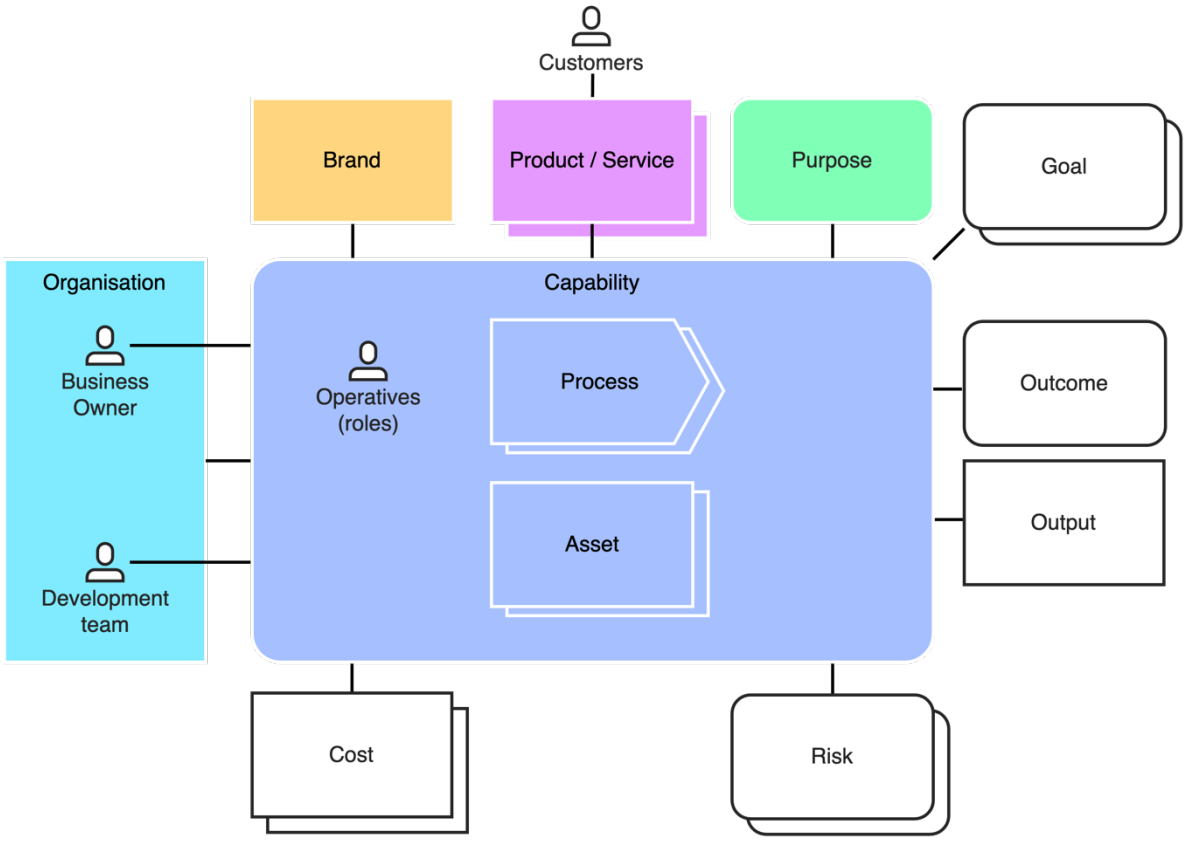


Figure 193: Extended Capability with related elements.

6.3.3.5 Capability Decomposition



Capability map introduces all the capabilities of an enterprise in different levels, typically in 1 to 3 levels. Decomposition of capabilities is breaking down a high-level capability into smaller, more specific sub-capabilities. This helps businesses better understand and manage the individual components (elements) that contribute to overall business success. By decomposing capabilities, an enterprise can more effectively allocate resources, improve processes, and drive targeted improvements according to strategic goals and more operational change activities.

The figure below introduces high-level Claims capability that consists of several detail level capabilities.

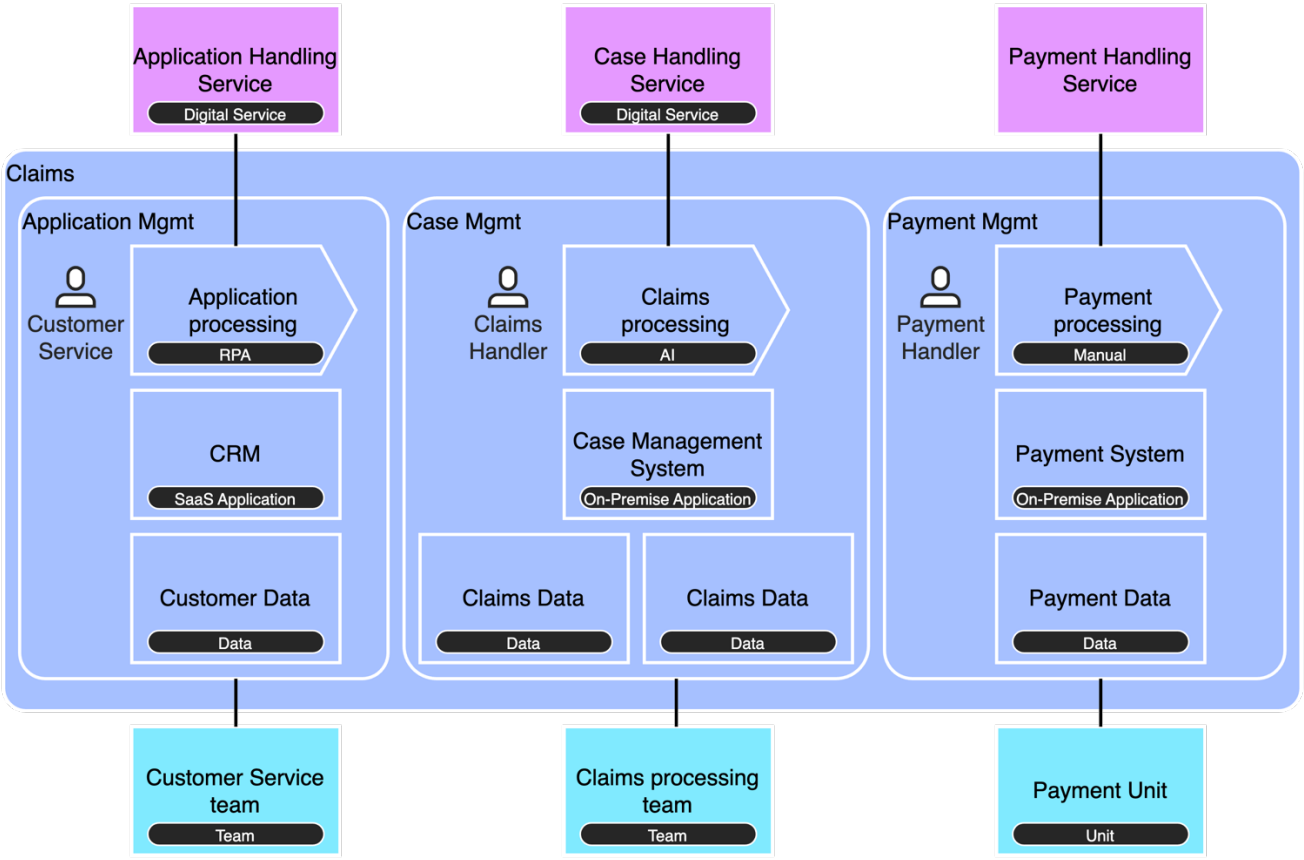


Figure 194: Claims Handling capability split into lower-level capabilities.

6.3.3.6 Capability Interactions

Though capabilities are abstract by nature, they can exchange information with each other, just like more concrete elements such as processes, applications, and organisations.

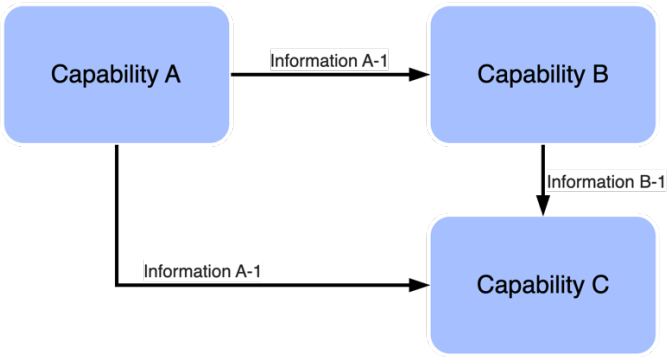


Figure 195: Information flows between capabilities.

6.3.3.7 Capability Map

A capability map is the master structure of an enterprise, as it contains all the major abilities from which the business is made. A capability map is a one-page illustration of what an enterprise does. A capability map is the *base map* of the business.



A business capability map is a visual representation of the enterprise's key capabilities. It usually categorises capabilities into groups (such as operational, strategic, or customer-facing). This map can be used for assessing the enterprise's readiness for strategic changes, identifying improvement areas, and guiding resource allocation etc.

An example structure of a capability map can be e.g. as shown below. A capability map can be divided into groups that highlight the purpose of capabilities. A good practice is to divide capabilities into groups that make it easy to interpret the relevance of capabilities based on their behavior.

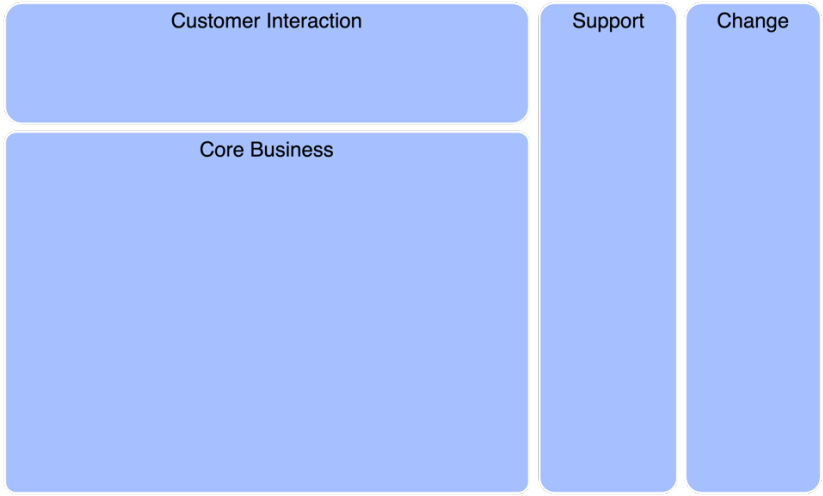


Figure 196: Capability map structure.

Example capability map shown below.

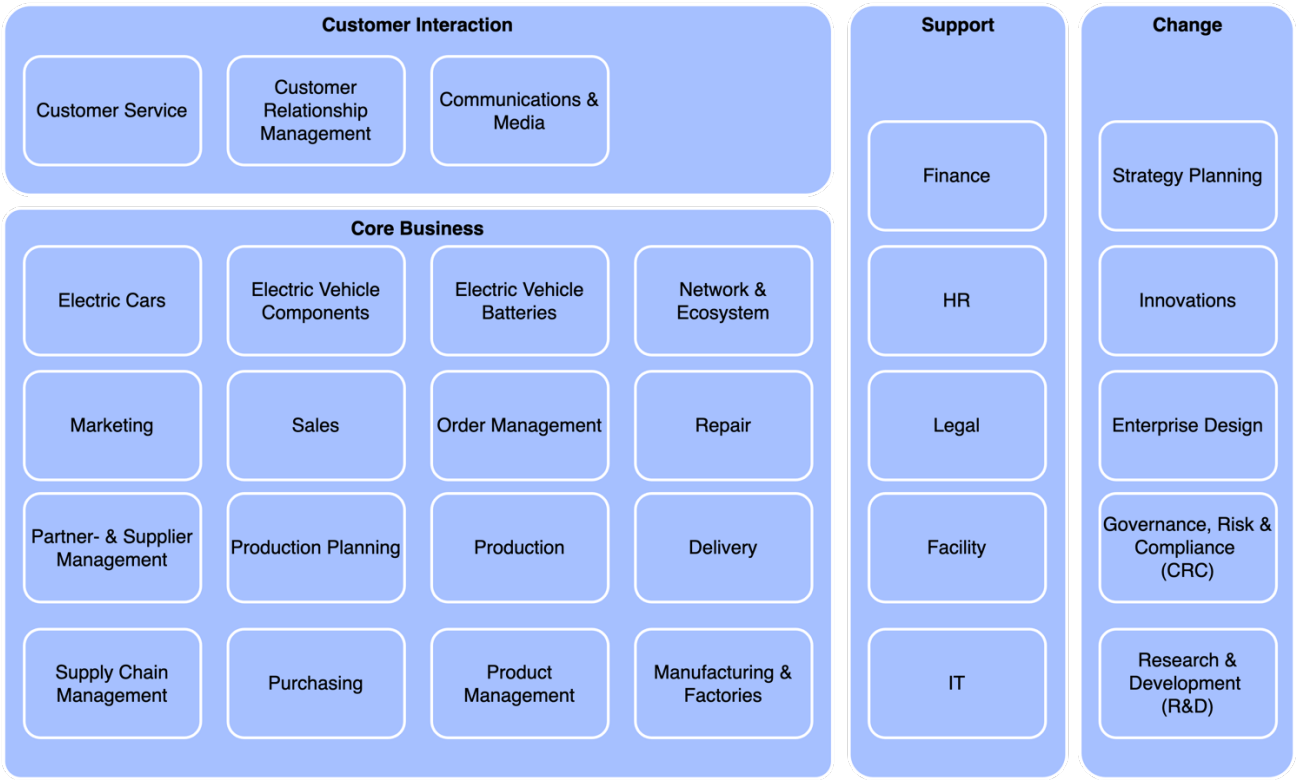


Figure 197: Capability Map example.

6.3.3.7.1 Capability Map as Heat Map

Capability map can be enriched with extra information by tagging. Tags and metrics can be used for e.g. risk management purposes, which adds risk statuses on each capability.



Figure 198: HeatMap of a Capability Map.

6.3.3.8 Capability levels



A capability map can contain a few levels of capabilities, e.g. 1) high-level business areas and then 2) atomic capabilities underneath. A good practice is to group the capability map into a) customer-facing capabilities, b) core business capabilities, c) supporting capabilities, and d) change capabilities (which enable the management and transformation of other capabilities and the entire business).

It is suggested to identify capabilities of few levels, e.g. three (3) levels.

Capability levels can be e.g. as follows:

- Level-0: high-level capability **categories** (e.g. Customer Interaction, Operations, Support and Change)
- Level-1: Business relevant **capability areas**
- Level-2: Capability **groups**
- Level-3: Base **capabilities** (mostly specific, atomic capabilities, e.g. Invoicing, Dept Collection)

Note that a capability can be decomposed into more specialised capabilities as shown below.

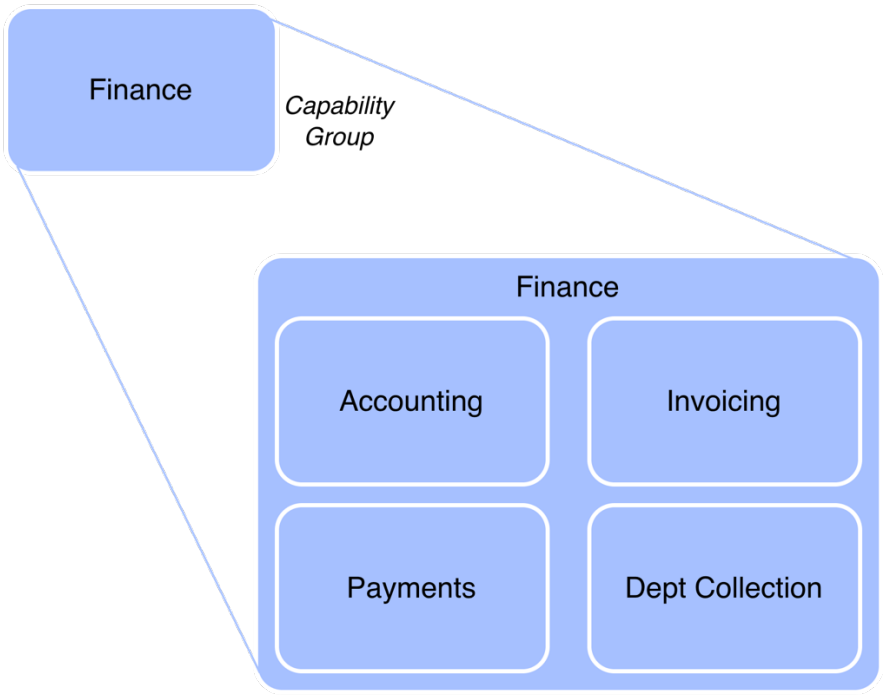


Figure 199: Capability groups consist of specific capabilities.

6.3.3.9 Composable Business Architecture



Capabilities are the building blocks of the composable business architecture of the enterprise. This makes the *capability first* approach a guiding design and development principle.

Enterprise's business architecture consists of business capabilities, that represent the modular *business components* from which the business of an enterprise is made of. These capabilities, the business components, enable the *composable business*.

Each business capability represents a logical unit that is essential for the operational functioning of the enterprise. A capability has a defined purpose that justifies its existence based on pure business criteria: operational business requires specific capabilities to function in alignment with the enterprise's identity and strategic direction.

A composable business architecture consists of capabilities, each of which performs specific behavior that is crucial for operational business. Capabilities are organisational abilities to execute necessary activities of the operational business. Capabilities represent both a) the operational and b) the supporting business components (building blocks). They represent the organisational outcomes that are required by the operational business of the enterprise.

Capabilities are the building blocks of the composable business architecture.

Capabilities are the high-level business components that encapsulate their internals from strategic level. This enables enterprise to adjust its performance according to changing conditions. In other words, capabilities make the business composable and adaptive for new and changing requirements and possibilities. Capabilities represent *what* is needed for the business while hiding the details of *how* this behavior is performed, by who and by which resources.

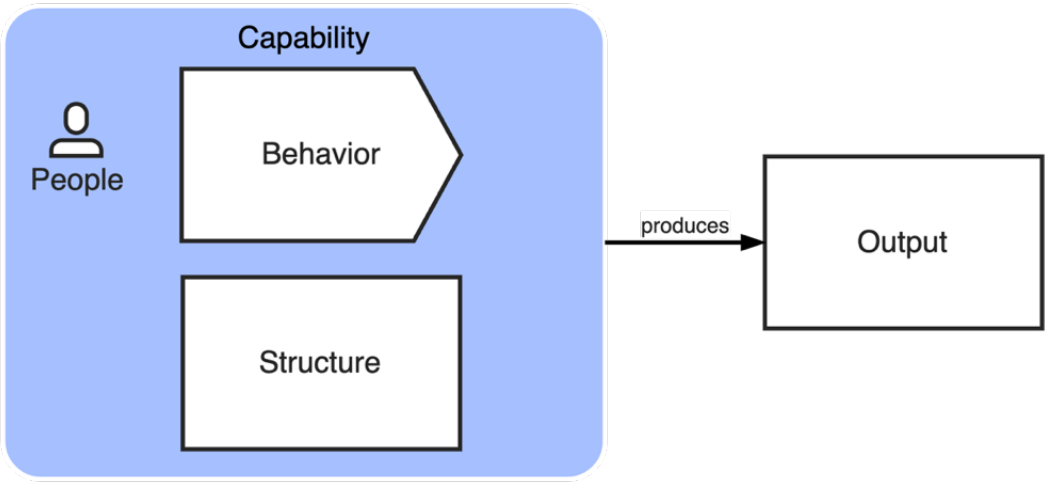


Figure 200: Capability - composable business component.

A capability provides ***what*** is needed for the business and hides the complexity of ***how*** the behavior is implemented.

A capability is a center of gravity that magnetises things that belong together. A capability exposes its behavior by products and/or services. A capability can be connected with certain organisation structures. Capabilities are required for producing the offerings (products or services) of the organisation.

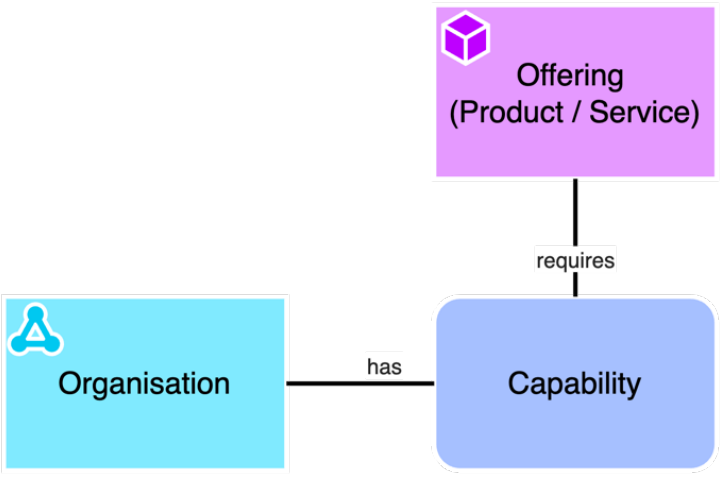


Figure 201: A capability is required for the delivery of an organisation's offerings.

Capabilities provide coarse grained granularity of components that can be used as composable building blocks of the operational business of the enterprise.

Note! *Composable Architecture* is another concept that defines adaptable applications as composable assets. All the business logic is available as composable API enables assets. So *composable architecture* is more application-level concept, whereas *composable business architecture* is on higher level, on business level.

6.3.3.10 Business Capabilities as Business Components



A business capability is a business component as it represents a self-contained, modular, reusable building block of what an enterprise must be able to do to achieve its strategic goals. Business capabilities are, just like software components in IT:

- **Modular** - They function independently but connect to other capabilities.
- **Reusable** - The same capability (e.g., "Customer Support") can support multiple products or services.
- **Composable** - Composed of elements. Each capability consists of people roles, processes, and assets (such as applications, data, and facilities).
- **Adaptable** - Can be reconfigured as business models evolve.
- **Technology-Agnostic** - Defines business needs first, allowing different IT solutions to enable them.
- **Enabling Value Delivery** - Capabilities enable the production and delivery of products and services to customers.

Business Capabilities act as composable business components, enabling enterprises to remain agile, scalable, and adaptable to change. Business capabilities integrates both behavior (activities, processes) and structure (assets and other resources). They are core building blocks that enables an enterprise to produce and deliver its offerings (products and services) to customers.

Whenever an enterprise plans to change, optimize, or transform its business operations, the first step should be scanning business capabilities.

A. Business capabilities define what the enterprise can do → They represent the core abilities of an enterprise.
B. All business operations depend on underlying capabilities → Every operational function is enabled by capabilities, every product or service is created by capabilities.
C. Business capabilities contain all other enterprise elements → They include people, processes, and assets, making them the most comprehensive way to assess impact before change.

Without scanning capabilities first, changes may fail, cause inefficiencies, or disrupt operations due to a lack of alignment with existing structures.

A **Business Capability** is a **business component** as it is a self-contained building block that enables an enterprise to perform a specific ability necessary for its operations.

6.3.3.11 Capability Scan



Framework for scanning business capabilities before making changes to business operations. **Principle**: *Capability First*.

Business capabilities define what an enterprise can do, and all business operations are enabled by underlying capabilities. Since business capabilities contain all key enterprise elements (such as people, processes, and assets), they should be scanned first whenever changes are planned in business operations. This ensures that transformations are feasible, sustainable, and aligned with strategy without causing unintended disruptions.

This description, the *Capability Scan*, provides a structured framework for scanning business capabilities before making operational changes.

To scan capabilities first according to capability scan approach we can:

- Ensure feasibility – Determine whether existing capabilities can support the planned change.
- Prevent operational disruptions – Identify dependencies between capabilities to avoid bottlenecks.

- Optimize resources – Highlight necessary improvements in people, processes, applications, and technology before committing investments.
- Support a modular approach to change – Allow enterprise to reuse, upgrade, or enhance capabilities instead of unnecessary redesigns or redundancies.
- Align with strategy – Ensure that changes contribute to long-term business goals and enterprise identity.

Capability scanning process before business changes:

- Step 1: Identify affected business capabilities
  - Define the planned operational change against the **capability map**.
  - Map which business capabilities are directly or indirectly impacted with.
  - Consider cross-functional dependencies with other capabilities.
- Step 2: Assess capability readiness & maturity
  - Evaluate whether the capability is strong enough to support the change.
  - Identify strengths, weaknesses, and improvement areas in:
    - People roles, skills & competencies (are skilled employees available?)
    - Processes & workflows (are they efficient and automated? Lean?)
    - Applications, technologies & assets (are the IT applications, data adequate?)
- Step 3: Check capability dependencies & integration points
  - Identify if other capabilities rely on or interact with the affected capability.
  - Ensure smooth integration with IT applications, and business processes.
  - Prevent silos by aligning with enterprise-wide capability maps.
- Step 4: Determine if capability enhancements or new capabilities are needed
  - Decide if existing capabilities can be modified, scaled, or enhanced to support the change.
  - Identify gaps that require new capabilities to be developed.
  - Prioritize investments based on business impact.
- Step 5: Align capability adjustments with strategy & business model
  - Ensure that capability changes support enterprise goals and strategic direction of the business model.
  - Verify that adjustments align with customer needs and value proposition.
  - Conduct a risk assessment to minimize disruptions & verify security aspects.

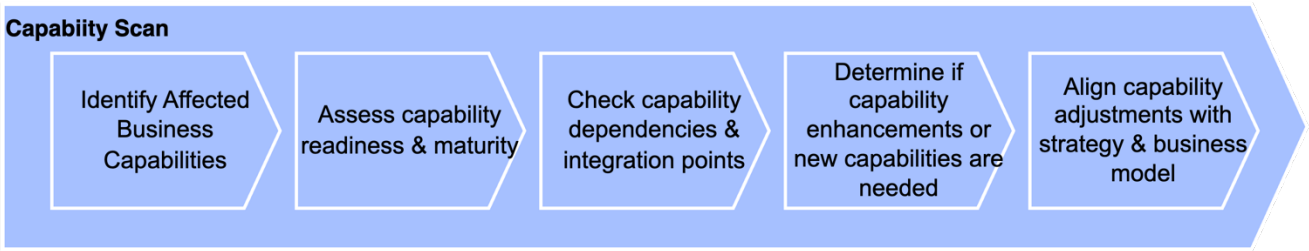


Figure 202: Capability scan process.

Capability scanning checklist:

- Have all relevant and affected capabilities been identified from the capability map?
- Are the people, processes, and technology within the capability sufficient to support the change?
- Have capability dependencies and integration points been assessed?
- Does the capability need enhancements or a completely new design?
- Are the adjustments aligned with the enterprise's long-term strategy?

Business Capability Scanning as the Foundation for Change:

- Before making changes to business operations, scanning business capabilities ensures a structured, risk-free, and strategically aligned transformation.
- Capabilities contain all necessary enterprise elements (people, processes, assets, and technology).
- Ensures changes are feasible, sustainable, and disruption-free.
- Helps businesses optimize investments and scale capabilities efficiently.

Business capability scanning is the foundation for change.

6.3.4 Process

A process is a set of related activities our enterprise carries out [3]. Processes are modeled with the EDGY *Process* element.



A process is a series of related activities that are performed in a specific sequence to achieve a particular business outcome.



Processes are designed to convert inputs into outputs in a way that adds value to the enterprise and its customers: a) business value and b) customer value. Processes can span across different units or departments and involve various stakeholders.

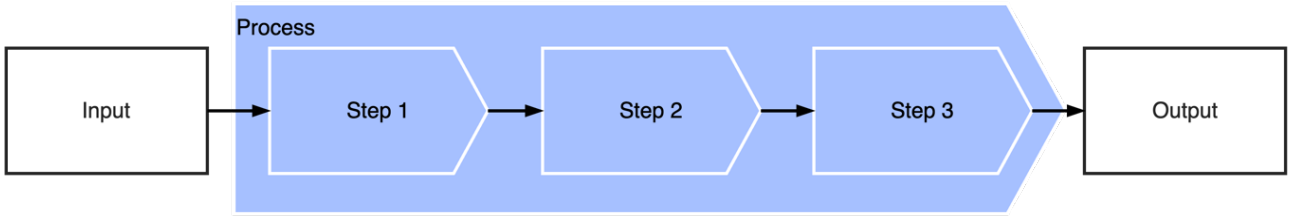


Figure 203: Process is flow of activities.

6.3.4.1 Process Flow

An example of a process flow, sequential steps of activities.

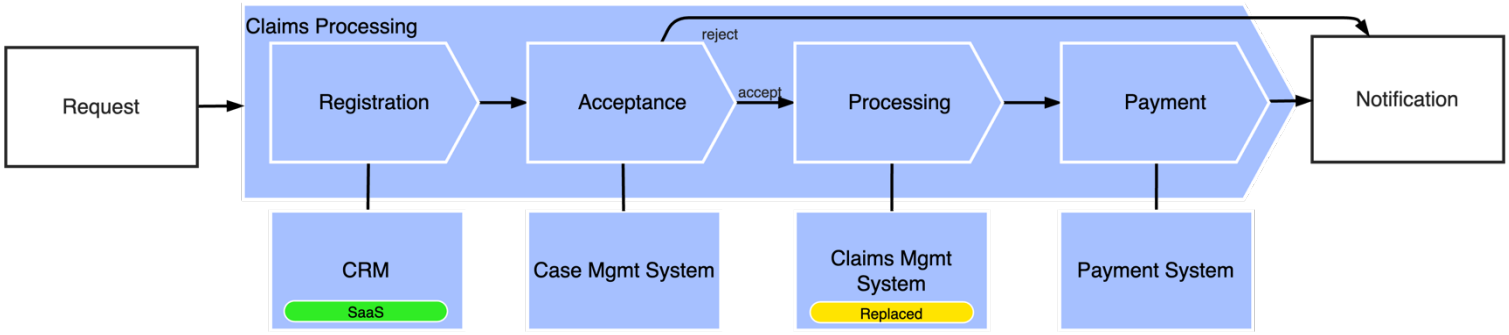


Figure 204: Claims process simplification.

Input and output are modelled with the EDGY *Object* elements as shown above, when they represent abstract business concepts.

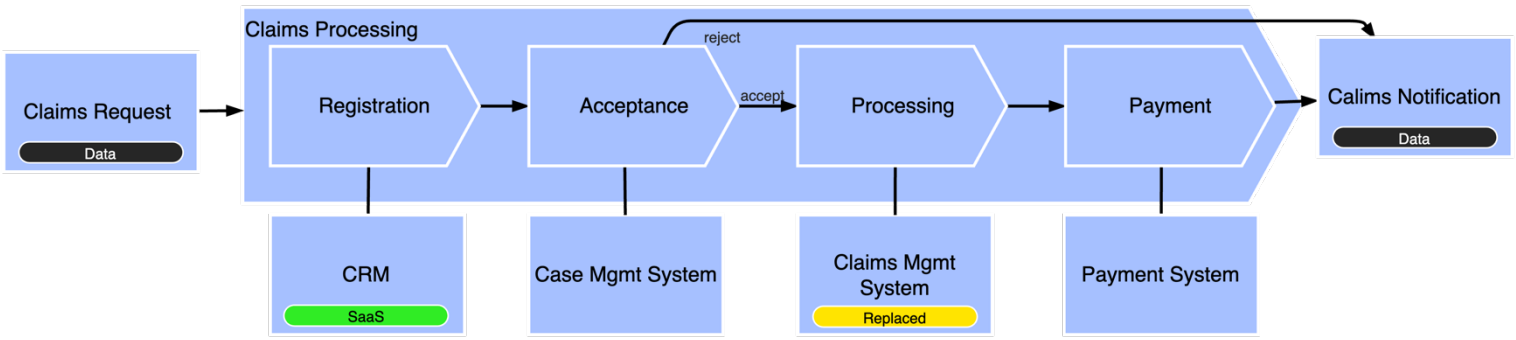


Figure 205: Claims process simplification (with input and output as Asset elements).

Alternatively, these objects can be modelled with EDGY *Asset* elements, if the input and output are actual data elements as shown below.

Alternatively, a process can be triggered by a business event (request), and finally the process throws a business event (notification). These business events and modelled with the EDGY *Outcome* elements as shown below.

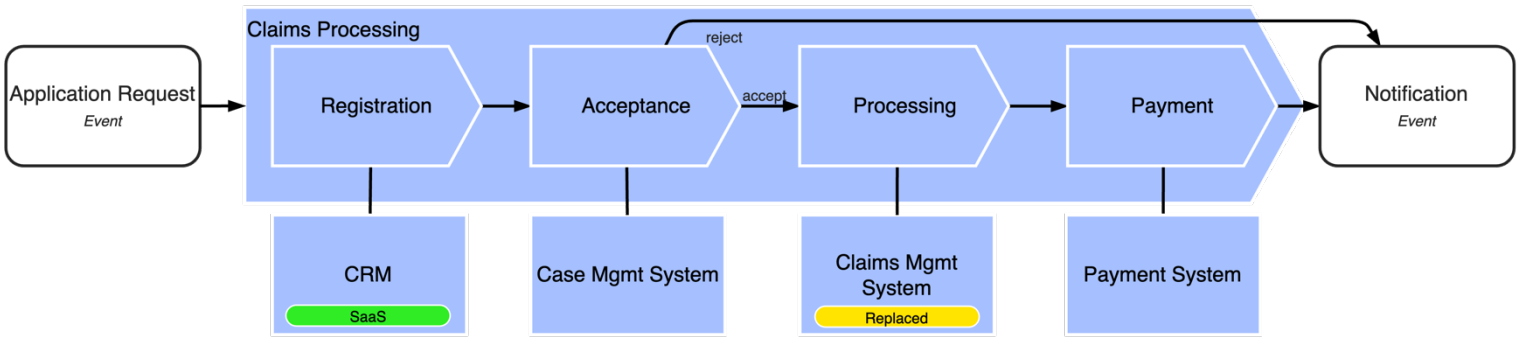


Figure 206: Claims process simplification that is triggered by a business event and throws a business event.

Decision points in processes (i.e., branching) can be modeled using the EDGY *Activity* element, to distinguish them from other process steps. In fact, a decision is an activity - something that someone (or something) does, not just a point where the flow splits.

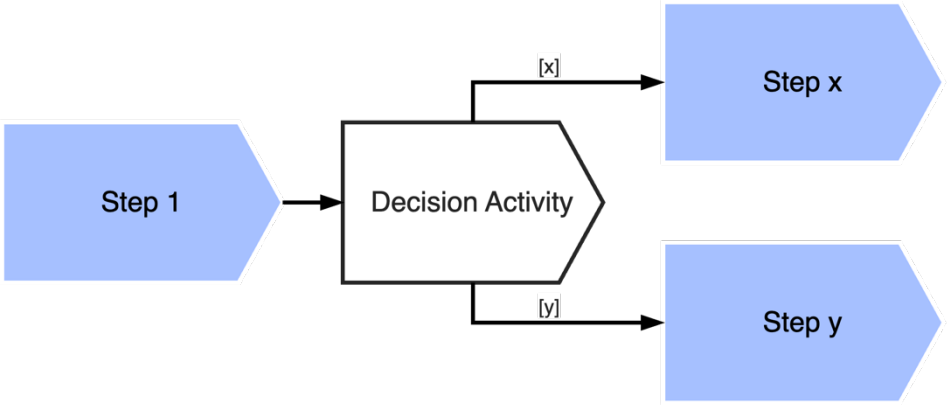


Figure 207: Decision point modelled with the EDGY Activity element.

To improve readability, a decision activity can be visually represented using a smaller-sized *Activity* element as ahown below.

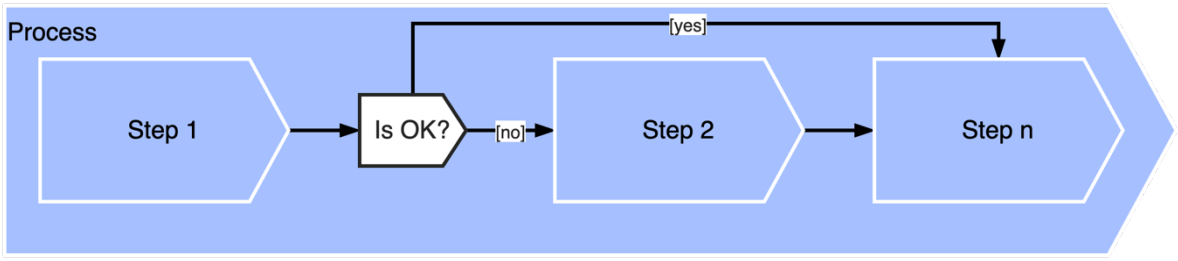


Figure 208: Decision point modelled with the EDGY *Activity* element.

Another example for modeling a “fork” decision point is shown below.

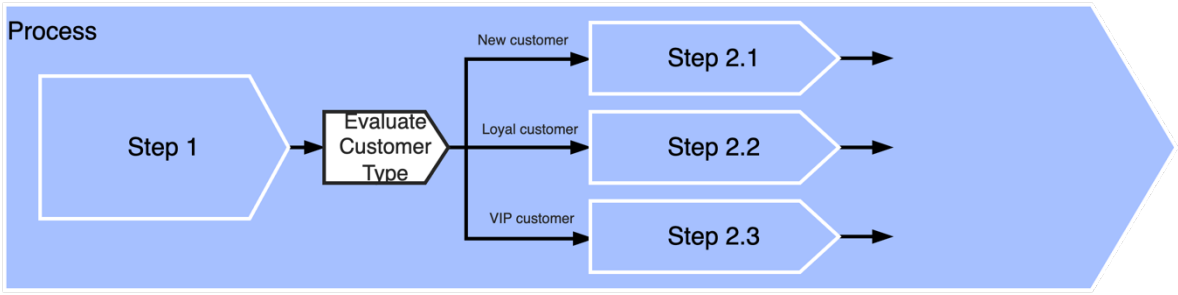


Figure 209: A “fork” decision point.

Another example is the use of labels to provide additional information - helping to save space in the diagram.

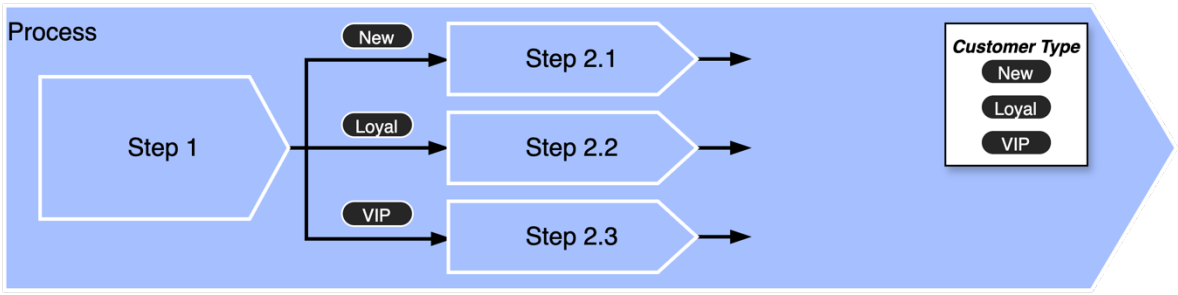


Figure 210: Labels used as additional information.

Color coding can be used - with any appropriate colors. Example with default colors below.

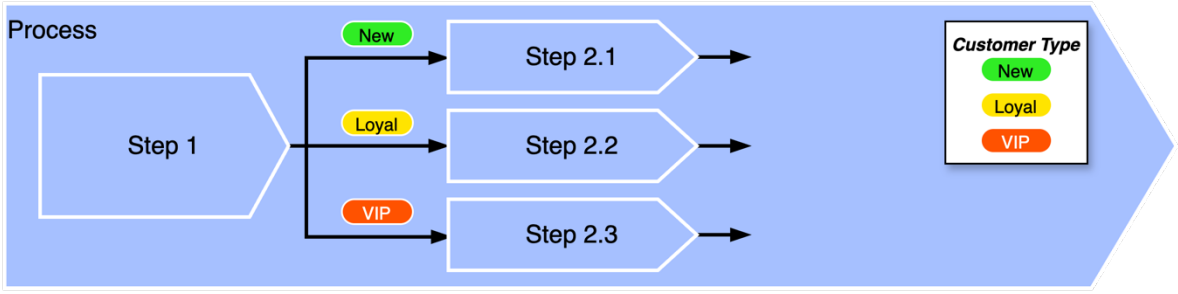


Figure 211: Color-coding example.

The flow of a process can be modelled with ‘swimline-like’ diagram, in which the actors of the process steps are shown as horizontal swimlines. The actors are the organisation structures, each of which performs certain steps of the overall process. Customer actions can be illustrated when appropriate.

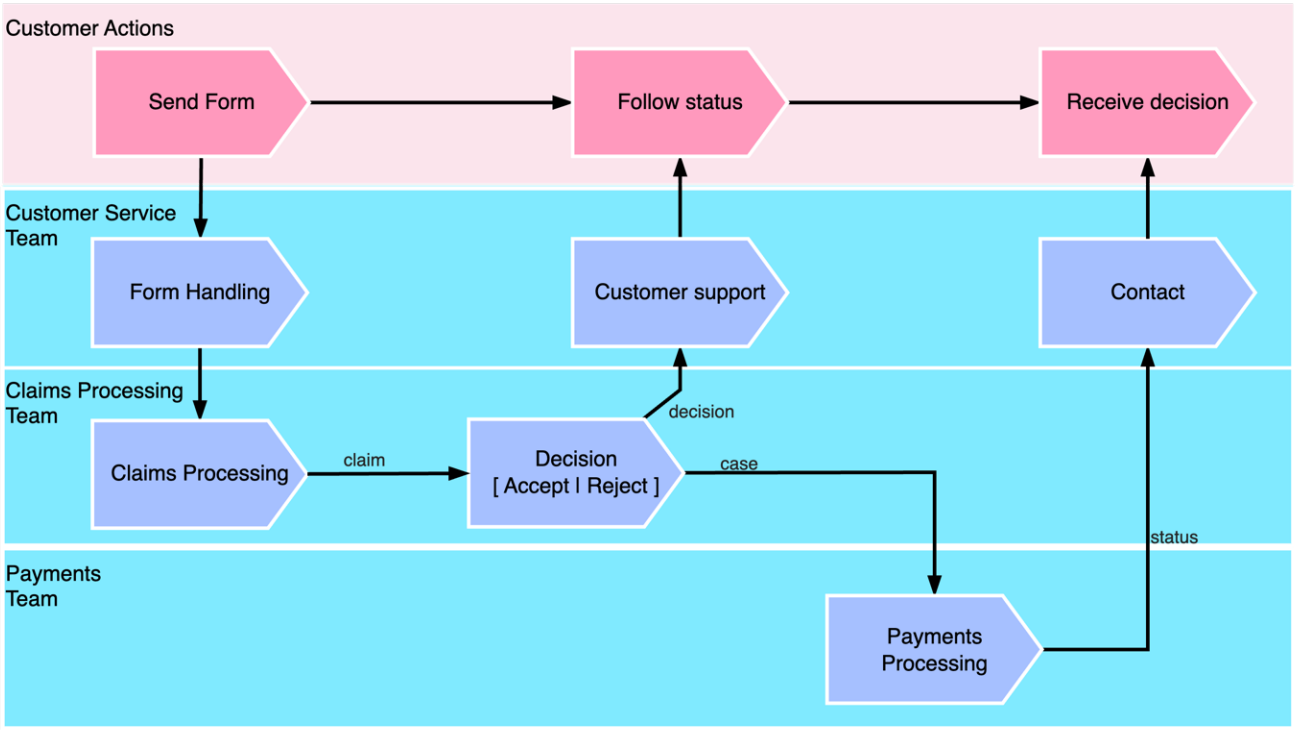


Figure 212: The process flow with organisation structures as 'swimlines' / actors.

6.3.4.2 Business Outcome-Driven Design with System Case

A system case (analogous to Use Case but without user initiation) defines an end-to-end process that spans multiple applications. Defining a system case can be initiated by identifying first the business outcome(s) to be achieved. This *business outcome-driven* planning starts with the desired end-result and then identifies all the required activities to achieve it.

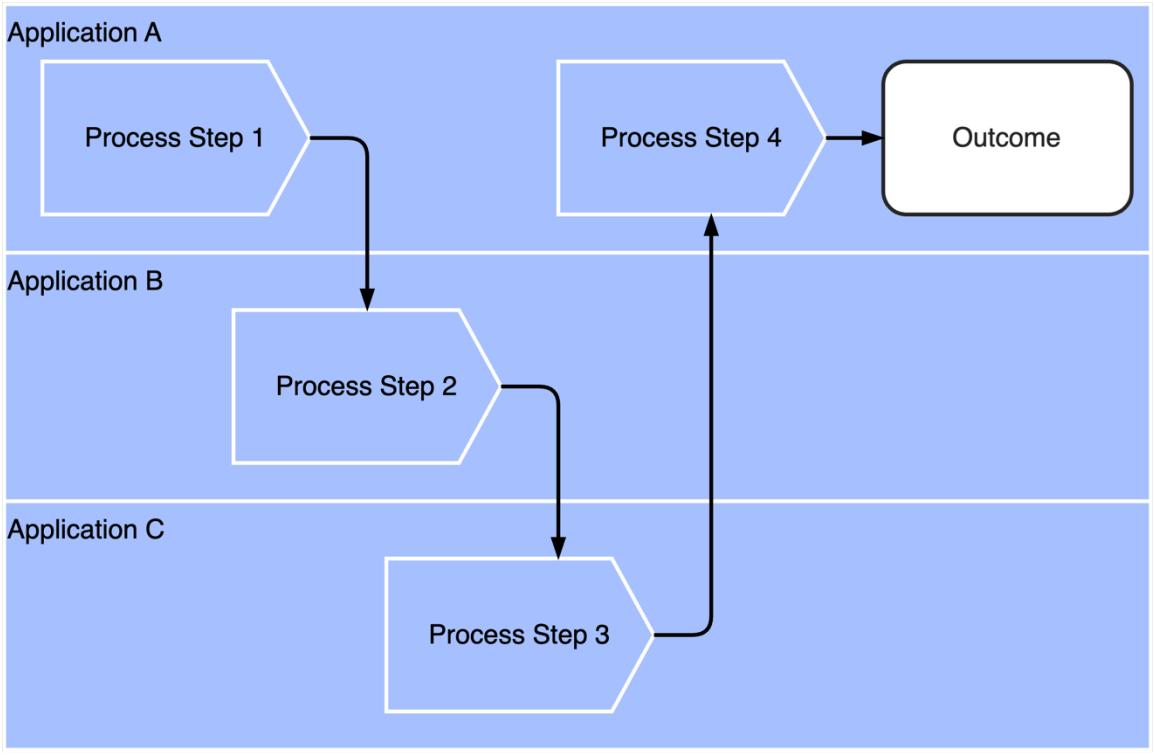


Figure 213: *Business outcome-driven* design visualisation is self-explanatory.

6.3.4.3 SIPOC (Suppliers, Inputs, Process, Outputs, Customers)

Six Sigma tool called SIPOC (***S****uppliers,* ***I****nputs,* ***P****rocess,* ***O****utputs,* ***C****ustomers*) can be used for defining elements common to all processes. This is an easy tool for analyzing the business case: what is the value the customer gets and how. EDGY object element is used for modelling inputs and outputs.

Which elements to use, depends on the context and what is appropriate to fit the purpose. The SIPOC pattern shown below.

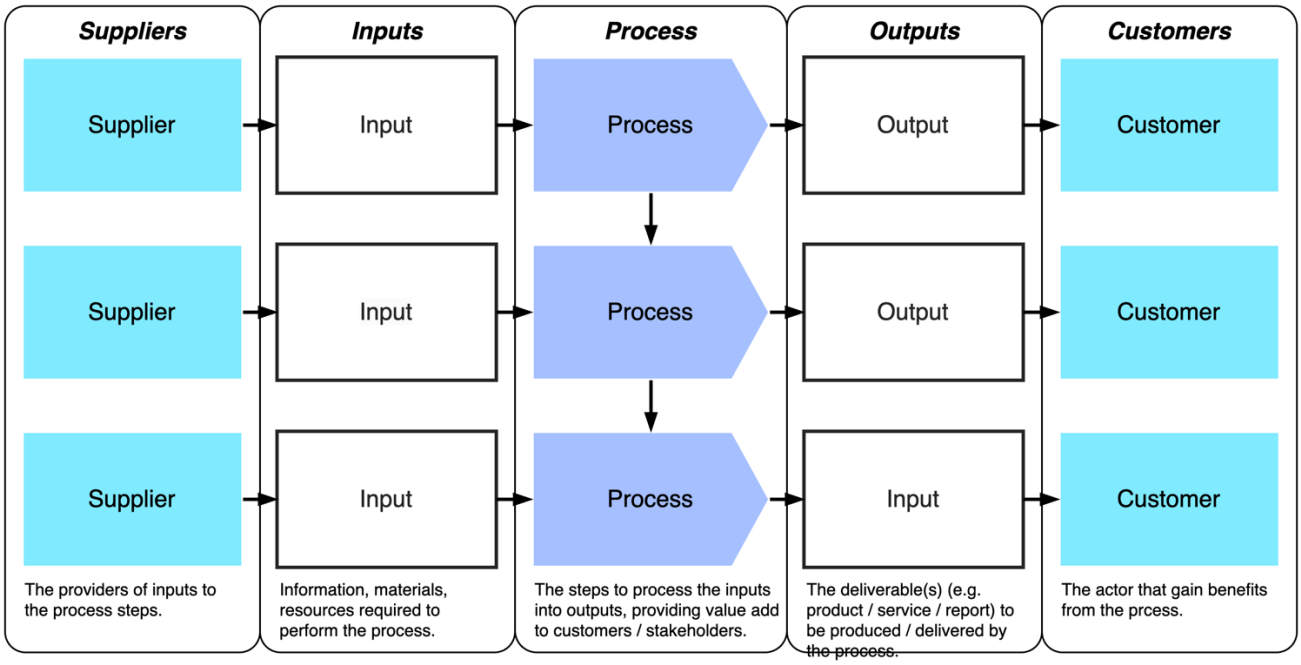


Figure 214: SIPOC pattern.

SIPOC consists of basic elements as shown in the figure below.

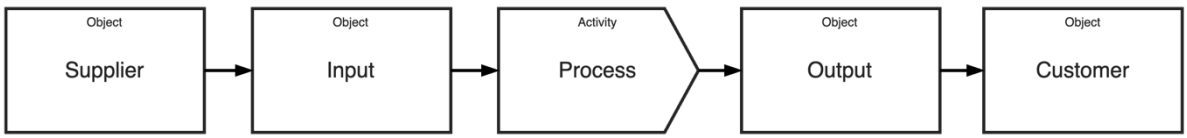


Figure 215: SIPOC basic elements.

SIPOC elements can be specialized as shown below.

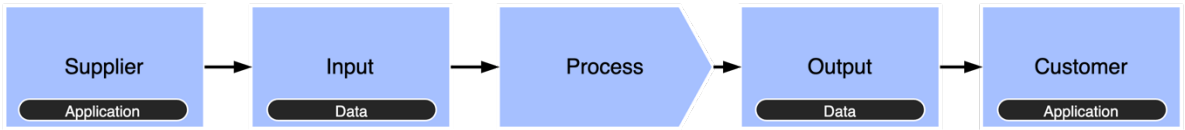


Figure 216: Specialised elements of the SIPOC.

All the SIPOC elements can be modelled with the asset element only for the sake of simplicity as shown below.



Figure 217: SIPOC modelled with the asset elements only.

6.3.5 Asset



An object we need and use to perform our capabilities [3]. Assets are modeled with the EDGY *Asset* element. Assets are resources that the enterprise owns or controls and that have economic value. These assets are used in the operation of the business to create value, provide goods or services, or support the overall goals of the organization. Enterprise assets are anything of value that the enterprise can leverage to achieve its business goals.



Assets can be classified into several categories as shown below.

Asset categories		
Category	Sub-category	Description
Tangible Assets	Physical Assets	Physical items that the business owns. E.g. buildings, machinery, vehicles, equipment.
	Financial Assets	Cash, investments, stocks, bonds, and accounts receivable, money.
	Real Estate	Property owned by the enterprise.
Intangible Assets	Intellectual Property (IP)	Patents, trademarks, copyrights, and trade secrets. Legal rights that protect the enterprise's innovations or brand.
	Brand Value	The perceived value and reputation of the enterprise's brand.
	Customer Relationships and Goodwill	The value derived from relationships with customers and other stakeholders, including customer loyalty and reputation.
	Software and Digital Assets	Proprietary software, databases, and digital platforms owned by the enterprise.
Human Assets	Employees (Human Capital)	The skills, competences, experience, and explicit and implicit (tacit) knowledge that employees bring to the enterprise, often referred to as human capital.
	Talent and Expertise	Specialized knowledge, intellectual capabilities, or expertise that the workforce contributes to the enterprise.
Operational Assets	Technology and IT Infrastructure	Computers, software, networks, servers, and other technology systems that support the enterprise's operations.
	Processes and Systems	Established methods and practices that allow the enterprise to operate efficiently and provide consistent services and/or products.
Natural Resources	Raw Materials	Any natural resources the enterprise owns or has rights to (e.g., minerals, oil, water).
	Energy Resources	Energy reserves or access rights to energy resources.

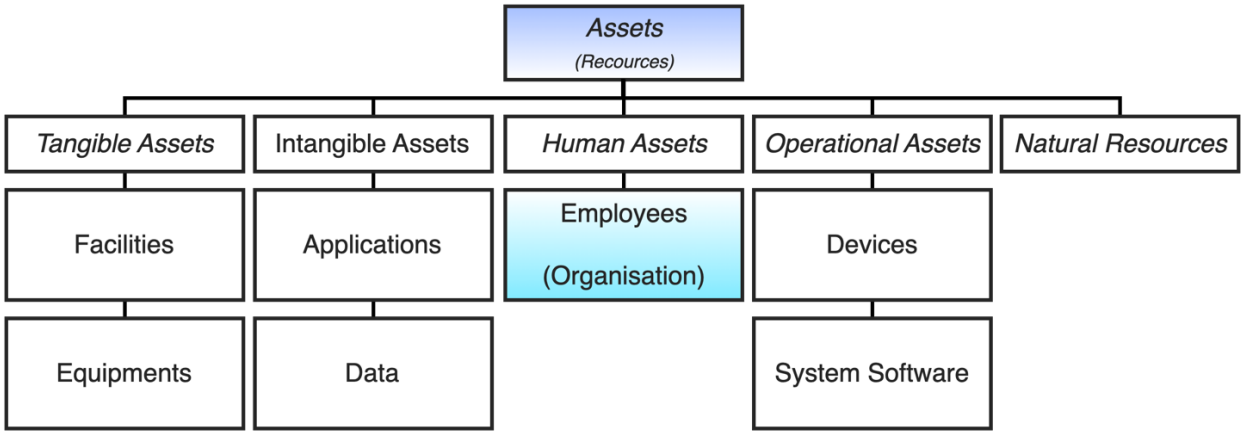


Figure 218: Asset categories and some examples.

Examples of assets below.

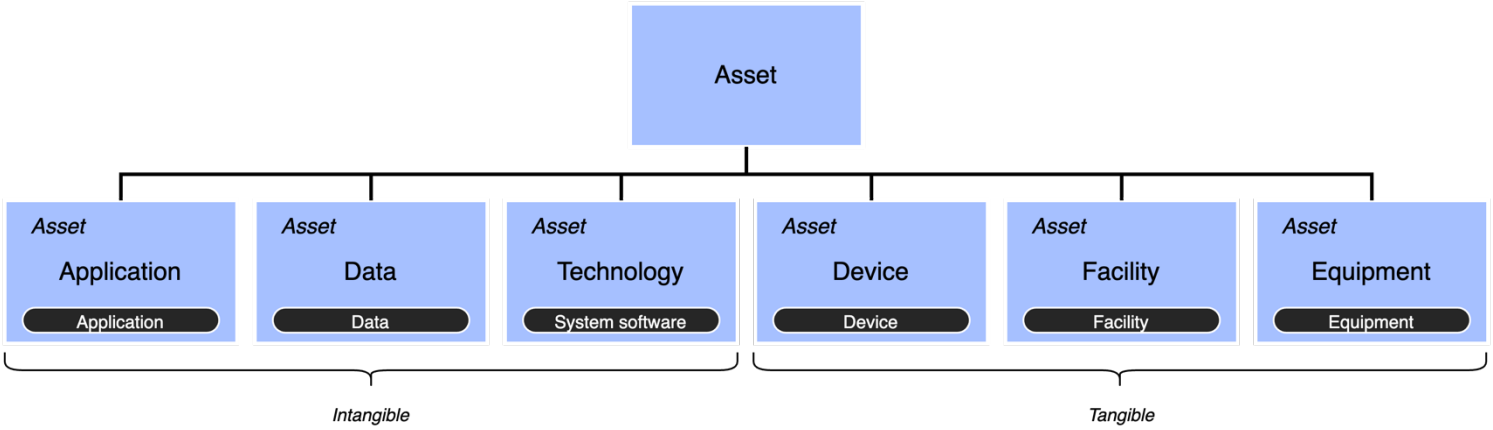


Figure 219: Asset examples.

6.3.6 Architecture Modeling Extensions: Tags and Metrics

Tags and/or metrics are associated with any EDGY elements such as *Asset* elements. There can be cases where an asset element can be associated with several tags and/or metrics, which can be positioned one below the other (figure below).



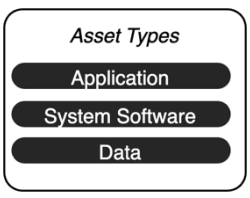


Figure 220: Tags and/or metrics attached to an asset element.

Tag. Different types of elements can be distinguished with the tag element. This can be necessary when it is important to precisely express the characteristics of elements. The use of tags makes the diagrams easier to interpret as the types of assets are made visible with declarative text, instead of special symbols that require extra knowledge.



There is a common set of asset types concerning application architecture. The minimum viable set, the short list, consists of the most typical asset types: 1) application, 2) system software and 3) data.



It suggested defining organisation context-specific asset types as tags, according to what is appropriate and fit the purpose, and then providing those tags within re-usable legend elements as shown below. This encourages to consistent modelling style.

A good practice is to avoid too many tags and metrics per element. It is preferred to use different views to focus on certain aspects such as business criticality or risk classification. Different versions of the diagram can be created for different purposes. The context typically explains the types. For example, an application architecture diagram titled “application architecture” implicitly implies that the asset elements are applications. Another good practice is to use ‘grouping’ of elements in the visualization tool (such as Draw.io or PowerPoint), so that the labels move together with the core element when it is moved in that diagram.

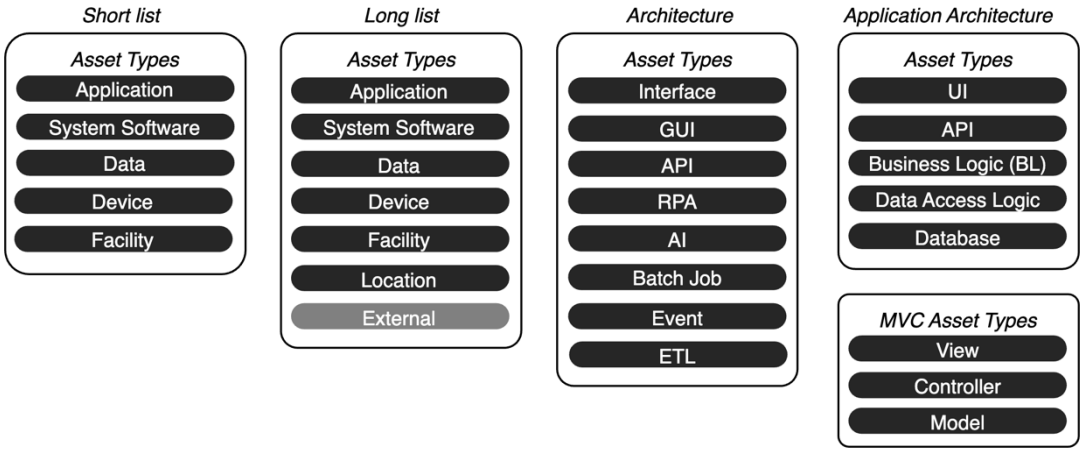


Figure 221: Tag labels for asset types.

In addition, there can be number of other asset types as shown below.

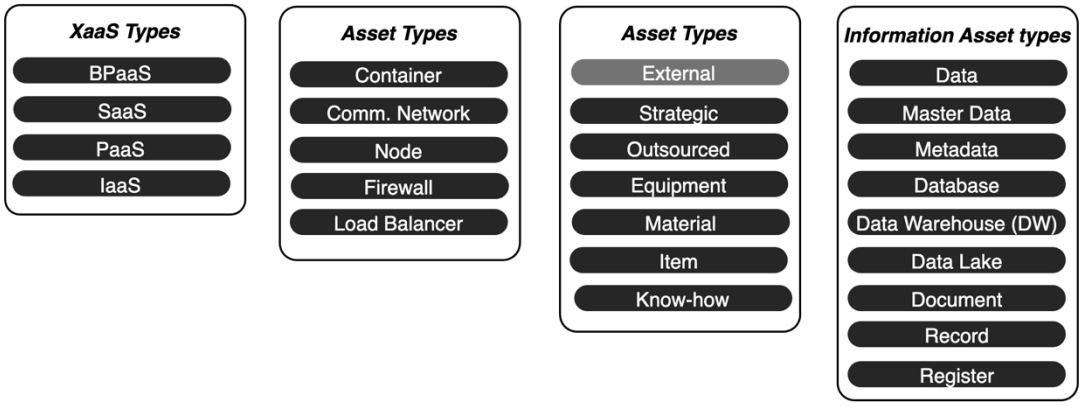
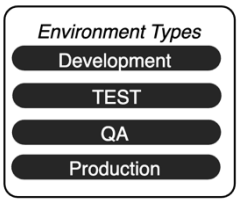


Figure 222: More examples of asset types.

IT environments can be identified as follows:



- **Development** environment for configuration, customization, and usage of source control to build an image of the target application to be promoted to another environment.
- **Test** environment for testing upgrade procedure against controlled data and performing controlled testing of the resulting target application.
- **QA** (Quality Assurance) environment for testing upgrade procedure against data, hardware, and software that closely simulate the Production environment and where the intended users can test the target application.
- **Production** environment for the actual business use.

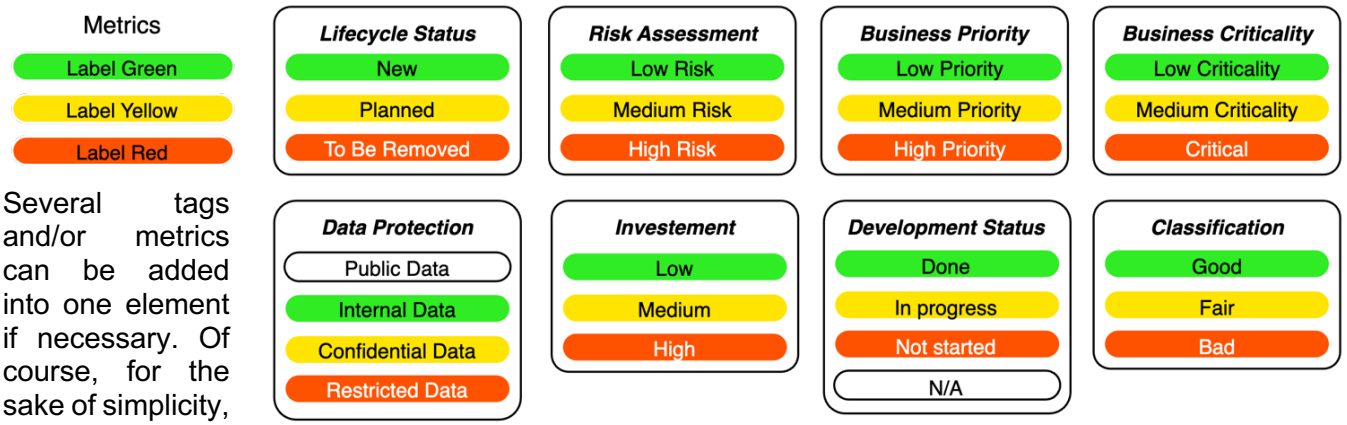
Assets and tags simplify the architecture for both modelers and users. The diagrams are easy to create and easy to understand:

- there is only a single element, the asset, for depicting any kind of asset,
- tags can be used for adding explanatory information to assets when appropriate.



Color-coding can be used for additional information, extra semantic, e.g. element borders can be colored as shown above. In addition, also the backgrounds of the elements can be colored (if the context of the diagram explains the types of the elements).

Metrics can be used for adding extra qualitative or quantitative definitions, or any kind of classifications such as risk assessment, priorities, criticalities etc.



Several tags and/or metrics can be added into one element if necessary. Of course, for the sake of simplicity, too much information and tags should be avoided.

Figure 223: Examples of metrics.

Tags and metrics and tags are small add on visual labels (elements) that can be added on top of the core element in the visualisation tool.



Figure 224: Examples of metrics associated with elements.

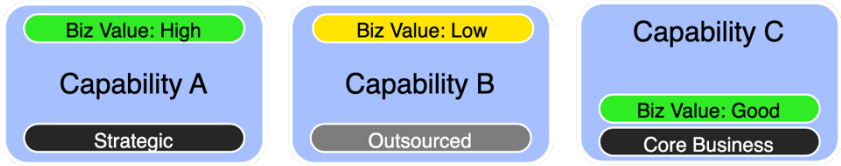


Figure 225: Extra information can be added with tags & metrics to elements.

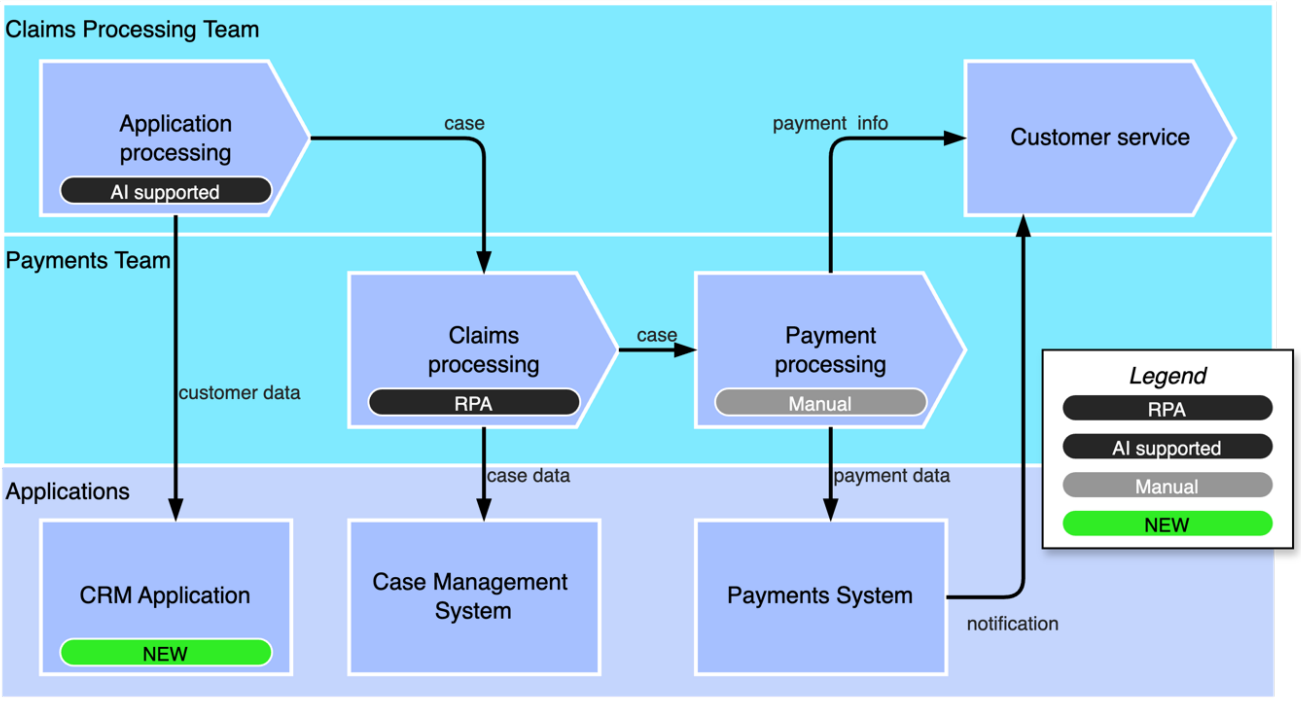


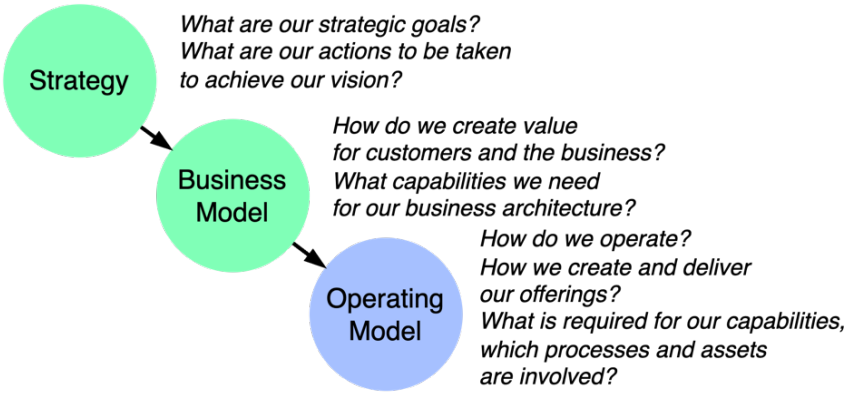
Figure 226: Process flow with tags & metrics.

6.3.7 Target Operating Model



The operating model of an enterprise is a blueprint for how the enterprise delivers value to its customers, stakeholders, and shareholders. It defines how the business is structured, what capabilities are required, how resources are allocated, and how processes, applications and technology are organized to execute the enterprise's strategy and achieve its goals.

An operating model serves as a bridge between the strategic vision of the enterprise (what it aims to achieve) and the day-to-day operations (how it gets things done).



The target operating model represents the targeted, to-be state of the operating model at high-level. The target operating model describes how the strategy and business model will be realised.

The modern business environment is more complex than ever before, with more challenging customer needs etc. This view is a tool that helps communicating which customer segments / -groups are served with which services, via which channels, etc. - according to strategic goals. A simplification of the target (to-be) operating model at high-level is illustrated on the figure below.

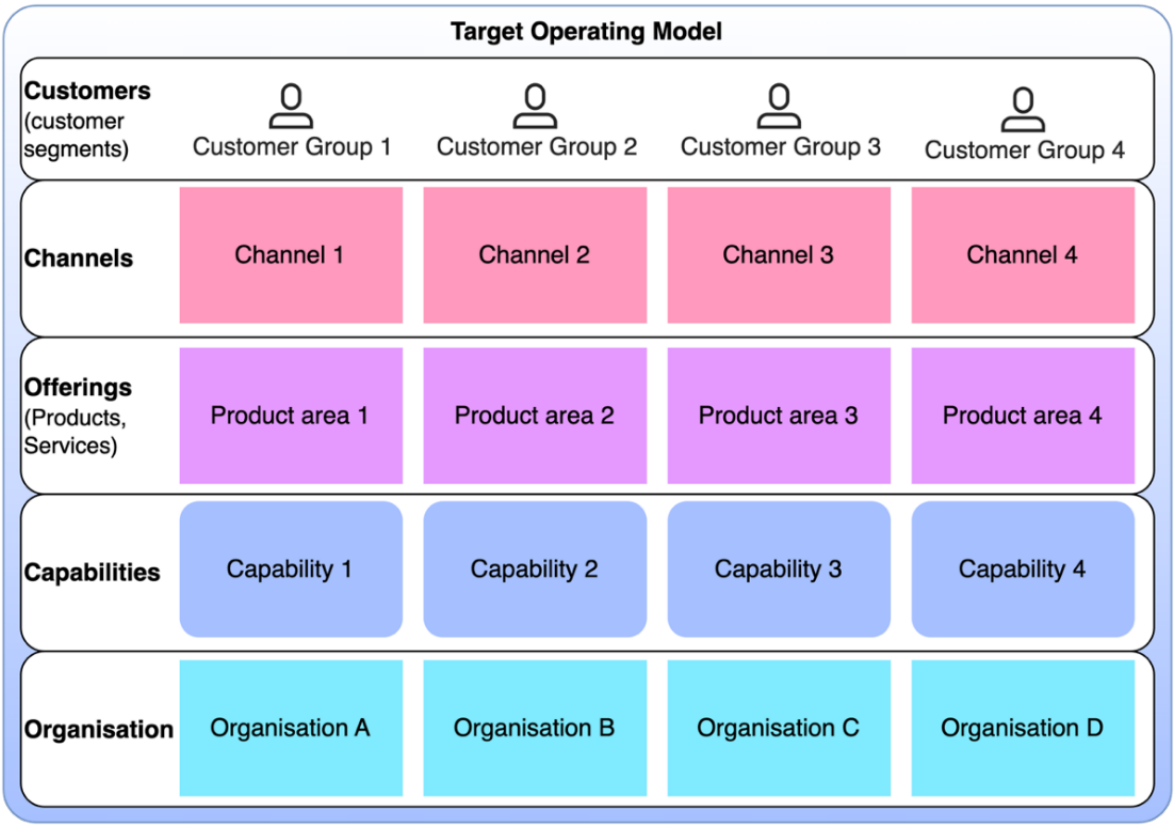


Figure 227: Target Operating Model.

6.3.8 Enterprise Map - the Milky Way Map (MWM)



A Milky Way Map is a visual representation of the whole business or some part of it. A Milky Way Map is a visualisation of the geography of the business of the enterprise. It shows *what* are the customer activities or tasks to be done, and *how* the enterprise serves those tasks, and *why* the enterprise is doing all this. The Milky Way Map is the map of the enterprise – the enterprise map.

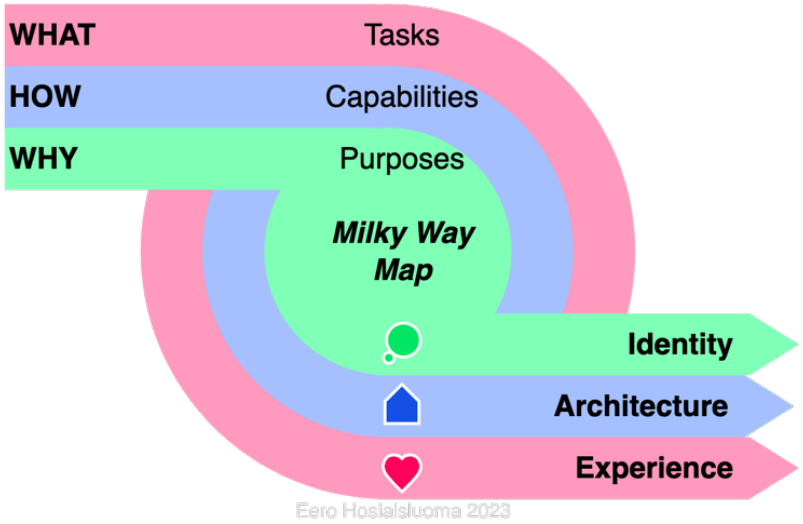


Figure 228: Milky Way Map is a tool for analysing the why, how and what.

The Milky Way Map is analogous to the *Golden Circle* by Simon Sinek introduced in the book *Start with Why*. In his well-known TED talk [42] Sinek explains the concept of the Golden Circle: "*Most organisations know WHAT they do, some organisations know HOW they do it, but only a few organisations know WHY they do what they do*". According to Sinek, this latter group, which prioritizes understanding and communicating their purpose - why they do what they do - is often the most successful. He uses Apple as an example. By WHY, Sinek refers to an organization's purpose, cause, and beliefs, its reason for existing. The clearest part is the what, while the why is often the most abstract. Sinek argues that inspired organizations think, act, and communicate from the inside out, starting from their why.

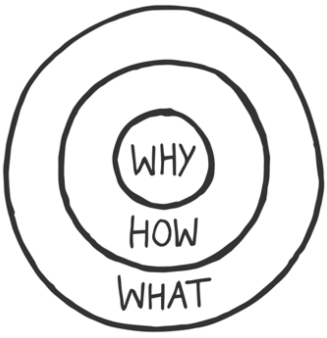


Figure 229: The Golden Circle by Simon Sinek.

- *What* = products provided and/or services offered, or the role in people's lives
- *How* = operational activities such as processes, and resources such as employees and applications
- *Why* = purpose, cause, beliefs, values, principles etc. The 'core' that explains everything else.

There is an analogy between the Milky Way Map and the real Milky Way galaxy, in which the center of gravity keeps the objects in surrounding circles where they are going around.

The Milky Way Map is divided into sectors, that represent the value stages of the business *value flow* (a.k.a. value stream).



Figure 230: The Milky Way.

[42] Simon Sinek's TED talk Start With Why:
https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action?language=en

The customer journey steps (or tasks) are shown on the outer circle. The capabilities are positioned in the middle circle, and the purposes, the goals for each value stage are shown in the inner circle. The business value flow can consist of sectors such as *Plan, Build, Market, Deliver, and Learn*. The Milky Way base Map is shown below.

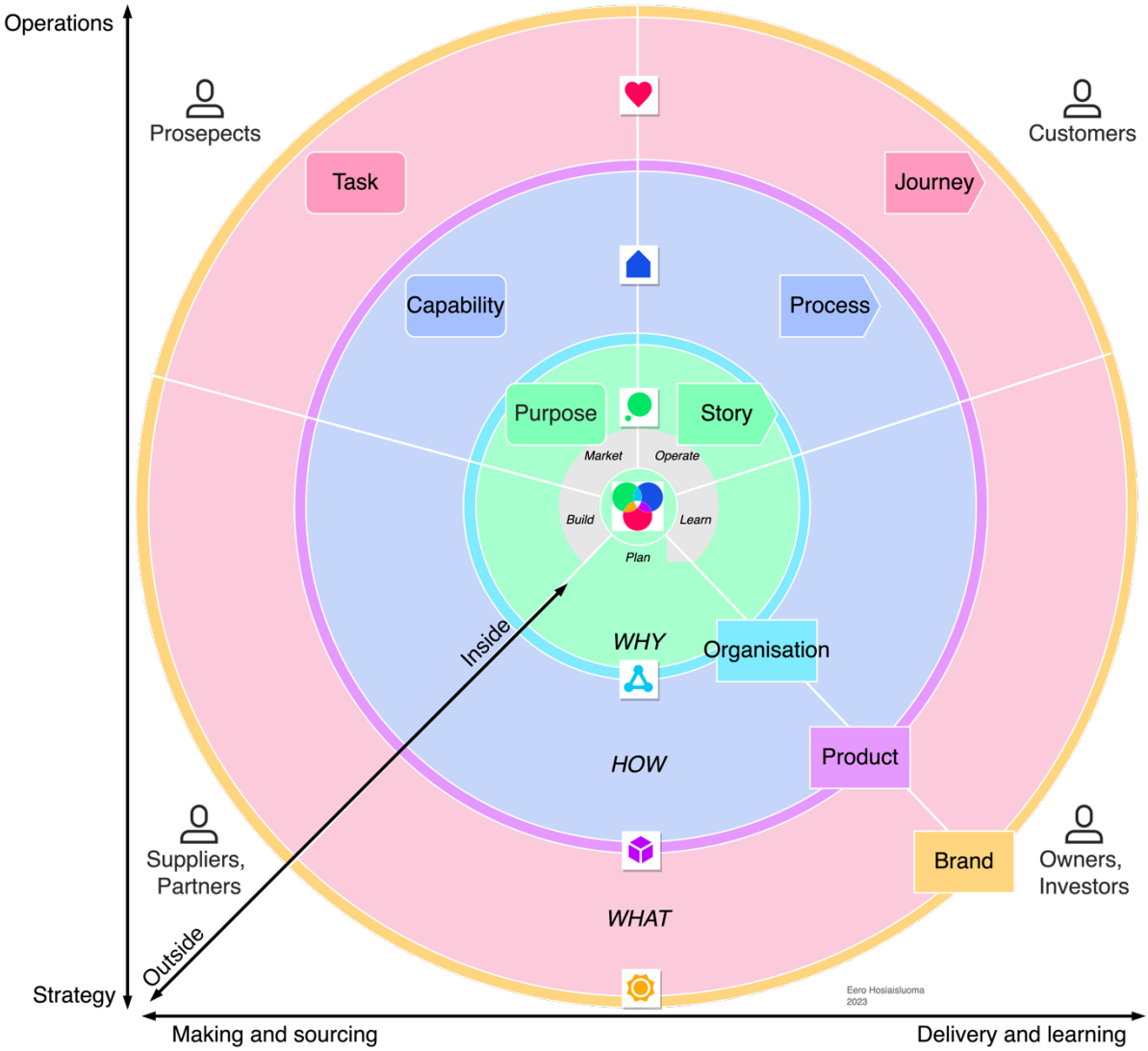


Figure 231: Milky Way base Map.

The Milky Way Map covers dimensions of the enterprise design as follows:

- Y-axis: Strategic aspects on the bottom left corner, operational aspects on the top left corner
- X-axis: Sourcing and marketing aspects on the bottom left corner, delivery and learning aspects on the bottom right corner.

The base map version above is just showing the basic idea of the Milky Way Map. There can be variations of the Milky Way Map depending on the context and what is appropriate to fit the purpose. For example, value flow stages (sectors) can be defined according to the business, which can be anything from the whole enterprise to some specific business area. Circles and their elements can be used according to what is necessary, e.g. tasks, journeys or channels, capabilities or processes etc. The Milky Way Map can be configured to fit for the purpose.

With the Milky Way Map it is possible to contextualize the capabilities from the enterprise's capability map by positioning them into the value flow. This visualizes which capabilities are performed and when, which capabilities are closer to the customer, and which are supporting those customer-facing ones. The purposes in the center of the Milky Way Map, represent the

goals for each value flow stage, showing why the enterprise is doing and what it is pursuing. The journey steps or tasks on the outer circle represent the customer journey, and also the tasks of the other stakeholder groups (such as partners, owners, job candidates etc.) that have some interest in the business of the enterprise.



Figure 232: Milky Way Map.

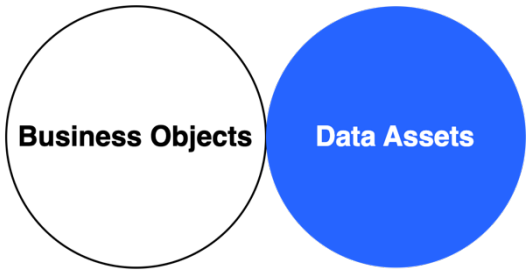
The *Brand* element can be added to the top of the map to explain what the focus area of the map is. For example, we can differentiate B2C and B2B customers and provide a map based on the customer segment. Then we may highlight or hide certain things (such as capabilities) from the map, or we can color-code certain tasks (e.g. showing the top tasks in yellow). Journey steps can be connected by arrows as shown below.

For more information about the Milky Way Map see the following sources:

- Annika Klyver's blog (the master source): https://annikaklyver.wordpress.com/
- Eero Hosiaisluoma's blog: https://hosiaisluoma.fi/design/milky-way-map-with-edgy/
- *Bridge the gaps with Milky Way enterprise maps*, recording, Intersection Group, 2022: https://intersection.group/events/milky-way-enterprise--maps3

6.3.9 Information Modelling: Business Objects and Data Assets

The EDGY *Object* elements can be used for modelling information structures such as business objects (a.k.a. Information Objects), those of which represent the information concepts that are relevant and meaningful for the business. These business objects can be modelled as assets when appropriate. High-level information modelling can be done with the Object element, Link- and Flow-relationships.



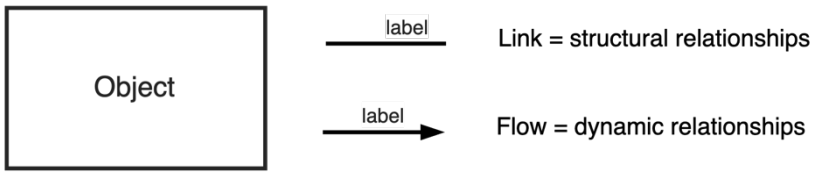


Figure 233: High-level data modelling elements.

Object-element can be used for modelling relationships between concepts.

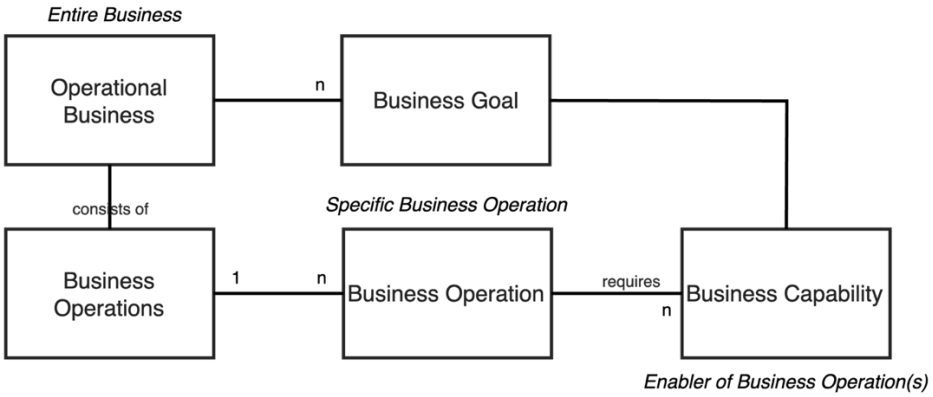


Figure 234: Relationships between concepts.

Object-element can be used for modelling hierarchies or specialisations of elements of the same type.

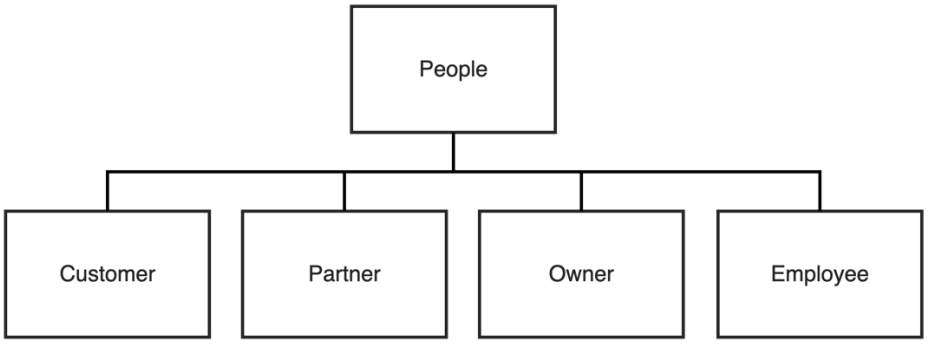


Figure 235: Specialisations of concepts.

High-level concept modelling example shown below.

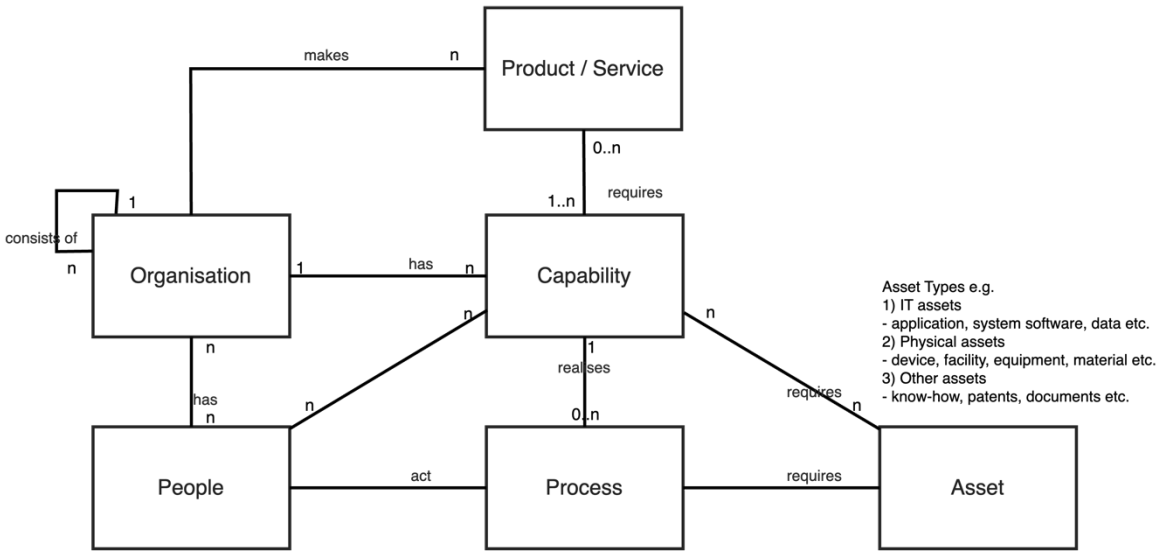


Figure 236: High-level concept model.

High-level data modelling with the object elements can be used e.g. for diagrams such as conceptual data model or Entity Relationship Model (ERM). An example high-level conceptual data models shown below.

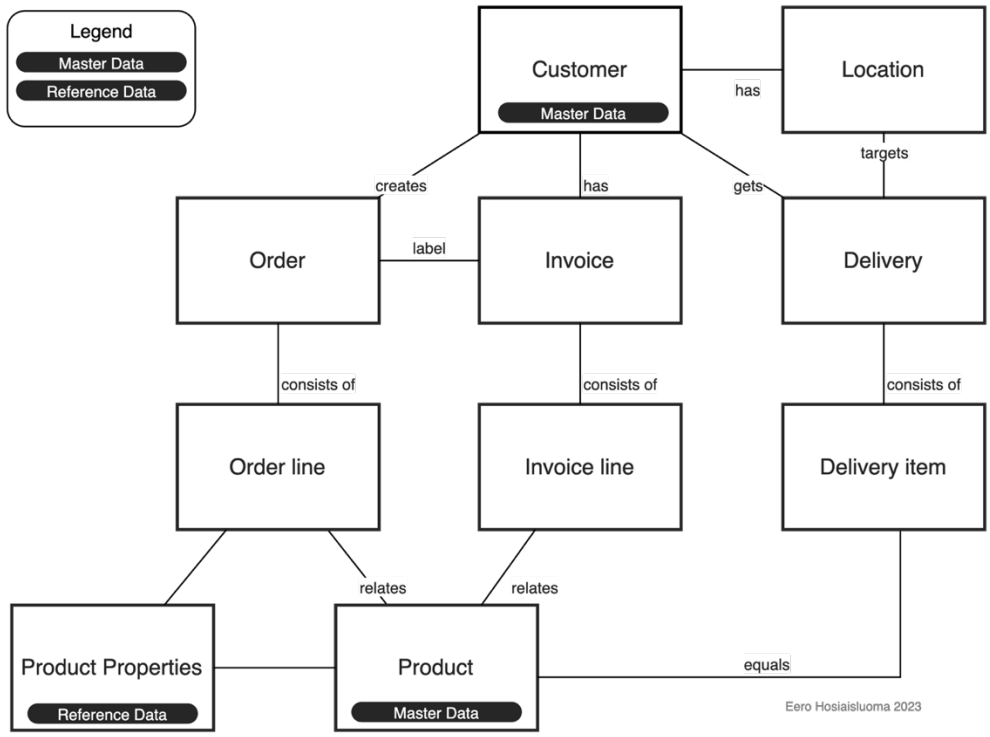


Figure 237: Conceptual Data Model.

Another example of conceptual data model shown below.

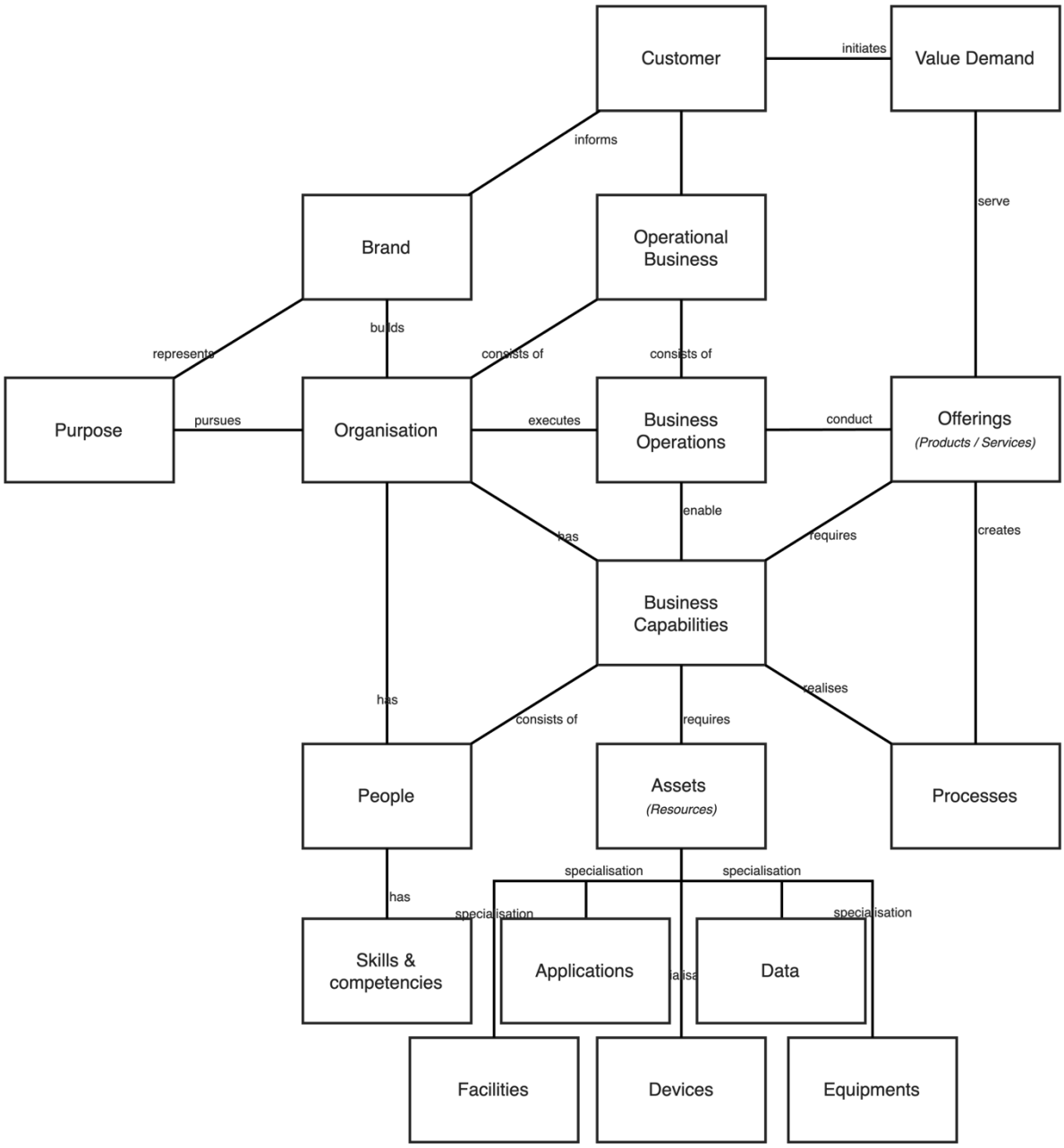


Figure 238: Conceptual Model.

6.3.9.1 Information Elements

Information can be modelled in two levels: 1) Conceptual level and 2) Operational level. The former objects are Business Objects that represent business relevant information concepts, such as customer, order or invoice. They are meaningful for business operations at conceptual and high level. The latter objects are Data Objects that represent operational data elements that are switched between the applications.

EDGY provides distinct elements for modelling high level business concepts and operational level data objects. Business

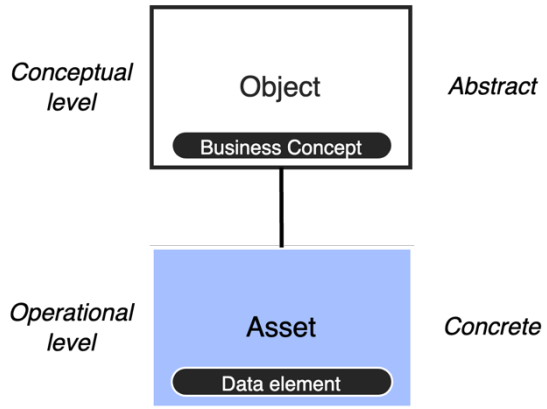


Figure 239: Information elements.

Objects can be modelled with the EDGY *Object*-element, and Data Objects can be modelled with the EDGY *Asset*-element (figure). In the architectural diagrams that represent the concrete business operations, the Asset-element is used to represent data element as data object.

6.3.9.2 Data Elements

Data elements (a.k.a. data objects) can be modelled with the EDGY *Asset* element with the tag element that indicates what is type of the asset, in case the diagram contains assets of different types (such as applications and data).





Figure 240: Data Object modelled with the Asset -element.

Data elements are entities used in architecture can be depicted as data assets, modelled with the EDGY *Asset*-elements. These are the data elements that are transferred between processes and/or applications. Note! Tag element is not necessary to indicate the type of asset, as the diagram is titled “Data Model”.

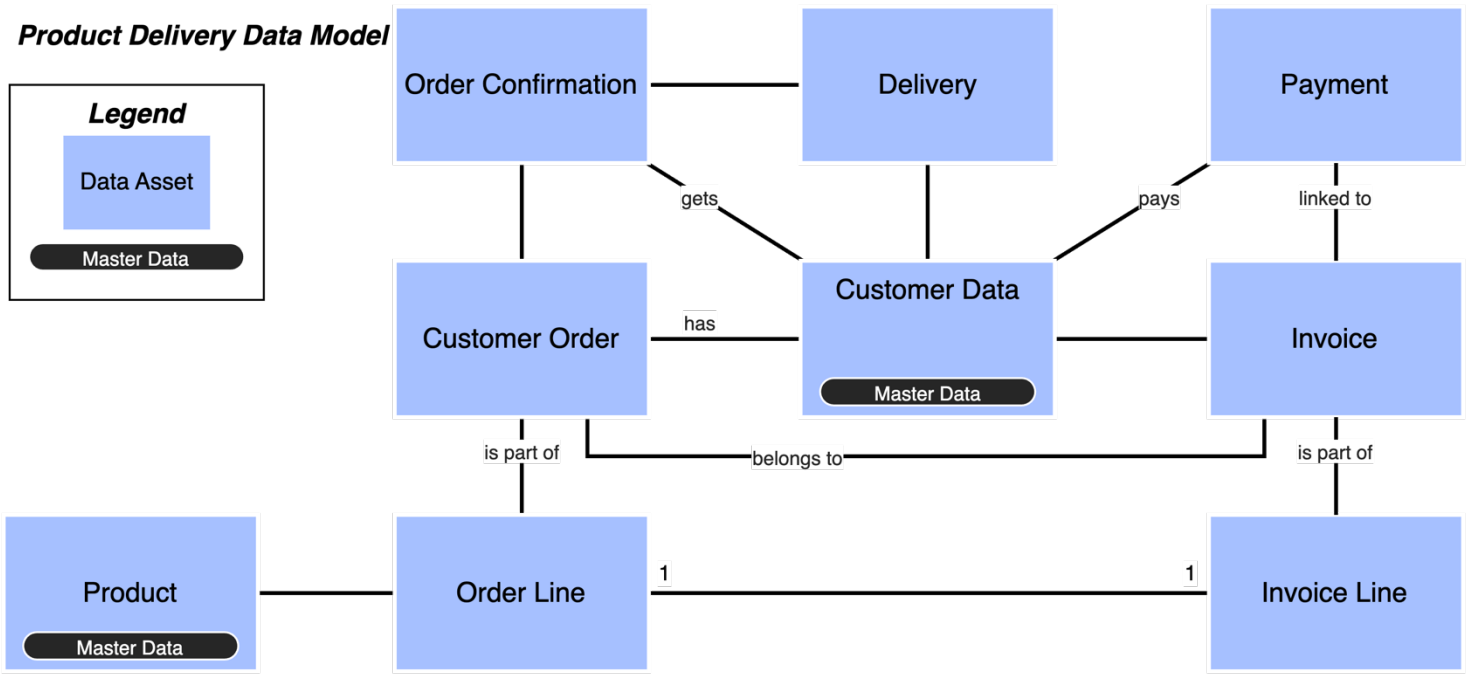


Figure 241: Data model - assets as data elements / -objects.

Tagged elements. The types of the *Asset* -elements can be differentiated from each other with that tag, that is positioned on the bottom of the element. An *Asset* -element can represent e.g. data, application, or any other asset such as facility, device or technology. (Tag element can be attached to the *Asset* -element by ‘grouping’ functionality that is available in many tools such as Draw.io or MS PowerPoint.) A tag can be e.g. as follows: ‘Data’, ‘Application’, ‘Software’ / ‘Technology’, ‘Device’, ‘Facility’. In addition, tags can be used to indicate any type -information that defines the characteristics of an element.

6.3.10 Information Flows



The data flows can exist e.g. between concrete elements such as processes, organisations or applications. Data objects are transferred in these data flows, as these flows are operational: they represent the actual business-relevant information flows between the entities.

Data objects / -elements are introduced as texts (labels) on flow relations as shown in the figures below.

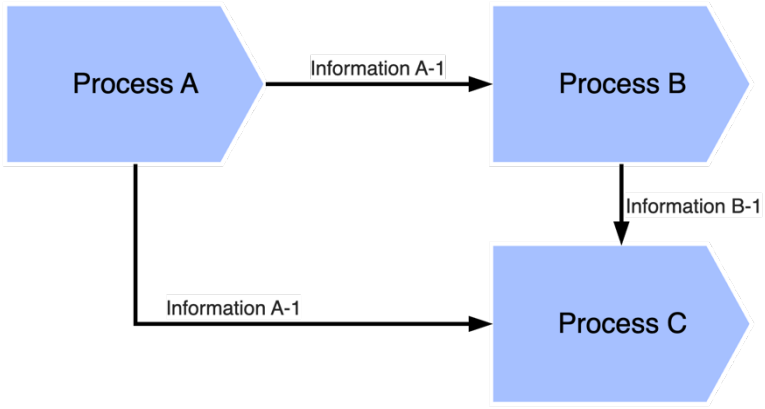


Figure 242: Information flows between processes.

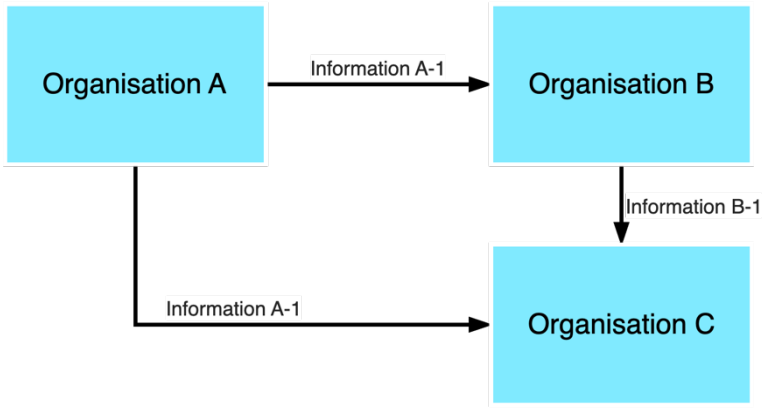


Figure 243: Information flows between organisations (business actors).

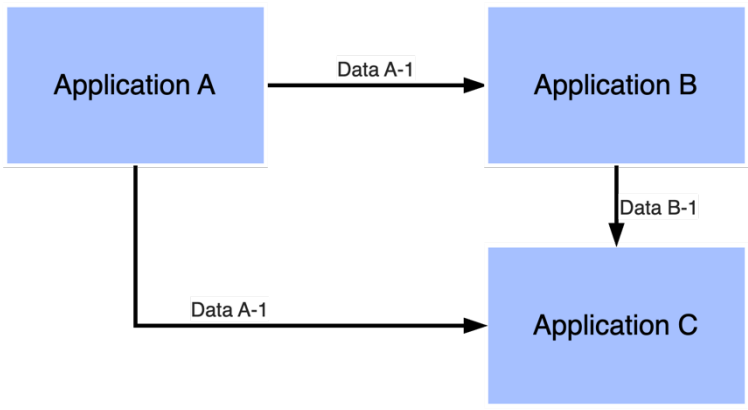


Figure 244: Data flows between applications.

6.3.10.1 Process Cooperation View

Information flows between processes define how an enterprise operates. As such this view represents the *operating model* of an enterprise. This view illustrates what is happening in and around an enterprise.

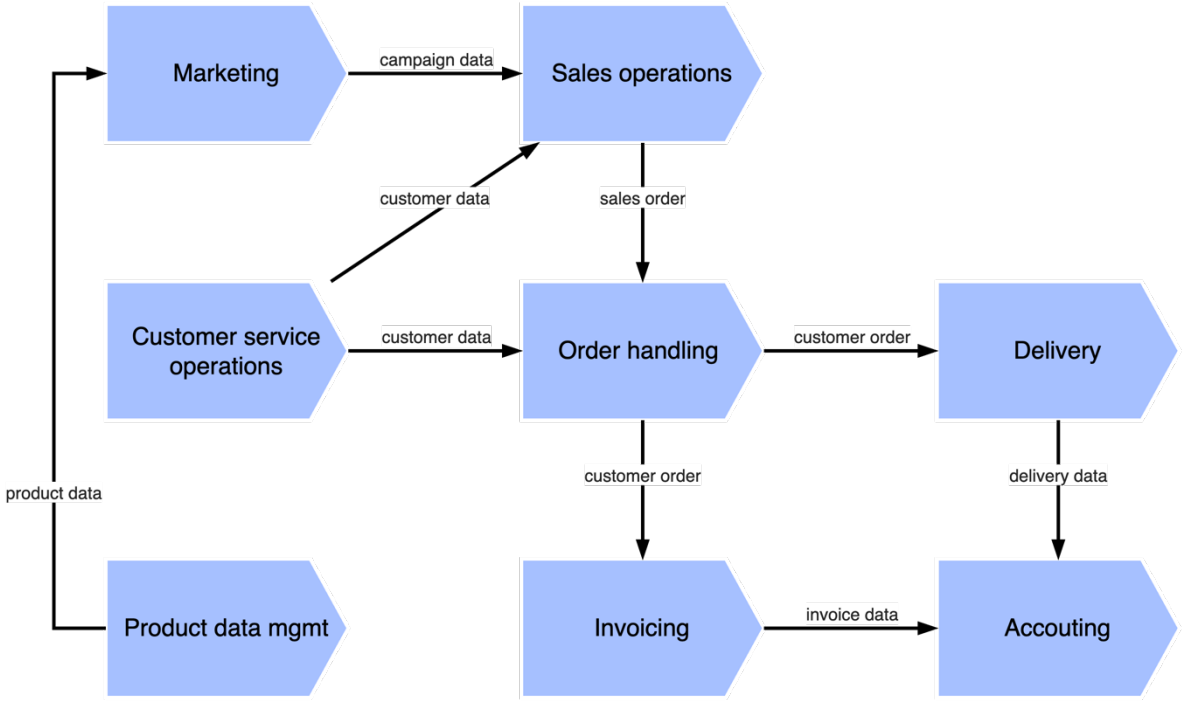


Figure 245: Process cooperation view.

6.3.10.2 Application Cooperation View

Application cooperation view a.k.a. application interaction view can be used for depicting how business data is transferred between the applications.

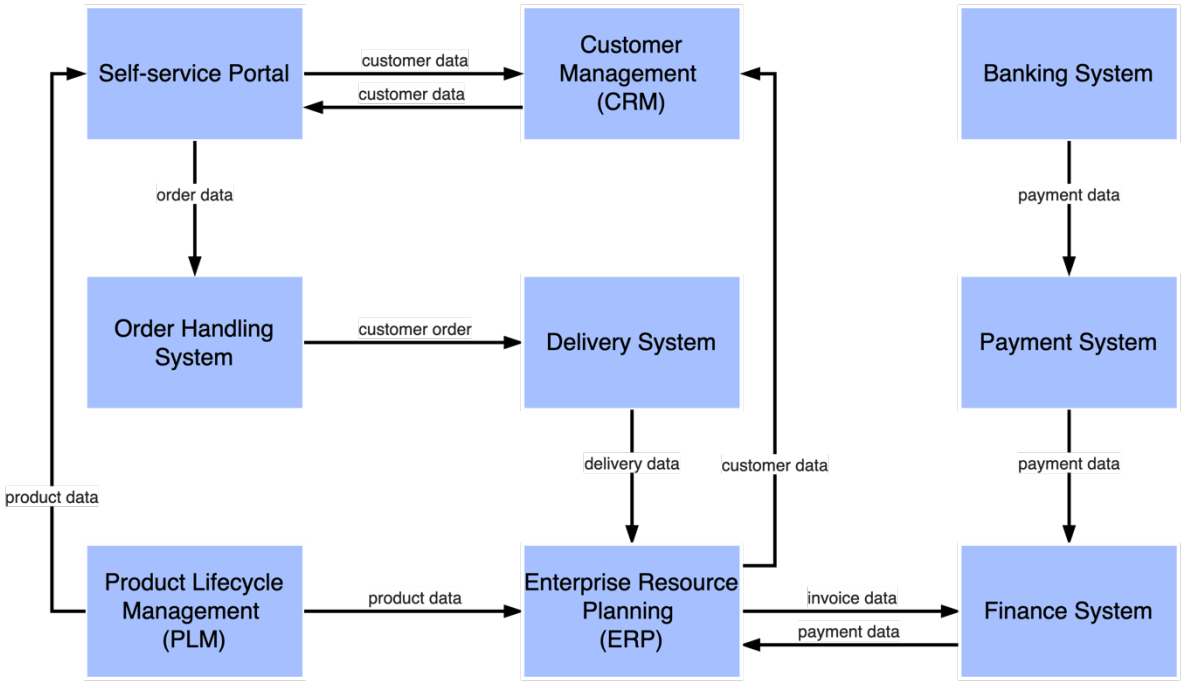


Figure 246: Application cooperation.

Integrations. This high-level application cooperation view can be used as the first (if not the only) diagram for exploring the integrations between the applications. This diagram introduces *what* business-relevant data is switched, and *what* is the direction of those transfers. However, this view doesn't specify *how* the transfers are executed, and via which interfaces. These can be further analysed based on this high-level overview diagram. So this high-level overview represents the business architecture (and enterprise architecture) level of details. respectively, more detailed solution architecture level diagrams can be created for development purposes (e.g. for agile development teams).



It is possible to use coloring in the flow relations by adding certain semantics in data flows. Coloring scheme can indicate e.g. mechanisms (such as sync/async, batch, RPC), protocols e.g. ftp(s) or REST or just differentiating the flows.

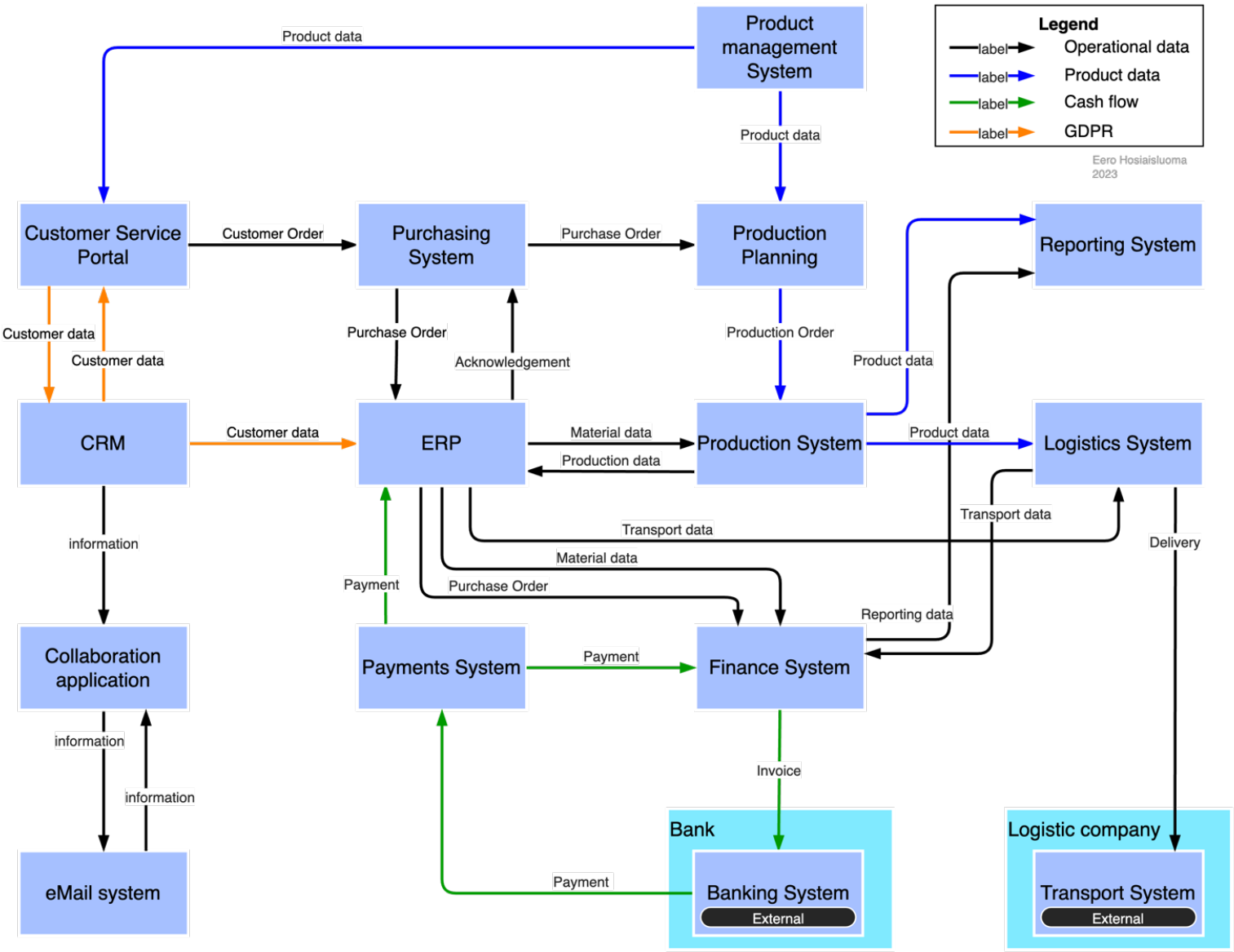


Figure 247: Application cooperation view - as a map like a 'metro map' / route map.

Both internal and external integrations can be shown when appropriate (e.g. external parties are shown in the figure above, a Logistic company and a Bank).

Overall information flow of the operational business of an enterprise can be illustrated with combining processes and assets that are interacting with flow relationships.

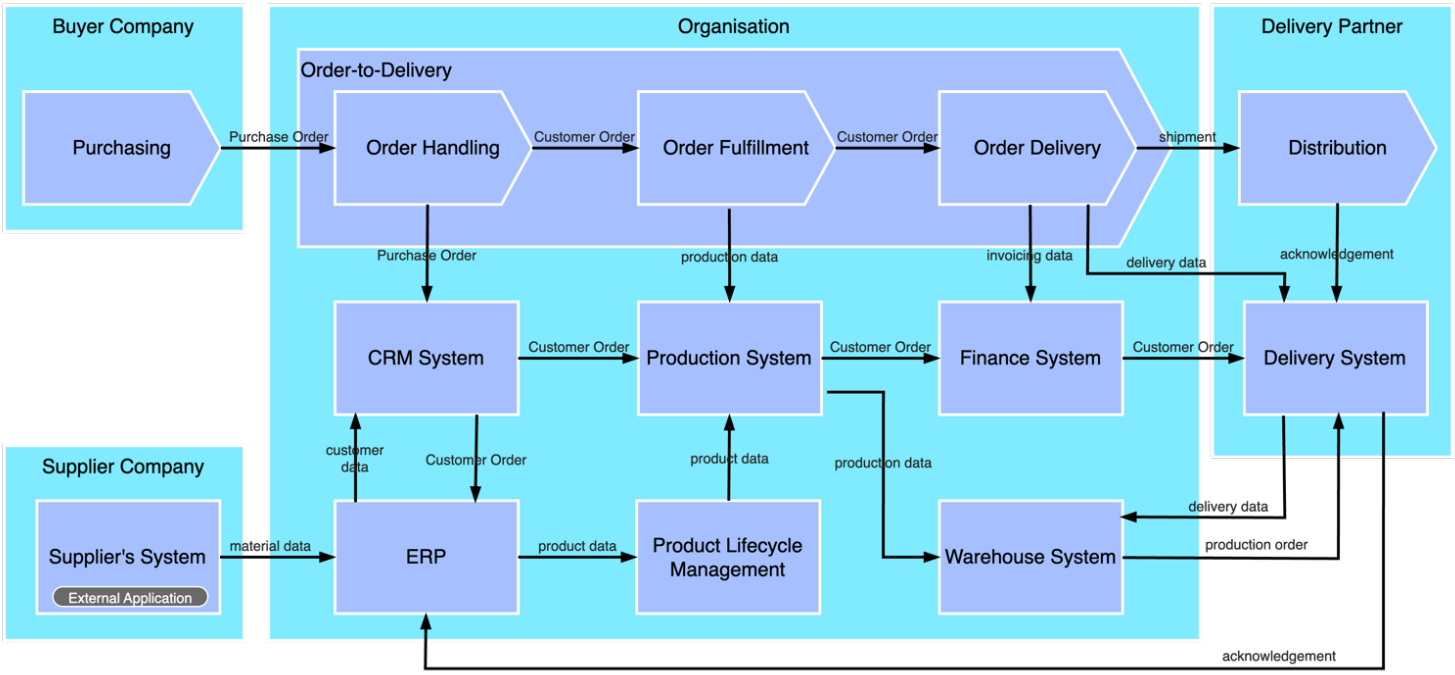


Figure 248: Data flows between the processes and applications in a B2B scenario.

6.3.10.3 Organisation Cooperation View

High-level information flows between the business actors / organisations shown below.

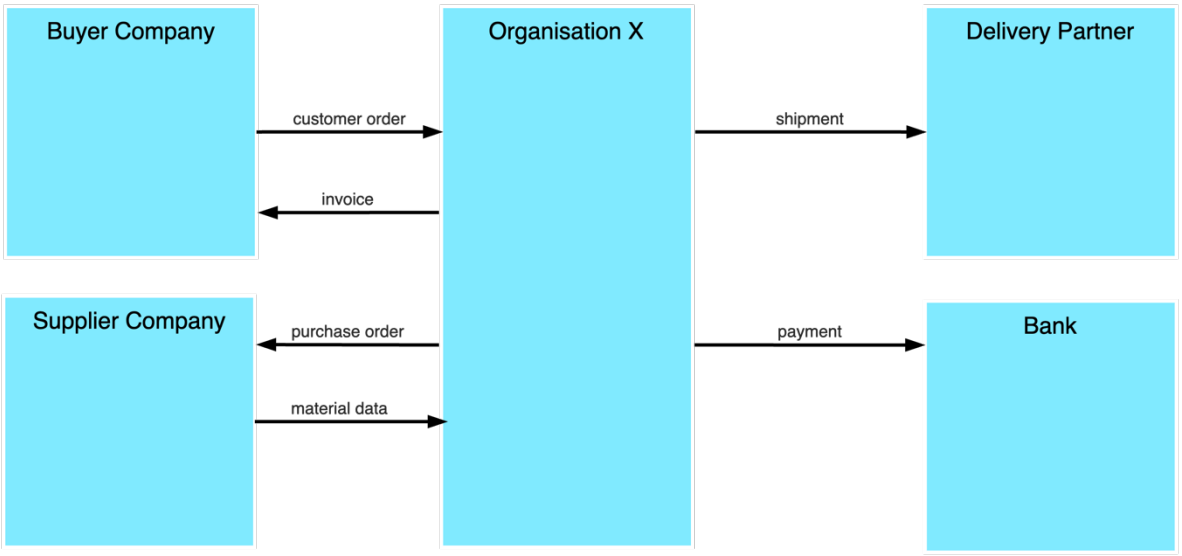


Figure 249: Information flows between the business actors.

6.3.11 Application Map



Applications of an enterprise are typically managed within a Configuration Management Database (CMDB) that can be used as a master data source of application portfolio. In addition, application catalog can be maintained in other tools (such as EA tool, Confluence based content management system etc.). The main idea is to have an overall view of the applications with attributes, such as business owner, supplier, functionalities, criticality, life-cycle status etc.

Application portfolio can be visualised as shown below.

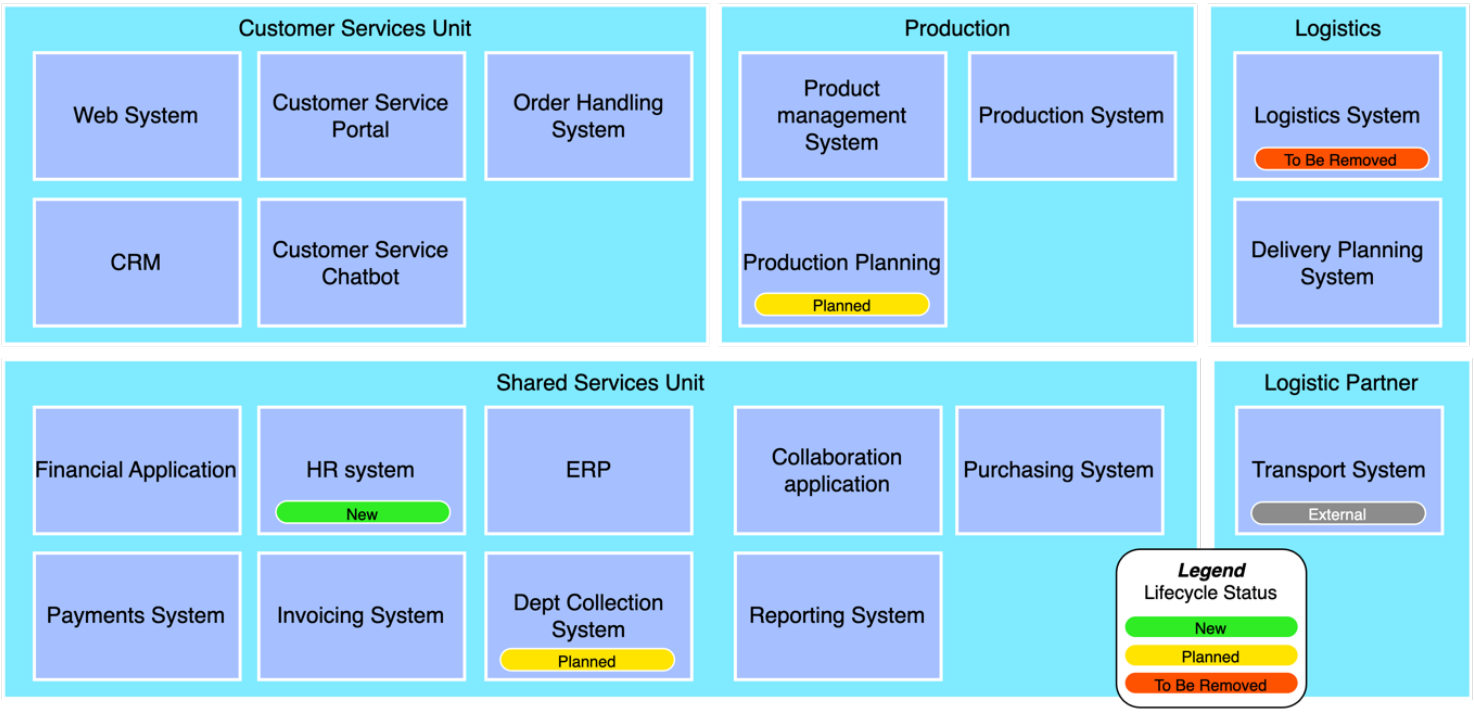


Figure 250: Application Map.

6.3.12 Application Architecture



Application architecture describes the logical structure of an application. Application architecture introduces both the external and internal aspects as follows:

- *Externals*: who are the users and what information is switched with other applications?
- *Internals*: what is the internal structure, and what are the integral parts (components, modules, subsystems) that the application is composed of?

Note! An application (a.k.a. system) refers to a component of the overall business architecture of the enterprise, or enterprise level architecture = Enterprise Architecture (EA).

Application architecture can be modelled with only a few elements of EDGY:

1) *Asset* element and
2) relationships *Link* and *Flow*.

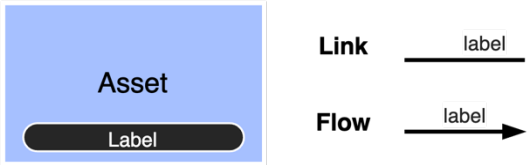


Figure 251: Elements of application architecture.

This simplicity of the EDGY makes it productive, as the modellers can concentrate on the problem instead of notation. However, the EDGY is expressive enough, and it is easy to do and easy to use. Everyone can easily understand EDGY diagrams.

The asset element is a multipurpose element, which can be used for modelling any kind of structural asset of an enterprise, e.g.:

- intangible assets such as applications, software and data as well as things such as competence, know-how, financial assets and -instruments etc.
- tangible, physical assets such as hardware, devices, facilities, equipment, (raw) materials, tools, machines, vehicles, instruments, network components, buildings etc.

The EDGY elements can be added with labels that express additional information. Labels enrich the usage of elements by providing extra information or any kind of characteristics that are meaningful in the context. There are two kinds of labels: 1) tags and 2) metrics.



Figure 252: Tags and Metrics used as labels of the elements.

Application architecture patterns introduced below illustrate the usage of these architectural elements.

Relationships between architectural elements are typically either 1) structural or 2) dynamic by their nature. The link defines a structural association between two elements, and the flow defines dynamic, directional influence or data flow between two elements.

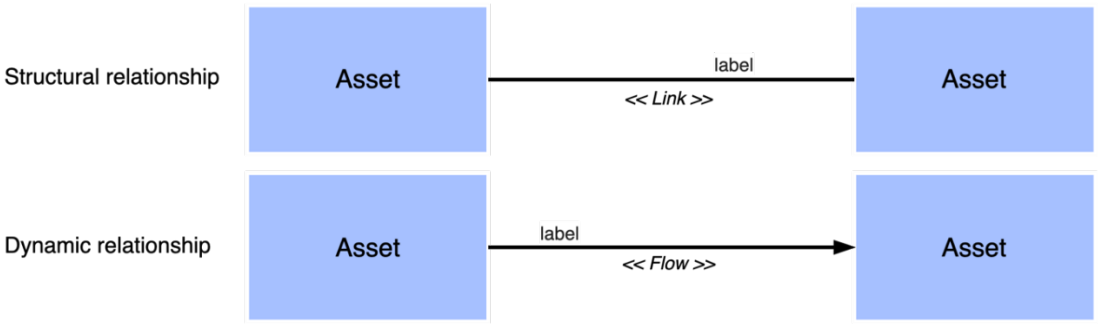


Figure 253: Structural and dynamic relationships: link and flow.

The structural relationship between the elements can be modelled explicitly with the 1) link relationship or 2) by nesting the elements as shown below.

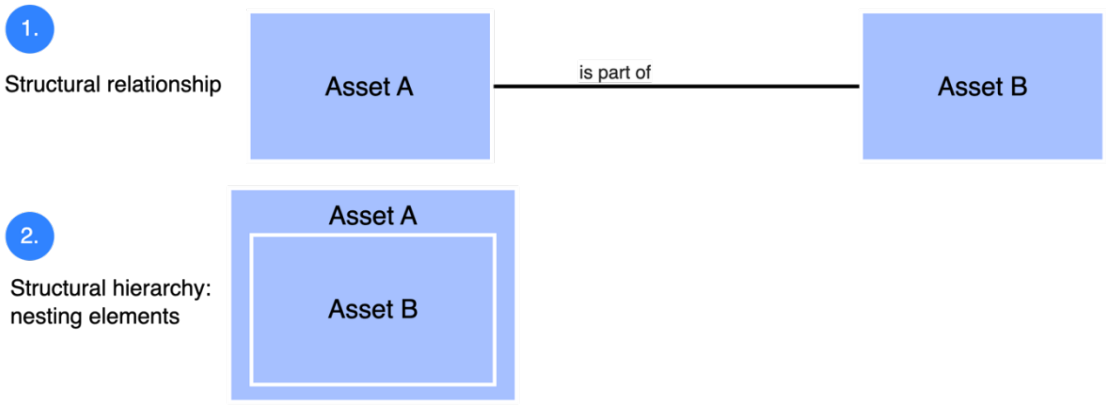


Figure 254: Structural relationship.

Structural relationship with explicit link relationship can introduce the characteristics of the association (e.g. “Is part of”).

Dynamic relationship typically introduces the data object that is switched between the elements.



Figure 255: Dynamic relationship.

6.3.12.1 Application Architecture Patterns

Application architecture patterns introduced below illustrate the usage of these architectural elements.

Three-tier architecture. A classic example of introducing the application's internal structure is the traditional three-tier architecture, which consists of the following tiers:

1) presentation tier (a.k.a. user interface tier),
2) business logic tier, and
3) data tier.

These tiers altogether represent the *separation of concerns*, the functional decomposition of an application into structural parts. Each tier has its specific responsibility, and the whole application is composed of these individual tiers and their functionalities. As these tiers are the structural parts of the application, they are included in the application by nesting.

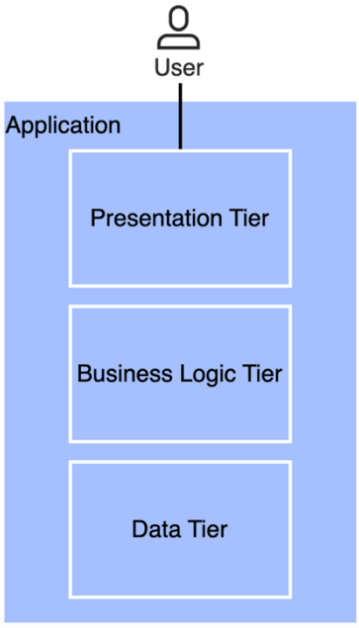


Figure 256: Three-tiered architecture.

Layered Architecture is analogous to three-tiered architecture. The same basic structure is now defined with other names of the parts, e.g. *tiers* are called *layers*.

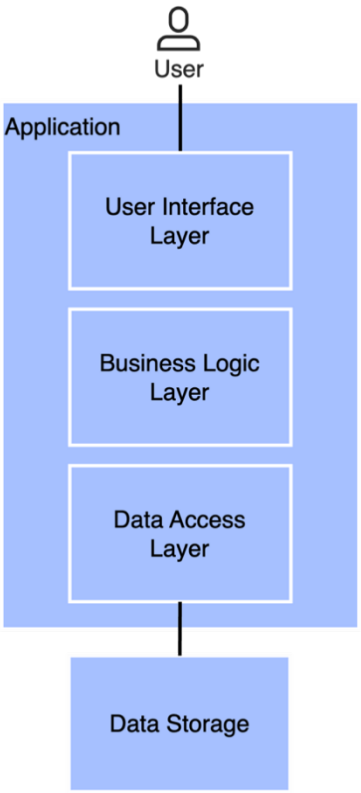


Figure 258: Layered Architecture.

Technologies. Assets can be used for representing e.g. application or technology a.k.a. system software as shown in the figure. When an application includes system software elements, then tags can express their type (such as Front-end, Back-end, User interface, Business logic etc.).

Note! Technologies, in the form of system software, are assets that are kept in control in the enterprise level, e.g. utilising a Configuration Management DataBase (CMDB). It is important to manage the technology portfolio as part of the enterprise architecture.

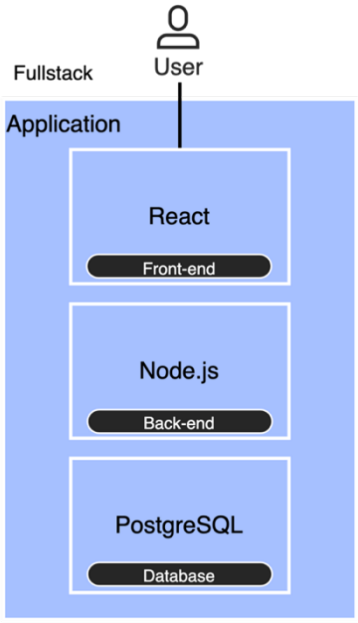


Figure 257: Full stack example with typed assets.

Model-View-Controller (MVC) pattern is compatible with the three-tiered and layered architectures. The MVC divides the application into functional components, each of which has a specific role and is responsible for certain functionalities: presentation, business logic and data access.

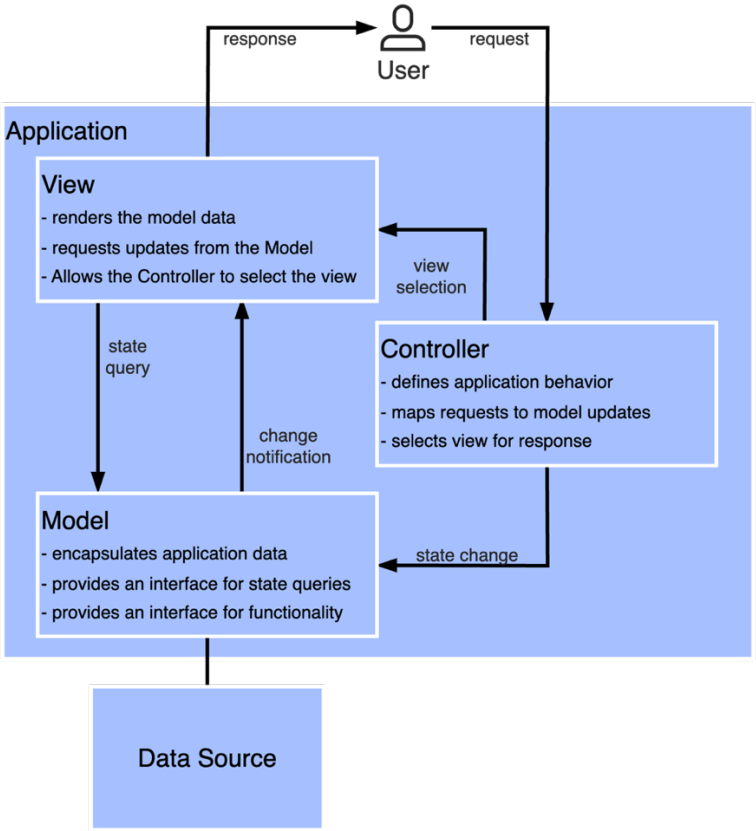


Figure 259: Model-View-Controller (MVC) pattern.

Notes:

- Additional information can be included in the asset elements - if that can be done without making the diagram too “busy”. Careful consideration must be given to how much information is sufficient, and how much is too much.
- Tags are not necessary when the diagram introduces only structural elements (components) of the same type, or the types of the elements are implicitly clear.

Technologies, the system software, are assets of the enterprise.

6.3.12.2 Data Processing

Input-Process-Output. As architecture defines the structure of an application, then the application consists of structural elements - all of which are modelled with the *Asset* element. The basic pattern of an application consists of the following elements: a) input data, b) processing unit (hiding the internal behavior as a black box), c) data storage and d) output data. This view introduces the basic concepts. The application is an *active structure element*, that performs certain behavior for processing the input and producing the output. The data objects (input and output) are *passive structure elements.*

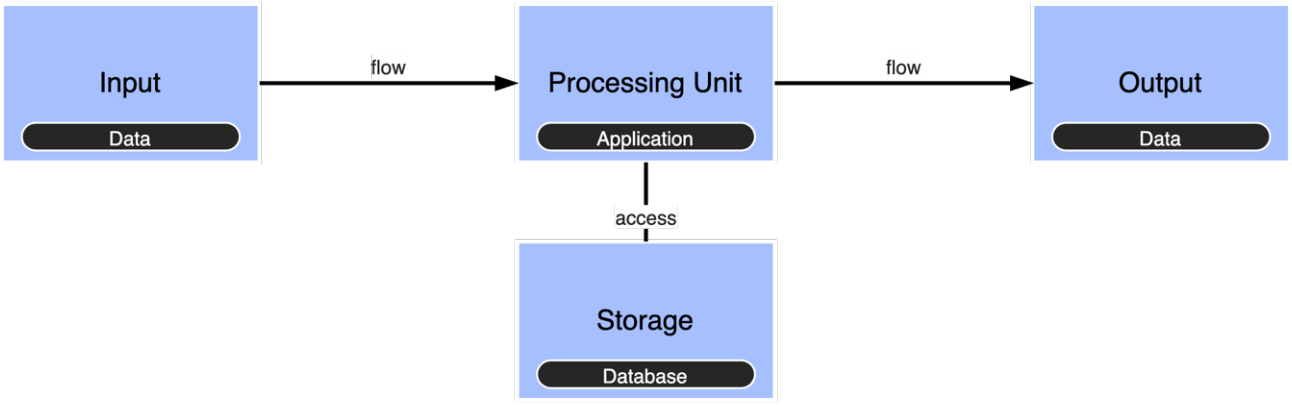


Figure 260: Data processing pattern.

Extract - Transform - Load (ETL) pattern represents how data is retrieved, processed and then loaded. ETL process consists of the following phases:

1) extracting is data retrieving/fetching from the source (typically a data source, but can be e.g. cloud service, analytics tool etc.),
2) transforming is processing (e.g. cleaning, enriching) the input data (source-, raw data) and
3) loading phase is storing the transformed output data into the target storage (e.g. database, data warehouse, data lake).

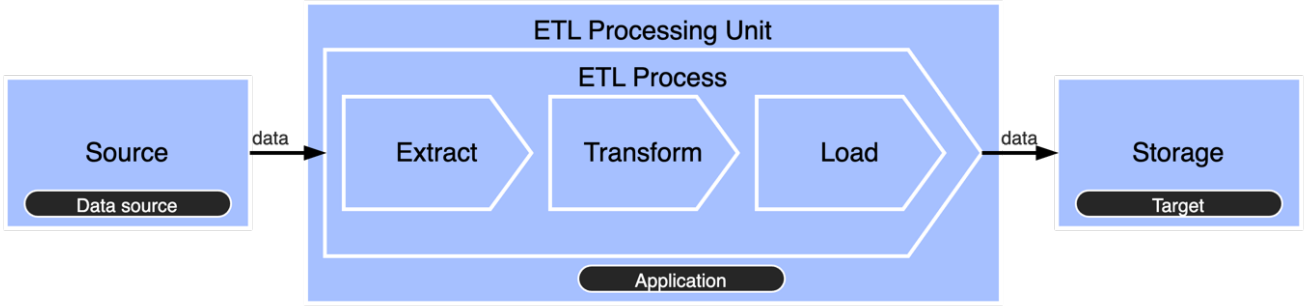


Figure 261: Extract-Transform-Load pattern.

The behavior of the application is modelled with the *Process* element, which represent any activity taken (by some structural element of the enterprise, such as organisation, application, component etc.). An alternative way of modelling the ETL is based on the *Asset* elements only as shown below. The choice between asset and process depends on the context and what is appropriate to fit the purpose.

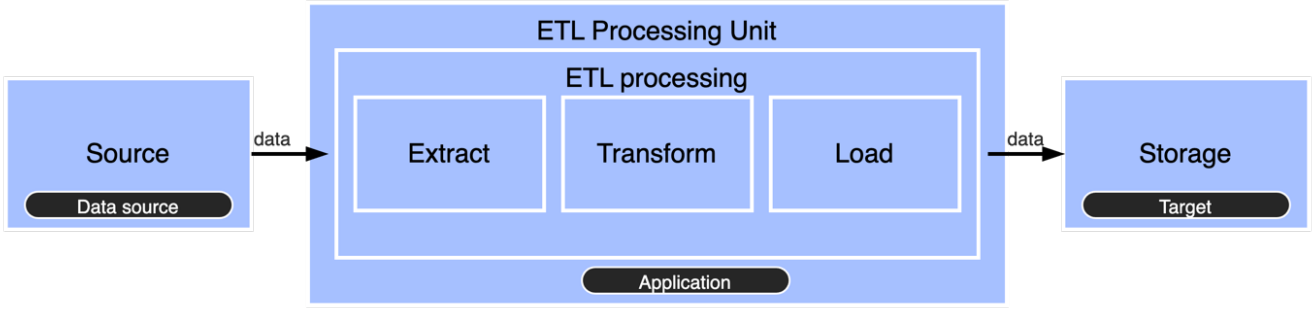


Figure 262: An ETL application modelled with *Asset* elements.

6.3.12.3 Architecture Modelling with Nesting

Nesting elements. Elements can be included in other elements. That can be done when there is a hierarchical structural dependency between the elements: an element belongs to another element. Or, there can be a behavioral dependency between the elements: an object performs an activity, e.g. an organisation performs a process.

This modelling style has advantages e.g. as follows:

A. simplicity; the structural dependency hierarchies are illustrated without (link) relationship elements, and
B. compact layout; The diagram can be modelled into a more compact form, as space is 'economically' saved by including elements with others.

For example, 1) an organisation makes products/services, 2) an organisation has capabilities, 3) an organisation performs processes, 4) an organisation has applications, 5) a capability consists of processes and assets (application- and/or data assets) 6) an application consists of components - all these can be modelled by nesting the elements.

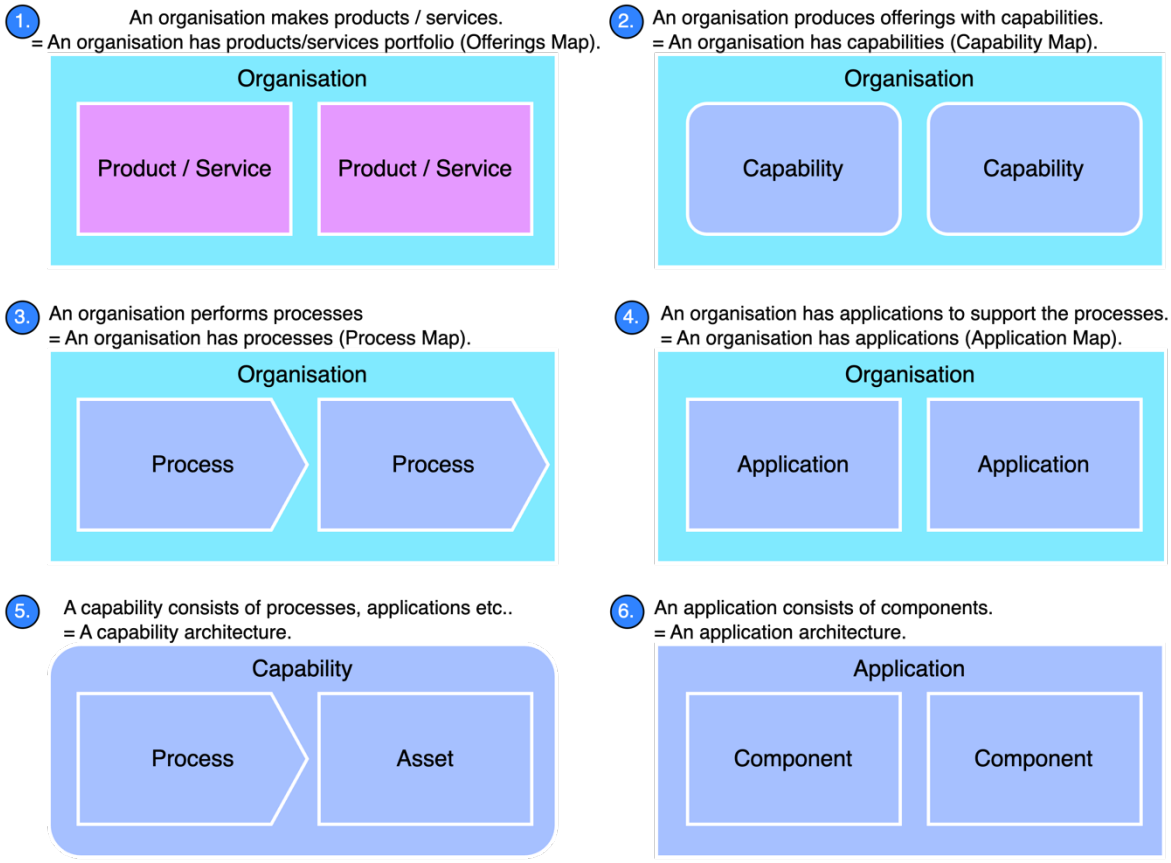


Figure 263: Nesting elements - for the sake of simplicity and compact layout.

Nesting elements of a capability: processes, applications, data and people included in the capability, which is a 'container' for things that belong together.

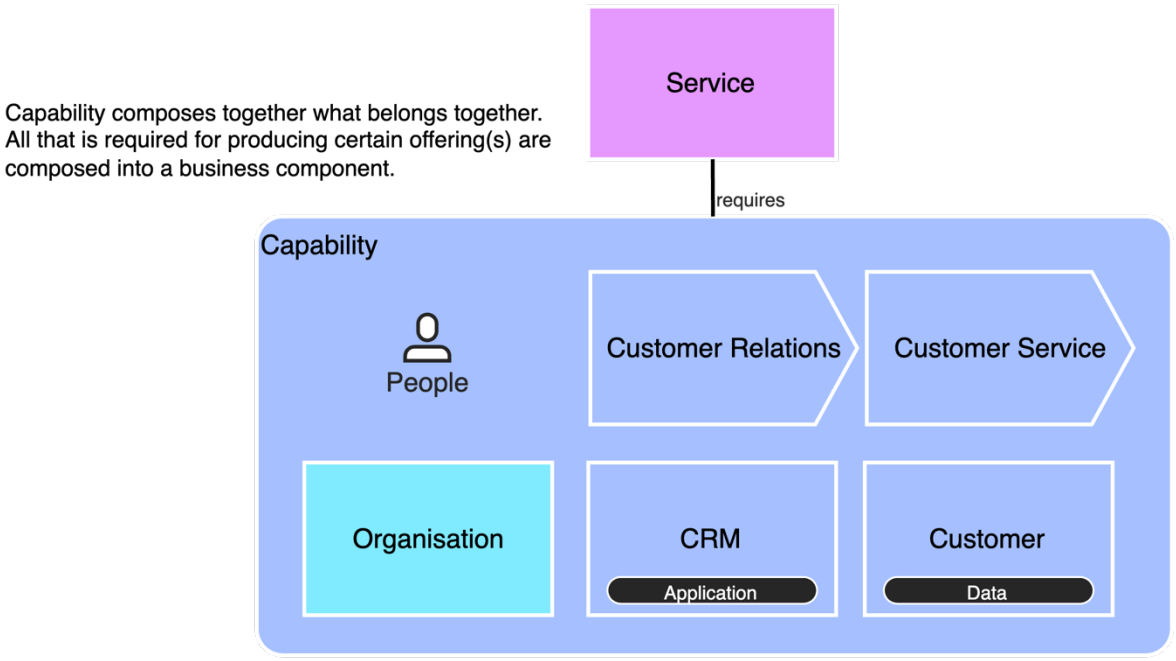


Figure 264: Elements nested in a capability.

6.3.12.4 Architecture Modeling Principles

Principles. The asset elements can be resized based on the content such as text, tags or metrics. However, the size can comprehend the meaning of the importance: a bigger element can be considered more important than the others. The suggestion is: to keep the elements with the same importance at the same size.

Principles:

1) Model only what is relevant (limit width and depth: scope and level of details).
2) There are not too many elements in the same diagram (split, use abstraction levels).
3) Only elements of the same abstraction level into the same diagram.
4) The elements are of the same size.
5) Elements aligned.
6) Connecting lines aligned orthogonally, no crossing lines.
7) Harmony, symmetry and balance of elements.
8) Use colors with care: not too much.
9) Less is more (minimalistic approach: *as little as enough, not as much as possible*).
10) Simplicity (*KISS* = *Keep It Simple, Stupid*).

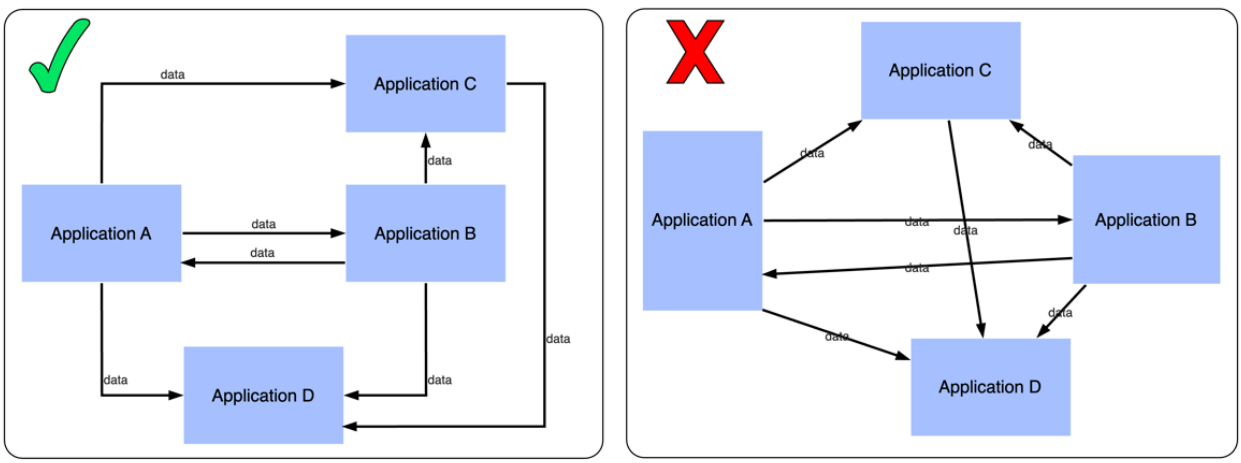


Figure 265: Suggested modelling style on the left.

An element is either an internal part of another element or an external element. For example, an organizational structure belongs to another structure, an application component consists of other components (such as a UI, business logic components, or a database), or a capability is made up of certain elements (such as people, processes, and assets).

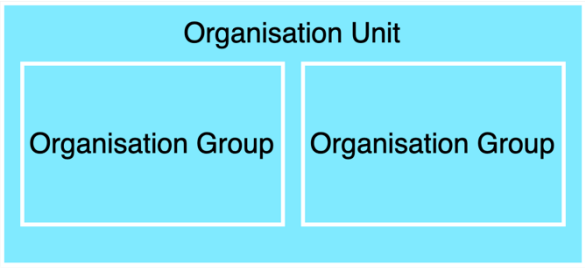


Figure 266: Nesting elements inside another element depicts hierarchy.

Place elements either inside other elements or outside of them. Use relationships if elements are not nested but positioned beside each other.

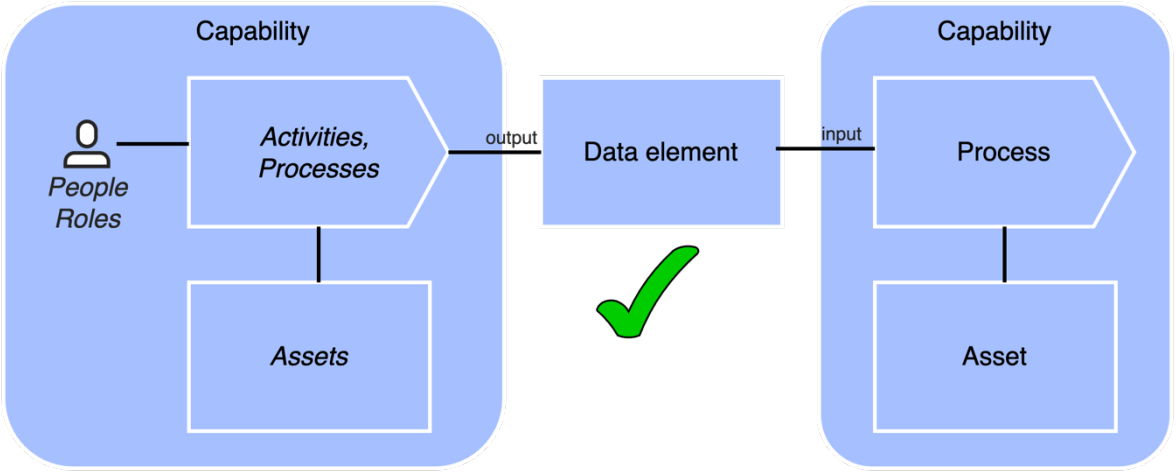


Figure 267: Place elements either inside or outside.

Avoid placing one element on the edge of another! Positioning them on the edge, like shown below, creates confusion and lacks logic. This kind of modelling style doesn't make any sense and should be avoided.

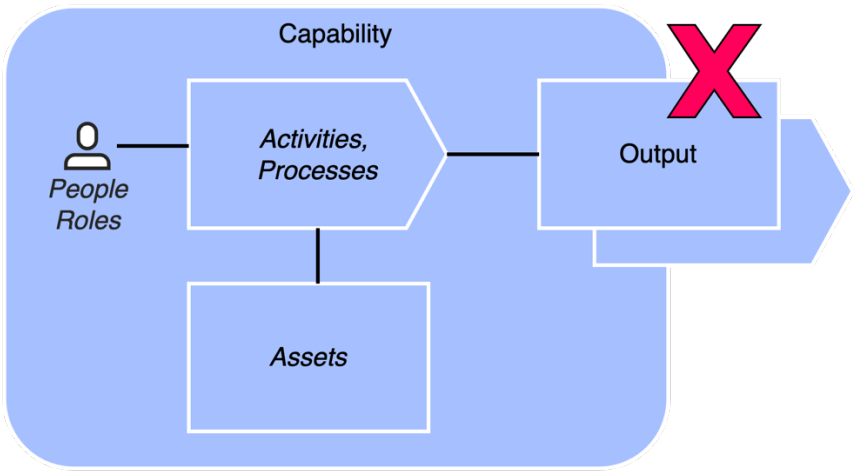
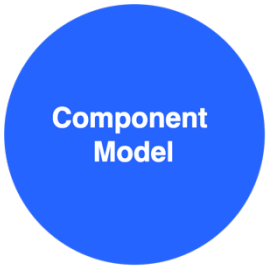


Figure 268: Don't model elements on the edge.

6.3.13 Component Model (CM 1-2-3)



An enterprise consists of structural parts, all of which are components of the whole. An enterprise can be viewed as a **component model** consisting of high-level components, the capabilities, each of which includes applications that are composed of modules, and so on. As such, an enterprise is a hierarchical system of systems, a system of components, that can be considered *fractal* [43] by nature. Fractal due to its hierarchical and recursive structure (not in a strictly mathematical sense).

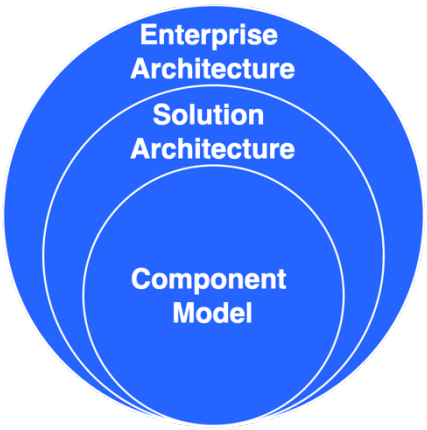


Figure 269: Hierarchy.

The Component Model views the enterprise as a whole comprised of individual components. It is important to understand which components the enterprise consists of and the role each component plays as part of the whole. Capabilities are enterprise level components, each of which consists of components such as applications, data, processes and people.

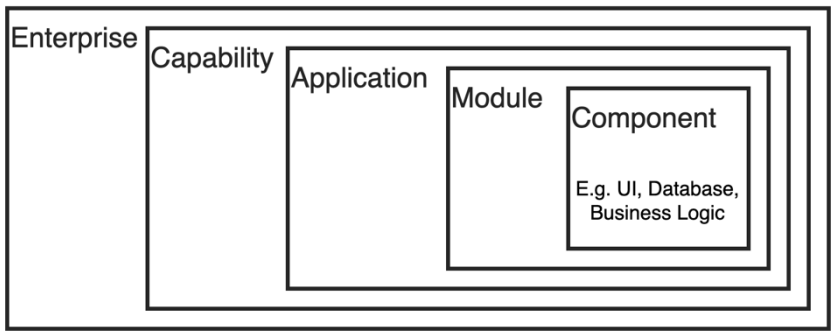


Figure 270: Component Model of an enterprise.

An enterprise is hierarchical, component-based, and recursive by nature.

Component Model (CM 1-2-3) is an application architecture modelling approach, in which a target application is depicted on different abstraction levels: 1) context-, 2) composition- and 3) component levels. These abstraction levels cover the architecture of a solution, the **solution architecture**.

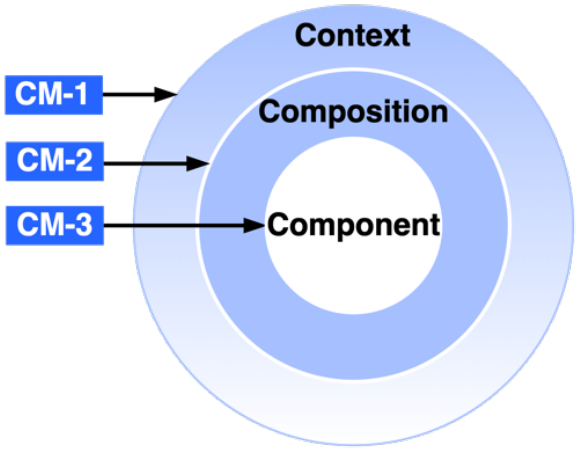


Figure 271: Component Model abstraction levels.

[43] A **fractal** entity refers to a system, structure, or concept that exhibits self-similarity across different levels or scales. This means that its overall pattern or behavior is mirrored in its smaller subcomponents, regardless of the level of abstraction. A fractal entity is composed of smaller components or subsystems, each reflecting the properties of the whole. Examples: 1) Enterprises or organisations can be seen as fractal entities, with units, departments, groups and teams reflecting the structure of the whole; 2) Application Architectures are modular and exhibit fractal properties.

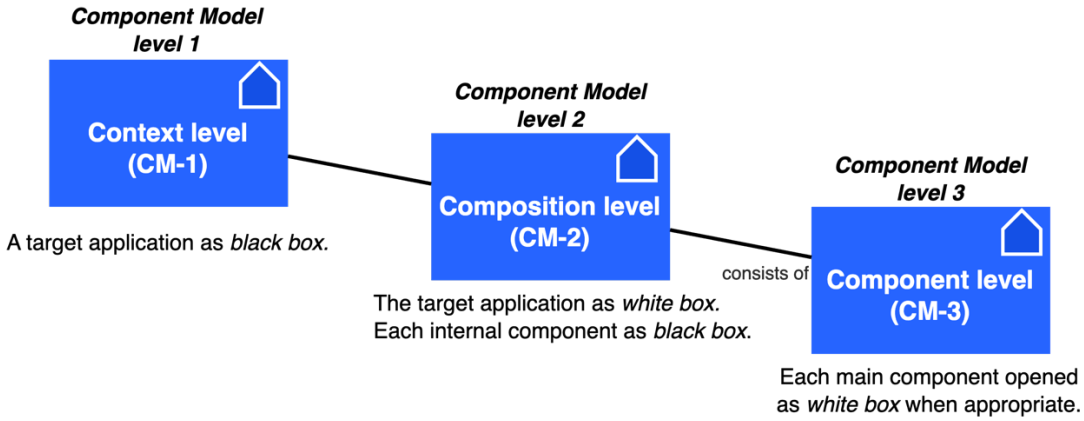
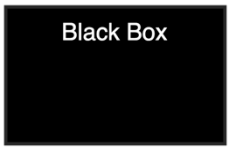


Figure 272: Component Model abstraction levels hierarchy.

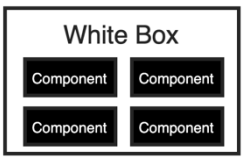
Component Model level 1 (CM-1):

- **Context** of a solution of a Business Architecture of an enterprise. The *solution Architecture of an application in context*. Typically a single application.
- Represents the *external* contextual aspects of an application: users and interactions with adjacent applications.
- The target application is depicted as a *black box*, its external services, interfaces and interactions are relevant. Its internal structure is not interesting at this abstraction level.



Component Model level 2 (CM-2):

- **Composition** of the target application, the main components of within the system boundary.
- Represents the *internal* behavior and structure of the target application.
- The target application is depicted as a *white box* by illustrating how it is decomposed into main components (a.k.a. sub-systems or modules), what are their responsibilities, and what interfaces are provided and required. Interfaces can be user interfaces (GUIs) or application interfaces (APIs). The internal components are depicted as *black boxes* at this abstraction level.
- The technology choices per component can also be shown, as the composition represents an executable and deployable unit.



Component Model level 3 (CM-3):

- Each (main) **component** can be depicted in detail whenever appropriate as *white boxes*.
- This abstraction level zooms into individual components by showing their internal behavior and structure.
- This level of diagram can be useful if the component is complex.

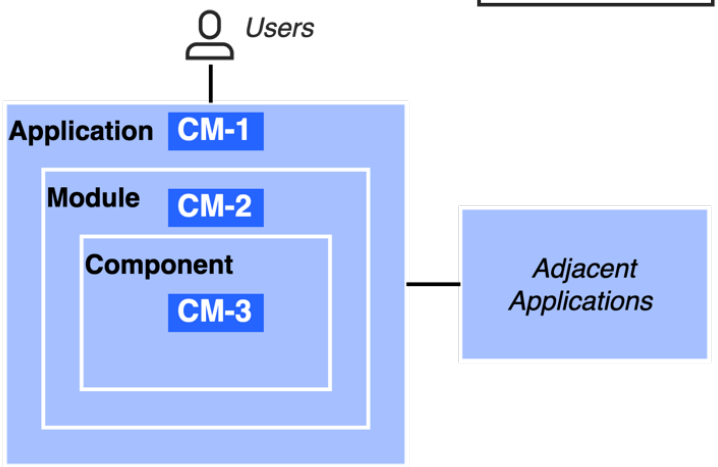


Figure 273: An application consists of components (modules), each of which consists of components.

All parts of the enterprise are components of the whole.

The application view consists of levels 1 to 3 as shown in the figure below.

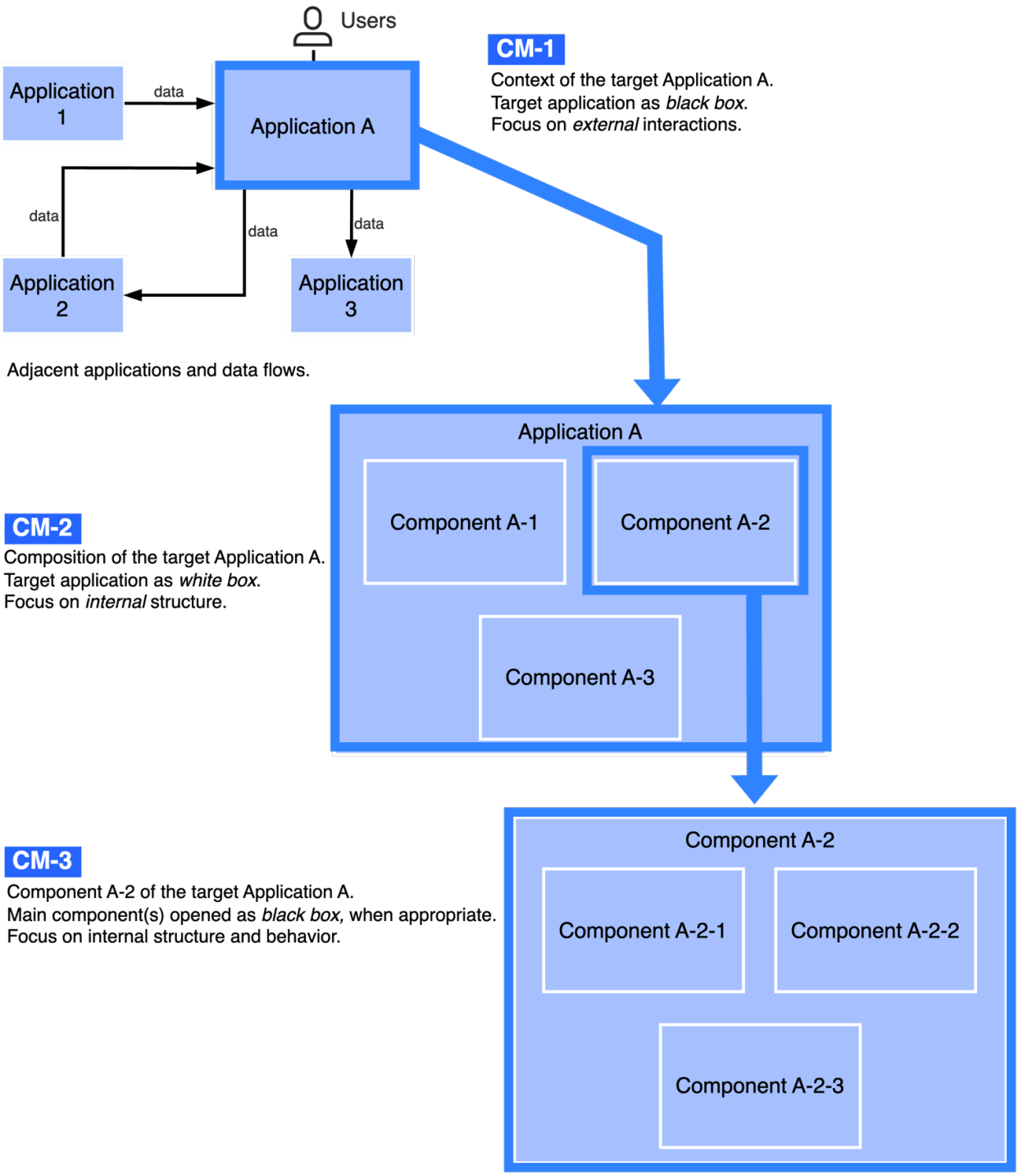


Figure 274: Component Model 1-2-3 abstraction levels of an application architecture.

See Component Model 1-2-3 (CM 1-2-3).

Component Model example diagrams of example target application named “Order Handling System” below.

6.3.13.1 Component Model level-1 (CM-1)

CM-1 Context diagram example beside.

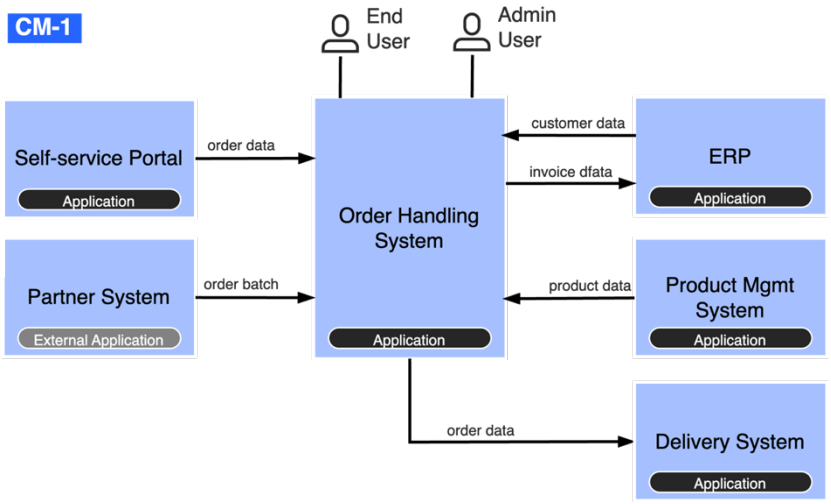


Figure 275: CM-1 context diagram.

6.3.13.2 Component Model level-2 (CM-2)

CM-2 composition diagram example below illustrates the internal structure of the application.

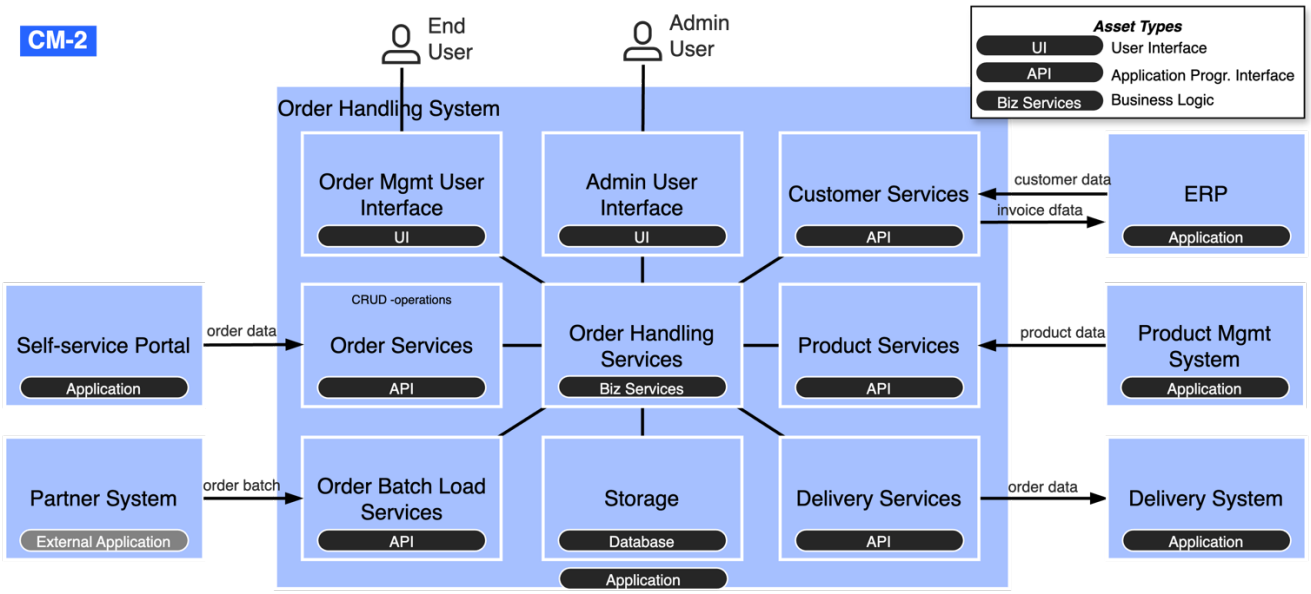


Figure 276: CM-2 composition diagram.

6.3.13.3 Component Model level-3 (CM-3)

CM-3 component diagram example below, showing the internal structure of a component.

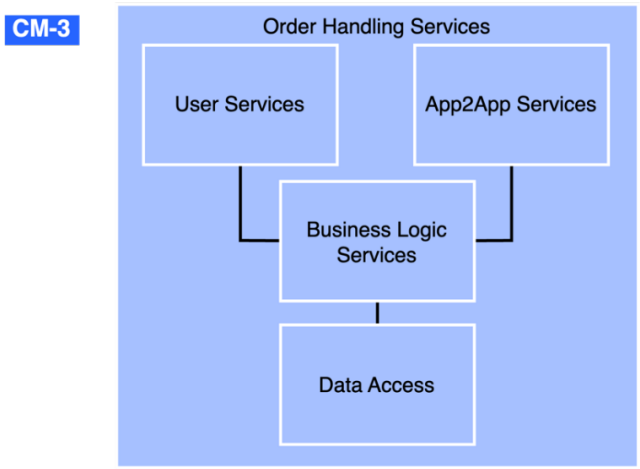


Figure 277: CM-3 component diagram.

6.3.13.4 Component Model level-0 (CM-0)

Level 0. The Component Model 1-2-3 can be extended to Component Model 0-n when starting from the overall business architecture and focusing on capabilities. Capabilities are the fundamental building blocks (DNA) of the business operations. A capability map is the "base map" of the whole operational business of an enterprise.[44]

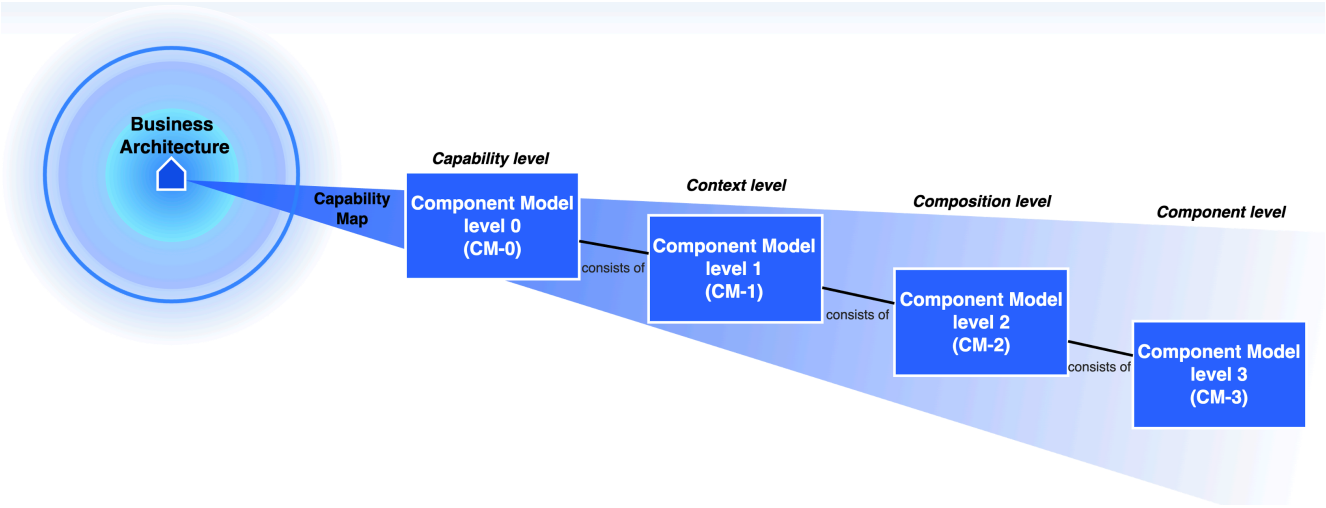


Figure 278: Component Model (0-n) starts from the capability level.

In the case of any change in an enterprise, such as concept design or a change initiative, the most practical approach is to analyse the customer and business needs in relation to the capabilities of the enterprise. Capabilities represent the business behaviors where changes need to be made, as they encompass all the behavioral elements of an enterprise. Once the appropriate capability is identified, the related applications are also determined. Capabilities form the foundation of the business, as they are the main building blocks of business architecture, as shown in the figure above.

Component Model (CM 0-n) can be extended with the capability level, level 0 as follows:

0) **Capability level 0** (business level, Enterprise Architecture/EA, Domain Architecture/DA)
1) **Context level 1** (application of a capability in business context, Solution Architecture/SA)
2) **Composition level 2** (the content, internal structure of an application)
3) **Component level 3** (the internal structure of a component of an application)

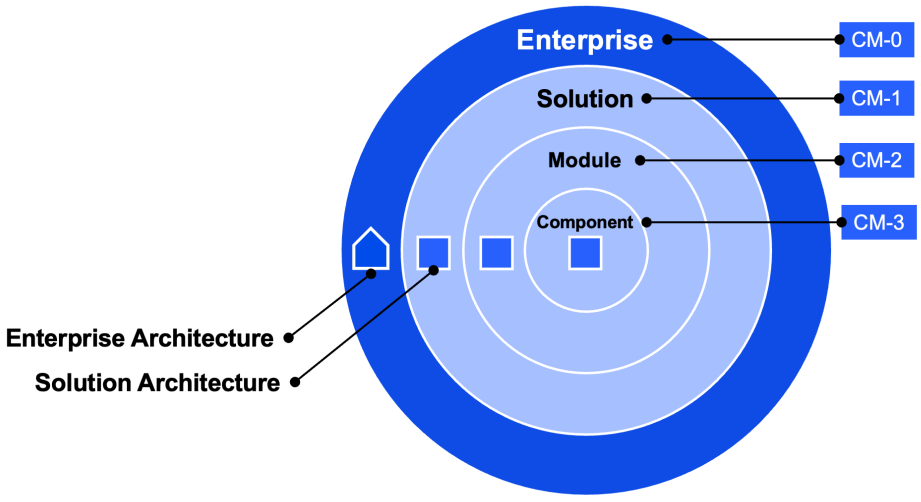


Figure 279: Hierarchy of architecture levels.

[44] Each component (such as application) of an enterprise belongs to certain capability. As such, when analysing any changes is reasonable to start from the capability map of the enterprise - according to "capability first" principle.

6.3.13.5 Component Model Examples

Component Model example diagrams of target application named “Internet Banking System”.

Component Model Level 1 (CM-1) diagram illustrates interactions between the target application and adjacent applications. All the relevant application interactions are introduced.

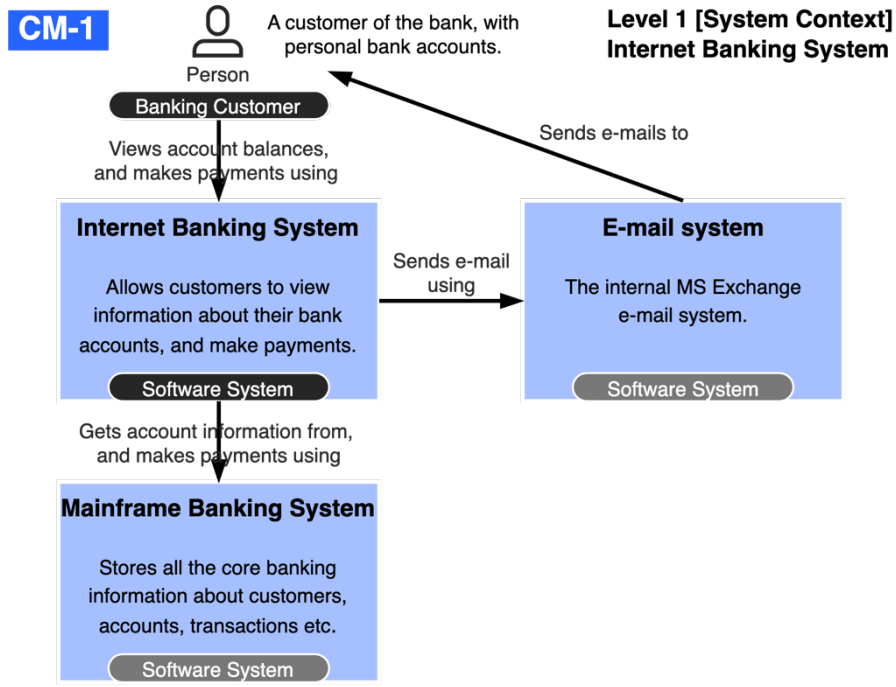


Figure 280: CM-1: Application architecture at a high level, the context level.

Component Model level 2 (CM-2) level illustrates how the target application is decomposed into modules (or main components), and which module realizes which application interfaces.

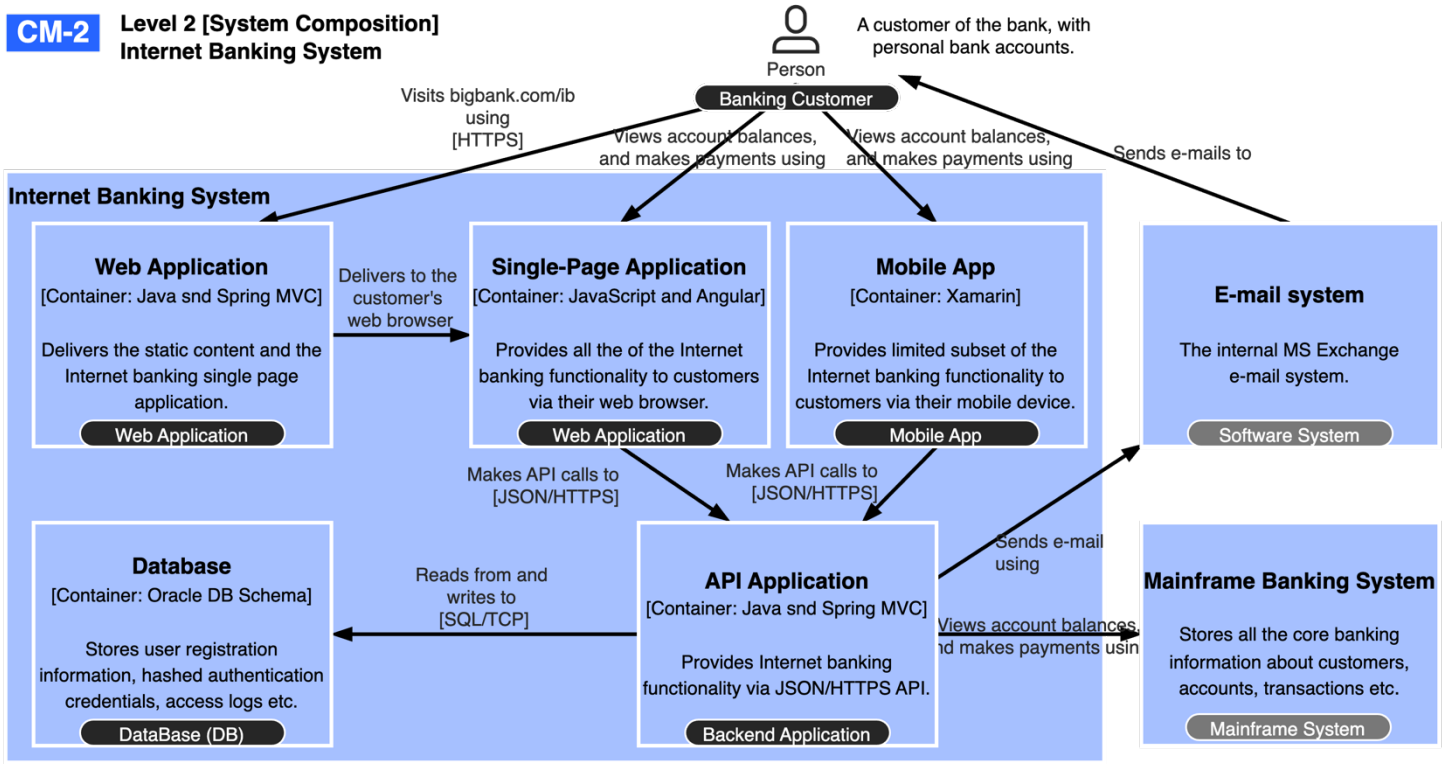


Figure 281: CM-2 Application architecture at a detailed level, the internal structure.

Component Model level 3 (CM-3) level illustrates how the target application's main modules are composed of sub-components, and how they interact. CM-3 diagram can be modelled for each application component separately, as shown in the diagram below.

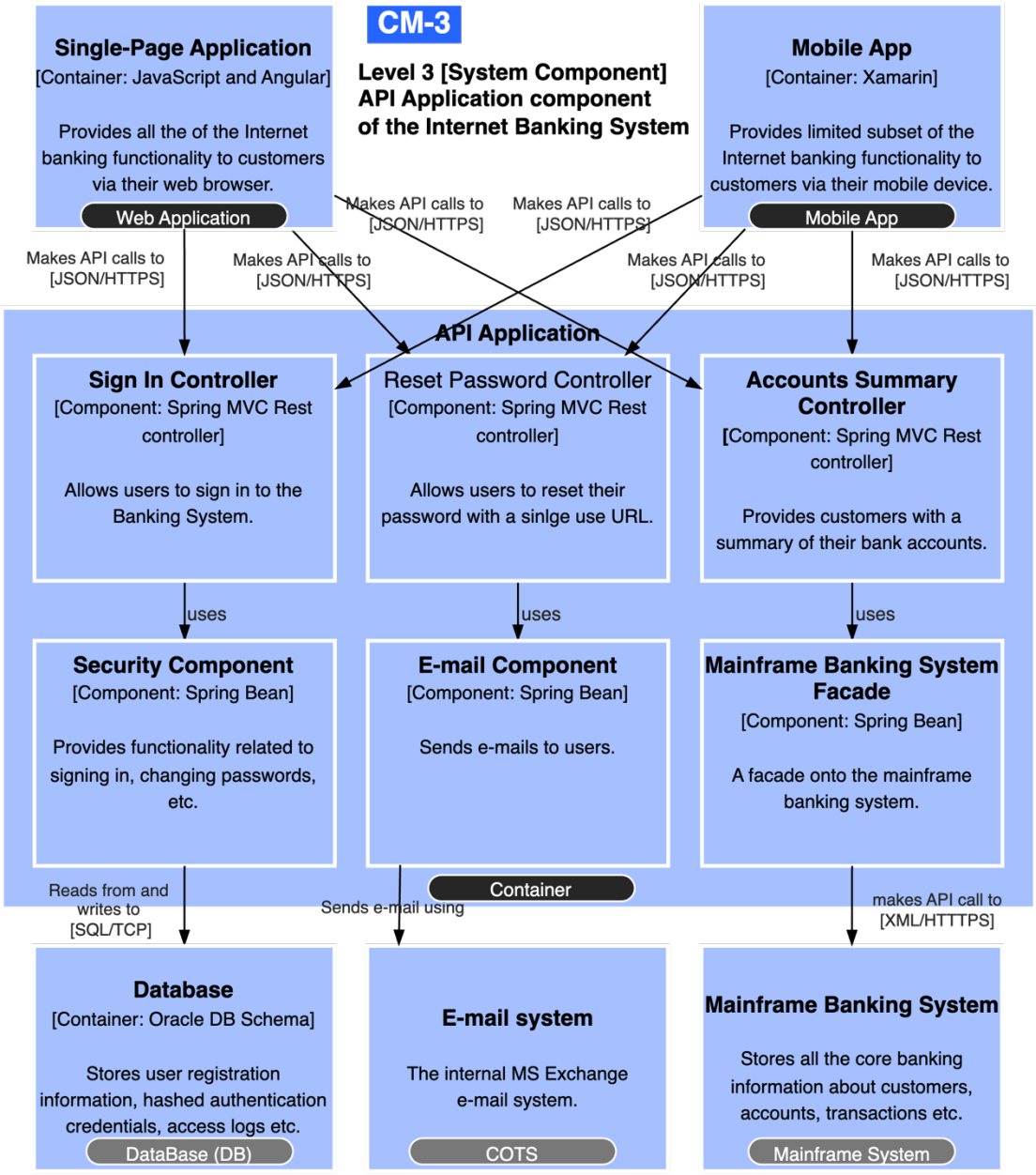


Figure 282: Main component of the application.

Note! Component Model is similar to C4-model, which can be modelled with EDGY, see this **EDGY and C4 mapping**: Application Architecture modelling with EDGY in abstraction levels of C4 model (pdf).

6.3.13.6 Deployment View

Deployment diagram. Technical infrastructure can be modelled also with EDGY architecture elements (Assets). This view illustrates the deployment environment, in which the business application is running. It is possible to define distinct test-, QA- (Quality Assurance) and production environments.

Deployment diagram example below. A deployment diagram can contain technologies.

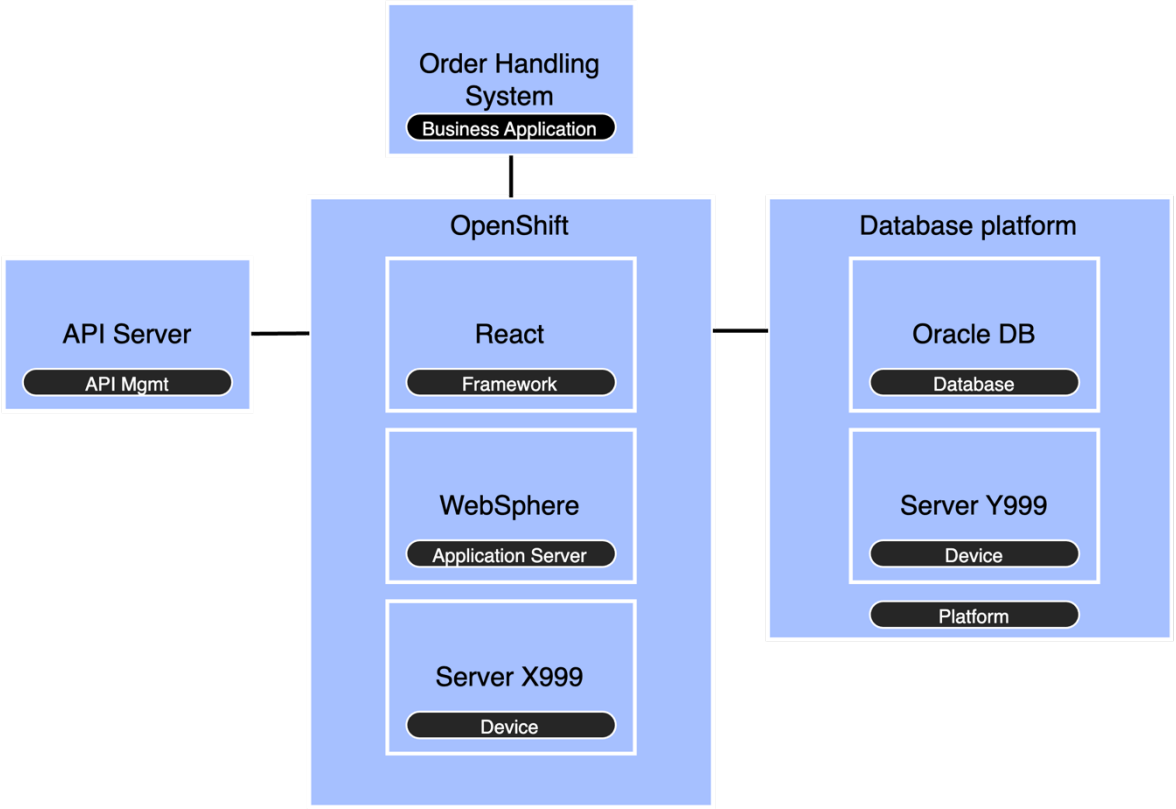


Figure 283: Deployment diagram.

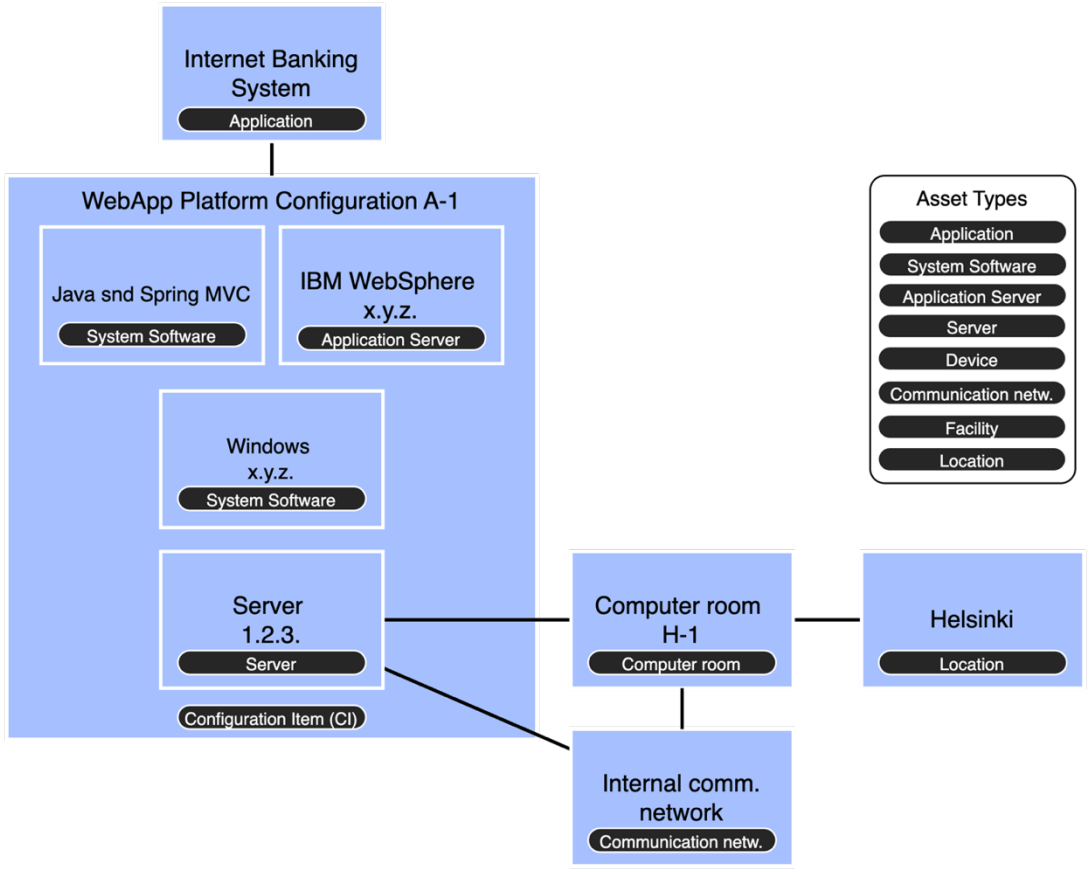


Figure 284: Deployment environment.

Technology architecture diagram below.

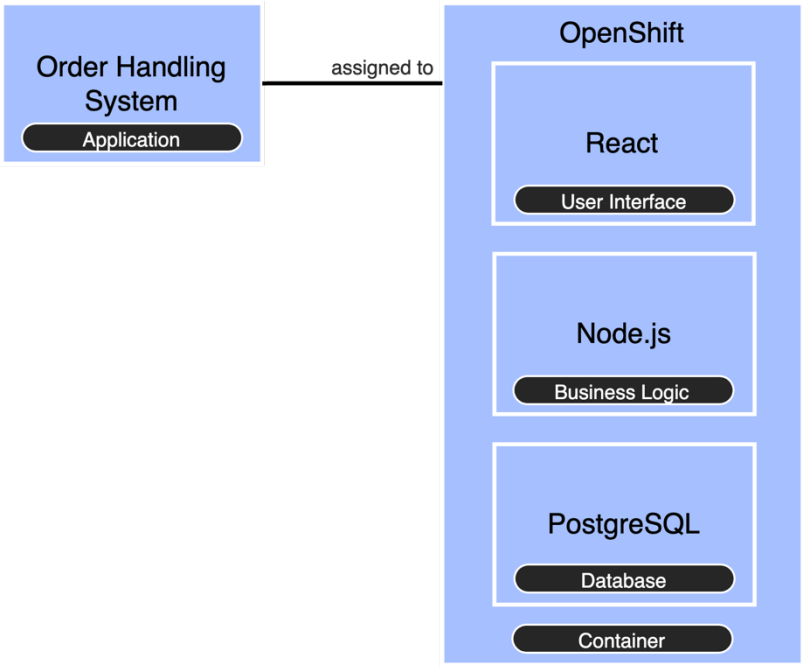


Figure 285: Technology platform diagram.

6.3.13.7 Component Interactions

Simple sequence diagram can be depcited with the *Asset* element and *Flow*-relation. This can illustrate how applications or components interact.

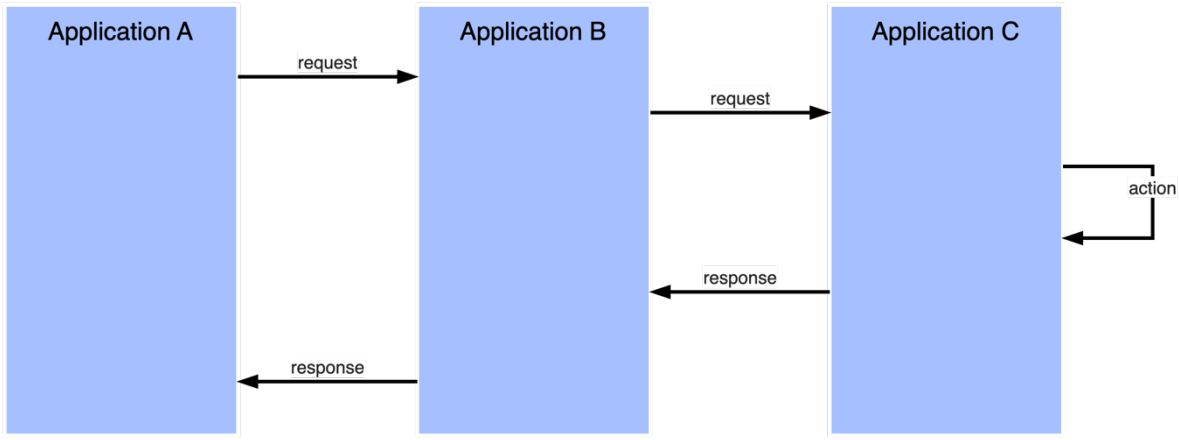


Figure 286: Seuqence diagram style (analogous to UML sequence diagram).

6.3.14 Technology Architecture

Technology architecture can be visualized with EDGY by using only one element and one or two relation types: with the *Asset* element and link (association) or flow relations. Additional tags can be used for informing the type of the asset (e.g. application).



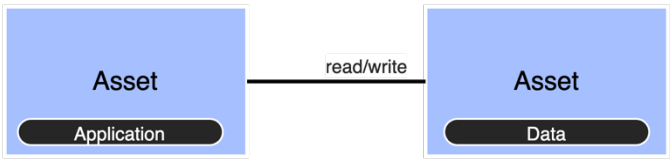


Figure 287: EDGY element *Asset* and link (association) relation.

Technology architecture can't be made any simpler than this! All that is meaningful in a technology architecture can be modelled with the *Asset* element with labels, and with *Association* relation. That's all what is needed for visualisation of technology architecture.

An example of technology architecture is shown below. This deployment diagram visualizes the run-time environment of a business application.

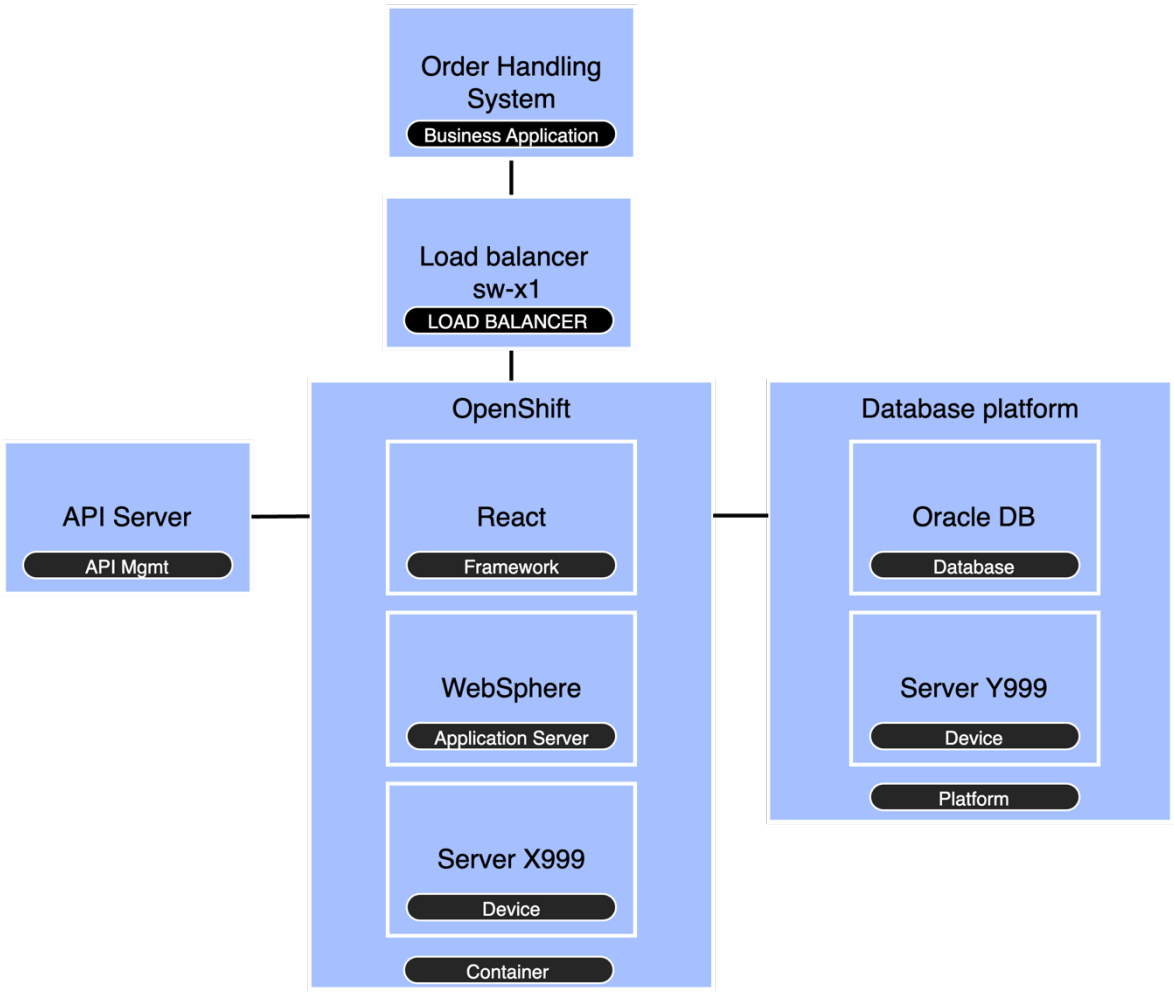


Figure 288: Technology architecture (the deployment environment).

When necessary, also the *Flow* relation can be used as shown below.



Figure 289: Flow relation between applications.

6.3.15 Application Integration



Application interactions a.k.a. integrations between applications can be modelled with flow -relation. The basic integrations illustrate what business data is transferred in which direction. Certain typical application integration patterns illustrate how applications interact with each other. Examples shown below.

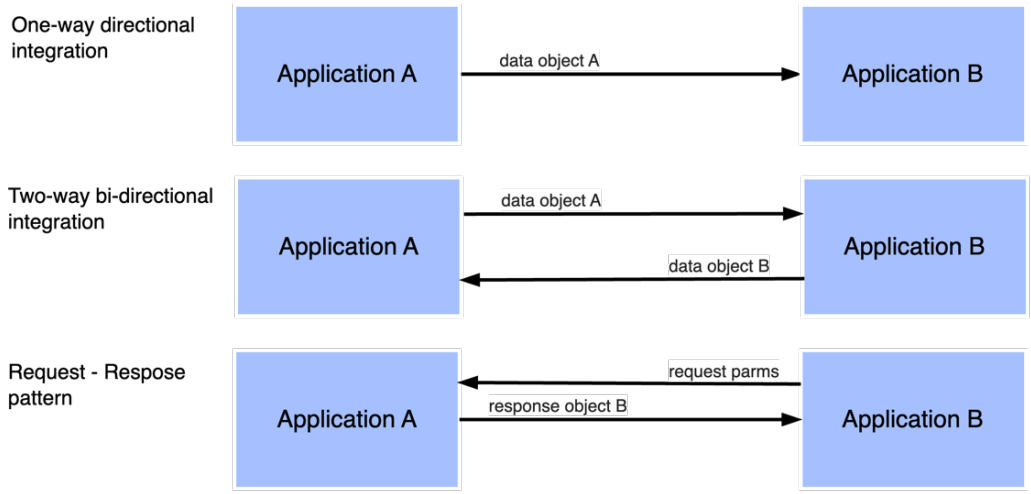


Figure 290: Application integration patterns.

> If a bi-directional connection between elements is intended, two relationships should be defined: one from element A to element B and one from B to A.
> [https://www.enterprise.design/wiki/Relationships]

Extra semantics can be added into flow relationships e.g. by line color or width.

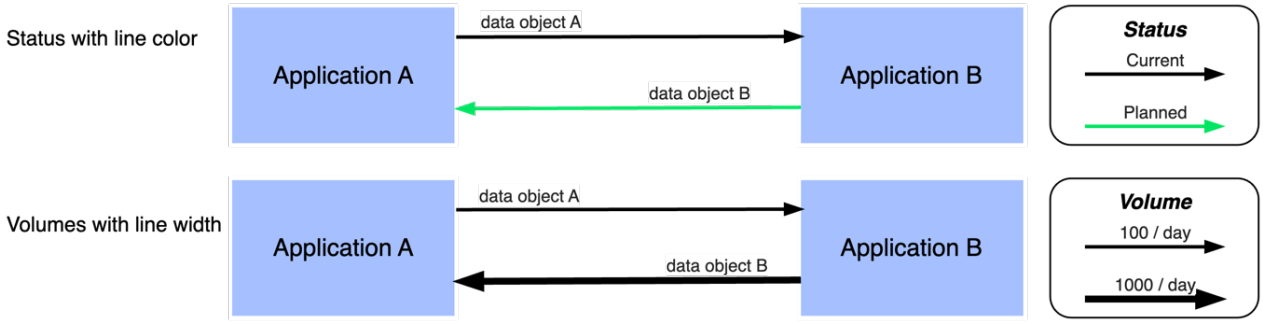


Figure 291: Additional semantics of flow relationships.

Extra semantics can be added to the line, such as protocols, mechanisms, volumes or frequencies.

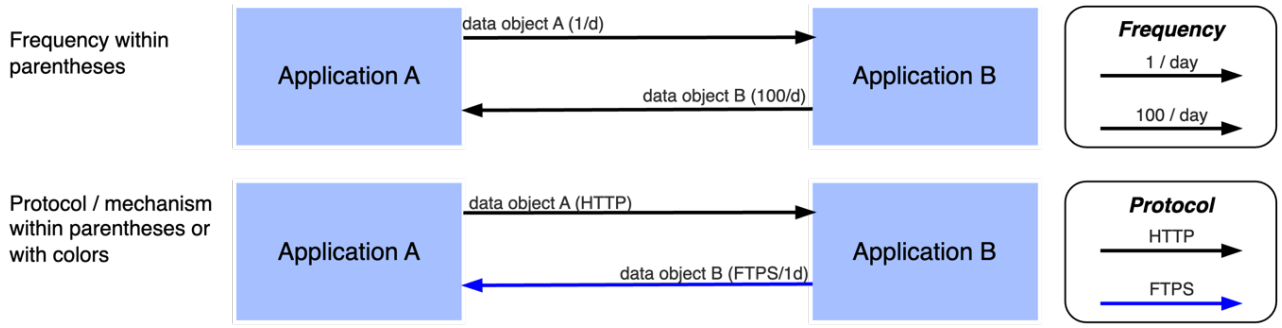


Figure 292: Additional information of mechanisms.

6.3.16 Value Flow



The *value flow* is a concept that represents how an enterprise creates value for its customers. The value flow can be divided into phases, sequence of activities, each of which create certain value add. The value flow can produce an output, which is associted with value.

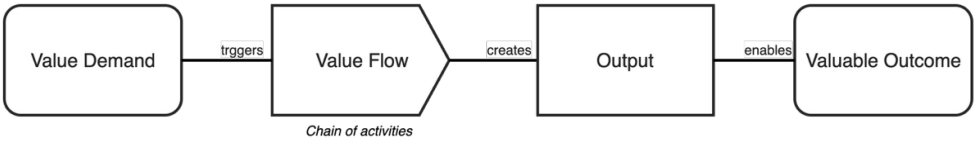


Figure 293: Value Flow.

The value flow of an enterprise can be visualised with the EDGY *Process* element.

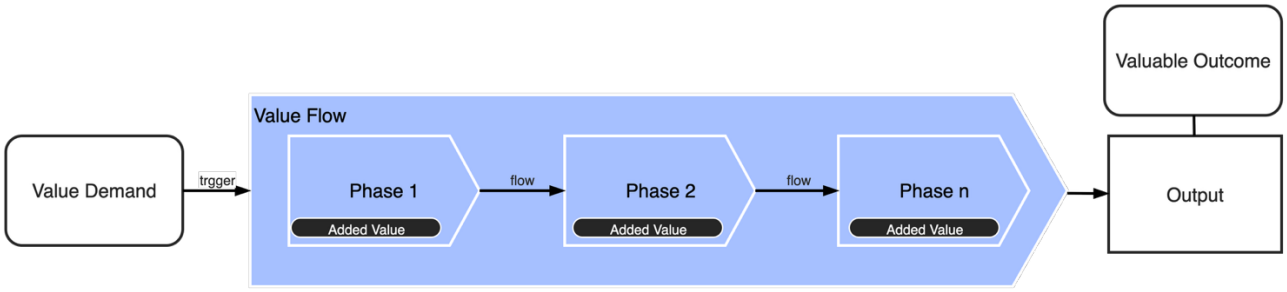


Figure 294: A value flow as an intra-organisational process.

The value flow is analogous to Michael Porter's *value chain* concept.

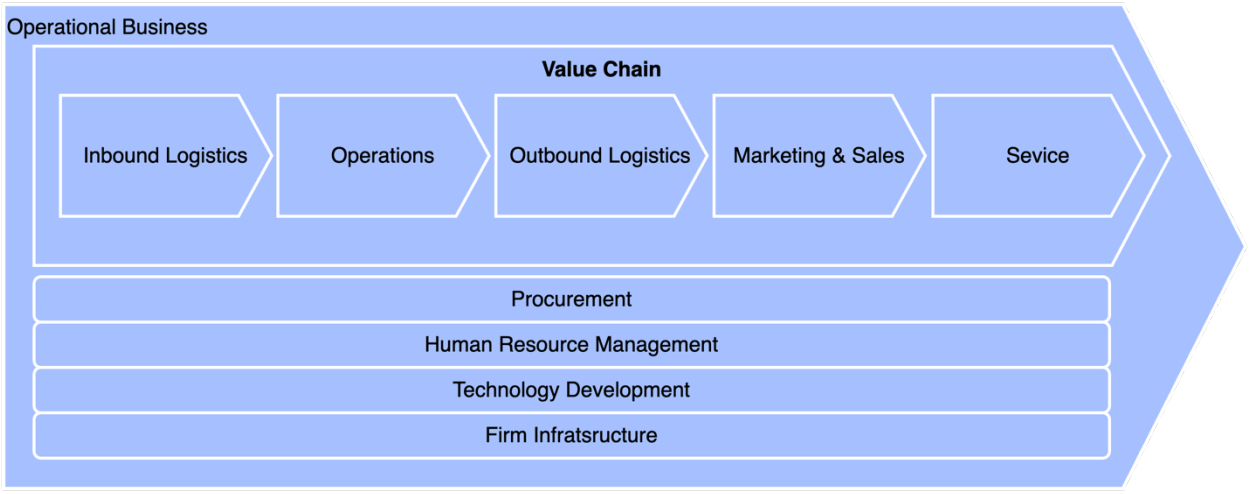


Figure 295: Value Chain by Michael Porter.

Business-to-business value chain sample below.

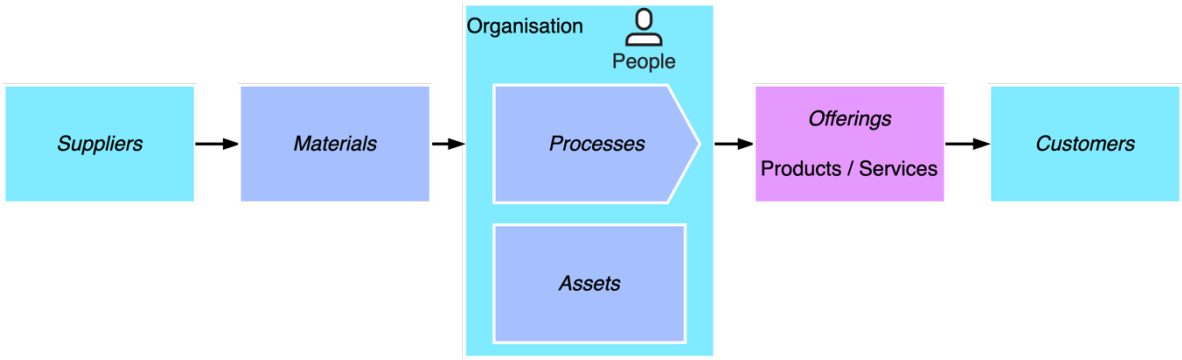


Figure 296: A B2B value chain.

Value Stream Map. Value Stream concept is a high-level concept that is used typically in the business model level. On the other hand, the operating model is based on actual processes. Customer Journey represents the customer actions. The customer value and business value can be modelled with the EDGY labels (tags and metrics) as shown below.

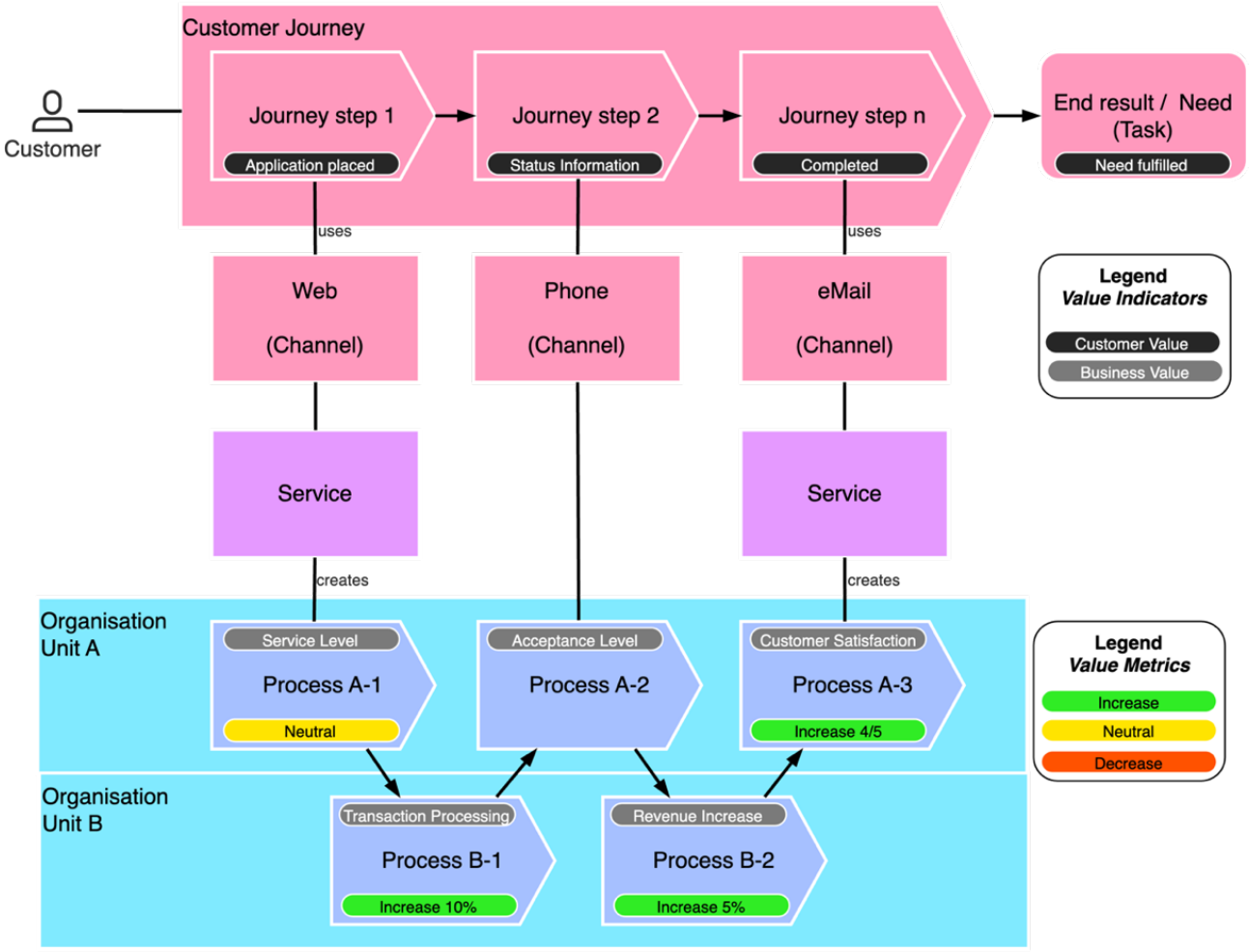


Figure 297: Customer Value and Business Value can be represented with the labels.

The concepts around the value flow introduced in the table below.

Concept	Description
Value Chain	Describes the activities and processes that an enterprise goes through to create and deliver a product or service to its customers. (M. Porter link)
Value Stream	Describes series of steps (activities) required to deliver a product or service to a customer, from the initial concept to the final delivery. The concept is commonly used e.g. in Lean management. A value stream focuses on the *internal* flow of value through an organisation, identifying both value-adding activities and non-value-adding activities (waste) to improve efficiency, effectiveness, and customer satisfaction.

6.3.16.1 Value Stream Types

The **value stream** is typically process-focused, and looks at the enterprise's efficiency in delivering value. There can be identified two types of Value Streams: 1) Operational Value Stream and 2) Development Value Stream.



While *operational value streams* drive the immediate delivery of products and services, *development value streams* ensure the continuous improvement and evolution of the enterprise's capabilities and offerings (products and/or services).

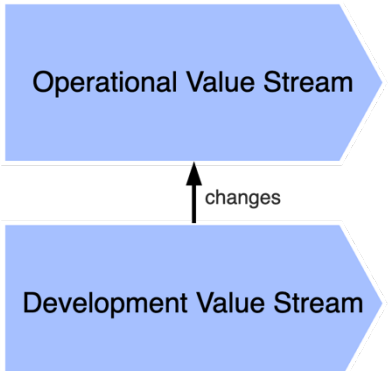


Figure 298: Value Stream types.

- **Operational value streams** are the core business processes that directly deliver products and services to customers. They are focused on day-to-day operations and revenue generation.
- **Development value streams** focus on creating and enhancing the systems, products, and services that enable operational value streams to function effectively. They are based on projects or products (e.g. digital products) and services, working behind the scenes to improve the enterprise's ability to deliver value.

Operational and development value streams are deeply interconnected. Operational value streams depend on the outcomes of development value streams. Development value streams provide the tools, products, services, and processes that operational value streams need to efficiently deliver value to customers.

The continuous improvement of operational value streams is often driven by the success of development value streams. Development teams, by iterating on their products, services or processes, enable operational teams to perform better, faster, and more efficiently.

Summary		
Aspect	Operational Value Stream	Development Value Stream
Purpose & Focus	Delivering value directly to customers	Creating and improving the products, services, and systems used to deliver value
Types of activities	Ongoing, day-to-day business operations	Product-, service- or project-based, design, development, testing, and improvement
Impact	Direct impact on customers and revenue generation	Indirect impact by enabling operational value streams to function better
Interaction with Customers	*Customer-facing*, involves direct interaction with end-users or customers	*Internal-facing*, involves building capabilities and tools
Continuity	Continuous, part of regular business operations	Episodic, tied to specific design efforts, initiatives, projects, programs or improvements
Examples	Sales, production, service delivery, customer service / -support	Product or service development, process improvement, technology updates

6.3.16.1.1 **Operational Value Stream (Organisation Perspective)**

Operational Value Streams (operational processes) represent the organisation view of how an enterprise creates value to customers and/or end users (*internal view*). An operational value stream is connected with the capabilities of the enterprise.

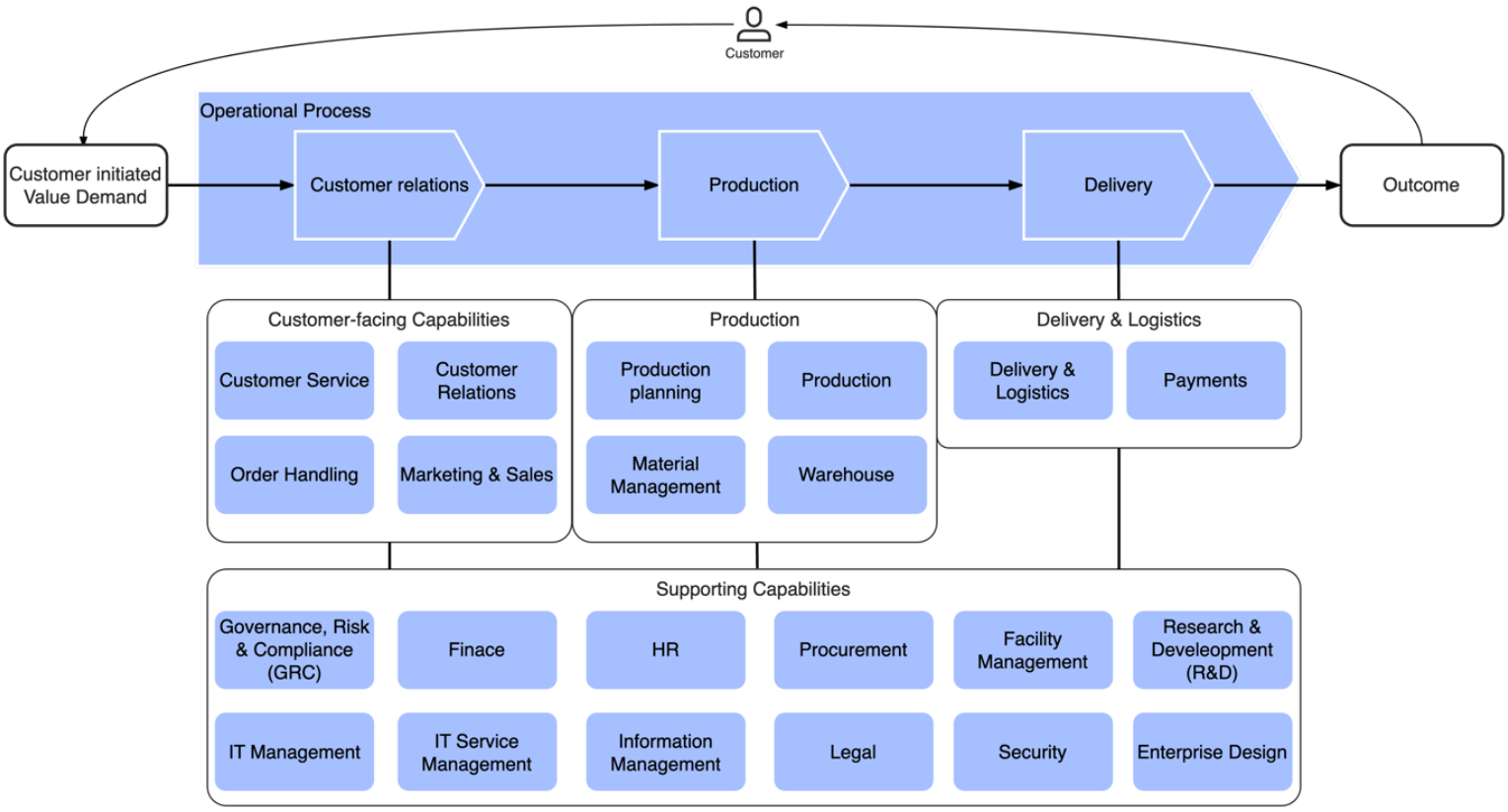


Figure 299: Operational Value Stream.

6.3.16.1.2 **Development Value Stream (Development Perspective)**

Development Value Streams refer to the set of activities that create and evolve the systems, products, services, or capabilities that operational value streams use to deliver value. These streams focus on designing, developing, and improving the products, services, and internal systems (applications) that enable the operational value streams to function effectively.

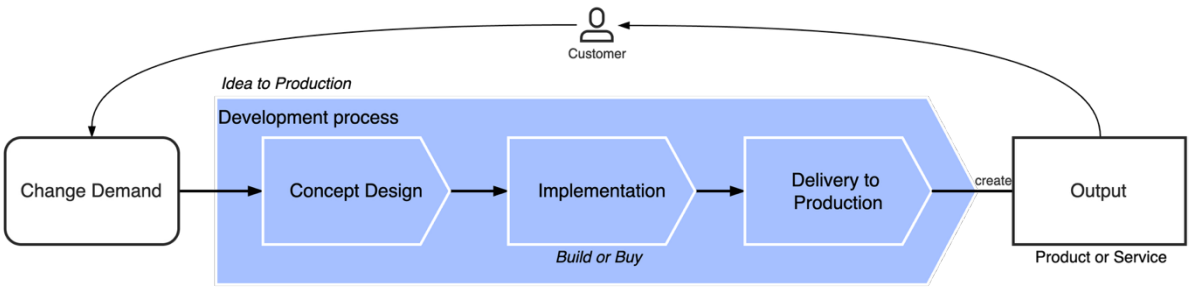


Figure 300: Basic Development process.

A development value stream (also) connects with the capabilities of the enterprise. These capabilities are basically the support- and change capabilities of the enterprise (see the capability map that introduces different types of capabilities: customer-facing-, operational-, supporting- and change capabilities).

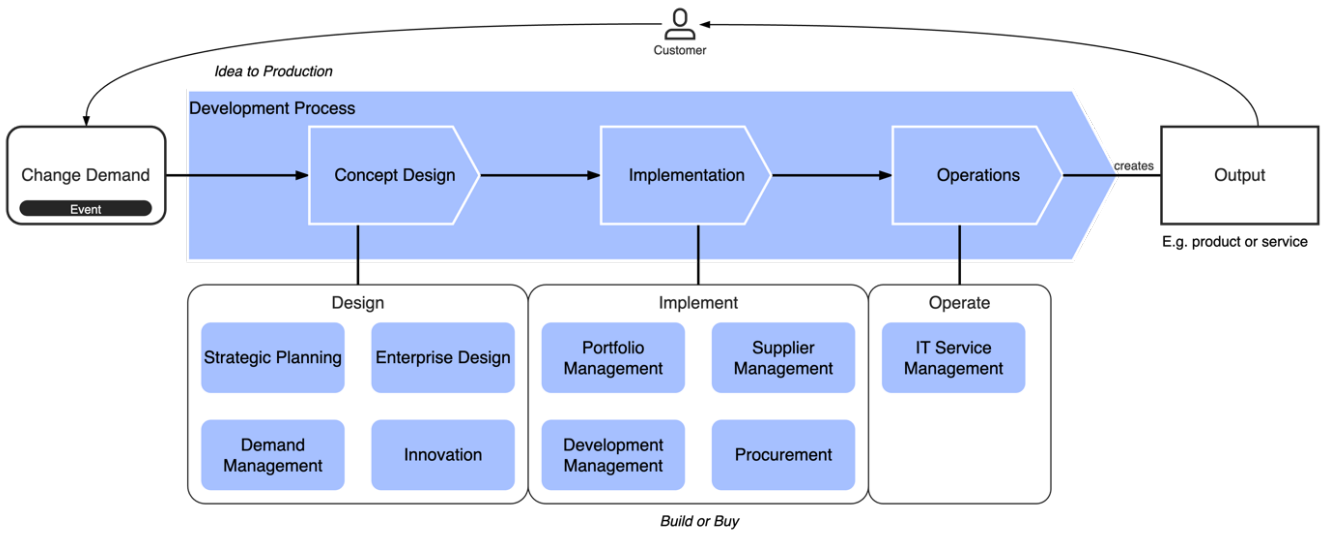


Figure 301: Development process (Development Value Stream).

6.3.16.1.3 Customer Journey

Customer Journeys represent the customer perspective, the customer view of how a customer experiences the enterprise, and how customer value is created.

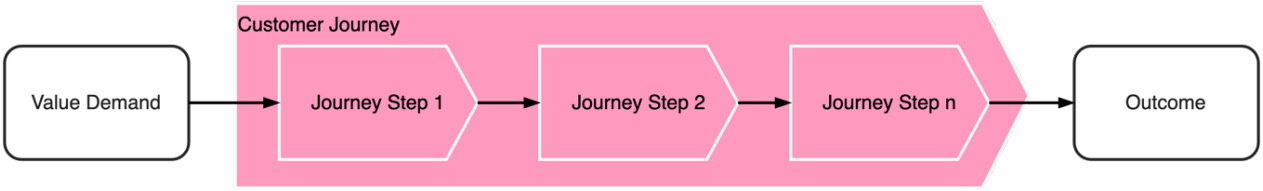


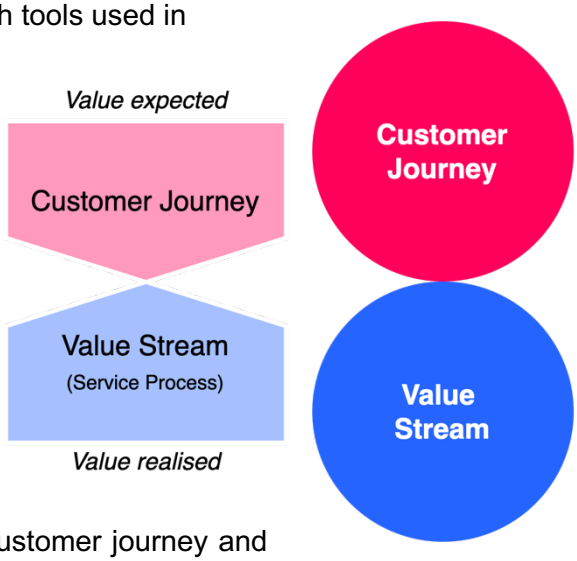
Figure 302: Customer Journey represents the customer view.

6.3.16.2 Customer Journey and Value Stream

Value Flow can be defined in two levels: 1) Customer level and 2) Organisation level. The former can be depicted as Customer Journey, and the latter as Operational Value Stream. A customer journey describes what the customer does and experiences when interacting with the products and/or services offered by the enterprise. A value stream is essentially just an operational process, with an emphasis on the creation of value.

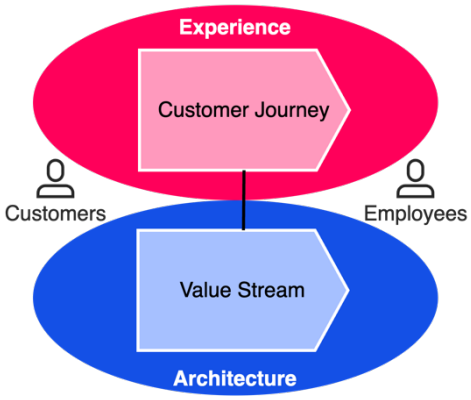
The Customer Journey and Value Stream are both tools used in understanding how value is delivered to customers, but they differ in focus and perspective:

- the **Customer Journey** focuses on the *external experience* of the customer, while
- the **Operational Value Stream** looks at the *internal processes* that create and deliver that experience.



Both are critical for understanding how value is created and delivered but address different parts of the overall process. The key is to get the whole picture, the holistic overview what is happening in and around the enterprise. That big picture can be taken by analysing both the customer journey and the value stream. This can be done by analysing the customer *experience* and operational *architecture* perspectives (facets) of the enterprise.

Customer Journey characteristics:



- The customer journey maps the *customer's experience* and interaction with an enterprise and its product(s) or service(s).
- It focuses on how customers perceive and experience every touchpoint with the business of an enterprise.
- The journey is often emotional and subjective, highlighting customer needs, pain points, and how they engage with the business across multiple stages (awareness, consideration, purchase, support, etc.).

Value Stream characteristics:

- A value stream maps the *internal processes* and activities required to deliver a product or service to the customer.
- It focuses on the flow of value through the enterprise, from the initial concept or request to final delivery and support.
- It is about how the enterprise creates and delivers value, identifying each step of production or service delivery, highlighting inefficiencies, and optimizing process.

Aspect	Customer Journey	Operatioanl Value Stream
Purpose & Focus	Customer experience, touchpoints and channels	Internal processes that create and deliver value
Perspective	From the customer's viewpoint	From the organisation's viewpoint
Objective	Understand and improve customer interactions, getting the *customer insight*	Improve internal processes and efficiency (e.g. Lean & agile methods)
Outcome	Enhance customer satisfaction and experience	Digital Product or service or operating model (process)
Key Phases / Stages	1) awarness, 2) consideration, 3) decision, 4) purchase / use / service, 5) post-purchase or -use or post-service.	1) Demand Management & concept design, 2) development (build, buy, use) & delivery, 3) production
Examples	A customer researching a product online, visiting a store, interacting with customer service, purchasing the product.	The internal process from product/service design, manufacturing, distribution and delivery to the customer.

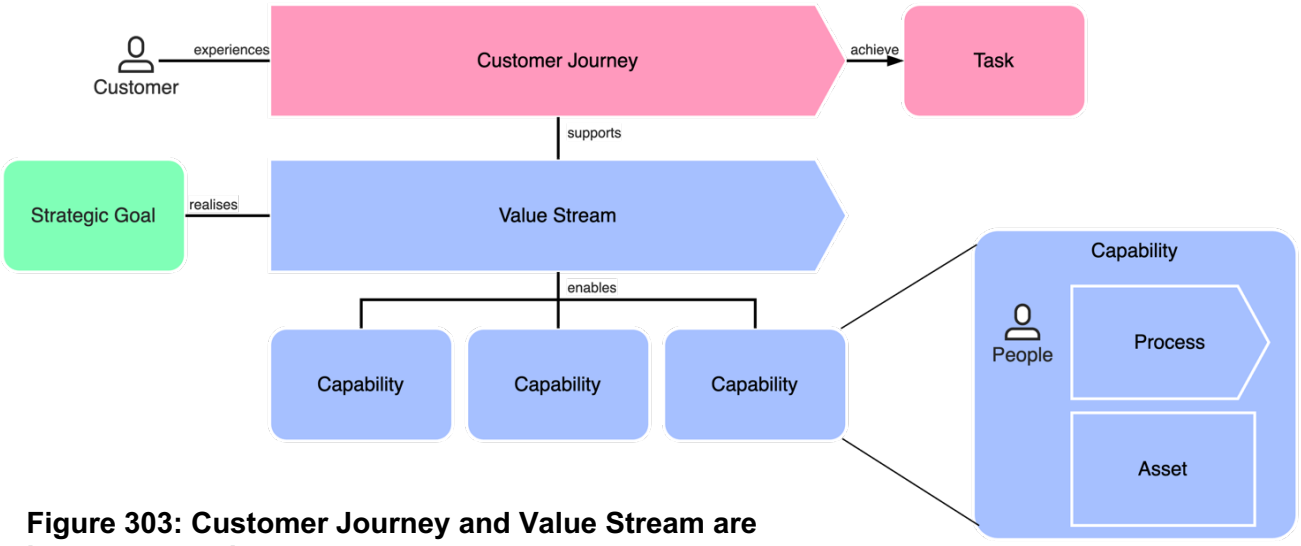
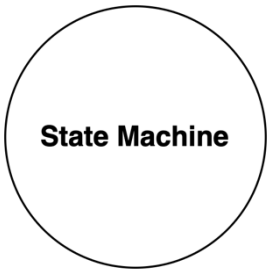


Figure 303: Customer Journey and Value Stream are interconnected.

6.3.17 Value Model

TBD

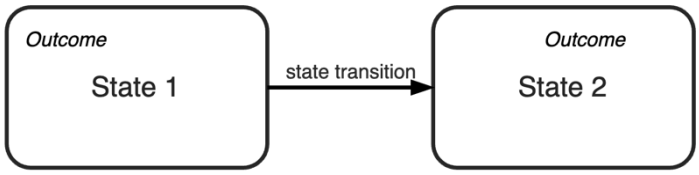
6.3.18 State Machine



A state machine in software development is a conceptual model used to design systems that can be in a specific state at any given time and transition between states based on defined events or conditions. It is widely used in software engineering to represent and manage complex workflows, behaviors, or processes in a structured way.

Key components of a state machine:

1. **States**: The distinct modes or conditions in which the system can exist. E.g. Initial state, Final (End) state.
2. **Transitions**: The movement from one state to another triggered by an event or condition.
3. **Events**: Inputs or triggers that cause transitions between states.
4. **Actions**: Operations performed during a state transition or while in a specific state.



A state machine visualised by using the EDGY *Outcome* elements representing the states.

Examples:

- UI/UX Design: Managing user interfaces that respond to inputs and change states, such as navigation flows or form validations.
- Workflow Management: Orchestrating business processes like order fulfillment or ticketing systems.

Example of a state machine for an order management system, illustrating the states an order can go through and the events that trigger transitions between those states.

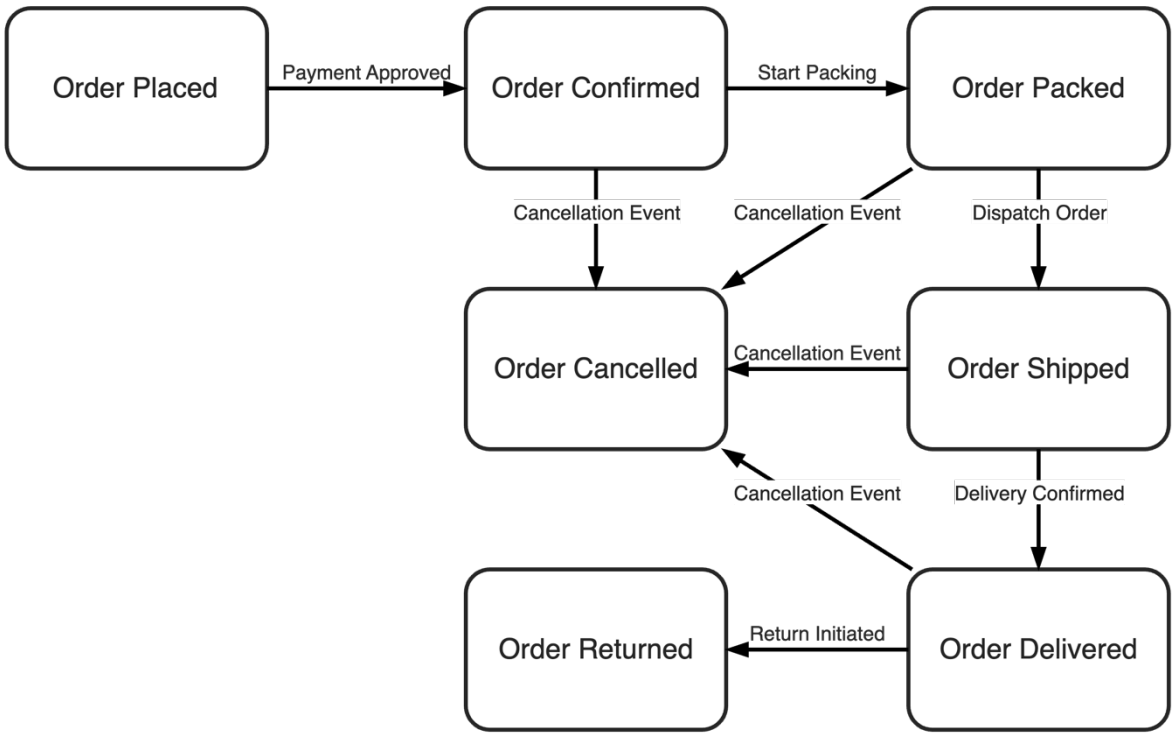


Figure 304: Order handling state machine.

Order handling states			
Currnet state	Event	Target (next) state	Action
Order Placed	Payment Approved	Order Confirmed	Send confirmation email.
Order Placed	Payment Failed	Cancelled	Notify customer about failure.
Order Confirmed	Start Packing	Order Packed	Notify warehouse to pack items.
Order Packed	Dispatch Order	Shipped	Update tracking information.
Shipped	Delivery Confirmed	Delivered	Notify customer about delivery.
Delivered	Return Initiated	Returned	Arrange for item pick-up or refund.
Any State (before Shipped)	Customer Cancellation	Cancelled	Refund payment, notify parties.

Types of state machines are e.g. as follows:

- *Finite State Machine (FSM)*: A system with a finite number of states and transitions. E.g. a traffic light system with Red, Yellow, and Green states.
- *Deterministic State Machine*: The next state is determined by the current state and the event.
- *Non-Deterministic State Machine*: The next state may depend on additional factors, leading to multiple possible transitions for a given event.

A state machine is a tool in software development for modeling and managing systems with distinct states and transitions. By defining states, events, and transitions, state machines help create clear, predictable, and maintainable workflows for various applications.

State machines help create clear and maintainable workflows for various applications.

6.3.19 Enterprise Risk Management (ERM)

Enterprise Risk Management (ERM) is an enterprise-level approach to managing risks by identifying them and preparing against them. Risks should be taken into account not only at the enterprise level but also in each and every change activity. Risk management aims to prevent risks proactively. Risk categories are as shown in the figure below.



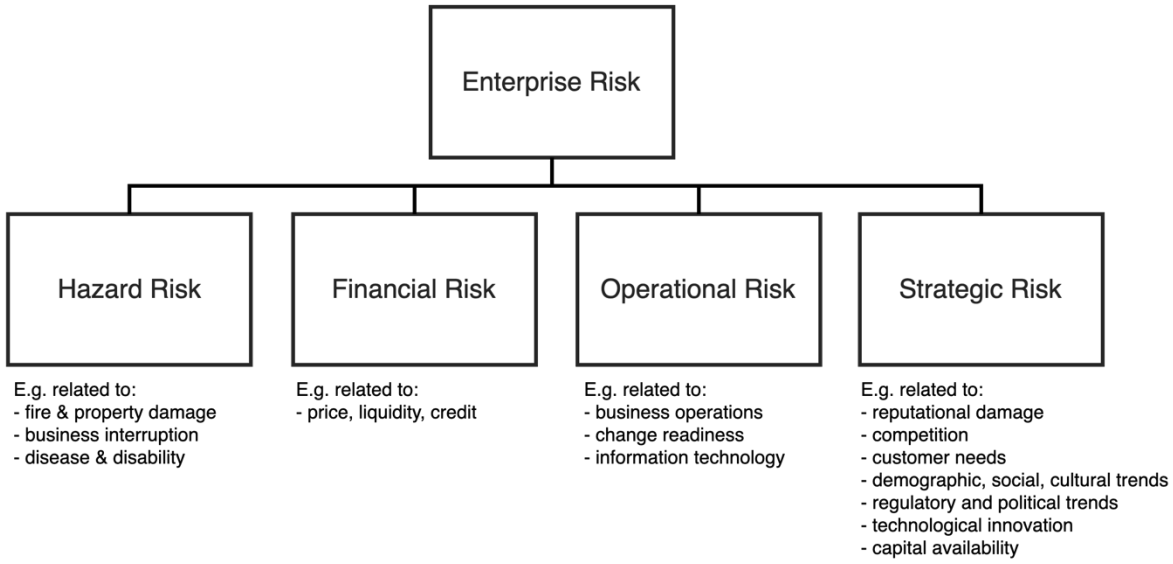


Figure 305: Risk categories.

More specific risk categories can be specified based on the problem domain such as: human capital risks, legal/regulatory risks, technological risks and natural disaster risks.

Risk management covers coordinated activities to direct and control an organisation. These are covered by ISO31000 standards [45].

A risk occurs when a threat meets vulnerability (illustrated below).

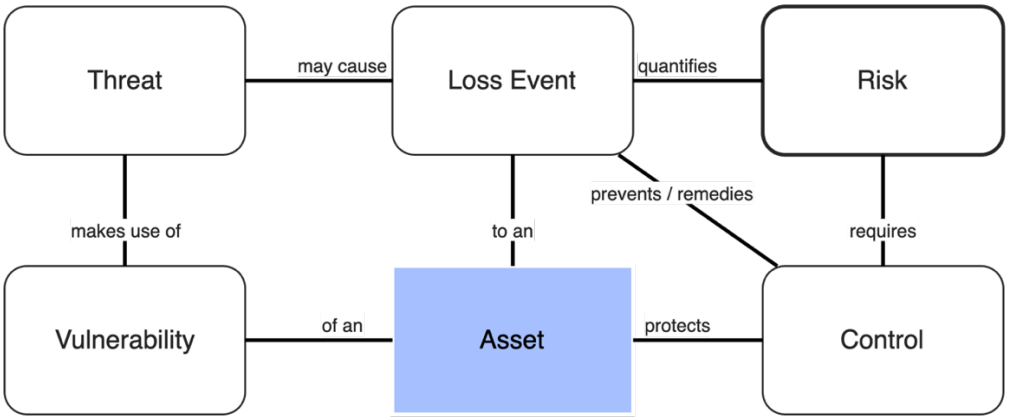


Figure 306: Risk concepts.

See the *Risk assessment* template [10.2.36].

See the template *Risk Identification & Assessment* (10.2.36).

Risk management concepts are introduced in the table below.

Enterprise Risk Management (ERM) concepts	
Term / Concept	Description
Asset at Risk	Any tangible or intangible asset / resource (e.g. data, application, facility).
Control	Control Measure / Risk Control / Treatment / Mitigation / Means. An action, device, procedure, or technique that reduces a threat, a vulnerability, or an attack by eliminating or preventing it, by minimizing the harm it can cause, or by discovering and reporting it so that corrective action can be taken.
Domain	A set of related entities that share one or more characteristics. A security domain is group of assets.
Loss (Event)	Any circumstance that causes a loss or damage to an asset.
Risk	Potential / probable of loss when the threat happens. Occurs when threat meets vulnerability. Initial risk = before mitigation; *Residual risk* = after mitigation.
Threat	A possible danger that might exploit a vulnerability and cause possible harm to an asset. Can be a) Threat Agent (e.g. an object, individual) or b) Threat Event (e.g. condition, occurrence).
Vulnerability	Any flaw or weakness in an asset's design, implementation, or operation and management that could be exploited by a threat.

Risk Assessment illustrated below. (Process flow with the EDGY *Activity* elements.)

[45] ISO31000 standard.

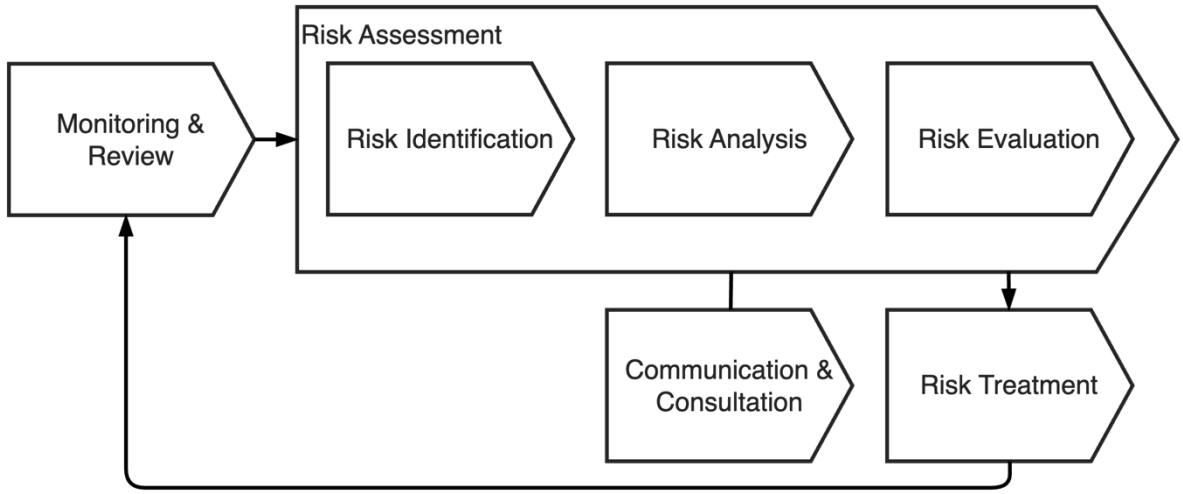


Figure 307: Risk Assessment [Source: Open Group, White Paper W172, 2017].

6.3.19.1 Capability-based Risk Management

Enterprise Risk Management can utilize capabilities as main components, as they consist of all the other elements of the enterprise. Capabilities or capability areas can be used as risk 'domains'. Risk modelling can be done by using EDGY elements and metrics (figure below).

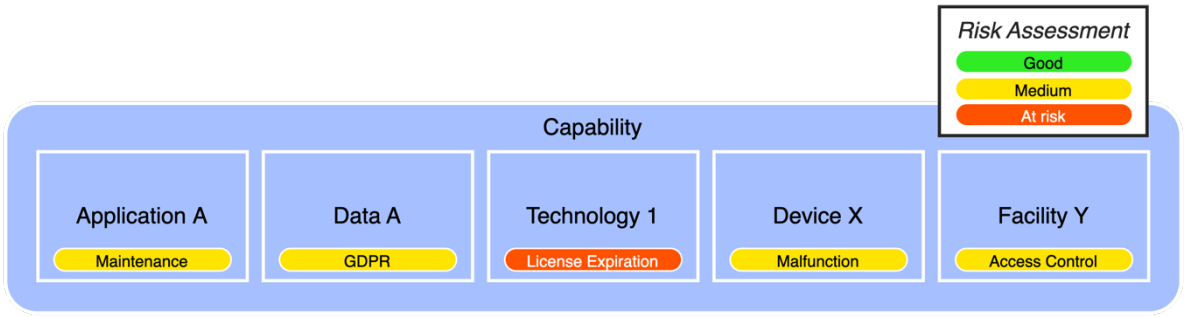


Figure 308: Assets with risks as metrics.

Another capability risk modelling example below.

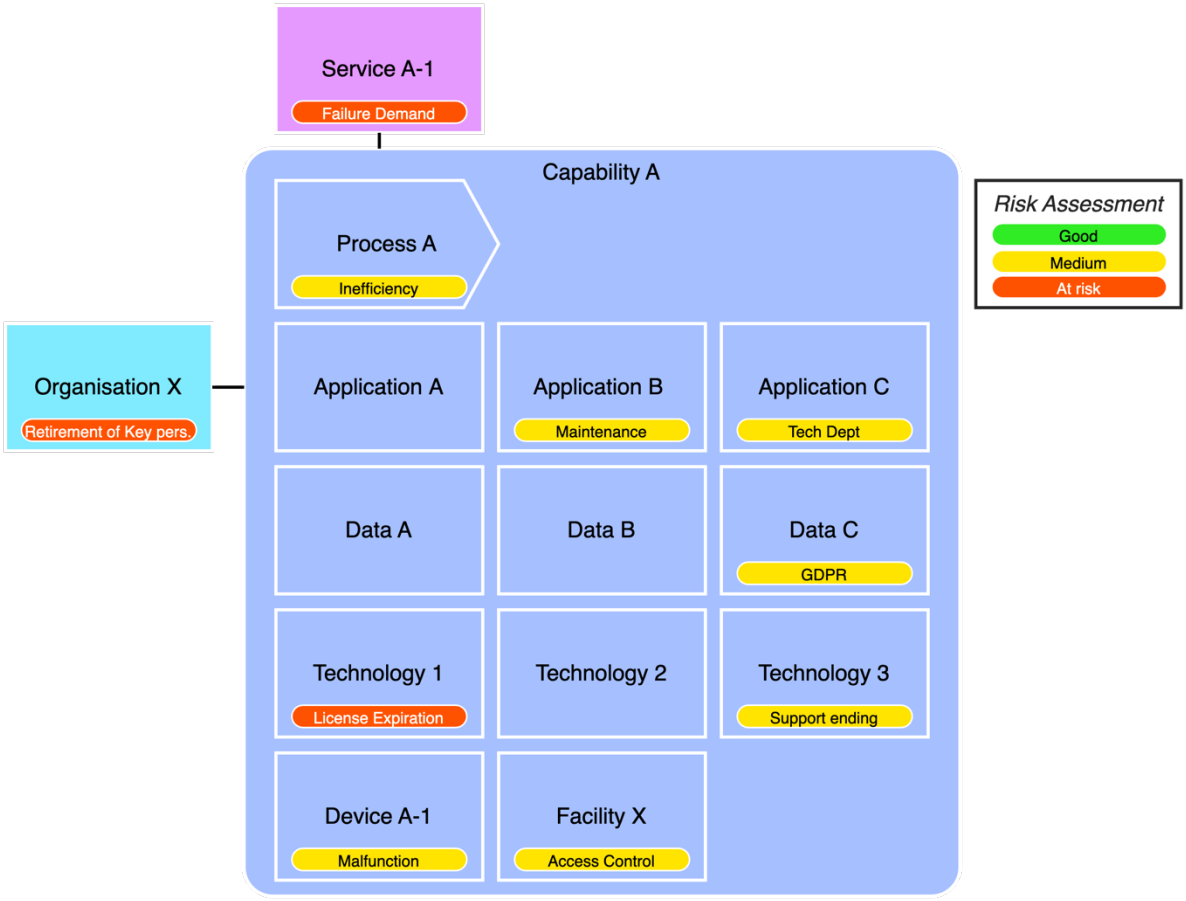


Figure 309: Risks set to elements of a capability.

Risks can be set to capabilities at a high level, or risks can be directed to the particular elements of the enterprise such as resources/assets. Potential targets of risks are elements of the enterprise, such as products and/or services, organisation units/groups/teams, employees (skills & competencies + career-related matters), processes, applications, data, technology, devices, facilities etc.

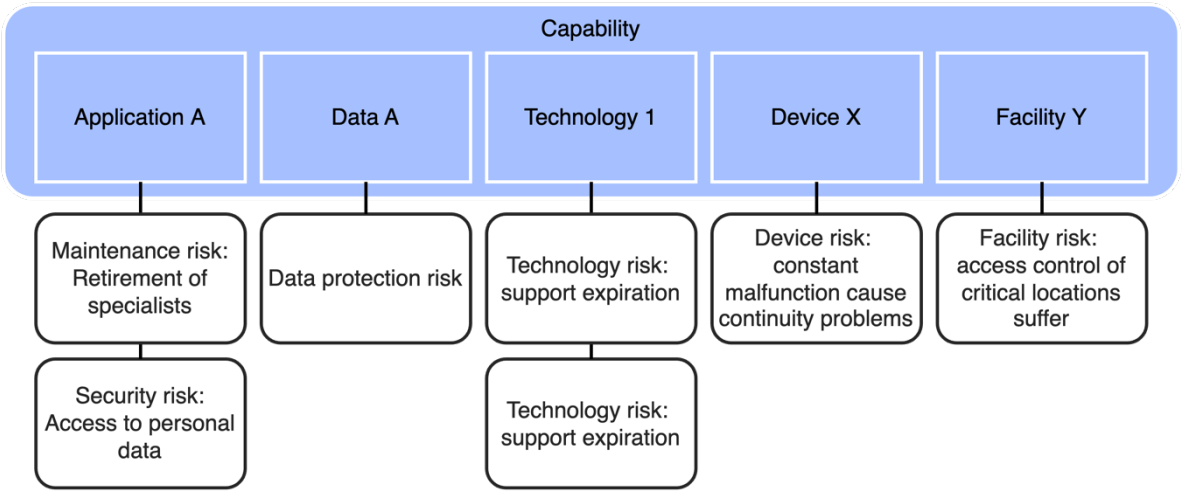


Figure 310: Risks defined explicitly as outcomes and connected to assets of a capability.

Risk management aims to prevent risks proactively.

7. Applying Enterprise Design with EDGY

7.1 Enterprise Design Viewpoints

There are many disciplines, practices, and capabilities involved in the change and operational activities of an enterprise. Each discipline has its own purpose and specific focus area. Enterprise Design and EDGY can be applied across all disciplines to facilitate holistic and human-centric collaboration.

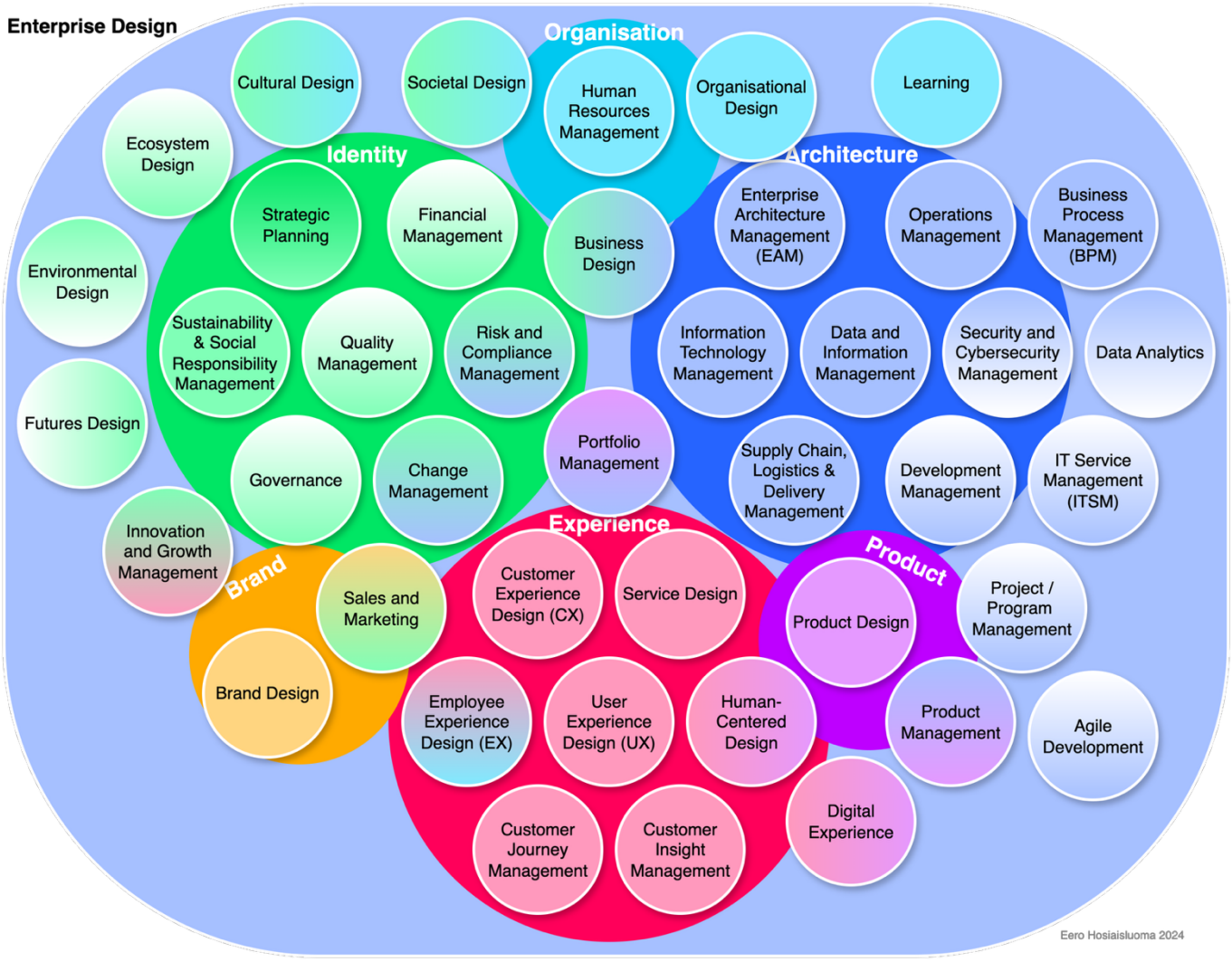


Figure 311: Enterprise Design facilitates many practices of an enterprise.

Enterprise Design and **EDGY** can be applied across all disciplines to facilitate holistic and human-centric collaboration.

The typical problem is that these disciplines often work independently and use different methods and tools. Each has its own focus areas, concepts, terminologies, and specialized competence roles. Enterprise Design, combined with EDGY, can integrate these distinct disciplines and enable cooperation by providing a holistic, coherent, and human-centric overview of the enterprise to support collaboration.

7.1.1 Disciplines and Competence Areas

The enterprise's internal development activities are a complex mix of separate expert groups and practices, with insufficient interaction and collaboration between them. Each expert group operates with its own methods and tools, which are not well aligned or compatible with those of other groups.

The separation of different expert groups further complicates already challenging large-scale business transformations, effective operational performance, and delivering an excellent customer experience.

Siloed work in distinct disciplines and separated practices can lead to several drawbacks that negatively impact organizational efficiency, innovation, and overall success.

Alert!
A large portion of business transformation initiatives fail, operational activities are siloed and inefficient, and customer experience and -satisfaction are poor.

Challenges enterprises face:

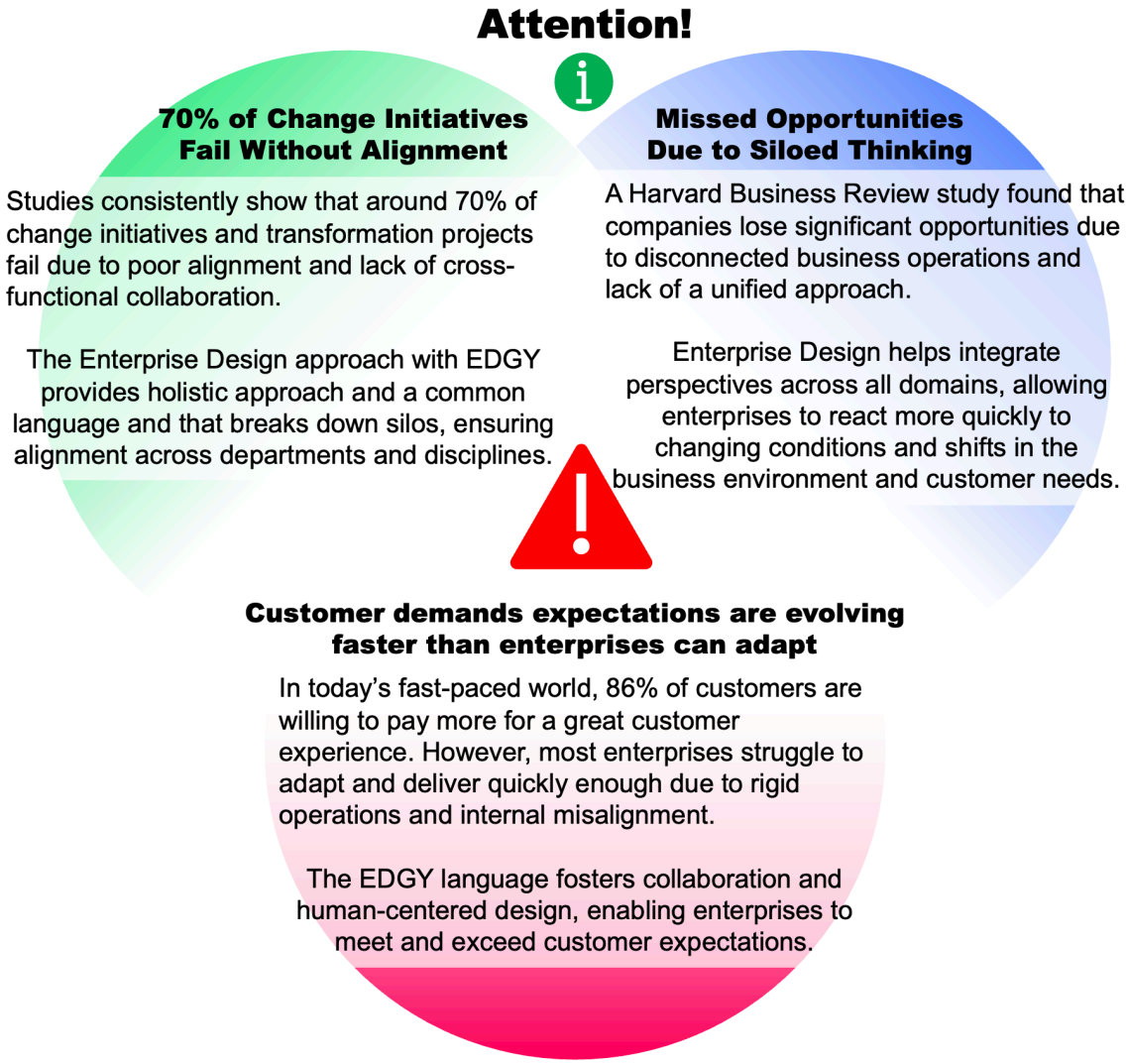


Figure 312: Examples of challenges.

The enterprise is under constant pressure from internal goals and external demands.

Competences, Skills and Roles. There are lots of different specialist groups in an enterprise. Many of these practices and specialist roles work in their own bubbles. Typically, distinct disciplines and separate practices operate in isolation within communication silos.

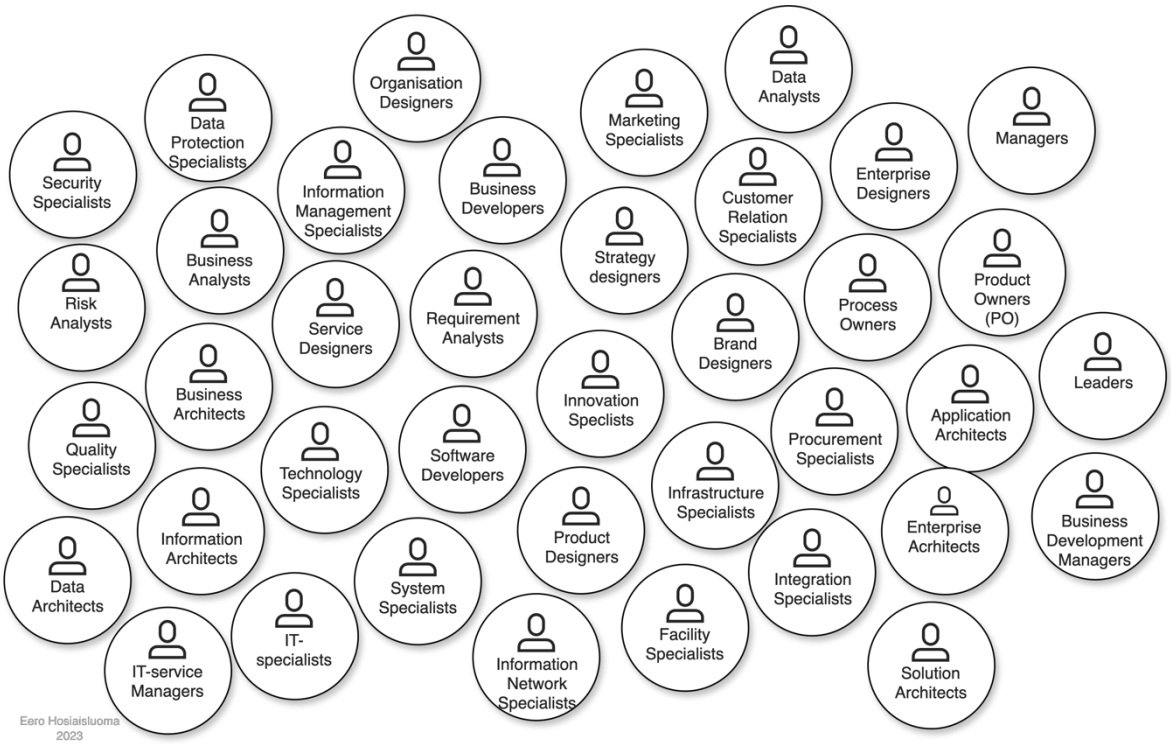


Figure 313: Examples of roles that participate in the disciplines of an enterprise.

Distinct disciplines view the enterprise from their own perspective.

7.1.2 Enterprise Design Approach

Things can be improved by increasing and facilitating collaboration between internal expert groups and with customers. It is beneficial to use methods and tools that are easy for most people to adopt and use.

Enterprise Design provide a comprehensive, holistic, human-centered and collaborative approach, along with a common language for all specialist groups. A holistic, human-centric, and collaborative approach is considered the most effective for designing and developing an enterprise because it ensures alignment of the enterprise's goals, operations, and structures with the needs of its stakeholders (employees, customers, partners) and its long-term strategy.

Enterprise Design provides a common language, the **EDGY**, that all groups of experts can understand and easily learn to use, facilitating collaboration.

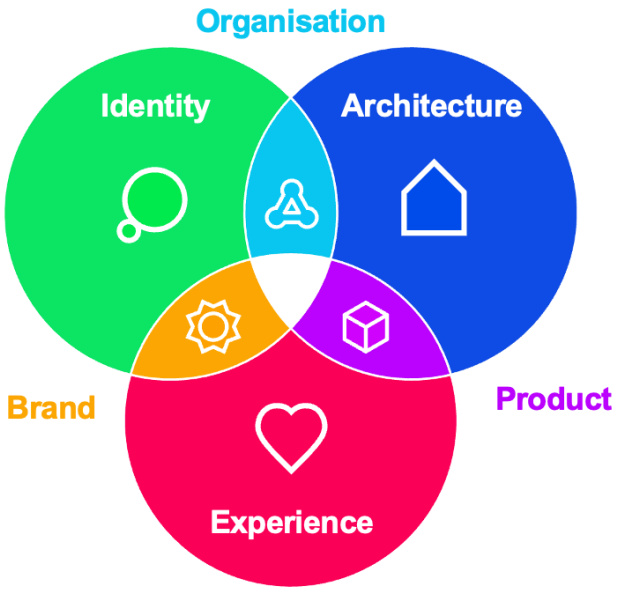


Figure 314: Enterprise Design approach with EDGY.

Enterprise Design is a holistic, human-centric and collaborative approach.

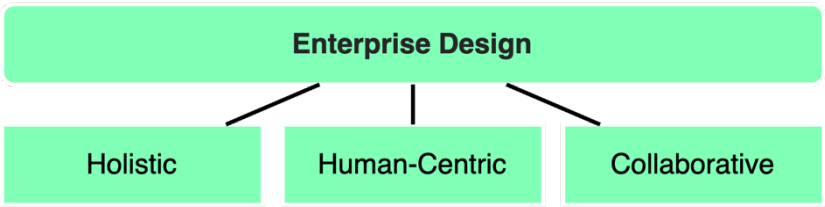


Figure 315: Enterprise Design is a holistic, human-centric and collaborative approach.

Characteristics of aspects:

Enterprise Design Approach	
Holistic	Enterprises are complex systems with interconnected parts like strategy, operations, culture, technology, and customer experience. A holistic approach ensures these elements work together. Prevents silos, eliminates gaps, and ensures that decisions in one area support and enhance the others, creating a coherent and balanced enterprise.
Human-Centric	Enterprises exist to serve people: customers, employees, and other stakeholders. Designing around their needs ensures relevance and value. Leads to better customer satisfaction, stronger employee engagement, and long-term loyalty by solving real problems and creating meaningful experiences.
Collaborative	Different disciplines (e.g., business, operations, technology, communications) bring unique perspectives and knowledge. Collaboration ensures all these voices contribute to the design process. Aligns teams around a shared vision, avoids conflicts, and fosters innovative solutions by leveraging diverse expertise.

The Enterprise Design approach can be utilized in many different use cases, and the Facet Model can be applied for diverse purposes. EDGY can be used as an easy-to-understand language that everyone can use. Enterprise Design bridges the gap between distinct disciplines. By adopting the Enterprise Design approach and EDGY language, business can bridge departmental gaps, increase operational agility, and ensure that the enterprise remains relevant and efficient in an ever-evolving landscape.

Benefits of the holistic, human-centered and collaborative enterprise design approach:

Holistic: Addresses the Entire Enterprise	Human-Centric: Focus on Real Needs of People	Collaborative: Enables Cross-Disciplinary Expertise
Comprehensive View of the Enterprise	Human-Centricity and Stakeholder Alignment	Improved Collaboration Across Disciplines
Prevention of Overlaps and Gaps	Human-Centric Value Creation	Enhanced Innovation and Problem-Solving
Simplifying the Complexity and Breaking Down Silos	Stronger Employee Engagement and Productivity	Enhanced Agility and Adaptability
Better Risk Management	Balancing Business Goals with Human Values	Integration of Disciplines ensures Alignment and Efficiency
Overall Approach Aligning and Balancing Purpose, Operations and Experiences	Prioritizes People Value at Every Level of the Enterprise	Shared and Simple Language for all Stakeholders

Enterprise Design facilitates the holistic, human-centric, and collaborative design to create better enterprises.

7.1.2.1 Enterprise Design is Holistic



Holistic. The Enterprise Design Facet Model is a practical tool for implementing a holistic approach to enterprise development. It ensures alignment between purpose, experiences, and operations, and fosters collaboration. This comprehensive perspective enables enterprises to adapt to change while delivering value to all stakeholders. By using the Enterprise Design approach and EDGY notation, enterprises can adopt a holistic approach that aligns their purpose, operations, and stakeholder interactions.

The enterprise design approach helps balance competing priorities: internal goals and operational activities, as well as the demands arising from customer needs.

The Enterprise Design Facet Model provides a structured tool for applying a holistic approach to ensure that all aspects of the enterprise are considered and aligned, human-centered, and designed for collaboration and adaptability. By integrating diverse perspectives, balancing priorities, and focusing on long-term impact, holistic overview creates a resilient, sustainable, and high-performing enterprise capable of thriving in a complex, ever-changing business environment.

Enterprise Design Facet Model introduces the perspectives of the enterprise (figure below).

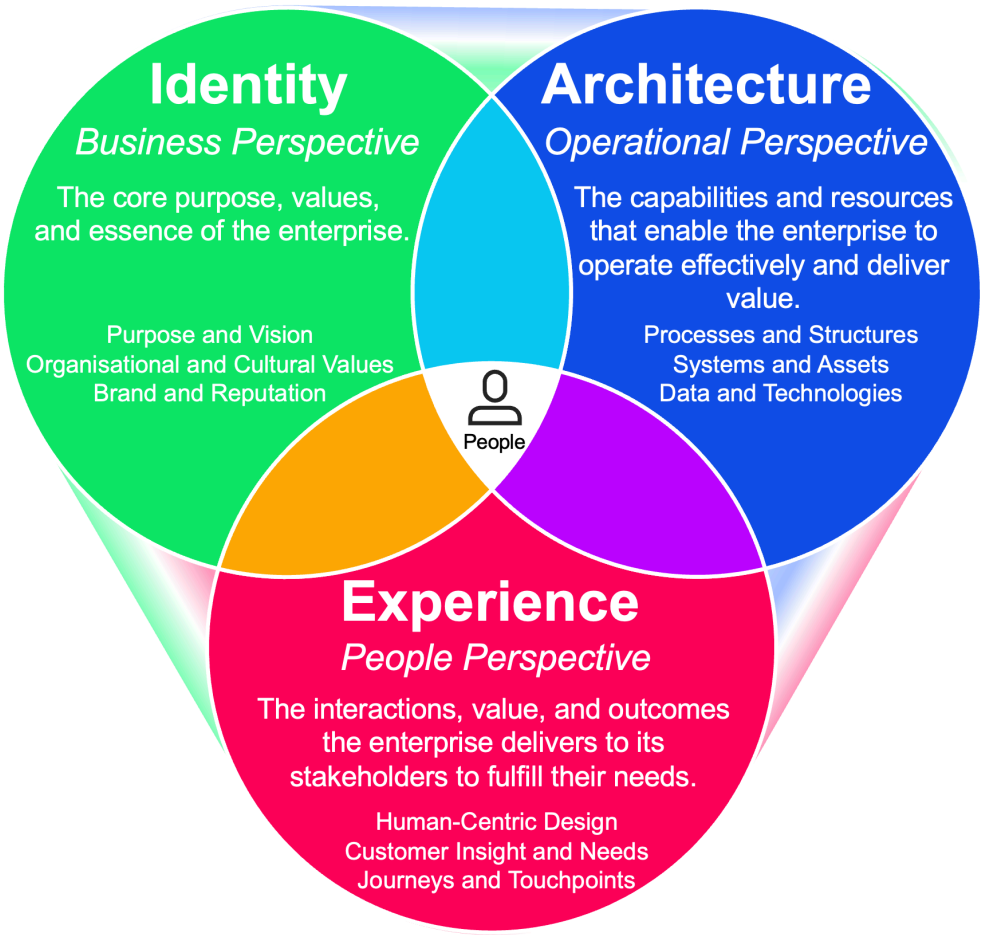


Figure 316: Enterprise Design as a holistic, human-centric and collaborative approach.

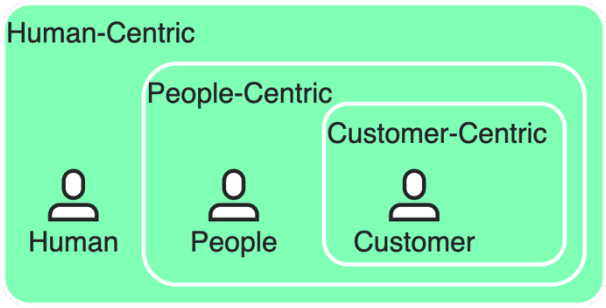
The **Enterprise Design Facet Model** provides a holistic overview of the enterprise.

7.1.2.2 Enterprise Design is Human-Centric



Human-centrism is making enterprises more people-focused, empathetic, and inclusive. By designing with human[46] (role or individual person) at the center, enterprises can create meaningful experiences, foster strong relationships, and achieve sustainable success while aligning strategic and operational goals with the needs of stakeholders.

A **human-centric** approach enriches enterprise design and development by ensuring that all strategies, decisions, and operations are based on the needs and experiences of people. When combined with a holistic and collaborative design approach, it enhances cross-functional alignment, drives innovation, and ensures sustainable, meaningful outcomes for both the enterprise and its stakeholders. Human-centered design covers experiences from all the stakeholder groups such as customers, users, employees, partners, owners, as well as individual personas.



People[47] create stories and tell narratives about the business, culture, and enterprise. People experience journeys and complete tasks to be done. People perform in capabilities based on specific competence roles. People are everywhere in the human-centric design. Human-centrism is all about people, in and around the enterprise.

- "*Enterprise Design is about listening, talking to co-creators, and facilitating discussions and decision-making processes. It will be mediating between parties with seemingly conflicting perspectives and interests.*" [2]
- *"An enterprise, is by default a human construct, is designed by definition: it is structured and brought to life by people with a shared ambition*". [2]
- "Designing enterprises is a process of human co-creation and collaboration". [2]

Comparing human-centered, people-centered and customer-centered design.

Aspect	Human-Centric Design	People-Centric Design	Customer-Centric Design
Scope	Broad (focuses on all humans and societal impact).	Group-oriented (focuses on communities or teams).	Narrow (focuses on customers of a business).
Focus	Universal human needs, accessibility, empathy.	Collective needs, social relationships, cultural contexts.	Business-driven, meeting customer needs and expectations.
Context	Social innovation, public services, general product or service design.	E.g. Organisational systems, or team dynamics or urban design.	Consumer products, services, and customer experiences.
Stakeholders	Includes everyone impacted (e.g., customers, employees, users, society).	Groups or communities, disciplines cooperating or using a product or service.	Customers or product/service end-users.
Goal	Improve life for humans in general.	Foster collaboration, community, or collective well-being.	Consentrate on customer experience (CX) and satisfaction.

Human-Centrism is important, as it defines the *why* and *what* aspects. In addition, the AI serves as an enabler to define *how* to enhance and execute human-centered goals.

Human-centrism focuses on designing solutions that serve the needs, emotions, and behaviors of humans in general, regardless of their specific role.

[46] **Human** refers to humans at large scale, to individual persons in broad range of roles such as customers, employees, citizens.

[47] **People** refers to groups of individuals. Focuses on social dynamics, cultural contexts, and group interactions.

7.1.2.3 Enterprise Design is Collaborative



Collaboration. The collaborative approach is essential for the design and development of an enterprise, especially when integrating multiple disciplines. The collaborative approach ensures that all parts of the enterprise work together seamlessly, leveraging diverse expertise and perspectives. It is particularly valuable in complex, multi-disciplinary environments where alignment, innovation, and adaptability are crucial for success.

By focusing on open communication, shared goals, and co-creation, the collaborative approach delivers solutions that are effective, widely supported and sustainable. Collaboration fosters agility by breaking down silos, enhancing communication, and leveraging the strengths of cross-functional teams. It ensures rapid feedback, adaptability, and efficient resource use, enabling enterprises to deliver high-quality outcomes in dynamic and fast-changing environments. Collaboration fosters agility in design and development by enabling teams to work more cohesively, respond faster to changes, and deliver value efficiently.

Collaboration fosters agility in design and development by enabling teams to work more cohesively, respond faster to changes, and deliver value efficiently.

Enterprise Design and the EDGY language foster collaboration within an enterprise by providing a shared approach and common visual language that bridge gaps between diverse teams and disciplines.

Enterprise Design approach bridges the gap between distinct disciplines.

7.1.2.3.1 Multidisciplinary as a Collaborative Approach

A multidisciplinary collaborative approach involves professionals from different disciplines (e.g., design, engineering, marketing) working together to address a shared goal or solve problems. Each discipline contributes its unique perspective and expertise, fostering innovation and comprehensive solutions. This approach is particularly effective in areas like human-centric design, where understanding and addressing diverse customer / user needs requires input from multiple fields.

Multidisciplinary combines expertise from different fields into collaboration to work toward common and shared goals.

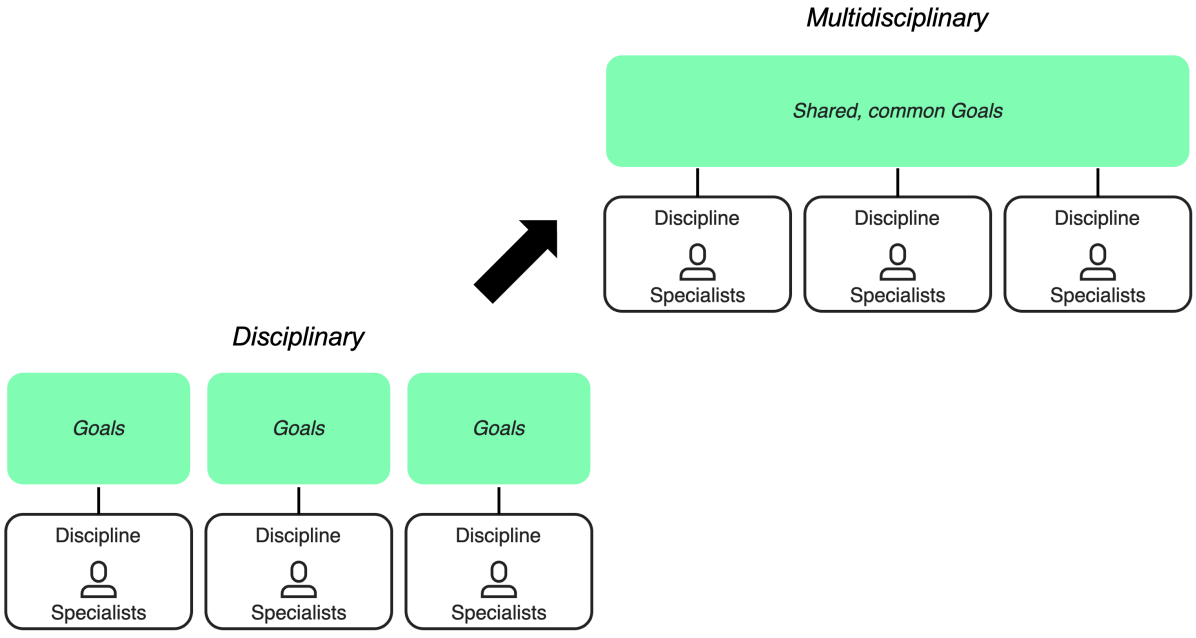
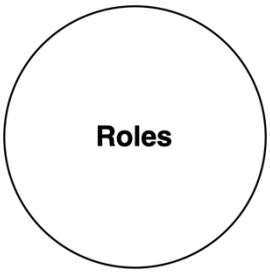


Figure 317: Multidisciplinarity combines specialists from diverse areas of expertise.

7.1.2.3.2 Enterprise Design and Roles



Business change requires the collaboration of multiple roles across management, customer experience, operations, technology, and communication. These roles ensure that change initiatives are strategically aligned, operationally feasible, and human-centered, ultimately increasing the chances of success. Example roles that are involved in the enterprise design.

A holistic, human-centric, and collaborative enterprise design approach to developing products and services requires input from diverse disciplines and specialist groups. These groups ensure that the resulting solutions address customer needs, business goals, and operational realities. By involving these disciplines, enterprises can develop products and services that are not only innovative and user-friendly but also strategically aligned and operationally robust.



Figure 318: Example roles in the enterprise design.

Short list of roles involved in enterprise design e.g.:

- *Business Analysts, Service Designers, Business Architects, Business Owners, Process Analysts/-Designers*.

These above-mentioned roles are essential to ensure that products and services align with business strategy, address customer needs, leverage data, integrate seamlessly into the enterprise, and support operational processes and enterprise change.

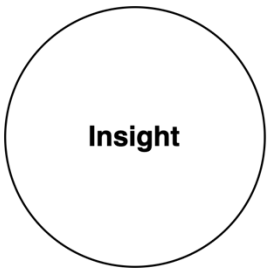
Long list of roles e.g. as follows:

- *Business Strategists, Service Designers, UX/UI Designers, Enterprise Architects, Product Owners, Data Scientists, IT Specialists, Customer Experience Specialists, Process Designers, Change Management Specialists, Behavioral Scientists, Marketing Specialists, Branding Experts, Financial Analysts, Program Managers, Project Managers, Legal Experts, Compliance Specialists, Sustainability Experts, Cybersecurity Specialists, Software Developers, Engineers, Facilitators, Design Thinking Coaches, Sales Representatives, Customer Representatives*.

These roles are important as a holistic approach requires input from strategy, design, technology, operations, customer insights, and compliance to ensure solutions are human-centric, technically feasible, scalable, and sustainable, while also meeting legal and ethical standards. Enterprise Design integrates these roles of different expert groups.

Enterprise Design brings together experts working in different disciplines and roles.

7.1.3 Enterprise Design Insights

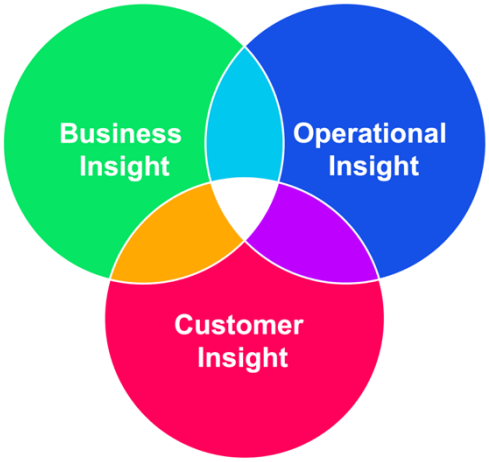


Customer Insight, *Business Insight*, and *Operational Insight* cover the essential dimensions of an enterprise context when designing products and services. Together, they create a holistic view that addresses the needs of the customer, the strategic goals of the business, and the practical realities of implementation.

Together, these three insights provide a comprehensive view that balances user desirability, business viability, and operational feasibility. By focusing on these three areas, enterprises can create products and services that are not only well-designed from a user perspective but also strategically aligned and practically implementable.

These three categories collectively address the essential considerations in designing products and services within an enterprise:

- Customer insight keeps the design user-focused and responsive to market needs.
- Business insight aligns the design with the company's strategic, financial, and branding goals.
- Operational insight ensures the design is feasible, efficient, and sustainable given the organization's current and projected capabilities.



Business Insight	Customer Insight	Operational Insight
Includes the enterprise's mission, vision, and strategic goals.	Insights into customers' needs, preferences, and pain points help ensure the products or services provide real value.	Insights into available resources, such as technology, expertise, and budget, inform what can realistically be achieved
Provides clarity on budget, cost structures, and revenue expectations, ensuring designs are financially viable.	Understanding the user journey, touchpoints, and overall experience expectations informs a user-centered design.	Understanding existing workflows and processes helps integrate the design seamlessly into operations, improving efficiency and effectiveness.
Helps understanding the brand's identity and positioning to create products and services that reinforce the brand's unique value.	Knowledge of customer demographics, behavior patterns, and segmentation helps in targeting design to specific groups effectively	Operational insight considers long-term scalability and maintenance, ensuring designs can grow with the organization and remain sustainable.
Grounds design decisions in strategic and financial realities, ensuring the product or service aligns with broader goals of the enterprise and adds measurable business value.	Ensures the design process starts and ends with the user, making products and services that are relevant, desirable, and differentiated in the market.	Ensures that the design is practical, feasible, and aligned with the organization's infrastructure, making it easier to implement and maintain over time.

Insights support product and service design of an enterprise.

7.1.4 Enterprise Design Executive Summary

By adopting the Enterprise Design approach and EDGY language, business leaders can bridge departmental gaps, increase operational agility, and ensure that their enterprise remains relevant, efficient and competitive in an ever-evolving landscape.

The new paradigm shift in organisational and business design emphasizes a holistic, human-centric, and collaborative approach, driven by a focus on interconnectedness and enterprise design. Three points:

- **Holistic Perspective**: Enterprises are viewed as complex ecosystems, where every element, processes, people, technology, culture, and the external environment, must work in harmony. The focus shifts from isolated units to integrated systems thinking, fostering seamless interactions across all parts of the enterprise.
- **Human-Centric Approach**: Prioritizes people (employees, customers, stakeholders) as the core of design and decision-making. Emphasizes empathy, inclusivity, and the creation of experiences that meet customer needs, enhance employee engagement, and provide meaningful work while creating value.
- **Collaborative Design**: Encourages cross-functional collaboration within the enterprise and with external stakeholders. Moves away from hierarchical, siloed structures to flat, networked, and agile models that empower teams. Utilizes co-creation to involve stakeholders in shaping strategies, products and services and developing operations.

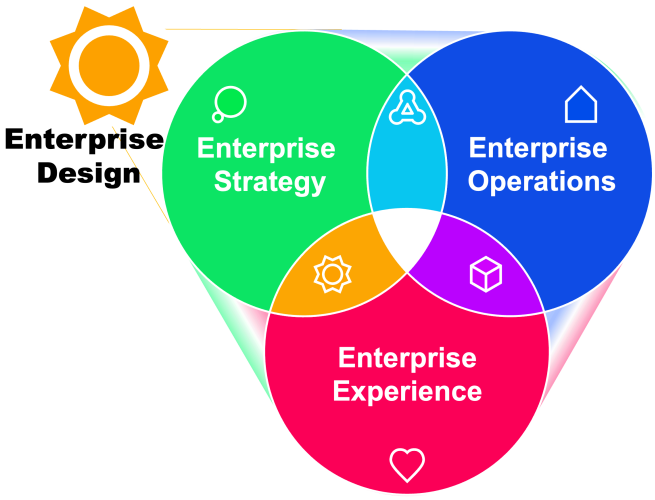


Figure 319: Enterprise Design as a holistic approach.

Executive Summary of Holistic, Human-Centric, and Collaborative Enterprise Design Approach		
1	Holistic Perspective	Views the enterprise as an interconnected ecosystem, ensuring alignment across processes, people, technology, and external factors to achieve seamless integration and operational efficiency
2	Human-Centric Focus	Places people, employees, customers, and stakeholders, at the core of the design process, emphasizing empathy, inclusivity, and meaningful engagement to create value-driven solutions.
3	Collaborative Approach	Fosters cross-functional and stakeholder collaboration, breaking silos to co-create strategies, products, and services that are agile, scalable, and aligned with enterprise goals.

The holistic, human-centric, and collaborative **Enterprise Design** approach integrates people, systems, and strategies to create aligned, adaptable, and value-driven offerings and solutions that meet both customer needs and enterprise goals.

The Enterprise Design Facet Model can be applied for diverse approaches. It can be applied to cover the overall design and development of the enterprise.

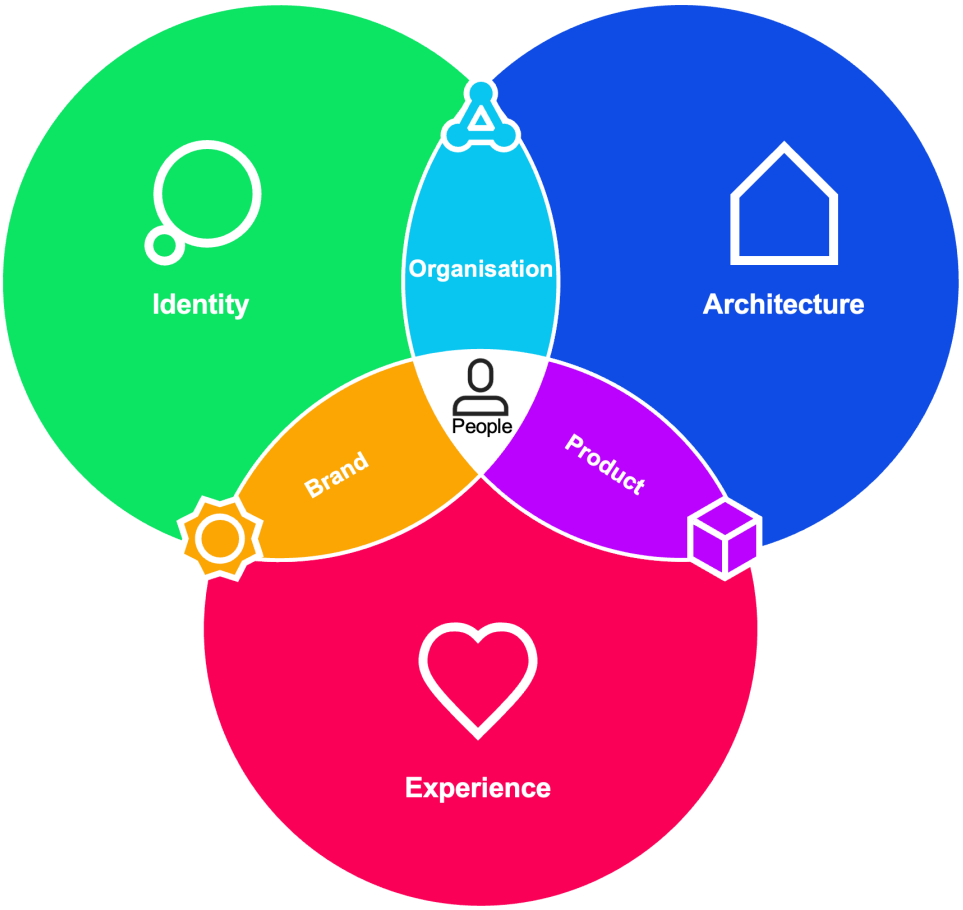


Figure 320: Enterprise Design Facet Model.

Holistic and Human-Centric Approach	Enterprise Design with EDGY encourages a comprehensive, human-centric approach that considers the enterprise from multiple angles.	This helps ensure that solutions are aligned with both business objectives and user needs, making them more practical and sustainable.
Multipurpose and Adaptable	The Enterprise Design approach, supported by the Facet Model and the EDGY language, is adaptable to various use cases and purposes.	This versatility makes it a valuable analysis tool for tackling diverse design challenges, from strategy and operations to customer experience.
Common Language for Collaboration	The EDGY language provides an easy and simple notation that all specialist groups can understand and use.	This common language facilitates effective communication and collaboration across the enterprise.

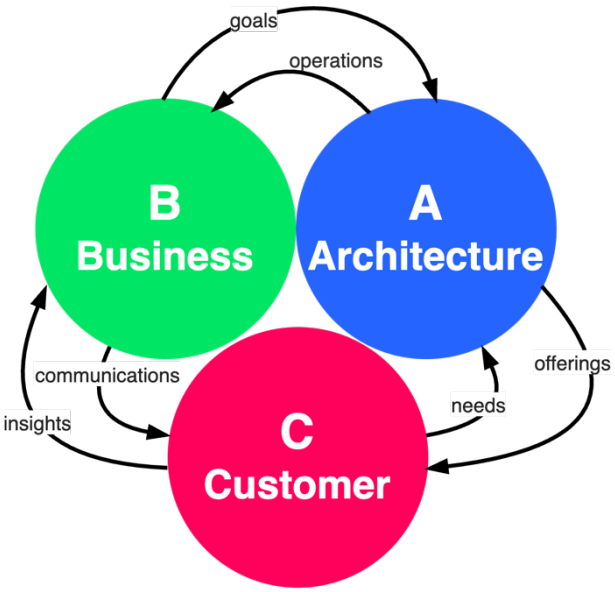
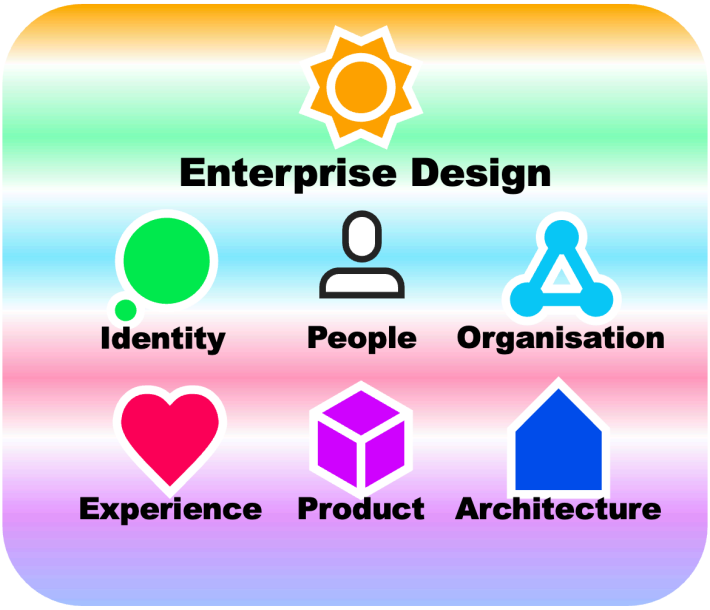
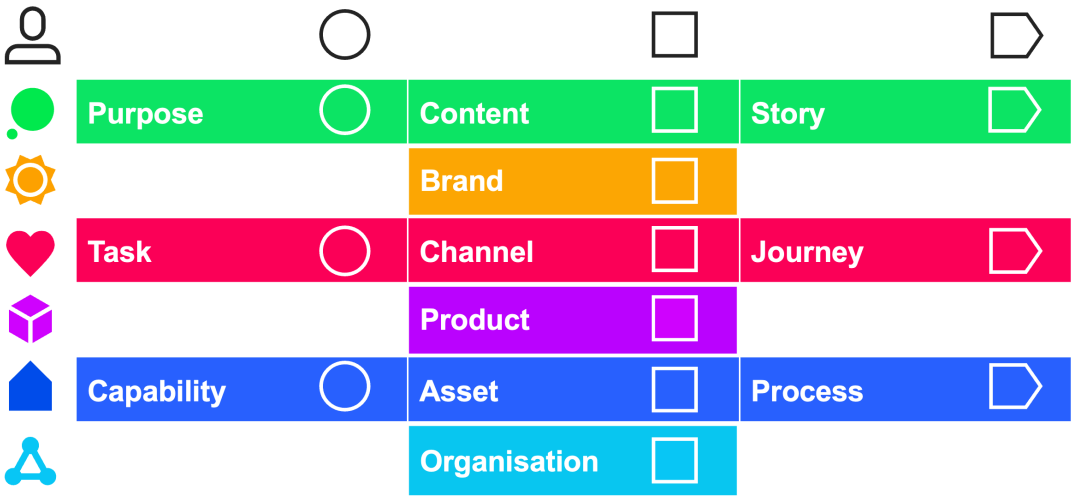


Figure 321: Holistic approach.





7.1.5 Enterprise Design as a Holistic, Human-centric, and Collaborative approach

Enterprise Design facilitates a holistic, human-centric, and collaborative approach by aligning business strategy, customer needs, and operations, enabling enterprises to create meaningful, efficient, and sustainable products and services for people's benefit. At a practical level, when people from different disciplines work together, Enterprise Design provides the Facet Model as an analytical tool to assist discussions, and EDGY language to facilitate communication.

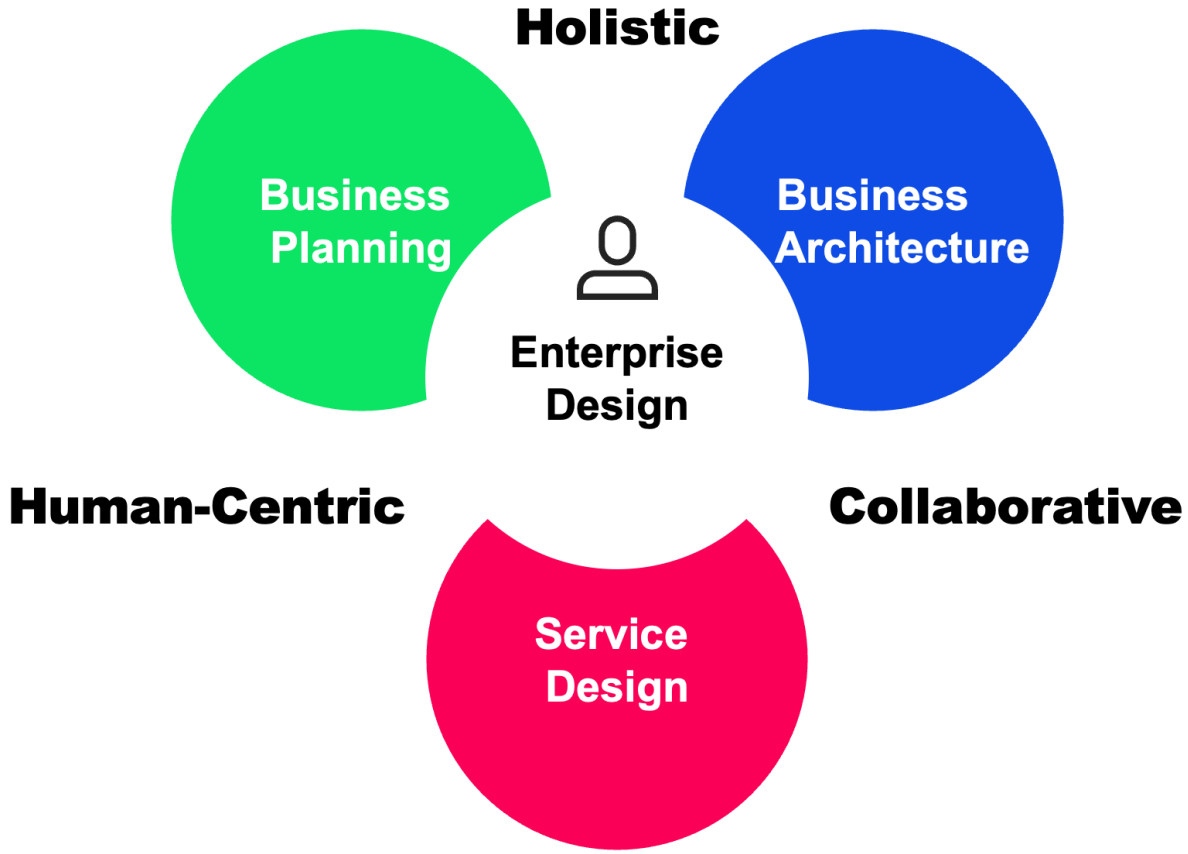


Figure 322: "Holistic Triad" of enterprise design.

Holistic Thinking considers the enterprise as a connected ecosystem where all elements, processes, people, technology, and environment, work together seamlessly. Thinking holistically ensures that business design, business architecture, and service design work in tandem to create an enterprise that is aligned, efficient, and responsive to change. This approach allows for a well-coordinated execution of strategic goals, enhances customer satisfaction and optimizes capabilities.

Human-Centrism focuses on understanding and prioritizing the needs, behaviors, and experiences of people, customers, employees, and stakeholders, at the core of the design process.

Collaboration encourages cross-functional teamwork and stakeholder involvement to co-create solutions that align with both human needs and organizational goals.

Enterprise Design and EDGY can be applied across all disciplines to facilitate holistic and human-centric collaboration.

7.1.5.1 Business Design



Business Design is a multidisciplinary approach that integrates principles of design thinking with business strategy, innovation, and organizational development to create value-driven, human-centered solutions for enterprises. It focuses on designing not just products or services but the underlying business models, processes, and systems that make them viable, desirable, and feasible.

Business design consists of aspects such as human-centered approach, Business Model Innovation (BMI) [48], systems thinking, cross-disciplinary collaboration, organisation design and brand design. As such, business design is integral part of *Enterprise Design*, which is the most comprehensive approach covering business design, service design and business- or enterprise architecture. By aligning business goals with human needs and operational realities, it enables enterprises to create sustainable, customer-centered, and competitive solutions.

Business design ensures that enterprises can adapt to a rapidly changing business environment – the world around the enterprise. Business design integrates creativity, strategy, and practical execution to shape businesses that thrive in both current (as-is) and future (to-be) landscapes.

7.1.5.2 Business Architecture



Enterprise Design introduces the Architecture Facet that represents all the architectural aspects and elements that are meaningful for operations and how an enterprise produces and delivers its offerings (products and/or service).

In this context, the Architecture is an umbrella term for all the diverse "architectures" that exists in an enterprise. We can identify several architectures e.g. as follows: Enterprise Architecture, Business Architecture, Solution Architecture, Information Architecture, Integration Architecture, Security Architecture.

Business Architecture (BA) covers most of the relevant elements that the business consists of. This makes Business Architecture suitable for design purposes, as it is both comprehensive and detailed enough.

Business Architecture provides holistic view of how an enterprise operates, helping to ensure that its structure and behavior (capabilities, processes) are aligned with strategic goals. It bridges the gap between strategy and execution, ensuring that business operations support the overall mission and goals of the enterprise.

[48] **Business model innovation (BMI)** is the process of fundamentally rethinking and redesigning the way an enterprise creates, delivers, and captures value. It goes beyond improving existing processes or products; instead, it involves creating entirely new ways for a business to operate, often challenging industry norms, capitalizing on emerging opportunities, and seeking disruptive innovations. Business model innovation is not just about making incremental improvements; it's about reimagining how an enterprise operates to deliver value in groundbreaking ways. It is essential for staying relevant, efficient, competitive, and adaptable in today's fast-changing business landscape.

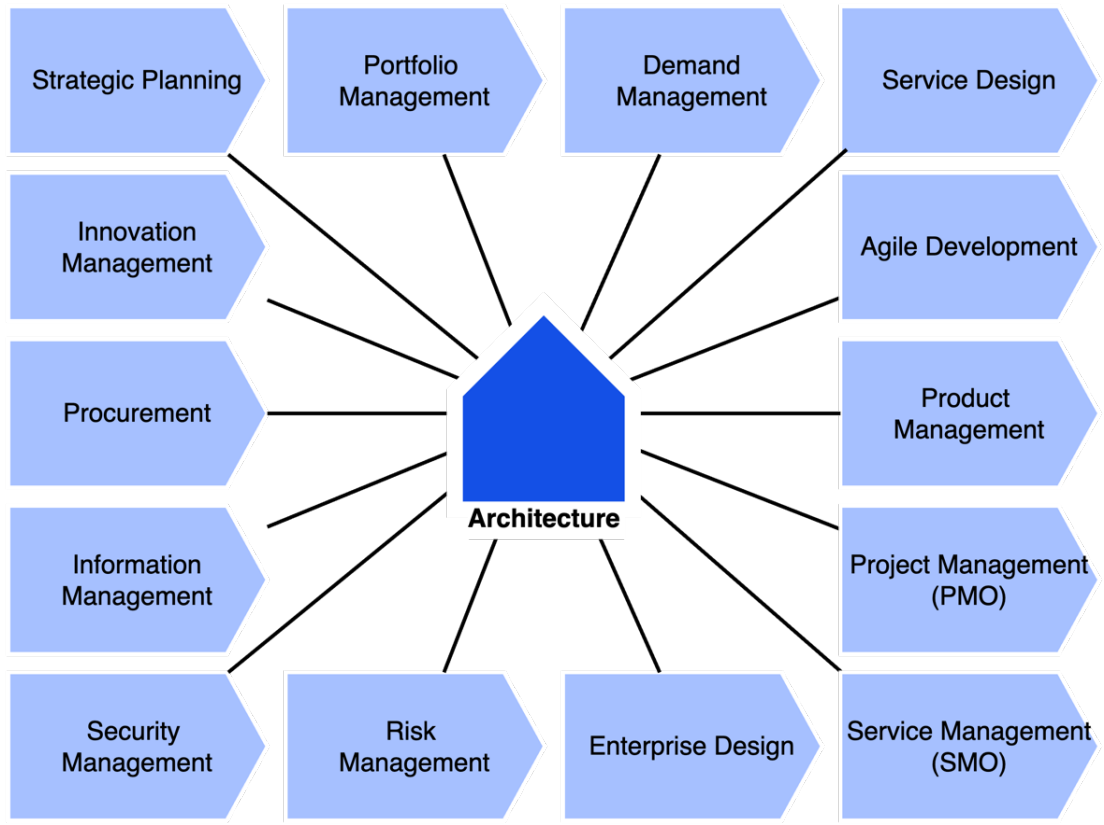


Figure 323: The role and importance of architecture are crucial.

The Architecture Facet of the Enterprise Design Facet Model represents elements that can be related to the Business Architecture. Simplification of the Business Architecture content shown below. This view is a subset of enterprise design elements that altogether represent the enterprise.

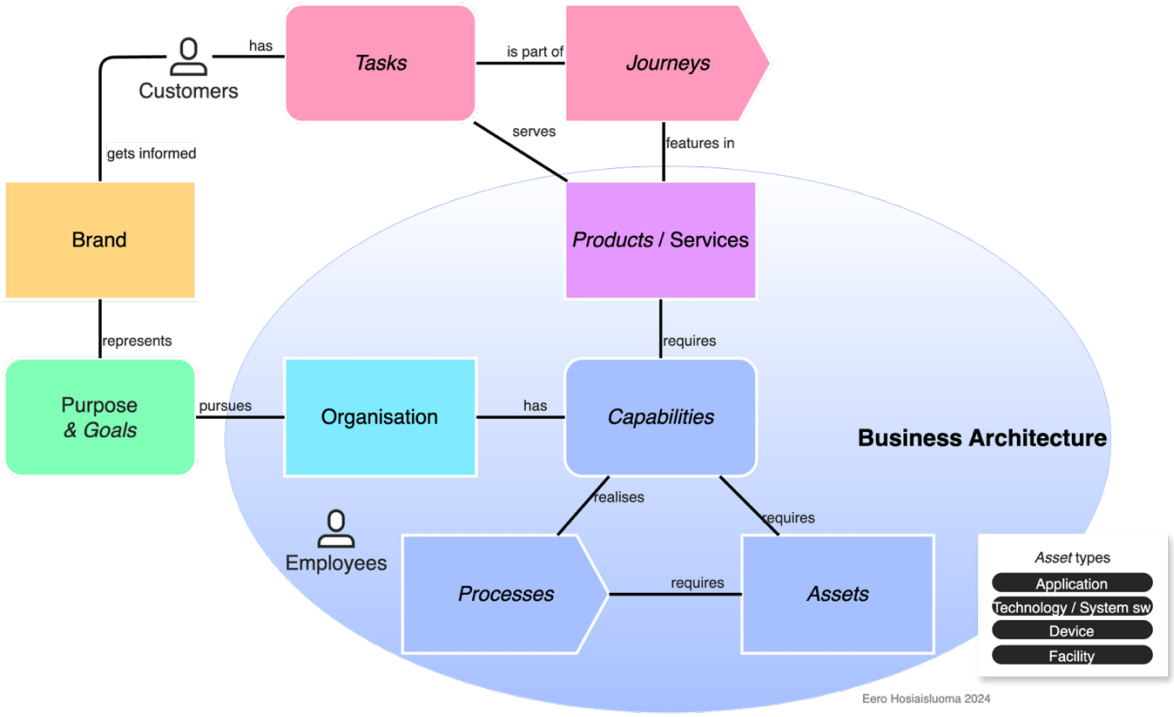


Figure 324: Business Architecture content.

The elements of Enterprise Design describe the entire enterprise, the business as a whole.

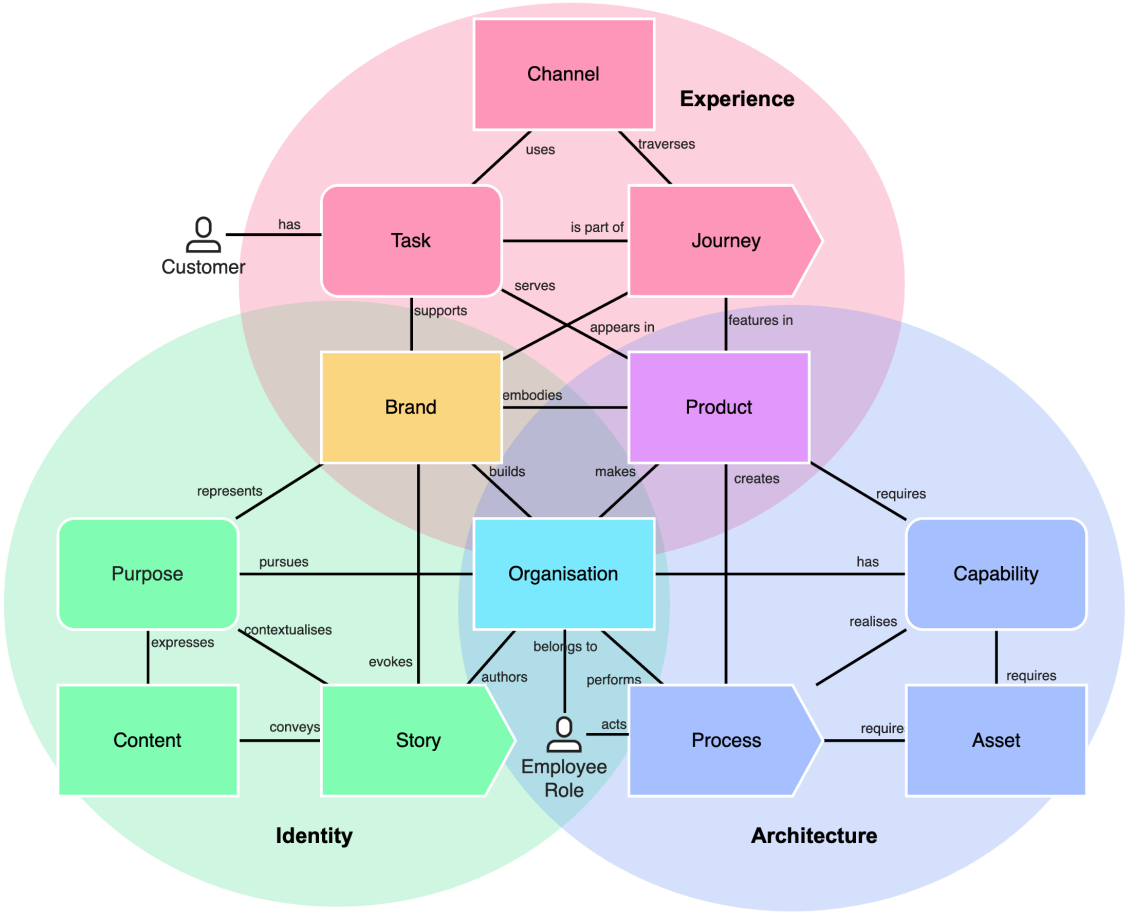


Figure 325: Enterprise Design elements covers the business architecture.

This business entity, the enterprise, is a system in which everything influences everything else, and it does not make sense to examine it only partially. The Enterprise Design Facets and their intersections together represent the entire business, where all the elements are interconnected. As such, the Enterprise Design Facet Model represents the whole enterprise, as it is important to view the entire business as a whole.

Business Architecture metamodel according to BIZBOK® guide shown below.

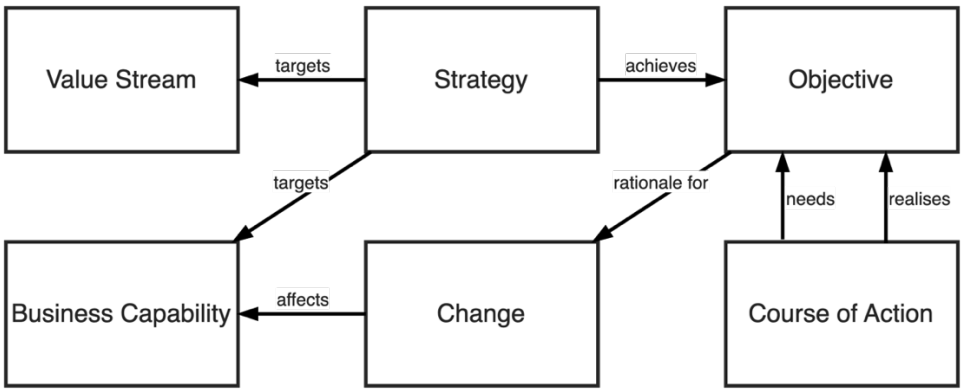


Figure 326: BIZBOK® metamodel.

Business Architecture content by the BIZBOK® is shown below.

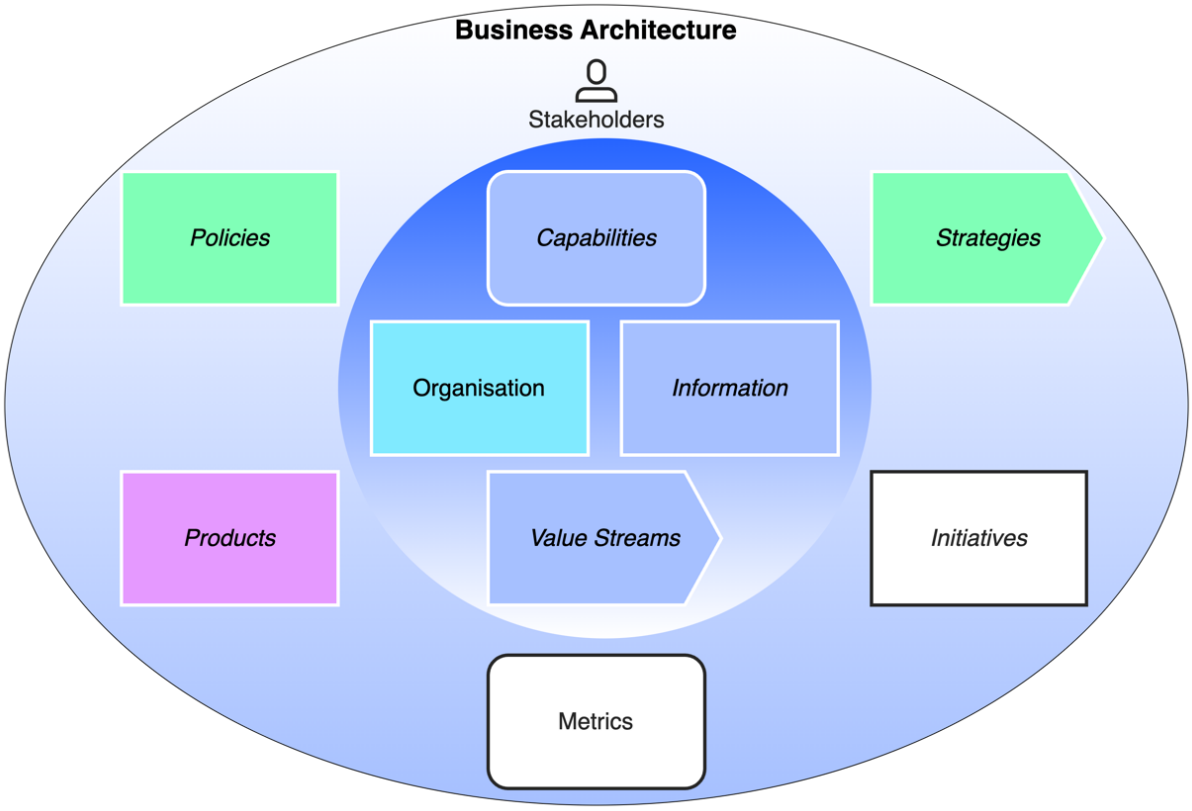


Figure 327: Business Architecture according to BIZBOK®.

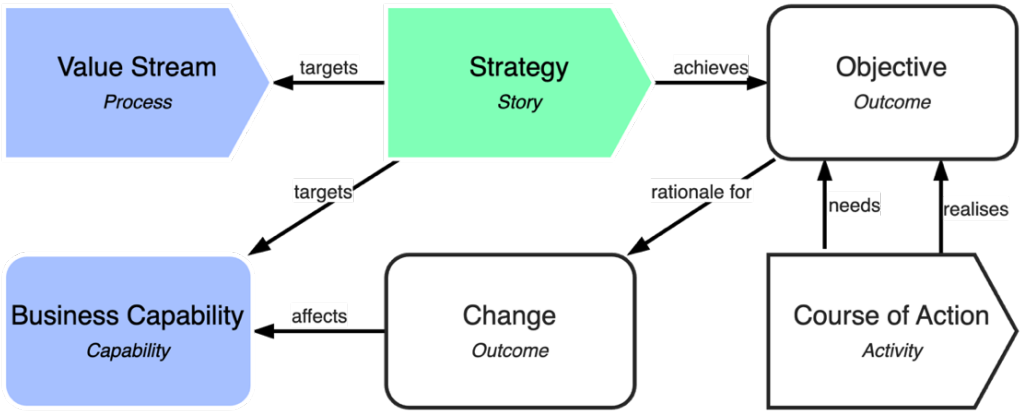


Figure 328: BIZBOK® metamodel with EDGY elements.

BIZBOK® is created by the Business Architecture Guild®.

The figure below illustrates the scopes and levels of the architectures.

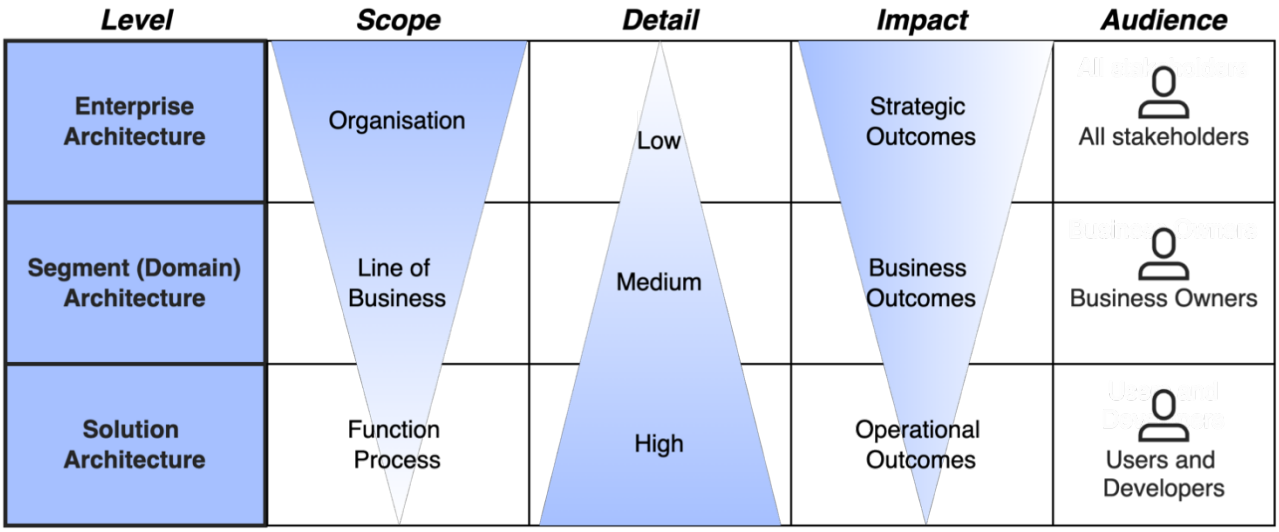


Figure 329: Architecture scopes.

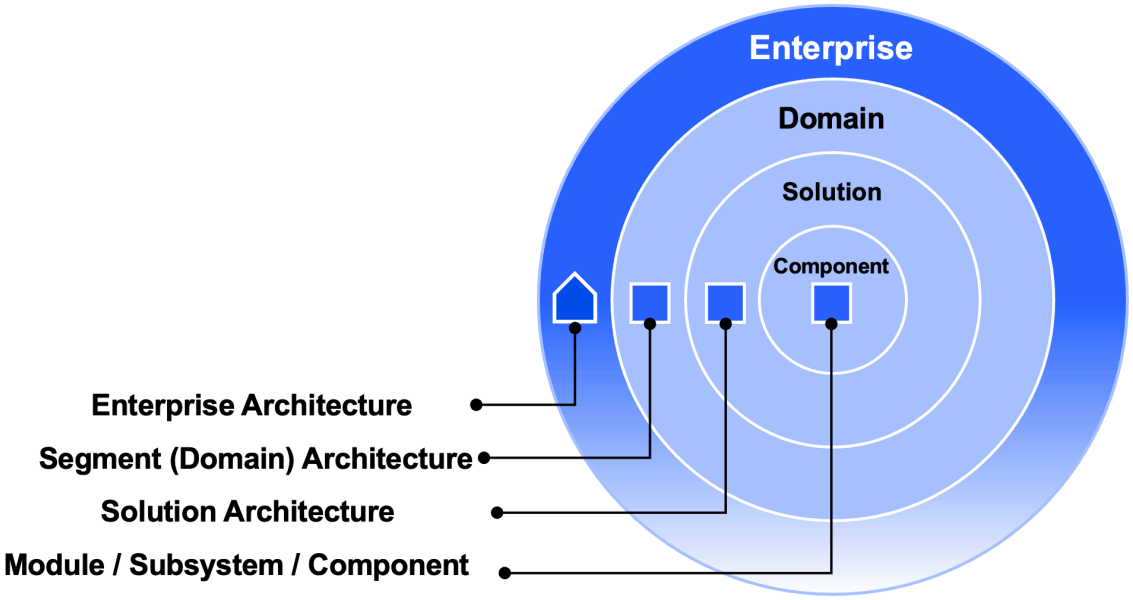
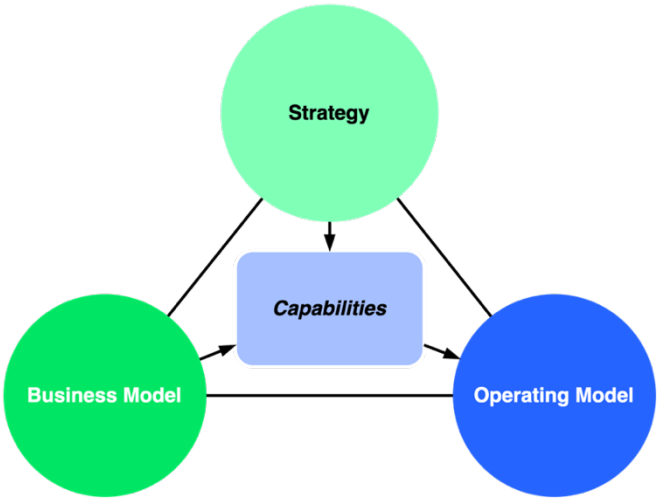


Figure 330: Architecture scopes.

Business architecture focuses on aligning enterprise's strategy, business model and operating model with capabilities. Questioning about the capability as a concept:

- Why capability is an important concept?
- Why not use another concept instead, as there are a few of them already, such as function, process and service?



In the big picture, the name of the concept isn't what matters. What is important is that certain substantial and behavioral elements are commonly understood and accepted. These elements can be used for the logical grouping of an enterprise's business. They include all the people, processes, and assets that work together to produce and deliver specific outputs or outcomes. The capability concept encompasses all of these. As such, capability model (capability map) can serve as a framework for organizing the business into behavioral structures.

7.1.5.3 Service Design

Service Design is a human-centered approach to designing and improving services. It focuses on understanding customer needs and creating seamless, enjoyable experiences across all touchpoints. Service design considers both the customer journey and the organization's internal processes, aiming to align them for optimal service delivery.



Customer Insight refers to a deep understanding of customers' behaviors, needs, motivations, and pain points. This understanding is derived from researching and analysing customer experiences, attitudes, situation in life, and preferences etc., which allows designers to make informed decisions that enhance the value and relevance of the service. It involves gathering data and insights about how customers interact with a service, what they value, and the challenges they face. Customer insight provides the foundation for creating user-centered services that meet real needs and enhance the overall customer experience.

Customer insight is crucial in service design because it grounds the design process in real user experiences, ensuring that services are relevant, valuable, and capable of meeting or exceeding customer expectations. Customer insight is a critical input for the service design process. It serves as the foundation for understanding customer needs, behaviors, expectations, and pain points, guiding the design of user-centered services.

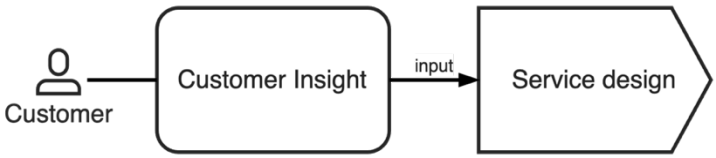


Figure 331: Customer Insight.

Customer insight is input for the service design process.

7.1.6 Service Design and Business Architecture - better together

Service Design and Business Architecture have strong synergy because they complement each other in aligning the design of services with the operational foundation of an enterprise. They combine customer-centric thinking with enterprise-level operational view (like Jin and Jang).

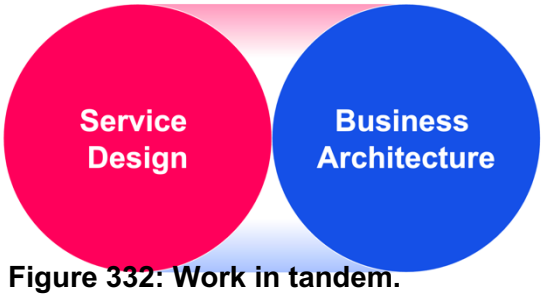
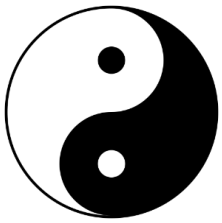


Figure 332: Work in tandem.



Together these practices help creating a balance between desirability, feasibility, and viability. This integrated approach ensures that services are impactful, sustainable, and fully supported by the enterprise's capabilities. Their synergy lies in combining the human-centered approach of service design with the systemic and structural perspective of business architecture, resulting in solutions that are both desirable for customers and feasible for the enterprise.

Service design and business architecture complement each other.

By working together, service design and business architecture ensure that innovations are customer-driven (desirable), strategically aligned (viable, lucrative and cost-effective), and operationally sustainable (feasible), making organizations more agile, competitive, and capable of delivering exceptional value to both customers and stakeholders.

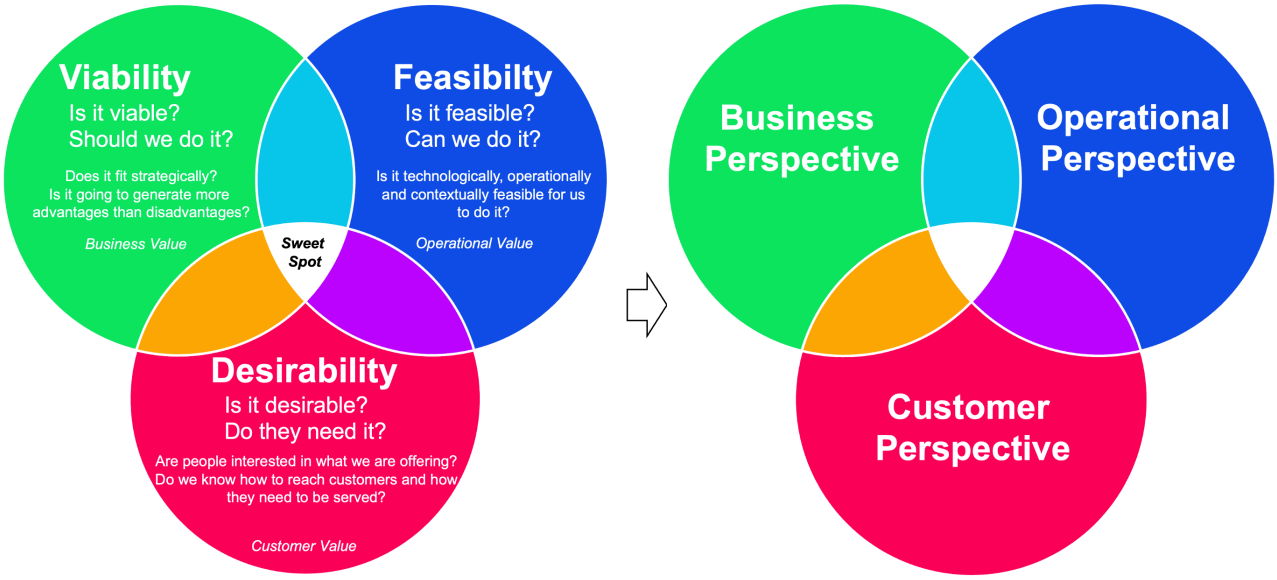


Figure 333: Business Architecture + Service Design = Business Design.

Service Design and Business Architecture are better together.

7.1.6.1 Synergy benefits of Service Design and Business Architecture

There are several reasons why service design and business architecture work better together than as separate disciplines:

Benefits of Collaboration Between Service Design and Business Architecture	
Seamless Integration of User Experience and Business Goals	Collaboration ensures that customer-centric services also meet organizational priorities like scalability, profitability, and strategic alignment.
Enhanced Feasibility and Viability	Business architects can identify potential bottlenecks in infrastructure, processes, or applications early, ensuring service designs are realistic and implementable.

Faster Time-to-Market	With both teams working in tandem, there is less back-and-forth during the transition from design to execution, accelerating the implementation timeline.
Holistic Service Innovation	Service designers bring creativity and empathy, while business architects bring structure and systems thinking. Together, they create services that are both innovative and robust.
Improved Stakeholder Buy-In	Together, service designers and business architects can communicate and visualise the value of enterprise design to executives.

There are several synergy benefits in the collaboration between service design and business architecture, as illustrated by the following examples:

1. Holistic approach User-Centered Design Meets Strategic and Operational Alignment	Service Design focuses on creating services that meet user needs, providing a user-centered perspective. Business Architecture ensures that these services align with enterprise goals, strategy, and operational structure. Together, they ensure that services are not only desirable for users but also strategically viable and operationally feasible, supporting the enterprise's goals and adding value to the enterprise.

2. Human-centrism and Consistent End-to-End Experience	Service Design emphasizes the end-to-end customer experience. Business Architecture focuses on the operational and technical backbone, as well as employee experience. When combined, they ensure that the experience designed for customers is supported by the enterprise's infrastructure, capabilities, and processes. This alignment minimizes breakdowns between customer experience and backend processes, leading to more consistent and reliable service and product delivery.

3. Collaboration Combines Complementary Skills to Achieve Shared Goals.	Service Designers bring creativity and empathy. Business Architects bring structure and systems thinking. Together, they create services that are both innovative and robust. Collaboration ensures that customer-centric services also meet organizational priorities like scalability, profitability, and strategic alignment.

4. Efficient Resource Utilization and Value Creation with Capability-Based Planning	Business Architecture maps out the enterprise's capabilities, processes, and resources, identifying where value can be created or optimized. Service Design can use this information to design services that leverage existing strengths, avoid redundancies, and effectively utilize resources. This cooperation helps prioritize investments and focus on developing services that maximize both customer satisfaction and business impact.

5. Enhanced Agility and Adaptability to Change	Service Design iterates on customer needs and feedback. Business Architecture adjusts enterprose structures and capabilities accordingly. In a dynamic and volatile environment, both Service Design and Business Architecture help enterprises respond to changing customer needs and business requirements. This synergy allows for a more agile enterprise, where new service offerings can be developed and scaled quickly.

6. Unified View for Stakeholder Engagement and Improved Stakeholder Buy-In	Together, Service Design and Business Architecture offer a holistic view that appeals to a wide range of stakeholders, from customer service teams to executives, by showing both the user impact and business relevance of service initiatives. Together, service designers and business architects can communicate and visualise the value of enterprise design to executives. This unified perspective helps gain buy-in across departments, making it easier to implement new services or improve existing ones.

7. Better Risk Management and Operational Feasibility	Business Architecture helps assess the feasibility of service ideas from an operational and technical standpoint, and viability from financial and strategic viewpoints. Service Design addresses the desirability and usability aspects. By working together, they ensure that new services are not only feasible but also minimize risk by aligning with the organization's current and future capabilities.

Synergy benefits arise when service designers and business architects work together in collaboration.

Service designers and business architects design together what customers' need, what services are required and what information is handled and switched between processes or applications. Business people make the decision what solution is to be selected to support business.

Service designers - what they bring to the table?

When service designers collaborate with business architects, they bring several valuable perspectives and skills to the table, such as:

How service designers contribute to collaboration	
Customer-Centric Design	Focus on understanding and addressing customer (or user) needs, ensuring solutions are customer-driven.
Empathy and Emotional Insight	Bring an empathetic approach to design, creating services that not only meet functional requirements but also resonate emotionally with people (customer, users).
Design Thinking Mindset	They bring creative problem-solving methodologies, fostering innovation and iterative development, which complement the structural focus of business architects.
Journey Mapping	Visualize customer experiences across touchpoints, identifying pain points and opportunities for improvement.
Visualization and Prototyping	Service designers use visual storytelling and rapid prototyping to make abstract concepts tangible, easier for stakeholders to understand, refine ideas and validate solutions with real users, helping teams and stakeholders align around shared goals and solutions.
Holistic Experience Design	Ensure solutions deliver consistent and seamless user experiences across all interactions. Service designers consider the entire customer experience, ensuring the business architecture aligns with and enhances the quality of service delivery across touchpoints.
Co-Creation, Facilitation and Cross-Disciplinary Communication:	Engage stakeholders and users in collaborative workshops, driving alignment and innovation. Service designers act as facilitators between diverse stakeholders and teams, translating user needs and business goals into actionable design strategies that can be implemented by architects. Service designers involve stakeholders in the design process, fostering collaboration, and ensuring that business architecture strategies are grounded in real-world insights.
Agility and Iteration	Adapt quickly to feedback and changes, refining solutions to better fit user needs and business goals.
Future-Oriented Ideation	Push the boundaries of what is possible, introducing fresh perspectives and visionary ideas.

Business architects - what they bring to the table?

How business architects contribute to collaboration	
Strategic Alignment	Ensure service design initiatives align with the enterprises's long-term goals and vision.
Business Context	Provide a deep understanding of organizational structures, processes, applications, data and strategies.
Capability Mapping	Define and document the enterprise's capabilities, creating a framework for scalable solutions.
Operational Feasibility	Assess the practicality of service designs within existing applications, processes, and constraints.
Integration Expertise	Align service designs with current applications (+technologies), processes data sources for seamless implementation.
Risk Management	Identify potential risks and ensure compliance with governance and regulatory requirements.
Resource Optimization	Guide resource allocation and investment to maximize ROI from service design efforts.
Scalability and Sustainability	Focus on solutions that can grow with the enterprise while remaining sustainable.

Solution architects define detailed plan of the internal structure of the selected solution and technical details of the integrations (such as protocols and mechanisms used). In case of cloud services, there is no solution architecture to be planned.

Solution architects - what they bring to the table?

How solution architects contribute to collaboration	
System Design Expertise	Design end-to-end technical solutions that align with both user needs and business goals.
Technical Feasibility Assessment	Evaluate whether proposed solutions can be implemented within current or planned technology environment / ecosystem.
Integration Skills	Ensure seamless integration of new services with existing applications, and platforms, with appropriate integration platforms and mechanisms.
Scalability and Performance	Design solutions that can handle growth while maintaining performance and reliability.
Technical Risk Mitigation	Identify and address potential risks related to technology, including security, scalability, and compatibility.
Framework and Standards Compliance	Ensure solutions adhere to technical standards, guidelines, principles, best practices, and compliance requirements.
Bridge Between Stakeholders	Translate business and user requirements into actionable technical specifications.
Cost-Effectiveness	Optimize technical solutions to balance innovation with budgetary constraints.

IT-specialists and "techies" - what they bring to the table?

How IT- and technology specialists contribute to collaboration	
Deep Technical Expertise	Provide in-depth knowledge of specific technologies (e.g. cloud, AI, APIs, databases) to drive innovation.
Implementation Skills	Build and configure the technical components of the solution, ensuring functional alignment.
Emerging Technology Insights	Introduce cutting-edge tools, platforms, and trends to enable innovative service designs and architectures.
Troubleshooting and Problem-Solving	Provide rapid resolution to technical challenges during development and implementation phases.
Security and Compliance	Ensure solutions are robust and meet cybersecurity and regulatory standards.
Custom Solutions Development	Tailor technical components to meet the unique needs of the service design and business architecture.
Automation and Tools	Identify opportunities for automation and suggest tools to streamline processes and enhance service delivery.
Technical Documentation and Support	Provide detailed technical documentation for applications and technologies used. Ensure long-term maintenance and knowledge transfer.

7.1.6.2 Collaboration benefits of Service Design and Business Architecture

Collaboration between service designers and business architects can be highly advantageous as it combines complementary skill sets to create customer-centric, strategically aligned services. Here's how they can collaborate in practice:

A. Aligning Customer-Centric Design with Business Strategy		
Service Design	Business Architecture	Collaboration
Focus on understanding customer needs, creating seamless user experiences, and designing services that delight customers.	Focus on aligning processes, applications, data, and organisational structures with business goals and strategies.	Service designers can ensure the user experience aligns with the enterprise's overarching business goals, while business architects can ensure that these experiences are operationally feasible and sustainable.

B. Co-Creating Service Blueprints		
Service Design	Business Architecture	Collaboration
Develop *service blueprints* that map customer journeys, touchpoints, and pain points.	Contribute by mapping backend processes, technology systems, and organizational structures that support the service.	A combined service blueprint ensures that the designed service is both user-friendly and operationally efficient.

C. Bridging the Gap Between ideation and implementation + execution		
Service Design	Business Architecture	Collaboration
Generate innovative solutions based on user research.	Evaluate feasibility, scalability, and alignment with enterprise architecture.	This ensures innovative ideas can be effectively implemented within existing or planned business ecosystems.

D. Iterative Testing and Validation		
Service Design	Business Architecture	Collaboration
Prototype and test solutions with users to refine experiences.	Validate that these solutions can be supported by current and future business applications.	Joint testing ensures the service is user-friendly, technically feasible, and operationally viable.

E. Joint Workshops and Co-Creation Sessions		
Service Design	Business Architecture	Collaboration
Host collaborative workshops where service designers provide user insights and journey maps.	Business architects contribute enterprise-level perspectives on processes, data, and applications.	A combined service blueprint ensures that the designed service is both user-friendly and operationally efficient.

Collaboration between service designers and business architects is advantageous, as it combines complementary skill sets to create customer-centric services that are strategically and operationally aligned.

The collaboration between service designers and business architects results in better designs, concepts, and implementations of services and products.

Service designers and business architects can share a variety of tools and methods to facilitate collaboration, align their perspectives, and achieve cohesive solutions. These tools and methods are often centered around understanding customers (users), mapping processes, and aligning business goals.

All in all, when it comes to methods and tools, the mindset in the Enterprise Design approach is ***both-and***, not *either-or*, meaning that all proven methods and tools are valid and usable.

Enterprise Design approach with EDGY supports co-design.

Here are some examples of benefits how service designers and business architects can utilise Enterprise Design and EDGY with appropriate tool (there are plenty of tools available ranging from free open-source solutions to commercial products with extensive features):

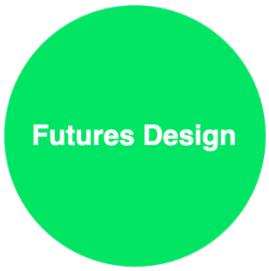
- **Service Blueprinting** provides a holistic view that bridges user experiences and internal processes.
- Co-create detailed service blueprints to connect customer experiences with backend operations.
- Visualize and streamline business processes and service delivery processes.
- Manage iterative co-design and implementation processes collaboratively.
- Align on how customers experience the service across different stages and touchpoints, including back-end processes and supporting applications.
- Helps both service designers focus on user experience and business architects understand process impacts.
- **Stakeholder Mapping** to identify and analyze all key stakeholders and their roles in delivering or experiencing the service.
- Outline the value proposition, target audience, channels, and resources needed to deliver a service.
- Align business architecture goals with customer-focused strategies.
- Customer Journey Mapping to map and analyze the flow of value through processes and applications.
- Collaboratively generate ideas, prioritize features, and solve problems.
- Build alignment and ensure all perspectives are considered in decision-making and design.
- Prototyping and Testing to develop low-fidelity to high-fidelity prototypes to validate ideas with stakeholders and customers to ensure alignment with business goals and customer needs.
- Evaluate how proposed changes impact customers, processes, and business outcomes.
- Create visualisations and presentations of key user groups to understand their needs, goals, and behaviors.
- Ensure solutions are grounded in real user insights and aligned with business objectives.
- Identify risks associated with service delivery or business processes.
- Balance the creative aspects of service design with the operational stability valued by business architects.
- Ensure both service designers and business architects align their efforts toward a unified vision.
- Streamline workflows by eliminating redundant tools or processes.
- Create a common, simple, easy and visually appealing language for discussing customer needs, business goals, and operational capabilities.
- Enable solutions to evolve with the enterprise's changing needs.

By utilising Enterprise Design with EDGY and leveraging shared tools and methods, service designers and business architects can foster greater collaboration and co-create services that are human-centric and aligned with business operations and enterprise goals.

Enterprise Design and EDGY ensure that the outcomes are better when created in collaboration between service designers and business architects.

7.1.7 Futures Design

Futures design[49] is a forward-thinking approach that focuses on exploring, envisioning, and designing multiple possible futures to help enterprises, communities, or societies anticipate and prepare for change. It integrates principles from futures studies and design thinking to develop scenarios, prototypes, and strategies that address uncertainties and potential outcomes, ultimately guiding decision-making and innovation.



Unlike traditional design, which may focus on specific goals or outcomes, futures design embraces the possibility of multiple futures. This is often referred to as "futures plural," meaning that many possible futures exist depending on decisions, trends, and unforeseen changes.

Futures Design combines strategic foresight, creative design, and actionable planning to create a holistic view of the future.

Here's a techniques involved:

- **Scenario Building**: Futures design often includes scenario building, where different future contexts are created based on trends, uncertainties, and potential disruptions. This helps in visualizing how various factors could shape the future and prepares organizations to adapt.
- **Speculative Prototyping**: This involves creating prototypes that illustrate how people might live, work, or interact with products in possible future scenarios. These prototypes can be physical, digital, or conceptual, and help make abstract ideas more tangible.
- **Trend Analysis**: Futures design includes trend analysis (identifying and analyzing current trends) and signal analysis (examining early indicators of change). These insights inform potential future scenarios.
- **Backcasting**: This is a method where the desired future scenario is defined first, and then steps are outlined to move from the present to that future. Backcasting helps enterprises create actionable plans to achieve their preferred future.

Futures design helps enterprises become more adaptable by preparing for various future possibilities, rather than relying on one predictable outcome. By exploring different scenarios, enterprises can make decisions today that account for potential future risks and opportunities. Futures design encourages innovative thinking and builds resilience, as it challenges traditional ways of planning and considers emerging trends and disruptions.

Enterprises can use futures design to develop strategies that are flexible and account for technological, social, or economic shifts. Governments and non-profits can explore future scenarios related to public health, education, or environmental challenges, helping them create resilient policies. Cities can design infrastructures and communities that are adaptable to changes like climate events, population growth, or technological advancements.

Summary. Futures design is a strategic and creative approach that leverages insights from future scenarios, trends, and design thinking to envision and prepare for multiple potential futures, ensuring that enterprises and societies can better navigate complexity and uncertainty.

Futures design is a practical approach for organizations to envision and prepare for multiple potential futures.

[49] **Futures Design** (in plural) and **Future Design** differs from each other in their focus. Futures design, a plural term, emphasizes the exploration and planning of multiple potential future scenarios. Future design, focuses on designing for one vision or specific direction of the future. The plural and the single.

By combining **Enterprise Design**'s holistic, human-centric and collaborative approach with EDGY's visual graph-based modeling to support futures design, enterprises can:

- Foresee future challenges through scenario planning.
- Align strategy and operations for actionable outcomes.
- Collaboratively innovate by exploring interdependencies visually.
- Adapt to complexity by iterating resilient solutions.

Enterprise Design with EDGY contribute futures design by supporting:

1. Holistic and Systems Thinking
   - Enterprise Design takes a systems-level view, connecting business models, services, technology, and organizational structures to align with future goals.
   - EDGY enhances this by visualizing and mapping interdependencies within enterprises.
   - This enables leaders to identify gaps, opportunities, and pathways for sustainable future outcomes.
2. Collaborative Innovation
   - Futures design requires collaborative decision-making. Enterprise Design fosters collaboration across disciplines - strategy, service design, and technology - to co-create future-proof solutions.
   - Enterprise Design with EDGY facilitates collaborative, graph-based visualization, enabling diverse stakeholders, including business owners, designers, business architects, and technology specialists, to co-create solutions.
   - EDGY supports this by graphing how various design elements (services, processes, capabilities) interplay. This visual interplay allows teams to explore scenarios and impacts collaboratively.
3. Designing for Complexity with Human-centric Focus
   - Futures design involves addressing complex challenges (e.g., sustainability, digital transformation) that often affect people's daily lives.
   - Enterprise Design with the Facet Model provides a scalable approach to apply human-centered principles across all levels of an enterprise, from strategic vision to operational design.
   - EDGY clarifies complex systems, enabling enterprises to identify human-centered opportunities within broader societal or organizational transformations.
4. Scenario Planning and Futures Exploration
   - Enterprise Design approach can be used for integrating scenario planning to explore multiple potential futures, preparing enterprises for uncertainty.
   - EDGY strengthens this by enabling modeling "what-if" relationships among enterprise elements such as services, processes, and capabilities.
   - This visual clarity allows enterprises to prototype alternative futures, test assumptions, and plan adaptive strategies.
5. Alignment of Strategic Vision and Execution
   - Enterprise Design bridges the gap between strategic vision (long-term futures) and actionable plans.
   - EDGY enables decision-makers to connect data and insights about people (e.g., customer journeys, pain points, personas) with organizational strategies, capabilities, processes, structures, and technologies - and show their interdependencies visually.
   - This ensures that futures design is not only aspirational but also grounded in operational feasibility.

Enterprise Design with EDGY empowers enterprises to not only envision the future but also design and execute pathways to achieve it.

7.1.8 Ecosystem Design

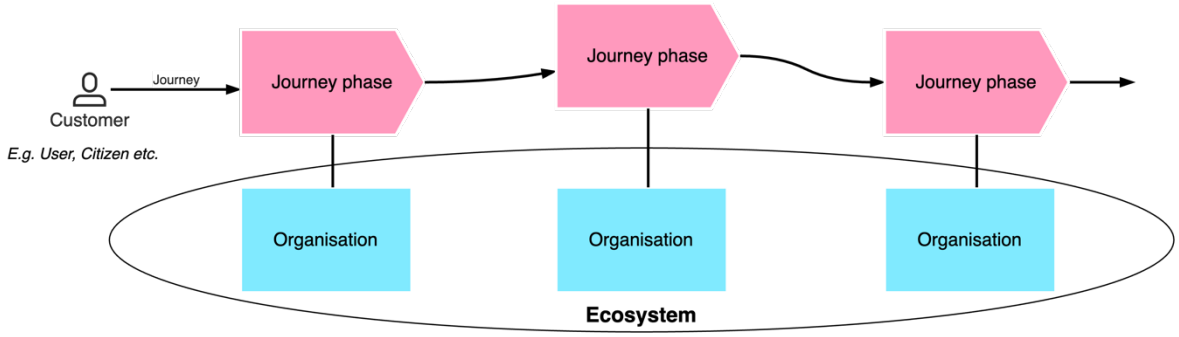


Ecosystem design is a strategic approach that focuses on creating and managing interconnected systems of stakeholders, capabilities, processes, and technologies that collectively deliver value. It moves beyond isolated products or services to consider the broader ecosystem where businesses, customers, partners, and technologies interact and collaborate.

Ecosystem design ensures that enterprises can:

- Facilitate seamless collaboration across multiple enterprises (entities, internal teams, external partners).
- Deliver holistic value by aligning interdependent systems and stakeholders.

Unlike designing for isolated products or services, ecosystem design considers the holistic network of relationships and ensures adaptability, resilience, and value generation across the entire ecosystem.



Ecosystem design considers the holistic network of relationships between entities.

Customers are key stakeholders. Customers are treated as active participants in the ecosystem, influencing its design and evolution. Their interactions with the business and other ecosystem components are mapped to ensure relevance and value delivery.

The customer is both the focus and the driver of ecosystem design, ensuring that all components work together to deliver meaningful and sustainable value. Customers are placed at the center of the ecosystem, and their needs, behaviors, and expectations drive decisions. The ecosystem is designed to deliver solutions that address customer pain points and create value across the entire customer journey, which spans multiple enterprises/organisations.

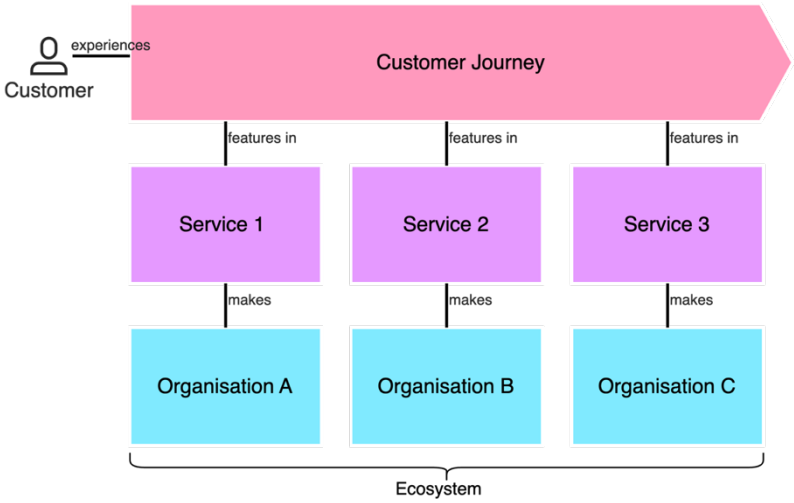


Figure 334: In an ecosystem, the customer journey spans services from multiple organisations.

The customer perspective is visualized using customer journeys to identify touchpoints, pain points, and opportunities for improvement. This ensures that the ecosystem supports seamless experiences across all channels and interactions.

Ecosystem design emphasizes alignment, collaboration, and adaptability within a holistic *system*, rather than focusing on isolated elements.

In the ecosystem context, customer journeys and customer experiences are managed ***holistically*** across the entire ecosystem, ensuring seamless interactions during all the phases (pre-service-, service- and post-service periods). All customer touchpoints, whether digital, physical, or human, are aligned to create a consistent experience with ***customer-centric focus***. All the involved enterprises and their Internal teams (e.g., service designers, architects, developers) and external partners ***collaborate*** to design and deliver optimized experiences.

Enterprise Design provides a structured approach for ecosystem design, ensuring alignment between the identity, architecture, and experiences of the ecosystem - to align all aspects of the business, such as people, processes, applications, data, and technology, with ecosystem goals as follows:

1) Holistic View of the Enterprise	Enterprise design ensures that all parts of the enterprise (capabilities, business goals, operations) align to support the broader ecosystem. It considers how the enterprise interacts with external partners, stakeholders, and technologies as part of a larger value network.
2) Customer-Centric Focus	Enterprise design incorporates human-centric thinking, ensuring that the needs of customers and other ecosystem participants drive the design. This approach helps identify pain points, opportunities, and synergies within the ecosystem.
3) Collaboration Across Disciplines	Enterprise design encourages collaboration between different roles (business architects, service designers, developers, etc.) to co-create solutions that work within the ecosystem.

EDGY language enhances enterprise design through graphical modeling of relationships, dependencies, and interactions across entities and their elements (services, processes etc.). EDGY brings precision and clarity to ecosystem design by focusing on the interplay of elements.

Ecosystem design benefits from enterprise design's Facet Model, which ensures a balance between identity, structure, and experience, and EDGY, which enables visual interplay for mapping and managing relationships. Together, they provide the tools to design, implement, and govern complex ecosystems.

By combining Enterprise Design and EDGY, enterprises can:

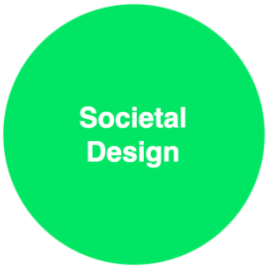
1) Design Holistic Ecosystems:
   - Align identity, architecture, and experience to create integrated, resilient, and adaptable ecosystems.
2) Deliver Human-Centric Experiences:
   - Prioritize seamless, meaningful experiences for all stakeholders within the ecosystem.
3) Enhance Collaboration:
   - Break down silos and promote shared understanding across stakeholders.
4) Visualize Complexity:
   - Use EDGY to map relationships, flows, and dependencies between ecosystem participants.

An ecosystem shares certain qualities with a single enterprise but is broader, more dynamic, and less centrally controlled. However, the Enterprise Design approach with EDGY can be used as a tool for ecosystems and all enterprises, regardless of their size or scope.

Enterprise Design with EDGY is suitable for enterprises of any size or scope.

7.1.9 Societal Design

Societal design focuses on addressing complex societal challenges by designing systems, solutions, and structures that create sustainable value for society as a whole. It combines design principles with systems thinking to deliver positive social, economic, and environmental impact. The approach considers stakeholders, societal needs, and systemic changes across communities, enterprises/organisations, and institutions.



Societal design aims to drive change by fostering innovation, improving inclusivity, and aligning human, economic, and technological elements to benefit society.

Societal Design focuses on designing solutions that create sustainable societal value.

Societal Design is a human-centered approach to designing service entities based on people's everyday lives. It shifts focus from technology-driven development to a societal context.

Societal Design addresses global challenges by placing people's everyday life at the center of service and societal development.

The Role of Human-Centrism, Holistic Approach, and Collaboration in Societal Design

A. Human-Centrism:
   - Societal design prioritizes people and communities as the focal point of all solutions.
   - It ensures that societal systems address real human needs, promote inclusivity, and improve the quality of life for all stakeholders.
   - Empathy-driven design uncovers pain points and opportunities to create meaningful, equitable outcomes.

B. Holistic Approach:
   - A systemic view ensures that societal challenges are addressed comprehensively by considering their interconnected nature.
   - Solutions are designed to balance economic, environmental, and social factors, fostering sustainability and long-term impact.
   - Holistic thinking helps enterprises consider both the big picture and the operational details necessary for implementation.

C. Collaboration of Entities and Disciplines:
   - Societal design requires cross-disciplinary collaboration between governments, businesses, non-profits, and communities.
   - Enterprise design, facilitated by EDGY, enables stakeholders to work together effectively toward shared goals.
   - Collaboration breaks down silos, encourages co-creation, and aligns diverse capabilities to address complex societal challenges.

Human-centrism, holistic approaches, and collaboration ensure that societal design addresses real needs, considers interconnected systems, and fosters cross-disciplinary teamwork for meaningful and sustainable outcomes.

Enterprise Design provides a structured way to address societal challenges by ensuring alignment, coherence, and value creation across systems as follows:

1) Identity
   - Defines the purpose, values, and role of the enterprise or ecosystem in addressing societal goals.
   - Clarifies who we are as a contributor to society and what positive change we aim to achieve.
   - Helps align societal goals with the enterprise's strategy to act responsibly and transparently.
2) Architecture

- Maps out the applications, organisations, people, and processes needed to support societal initiatives.
- Provides a framework for managing relationships, capabilities, and resources across multiple enterprises, and stakeholders.
- Ensures scalability, adaptability, and alignment with societal needs.

3) Experience
   - Focuses on delivering human-centered solutions that meet the needs of people and communities.
   - Designs inclusive and equitable experiences across touchpoints to foster engagement, trust, and collaboration.
   - Enhances the social impact by prioritizing accessibility, inclusivity, and empathy.

Enterprise Design with its Facet Model (Identity, Architecture, Experience) provides structure and alignment to societal initiatives, and EDGY enables the visualization and management of relationships across complex societal ecosystems.

Societal design integrates human-centered, collaborative approaches to solve complex societal challenges.

7.1.10 Enterprise Models

The Enterprise Design Facet Model can be applied to many different ways to analyse and design the enterprise. The Enterprise Design Facet Model[50] can be applied as a method or an analytical tool, and the EDGY as a modelling notation. An example of using the Facet Model for analysing the models of enterprise, e.g. in these three models: business model, operating model and customer-centric model (a.k.a. customer-engagement model).

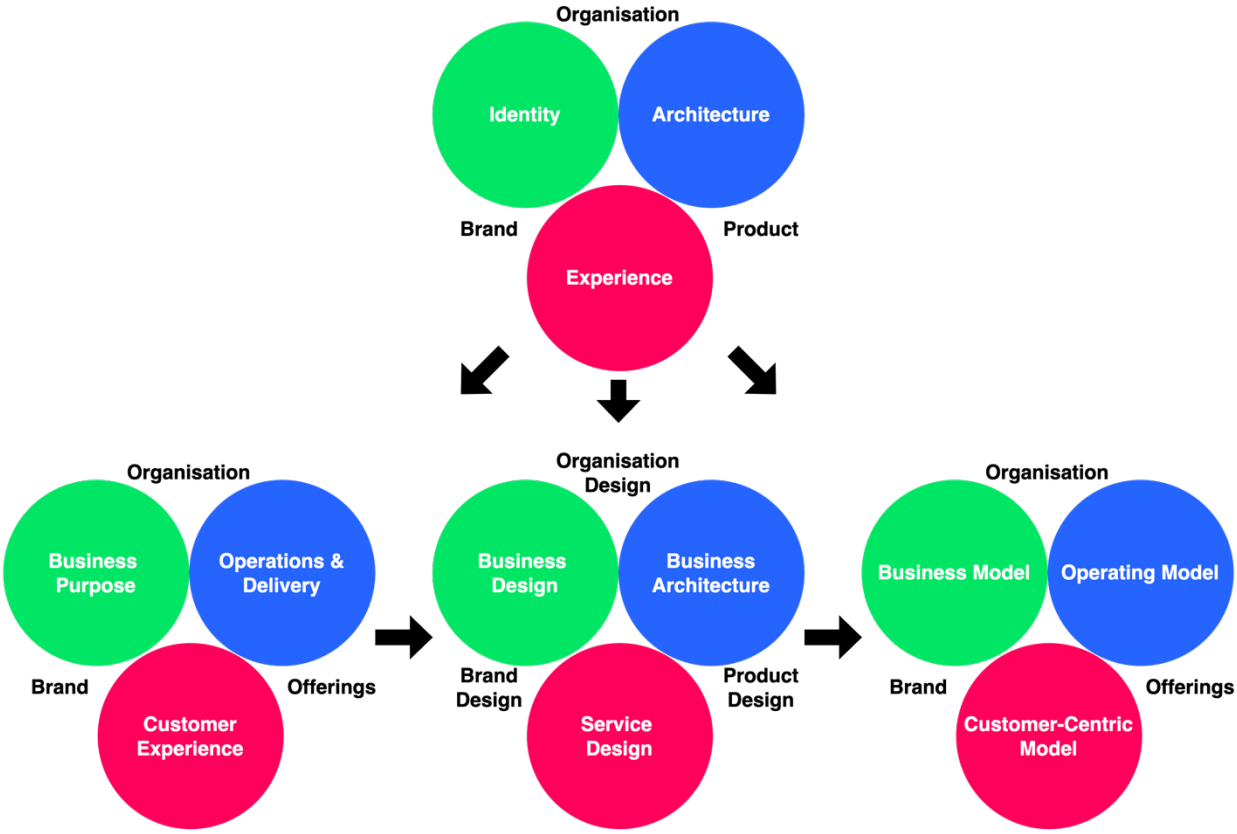


Figure 335: The Enterprise Design Facet Model is adaptable to various uses.

[50] All methods, frameworks, and tools are limited, but some are useful. Enterprise Design with EDGY is simple yet powerful enough to fit most design challenges.

The business model, operating model, and customer-centric model are interconnected frameworks that guide why and how an enterprise creates, delivers, and captures value. Each focuses on different aspects of the organization but works synergistically when aligned.

The Enterprise Design Facet Model provides a comprehensive way to analyze:

The **business model** defines *why* the enterprise exists, why it matters and what it does, the **operating model** focuses on *how* it does it, and the **customer-centric model** ensures *what* the enterprise makes and what is customers.

By integrating these three models, businesses can create sustainable value, operate efficiently, and build lasting customer engagement.

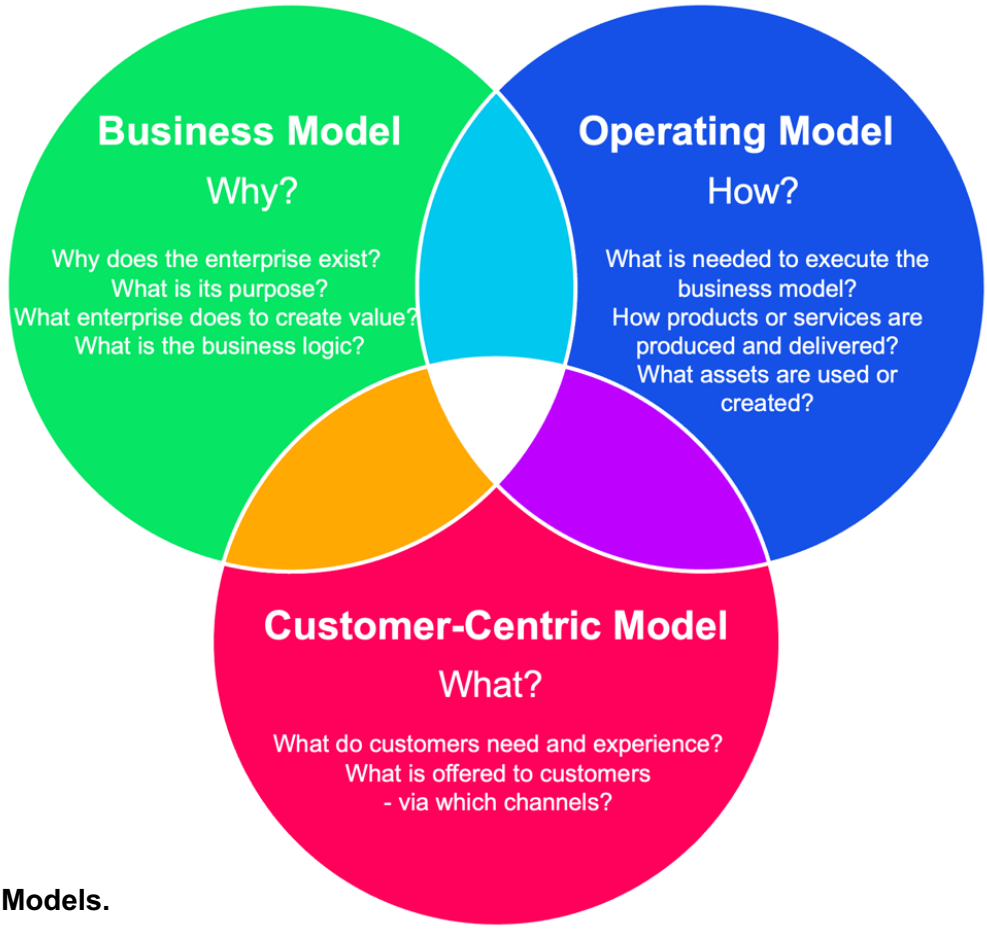


Figure 336: Enterprise Models.

Business Model - the *WHY*	Defines the purpose, goals and strategy, what the business offers, how it creates value, and whom it serves, at a high-level. Specifies the value proposition, what the business aims to deliver to customers. Sets the direction for the enterprise, what needs to be achieved. Aligns the business model with the enterprise's brand identity and culture, ensuring it resonates with customers, employees, and stakeholders. Positions the business model to reflect a strong brand promise that connects emotionally with customers and communicates value clearly.
Customer-Centric Model - the *WHAT* and to *WHOM*:	Focuses on what is delivered to customers (products, services, experiences). Connects customer-centric design with product and service offerings. Ensures that the offerings focus on meeting customer needs and delivering a good experience, and validates that the value created aligns with the customer expectations. Provides insights into customer behavior, preferences and feedback, and prioritizes customer journeys and touchpoints to design and deliver good experiences. Ensures the customer-centric model strengthens the brand identity by delivering on its promises.
Operating Model - the *HOW*	Defines how the enterprise delivers value, and how the strategy is executed in day-to-day activities, at a detailed level. Translates the strategy into practical, operational execution, how processes, people, and assets (e.g. technology) deliver the value defined in the business model. Ensures alignment between internal operational structures that enable value delivery (organisation, people, capabilities, processes, applications, data) and strategic goals. Connects the operating model to internal and external user experiences, ensuring smooth delivery and operational excellence.

7.1.10.1 Business Model

Business Model ▪ Outlines how an enterprise creates, delivers, and captures value. ▪ Defines the strategic blueprint for the enterprise's operations and financial aspects.	
Characteristics	Outlines the strategic framework for how the business creates value.
Purpose	Defines "**what**" the business does and "**why**" it matters.
Focus	Value creation, revenue streams, cost structures, key activities and resources, customer segments
Importance	Provides a blueprint for growth, transformations, and long-term sustainability.

Business model with example EDGY elements shown below.

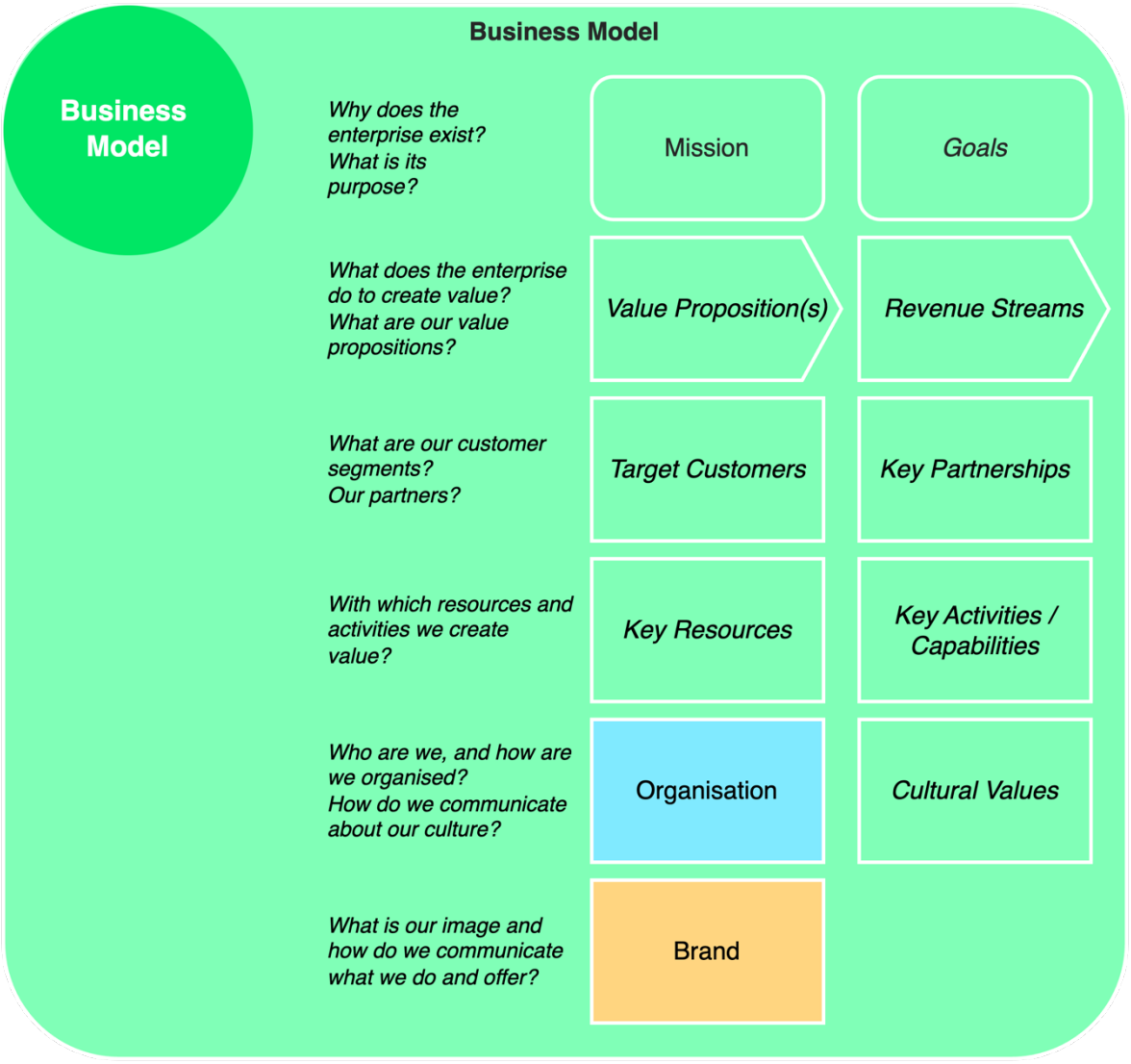


Figure 337: Business Model.

7.1.10.2 Customer-centric Model

Customer-centric Model ▪ Defines the "what" an enterprise makes and offers for customers' benefit by ensuring that every product, service, or experience is designed and developed around the needs, preferences, and expectations of the customer.	
Characteristics	Centers on understanding and fulfilling customer needs and expectations.
Purpose	Defines the "**what**" an enterprise makes and offers for customers' benefit and ensures that all activities are aligned with "**who**" the business serves.
Focus	Customer insights, customer experience, customer journeys, customer needs.
Importance	Drives customer loyalty, improves brand reputation, and enhances lifetime value.

Customer-centric model with EDGY elements below.

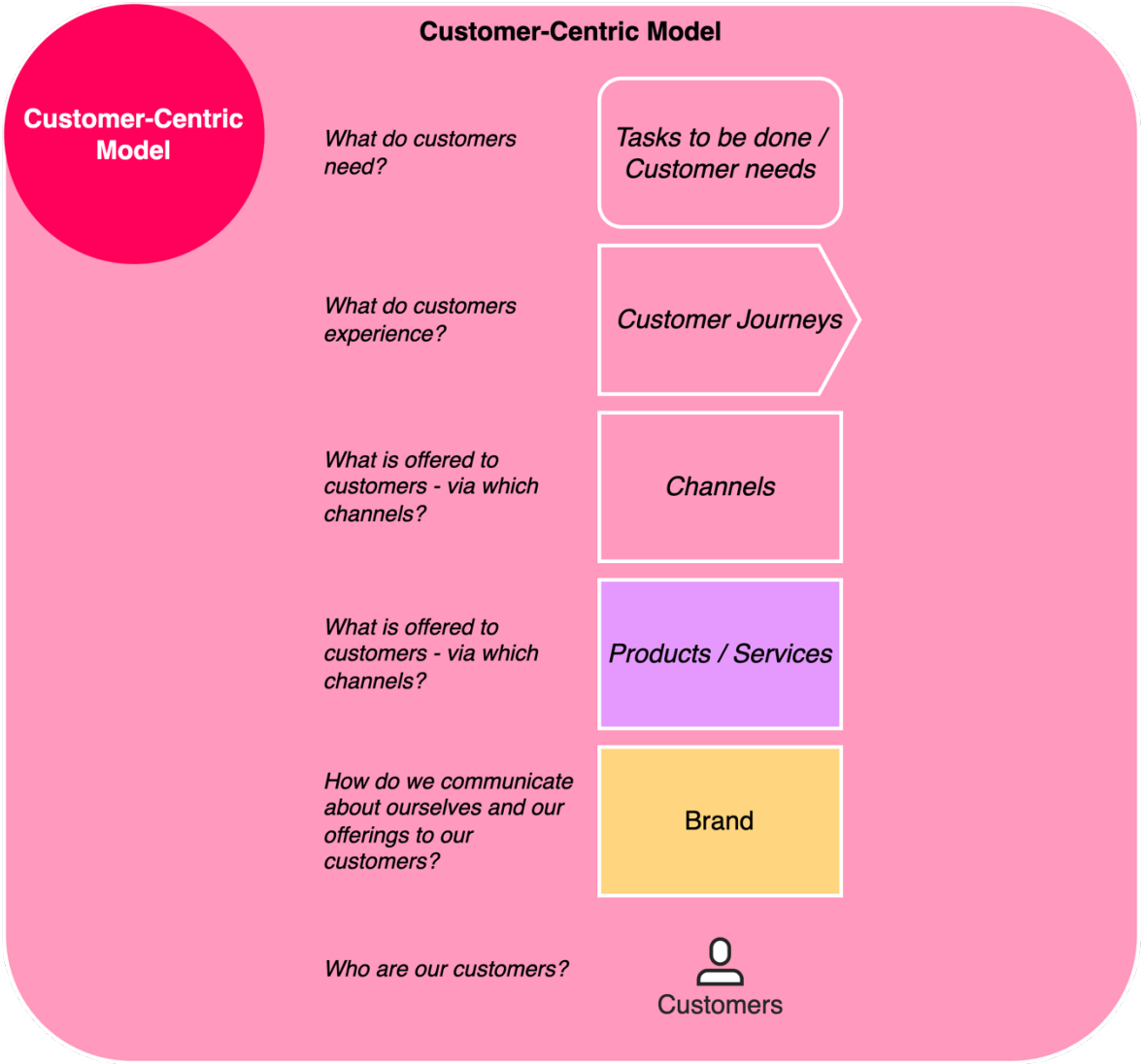


Figure 338: Customer-Centric Model.

7.1.10.3 Operating Model

Operating Model ▪ Defines how the business is organized to execute its business model.	
Characteristics	Translates the business model into actionable operations and ensure operational execution.
Purpose	Outlines "**how**" the business achieves its goals operationally.
Focus	People and roles, capabilities, internal processes, assets (e.g. technologies), and operational efficiency.
Importance	Ensures the business operates effectively and can deliver on its promises.

Operating model with EDGY elements below.

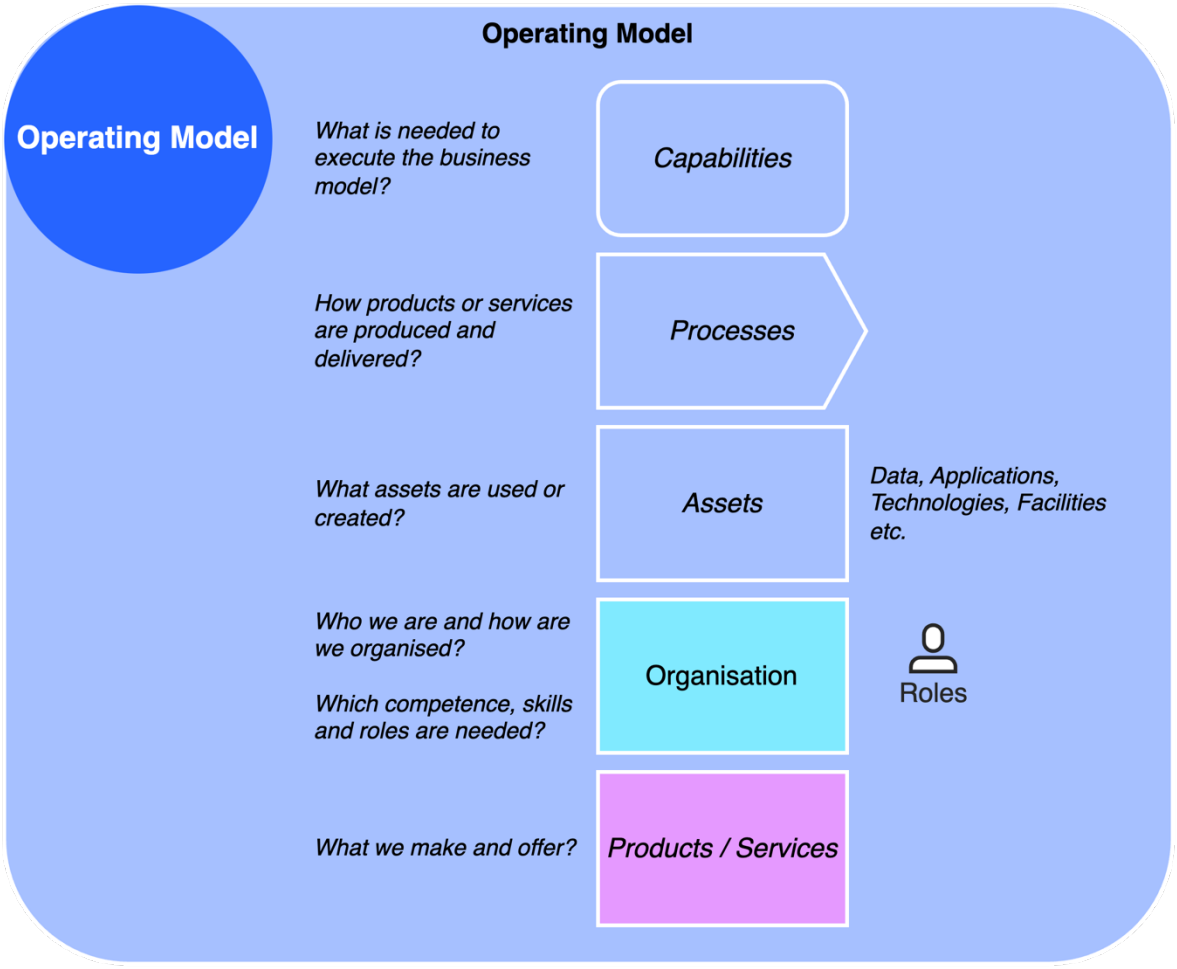


Figure 339: Operating Model.

7.1.11 Enterprise Design and Enterprise Architecture



Enterprise Design and Enterprise Architecture are closely related disciplines that both aim to improve the functionality, efficiency, and alignment of an enterprise. However, their focus areas and methods differ, creating a complementary relationship.

Both seek to align an enterprise's capabilities, processes, and resources with its strategic goals. Both aim to create coherence within the enterprise, ensuring that design and architecture support the business strategy.

- Enterprise design provides a holistic, human-centric and collaborative view of the enterprise, focusing on customer experiences, service delivery, and strategic alignment.
- Enterprise architecture takes a systemic and technical view, focusing on structures, processes, and applications needed to implement and support the design.

Enterprise architecture can merge with enterprise design and leverage its holistic, human-centric and collaborative approach, not only without conflicts but with substantial relevance and advantage. Enterprise architecture can benefit from enterprise design's holistic approach, which considers not only the architecture but also the business strategy and the customer's perspective. Enterprise Design covers Enterprise Identity, Enterprise Experience and Enterprise Architecture.

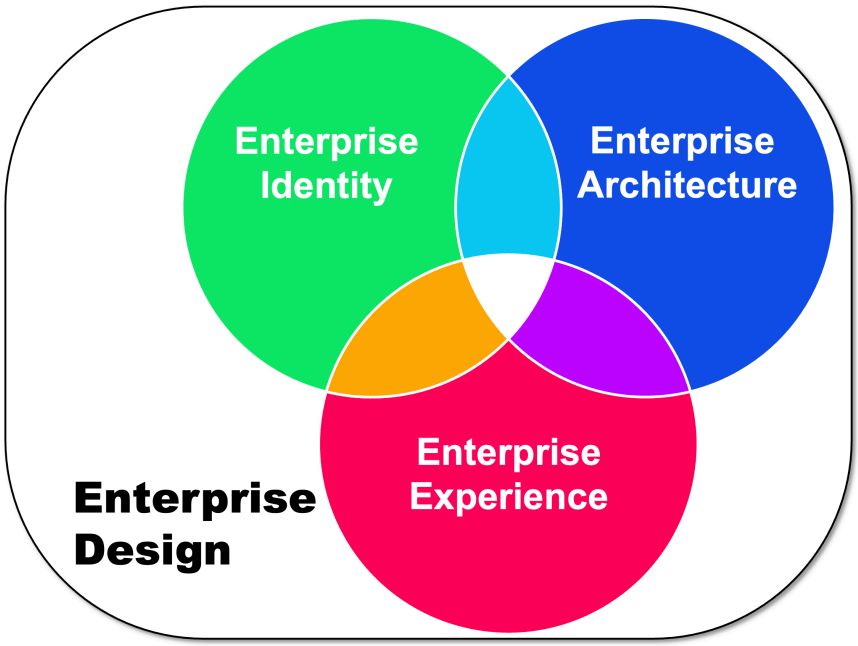


Figure 340: Enterprise Design is a holistic approach that covers all what is meaningful in an enterprise.

Enterprise Design approach ensures alignment across all components of the enterprise, enhancing effectiveness and coherence:

- Holistic Perspective: Enterprise Design integrates all aspects of an enterprise, including strategy, organisation, culture, processes, applications, data, and customer interactions.
- Focus on Meaningfulness: Enterprise Design ensures that every part of the enterprise contributes value and aligns with its purpose, goals, and customer needs.
- Systemic Approach: Enterprise Design doesn't just address isolated issues; it views the enterprise as a connected system where changes in one part affect the whole.

Enterprise Architecture (EA) can benefit from **Enterprise Design's** holistic, human-centric and collaborative approach.

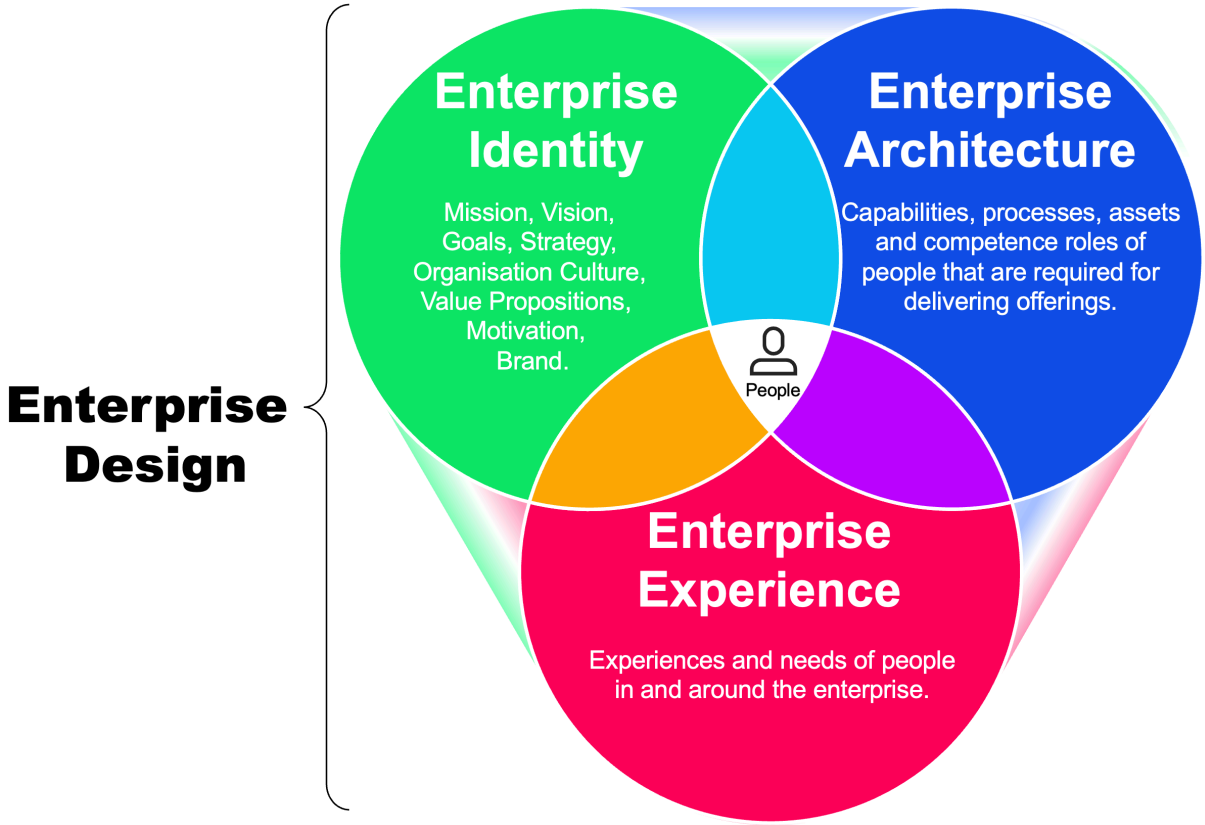


Figure 341: Enterprise Design covers Enterprise Architecture, Enterprise Experience and Enterprise Identity.

Differences Between Enterprise Design and Enterprise Architecture:

Aspect	Enterprise Design (ED)	Enterprise Architecture (EA)
Perspectives	***Holistic***, emphasizing customer and employee experiences with business outcomes.	***Systemic***, emphasizing efficiency, scalability, and sustainability of enterprise systems.
Focus	***Human-centric*** solutions for services, products, and applications that align with with customer needs, business strategy, and experience.	***Technical*** and structural alignment of applications, processes, data and capabilities with business goals.
Approach	***Collaborative***, creative, and iterative, focuses on design thinking and co-creation.	***Analytical***, structured, and systematic, relies on technical (mostly) frameworks and models.
Scope	Customer experience, service delivery, and business strategy alignment.	Operational and Technical infrastructure, capabilities, and governance.
Methodologies	Design thinking (service design), business architecture, co-creation, and iterative prototyping, Enterprise Design & EDGY.	Frameworks like TOGAF, Zachman, or ArchiMate.
Stakeholder Interaction	Heavy involvement with users, customers, and cross-functional teams, business leaders.	Focused on aligning business and IT, IT-teams, operational stakeholders.
Deliverables	Service blueprints, customer journeys, business models, and enterprise maps.	Architecture diagrams, process models, data transfers, integrations and roadmaps.

While enterprise design focuses on **what** the enterprise should deliver to meet customer and business needs and how it should engage with its stakeholders, enterprise architecture focuses on **how** the enterprise organizes its resources and applications to deliver those

outcomes. When combined, they provide a powerful framework for creating enterprises that are both innovative and operationally efficient.

- Enterprise Design is about designing the enterprise's value propositions and experiences with a human-centric lens.
- Enterprise Architecture is about building the enterprise's structure and systems to support and operationalize those designs.
- Together, they bridge creativity and execution for a well-aligned and effective enterprise

7.1.11.1 Enterprise Architecture (EA) is at a crossroads

Enterprise Architecture (EA) can survive as a discipline on its own and choose between maintaining the traditional track or shifting to a more business-oriented approach. Alternatively, EA can integrate with other disciplines and become part of Enterprise Design. This requires changes in thinking, practices, tools, and methods. The benefit is staying relevant and achieving a better position in the overall changes and transformations within the enterprise.

Rebranding the entire EA discipline can open new possibilities to make its value more beneficial to new stakeholder groups than before.

7.1.11.2 Rebranding Enterprise Architecture (EA)

Examples of actions to make enterprise architecture more efficient and beneficial for the enterprise's business.

From traditional EA to Business-Outcome-Driven Enterprise Architecture (BODEA)

A focus area for enterprise architecture is business-outcome-driven EA (BODEA) as Gartner has introduced it.

BODEA "starts with business architecture to align business and IT by putting the "Why" and "What" of EA before solutions and technical architecture, the "How" of EA. Business-outcome-driven approach shifts EA from the traditional EA to more business-oriented. Traditional EA "is technology-centric that focuses on solutions and technical architecture with an emphasis on projects as well as command and control governance" according to Gartner. [Reference: *8 Steps to Start a High-Impact EA Practice,* Gartner, 2024].

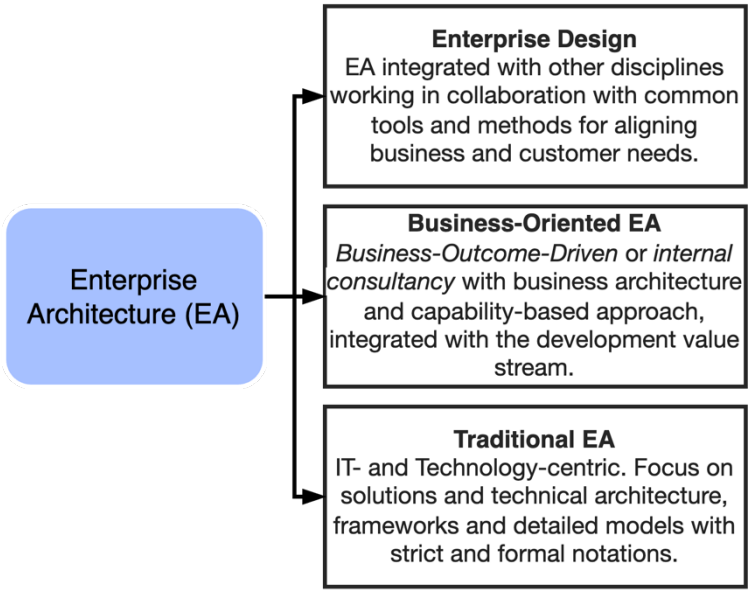


Figure 342: EA at a crossroads.

EA as Internal Management Consultancy (IMC)

A preferred shift to more business focused defines EA as an internal management consultancy (IMC). "IMC is stakeholder-centric. IMC extends BODEA by delivering EA services to meet the needs of stakeholders. It professionalizes the EA practice by offering advice and guidance, working in a responsive and agile way, using adaptive governance". [Gartner]

From BODEA TO IMC

The shift in enterprise architecture from traditional EA to internal management consultancy (IMC) represents the next organic maturity step, evolving from being business-outcome-driven to becoming a real, practical advisor and collaborative partner within the enterprise.

If enterprise architects (EAs) want to shift from being technical specialists to more business- and human-oriented professionals, they can adopt a variety of tools and approaches that emphasize collaboration, accessibility, and business alignment.

7.1.11.3 Enterprise Architecture (EA) Criticism

EA, in its traditional form, has faced significant challenges in delivering the agility and accessibility that modern enterprises demand. Its complexity and rigid frameworks have often made it difficult for business leaders and stakeholders to engage with and benefit from. Instead of enabling agility and innovation, it has, at times, become a cumbersome exercise that feels disconnected from real business priorities [51].

To enable enterprises to thrive, we must move beyond rigid frameworks and embrace more adaptive, human-centered approaches. By streamlining processes, fostering collaborative design, and aligning with real business outcomes, EA can become a truly integral and impactful driver of success.

Enterprise Architecture (EA) has not been success.

EA has often failed and faced criticism for its lack of success in delivering value in many enterprises - even though EA covers crucial aspects of the enterprises. EA has disconnected from business management and customer experience. The criticism has focused on the following issues:

Enterprise Architecture (EA) criticism	
Issue	Description
Misalignment with Business Needs	EA is frequently perceived as a technical or IT-driven function, disconnected from core business strategies and goals. This disconnect makes EA outputs irrelevant to decision-makers and fails to deliver tangible business value.
Overemphasis on Theoretical Frameworks and Models	EA often focuses on cumbersome and complex frameworks (e.g., TOGAF, Zachman) and documentation rather than practical outcomes. The obsession with theory and models alienates stakeholders who seek actionable results, not abstractions.
Slow to Deliver Value	Traditional EA practices are slow and cumbersome, often failing to keep up with the pace of change in modern enterprises that are agile and dynamic. By the time EA recommendations are implemented, they may no longer be relevant, leading to frustration and wasted resources.
Resistance to Collaboration	Enterprise architects often operate in silos, failing to engage effectively with business leaders, service designers, product teams, and other stakeholders. This isolation results in a lack of buy-in, with EA being seen as an obstacle rather than an enabler.
Failure to Address Human-Centric Needs	EA often neglects the human aspects of enterprises, such as culture, collaboration, and customer experience. Without addressing these elements, EA initiatives fail to drive meaningful change or adoption.
Inability to Demonstrate ROI	EA struggles to clearly articulate its value in terms of measurable business outcomes, such as cost savings, revenue growth, or customer satisfaction. This makes it difficult for leadership to justify continued investment in EA.
Legacy Thinking in a Digital World	EA often clings to outdated methods and rigid architectures in a world demanding agility and rapid innovation. This rigidity prevents enterprises from adapting to disruptions, making EA appear obsolete.

The world for which traditional Enterprise Architecture (EA) was created no longer exists. Today, business is faster and more agile, and the pace of change requires a more flexible and collaborative approach.

[51] K. Penttinen's dissertation, *The Long and Winding Road of Enterprise Architecture Implementation in the Finnish Public Sector* (2018, University of Jyväskylä), addresses challenges with enterprise architecture in the Finnish public sector, which are common to many organisations worldwide. https://jyx.jyu.fi/handle/123456789/60447?locale-attribute=en .

7.1.11.4 EA Opportunities

What enterprise architects could do to keep their profession relevant in enterprises?

Enterprise architects can remain relevant by evolving from technical specialists to strategic business enablers. By focusing on value delivery, human-centricity, agility and communication, they position themselves as indispensable contributors to enterprise growth and transformation. Enterprise architects need to reinvent themselves and embrace renewal. To remain valuable in today's fast-changing business environment, enterprise architects must transform their roles and approaches.

What enterprise architects could (= should) do to stay relevant:

Renewal of Enterprise Architects - How can enterprise architects renew themselves?	
Area	Description
Shift to Business-oriented Outcomes (from IT-orientation)	Prioritize delivering measurable business value within business outcomes rather than just creating models and documentation. Work closely with leadership to align architecture initiatives with business goals, such as reducing costs, and/or improving customer experience.
Become Business-Centric, Not IT-Centric	Reposition EA as a strategic partner to the business rather than a technical discipline. Learn business strategy, collaborate with product owners, and speak the language of business people, -managers and -leaders.
Focus on Human-Centered Design	Incorporate user experience, employee well-being, and cultural alignment into architectural decisions. Engage directly with end-users, and (agile) product teams, to ensure solutions are designed for people, not just systems.
Be a Facilitator, Not a Gatekeeper	Transition from controlling architectural decisions to enabling collaboration. Act as a bridge between teams, encouraging co-creation and empowering others to contribute to architecture initiatives.
Be a Change Leader / Change Agent	Become specialist of digital transformation and enterprise-wide innovation. Lead initiatives that integrate new tools, foster cross-functional collaboration, and prepare the enterprise for future challenges.
Adopt Agile and Lean Practices	Embrace agile methodologies to deliver incremental value and respond quickly to changing business needs. Replace traditional "big bang" architecture designs and *big design up front (BDUF)* approach with iterative and incremental, adaptive approaches that evolve over time.
Embrace Emerging Technologies, Tools and Methods	Stay ahead of trends in AI, cloud computing, blockchain, and other disruptive technologies to guide enterprises through transformation. Be proactive in recommending and piloting innovative solutions that align with the enterprise's goals. Be
Promote Agility and Resilience	Design architectures that are flexible and resilient, capable of adapting to disruption and evolving needs. Focus on modular, cloud-based, and scalable architectures that support innovation and rapid change.
Communicate Value Clearly	Translate technical concepts into business terms to show how EA contributes to strategic objectives. Use storytelling, data visualization, and success metrics to build stakeholder confidence.
Be an enabler, not a blocker.	Enable co-creation with an inspiring, encouraging, and experimental atmosphere. Encourage experimenting with new methods and practices, and try what works and let go of what doesn't. Avoid sticking to old ways that have proven ineffective.

Enterprise architects must evolve from being technical specialists to strategic business enablers who drive value and adaptability. By becoming agile, business-focused, and human-centric, they can secure their roles as indispensable leaders in the modern enterprise.

Enterprise architects must shift from technical specialists to strategic business partners.

7.1.11.5 Tools, Frameworks, and Methods

No tool, farmework or method alone can make a discipline successful. Success depends on how the tools, frameworks, methods and visualization are used. Is it easy for everyone to use, or difficult for most people?

EAs can move toward a business- and human-oriented role by adopting tools that:

- Simplify complexity for non-technical stakeholders.
- Focus on business capabilities, customer journeys, and strategic alignment.
- Foster collaboration and communication across all levels of the enterprise.

This shift will make enterprise architecture more relevant and valuable in driving business success.

Overemphasis on theoretical frameworks and models, combined with complex tools, makes enterprise architecture too cumbersome and inaccessible for other stakeholders, such as business people. Enterprise architecture tools are often too technical for non-technical stakeholders to use, and the models and diagrams, while detailed and accurate, are often difficult to understand.

Too theoretical and technical – too difficult for other stakeholders.

What kind of tools and visualisations are the most useful and valuable to EAs shift their focus from technology-driven to business-outcome-driven planning? EAs can utilise e.g.:

1. **Visual Collaboration Tools**, that simplify communication and foster collaboration across technical and non-technical stakeholders. E.g. *digital whiteboards* for brainstorming, journey mapping, and collaborative workflows. These make architectural concepts more accessible and encourages input from all stakeholders, they visualize processes and systems in an intuitive way, bridging technical and business perspectives.
2. **Diagramming Tools**, for creating simple, human-readable diagrams that anyone in the enterprise can understand. E.g. *Draw.io* (https://www.drawio.com/ and https://app.diagrams.net/), a lightweight, free tool for creating flowcharts, process diagrams, and capability maps etc. Or Customer Journey Mapping Tools to incorporate customer experience into architectural planning by mapping customer journeys, stakeholder insights and touchpoints, e.g. with Smaply (https://www.smaply.com/).
3. **Enterprise Design Approach and language**, for holistic overview that integrate human, business, and technical perspectives. E.g. EDGY, a simple visual language for aligning stakeholders and disciplines that can be used diagramming tools (such as Draw.io) and with plain old PowerPoint.
4. **Simplified EA Tools with Business Alignment Features**, adopt tools designed for both business and IT users, e.g. Confluence (https://www.atlassian.com/software/confluence), that allows people to create content in diverse formats such as plain text, tables or figures.
5. **Data Visualization and Analytics Tools**, make data-driven architectural decisions that resonate with business stakeholders. E.g. Tableau / Power BI.
6. **Agile and Lean Tools**, integrate agility into EA processes to better align with business priorities and reduce time-to-value. E.g. Jira (https://www.atlassian.com/software/jira).

Using tools effectively requires discipline; otherwise, the structure of content degenerates, and the quality of outputs suffers. Managing the content requires continuous refactoring and care, agreed and shared practices, and a governance model, or otherwise, the content becomes fragmented. A tool doesn't make the quality of content, a tool doesn't make good visualisations but discipline and commonly agreed guidelines. As a result of this, the outputs, the artifacts,

the visualisations are understandable, usable and valuable. Paraphrasing Wittgenstein: "the meaning of visualisations lies in their use".

> "*The meaning of visualisations lies in their use.*" *[Applying Wittgenstein]*

Tool with a repository – or not?

The necessity of an enterprise architecture (EA) repository managed within specialized and complex tools depends on the enterprise's specific needs, but modern trends increasingly favor tools that facilitate collaboration and accessibility.

When can an EA tool with a repository be useful:

1) If the enterprise's architecture involves highly complex systems, processes, and dependencies, a specialized EA tool may be necessary for detailed modeling and analysis.
2) In highly technical environments where deep system-level analysis is required, these tools can be useful.
3) When reusability of the elements is necessary.

When can a collaboration tool (without a repository) be reasonable choice:

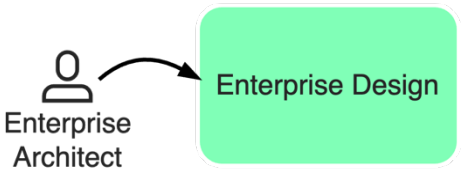
1) If cross-disciplinary collaboration and shared ownership of enterprise artifacts (models, visualisations, descriptions) are important (to prevent siloing and stakeholder group isolation).
2) In business- and customer-driven enterprises, where tools should be accessible and understandable also to non-architects, such as business people, designers.
3) When simplicity and accessibility are necessary, so that diverse stakeholder groups can easily share a common understanding of designs.
4) When agility and flexibility are needed, like in n fast-moving environments, lightweight and shareable tools may be more adaptable, enabling quicker updates and easier access for all stakeholders.
5) For holistic Enterprise Design, where designers and architects are working together for customers' benefit.

A tool alone does not make anyone a master in their profession.

> *"A fool with a tool is still a fool."*

7.1.11.6 Why Enterprise Design Makes Sense for Enterprise Architects

Enterprise design involves the application of design thinking, systems thinking, and user-centered approaches to shape and optimise an enterprise's structure, processes, culture, and technology ecosystem. It focuses on how the enterprise operates as a whole system to deliver value to customers and stakeholders.



Unlike traditional EA, which often focuses on technology alignment with business strategy, enterprise design places greater emphasis on:

- Human-centric design (e.g., employee and customer experience).
- Coherence and adaptability in operating models and ecosystems.
- Cross-disciplinary collaboration across strategy, business, and design disciplines.

Enterprise architects are well-positioned to lead in enterprise design due to their:

- Systems-level thinking: Ability to understand complex systems and dependencies.
- Cross-functional expertise: Experience in working across IT, business, and strategy.
- Strategic alignment focus: Expertise in aligning capabilities with business goals.

Enterprise design builds on these strengths but integrates new approaches, such as:

- Design thinking: Creating solutions centered on people and outcomes.
- Service design: Mapping and optimizing workflows and interactions.
- Continuous adaptability: Enabling the enterprise to evolve with market changes.

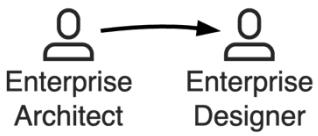
How to Transition into Enterprise Design?

If enterprise design resonates as a next step, here's how an enterprise architect can pivot effectively:

1. Shift Mindset from Architecture to Design
    a. Focus on enabling innovation and creating seamless experiences rather than rigid frameworks.
    b. Move from being a "governor" to a "facilitator" of enterprise-wide change.
2. Learn Key Skills and Tools
    a. Design Thinking: Master frameworks like journey mapping and service blueprint.
    b. Service Design: Learn to design end-to-end journeys and stakeholder experiences.
    c. Enterprise Coherence: Focus on simplifying and connecting operating models.
    d. Tools: Familiarize yourself with customer journey mapping platforms, and systems modeling tools, and visualisation tools (like Miro, Figma, Mural, Draw.io).
3. Collaborate with Diverse Roles
    a. Work closely with business designers, UX/UI designers, product owners, and service designers to co-create solutions.
    b. Act as a bridge between strategic intent (business goals) and operational execution.
4. Focus on Outcomes, Not Deliverables
    a. Transition from documenting systems and processes to actively shaping desired outcomes for the enterprise, such as agility, innovation, or better customer experience.
5. Engage in Ecosystem Thinking
    a. Help enterprises design ecosystems of partners, services, and technology that are adaptive and scalable, rather than static architectures.

Potential Roles in Enterprise Design

As an enterprise architect moving into enterprise design, you could pursue roles such as:



1. Enterprise Designer: Focus on designing the overall operating model and ecosystem of the organization.
2. Business Design Strategist: Lead efforts to align business goals with human-centric design and technology strategies.
3. Service Design Lead: Map and improve enterprise-wide services and journeys / workflows / processes for internal and external users.
4. Experience Architect: Work on optimizing employee and customer experiences across touchpoints.
5. Innovation Leader: Drive innovation projects by combining business design, technology, and user insights.

Benefits of Enterprise Design Over Traditional EA

- Broader Scope: Goes beyond IT and technology to address business fundamentals, culture, and customer interactions.
- Agility: Focuses on adaptability rather than rigid long-term planning.
- Human-Centric: Addresses the needs of people (employees, customers, and partners) at the core of its solutions.
- Collaborative: Involves cross-disciplinary teams, creating more buy-in and alignment across the enterprise.

Enterprise design could indeed be a meaningful answer for enterprise architects seeking to stay relevant in a changing business and technology landscape. By adopting the principles of design thinking, focusing on customer and outcomes, and emphasizing collaboration and adaptability, enterprise architects can reinvent themselves as key players in shaping the future of their organisations. This approach aligns with modern trends, including digital transformation, agile operating models, and human-centered innovation.

7.1.12 Enterprise Design Principles

Principles serve as foundational guidelines or rules that inform the design, structure, and operation of an enterprise. These principles ensure that the enterprise remains aligned with its strategic goals while addressing the needs of stakeholders (customers, employees, owners etc.).



Principle	Description
Holistic Thinking	Refers to viewing the enterprise as a cohesive, interconnected system where every element, such as processes, people, technology, culture, and external factors, affects and is affected by others. It emphasizes the importance of understanding the enterprise as a whole, rather than analyzing its parts in isolation, to create solutions that align with both customer needs and enterprise goals.
Human-Centricity	Human-centricity in enterprise design places people, employees, customers, and other stakeholders, at the core of the design process. It focuses on understanding human needs, behaviors, and expectations to create solutions that provide meaningful experiences while aligning with business goals.
Collaboration Across Disciplines	The principle of collaboration across disciplines in enterprise design emphasizes breaking silos and fostering teamwork among diverse roles and expertise. It recognizes that designing and implementing effective solutions for an enterprise requires input from multiple perspectives, ensuring alignment between strategic goals, customer needs, and operational realities.
Customer First	Prioritizes the needs, preferences, and experiences of customers in every aspect of designing products, services, and business strategies. It ensures that the enterprise aligns its goals and operations to deliver maximum value to customers. Customer-centrism forces the enterprise designers to customer-driven design in all the change activities.
Goal-driven Design	Focuses on achieving specific user or business goals throughout the product or service design process. The design process begins with an in-depth understanding of the customers' goals, tasks, and motivations, the customer insight. Designers create solutions that help customer (and users) accomplish their goals in the most effective way possible. Goal-Driven Design ensures that products or services are designed to meet both user needs and business goals by focusing on the goals from the very beginning. It emphasizes task-oriented, customer (and user) centered design, with an iterative process to refine the solution over time.
Design by Purpose	An approach to design that prioritizes aligning a product, service, or system with its core purpose or mission. The focus is on ensuring that the design is driven by the intended outcomes, customer needs, and long-term goals, rather than aesthetics, trends, or unnecessary features. This approach emphasizes clarity of purpose and intentionality in the design process, ensuring that every design decision supports the overall goal or purpose of the product or service.
Capability First Business Architecture Approach	Capabilities represent the basic building blocks of the operational business of the enterprise. Thus all the design and development shall be started from the capabilities. In practice, the capability map of the enterprise is the base map, from which all the change activities shall be started. The suggested steps are as follows: 1) inspect the capability map, 2) identify and focus on the capability that contains the behavior and/or structure against which the change activities are related/concerned, 3) depict the changes to the target elements (such as people, processes or assets), 4) perform the concerning changes.
Co-design	Co-design (or collaborative design) is a design approach that actively involves all stakeholders, such as users, customers, employees, and other relevant parties - in the design process to ensure that the final product, service, or solution meets their needs and expectations. Unlike traditional design processes where designers make decisions independently, co-design emphasizes partnership, collaboration, and shared ownership of the outcomes.
Security by Design	Proactive approach to system and software development in which security considerations are integrated from the very beginning of the design process, rather than being treated as an afterthought or added later. It emphasizes building security into every layer of the system, ensuring that the architecture, code, and operational procedures are inherently secure.

7.1.13 Enterprise Design Maturity Model

A **maturity model** for Enterprise Design and EDGY could help enterprises assess their progress in adopting a holistic, human-centered approach to design and collaboration across disciplines. Here's an example of a five-step maturity model for Enterprise Design and EDGY:

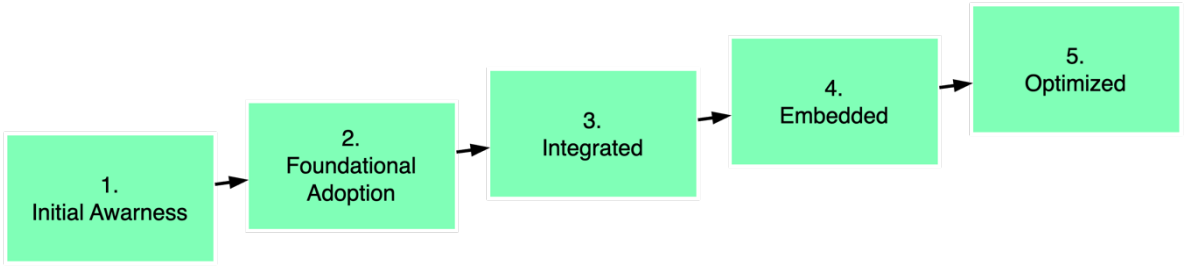


Figure 343: Maturity steps (according to typical progress).

1. Initial Awareness	Characteristics: Limited understanding of Enterprise Design principles and EDGY language. Collaboration across expert groups is minimal, with siloed practices and fragmented approaches. Focus: Basic awareness of the potential benefits of Enterprise Design and EDGY as tools for aligning different disciplines within the enterprise. Actions: Introductory training sessions on Enterprise Design concepts and EDGY language to build initial understanding.
2. Foundational Adoption	Characteristics: Initial efforts to adopt Enterprise Design and EDGY concepts in selected projects, concept designs etc. Some cross-functional collaboration is encouraged, though still limited in scope. Focus: Applying Enterprise Design in pilot projects/initiatives/concept designs to test its usefulness for alignment and improved collaboration. Actions: Develop basic EDGY language guidelines and frameworks; engage a few teams in using EDGY concepts to facilitate shared understanding.
3. Integrated	Characteristics: Enterprise Design and EDGY are applied consistently across multiple teams. Cross-functional collaboration begins to take shape, supported by standardized methods and tools. Focus: Ensuring alignment of goals and actions across departments/units using EDGY as a common language and Enterprise Design principles for coherent structures. Actions: Establish standardized processes and tools based on EDGY, facilitate regular cross-functional workshops, and use Enterprise Design for structured approaches in key projects, programs, initiatives and all the concept design efforts.
4. Embedded	Characteristics: Enterprise Design and EDGY are fully embedded in the organization's culture and processes, with all teams using them to guide collaboration. Focus: Using Enterprise Design and EDGY for continuous improvement, focusing on optimizing customer experience, operational efficiency, and strategic alignment. Actions: Implement enterprise-wide training, incorporate EDGY language and Enterprise Design in all strategic and operational planning, and establish feedback loops for continuous improvement.
5. Optimized and Adaptive	Characteristics: Enterprise Design and EDGY are fully mature, with agile, adaptable processes that respond seamlessly to changes in strategy, business demands, or customer needs. Focus: Leveraging Enterprise Design and EDGY for innovation, fostering an adaptable and resilient enterprise that can rapidly realign to new goals or shifts in the market. Actions: Use advanced metrics to measure the impact of Enterprise Design, integrate EDGY into decision-making at all levels, and continuously evolve practices to stay ahead of business and customer needs.

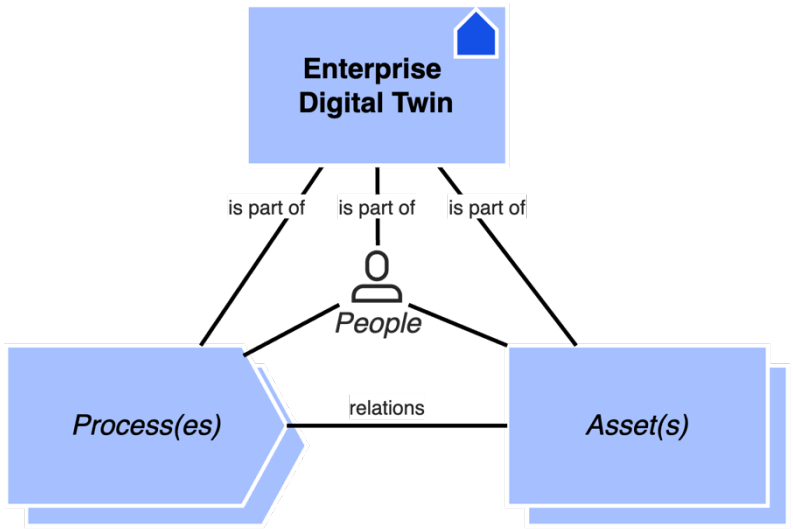
This model helps enterprises increase their maturity in using Enterprise Design and EDGY to drive alignment, enhance collaboration, and continuously improve adaptability and effectiveness. Each step builds on the previous one, fostering a more unified and agile enterprise.

7.1.14 Enterprise Digital Twin (EDT)



An Enterprise Digital Twin (EDT) is a real-time, dynamic virtual representation of an enterprise, including its assets, activities, people, and their relationships. Assets can include data assets, applications, devices, facilities, and other resources, while activities encompass processes and workflows. An EDT is designed to optimize decision-making, improve operations, and enhance customer experience through AI-driven insights, predictive analytics, and automation.

Unlike traditional *digital twins* that focus on physical assets (e.g., manufacturing, logistics), an EDT models enterprise-wide processes to enable predictive decision-making, automation, and optimization.



Assets, activities, and people are core elements of an EDT. A fully functional EDT also includes data, processes, relationships, and AI-driven insights that enable real-time decision-making and predictive analytics. An EDT is designed to optimize decision-making, improve operations, and enhance customer experience through AI-driven insights, predictive analytics, and automation.

Figure 344: Enterprise Digital Twin.

An **Enterprise Digital Twin (EDT)** is a real-time, dynamic virtual replica of an enterprise.

How an Enterprise Digital Twin Works?

1. Data Integration → Collects data from ERP, CRM, IoT, cloud systems, and operational sources.
2. Digital Modeling → Maps business entities, workflows, supply chains, and IT systems into a virtual model.
3. AI & Analytics → Uses machine learning and predictive analytics to simulate different scenarios.
4. Continuous Optimization → Identifies inefficiencies, suggests improvements, and enables decision-making.

Why Enterprise Digital Twin (EDT)?

An Enterprise Digital Twin offers organizations a real-time, data-driven digital reflection of their operations, enhancing:

- Operational efficiency through automation and optimization.
- Decision-making with actionable insights from real-time data.
- Business agility by enabling rapid responses to change.
- Customer satisfaction through personalized, predictive services.
- Cost savings through efficient resource utilization and risk mitigation.

Key layers for Building an Enterprise Digital Twin (EDT)

EDT layer	Description	Purpose	Automation / AI Support
Visualization, Interaction & Monitoring	Provides dashboards, reports, and real-time insights.	Enables business users and executives to interact with EDT insights and take action.	Medium - AI-powered insights & alerts but still human-driven decision-making.
AI-Driven Digital Twin & Process Automation	Models enterprise operations, optimizes workflows, and automates decision-making.	Uses AI to predict trends, detect inefficiencies, and trigger automated workflows.	High - AI-driven analytics, predictions, and automation.
Data & Integration Layer	Collects, integrates, enriches, and stores enterprise-wide data.	Ensures EDT has access to structured, real-time, and historical data.	Low - Mainly focused on data fetching, integration and storage.
Security, Compliance & Governance (Vertical)	Ensures data security, compliance, and governance across all layers.	Protects enterprise data, enforces regulations, and ensures ethical AI governance.	Medium - Automated compliance monitoring, access control, and risk detection.

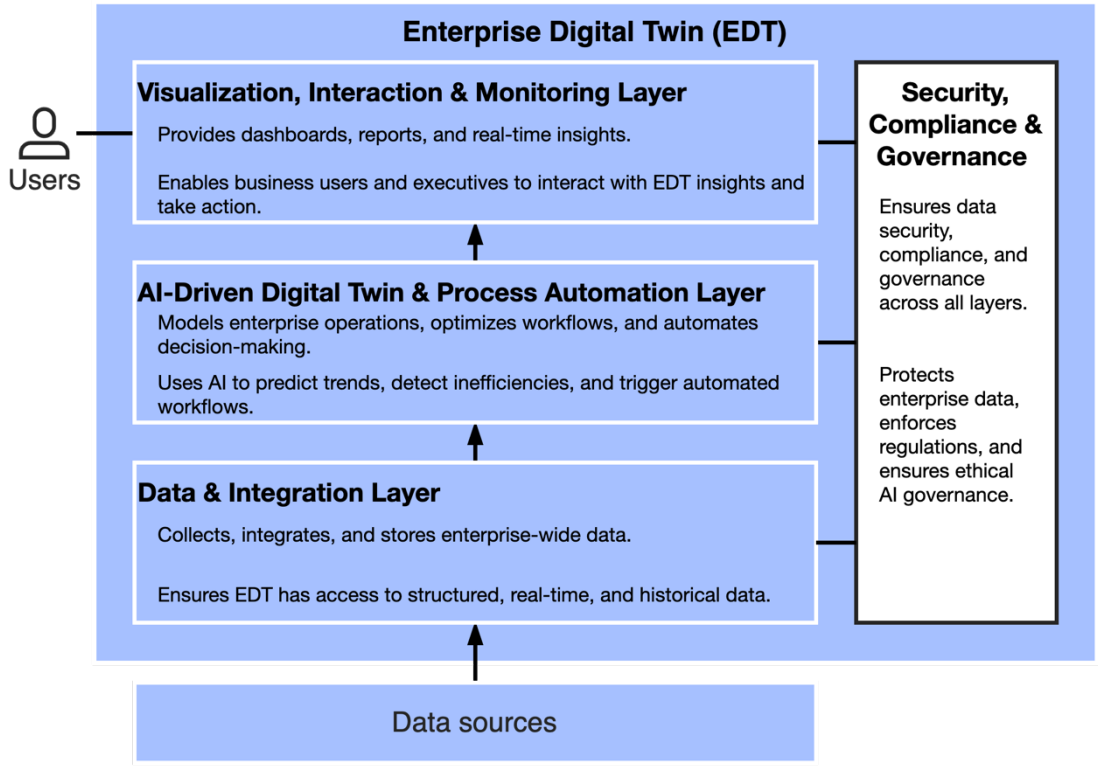


Figure 345: Enterprise Digital Twin architecture.

A **Knowledge Graph (KG)** acts as the brain of an Enterprise Digital Twin, providing a structure, semantic understanding of how all enterprise elements (data, processes, people, assets, etc.) are related, context, and intelligence to make simulations, predictions, and automation more effective. By integrating these two technologies, enterprises can achieve a more adaptive, data-driven, and intelligent operational model.

The Knowledge Graph (KG) connects information across the different layers of the EDT and enables context-aware reasoning, decision-making, and automation.

The Knowledge Graph (KG) primarily resides in the AI-Driven Digital Twin & Process Automation Layer but interacts across all layers as follows:

1. Data & Integration Layer (Foundation for the Knowledge Graph)

    - The KG consumes structured and unstructured data from this layer (e.g., from databases, IoT devices, APIs, business systems).
    - Acts as a semantic layer that organizes the incoming raw data into a meaningful and interconnected knowledge model.
    - Helps create data relationships and ontologies for reasoning and integration.
2. AI-Driven Digital Twin & Process Automation Layer (KG's Core Location)
    - The KG functions as the brain here by connecting data, processes, and AI models.
    - Provides contextual understanding of operational data and enables predictive analytics and real-time decision-making.
    - Supports AI algorithms by delivering semantic reasoning (e.g., identifying patterns, anomalies, and cause-effect relationships).
    - Enables dynamic automation by connecting events, triggers, and responses in business processes.
3. Visualization, Interaction & Monitoring Layer (Driven by Insights from KG)
    - The KG feeds insights into visualization dashboards, enabling users to interact with connected data intelligently.
    - Supports semantic search capabilities for advanced querying and better visualization of relationships between enterprise elements.
    - Helps with interactive monitoring by connecting real-time data and processes visually.

- Security, Compliance & Governance (Applies to the KG Across Layers)
    - Access controls to sensitive information stored in the KG.
    - Data lineage and traceability to comply with regulations (e.g., GDPR).
    - Ensures that automated decisions derived from the KG follow compliance policies and ethical guidelines.

EDT layer	Role of the Knowledge Graph
Data & Integration Layer	Structures and integrates diverse data sources into meaningful relationships.
AI-Driven Digital Twin & Process Automation	Enables semantic reasoning, context-aware automation, and predictive analytics.
Visualization, Interaction & Monitoring	Powers interactive insights, visual connections, and intelligent monitoring.
Security, Compliance & Governance (Vertical)	Controls access, ensures compliance, and manages data governance policies.

A **Knowledge Graph** enables semantic relationships between entities.

Customer Journey Management (CJM) is a critical component of an EDT, as it tracks, predicts, and optimizes customer interactions in real-time:

- Knowledge Graphs map customer behaviors across different touchpoints.
- AI predicts next-best actions for customer engagement.
- EDT continuously optimizes workflows for better customer experience.

An Enterprise Digital Twin is a game-changer for businesses, providing a real-time, AI-driven mirror of an enterprise. It helps leaders simulate decisions, improve efficiency, and future-proof operations - enabling smarter, data-driven transformation.

Role of AI in an Enterprise Digital Twin

AI is a critical enabler of EDTs, enhancing their predictive capabilities, automation, and decision-making.

- AI for Predictive Insights
    - AI forecasts future trends based on knowledge graph relationships.

  - Example: AI predicts customer churn, supply chain delays, financial risks.
- AI-Driven Personalization
  - AI dynamically adjusts policies, workflows, and customer engagement.
  - Example: AI tailors insurance policy offers based on customer profiles.
- AI for Fraud & Anomaly Detection
  - AI detects fraudulent patterns in insurance claims, banking, or public services.
  - Example: AI flags fake insurance claims by analyzing cross-domain KG relationships.
- AI-Optimized Digital Twin Simulations
  - AI runs simulations to test "what-if" scenarios for business processes.
  - Example: AI simulates how a supply chain disruption affects insurance payouts.
- AI-Powered Automation
  - AI automates policy underwriting, customer support, and regulatory compliance.
  - Example: AI auto-approves low-risk insurance claims while flagging complex cases for human review.

AI makes an Enterprise Digital Twin (EDT) smarter by enabling it to analyze data, learn from patterns, and make intelligent decisions automatically.

AI turns an Enterprise Digital Twin (EDT) from a passive digital model into a proactive, self-improving system that helps the business operate smarter, faster, and more efficiently.

Use Cases of an Enterprise Digital Twin

- Strategic Decision-Making → Simulate different business strategies before implementation.
- Process Optimization → Identify bottlenecks and inefficiencies in workflows.
- Enterprise Architecture & IT Management → Improve IT governance, cloud transformation, and system integrations.
- Risk & Compliance Management → Predict and mitigate potential risks.
- Customer Experience Improvement → Optimize customer journeys using behavioral data.
- Supply Chain & Logistics Optimization → Simulate supply chain disruptions and improve resilience.

An **Enterprise Digital Twin (EDT)** empowers enterprises to be smarter, faster, and more efficient, driving innovation while staying aligned with strategic goals. It's not just about visibility, it's about transforming how the business operates.

7.1.15 SPO_2 (Subject – Predicate – Object – Outcome)

SPO. A Subject-Predicate-Object (S-P-O) triple is a fundamental structure used in semantic modeling, knowledge representation, and linked data. It represents information in the form of relationships between entities.

The sentence “The customer buys a product” can be represented as:

(Customer123) → (purchases) → (ProductXYZ)

This structure is machine-readable and standardized, making it useful for knowledge graphs, AI, and enterprise data integration.

Subject-Predicate-Object (S-P-O)		
Element	Description	Example
Subject	The entity or thing being described.	“The customer”
Predicate	The relationship or action connecting the subject and object.	“buys”
Object	The entity affected by the action or relationship	“a product”

Why is the S-P-O triple useful?

1) Enables structured and interconnected data
    a. It organizes data logically in a graph-based structure.
    b. Helps connect different types of related information (e.g., customers, transactions, products).
2) Foundation of the semantic web & knowledge graphs
    a. Used in RDF (Resource Description Framework) for linked data and ontology-based systems.
    b. Powering AI-driven search engines, chatbots, and intelligent assistants (e.g., Google Knowledge Graph).
3) Improves AI & Machine Learning Understanding
    a. Helps AI reason about relationships and context rather than just recognizing raw data.
    b. Used in Natural Language Processing (NLP) and context-aware AI systems.
4) Enhances enterprise data management
    a. Useful for *Enterprise Digital Twins (EDT)* and Enterprise Knowledge Graphs.
    b. Helps integrate business data from different systems using common relationships.
5) Enables Querying & Insights Across Disparate Data Sources
    a. Allows flexible querying using SPARQL (query language for RDF data).
    b. Example: “Find all customers who purchased ProductXYZ and their past transactions.”

S-P-O triples are a powerful way to structure relationships in data. They help organize, search, and analyze information in a meaningful way, making them essential for AI, knowledge graphs, and enterprise data systems.

Subject – Predicate – Object (SPO) triples help organize, search, and analyze information in a meaningful way, making them essential for AI, knowledge graphs, and enterprise data systems such as Enterprise Digital Twins (EDT).

SPO with EDGY.

EDGY’s elements can be used for classic subject–predicate–object (S-P-O) structure often used in logic, linguistics, and knowledge representation.

In its simplest form, the EDGY base element *Object* is used as both a subject entity and an object entity, associated with the *Flow* relation, as shown below:

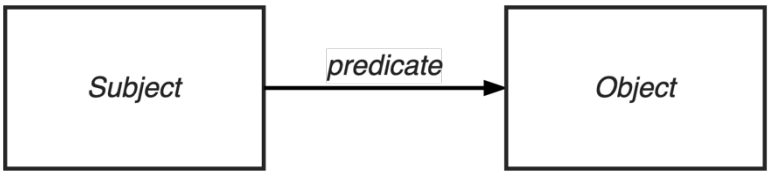


Figure 346: Subject – predicate – object modelled with the EDGY Object element.

The subject can be a business actor such as organisation or a role as shown below, modelled with the EDGY elements *Organisation* and *People*.

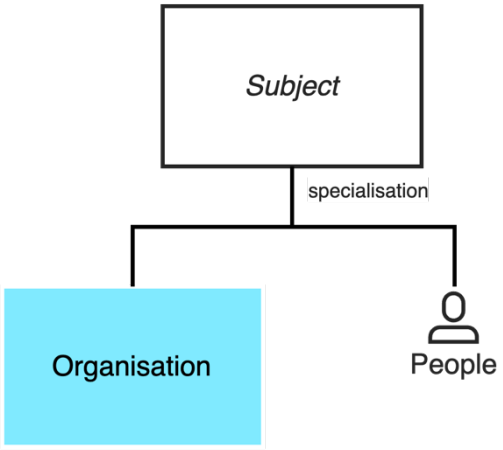


Figure 347: An organisation or human as subject.

An example with *People* element as subject:

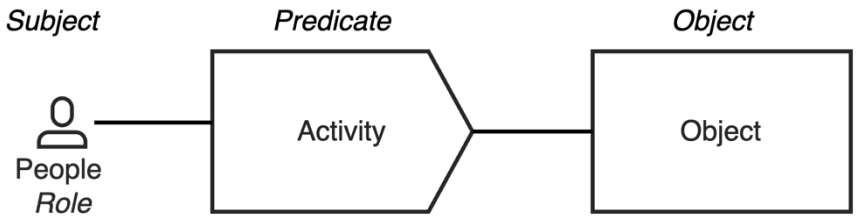


Figure 348: *People* role element as Subject, *Activity* as predicate and object.

An example with *Organisation* element as subject:

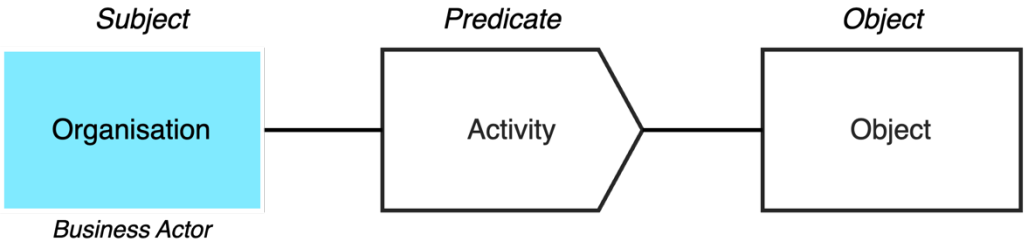


Figure 349: *Organisation* as Subject, *Activity* as predicate and object.

From SPO to SPO_2 with EDGY

In addition to EDGY elements *People*, *Organisation*, *Activity* and *Object* ements, the *Outcome* is crucial because it shows ***why*** the activity happens and what value is created.

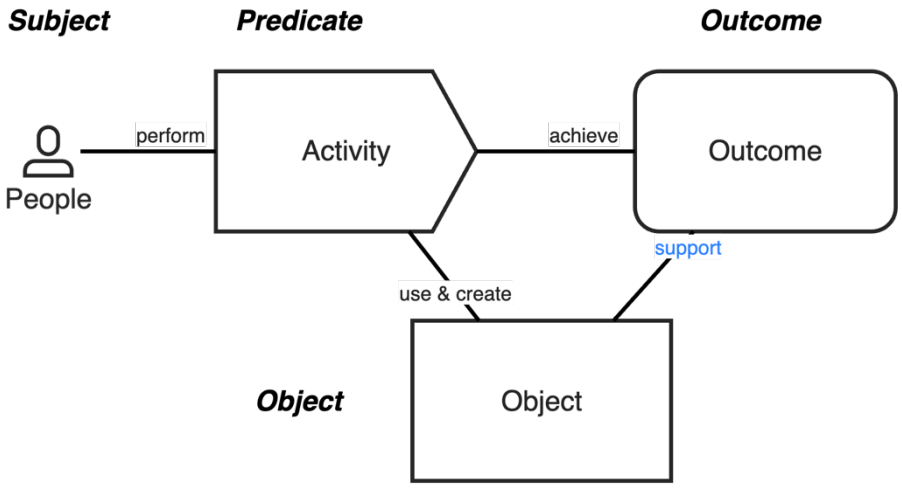


Figure 350: EDGY elements representing SPO + O.

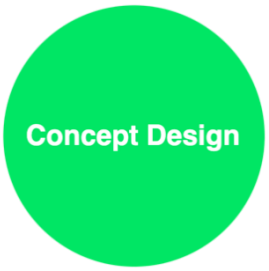
Subject-Predicate-Object and Outcome with EDGY			
Element	EDGY element	Description	Notation
Subject	People	Human actor such as role (e.g. customer).	People
	Organisation	An organisational business actor.	Organisation
Predicate	Flow	Association that represents influence between elements (subject and object).	*predicate*
	Activity	Represents what is being done; the action performed by an actor (the subject) on or with an object.	Activity
Object	Object	Represents an entity that is used or produced by an activity.	Object
Outcome	Outcome	A end result, effect, benefit, the purpose.	Outcome

Why this analogy is helpful:

- It helps in structuring knowledge and relationships in enterprise design.
- It aligns well with knowledge graph thinking (triples of subject–predicate–object).
- It clarifies who does what to what, and why, which is exactly what EDGY aims to model in an enterprise.

7.2 Enterprise Design Examples

7.2.1 Concept Design



Concept design refers to the phase where the foundational ideas and high-level design of a product, service, or system are developed before moving into the implementation and operation phases. This is an essential early stage that focuses on defining what will be built and why, ensuring that the service or end product aligns with customer needs and business goals.

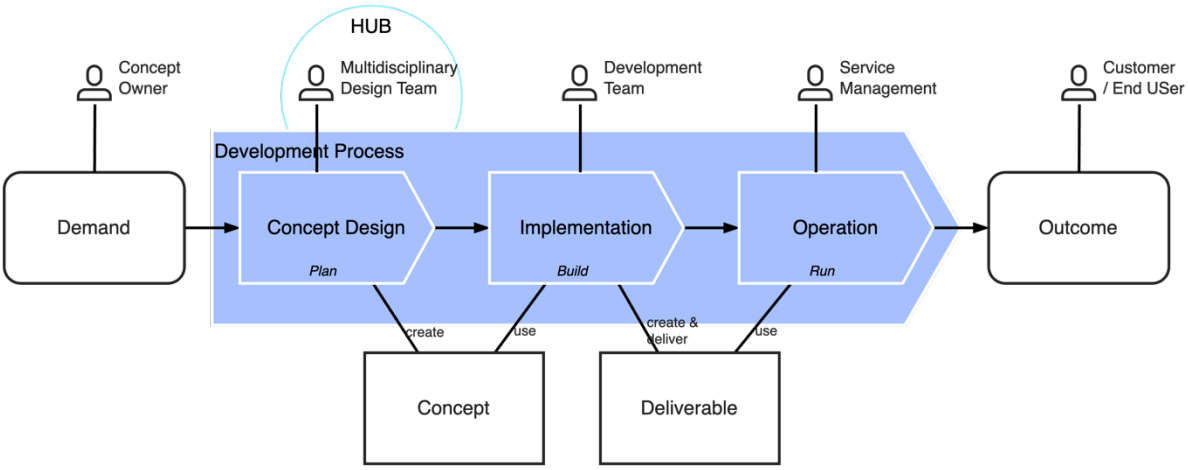


Figure 351: Concept Design phase in the Development Value Stream.

Concept Design Principles. Viability, feasibility, and desirability are core principles used to evaluate and shape ideas to ensure they are practical, sustainable, and meet user needs

In every demand and in every concept, the following three principles must be met:

1. **Desirability:** the customer perspective, we must ensure that the service or product meets the customer needs and expectations, and it is usable, valuable and beneficial for the customer. The service must be beneficial, relevant, provide good user or customer experience and fulfill customer needs. We should always ask questions like: "Do people want or need this service / product?" "Do customers pay for this?"
2. **Viability**: there must be a business model behind the concept. It must be aligned with business goals and strategy, economically sustainable, and cost-effective. Essentially, it answers the question, "Can this service survive and thrive?"
3. **Feasibility**: examines the practicality, efficiency, and reliability of the service or product, ensuring it is both operationally and technically feasible to implement. It considers the operational and technical resources required to produce and deliver the service effectively, including people's skills and competencies, processes, and assets (such as technology and infrastructure). Feasibility addresses. Feasibility answers the question, "Do we have the means and resources to make this service a reality?"

Balancing these three principles, desirability, viability and feasibility, ensures that services are both user-centered and sustainable within the organization.

For a demand or concept to be successful, it should ideally balance these three aspects:

- *Desirable but not viable or feasible*: The concept may be attractive to users but could fail due to high costs or operational (e.g. technical) limitations.
- *Feasible but not desirable or viable*: The concept can be built but may not meet user needs or generate enough value to sustain itself.
- *Viable but not desirable or feasible*: The concept might be cost effective and profitable in theory but could be difficult to implement or not resonate with users.

The goal in enterprise design is to find the sweet spot where a concept is desirable to users, feasible to implement, and viable for the business, ensuring long-term success and sustainability.

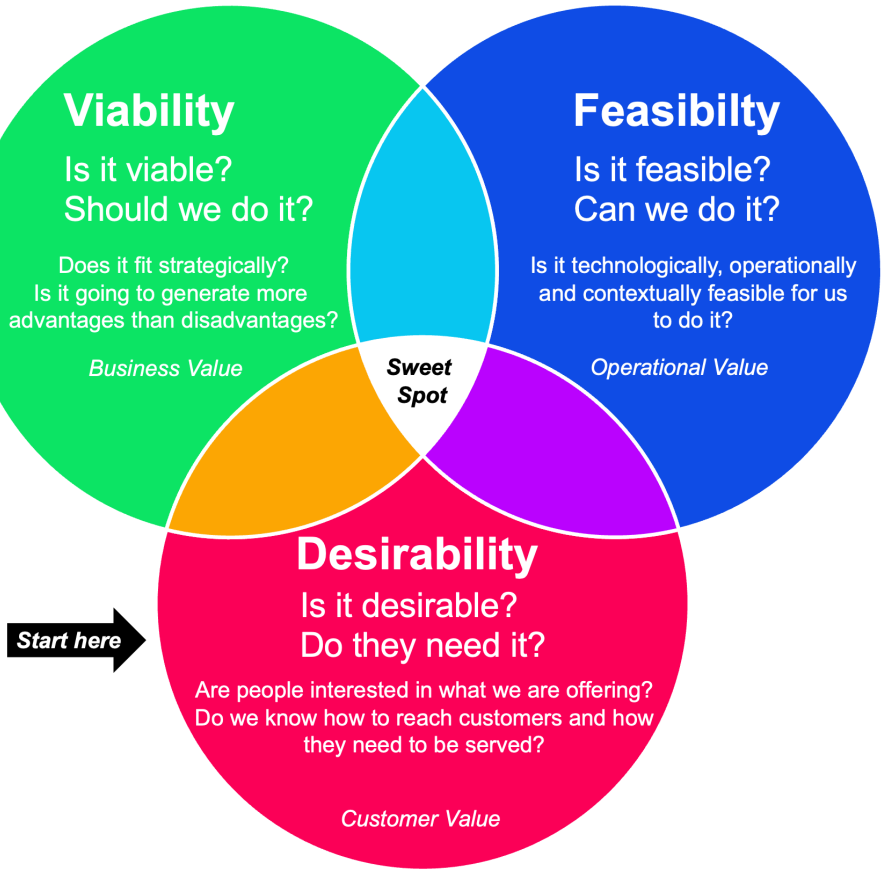
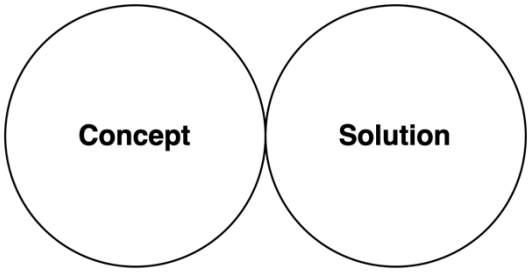


Figure 352: Concept Design principles and viewpoints.

In successful enterprise design, these three principles intersect, creating *solutions* that are desirable for users, feasible to implement, and viable for the business.



Concepts and **solutions** are interconnected yet distinct elements in the process of problem-solving, innovation, and design. The concept provides the “why” and "what", the vision and rationale for addressing a challenge or opportunity, while the solution provides the "how", the specific implementation plan that operationalizes the concept. Both are essential, with the concept ensuring alignment with strategic goals and the solution delivering practical outcomes.

Concept Design is a co-design process, which is triggered by certain demand (event or need) that is occurred in the business environment of the enterprise. Concept design can encompass the following phases and artifacts:

- Problem definition: drivers, goals and outcome
- Customer needs: customer- and organisation views (Service Blueprint, BMC etc.)

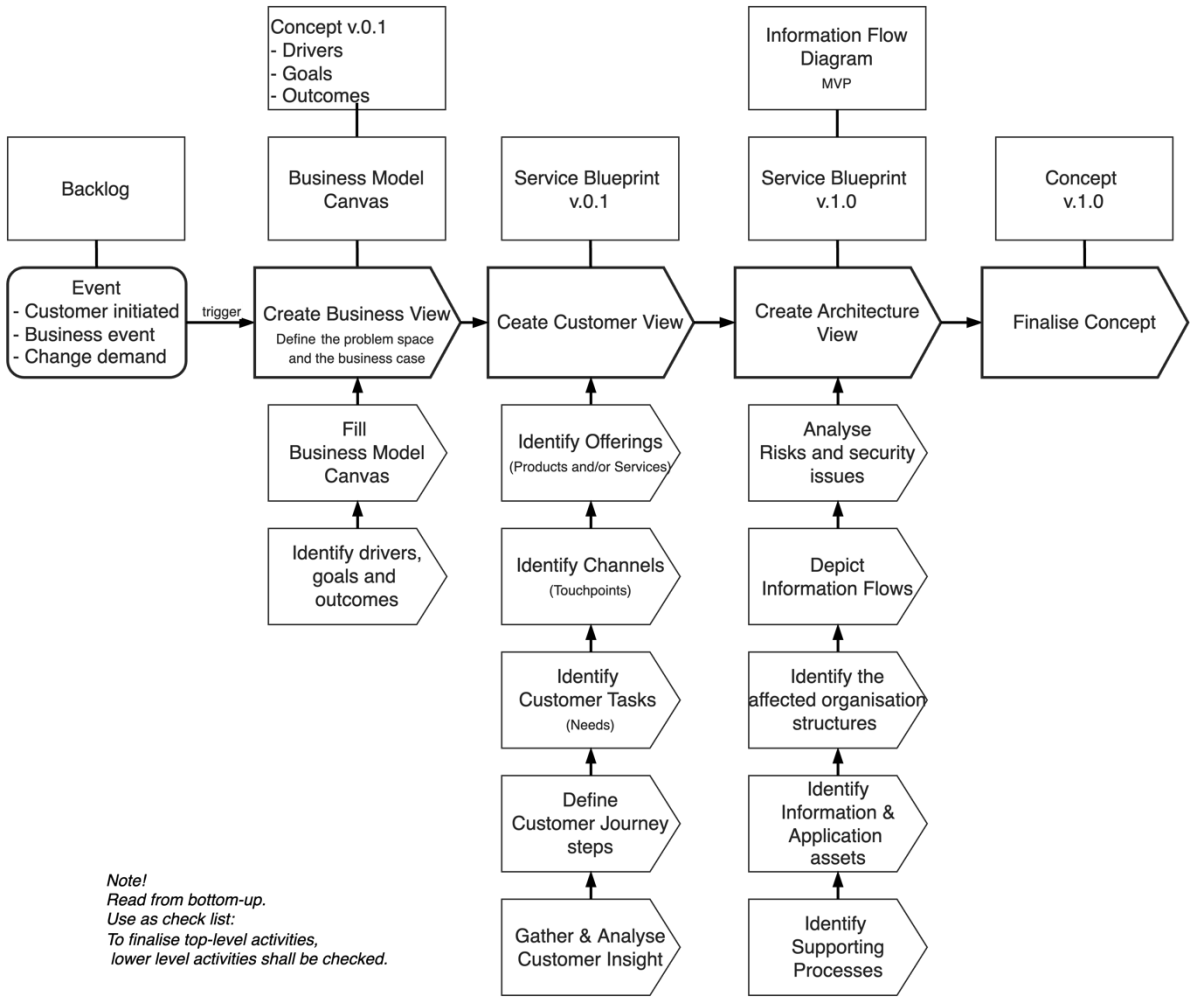


Figure 353: Concept Design process.

A concept content example shown beside.

A *concept design canvas* (10.3.17) can be used for defining the customer need and possible solution.

Making changes is asking questions. The purpose of Concept Design is asking right questions to analyse:

- ***Why*** a change is needed?
- ***What*** is the change?
- ***Who*** benefits from the change?
- ***How*** can the change be implemented, and by whom and when?

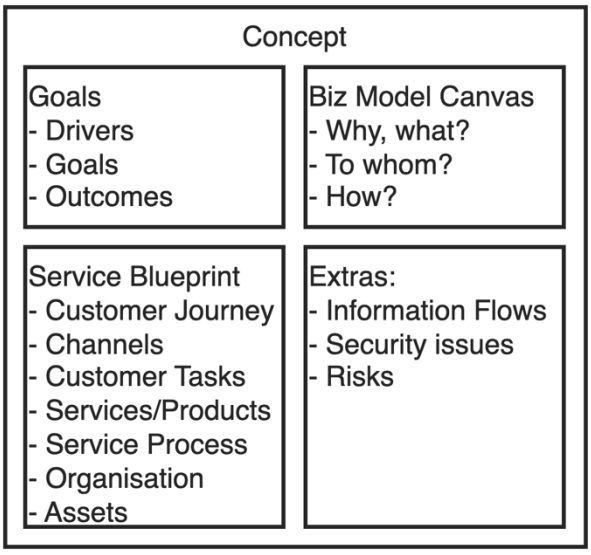


Figure 354: Content of a concept.

7.2.2 Enterprise Design Hub (EDH)

The Enterprise Design Hub is a nexus for business design, connecting strategy, operations, and experience design, helping enterprises tackle current and future challenges. The Hub manages all customer- and business-initiated change demands within an enterprise.

The question is: *How to make enterprise's design & delivery process efficient?*

The answer is: Enterprise Design Hub.

WHAT, WHY, and HOW? Everything needed is already in place: several professional disciplines. They just need to join forces, which can be achieved by establishing an Enterprise Design Hub practice, a virtual team.

What is the Enterprise Design Hub?

The Enterprise Design Hub (EDH), or simply the Hub, is a joint force and a practice, organized as a virtual team, that manages all change demands within an enterprise. Change demands can be e.g. customer- or business-initiated. The Hub is a cross-functional, multi-disciplinary and collaborative. All the relevant disciplines are involved, such as service designers, business architects, innovation specialists, security specialists, risk analysts, process specialists, technology experts - to collaboratively drive enterprise change and innovation. They share methods and tools, and utilizes agile practices. The Enterprise Design Hub is a virtual team, not necessarily an organizational structure. It operates through continuous meetings (e.g. weeklys) and uses a Kanban board to manage tasks, ensuring collaboration and transparency across disciplines. Examples of roles involved are shown in the figure beside.

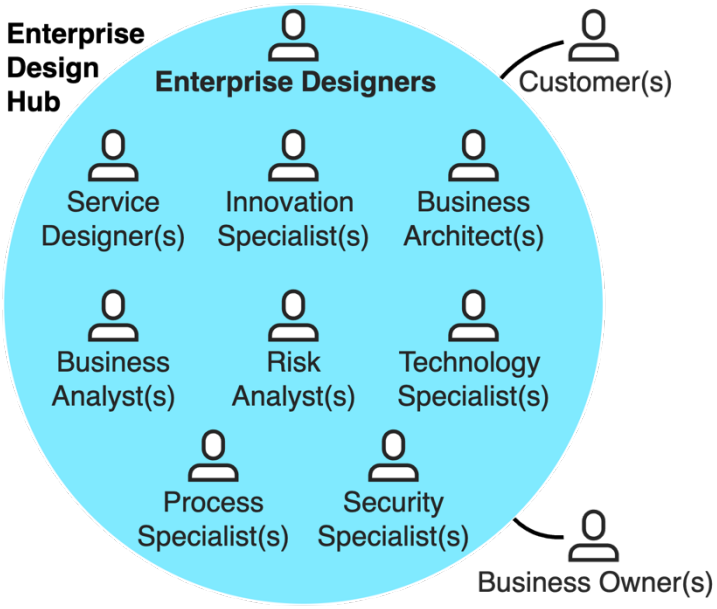


Figure 355: Enterprise Design Hub - a joint force of united disciplines.

The Enterprise Design Hub is a shared space for collaboration that enables these disciplines to work together seamlessly to address the complexity of enterprise change. A central place or nexus for aligning service design, business architecture and other relevant efforts. This makes all the disciplines meaningful as they complement each other. Their synergy creates value, including emergent value, and drives beneficial business outcomes, ultimately contributing to the creation of better enterprises.

To unite service designers, business architects and other specialists together, the enterprise can establish a cohesive design & delivery process that integrates all the disciplines to address change demands across an enterprise. This practice ensures that all phases, from concept to operations, are strategically aligned, customer-centric, and operationally efficient.

The Enterprise Design Hub:

- Emphasizes experimentation, creativity, and innovation.
- Suggests a collaborative, exploratory environment where new ideas are tested, refined and conceptualised.
- Appeals to enterprises looking to foster a forward-thinking, customer-centered culture and seeking structure for managing enterprise changes.
- Supports enterprise change activities, facilitates design sessions, and creates design deliverables such as concept designs.
- Supports business design by providing a structured, collaborative framework and tools to address the complexities of modern organizations.

Note! The Enterprise Design Hub (EDH) is a pattern for a collaboration framework in an enterprise. The name can be organization-specific, e.g. <Org name> Hub, or Design Office, Design Lab, Design Studio, Integrated Enterprise/Experience Design - or simply just "**Hub**" or "**HUB**".

Enterprise Design Hub role is analogous to the hub in the traditional ***hub-and-spoke model***, where the *hub* acts as the central point connecting various *spokes* (departments, teams, or systems). The hub-and-spoke model is a design pattern commonly used in transportation, logistics, and network systems. In this model, a central hub connects to multiple spokes, facilitating efficient communication and coordination. Similarly, the Enterprise Design Hub functions as the central node that connects various organizational units (spokes), enabling:

- Centralized Coordination: The hub ensures that all spokes are aligned with the organization's strategic objectives.
- Efficient Communication: It facilitates the flow of information between different departments, reducing silos.
- Resource Optimization: By centralizing certain functions, the hub allows for better resource allocation and avoids duplication of efforts.

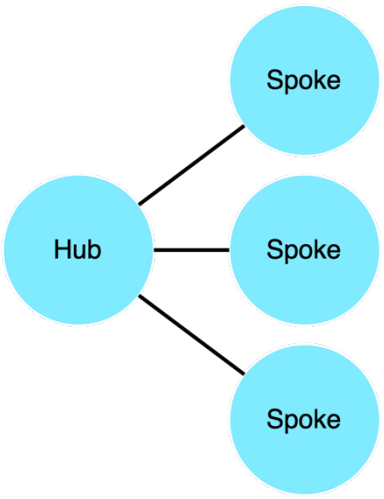


Figure 356: The hub-and-spoke -model.

The Enterprise Hub embodies the principles of the hub-and-spoke model by serving as a central point of coordination and integration, facilitating collaboration, and aligning various parts of the organization towards common goals.

The Enterprise Design Hub is a joint-force practice for managing the change demands of an enterprise.

The Enterprise Design Hub as a collaborative framework for aligning strategy, operations, and experience design. It emphasizes overcoming siloed work by uniting disciplines such as service design, business architecture, and technology experts.

The Hub fosters innovation, customer-centricity, and operational efficiency through shared tools, governance, and co-creation practices. By addressing enterprise change demands holistically, it enables businesses to manage transformations effectively, reduce redundancies, and deliver measurable value.

The Hub supports enterprises in tackling both current and future challenges through strategic alignment and multidisciplinary collaboration.

The Hub ensures that change is intentional, contextual, and connected, not just reactive. It's the engine room of enterprise transformation - quietly but powerfully keeping everything aligned, flowing, and evolving.

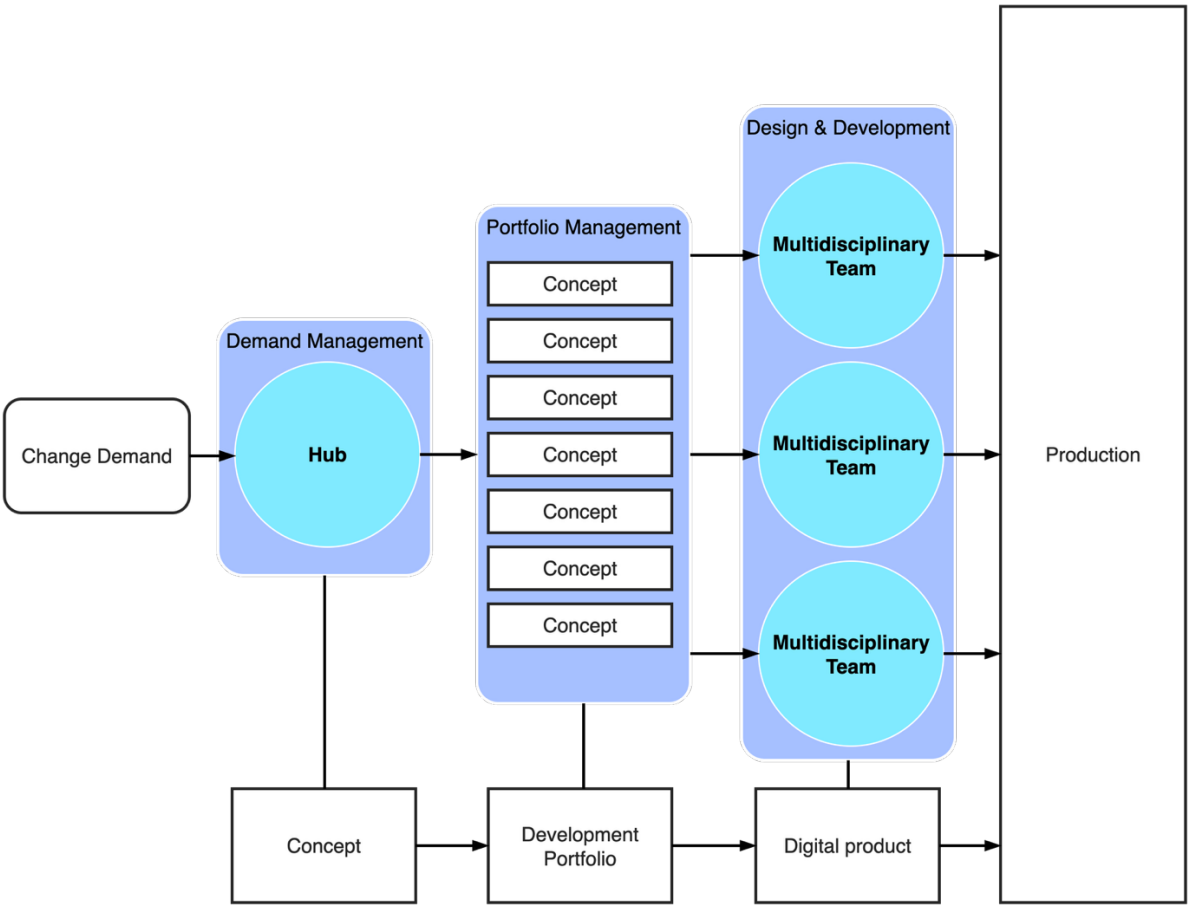


Figure 357: Incoming change demands are handled in the centralised Hub, from which all the concepts are directed to multidisciplinary teams via portfolio management.

Why Enterprise Design Hub is interesting?

There are typically many design, development and change management disciplines in an enterprise working in isolation lacking collaboration. Many of these important and valuable disciplines are struggling with their relevance. Many specialist groups feel like they are not understood, and their purpose is not crystal clear for all the stakeholders. Business people don't understand what those expert groups do, how they do, and why they do what they do.

The current situation is not optimal because all disciplines and practices are working separately, in silos, each using methods and tools of their own. This leads to misalignment, duplicated efforts, and fragmented solutions that don't fully address the needs of the enterprise or its customers. By not collaborating, enterprise and its teams miss opportunities to create cohesive, efficient, and customer-centered outcomes.

The root causes for needing a more efficient enterprise change process boil down to the complexity of modern business, the pace of change, and the challenges of siloed work. Addressing these issues requires creating a collaborative, integrated, and customer-centered approach to design and change management, like the Enterprise Design Hub, to drive better alignment, agility, and business outcomes.

The Enterprise Design Hub is a solution to the "problem of isolation", where many different expert groups work separately and independently within their own silos – even though it would be most beneficial for the enterprise if they collaborated.

An enterprise often has many isolated disciplines working in silos, without collaboration.

How Enterprise Design Hub works?

Unified approach for collaboration. The Enterprise Design Hub serves as a central point at the start of the overall development process, where all incoming change demands are managed. The Hub is where experts from distinct disciplines, together with the demand or business case owner, analyze change demands: what the case is, why it is important, and how to proceed.

The Hub enables competencies and perspectives to converge, ensuring alignment between strategic goals and customer needs. For example, Service Designers bring customer- and user-centered design methodologies, focusing on customer journeys, touchpoints, and experiences. Business Architects align these designs with enterprise strategy, business capabilities, value streams, and operating models.

The Enterprise Design Hub is a virtual team composed of specialist roles and individuals who may belong to different organizational structures (e.g., units, groups, or teams). Although they come from different parts of the enterprise, they collaborate within the Hub to align efforts, share expertise, and achieve common goals through regular meetings (e.g. weeklys) and task management (e.g. using a Kanban board).

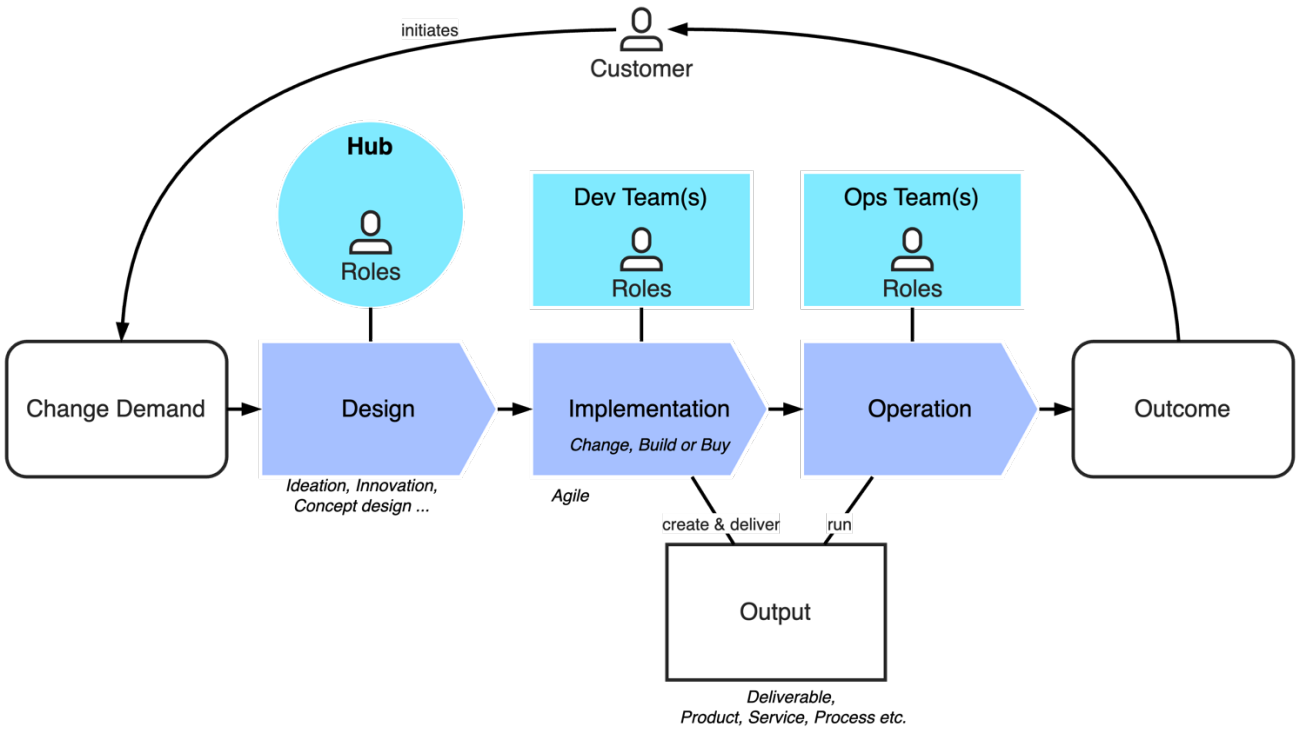


Figure 358: Enterprises's development value stream with the HUB as a virtual team (circle).

Cross-disciplinary integration and collaboration. The Enterprise Design Hub isn't limited to service designers and business architects, it fosters collaboration across disciplines like security specialists, innovation specialists, risk analysts, business analysts, technology specialists, process specialists, Lean- Six Sigma etc., specialists, and agile coaches. Together these specialists can be called simply enterprise designers. They cooperate with other stakeholders such as customers, business owners or product owners, service owners or concept owners etc. This multidisciplinary integration ensures holistic solutions that account for strategy, design, risk, feasibility, and technology. It also ensures that all change demands are analyzed for their viability, feasibility, and desirability - both for the customers and the business.

Collaboration is essential as it ensures:

- Shared Vision: All disciplines align with the same strategic and user-centered goals.

- Holistic Solutions: Cross-functional input ensures solutions are comprehensive and scalable.
- Efficiency: Shared knowledge eliminates redundancies and accelerates delivery.
- Risk Mitigation: Early involvement of risk and compliance ensures secure and compliant solutions.
- Employee Engagement: Collaborative environments foster purpose, trust, and innovation.
- Customer Satisfaction: Seamless, cohesive services lead to better customer experiences.

Holistic change management. By creating a collaborative approach, enterprises can process change demands effectively, avoiding the pitfalls of siloed work and delivering lasting value across the enterprise. The overall design & delivery process (a.k.a. development value stream) with The Enterprise Design Hub in place.

The Enterprise Design Hub provides a structured process for managing enterprise change demands from concept to operations. By combining service design and business architecture (among others), it ensures that changes align with enterprise goals, and solutions are designed with both the customer and the organisation in mind.

Shared design practices. The Enterprise Design Hub formalizes a unified design process, combining service design's customer-centricity and business architecture's strategic and operational alignment by utilising the Enterprise Design approach with the EDGY language. This process includes:

- Strategic alignment and problem definition.
- Co-creation of customer journeys, service blueprints, and business capability models.
- Defining how solutions will be built or integrated.
- Continuous improvement based on user feedback and metrics.
- Meetings (such as weekly) and tools like Kanban and methods like Scrum or Scrumban, according to what is appropriate.

Centralized Governance. The Enterprise Design Hub ensures that all changes are processed systematically, using a design governance model that prioritizes strategic goals (viability), operational feasibility, and customer value (desirability). This avoids duplication, misalignment, and silos.

Scalable and adaptive. The Enterprise Design Hub is flexible enough to accommodate:

- Small-scale service innovations.
- Large-scale enterprise transformations.
- It can evolve to include new methodologies, technologies, or disciplines as the enterprise grows or volumes and frequencies of changes increase.

Shared language and artifacts. Service designers and business architects (and others) use shared tools like service blueprints, capability maps, and journey maps to collaborate effectively. All the disciplines can easily learn to use the EDGY as a common language (in tools like Draw.io or plain old PowerPoint).

The Enterprise Design Hub is a collaboration enabler for enterprise change activities.

Advantages of the Enterprise Design Hub:

- Alignment: Ensures that design solutions align with enterprise strategy, goals, and business capabilities.
- Efficiency: Centralizes efforts, reducing silos and redundant initiatives.
- Customer-Centricity: Keeps the customer at the core of all design and change initiatives.
- Strategic Impact: Enables changes to deliver measurable business value.
- Collaboration: Encourages cooperation and teamwork across traditionally siloed disciplines.

The Enterprise Design Hub isn't just a practice - it's a philosophy for uniting service designers and business architects in a collaborative, structured, and impactful way. It enables them to work together effectively while integrating other critical disciplines, ensuring that enterprise changes are strategic, customer-centered, and operationally sound. This makes it the ideal answer for enterprises seeking to bridge strategy and execution.

The Enterprise Design Hub supports and enhances Demand Management by providing a structured, collaborative approach to handling change demands across an enterprise.

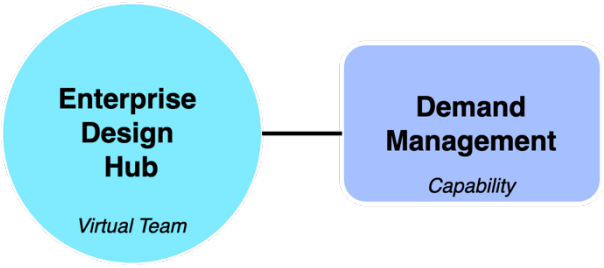


Figure 359: Enterprise Design Hub and Demand Management capability are related.

Demand Management is a business capability that focuses on capturing, analyzing, prioritizing, and balancing customer and business needs with available resources, strategic goals, and operational constraints. It ensures that the organization invests in the most valuable and feasible initiatives by managing competing demands effectively. In this relationship, Demand Management is the business capability, and Enterperise Design Hub is the doer. By integrating Demand Management with the Enterprise Design Hub, enterprises can ensure that change demands are handled proactively, strategically, and efficiently, reducing wasted effort, improving alignment, and driving business value.

Disciplines. There are many important and valuable disciplines in enterprises, but many of them are struggling with their relevance. Many specialist groups feel like they are not understood, and their purpose is not crystal clear for all the stakeholders. Business people don't understand what they do, how they do, and why they do what they do.

Many of these disciplines, diverse groups of specialists, are working in silos, each having their own methods and tools.

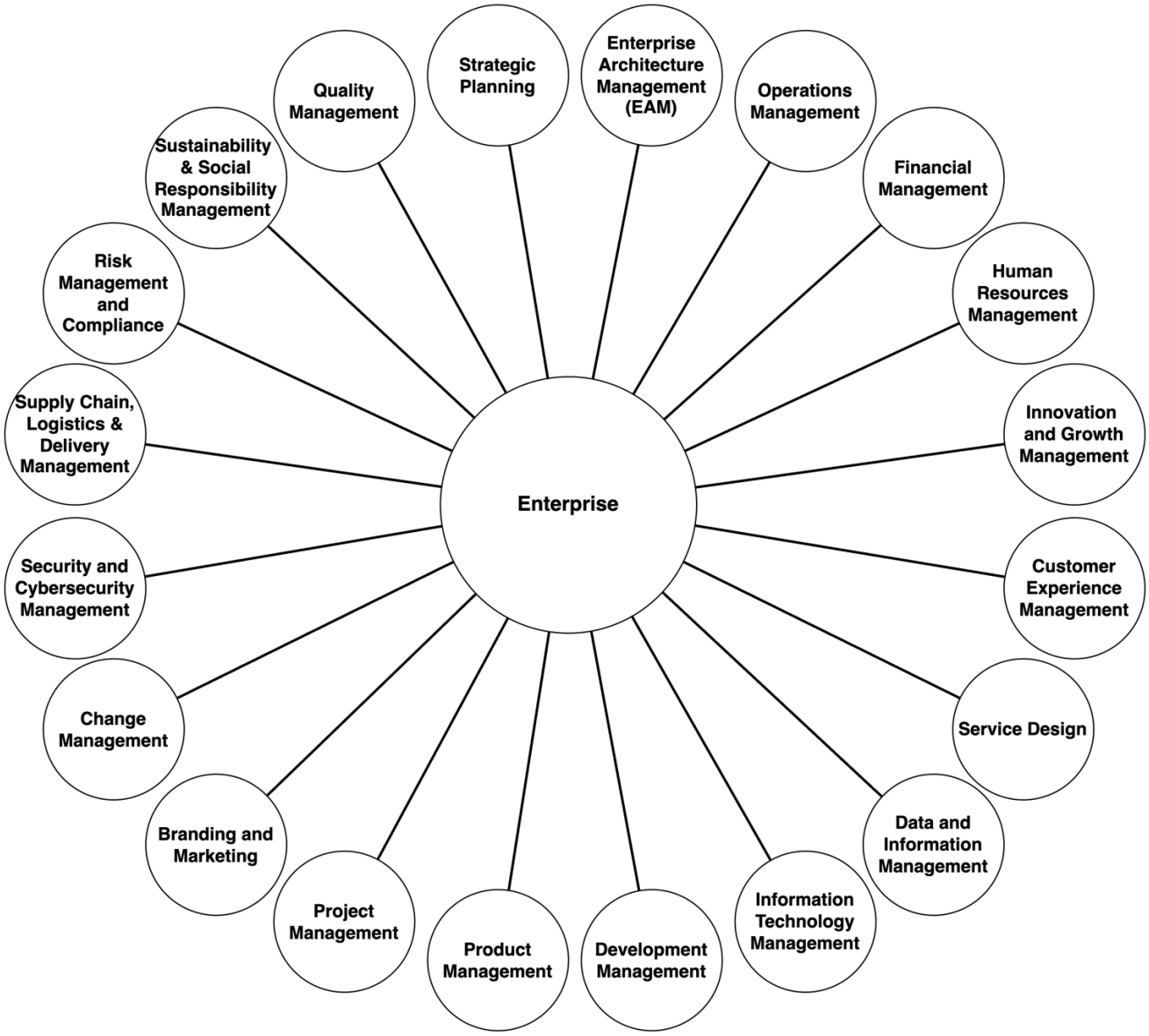


Figure 360: Disciplines.

Use Cases. Here are some example use cases for utilising the Enterprise Design Hub:

UC 1. Demand management and concept design	An enterprise performs continuous demand management and concept design to capture, prioritize, and address customer- and business needs of any size. The Enterprise Design Hub handles incoming customer and business needs by providing a structured and collaborative process for analyzing, and designing concepts by integrating competencies from different disciplines, along with tools, data, and collaboration - to ensure that all incoming needs are addressed efficiently and actionable concepts for change are delivered to create measurable value. Result: Concepts, deliverables (artifacts, outputs), and business outcomes that transform diverse customer and business needs into actionable, valuable, and measurable solutions through collaboration and structured analysis.
UC 2. Improving customer experience	An enterprise notices that customers are unhappy with their service. Using the Enterprise Design Hub, they map out the customer journey, find problem areas, identify pain points in service delivery, align these insights with strategic goals, and redesign the service process, co-design the service process and related solutions with input from relevant teams, prototype and implement changes, measuring the impact on customer satisfaction metrics. Result: Happier customers and better reviews.
UC 3. Launching a new product or service	A business wants to launch a new product or create a service but struggles to align teams (design, development, and operations). The Enterprise Design Hub brings these teams together to co-create the product or service strategy, design, and delivery. Result: A successful product /service launch with clear roles and goals.
UC 4. Streamlining internal processes	Employees are frustrated by slow and confusing processes. The Enterprise Design Hub helps analyze workflows and simplifies steps by involving different units, groups, or teams. Result: Faster processes and more satisfied employees.
UC 5. Digital transformation	An enterprise wants to switch from paper-based systems to digital tools. The Enterprise Design Hub guides the enterprise in planning the transition, and choosing the right tools. Result: A smooth digital transformation and more efficient work.
UC 6. Aligning strategy with execution	The leadership team has a new vision, but employees don't understand how to implement it. The Enterprise Design Hub helps translate the strategy into practical steps and ensures every team is aligned. Result: Clear execution of the enterprises's vision.
UC 7. Merging two enterprises	After a merger, two organisations struggle to combine their operations and cultures. The Enterprise Design Hub helps create a shared vision and integrates teams, processes, and systems. Result: A unified company that works together smoothly.
UC 8. Entering a new market / business / new responsibilities	A business wants to expand its business (e.g. to a new country, or by taking on new regulatory or other responsibilities) but doesn't know how to adapt its products and services. The Enterprise Design Hub helps research the business environment, involve local experts, and design an action plan (e.g. a market-entry plan). Result: Clear understanding of the new environment, and strategic action plan.

These use cases show how the Enterprise Design Hub can help solve common business challenges in a structured, collaborative way, ultimately enabling improved operational efficiency.

The Enterprise Design Hub is a nexus for business design, connecting strategy, operations, and experience design, helping enterprises tackle current and future challenges.

Benefits. Having disciplines such as service designers, business architects, security specialists, risk analysts, business analysts, technology specialists, and others join forces in a collaborative environment like the Enterprise Design Hub is critical and extremely valuable for the following reasons:

B 1. Eliminating silos enhances communication and understanding	**Improved collaboration**: Cross-disciplinary teams share knowledge and insights, leading to a deeper understanding of challenges and opportunities. **Common goals**: A shared space ensures everyone works toward the same strategic and operational objectives, reducing confusion and conflicting priorities.
B 2. Holistic solutions instead of fragmented outputs	**End-to-end** design: By collaborating, the team can consider the entire service lifecycle - from strategy to implementation to operation - ensuring solutions are complete and cohesive. **Interdisciplinary thinking**: Service designers ensure user-centricity, business architects align with strategy, and other specialists bring in technical feasibility, risk mitigation, and compliance.
B 3. Aligning customer needs with business goals	**Customer-centric and strategic alignment**: Service designers ensure a focus on customer experience, while business architects ensure these solutions align with enterprise goals and value streams. **Balanced perspectives**: This alignment avoids over-prioritizing either customer experience or operational constraints, achieving balance.
B 4. Accelerated decision-making and delivery	**Collaborative decision-making**: Cross-functional teams can resolve conflicts and make informed decisions faster when they're working together in real time. **Reduced rework (and failure demand)**: Collaborative design and planning reduce the likelihood of costly rework caused by misunderstandings or misaligned efforts.
B 5. Increased efficiency and reduced redundancy	**Shared resources**: Collaboration ensures that existing data, processes, and technology are leveraged efficiently across teams. **Streamlined processes**: The Enterprise Design Hub acts as a single point of truth for managing change, reducing inefficiencies and overlaps.
B 6. Managing complexity in enterprise change	**Integrated expertise**: Complex problems demand expertise from multiple disciplines. For example, a new service might need to address customer needs (service design), align with strategic business capabilities (business architecture), comply with regulations (risk/security), and integrate seamlessly into IT systems (technology specialists). **Systemic solutions**: A united team can address issues holistically, ensuring no critical aspect is overlooked.
B 7. Better risk mitigation and security	**Proactive risk management**: Risk and security experts can collaborate early in the design process, identifying potential vulnerabilities before they become problems. **Resilient solutions**: By integrating risk and security considerations with customer experience and strategy, solutions are both safe and user-friendly.
B 8. Enhanced innovation and creativity	**Cross-pollination of ideas**: Bringing together diverse disciplines fosters innovation, as different perspectives spark creative solutions. **Collaborative ideation**: A joint environment encourages brainstorming and co-creation, leading to more innovative outcomes.
B 9. Unified governance and accountability	**Centralized oversight**: A unified hub provides governance to ensure all solutions meet enterprise standards, principles and strategic priorities. This helps prevent fragmented or non-compliant solutions. **Clear accountability**: Collaboration ensures every discipline understands its role in the larger context, improving accountability and ownership.
B 10. Enhanced employee and stakeholder satisfaction	**Streamlined collaboration**: Working together fosters a sense of purpose and teamwork, improving employee engagement. **Stakeholder buy-in**: Unified efforts build trust and confidence among stakeholders, as they see the organisation working cohesively.

Challenges to be solved, and causes why the Enterprise Design Hub is helpful and advantageous. So what are the problems in the design and development of an enterprise if the changes are not processed collaboratively? Problems and impacts:

C 1. Misalignment between strategy and execution	When teams work in silos, there's often a disconnect between the enterprise's strategic goals and the actual solutions being developed. Initiatives may fail to support business objectives, resulting in wasted resources. Solutions that don't align with enterprise priorities might not deliver the intended value.
C 2. Fragmented customer experience	Without collaboration, service designers and business architects may focus on different parts of the solution, leading to a disjointed user experience. Poor experiences can damage customer trust, employee productivity, and brand reputation.
C 3. Inefficiencies and redundancies	Siloed teams often duplicate work or create incompatible solutions due to a lack of shared knowledge. Increased costs and resource waste. Longer timelines as teams resolve conflicts and redundancies later in the process.
C 4. Gaps in risk and compliance	Risk analysts and security specialists might be brought in late, or not at all, resulting in solutions that overlook critical requirements. Vulnerabilities in security could lead to costly breaches, or reputational damage etc. Expensive redesigns may be required to fix non-compliance issues discovered after implementation.
C 5. Poor decision-making	When disciplines and teams operate independently, decision-making lacks diverse input, resulting in biased or uninformed choices. Suboptimal solutions that fail to address the full scope of the problem. Delayed decisions as stakeholders debate conflicting priorities.
C 6. Limited innovation	Silos restrict the cross-pollination of ideas and perspectives, stifling creativity and innovation. Missed opportunities to develop novel solutions or gain competitive advantages. Solutions that are functional but lack the differentiation needed to stand out in the market.
C 7. Lack of accountability, ownership and responsibilities	Without a collaborative process, it's often unclear who owns what, and who does what, leading to confusion and finger-pointing. Change activities (programs, projects etc.) stagnate as teams blame each other for delays or failures. Teams may avoid responsibility for critical issues, leaving them unresolved.
C 8. Inconsistent processes and standards	Teams working in isolation may follow their own processes, tools, and standards, leading to misalignment. Solutions don't integrate well with existing systems or other ongoing initiatives. Inconsistent approaches can create long-term technical debt and operational inefficiencies.
C 9. Delayed delivery	Miscommunication and lack of coordination between teams can lead to bottlenecks and delays. Projects take longer to complete, impacting the organization's ability to respond to market changes. Missed deadlines can weaken stakeholder confidence and result in missed opportunities.
C 10. Reduced employee engagement and morale	Siloed work environments can create frustration among employees, as they feel disconnected from the larger goals of the enterprise. Decreased employee satisfaction and productivity. Higher staff turnover as employees seek more collaborative and fulfilling environments.
C 11. Inflexibility and scalability issues	Independent teams often design solutions that address immediate needs without considering the enterprise's broader requirements or long-term scalability. Solutions become brittle and difficult to adapt as the business evolves. Future growth initiatives face obstacles due to poorly integrated systems and processes.

C 11. Inflexibility and scalability issues	Independent teams often design solutions that address immediate needs without considering the enterprise's broader requirements or long-term scalability. Solutions become brittle and difficult to adapt as the business evolves. Future growth initiatives face obstacles due to poorly integrated systems and processes.
C 12. Missed opportunities for cost savings	Lack of collaboration prevents teams from identifying shared needs and leveraging economies of scale. Procurement and development costs increase unnecessarily. The enterprise misses chances to consolidate tools, processes, or technologies.
C 13. Customer and stakeholder frustration	Disconnected teams lead to inconsistent communication with stakeholders, resulting in unmet expectations. Stakeholders lose trust in the enterprise's ability to deliver. Customers experience delayed or subpar services, damaging satisfaction and loyalty.
C 14. Difficulty measuring success	Siloed work often leads to disconnected metrics and KPIs, making it hard to assess the impact of changes. The enterprise struggles to understand what's working and what's not. Continuous improvement becomes nearly impossible without a clear picture of success.

The Flow - Enterprise's Development Value Stream (*Development Flow*)

The organization's development process (a.k.a. development value stream) consists of several key phases that transform needs and ideas into delivered value. These phases typically follow a structured flow, ensuring that change demands are effectively processed from conception to implementation.

The development process can be effectively divided into three high-level phases: 1) Design (Plan), 2) Implementation (Build & Deliver), and 3) Operation (Run).

The Enterprise Design Hub is positioned primarily in the Design phase, but its influence extends into the Implementation phase as well.

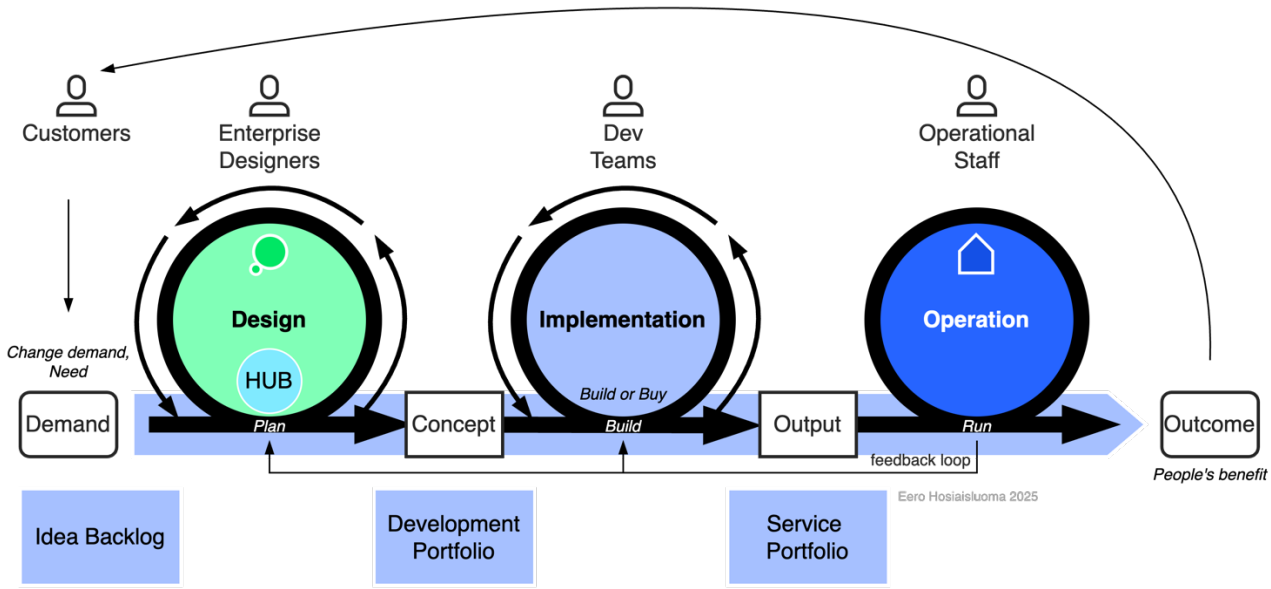


Figure 361: Development process.

The development process is divided into three high-level phases:

1. Design (Plan)	Focus: Conceptualization, strategy, and feasibility analysis. Activities: - Capturing and managing change demands. - Defining customer and business needs and aligning them with enterprise goals. - Designing solutions (e.g., service design, business architecture, capability modeling). - Assessing viability, feasibility, and desirability. - Delivering concepts Aligns with: COBIT's "Plan" phase and IT4IT's "Plan" and "Build" phases (early-stage).
2. Implementation (Build & Deliver)	Focus: Development, testing, and deployment. Activities: - Translating concepts (designs) into working solutions. - Developing and integrating features, products, or services. - Testing, validation, and iterative improvements. - Deploying and transitioning solutions into production. Aligns with: COBIT's "Build" phase, and IT4IT's "Build" and "Deliver" phases.
3. Operation (Run)	Focus: Managing, maintaining, and continuously improving live solutions. Activities: - Monitoring performance and measuring success. - Providing support, incident management, and ongoing optimization. - Gathering user feedback and feeding insights back into the Design phase. Aligns with: COBIT's "Run" phase and IT4IT's "Run" phase.



Figure 362: Three-phase development process**.**

Why does this three-phase structure work?

A. Simplicity & universality	The three-phase model aligns well with widely used frameworks like COBIT (Plan, Build, Run) and IT4IT (Plan, Build, Deliver, Run) while keeping it simple.
B. Clear handoffs between phases	Ensures structured transitions from idea to execution to operation.
C. Adaptability to Enterprise Design Hub	The Enterprise Design Hub plays a key role in the Design phase, supporting demand management, concept development, and alignment with business strategy.

This Design-Implementation-Operation model is both practical and industry-aligned, making it a solid approach for structuring an enterprise's development process.

How the Enterprise Design Hub fits into the three-phase model?

1**. Design (Plan)** – The core of the Enterprise Design Hub

- The Enterprise Design Hub plays a central role in this phase by:

- Capturing and structuring change demands from customers, business units, and strategic initiatives.

- Aligning business, technology, and customer/user needs through co-creation and cross-disciplinary collaboration.
- Defining solutions conceptually (e.g., customer journeys, service blueprints, business capability models).
- Ensuring feasibility, viability, and desirability before moving to implementation.

- Positioning: This is where the Hub has the strongest impact, as it sets the foundation for successful execution.

2. Implementation (Build & Deliver) – supporting development teams

- While the primary ownership shifts to development teams, the Enterprise Design Hub still plays a supporting role by:

- Ensuring strategic alignment between teams and stakeholders.
- Providing guidance on design intent to development teams.
- Helping refine and iterate solutions based on user feedback and testing.

- Positioning: The Hub remains engaged to prevent misalignment and ensure that the original design vision is implemented correctly.

3. Operation (Run) – feeding insights back into design

- While not directly involved in daily operations, the Enterprise Design Hub plays a continuous improvement role by:

- Gathering insights from real-world usage to refine future designs.
- Identifying emerging change demands based on operational feedback.
- Ensuring iterative improvements to the enterprise's systems and services.

Positioning: The Hub captures learning from operations and feeds them back into the Design phase for the next iteration.

The Enterprise Design Hub is primarily positioned in the Design phase, with a supporting role in Implementation and a feedback loop in Operation.

How does the Enterprise Design Hub fit within SAFe, ITIL4, IT4IT frameworks?

SAFe (Scaled Agile Framework) and the Enterprise Design Hub	• The Enterprise Design Hub supports Lean Portfolio Management (LPM) by managing incoming epics and capabilities. • Facilitates business agility by ensuring strategic alignment across Agile Release Trains (ARTs). • Helps define customer journeys, service blueprints, and business capabilities. • Ensures that cross-functional collaboration and Enterprise Architecture considerations are embedded. • The Hub ensures that solutions are continuously validated, measured for outcomes, and iteratively improved. • Supports the Lean-Agile Mindset by enabling cross-team collaboration in the Continuous Delivery Pipeline. • Helps prioritize and structure customer- and business-driven change demands before they reach the backlog. • Acts as a bridge between business strategy and Agile teams, ensuring alignment. • Fosters a culture of Design Thinking and Customer Centricity.

ITIL 4 (IT Service Management Framework) and the Enterprise Design Hub	• Contributes to Service Design, ensuring IT services align with business objectives and customer needs. • Integrates with Demand Management to filter and prioritize change initiatives. • Supports Service Transition, ensuring new or changed services meet defined business and technical expectations. • Works with Change Enablement to minimize risks during deployment. • Integrates with Service Operation to monitor the effectiveness of deployed solutions. • Ensures IT service changes are business-driven and customer-centric. • Supports service innovation and cross-functional collaboration in IT service management.

IT4IT (End-to-End IT Value Chain Framework and IT Reference Architecture by the Open Group, link)	• Works within the Plan and Build value streams to define and prioritize change demands. • Ensures that new services align with enterprise IT strategy and architecture. • Supports Develop & Deploy value streams by coordinating business-driven feature development. • Ensures a structured transition to production with minimal risk. • Connects with the Run & Consume value streams, ensuring that deployed IT services deliver the intended business outcomes. • Acts as a governance layer, ensuring structured demand and IT service lifecycle management. • Bridges business demand and IT execution, integrating IT investments into broader enterprise strategies.

The Role of the Enterprise Design Hub Within COBIT

COBIT (Control Objectives for Information and Related Technologies) is a governance and management framework that helps organizations ensure that IT and business processes align with strategic goals, risk management, and compliance requirements.

The Enterprise Design Hub (EDH) plays a key role in bridging business design, IT governance, and enterprise change management within COBIT's structure.

COBIT is structured around Governance (EDM - Evaluate, Direct, Monitor) and Management (APO, BAI, DSS, MEA - Align, Plan, Organize, Build, Acquire, Implement, Deliver, Support, Monitor, and Evaluate).

COBIT Domain	Enterprise Design Hub's Role
EDM (Evaluate, Direct, Monitor)	Ensures that business and IT strategies align by capturing and structuring change demands. Provides strategic design oversight for decision-making.
APO (Align, Plan, Organize)	Supports Enterprise Architecture, Portfolio Management, and Risk Management by ensuring that change initiatives are designed holistically with cross-functional input.
BAI (Build, Acquire, Implement)	Facilitates solution design, feasibility analysis, and implementation oversight to ensure that new solutions align with business needs and compliance.
DSS (Deliver, Service, Support)	Ensures that services are designed for usability, performance, and security, minimizing operational inefficiencies.
MEA (Monitor, Evaluate, Assess)	Captures operational feedback and continuously improves business design strategies based on performance metrics.

Integration of the Enterprise Design Hub Within COBIT's Plan, Build, Run Model

COBIT's Plan, Build, Run structure aligns closely with the Enterprise Design Hub's role in enterprise change and service design:

1. Plan (Align, Plan, Organize - APO):
   - The Enterprise Design Hub ensures that business objectives, IT capabilities, and risk considerations are factored into enterprise change planning.
   - Facilitates demand management and enterprise architecture alignment.
2. Build (Build, Acquire, Implement - BAI):
   - Supports the design, validation, and governance of new business solutions, IT services, and enterprise changes.
   - Ensures that projects align with business goals and compliance requirements.
3. Run (Deliver, Service, Support - DSS) & Improve (Monitor, Evaluate, Assess - MEA):
   - Ensures continuous service improvement, feeding real-world insights back into design.
   - Helps monitor change effectiveness and refine strategies for future initiatives.

Benefits of the Enterprise Design Hub in COBIT:

- Bridges Business and IT: Ensures business needs are translated into IT and service management frameworks effectively.
- Improves Governance & Decision-Making: Provides structured insights for evaluating and prioritizing enterprise changes.
- Enhances Cross-Disciplinary Collaboration: Ensures that security, risk management, service design, and business architecture teams collaborate effectively.
- Ensures Compliance & Risk Mitigation: Supports regulatory alignment by integrating governance and risk considerations into early-stage solution design.
- Drives Continuous Improvement: Captures performance feedback to enhance design strategies and optimize IT investments.

The Enterprise Design Hub acts as a central enabler within COBIT, ensuring that business strategies, IT capabilities, and governance frameworks are aligned. It supports structured decision-making, cross-functional collaboration, and continuous improvement, ultimately leading to more effective enterprise change management and digital transformation.

The Role of the Enterprise Design Hub Within Enterprise Architecture Frameworks

Enterprise architecture (EA) frameworks, such as TOGAF (The Open Group Architecture Framework), provide structured methodologies for aligning business goals, IT strategy, and operational capabilities. The Enterprise Design Hub (EDH) plays a critical role in bridging enterprise design, strategy, architecture, and execution, ensuring that architectural changes and transformations are well-integrated and customer-centric.

How the Enterprise Design Hub Aligns with TOGAF's Architecture Development Method (ADM)

TOGAF's ADM (Architecture Development Method) consists of phases that guide organizations in planning, designing, and implementing enterprise architectures. The Enterprise Design Hub integrates within these phases as follows:

ADM Phase	Enterprise Design Hub's Role
Preliminary Phase	Establishes the Enterprise Design Hub as a collaborative mechanism for aligning business and IT stakeholders.
Phase A: Architecture Vision	Ensures business and user needs are well-defined through service design, business modeling, and co-creation workshops.
Phase B: Business Architecture	Helps create business capability models, value streams, and customer journeys, ensuring that enterprise transformation efforts align with user needs.
Phase C: Information Systems Architecture	Facilitates cross-disciplinary collaboration between business, IT, and data architects, ensuring that data and application designs support strategic goals.
Phase D: Technology Architecture	Ensures that technology decisions align with customer / user experience, business needs, and operational feasibility.
Phase E: Opportunities & Solutions	Supports the prioritization and validation of architectural initiatives, ensuring that changes create measurable business value (business outcomes).
Phase F: Migration Planning	Helps structure the enterprise change roadmap, ensuring smooth transition and stakeholder alignment.
Phase G: Implementation Governance	Ensures that changes align with strategic goals and business outcomes, reducing architectural drift and misalignment.
Phase H: Architecture Change Management	Supports a continuous improvement process where feedback from real-world implementations informs future architecture refinements.

The Enterprise Design Hub ensures that architecture is not just IT-driven but business- and customer-centric, making TOGAF's ADM more adaptable, agile, and aligned with organizational objectives.

Benefits of the Enterprise Design Hub in Enterprise Architecture:

- Bridges Business and IT Architecture
    - Ensures that enterprise architecture efforts align with real-world customer and business needs, customer journeys, and value streams.
- Enhances Stakeholder Collaboration
    - Brings together business leaders, architects, designers, and technologists to co-create enterprise solutions.
- Improves Change Management & Governance
    - Ensures that architecture changes are well-governed, strategic, and iterative, reducing project failure risks.

Drives Agile & Human-Centered Architecture

- Introduces design thinking and iterative testing into enterprise architecture planning.

Supports Continuous Feedback & Adaptability

- Ensures that architectural models evolve based on user feedback and operational insights.

The Enterprise Design Hub serves as a crucial enabler within enterprise architecture frameworks like TOGAF, ensuring that architectural initiatives are business-driven, customer-centric, and adaptable. It transforms traditionally rigid, IT-focused architecture planning into a dynamic, collaborative, and value-driven approach, making enterprise architectures more agile, relevant, and impactful.



The Enterprise Design Hub (EDH) is a united joint force. A practice that integrates specialists from different disciplines to collaborate for creating better enterprises.

By joining forces in the Enterprise Design Hub, all disciplines collaborate effectively to deliver strategically aligned, customer-centered, and operationally feasible solutions. This integration eliminates the inefficiencies, misalignments, and risks of siloed work, while fostering innovation, accelerating delivery, and enhancing enterprise agility. In today's complex and fast-changing business landscape, this joint-force approach is not just valuable, it's essential for long-term success.

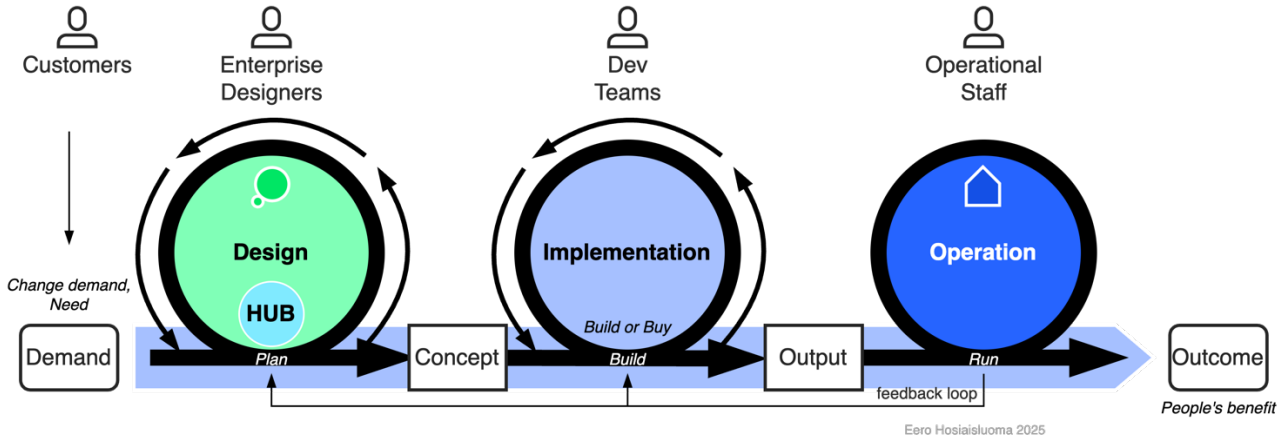


Figure 363: The Hub operates at the beginning of the enterprises's development process (development value stream).

The Enterprise Design Hub (EDH) is a unified joint force - a practice that brings together specialists from different disciplines to collaborate in creating better enterprises.

The Enterprise Design Hub (EDH) plays a crucial role in holistic demand management, ensuring that Enterprise Design Facets- Identity, Experience, and Architecture are seamlessly integrated. This approach strongly emphasizes the connection between customer experience, strategic goals, and enterprise operations, which are foundational elements of enterprise architecture.

Key emphases on the Enterprise Design Hub's role:

1. Holistic demand management across enterprise design facets
   - EDH does not treat business, customer, and operational needs as separate silos. Instead, it integrates them into a single, structured approach that ensures balance and synergy between:
     - Enterprise Identity → Who we are and what we stand for.
     - Enterprise Experience → How we engage with users, employees, and stakeholders.
     - Enterprise Architecture → How our structures, processes, and technologies support value creation.
2. Strong focus on customer experience, strategy, and operations
   - Unlike traditional demand management, which often focuses solely on operational efficiency or IT alignment, EDH ensures that customer experience (CX), strategic intent, and enterprise architecture are treated as interconnected parts of business transformation.
3. Human-centric, collaborative, and perspective-shifting approach

- EDH is inherently human-centric, ensuring that people - customers, employees, and stakeholders - remain at the core of enterprise transformation efforts.
- It encourages perspective-switching and reframing, ensuring that business, design, and technology experts do not work in silos but instead co-create solutions that balance business value, usability, and feasibility.

4. Powered by Enterprise Design approach and EDGY language for structured enterprise thinking
   - EDH is strongly supported by the EDGY, which provides a structured way to explore enterprise change from different perspectives:
     - Enterprise Identity → Aligning purpose, vision, and differentiation.
     - Enterprise Experience → Ensuring customer and employee-centric service and interaction models.
     - Enterprise Architecture → Structuring business capabilities, processes, and technology to enable transformation.

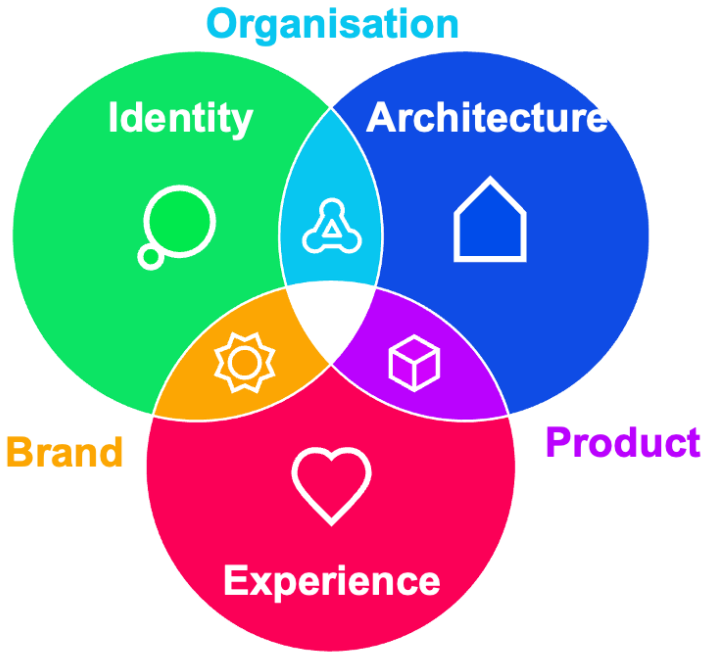


Figure 364: EDH is strongly supported by the EDGY, which provides a structured way to explore enterprise change from different perspectives

Key differentiators of the Enterprise Design Hub:

1. Not just IT or business-driven - EDH balances strategy, experience, and operations.
2. Encourages organizations to rethink challenges through perspective-switching and reframing.
3. Ensures every demand is assessed holistically—aligning identity, experience, and architecture.
4. Facilitates structured collaboration, leveraging the EDGY framework to ensure clarity and cross-disciplinary integration.

Note! Gartner's *Fusion Teams* and the Enterprise Design Hub share the same core principles: cross-functional collaboration, business-driven innovation, and agility. However, EDH extends the concept beyond individual teams and projects, creating an enterprise-wide collaboration framework that integrates business strategy, customer experience, and operational execution.

The Enterprise Design Hub is not just a demand management tool - it is a holistic, human-centric, and collaborative framework that ensures enterprises can manage change effectively by integrating customer experience, strategic goals, and operations into a single, structured approach.

The Enterprise Design Hub is an enterprise design enabler.

- Facilitates Cross-Disciplinary Collaboration:
  - Brings together service designers, business architects, technology experts, and other specialists to collaborate on enterprise-wide initiatives.
- Supports Holistic Demand Management:
  - Manages incoming change demands, ensuring they are assessed for strategic alignment, customer impact, and operational feasibility.
- Integrates Business, IT, and Customer Perspectives:
  - Ensures that enterprise designs balance business goals, IT capabilities, and customer needs, making solutions more effective and sustainable.
- Encourages Innovation and Perspective-Switching:
  - Leverages EDGY to reframe challenges and explore new solutions from multiple angles, including enterprise identity, experience, and architecture.
- Enables Agile and Adaptive Enterprise Change:
  - Provides a structured, yet flexible approach to enterprise design, allowing for continuous improvement and rapid adaptation in dynamic environments.
- Promotes Strategic Alignment and Governance:
  - Works with enterprise architecture, Lean Portfolio Management, and other governance structures and frameworks to ensure that design initiatives are aligned with organizational strategy and compliance requirements.

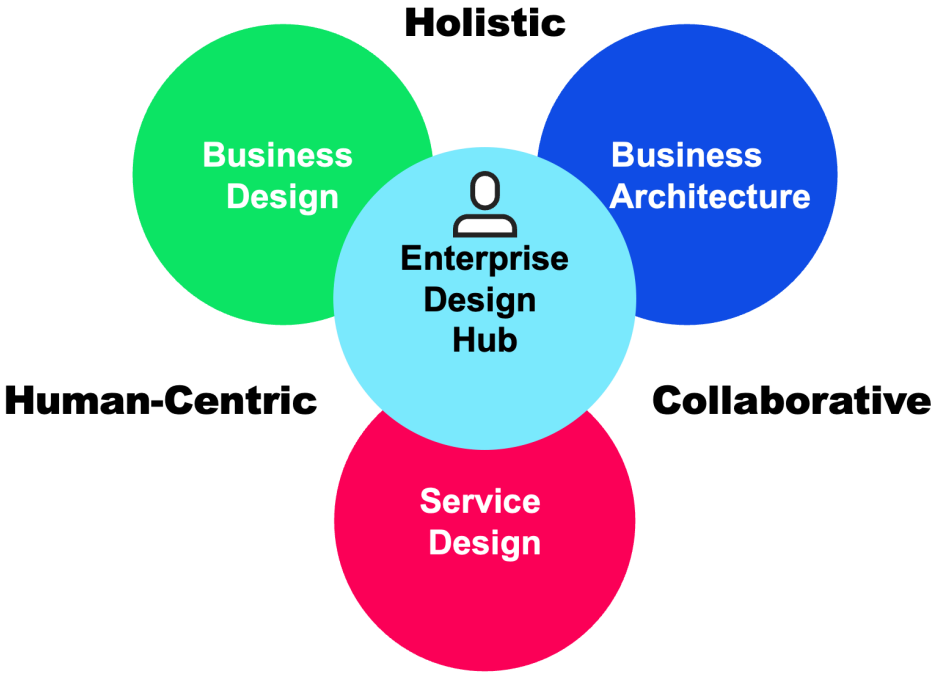


Figure 365: The Enterprise Design Hub is an enterprise design enabler

The Enterprise Design Hub is a powerful enabler that helps enterprises design, align, and implement effective enterprise-wide changes. It ensures that enterprise design is collaborative, customer-centric, and strategically integrated, making it a vital component for successful business transformation.

7.2.3 Capability-Based Approach (CBA)



The *Capability-Based Approach* focuses on identifying, planning, developing, enhancing and operating the enterprise's business capabilities necessary for achieving strategic goals. As such, capability-based approach enables strategy execution. In addition, the capability-based approach leverages the *capability-first* principle, which emphasises capabilities as the primary units of management, design, planning, and operations within the enterprise. Effectively this means that capabilities link the strategy, business model and operating model of the enterprise.



A capability refers to an enterprise's ability to perform a specific activity that is essential for delivering value and maintaining competitive advantage. Capability-based planning ensures that an enterprise allocates resources, invests in skills, and optimises processes that are critical to its success.

Instead of focusing on individual initiatives or projects, capability-based approach emphasises building and strengthening the capabilities that are most important for the enterprise's strategic success. Capabilities are developed based on their alignment with the enterprise's strategic goals. By understanding which capabilities are necessary to execute the strategy, the enterprise can focus and invest in the right areas.



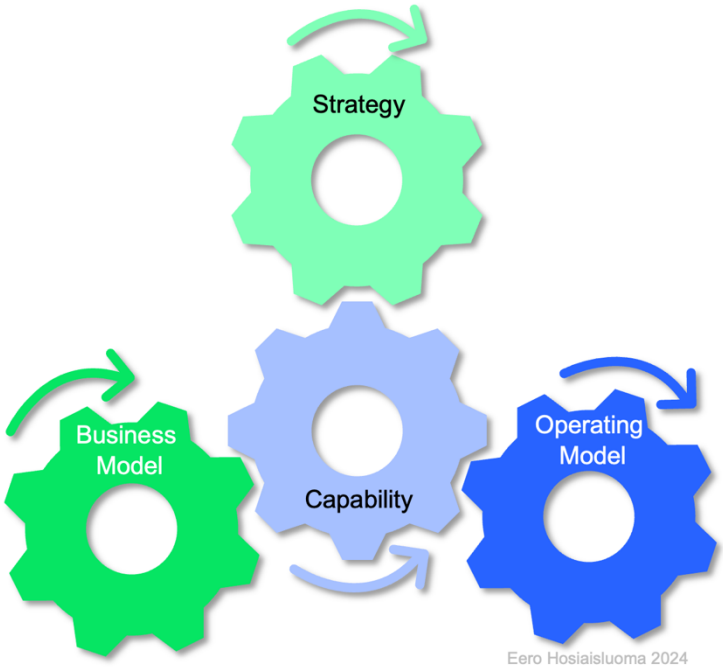


Figure 366: Capabilities link strategy, business model and operating model.

Holistic. Capability-based design, -planning and -development is a holistic approach. Capabilities are typically a combination of people, processes, and assets (such as data, applications, technology, and resources). Capability-based approach considers how these elements work together to enable the enterprise to achieve its goals.

Incremental and iterative. Capability-based approach is incremental and iterative, as the business environment is in continuous change, and so is the enterprise. They continuously assess their capabilities, identify gaps or weaknesses, and focus and invest in improvements to enhance those capabilities over time.

Cross-Functional Collaboration. Since capabilities are enterprise-level, unique, and agnostic to organisational structures, they span across multiple units, departments, or functions. Capability-based approach encourages collaboration between different parts of the enterprise to ensure that all necessary components are integrated. This approach helps prevent the silo effect, where distinct units develop their own components in isolation, without an enterprise-wide analysis.

Strategic. Capability-based approach is a strategic approach that helps enterprises align their internal strengths (capabilities) with their long-term strategic goals. By focusing on developing the right capabilities, whether related to people, processes, or technology, enterprises can

improve efficiency, drive innovation, and maintain a competitive advantage. This approach ensures that all initiatives are connected to the enterprise's strategy, enabling more effective execution and resource allocation.

A key tool in capability-based approach is the capability map, which visualises the enterprise's core capabilities and how they support strategic goals. The map helps in identifying gaps and areas where development is needed.

Capability-based approach is strategic, holistic, iterative and incremental.

Comparing capability-based approach with continuous *demand-based development*, and *concept design*. They are interconnected approaches that together drive an enterprise's ability to respond to changing business needs, innovate, and maintain competitive advantage.

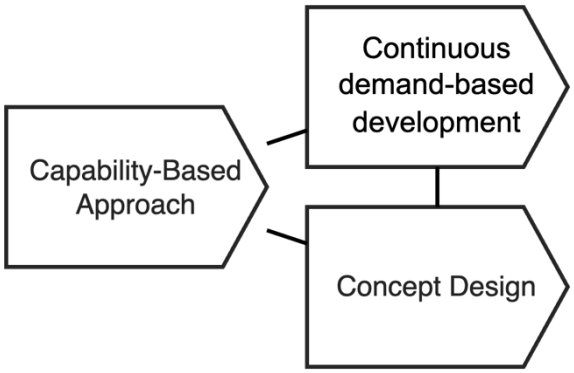


Figure 367: Interconnected approaches.

Capability-based approach, continuous demand-based development, and concept design are highly interrelated approaches in an enterprise's development strategy. Capability-based approach builds the foundational skills, processes, and technologies needed for long-term success. Concept design drives innovation and identifies new opportunities for capability building, while continuous, daily-basis demand-based development ensures that the enterprise can respond quickly to short-term needs. Together, they create a dynamic system that allows for both innovation and operational agility, ensuring that the enterprise is well-positioned for success in an ever-changing environment.

Capability-based approach provides the foundation for daily-basis development: the capabilities built through capability-based approach enable enterprises to respond effectively to daily demands. A capability map is the base map of the enterprise's business operations.

Capability-based approach provides the foundation for daily-basis development.

Concept design is an early-phase development activity focused on creating innovative solutions, products, services, or processes. It involves ideation, prototyping, and exploring new ideas based on customer or market needs. Concept design often occurs at the front end of innovation. Concept design identifies new ideas and opportunities that may require the development of new capabilities, or update existing capabilities. Again, the capability map provides a ready-made overview of the current business. All the new ideas are somewhat related to existing capabilities.

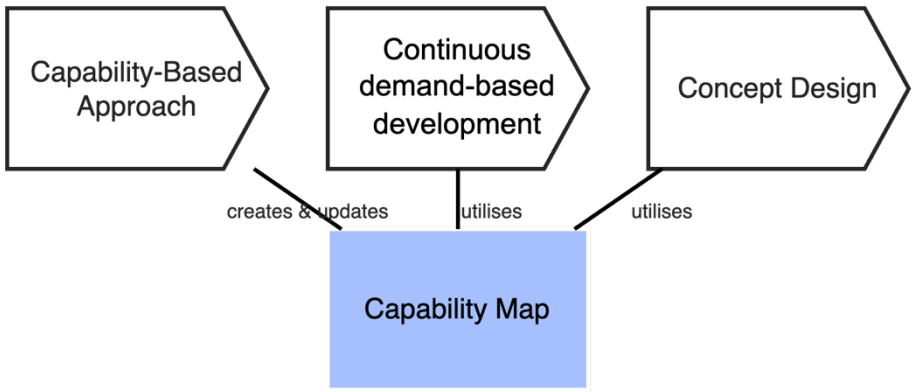


Figure 368: A Capability Map serves as the foundational map of an enterprise's business operations.

Capability-based approach serves as the backbone that enables both concept design and continuous, demand-based development. It focuses on building long-term capabilities that support both innovation (concept design) and operational agility (daily demand-based development).

Capability-based planning is the backbone that enables both concept design and continuous, demand-based development.

Capability-based approach is a strategic approach that focuses on building and enhancing core business capabilities, enabling enterprises to effectively execute their strategy, adapt to change, and achieve sustainable competitive advantage.

Capability-based approach emphasizes building and refining the skills, processes, and resources necessary for an enterprise to achieve its strategic goals and maintain a competitive advantage. By focusing on capabilities, enterprises can enhance their agility, foster innovation, and effectively respond to changing market conditions. Real agility comes with well-defined capabilities in place, as capabilities represent the fundamental behavioral units of an enterprise.

Capabilities are focal-points of business operations as well as business management and -development. Capabilities operationalise change demands of any kind: strategic goals, customer initiated demands and other business-related changes.

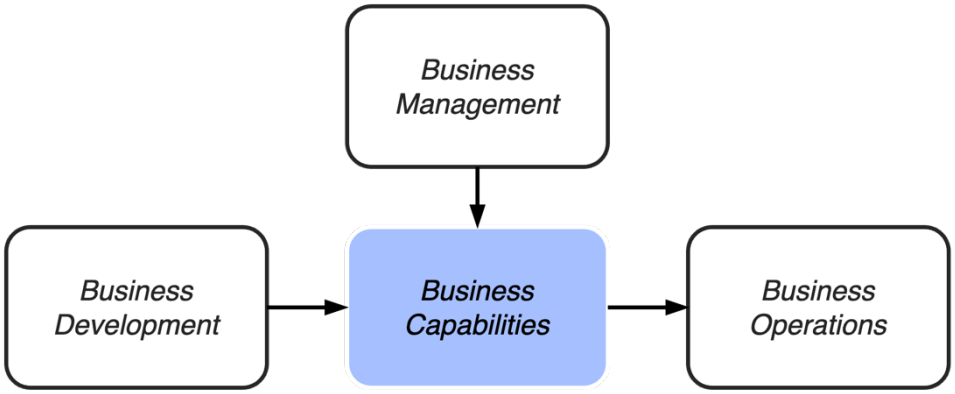


Figure 369: Capabilities are focal points of business architecture.

Principle: Focus on Capabilities (Capability First approach) in development. All the operational changes in an enterprise are changes to its capabilities.

All the operational changes in an enterprise are changes to its capabilities.

Benefits of Capability-based approach:

- **Strategic Focus**: Capability-based approach ensures that the enterprise focuses its efforts on areas that directly support its strategic goals, rather than investing in isolated or disconnected initiatives.
- **Better Resource Allocation**: By understanding which capabilities are critical for success, enterprises can allocate resources more effectively, ensuring that investments are directed toward areas that deliver the most value.
- **Improved Agility**: Focusing on developing core capabilities allows enterprises to be more agile and responsive to changes in the business environment, market, technology, or customer demands. Strong capabilities enable enterprises to pivot more effectively when needed.
- **Sustainable Competitive Advantage**: By continuously improving and developing the capabilities that matter most, enterprises can build and sustain a competitive advantage over time.

Capabilities serve as the foundation that enables the implementation of strategic goals, customer needs, and other business-related changes at the operational level.

Steps in Capability-based approach:

1. **Identify Strategic Goals**: Understand the organization's strategic goals and align capability development with those objectives.
2. **Map Existing Capabilities**: Use a *capability map* to assess the enterprise's current strengths and weaknesses.
3. **Identify Gaps and Opportunities**: Determine where the enterprise's current capabilities fall short of supporting strategic goals.
4. **Develop a Capability Roadmap**: Create a plan for developing, enhancing, or acquiring capabilities over time.
5. **Execute and Monitor**: Implement initiatives to build capabilities, monitor progress, and adjust the plan as needed.
6. **Continuous Improvement**: Regularly evaluate capabilities to ensure they remain aligned with changing business needs and external factors.

Capability-based approach is the primary development tool, supporting all other development and design efforts within the enterprise.

7.2.4 Capability-Based Planning (CBP)



Capability-based planning is a strategic approach focused on building specific capabilities rather than simply acquiring assets or resources. It's commonly used in fields like defense, business, and government, where enterprises need to ensure they can effectively achieve their goals under various conditions. The main idea is to identify the essential capabilities needed to meet strategic goals and then plan, prioritize, and allocate resources to develop those capabilities.

Capability-based planning primarily focuses on ***what*** an enterprise needs to be able to do rather than ***how*** it will do it. This approach centers on identifying and defining the essential capabilities (the high-level abilities) required to achieve strategic goals and fulfill the enterprise's mission and business model - the ***why***.

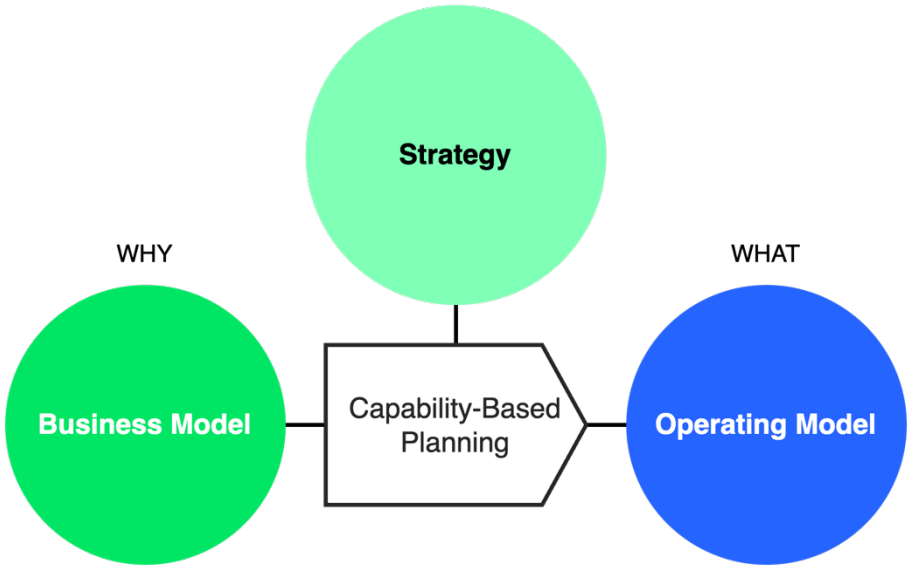


Figure 370: Relations between strategy, business model and operating model.

In capability-based planning, planners first define *what* the enterprise needs to be able to do, like responding to a security threat, launching a product, or delivering a public service, without being overly prescriptive about the means (the "how"). They then evaluate the current

and future capabilities required to achieve these outcomes. This method (***capability first*** - principle) allows flexibility, focusing on building adaptable skills, tools, and processes that can respond to changes, uncertainties, or evolving scenarios. The capability map is a good starting point – the base map - when analysing the impact of goals in any change initiatives or business transformations within an enterprise.

Capability-based planning primarily focuses on ***what*** an enterprise needs to be able to do.

Capability-based planning is important and valuable because it aligns resources and planning directly with an enterprise's strategic goals. This makes enterprise more adaptable and efficient, especially in uncertain or rapidly changing environments. Examples of benefits:

Capability-Based Planning (CBP) advantages	
Holistic and Integrated Approach	Capability-based planning combines people, processes, and assets (e.g. applications, data, technology) into unified capabilities, creating an integrated view of the enterprise. Other approaches often focus on isolated elements, leading to silos and misalignment.
Improved Adaptability to Change	Proactivity and flexibility: By focusing on capabilities rather than specific resources or assets solely, enterprises can adapt quickly to changing circumstances, such as market shifts, new regulations, or new technologies. Since capabilities are defined, this helps enterprises respond effectively to changes.
Strategic Alignment	Links capabilities to the enterprises's strategy and goals. Capability-based planning ensures that all levels of the enterprise and resources are focused on capabilities that directly contribute to achieving enterprise goals. This fosters cross-functional collaboration, as different units or teams understand their role related to capabilities.
Cross-Functional Collabortation & Integration	Breaks down silos by coordinating capabilities across organisation, ensuring all units contribute to shared goals. Capability-based planning identifies gaps and redundancies across the enterprise, enabling better prioritization and allocation of resource
Business Outcome-Orientation	Focus on "What" Over "How". Aligns capabilities with desired business outcomes. Capability-based planning emphasizes outcomes and value over outputs, ensuring that all capabilities are directly linked to delivering measurable business value.
Enhanced Risk Management	Capability-based planning encourages to preparedness, by handling various scenarios or threats at capability level, rather than planning for a single resource or asset. This creates a resilient enterprise better equipped to handle risks from internal challenges or external pressures

Example Use Cases:

- Developing digital transformation roadmaps.
- Preparing for changing business environment conditions.
- Building new operational abilities for the business operations of an enterprise.

Summary: Capability-based planning helps enterprises focus on the "what" of achieving goals in a way that is responsive, resource-efficient, and resilient, making it a critical component for long-term success in complex environments.

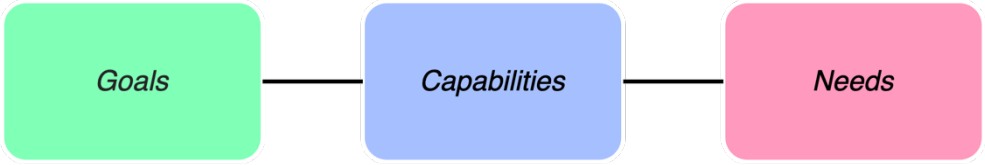


Figure 371: Capabilities link enterprise's goals and customer needs.

Capability-Based Planning (CBP) ensures that the enterprise focuses not only on isolated outputs (such as products, services, applications, or processes) but on building the foundational capabilities needed to thrive in a dynamic, volatile, and ever-changing business environment.

7.2.4.1 Capabilities and other concepts

A common challenge with capabilities, their abstract nature makes them harder for people to understand, align with, and act upon. A fundamental difference between these concepts is that business capabilities are relatively stable, while functions, processes, and structures can change over time.

The problem in a nutshell:

- Business capabilities are often misunderstood because they are abstract and easily confused with more concrete concepts like functions, processes, people skills, oragnsiational structures (such as units, groups, or teams) or IT systems.
- While capabilities define what a business can do at high-level, they are often mistaken for how work is done (processes), who does it (functions or organisationsla structures), with which skills and comptences (people, roles) or what systems support it (IT features).

Why this confusion happens:

- Capabilities are high-level and strategic, making them harder to grasp compared to concrete workflows (processes) or organizational roles (functions).
- They sound similar to functions, leading people to equate them (e.g., "HR Function" vs. "HR Capability").
- Processes execute capabilities, but people often think processes are capabilities.
- IT systems support capabilities, yet businesses sometimes assume "having software = having a capability."

Why the problem of confusion is a problem:

- Lack of clarity & common understanding
  - People often struggle to define what a capability actually means in practical terms.
  - For example, saying a company has a “Customer Experience Management” capability sounds strategic, but employees might not know how that translates into real actions.
- Difficulty in linking to operations
  - Because capabilities are abstract, organizations sometimes struggle to connect them to day-to-day business operations.
  - If an enterprise claims “Innovation” as a capability but lacks defined processes for R&D, prototyping, or idea management, the capability remains theoretical rather than operational.
- Misalignment between business and IT
  - In digital transformation or enterprise architecture, business leaders talk about capabilities, but IT teams focus on concrete systems and workflows.
  - If capabilities aren’t mapped clearly to real processes, tools, and data flows, IT might build solutions that don’t fully support business needs.
- Resistance to change
  - Employees often resist change if they don’t understand how a capability improvement impacts their role.

How to avoid confusion:

1. Clearly separate capabilities from functions and processes in strategy discussions.
2. Use a capability map to show stable, high-level abilities vs. changeable structures.
3. Communicate that capabilities exist independently of IT systems, workflows, or teams.

How to Fix This Problem?

A. Define capabilities in business terms → Use simple language, examples, and value statements, use the common, shared terminolgy and names used in the organisation

B. Link capabilities to processes → Show how each capability is supported by specific processes and applications, and performed by certain organisational structures (units, groups, teams and skills (people, roles)
C. Use visualizations → Capability maps, heatmaps, capability canvases, capability views opening the contents of a capability, and roadmaps help clarify relationships.
D. Communicate the "so what?" → Explain why a capability matters and how improving it benefits business, employees and customers.

Differences between these concepts are shown in the table below.

Name	Definition	Type	Level	Example
Business Capability	Defines **WHAT** the business can do at a high level, representing strategic abilities.	Behavioral, abstract	Strategic	Customer Relationship Management
Business Function	Defines WHO performs activities to support capabilities, focusing on business roles and responsibilities.	Behavioral, concrete	Tactical	Marketing, Sales, HR, Legal, Finance
Business Process	Defines HOW work gets done through structured workflows and activities.	Behavioral, concrete	Operational	Order Fulfillment, Payment Processing
Organisational Structure (e.g. unit, group, tem)	Defines HOW teams, units, or departments are grouped, organised, to execute business functions and processes.	Structural, concrete	Operational	North Europe Sales Team, IT Department
People Roles & Skills	Employees with specific competencies work within teams to execute business functions and processes.	Behavioral, concrete	Operational / Individual	Customer support agent with complaint-handling expertise, service designer

These examples illustrate how business capabilities (high-level abilities) can break down into functions, processes, and specific organisational structures (such as units or tems) that execute the work.

Capability	Function	Process	Organisation
Customer Relationship Management	Customer Support	Handle customer complaints	Customer Support Team
Sales & Revenue Growth	Sales	Lead generation & qualification	Regional Sales Unit
Brand Management	Marketing	Digital advertising campaign execution	Social Media Marketing Team
Talent Management	Human Resources (HR)	Employee Onboarding & Training	HR Training & Development Team
Supply Chain Optimization	Logistics	Warehouse Inventory Management	Warehouse Operations Unit
Financial Planning & Control	Finance & Accounting	Budgeting & Forecasting	Finance Department
IT Infrastructure Management	IT Operations	Network Security Monitoring	Cybersecurity Team
Innovation	Research & Development (R&D)	New Product Prototyping	R&D Engineering Team

7.2.4.1.1 Capabilities and Processes

What is the difference between capabilities and processes in a business context?

Capabilities and processes are closely related but distinct concepts.

1. Capabilities
    a. Capabilities refer to the enterprise's ability to achieve specific business outcomes.
    b. They represent a combination of skills, knowledge, resources, technology, and structures that allow an enterpriseto create value.
    c. Capabilities are relatively stable over time and define **what** a business can do (e.g., customer service excellence, supply chain management, product innovation).
2. Processes
    a. Processes are structured activities or workflows that transform inputs into outputs.
    b. They define **how** work gets done and are more operational in nature.
    c. Processes are detailed, can be standardized, and may change more frequently based on optimization efforts.

Relationship:

- Capabilities are enabled / realised by processes.
- Improving processes can strengthen capabilities.
- Capabilities are more abstract, while processes are concrete.
- Capabilities are conceptual and describe **what** an enterprise can do at a high level. They are often broad, strategic, and independent of specific workflows or tools.
- Processes are tangible and operational. They define **how** things get done through specific steps, roles, inputs, and outputs.
- Capabilities serve as high-level business goals, while processes are the structured activities to support those goals.

Feature	Capabilities	Processes
Definition	**What** a business can do / must be able to do	**How** a business does things
Focus	Strategic & long-term	Operational & short-term
Stability	Relatively stable over time	Can be frequently optimized
Scope	High-level & broad	Detailed & step-by-step
Example	"Customer Relationship Management" / “Customer Service”, the enterprise has the ability to build and maintain strong customer relationships.	"Handling Customer Complaints", a step-by-step workflow (flow of activites) that customer service representatives follow to address and resolve complaints.

7.2.4.1.2 Capabilities and Functions

What is the relation between business capabilities and business functions in a business context?

In a business, Business Capabilities (WHAT the enterprise must be able to do) and Business Functions (WHO is responsible for doing it) are executed by organizational structures (units, groups, teams) and people roles (skills & competencies).

Hierarchy of Execution:

1. Business Capabilities (WHAT the business must be able to do)
    a. High-level strategic abilities that remain stable over time.
    b. Example: "Customer Relationship Management."
2. Business Functions (WHO owns the responsibility to execute capabilities)
    a. Organizational domains that operate to fulfill business capabilities.

   b. Example: "Customer Support Function."
3. Organizational Structure (Units, Groups, Teams) execute functions
   a. Defines HOW people and teams are arranged to perform business functions.
   b. Example: "Customer Service Unit."
4. People Roles & Skills enable execution at an individual level
   a. Employees with specific competencies work within teams to execute business functions and processes.
   b. Example: "Customer Service Representative with complaint resolution skills."

7.2.4.1.3 Relations between the concepts

In a conceptual data model, cardinalities define how entities relate to each other in a business context. Below is a structured view of the many-to-many (M:N), one-to-many (1:M), and one-to-one (1:1) relationships between Business Capability, Business Function, Business Process, Organization, Employee, and Role.

- Capabilities are high-level and supported by multiple functions.
- Functions consist of multiple processes.
- Processes involve different organizational structures and roles.

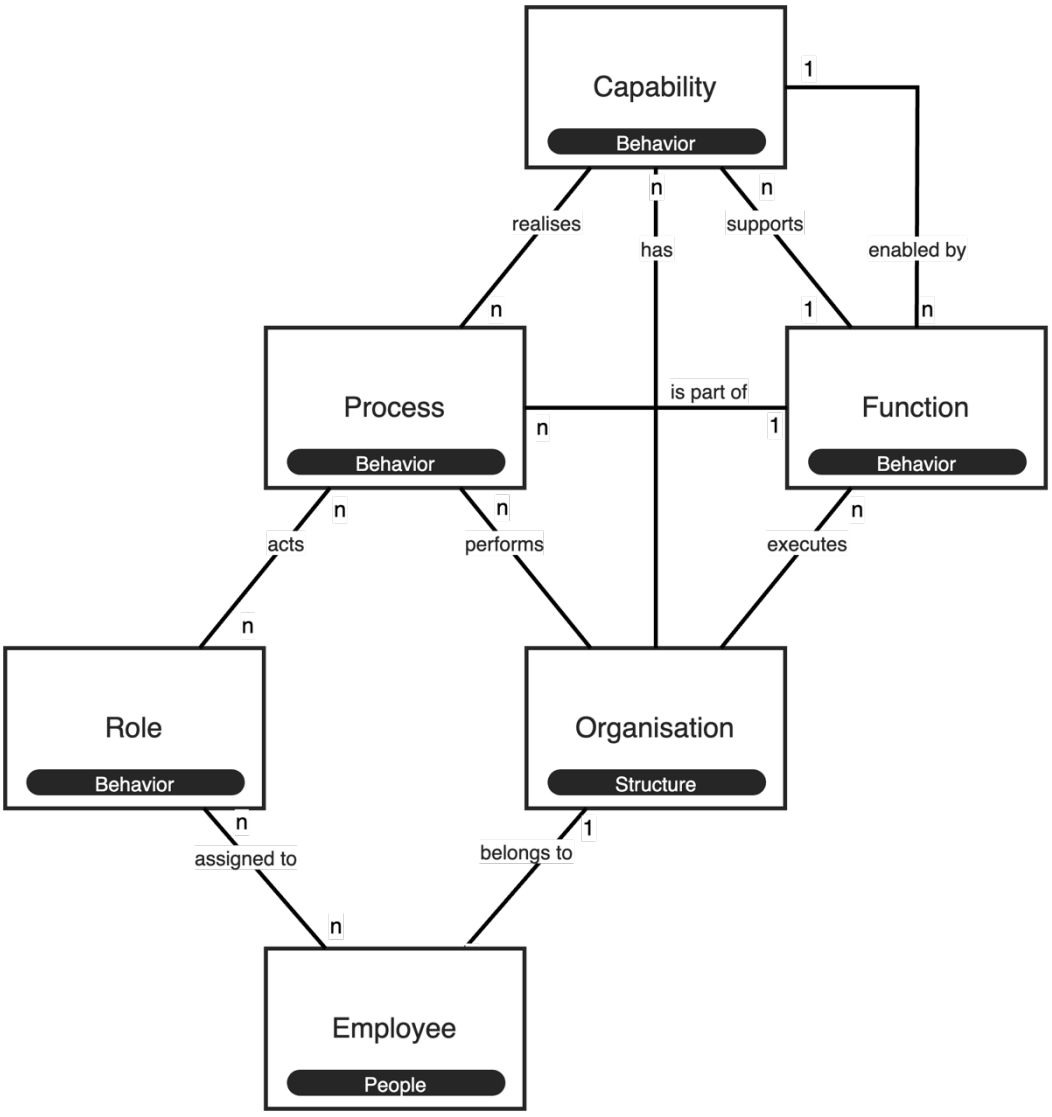


Figure 372: Relations between the concepts in business context.

7.2.5 Enterprise Design Model

Enterprise Design Facet Model Venn-diagram can be applied to concept design. The Facet Model can be used in many ways. The starting point can vary. Design can be started from any part of the Facet Model. To start from the Experience forces us to take the customer first approach and analyse first the desirability of the demand, new idea or innovation candidate.

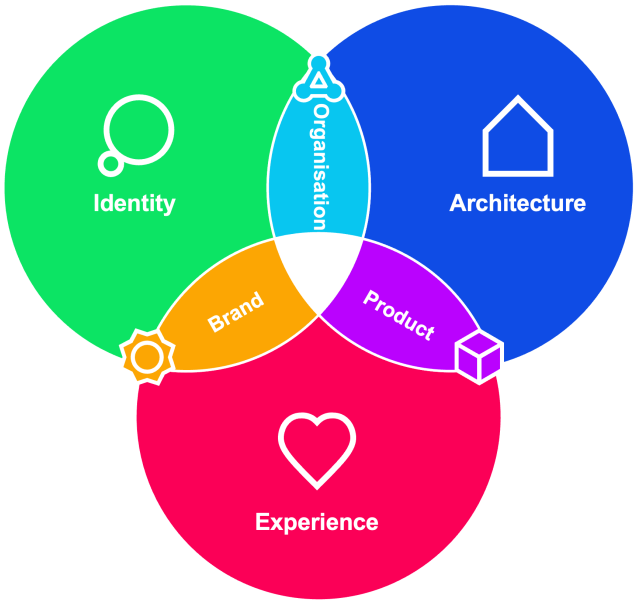


Figure 373: Enterprise Design VENN-diagram.

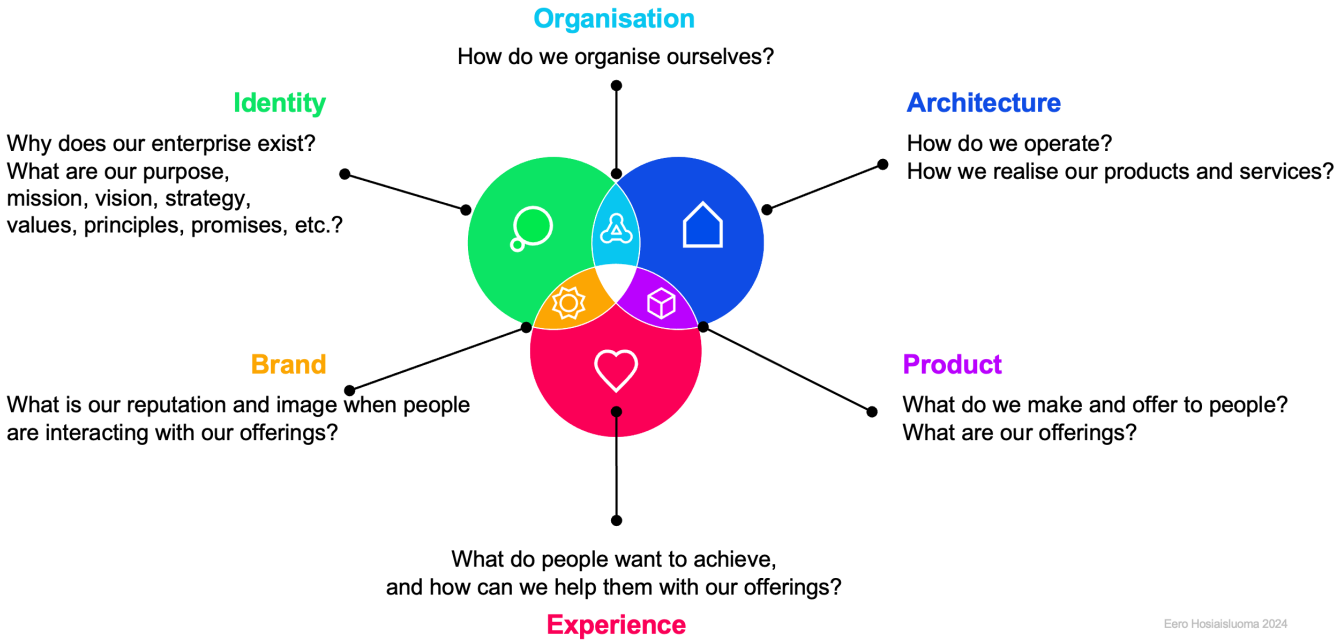


Figure 374: Enterprise Design Facets and Intersections.

7.2.6 Enterprise Design Wheel

The *Enterprise Design Wheel* (or *Enterprise Wheel* for short) method can be used as a source of inspiration and guidance when starting with an enterprise design challenge. Enterprise perspectives and intersections are introduced as sectors of a wheel in two levels: 1) Facets represent the sectors at high-level and 2) enterprise elements represent the sectors at detail-level.

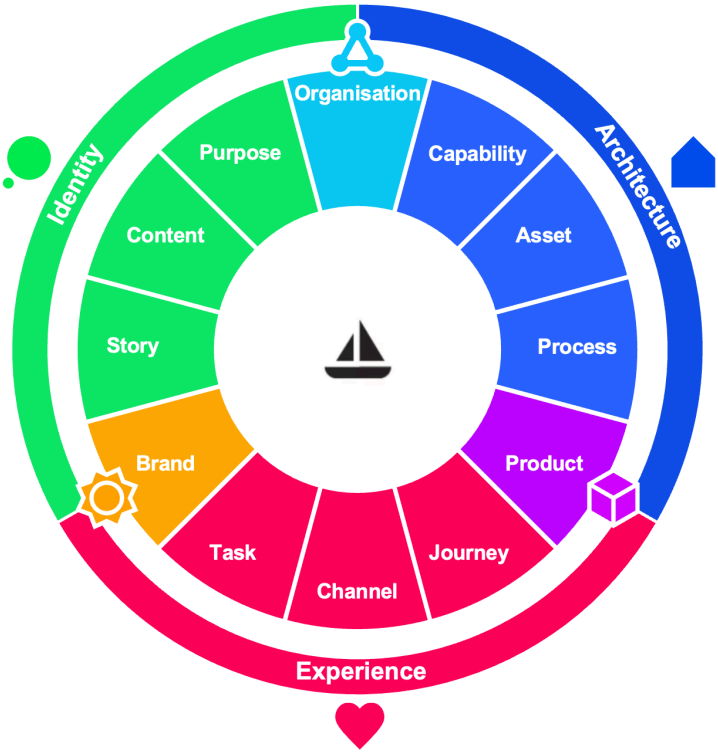


Figure 375: Enterprise Design Wheel sectors at high-level.

Analysis can be started on any sector, and then continued to adjacent sectors to any direction. The view can be taken from different viewpoints such as from enterprise, organisation, employee or customer viewpoint. The viewpoint can be placed in the middle of the wheel.



Figure 376: Enterprise Design Wheel and questions to be asked when visualising.

The Enterprise Wheel supports holistic thinking and considering all the elements. Enterprise elements around the Enterprise Wheel.

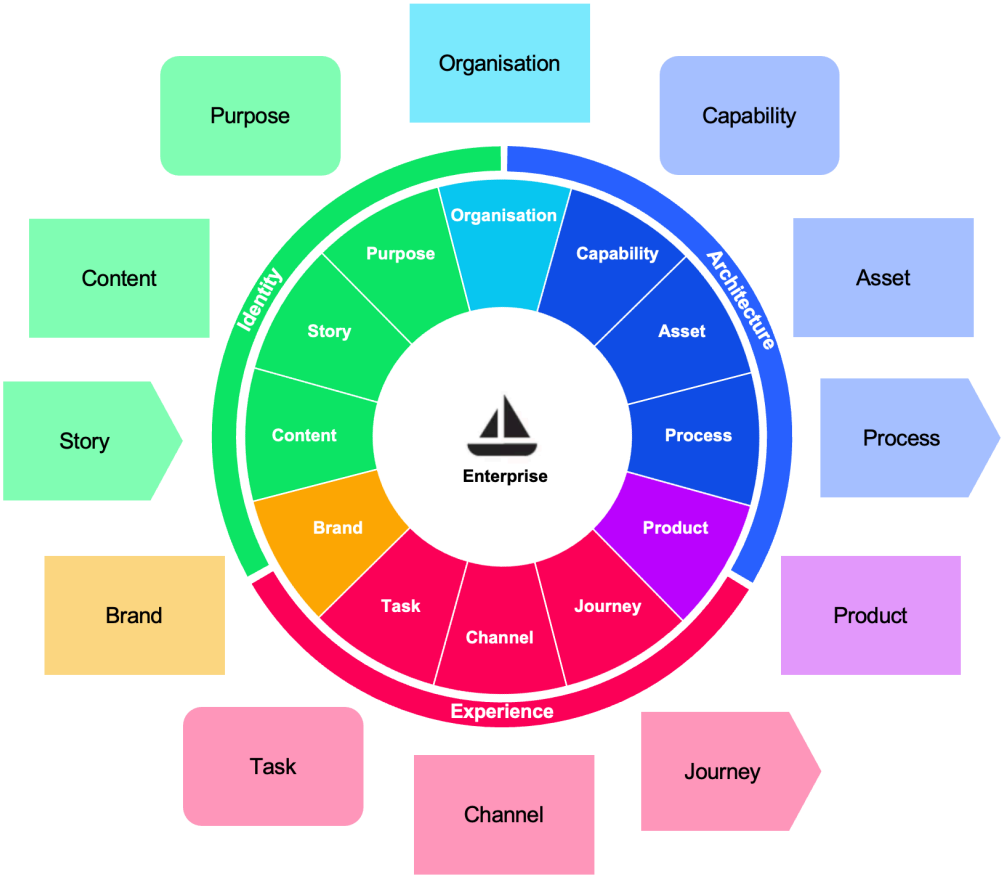


Figure 377: Enterprise Design Wheel and enterprise elements.

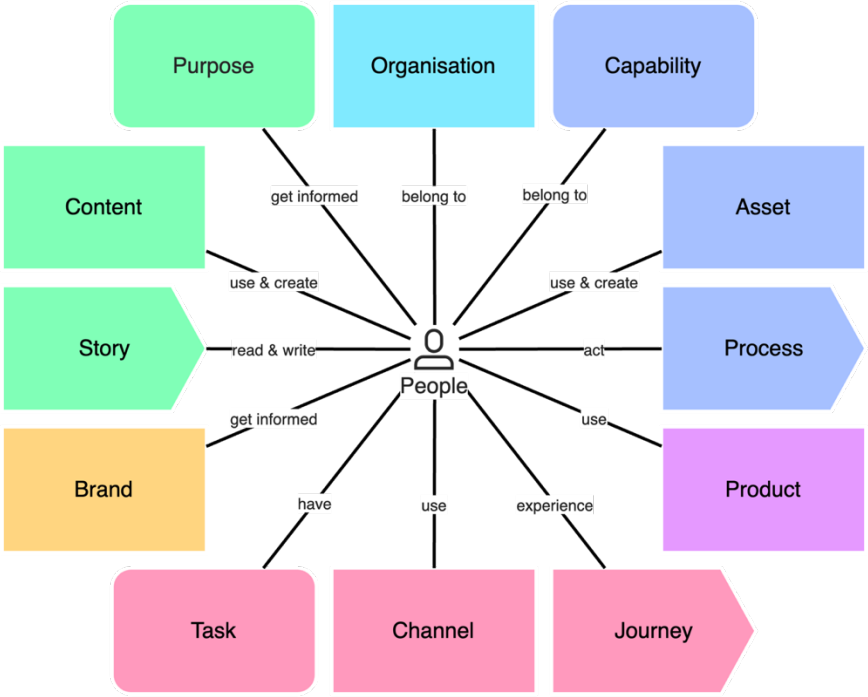


Figure 378: People focus.

7.2.7 Enterprise Design House

The *Enterprise Design House* (or *Enterprise House* for short) is a high-level approach for enterprise design. It introduces the main points of the enterprise design, starting from the

Identity perspective. As such, the Enterprise House is a management method. It covers strategic level on the top, then customer and architecture perspectives.

Enterprise Design House covers all the viewpoints visualised as layers. Enterprise Design House main floors shown below.

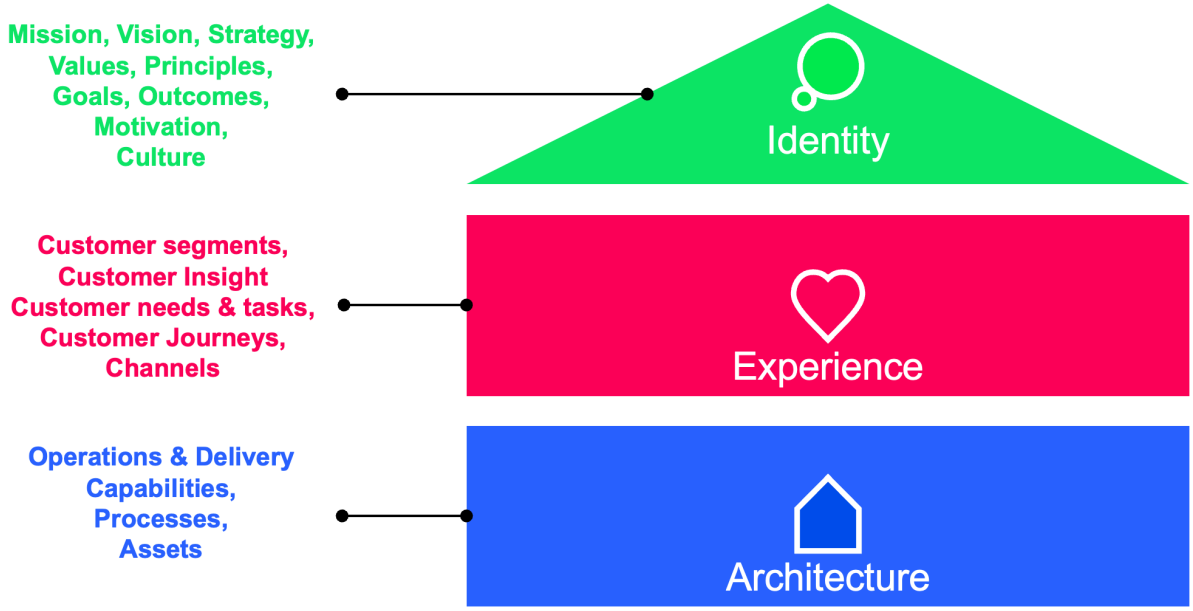


Figure 379: Enterprise Design House for high-level design of the enterprise.

This view can be used as a landing page in enterprise's content management tool (such as Confluence). This page provides a front page, a gateway to drill down into descriptions such as diagrams and maps.

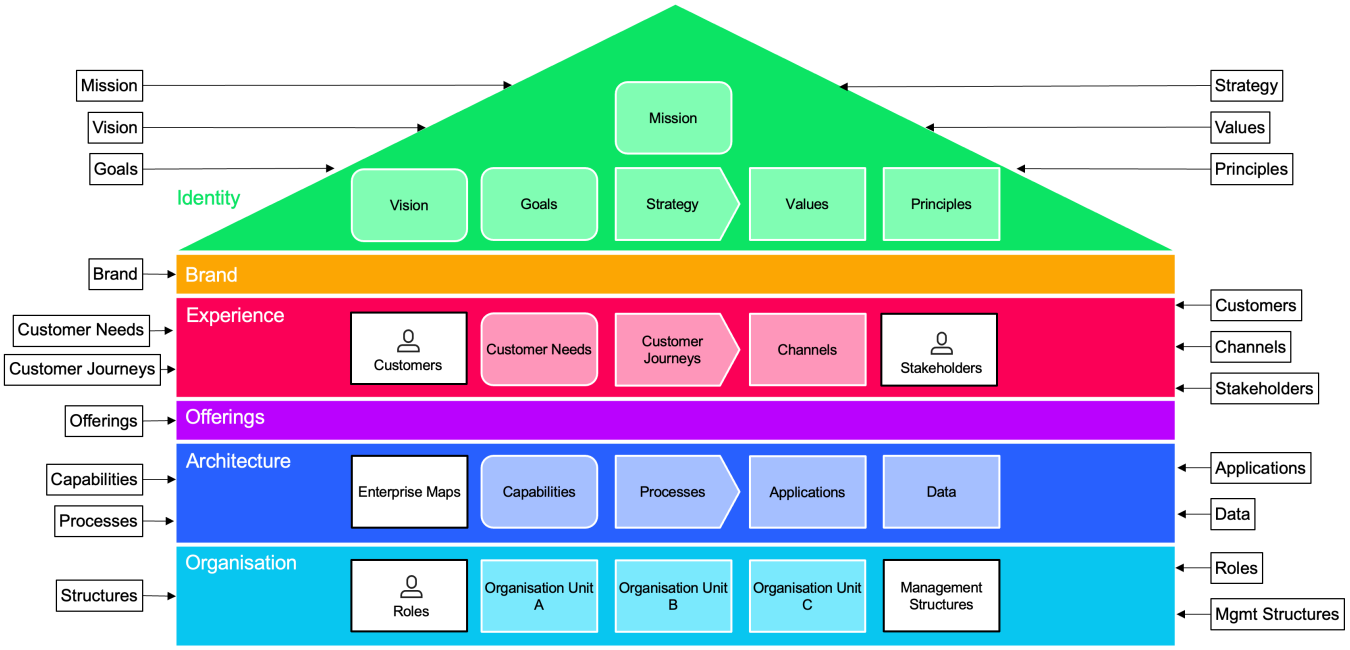


Figure 380: Enterprise Design house as a content framework.

Enterprise Design House with all the viewpoints visualised as layers can be used as an enterprise architecture framework and implemented in an EA tool (like Sparx EA, an example coming soon…).

7.2.8 Enterprise Framework

The Enterprise Framework is a tool for managing the elements of enterprise development. It can be implemented in any appropriate content management tool *)[52] that is used in the organisation. The framework is agnostic to visualisation languages and notations by default.

The purpose of the Enterprise Framework is to:

- Serve as the landing page of all the content that covering the behavior and structure of the enterprise.
- Provide a conceptual content model for enterprise development across all involved disciplines (e.g., business owners, designers, architects, and developers).
- Maintain all design and development descriptions and models in a centralised, easily accessible location.
- Maintain an inventory and track all enterprise elements relevant to understanding the enterprise.

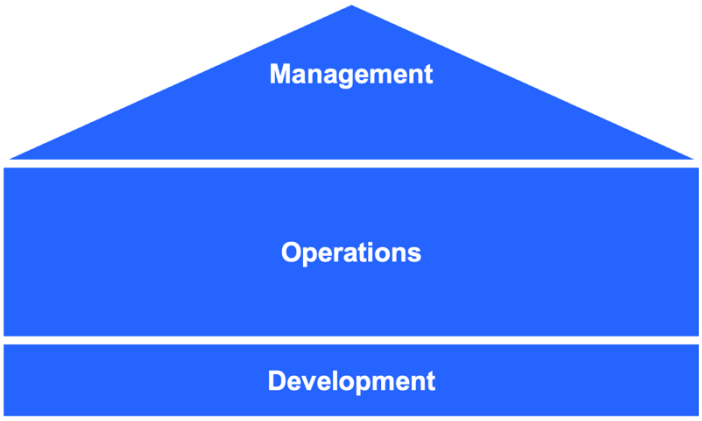


Figure 381: The Enterprise Framework at high-level.

This version is a template that can be adapted (adjusted & tuned) to fit the specific needs and context of the enterprise.

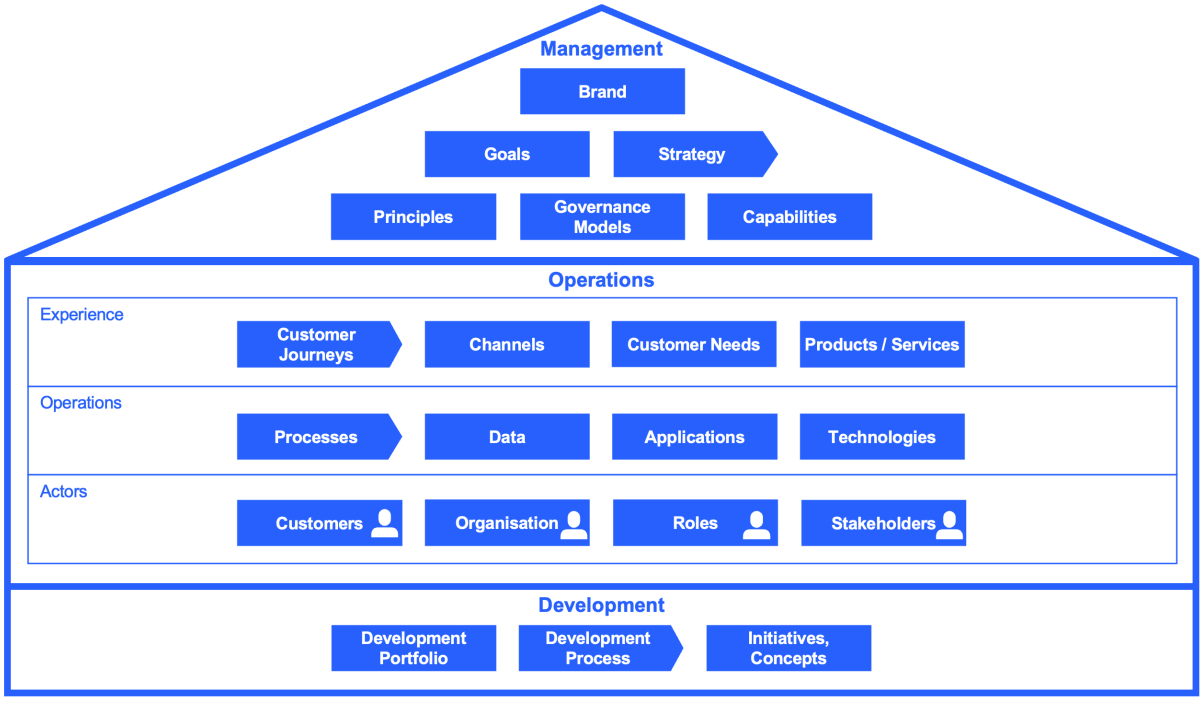


Figure 382: The Enterprise Framework at detailed level: content elements.

This framework can be used as a 'landing page' in a content management tool. For example, in the Confluence, this framework can represent the main page, the cover page into all the content in all the sub-pages in the organisation. The elements in the 'house' can be links to sub-pages with specific content such as text, tables and figures. The figures can be made with

[52] *) Content management tools used in the organisation can be e.g. Atlassian Confluence (combining text, tables, and figures), an EA-tool such as QualiWare or BlueDolphin from ValueBlue – with which it is possible to use different languages that complete each other (such as EDGY, ArchiMate, BPMN).

an appropriate tool such as Draw.io (see: https://hosiaisluoma.fi/design/edgy-modelling-with-draw-io/).

The Enterprise Framework content can be adapted, adjusted & tuned to fit the specific needs and context of the enterprise: use relevant, appropriate elements.

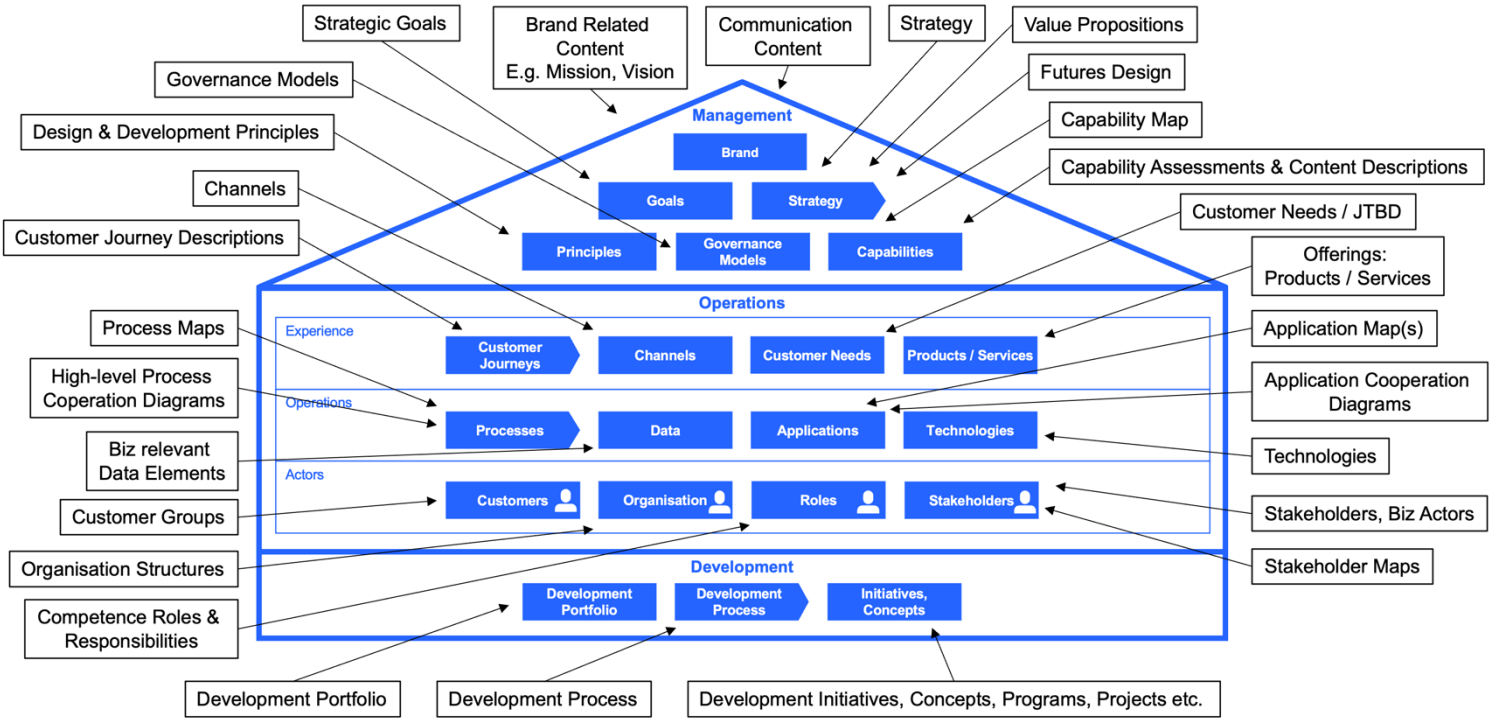


Figure 383: The Enterprise Framework contents.

Navigation in the 'House'. The 'House' elements support a drill-down effect: selecting an element opens a dedicated sub-page or figure for more granular detail. Each sub-page can act as a directory for related content, such as system landscapes or interaction diagrams. Alternatively, the link can open a specific diagram, such as a stakeholder map. However, the core idea is that each element on the 'landing page' acts as a link to a specific sub-page. These sub-pages can contain text, tables, and figures, or provide further links to deeper sub-pages related to the topic.

In this form, the 'House' model serves as the Enterprise Architecture framework, which can be implemented using an appropriate modeling tool or the enterprise's existing content management system.

Yet Another Framework (YAF), yes, but a simplistic and minimal one that can be used for various purposes, modified and applied to fit for purpose - whatever is appropriate in the case.

The Enterprise Framework is lightweight: it is easy to understand and use, simple enough to start with, modular, and quick to adopt and iterate.

Why Enterprise Framework? For:

- Flexibility: Works for any domain or scale.
- Clarity: Focuses on what matters.
- Collaboration: Simple enough for everyone to use – for multipurpose and multidisciplinary use.

Enterprise Framework is lightweight, flexible and collaborative.

Principles: designed to be simple, modular, adaptable and purpose-driven.

- Simple: Contains only what's necessary, what is typical and common for enterprises.
- Modular: Components (elements) of the framework can be added, removed, or replaced – as needed.
- Adaptable: Fit for purpose, use those components and elements that are relevant in the context.
- Purpose-driven: Always ask "why" before "how" or "what" when adding things.

Best practices:

- Visual notation:
  - Use what is common to most of the people involved in the enterprise development.
  - Use a simple, shared notation to communicate with all the disciplines and stakeholders. E.g.
    - Boxes for entities (organisations, applications, data elements etc.)
    - Arrowed lines for relationships or flows (e.g., value, information, dependencies).
    - Straight lines for associations between elements (such as entities)
    - with connection lines (straight lines or arrowed lines)

Anti-patterns (what not to do):

- Overcomplicate: If it feels heavy, you're doing it wrong. Adapt to the situation, don't force-fit.
- Set in Stone: Frameworks should adapt and evolve with needs.
- Jargon Overload: Keep it understandable for all stakeholders.

The Enterprise Framework is the next evolutionary step from the so-called *Lean EA Framework* that integrates the enterprise architecture discipline into the overall development work in an organisation. The Lean EA framework is introduced here:

- *Lean Enterprise Architecture Method for Value Chain Based Development in Public Sector*
- https://hosiaisluoma.fi/Hosiaisluoma_etal_ECDG2018.pdf
- Research Gate link:
  - https://www.researchgate.net/publication/328560027_Lean_Enterprise_Architecture_Method_for_Value_Chain_Based_Development_in_Public_Sector

The Framework represents the behavior and structure of the enterprise.

Summary

The Enterprise Framework is a holistic tool for visualising and governing an enterprise's behavior and structure. Represented as a 'House' model, it serves as a bridge between high-level strategy and everyday operations and development activities.

- By providing a shared conceptual model, it ensures that all disciplines – from business owners and service designers to architects and developers – speak the same language and use the same content repository of enterprise elements (see https://hosiaisluoma.fi/design/enterprise-elements/).

Ultimately, the Enterprise Framework is a living repository. It prevents organisational silos by keeping all design and development descriptions in one findable location, ensuring that any change – whether a new regulation, a service, or an application update – is understood within the context of the whole enterprise.

The Enterprise Framework serves as the foundation for an Enterprise Digital Twin, providing a virtual representation of the enterprise's behavior and structure. It acts as a centralised source of truth, supporting both strategic decision-making and continuous enterprise development.

Enterprise Design with EDGY
Cookbook *by Eero Hosiaisluoma*

Key Concepts:

1. The ‘House‘ as a Navigation Hub.
    a. The core of the framework is a visual “landing page” (the House). This model organises the enterprise into logical layers, typically moving from the “Why” (Strategy) down to the “How” (Technology).
    b. Roof (‘Management’):
        i. Strategy, Vision, and Identity.
    c. Middle Floors (‘Operations’, the ‘foundation’):
        i. Customer Experience View: journeys, channels, offerings
        ii. Operations and Architectural View: Processes, data, applications, technologies.
        iii. Organisation and Business Actor View: organisation structures, roles, stakeholders.
    d. Bottom layer (‘Development’).
        i. The bottom layer focuses on the change and innovation of the operations. It describes how the enterprise evolves and builds new capabilities.
        ii. Content: Development programs, projects, architecture principles, and the “Systems of Innovation” or new technology pilots.
        iii. Purpose: To ensure the continuous improvement and future-proofing of the enterprise
2. The Drill-Down Effect.
    a. The framework is designed for layered navigation. A user can start at the high-level House view and “drill down” by clicking on specific elements. This leads to:
        i. Detailed sub-pages: Containing text, tables, and specific descriptions.
        ii. Visual diagrams: Such as stakeholder maps, system interaction diagrams, or process models.
3. Tool-Agnostic Implementation.
    a. The framework is not tied to a specific software platform. It can be implemented in:
        i. Modeling tools: (e.g. QualiWare, BlueDolphin from ValueBlue or Sparx EA) for deep architectural analysis.
        ii. Content Management Systems (CMS): (e.g. Atlassian Confluence) for wide organisational accessibility and collaboration.
    b. The framework is also notation-agnostic, meaning it does not restrict the user to a single modeling language. Instead, it allows for the use of the most appropriate notation for each purpose.
        i. It supports a multi-layered approach where different modeling languages complement each other based on the level of abstraction. High-level strategic designs and conceptual models are often best represented with EDGY, whereas detailed process flows and system architectures can be further refined using specialised notations like BPMN, ArchiMate, or UML.
        ii. Ideally, the framework enables the interoperability of different languages: for instance, high-level concepts and sketches can be created using EDGY, while more technical or granular details can be documented using BPMN, ArchiMate, or UML as needed.

Modern versions of the framework can incorporate the EDGY language, which balances three critical facets:

- **Identity**: What the enterprise is (Purpose, Mission, Vision, Goals, Brand).
- **Experience**: How the enterprise is perceived (Customer/Employee journey).
- **Architecture**: How the enterprise is operating (Processes, data, applications, technologies).

7.2.9 Enterprise Design Triangle

The *Enterprise Design Triangle* (or *Enterprise Triangle* for short) is another approach for enterprise design.

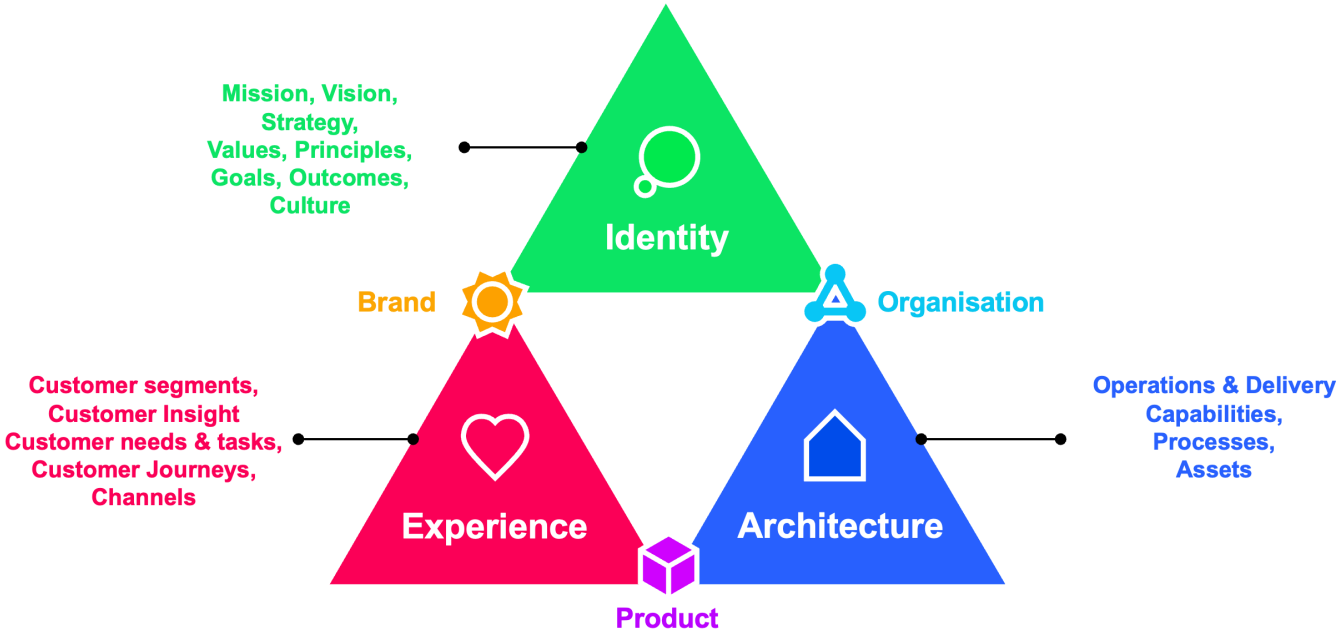


Figure 384: Enterprise Design Triangle.

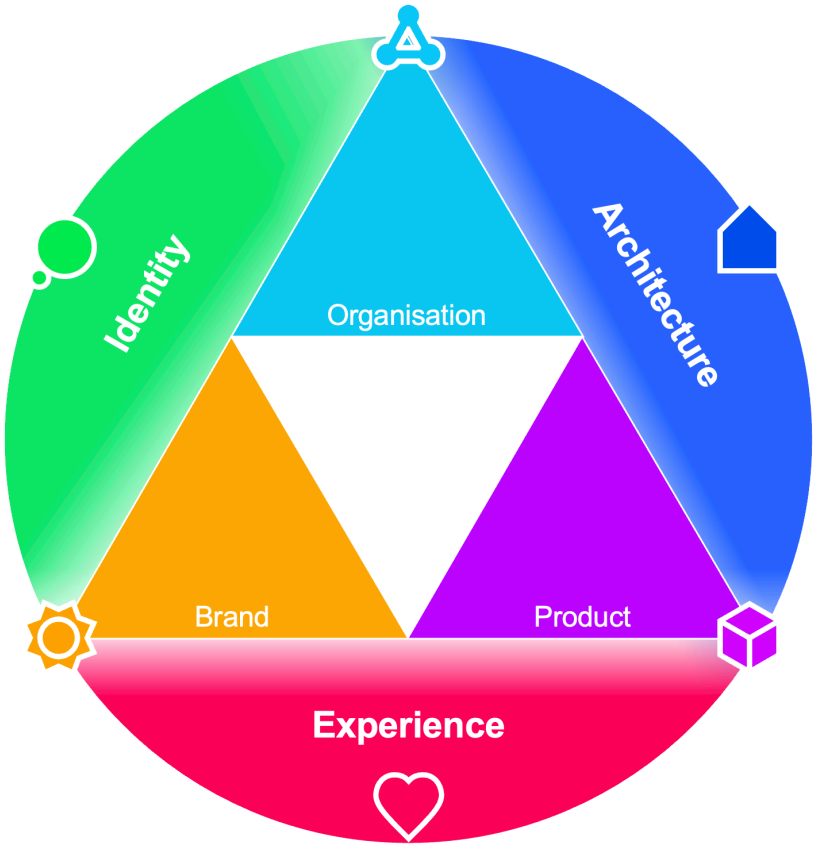


Figure 385: Enterprise Design Triangle model.

7.2.10 Customer-Driven Design Approach

To start from the Experience forces us to take the customer first approach and analyse first the customer needs that can be served. The Facet Model can be used as a checklist in design.

Customer First -approach – Experience Perspective - WHAT			
Step	Description		Diagram Type
1	Identify customers, service providers, partners etc. (EDGY People)		Stakeholder map
2	Identify customer needs (EDGY Task) with customer journeys		Service Blueprint
3	Identify products and/or services (EDGY Product)		Service Blueprint
4	Identify processes or capabilities (EDGY Process / Capability)		Service Blueprint
5	Identify organisation (EDGY Organisation) and roles (People)		Service Blueprint

Start with WHY -approach forces us to define the purpose first.

Start with Why -approach – Identity Perspective - WHY			
Step	Description		Diagram Type
1	Describe the brand, the name of the target area (EDGY Brand)		Identity Canvas
2	Define the purpose, the mission (EDGY Purpose)		Identity Canvas
3	Define the content, what we do (EDGY Content)		Identity Canvas
4	Define the story: past, current, future (EDGY Story)		Identity Canvas, Story Map
5	Identify who we are (EDGY Organisation)		Identity Canvas

Wrapped within a capability element (EDGY Capability).

Operational Business – Architecture Perspective - HOW			
Step	Description		Diagram Type
1	Introduce offerings, products and/or services (EDGY Product)		Capability Canvas
2	Define processes (EDGY Process), how		Capability View, Process View
3	Define resources (EDGY Asset), with what		Capability View
4	Define organisation and people (EDGY Organisation, People), who		Stakeholder Map

Roadmap - WHEN			
Step	Description		Diagram Type
1	Define the drivers for change (EDGY Outcome)		Goals View
2	Define the qualitative goals how the target area is to be changed (EDGY Purpose)		Goals View
3	Define the outcomes that are to be achieved (EDGY Outcome)		Goals View
4	Define the actions to be taken (EDGY Activity)		Action Plan, Roadmap

7.2.11 How Might We (HMW)

The "How Might We" (HMW) approach is a problem-framing technique used in design thinking and innovation processes to turn challenges into actionable questions that inspire creative solutions. This approach helps people (in organisation, unit, group, or team etc.) reframe problems in a way that is open-ended, optimistic, and focused on possibilities, making it easier to brainstorm, explore, and generate ideas. This approach aims to find new solutions without getting stuck on predefined problems.

The purpose of the HMW approach is to break down challenges into manageable and inspiring questions. This allows people to view problems from a new perspective, encouraging creativity and promoting collaborative problem-solving.

Each question begins with "How might we…" and is followed by a specific problem or challenge. The phrasing encourages people to explore various possibilities ("how"), maintains optimism ("might"), and suggests collaboration ("we").

Breaking challenges into manageable and inspiring questions "How might we…".

Steps:

1. **Define the Problem or Challenge**: Start with a clear understanding of the problem or design challenge. Gather insights from user research, data analysis, or stakeholder input to get a well-rounded view of the issues.
2. **Generate "How Might We" Questions**: Break down the problem into smaller, actionable questions using the "How Might We" format. This is done by focusing on specific aspects of the problem that could lead to innovative solutions.

   Examples:

   - "How might we make the support process faster for customers?"
   - "How might we reduce waiting time without compromising service quality?"
   - "How might we improve the support experience for customers while they wait?"
3. **Refine the Questions**: Refine your HMW questions to be neither too broad nor too narrow. Broader questions can generate more ideas, while narrower ones can lead to more specific solutions. Striking a balance between the two can foster productive brainstorming.

   Example:

   - Instead of: “How might we improve customer experience?”
   - Try: “How might we create a more engaging waiting experience for customers?”
4. **Brainstorm Solutions**: Use the HMW questions as starting points for brainstorming sessions. Encourage participants to generate a variety of ideas without judgment or immediate filtering. The open-ended nature of HMW questions inspires creative thinking and exploration.

   Example:

- For “How might we create a more engaging waiting experience for customers?” ideas could include interactive wait-time updates, entertainment options, or self-service support tools.

5. **Evaluate and Prototype Ideas**: After brainstorming, review the ideas generated for each HMW question and select the most promising solutions to prototype and test. The goal is to explore ideas that could address the challenge effectively.

   Example:

- A prototype for the customer support experience might involve testing a digital interface that provides real-time support updates.

The "How Might We" approach is a powerful tool in design thinking and problem-solving. By breaking challenges into actionable, open-ended questions, it encourages innovative

thinking, teamwork, and solution-oriented exploration, making it an effective technique for organizations aiming to solve complex challenges creatively.

EDGY elements can be used for modelling the design challenge and *How Might We* -sentences. The Enterprise Design Facet Model helps thinking from different perspectives and facilitates and fosters ideation. Template shown below:

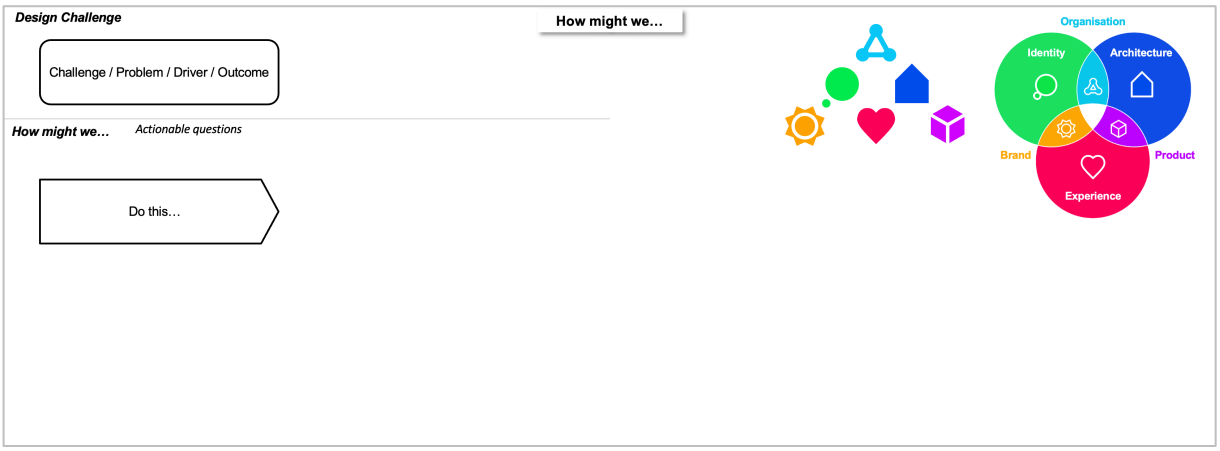
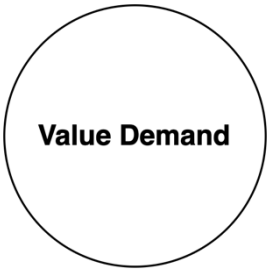


Figure 386: "How might we (HMW)" analysis template.

The "How Might We" approach is a tool in design thinking and problem-solving.

7.2.12 Value Demand and Failure Demand



Value demand is "normal, healthy basic demand" that arises from customer needs (tasks, jobs to be done), to which the organisation responds by offering appropriate services and/or products.

Failure demand is unnecessary additional demand that arises when customer needs have not been met, and the customer has to return to the service. Failure demand is a significant cause of inefficiency and cost escalation in organisations.

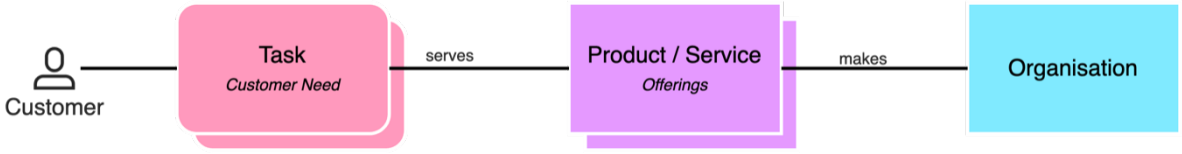


Figure 387: Customer meets the organisation at the service interface.

Value Demand describes a situation where customers have needs for which they seek products or services to help them achieve their desired outcome. Customer needs are tasks that customers want to accomplish (jobs to be done). Value demand is thus a situation where customer needs meet the services and/or products offered by the organisation.

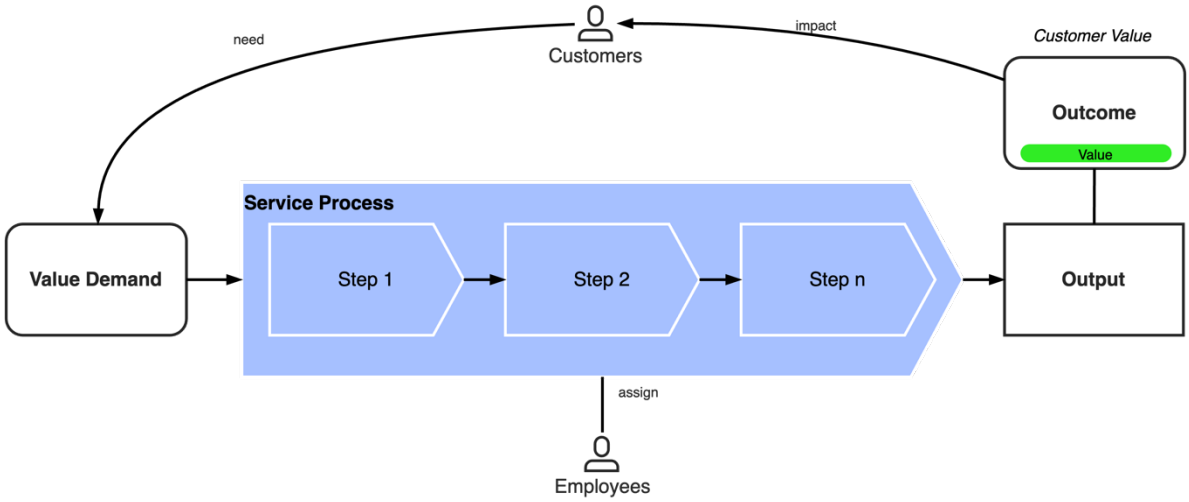


Figure 388: Value Demand.

If the organisation successfully responds to value demand in a way that meets the customer's needs, that is, the outcome produced by the services and/or products benefits the customer, the customer feels they have had a good customer experience. Customer value is therefore the benefit, the added value that the customer feels they receive if the service and/or product meets their expectations. In other words, there is a benefit from the service and/or product, which can manifest in different forms. For example, the customer solves their problem or completes their task, or saves time if the use of the service and/or product speeds up the completion of their needs or tasks. The benefit can also be in the form of saved money, as the customer can complete their task more affordably.

Customer experience and customer value are based on the quality of the service and/or product. Quality determines the customer experience and the associated benefit perceived by the customer.

An organisation responds to value demand with its offerings (products and/or services).

What, where, when - and why? It is important to understand what the customer needs, why they need it, where (the situation, context) they need it, and when they need it. This information is called customer insight, which is obtained by collecting information about the customer's actions, asking about the customer's needs and motives. Customer insight can be obtained utilizing service design and data analytics methods. In this sense, it is paramount to start from customer needs.

Customer need creates value demand. The organisation aims to respond to this demand with its services and smooth processes. From a holistic perspective, the organisation should strive to respond to demand, i.e., customer needs, and then tailor its services and operations to meet this demand. As a result of focusing on creating customer value, the organisation also generates business value.

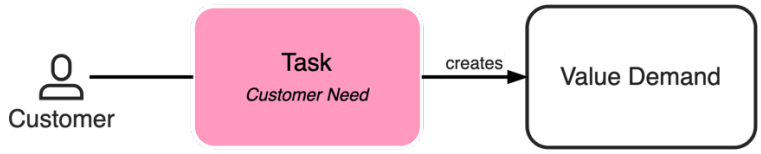


Figure 389: Customer need creates value demand.

From the organisation's perspective, it is essential to focus not only on customer needs or expectations but also on service delivery, i.e., how the service process and employees' function. It is worthwhile for the organisation to tune this operation to be as smooth as possible, following the Lean philosophy by maximizing flow velocity and minimizing

unnecessary 'waste,' valueless activity. In this regard, the organisation can leverage technologies such as artificial intelligence (AI) and robotic process automation (RPA).

It is worth noting that satisfied employees serve customers well. The better the work environment, the more likely customers are to receive good service. In this sense, employee satisfaction contributes to customer satisfaction, meaning that employee experience affects customer experience.

To ensure smooth operation and the quality of value demand, it is recommended to proceed in the following order when changing or renewing operations:

- Identify customers/customer groups, as well as other stakeholders (using Stakeholder Map)
- Identify customer needs and customer journeys (using Service Blueprint).
- Identify services and/or products offered to customers for their needs, from which customers benefit.
- Identify organisational processes related to service delivery (and necessary information systems if needed).

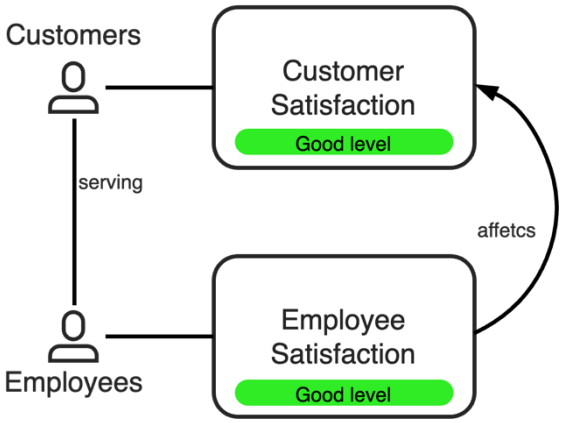


Figure 390: Employee satisfaction affects customer satisfaction.

Value demand creates customer value and business value.

Failure Demand. Avoidable unnecessary additional demand, failure demand, describes a situation where the outcome of the service does not meet the customer's expectations. The customer has to return to the service with additional needs, either during or after the service process. Failure demand is the result of poor or unsuccessful service by the organisation. Therefore, both customer experience and employee experience are poor: the customer experiences unnecessary trouble, and the organisation faces unnecessary additional work and costs. Failure demand 'disturbs' smooth customer service and smooth business operations.



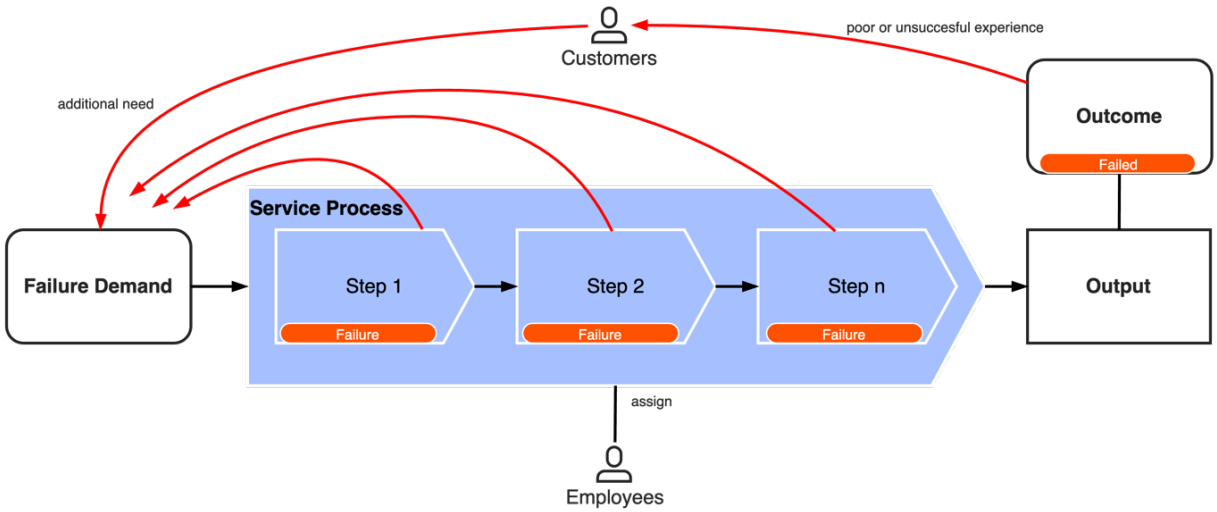


Figure 391: Failure demand creates unnecessary additional demand in the service process when the service does not meet the customer's expectations.

Failure demand is the result of failed or inadequate service by the organisation, leading to a poor customer experience and causing unnecessary additional work for the organisation.

Mismatch problem - Customer needs and organisational offerings do not meet.

The misalignment, or gap, between customer needs and an organisation's offerings - referred to as the "matching problem" - occurs when there is either no suitable service available to meet customer needs or when the appropriate service exists but is not available at the right time. When customer needs and organisational offering (supply) are not aligned, it results in a matching problem, which often leads to failure demand.

The mismatch problem, or matching problem, occurs when an organisation's offerings do not meet the customers' needs.

"Failure to serve the customer properly leads to additional demands from the customer. This dissatisfaction burdens the organisation, tires employees, and increases costs. This phenomenon is known as failure demand. It occurs when the customer receives the wrong service, no service at all, or only a partial service. The issue lies not with the customer but with the organisation. Failure demand is always a clear signal that the interaction between the organisation and the customer is not functioning effectively." [Hyytiälä, H.]

Failure demand is demand that we do not want.

What is the actual problem? Why is failure demand problematic, and why should it be addressed? Why not just acknowledge that such a phenomenon exists, occurring occasionally? Failure demand has consequences that are problematic for all parties involved (according to H. Hyytiälä):

1. **Availability and Quality of Services Deteriorate**: This reflects a quality issue, where unnecessary bouncing from one counter to another or repeatedly addressing the same issue causes customer frustration.
2. **Increased Burden on Organisational Resources**: This indicates a capacity problem, where the volume of unnecessary work detracts from value-producing activities, putting additional strain on organisational resources.
3. **Rising Costs**: This is an economic or cost issue, where unnecessary work leads to increased costs, both direct and indirect, such as additional time, raw materials, and other resources

These issues are significant for customers, organisations, and, more broadly, for society and the economy as a whole. Therefore, it is crucial to address failure demand. Ideally, this should be done proactively to prevent or reduce its occurrence. Reducing failure demand is economically beneficial, as it enhances both customer and employee satisfaction. Fewer instances of failure demand led to greater satisfaction and a better overall experience with the organisation and its services.

Failure demand occurs when a customer must return to a service because the initial outcome did not meet their expectations.

Causes of Failure Demand. When a customer's needs and an organisation's offerings do not align, failure demand arises. This creates a negative cycle that is harmful to the organisation and, more importantly, undesirable for the customer. The customer fails to receive optimal service, and their needs are not met as expected.

The root causes of failure demand are:

1) Poor understanding of customer needs and situation: When the organisation does not fully grasp what the customer needs or their specific context.
2) Ineffective service processes: When the processes in place are not efficient or effective in addressing customer needs, when service processes are dysfunctional, characterized by ambiguity, inaccuracy/imprecision, uncertainty, and lack of systemization:
    a. Ambiguity about the customer's situation.
    b. Imprecision regarding the customer's needs.

c. Uncertainty and Data Gaps in the process of meeting the customer's needs, resulting in the customer being "bounced around."
d. Inefficient and Disorganized Operations, including duplication, inconsistency, or inadequacy: incorrect information is requested from the customer at the wrong stage, or too much or too little information is sought, leading to a failure to meet the customer's needs on the first attempt.

Both issues are the responsibility of the organisation. They are self-inflicted problems that result in dissatisfaction for both the customer and the organisation. Failure demand is not unexpected; it arises from a lack of proper understanding of both customer needs and organisational actions.

These causes highlight various factors that contribute to failure demand, emphasizing the need for improvements in service delivery and organisational processes.

The root causes of failure demand are:
1) a poor understanding of the customer's needs and situation, and
2) dysfunctionality in the service process.

List of causes of the failure demand in the table below.

Causes of Failure Demand	
Cause	Description
Poor Service Quality	The service provided does not meet the customer's expectations or needs.
Incomplete or Incorrect Information	Customers receive incorrect or insufficient information, leading to misunderstandings or errors that require further assistance.
Inefficient Processes	Organisational business processes are inefficient, causing delays, errors, or repeated interactions.
Lack of Communication	There is inadequate communication between the organisation and the customer, leading to confusion or unmet expectations.
Service Gaps	There are gaps in the service offering, such as missing features or unavailable services, that lead customers to seek additional support.
Error Resolution	When mistakes or errors occur and require additional follow-up to correct them.
Inadequate Training	Employees lack the necessary training to address customer needs effectively, resulting in repeated customer interactions.
System Failures	Technical or system issues hinder service delivery, forcing customers to return for resolution.
Misalignment of Expectations	There is a disconnect between what customers expect and what the organisation delivers, leading to dissatisfaction and additional demands (failure demands).

A common list of consequences shown in the table below.

Consequences of failure demand	
Consequence	Description
Increased Operational Costs	Addressing repeated or additional demands leads to higher costs, including wasted time, resources, and employees.
Decreased Customer Satisfaction	Customers become frustrated when their needs are not met the first time, leading to dissatisfaction and a negative perception of the organisation.
Employee Burnout	Employees may become overwhelmed by the extra workload (also cognitive load) caused by repeated customer interactions, leading to stress, decreased morale, and burnout.
Reduced Efficiency	The organisation's processes become less efficient as time and resources are diverted to handling failure demand instead of value-adding activities.
Lower Service Quality	The overall quality of service deteriorates as the organisation struggles to meet both initial and additional customer demands.
Damage to Reputation	Persistent failure demand can harm the organisation's reputation, as customers share their negative experiences with others.
Loss of Business	Unsatisfied customers may choose to take their business elsewhere, resulting in lost revenue and market share.
Missed Opportunities	The focus on correcting past mistakes can prevent the organisation from innovating or improving its services, leading to missed opportunities for growth.

Summary of Failure Demand consequences:

- The customer does not receive the service they need and must return with additional requirements.
- The organisation incurs unnecessary extra work due to these additional demands.
- As a result, both the customer experience and the employee experience suffer.

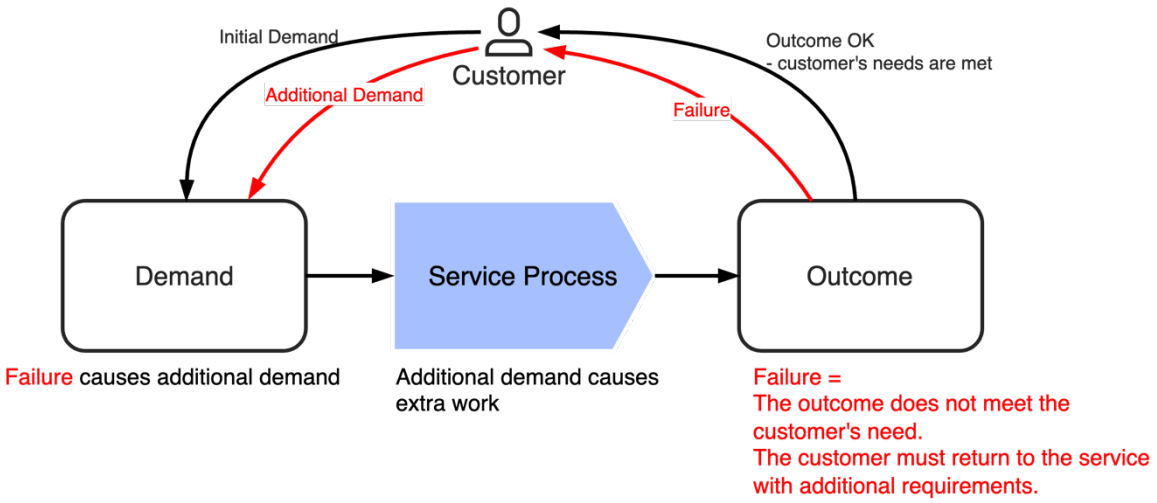


Figure 392: Failure demand causes extra work.

Failure demand burdens the organisation.

The additional work resulting from customers' unmet needs creates an illusion that the organisation is efficient because employees appear busy and have a lot to do. This illusion of efficiency - often referred to as the efficiency paradox - arises from the belief that a well-functioning organisation should ideally have no spare capacity [according to Modig, N., Åhlström, P.]. However, the reality is that a significant portion of this work may be unnecessary additional tasks.

From the customer's perspective, an organisation that seems resource-efficient and fully occupied may actually be slow and inefficient. The overload on capacity is often due to the unnecessary work generated by failure demand. While value demand creates meaningful work, failure demand leads to unnecessary additional tasks that burden the organisation without adding value.

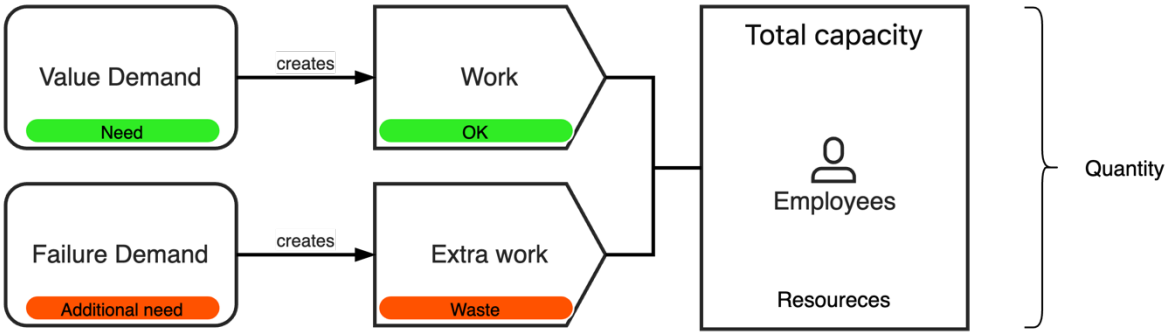


Figure 393: Value demand generates meaningful work, while failure demand results in unnecessary additional work.

"Is it possible that a significant portion of the work carried out in our organisations is simply waste? Perhaps we consider ourselves efficient because we manage thousands of tasks, but in reality, we are just squandering our resources. On a broader scale, what implications does this have for how we use resources at the societal level?" [Modig, N., Åhlström, P., *This is Lean*, 2013]

Failure demand may be the cause of the organisation's capacity overload.

How can the emergence of failure demand be prevented?

Failure demand arises from both a poor understanding of the customer's needs and situation, and issues within the service process. Both of these issues are caused by the organisation, and thus, both can be addressed by the organisation.

To address failure demand effectively, it is crucial to understand the customer's situation (context) and needs. This involves analyzing the customer journey and the supporting service processes. Together, these elements create a comprehensive, holistic framework that includes both:

a. The customer perspective, which focuses on understanding the customer's experience and requirements, and
b. The organisational perspective, which involves examining and improving the service processes that support customer interactions.

Understanding and addressing both perspectives are essential for reducing failure demand and improving overall service quality.

Preventing Failure Demand	
Means	Description
Improve Understanding of Customer Needs	Get Customer Insight. Develop a deep understanding of customer expectations through regular feedback, surveys, and direct interactions. Use this information to tailor services and improve accuracy in meeting needs. Use enterprise design methods and tools (incl. service design).
Enhance Service Processes	Streamline (Lean) and refine service processes to eliminate inefficiencies and reduce errors. Ensure that processes are well-defined and consistently followed to avoid ambiguity and miscommunication.
Invest in Employee Training	Provide comprehensive training for employees to ensure they have the skills and knowledge needed to effectively address customer needs on the first contact.
Utilise Technology and Automation	Implement technology and automation to improve accuracy and efficiency in service delivery. Systems that manage information, track customer interactions, and facilitate seamless service can reduce the likelihood of errors. Consider RPA and AI as solutions whenever appropriate.
Promote Effective Communication	Ensure clear and effective communication channels between the organisation and customers. Address any gaps in communication to prevent misunderstandings and misalignment of expectations.
Initiate Regular Reviews and Improvements	Regularly review and analyse service processes and customer interactions to identify areas for improvement. Implement changes based on these reviews to continuously enhance service quality.
Standardize and Systematize Operations	Develop and implement standardised procedures and guidelines to ensure consistency in service delivery. Systematising operations helps reduce variability and the potential for mistakes.
Monitor and Analyze Failure Demand	Track instances of failure demand to identify patterns and root causes. Use this analysis to address specific issues and prevent recurrence.
Encourage Feedback and Continuous Improvement	Create a culture of continuous improvement where feedback from both customers and employees is valued and used to make necessary adjustments.
Design for First-Time Resolution	Aim to resolve customer issues or requests on the first contact. Design processes and services with the goal of minimising the need for customers to return with additional requirements. "*Get it right the first time*".

Addressing failure demand requires an understanding of both customer behavior and organisational behavior.

To prevent failure demand, it is essential to transition to a customer-centric approach by effectively managing customer journeys.

The customer journey (or service journey) encompasses the complete experience of a customer when interacting with the services provided by an organisation. It includes all the actions and experiences of the customer throughout their engagement with the organisation. Understanding the customer journey provides valuable insights into the customer's situation (such as their life circumstances). With this understanding, with *customer insight*, the organisation can deliver services that are both timely and well-suited to the customer's needs. The organisation's goal should be to provide the right services and expertise at the right time.

Resolving failure demand begins with mapping out the customer journey, which is closely linked to the organisation's internal service processes. These perspectives converge at the service interface. The customer perspective views the service from the *outside in*, focusing on the customer's overall experience, while the organisational perspective examines it from the *inside out*, focusing on internal processes.

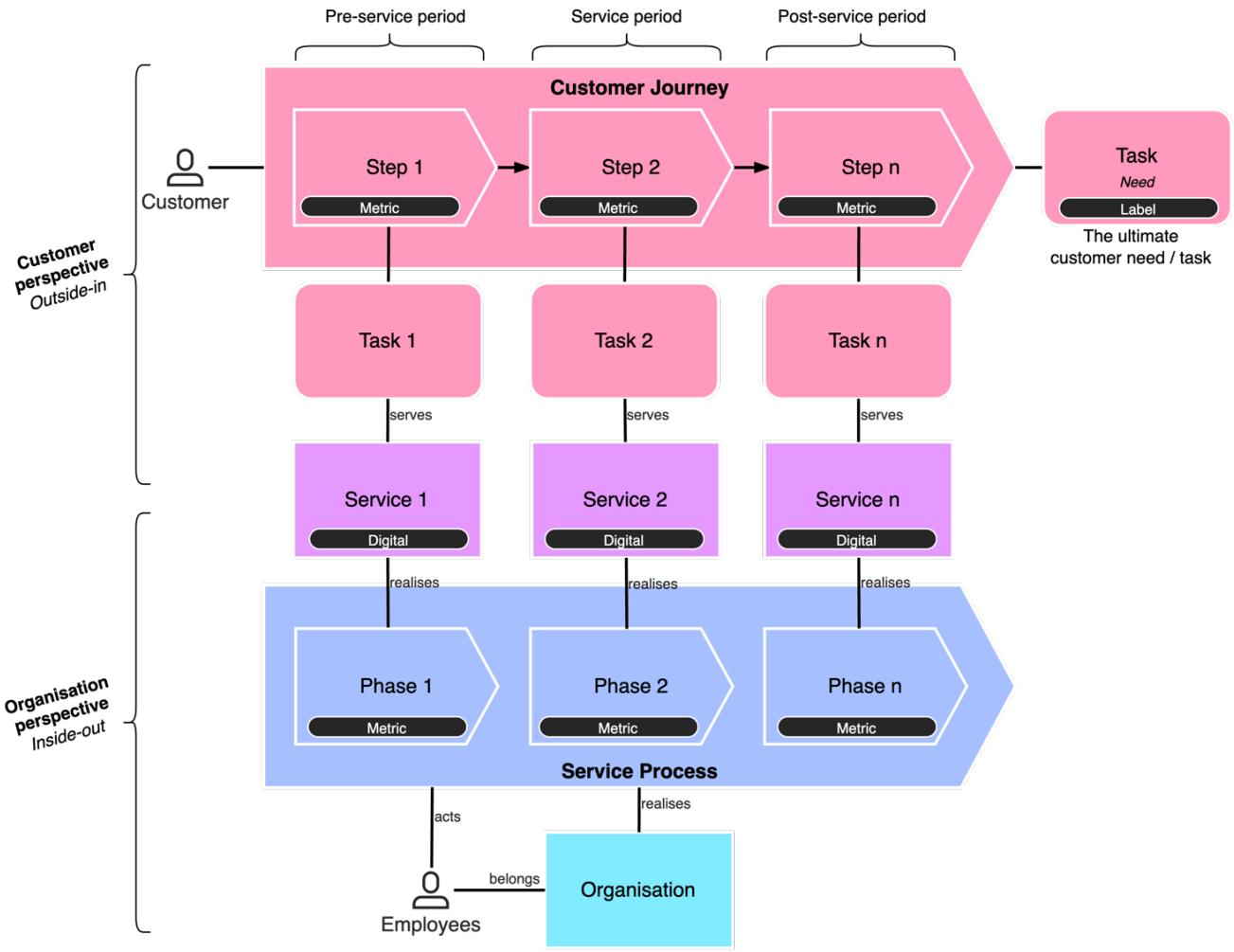


Figure 394: In a comprehensive analysis, the customer journey and internal service processes converge.

The most effective approach is to consider both perspectives holistically. This integrated view can be achieved through the Enterprise Design approach, which combines both perspectives and their respective methods.

A Service Blueprint is a descriptive tool that maps the customer journey in relation to the service delivery processes within an organisation. It highlights how the customer's interactions intersect with the organisation's operations through the service interface. As such, the Service Blueprint serves as a model that illustrates the interaction between the customer and the organisation, making it a valuable tool for analyzing both value demand and failure demand. Below is an example of a Service Blueprint.

Breaking down the customer journey into its components involves analysing customer feedback and process metrics to gain a comprehensive overview. This analysis allows for targeted interventions at individual customer touchpoints and process stages. By analysing both the customer service journey and the supporting organisational service process, we can identify pain points for the customer and organisational issues, addressing any dysfunctional steps in the service process. Process optimisation, following Lean principles, helps enhance flow efficiency and overall performance.

Understanding the customer's situation and needs can be achieved through service design techniques, while gaining insights into the organisation's operations is accomplished through business architecture. Together, these approaches form the Enterprise Design approach, which comprehensively examines both a) customer activities and b) organisational processes. Visualizing the entire process helps create a shared understanding.

It is valuable to describe processes in a way that is clear, quick, and easy for everyone to understand. EDGY is designed to be simple and straightforward while remaining expressive. It allows for the depiction of both customer and organisational activities in a way that facilitates discussions about necessary changes and fosters a shared understanding of the overall picture.

Enterprise Design begins with understanding the enterprise as a whole. This holistic approach allows us to view the organisation from all relevant perspectives, identify and explore key dependencies, and pinpoint the most significant leverage points for change. As a result, Enterprise Design integrates various disciplines to provide a comprehensive understanding and facilitate effective transformation. Enterprise Design is a valuable tool for preventing failure demand.

7.3 Enterprise Development Examples

Development is an overall process that can be divided into high-level phases such as *design*, *implementation* and *operations*. In other words, to *plan*, *build* and *run* phases.

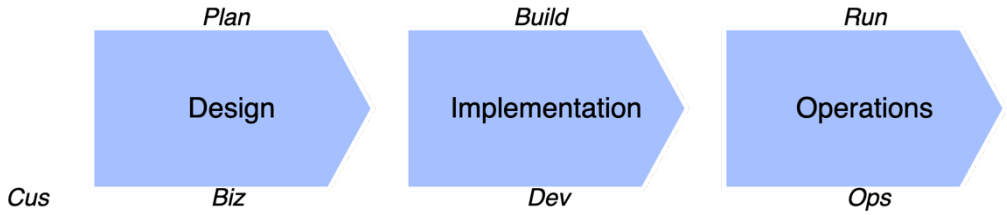


Figure 395: Plan, Build, Run -phases.

This overall process (Plan, Build, Run) can be supported by the Enterprise Design approach, which can be applied not only to design and implementation but also to the experience aspect.

By aligning motivations with the Identity facet, operations with the Architecture facet, and experiences with the Experience facet, the Enterprise Design Facet Model provides a robust framework for addressing the holistic needs of the enterprise. It ensures that strategic goals, operational systems, and user interactions are seamlessly integrated, driving value and long-term success.



Figure 396: Enterprise Design can be applied to support holistic enterprise development by covering all the aspects motivations, operations and experiences.

7.3.1 IT4IT Reference Architecture

The IT4IT Reference Architecture, developed by The Open Group, is a framework for managing the business of IT. It provides a vendor-neutral, technology-agnostic standard for managing the entire IT lifecycle, focusing on integrating and automating IT processes to deliver value more effectively. IT4IT is based on a Value Chain that aligns IT operations with business needs. It identifies key activities in the IT lifecycle that drive value to the organization.

The architecture is divided into four value streams that map to the end-to-end IT lifecycle:

1. Strategy to Portfolio (S2P): Focuses on aligning IT strategies with business objectives and managing the IT portfolio.
2. Requirement to Deploy (R2D): Manages the development and delivery of IT solutions, including Agile and DevOps practices.
3. Request to Fulfill (R2F): Streamlines how IT services and products are requested and delivered to consumers.
4. Detect to Correct (D2C): Covers monitoring, detecting, and resolving issues in IT services and infrastructure.

These four value streams can be mapped to phases *plan*, *build*, *deliver* and *run*.

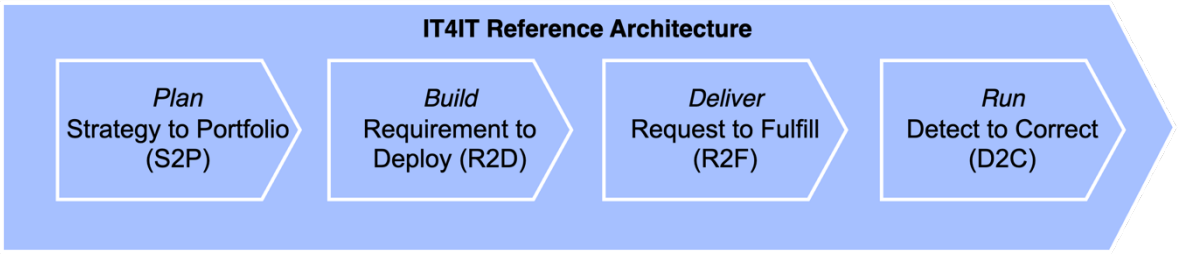


Figure 397: IT4IT value delivery chain.

IT4IT introduces Digital Product that is an unit of development.

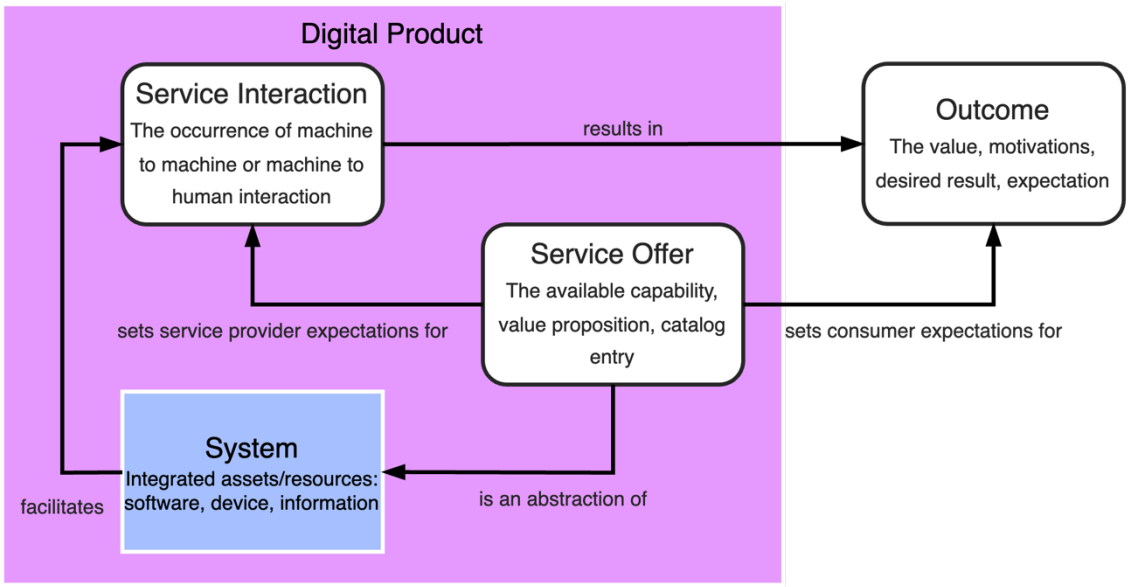


Figure 398: Digital Product (IT4IT).

Examples of Digital Products: eCommerce Websites, Mobile apps, Operational Technology (OT), smart devices, Digital Platforms (PaaS, SaaS, Low code/No code dev, content platforms (docs, videos etc.)). Operational Technology (OT): monitors, sensors, RPA and AI solutions etc.

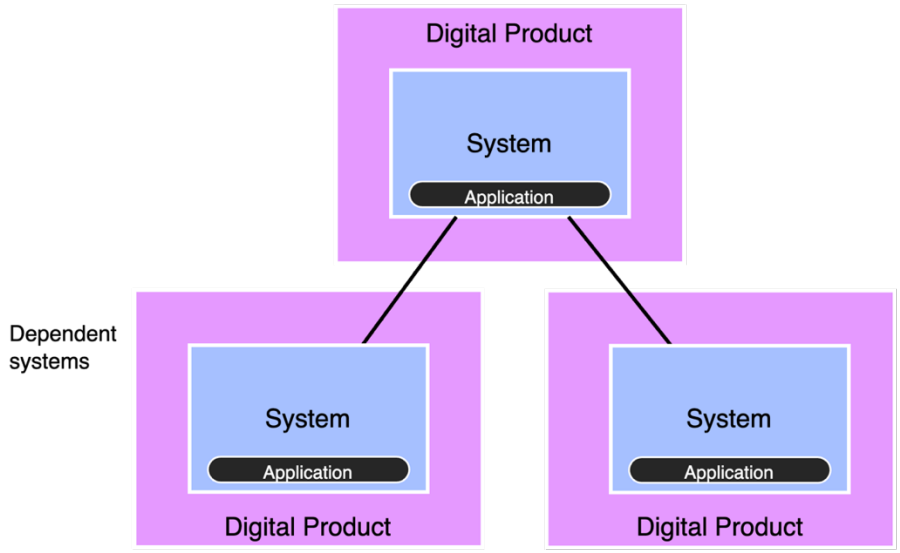
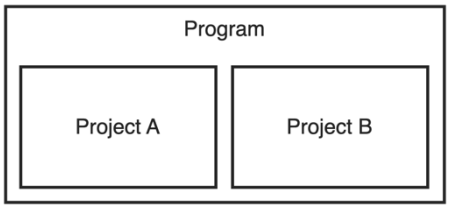


Figure 399: Digital Products may use other digital products (on system level).

7.3.2 Change Project or Program

All the changes in the enterprise should be derived from the business goals, as they define what are the changes we want make happen. Accordingly, all the change activities or -initiatives of the enterprise are related to the operations of the enterprise. However, the changes are affecting to the identity of the enterprise. It is important to identify the drivers reasoning and explaining why a change is needed, and then set the goals for the change.



A change project or program can be modelled with the *Object* element, as project or program is a structural construction, temporary organisation. Goals of a project can be modelled with the *Purpose*, deliverable with the *Object*, and triggering demand with the *Outcome* element.

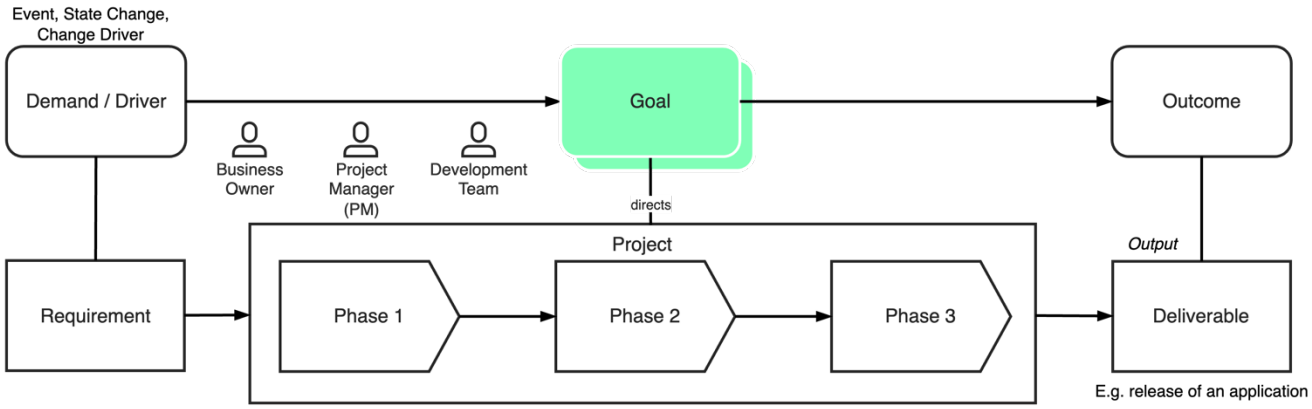
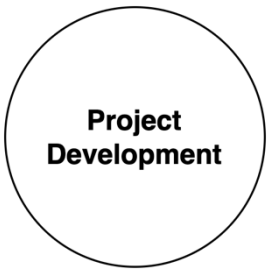


Figure 400: Change project or -program.

7.3.3 Project Development

The deliverable of a project can be e.g. a release of product (such as an application). The changes of an enterprise are related to the operational architecture of the enterprise. As such, the changes are affecting to concrete elements of the operations of the enterprise. Such operational elements are e.g. processes or assets (such as applications, facilities or devices).



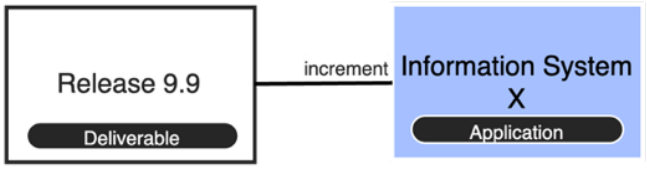


Figure 401: Release of a software project.

In the case of a software project, each phase can product a release as the output.

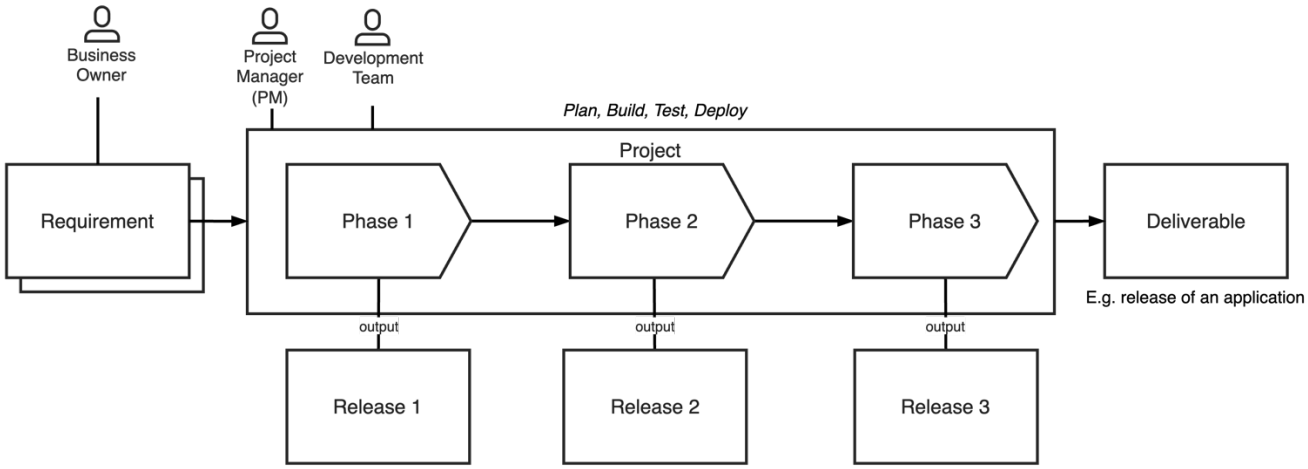


Figure 402: A software project with releases.

Projects are changes in the capabilities of the enterprise.

7.3.4 Project Management

Project Management triangle introduces primary constraints on any project (or program):

- **Scope** refers to the overall goals, deliverables and tasks need to be completed in the project. The scope defines what the project is supposed to achieve and includes expected outcomes.
- **Schedule** (or Time) represents the project timeline including deadlines for deliverables and the overall duration of the project.
- **Budget** (or Cost) represents what is allocated for the project. It includes all the required resources such as financial, labor/employee, tools and other costs.

The visualisation shown beside. The quality in the center of triangle represents the balancing factor. The quality is affected by balancing scope, schedule and budget.

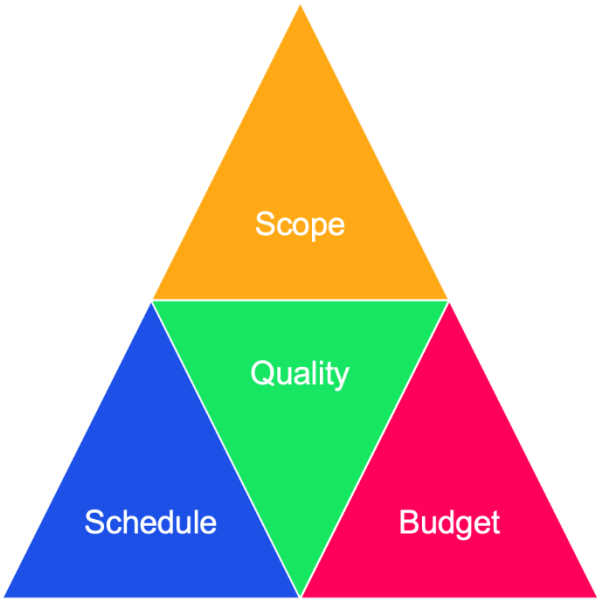


Figure 403: Project Management Triangle.

7.3.5 Product Development

Product development in an organizational context refers to the structured process of designing, creating, and bringing a new product or improving an existing product to production environment that is used by the business operations.



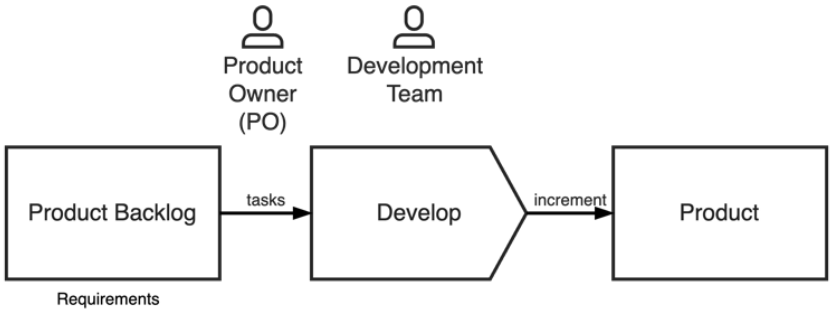
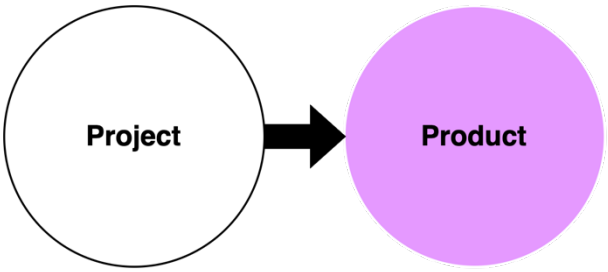


Figure 404: Product Development.

The "**From Projects to Products**" paradigm change refers to a shift in how organisations approach software development, delivery, and operational models. It involves moving away from a project-based mindset, which focuses on temporary, isolated initiatives, to a product-based mindset, which emphasizes long-term ownership, continuous improvement, and delivering value to customers through sustained investment in products.



The "From Projects to Products" paradigm shift reflects a fundamental change in how organisations operate, focusing on long-term value creation rather than short-term deliverables. This approach aligns with modern customer expectations, technological advancements, and the need for agility in dynamic business environments. While it requires cultural and structural changes, it ultimately enables organisations to deliver better, faster, and more customer-focused results.

Differences Between Projects and Products		
Aspect	Project-Based Approach	Product-Based Approach
Focus	Temporary, specific scope and deliverables.	Continuous delivery of value to customers.
Ownership	Managed by temporary project teams.	Long-term ownership by dedicated product teams.
Timeline	Time-bound with a defined start and end.	Ongoing with no predefined end date. Follows the product life cycle (plan, build, deliver, operate/run, improve, retire).
Success Metrics	Completion of scope within budget and time constraints.	Customer satisfaction, business outcomes, and adaptability.
Goal	Deliver a set of predefined outputs.	Solve customer problems and adapt to evolving needs.
Funding	Fixed budget for each project.	Continuous funding based on value delivered.
Mindset	Task-oriented and delivery-focused.	Outcome-oriented and value-focused.

Why the shift is happening?

1. Customer-Centricity:
    a. Customers increasingly expect continuous innovation, support, and updates.
    b. A product-oriented approach ensures organisations focus on customer needs rather than simply completing a project.
2. Agility and Adaptability:
    a. The project-based approach often struggles to adapt to rapid changes in market demands or technology.
    b. A product-based approach allows organizations to pivot and evolve their offerings over time.
3. Value Creation:
    a. Projects often focus on completing tasks, while
    b. products focus on delivering measurable, ongoing business value and solving real-world problems.
4. Technological Advancements:
    a. Modern technologies like cloud computing, DevOps, and Agile methodologies favor continuous delivery and iterative improvements, aligning better with product-based thinking.

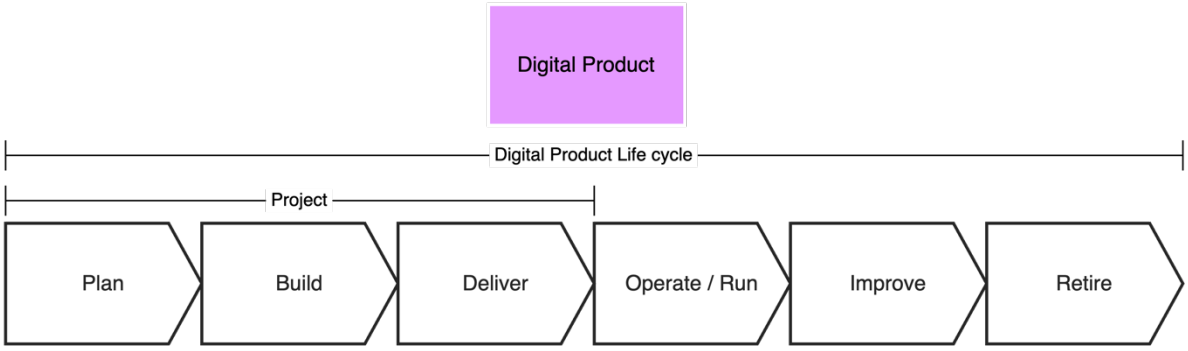
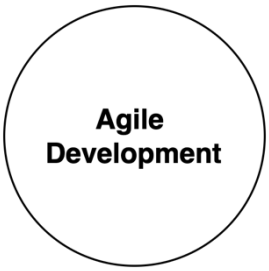


Figure 405: Digital product life cycle.

7.3.6 Agile Development

Agile development is a modern approach to software development and project management that emphasizes flexibility, collaboration, incremental progress, and the ability to quickly adapt to changes.



Agile methods and frameworks such as Scrum and SAFe promote iterative and incremental development, which performed in time boxed manner. The Scrum method is based on the following aspects and phases:

- **Product Backlog**, a list of desired work, requirements. Prioritized, prepared and estimated list of items for to be selected to sprint
- **Sprint**, a development period of few weeks (e.g. 1 to 4 weeks) that produces a product increment
- **Product Increment**, a version, a release of the product
- **Sprint Planning**, selection of backlog items/tasks for the next Sprint
- **Daily Scrum**: 15-minute event held each day for the Development Team.
- **Sprint Review**, a demo session of features of the product increment
- **Sprint Retrospective**, a development team session for reflection and improvement.

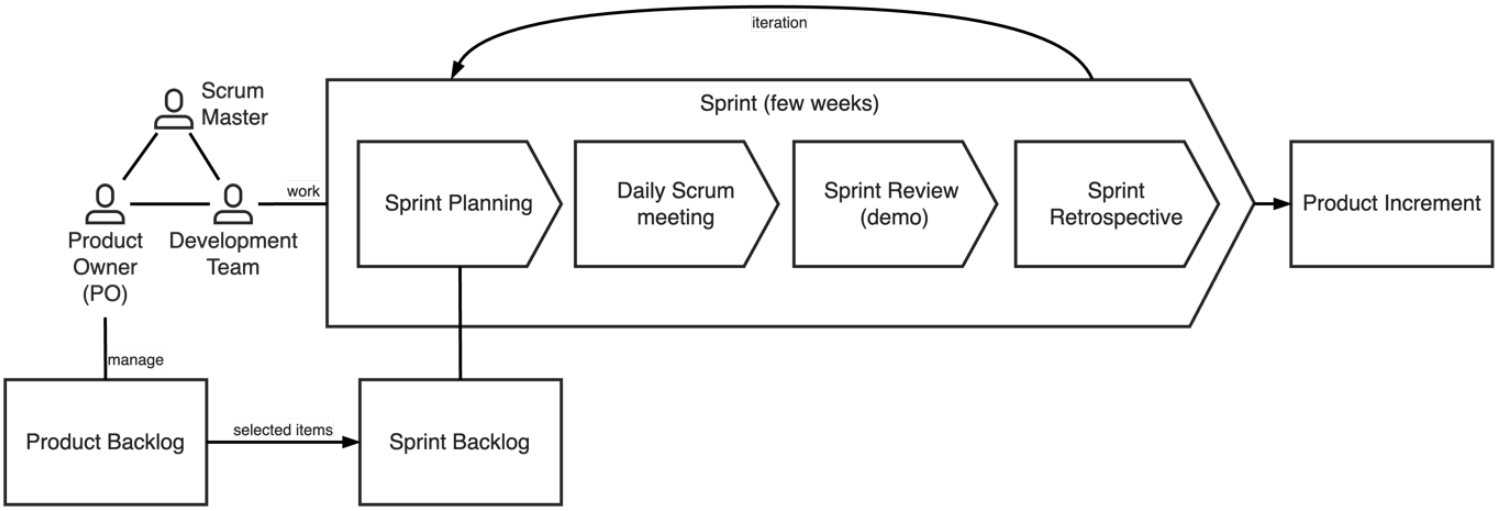


Figure 406: Scrum cycle.

Scrum Roles:

- **Product Owner (PO)**: a business representative, the voice of the stakeholders, responsible of the business requirement management and prioritisation for the Product Backlog, works closely with the development team, defines and prioritises the Product Backlog
- **Scrum Master**, facilitates Scrum ceremonies, assists the development team
- **Development Team** consists of members of specialisation areas such as programming, testing, release management, continuous integration etc.

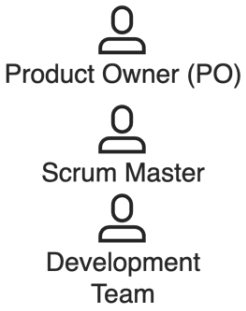
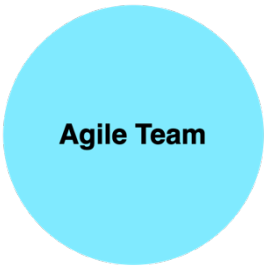


Figure 407: Scrum roles.

7.3.7 Agile Team

Agile team is an autonomous, independent and self-organising team that consists of members each of which is capable of doing tasks from the team's product backlog. Team members are equal and can share the tasks. However, typically team members are specialised to certain competences such as user interface (UX), back-end programming or testing. Typical team structure is illustrated in the figure below.



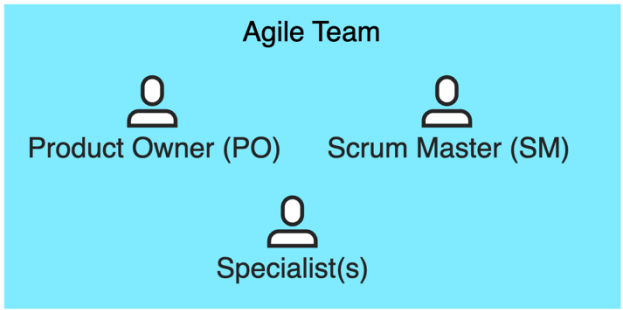
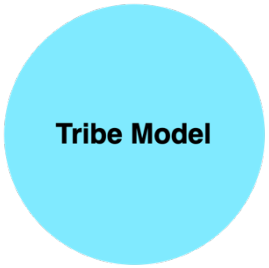


Figure 408: Agile Team members: PO, SM and several specialists.

Scrumban provides the structure of Scrum with the flexibility of Kanban, making it a versatile approach for teams that need to adapt to changing priorities and workloads.

7.3.8 Tribe Model

Tribe model is based on the Spotify tribe model (also known as *Enterprise Agility*). A tribe consists of squads (teams), chapters and guilds. A Tribe is established based on e.g. a value stream.



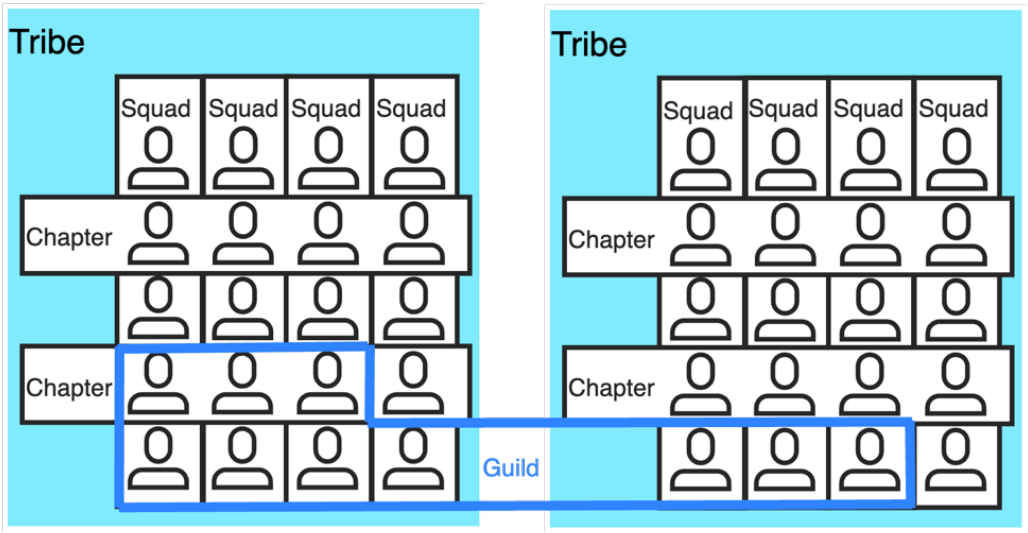


Figure 409: Tribe model.

Tribe model actors:

- **Tribe**: a collection of squads that share a purpose (= mission and vision)
- **Squad**: a cross-functional team that is responsible for delivering a specific functionality or capability. A squad is autonomous, self-organising with members from different disciplines such as software development and design.
- **Chapter**: a group of individuals who share similar skills such as software development, design, test etc. Chapters organise forum for collaboration, knowledge sharing and skill development.
- **Guild**: a community of interest of individuals from different tribes who share a common interest or passion, such as UX, agile practices, service design etc.

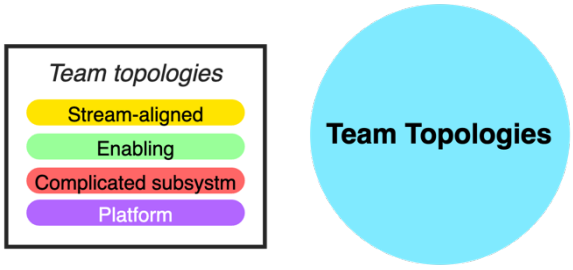
Tribe roles:

- **Tribe Lead**: responsible for guiding and supporting the tribe in performing its purpose and achieving its goals according to the organisational goals and priorities.
- **Product Owner**: represents the voice of the stakeholders, defines the requirements and prioritises the backlog of features, work closely with the stakeholders to understand the customer needs.
- **Tech Lead**: a specialised senior engineer or technical expert who leads, guides and mentors the squad
- **Agile Coach**: provides coaching, training and support to tribes and squads for adopting agile practices, improve team dynamics, and increase performance and effectiveness.

Development Team as multidisciplinary *Fusion Team*, introduced by Gartner. This means that a team consists of diverse competences that complement each other.



7.3.9 Team Topologies



Team topologies introduces an approach to organize teams for development.

Following types teams are introduced:

1. Stream-aligned team
2. Enabling team
3. Complicated subsystem team
4. Platform team

Team Topologies is a modern approach to designing and structuring software development and operational teams to optimize collaboration, delivery, and adaptability in an organization. It was introduced by Matthew Skelton and Manuel Pais in their book "*Team Topologies: Organizing Business and Technology Teams for Fast Flow*."

The concept focuses on creating team structures and interaction patterns that align with the organization's goals, systems, and desired outcomes, particularly in complex and dynamic environments like technology organizations.

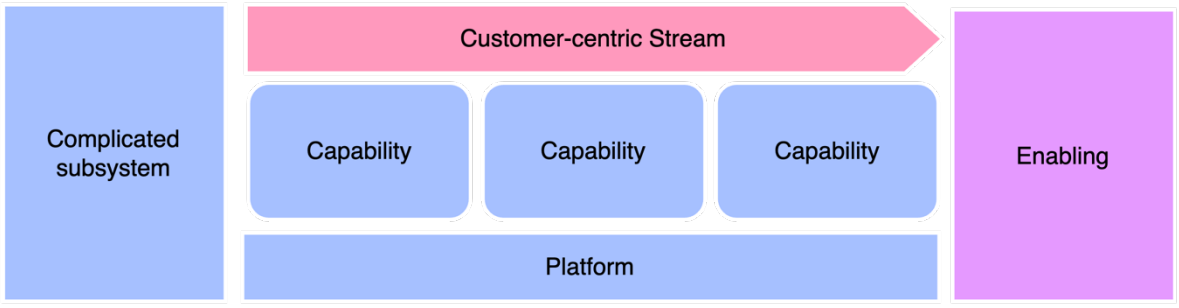


Figure 410: Team Topologies and topology of teams.

Team Topologies provides a practical framework for structuring teams, improving collaboration, and reducing bottlenecks in software development and operations. By focusing on flow, clear team roles, and adaptable structures, it helps organizations achieve better alignment between their teams and their goals, leading to faster and more efficient delivery of value.

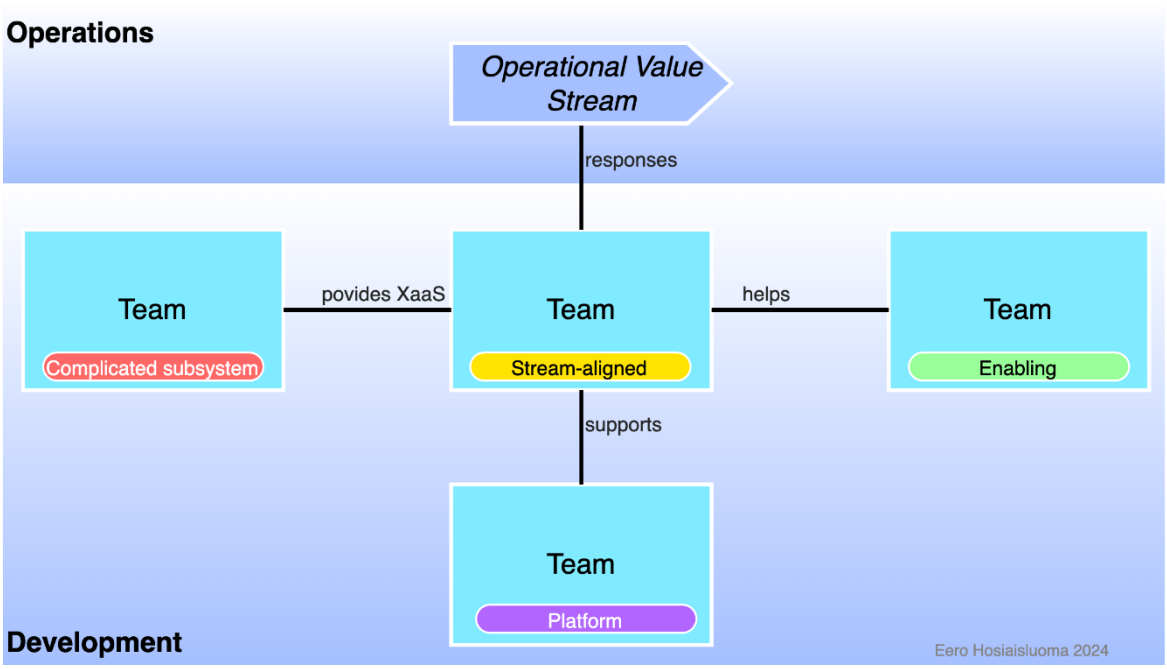


Figure 411: Teams positioned according to the Team Topology.

The **Team Topologies approach** provides benefits by structuring teams around **value delivery, collaboration, and adaptability**. It is particularly effective in dynamic and complex environments, such as software development or large-scale systems engineering.

The Team Topologies approach improves employee satisfaction by:

- Reducing cognitive overload.
- Empowering teams with autonomy and clear roles.
- Facilitating productive collaboration and support.
- Providing opportunities for mastery and growth.
- Promoting a culture of continuous improvement and work-life balance.

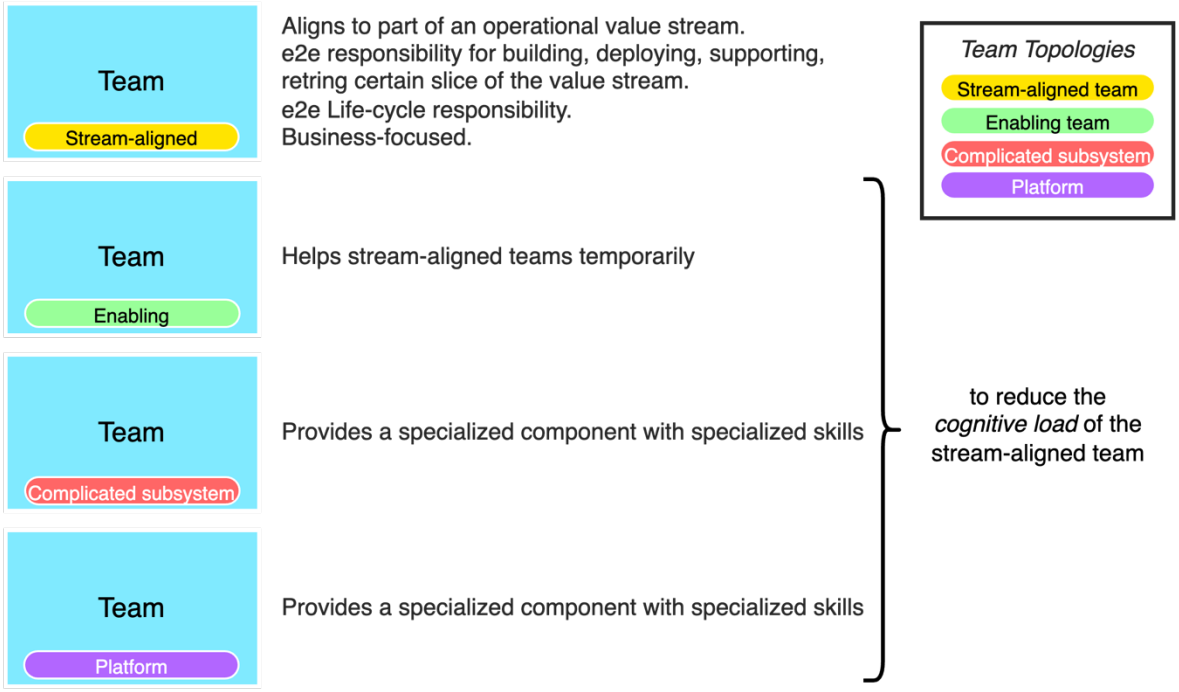


Figure 412: Teams with type tag.

7.3.9.1 Team Interaction Map

A Team Interaction Map is a visual tool that illustrates how different teams, departments, or roles within an organization collaborate, communicate, and exchange information to achieve common goals. It helps organizations understand dependencies, improve collaboration, and optimize workflows by making team relationships and interactions clear.

Why use a Team Interaction Map?

- Clarifies team roles & responsibilities → Visualizes how teams are connected.
- Reveals bottlenecks & communication Gaps → Identifies where collaboration breaks down.
- Enhances cross-functional collaboration → Helps align efforts across departments.
- Supports organizational change → Useful for restructuring, scaling teams, or improving workflows.
- Improves development management → Visualizes dependencies for more effective transformation planning.

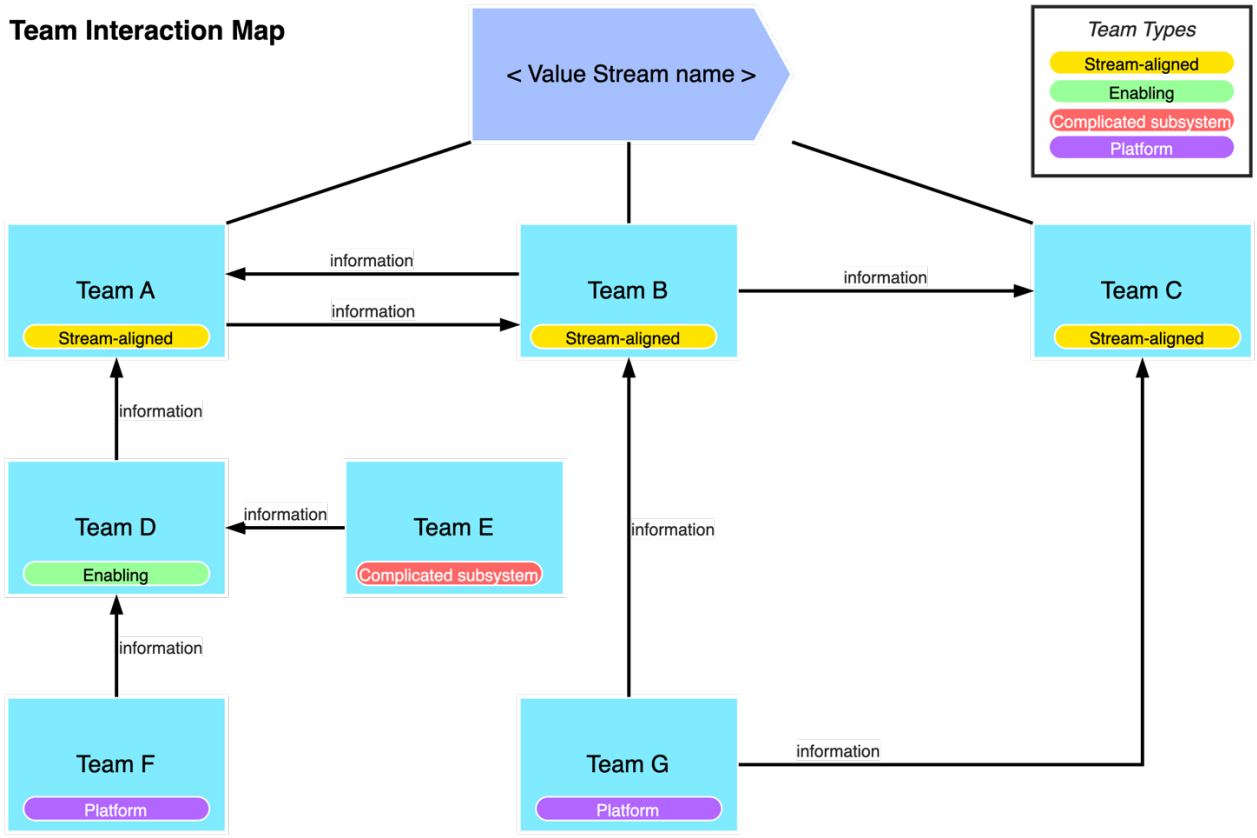


Figure 413: Team Interaction Map.

Team Interaction Map consists of:

1. Teams or roles (Nodes):
   - Represented as boxes (or circles), each node stands for a team.
2. Interactions (Connections):
   - Lines or arrows show how teams collaborate, or exchange information.
   - Arrows can show the *directionality*, who initiates communication or who depends on whom.
   - Can represent different types of interactions (e.g., information flow, dependencies, decision-making authority).
3. Type of interaction (Labels or Colors):
   - Different colors or line styles (e.g., solid, dashed) can represent the frequency, importance, or type of interaction.
   - Example: Daily collaboration (solid line) vs. occasional reporting (colored line).

Note! Interactions between roles can be illustrated in a separate diagram.

Example Use Cases of a Team Interaction Map:

- Agile Product Development: Visualizes how development, testing, and product management teams coordinate.
- Customer Journey Management: Maps the flow of communication between marketing, sales, customer support, and operations.
- Digital Transformation Initiatives: Shows how IT, HR, and business units interact during business transformations, system upgrades or process improvements.

A Team Interaction Map helps organizations to improve communication clarity across teams, and identify and resolve process inefficiencies (bottlenecks).

A **Team Interaction Map** fosters improved collaboration and alignment, helping teams work together effectively to achieve strategic goals.

7.3.9.2 Team Responsibilities View

The responsibilities of a team can be visualised in a separate diagram to illustrate the team's purpose, value proposition, key responsibilities, and the roles or individuals that belong to the team.

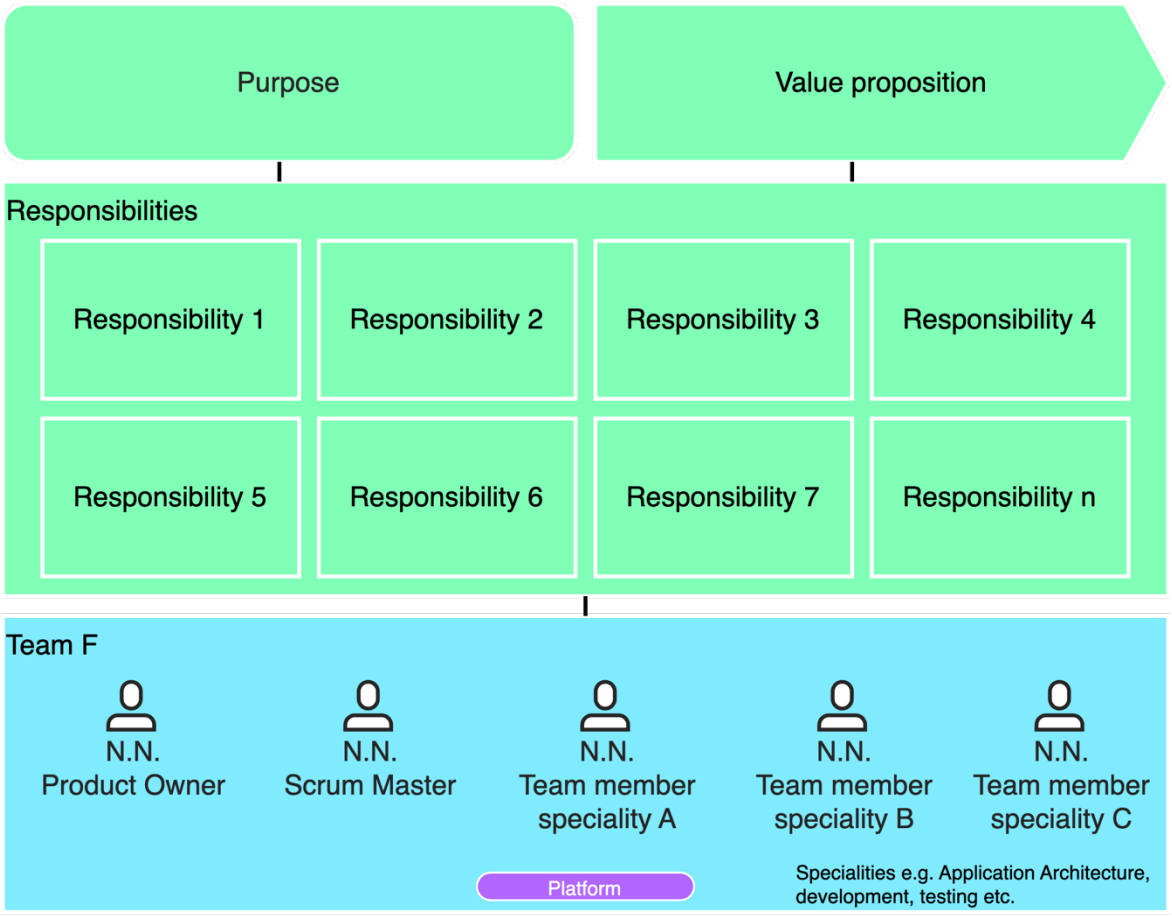


Figure 414: Team responsibilities.

Tools used be the team can be introduced in the same visualisation or in a distinct figure:

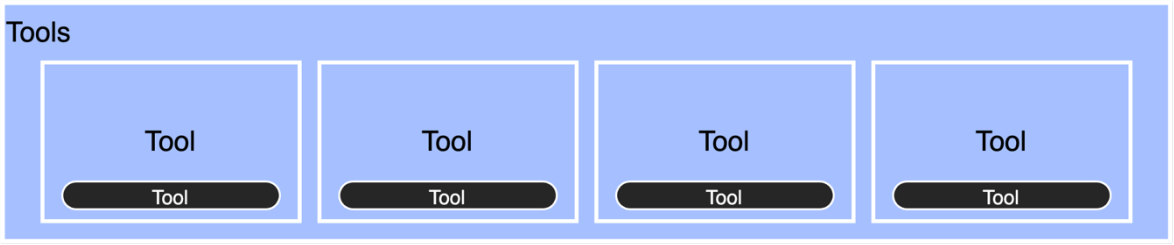


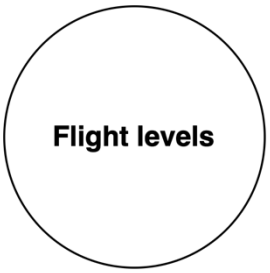
Figure 415: Tools.

Visualising a team's responsibilities in a distinct view clarifies roles, expectations, and value contributions, fostering better collaboration and accountability - for both team members and the broader organisation.

A distinct view of team responsibilities offers:

- Clarity → Everyone knows their role and purpose.
- Alignment → Responsibilities support the team's mission and business goals.
- Collaboration → Promotes better teamwork across departments.
- Accountability → Clearly assigned responsibilities minimize overlap and confusion.
- Adaptability → Helps manage changes efficiently during growth or transformation.

7.3.10 Flight Levels



The Flight Levels approach is a framework developed by Klaus Leopold to help organisations visualize and manage work at different levels of the business, ensuring alignment between strategy, coordination, and operations. It provides a holistic view of an organisation's activities, helping teams and leaders see the big picture and understand how work at different levels impacts overall business goals.

The framework is based on the metaphor of flying at different altitudes, with each "flight level" representing a different perspective or scope within the organisation:

Flight Level 3: **Strategic** (Highest Level)

- Focus: Organisational strategy, long-term goals, and portfolio management.
- Purpose: Aligns the enterprise's strategic vision with operational activities. It ensures that business goals are clear and provides direction on how to achieve them.
- Participants: Typically c-level management or leadership teams.
- Example: Setting goals like increasing customer satisfaction by a certain percentage.

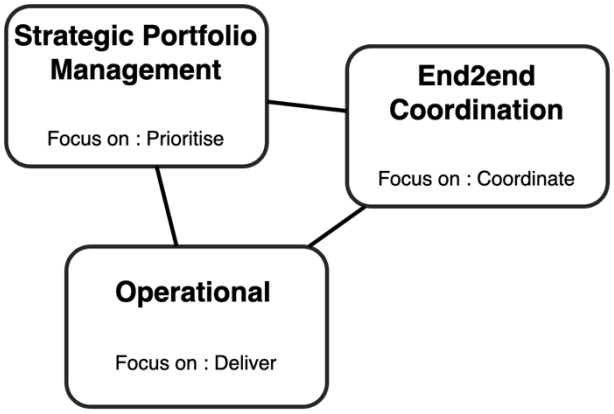


Figure 416: Flight levels.

Flight Level 2: **Coordination** (Middle Level)

- Focus: Coordination across multiple teams and units to ensure strategic alignment and smooth delivery of work.
- Purpose: Breaks down high-level strategy into coordinated activities. Ensures that various teams are working together and not in isolation.
- Participants: Middle management, product owners, and team leads.
- Example: Coordinating the development of products between different units.

Flight Level 1: **Operational** (Ground Level)

- Focus: Day-to-day work and operations of individual teams.
- Purpose: Ensures that the actual work being done aligns with higher-level strategies. Teams focus on executing tasks efficiently and delivering value.
- Participants: Teams and individuals responsible for daily operations.
- Example: Developers writing code, customer support responding to tickets, or marketing teams creating campaigns.

Benefits of the Flight Levels Approach:

- Big Picture and Detail Balance: Helps avoid the siloed thinking common in organizations by encouraging both strategic thinking and operational execution.
- Cross-Functional Collaboration: Encourages different teams and departments to collaborate more effectively by visualizing dependencies and coordination needs.

- Agility at Scale: Supports the application of agile principles across large organizations, ensuring that strategy is connected to the work being done by teams.
- Continuous Improvement: By visualizing work at various levels, organizations can better identify bottlenecks, inefficiencies, and opportunities for improvement.

When to Use the Flight Levels Approach:

- If your organisation struggles with aligning strategic goals to operational activities.
- If you want to scale agile practices across multiple teams or units.
- If coordination between teams is a challenge, leading to misalignment or delays.

The Flight Levels approach offers a structured way to view and manage work across an organization, ensuring that strategic goals align with everyday team activities and that different teams are working cohesively.

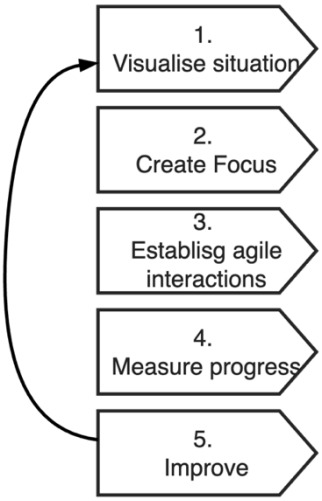
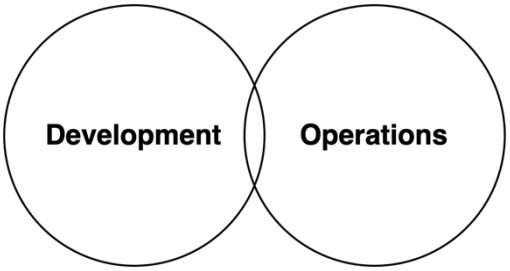
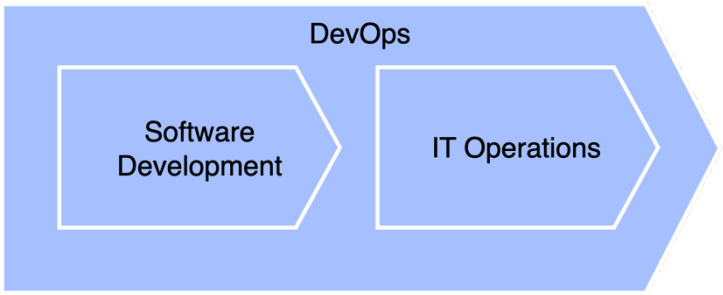


Figure 417: Activities.

7.3.11 DevOps

Software Development (Dev) and IT operations (Ops) together form the ***DevOps*** model. It is a set of practices that emphasize collaboration and communication between development and operation. Traditionally development and operations teams have worked separately in silos. In DevOps, they work together as an integrated team. DevOps is not only a way to organise people, Sometimes, quality assurance and security teams come along, and then the model is called ***DevSecOps***.





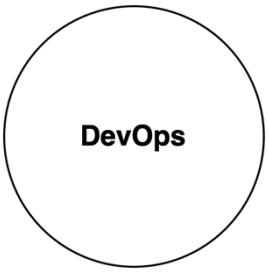


Figure 418: DevOps = Software Development + IT Operations.

Definitions:

- “DevOps is the combination of cultural philosophies, practices, and tools that increases an organisation’s ability to deliver applications and services at high velocity: evolving and improving products at a faster pace than organisations using traditional software development and infrastructure management processes. This speed enables organisations to better serve their customers and compete more effectively in the market.” [Source: AWS]

DevSecOps stands for Development, Security, and Operations, and it's an evolution of the traditional DevOps approach that integrates security practices into every phase of the software development lifecycle. The goal of DevSecOps is to automate security throughout the entire process, from development and testing to deployment and operations, rather than treating security as a separate, final step.

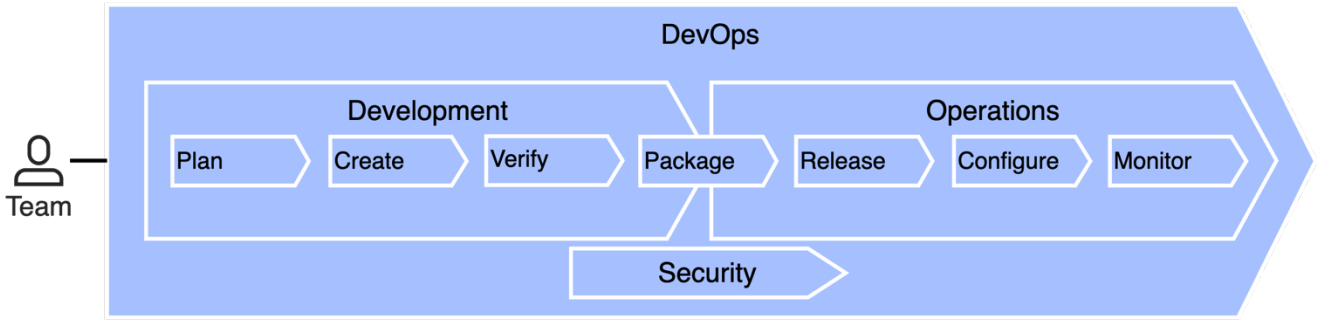


Figure 419: DevSecOps overview.

7.3.12 Organising Development in an Enterprise

Conventional hierarchical ***command and control***, and ***holacracy***, represent two extreme models for organizing and managing work within an organization. Conventional *command and control* is characterized by a rigid hierarchy, centralized decision-making, and structured roles, while holacracy enables enterprises to become more agile, innovative, and adaptive by distributing power and giving employees more autonomy. Holacracy encourages to self-management and enforces self-organising teams, called *circles*, according to agile practices (as introduced in Scrum or SAFe).

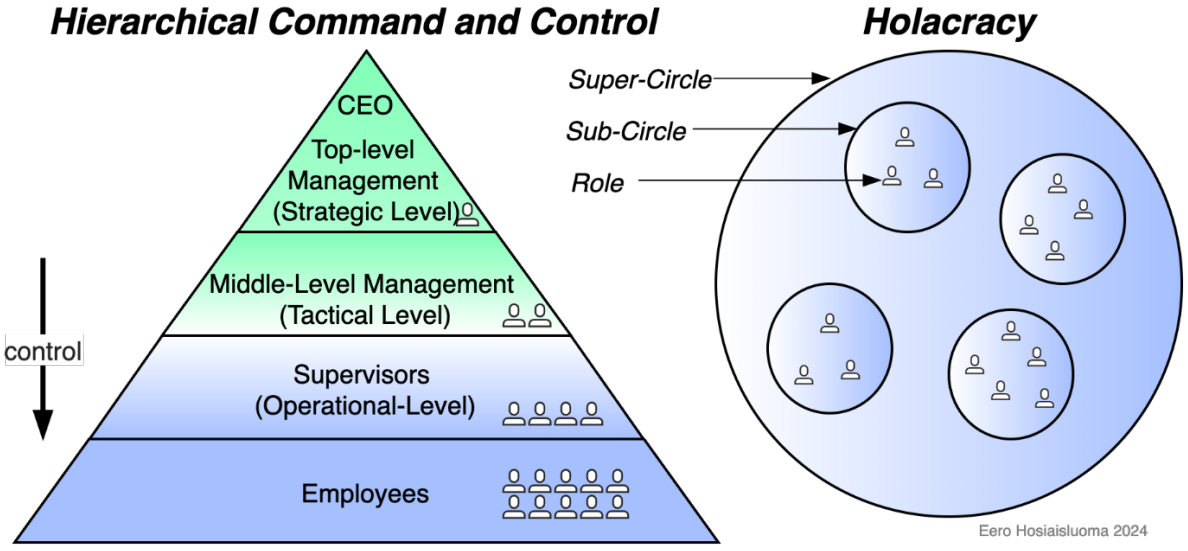


Figure 420: Organisation extremes.

Holacracy is a system of organisational governance and management that decentralizes authority and decision-making, distributing power across the organization rather than relying on a traditional hierarchical structure. In a Holacracy, authority is spread throughout self-managing teams, *circles*, which are structured to allow for autonomy, flexibility, and responsiveness. This approach contrasts with conventional command-and-control systems, where power and decision-making are concentrated at the top levels of the hierarchy.

- **Self-Managing Teams (Circles)**: The organization is broken into circles, which are self-managing teams that operate autonomously to achieve specific goals. Each circle has its own purpose and authority to make decisions within its scope. Circles are often nested, meaning that smaller circles are part of larger circles, creating a dynamic structure where decisions and responsibilities are decentralized.

Holacracy provides a more flexible, adaptive, and self-managed system where decision-making authority is distributed across the organisation, empowering employees to manage

their roles and responsibilities independently. The conventional command and control model, on the other hand, is a top-down hierarchical structure where decision-making and power are centralized, with a more rigid and controlled approach to management. Holacracy fosters higher employee engagement, faster innovation, and agility, while traditional hierarchies may be better suited for organizations requiring clear, centralized control, particularly in highly regulated or risk-sensitive environments.

Comparing conventional, hierarchical command and control approach with holacracy.

Differencies		
Aspect	Conventional, Command & Control	Holacracy
Structure	Hierarchical, top-down	Distributed, role-based
Decision-Making	Centralized, approval required	Decentralized, role-specific autonomy
Authority	Positional, based on rank	Role-based, distributed
Leadership	Centralized, tied to position	Distributed, tied to specific roles
Flexibility	Rigid, slow to adapt	Adaptive, dynamic roles and circles
Employee Autonomy	Limited, directive	High, self-managed
Innovation	Top-down driven	Bottom-up, continuous improvement
Governance	Centralized, hierarchical	Collaborative, frequent governance meetings
Performance Management	Manager-driven, hierarchical evaluations	Role-based, peer feedback

To enable communication, the self-managing teams are networked with each other.

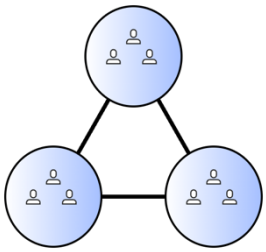


Figure 421: Networked teams.

To enable coordination, the self-managing teams can be assigned to value stream.

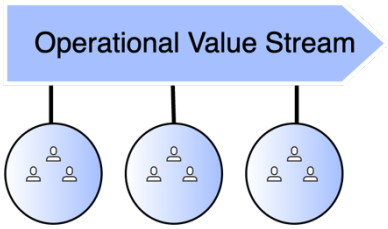


Figure 422: Value Stream based organised teams.

For coordination, communication, and business alignment, the self-managing teams can be assigned to a value stream, which has a clear business purpose, vision, and ownership. This organizational approach is based on the Tribe model and leverages Team Topologies practices.

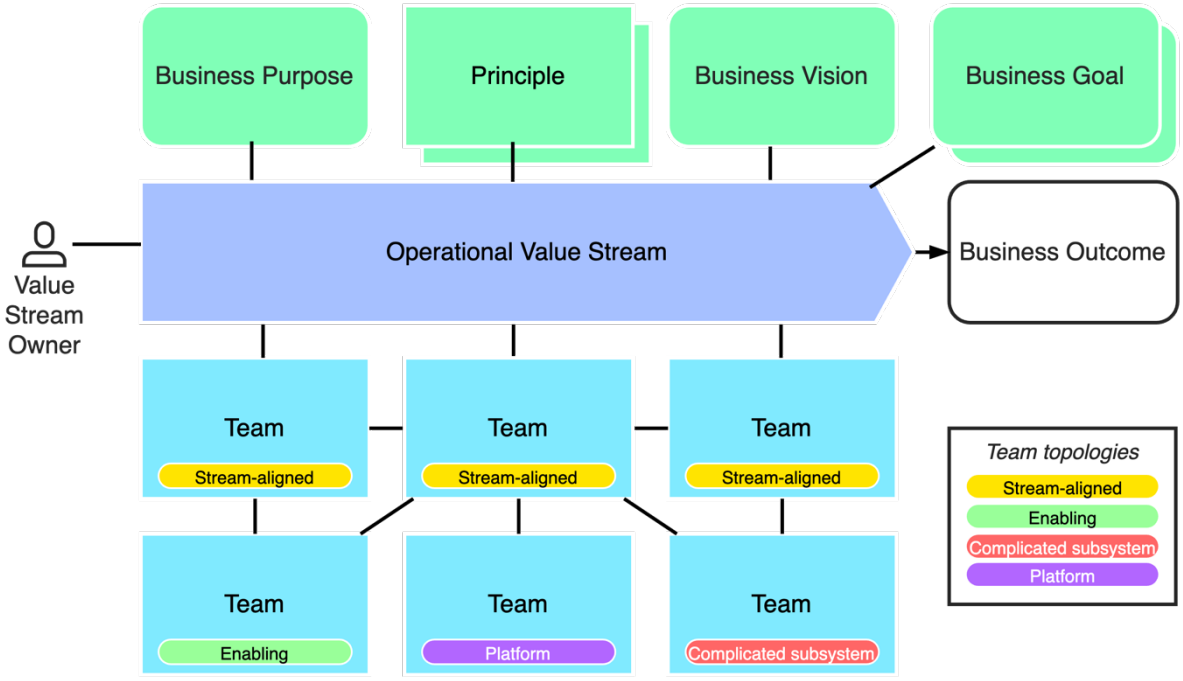


Figure 423: Development organised around the Value Stream.

The Customer Journey is what customers are doing and experimenting, while operational value stream is providing the products and/or services. Teams are assigned to capabilities that are connected with the value stream.

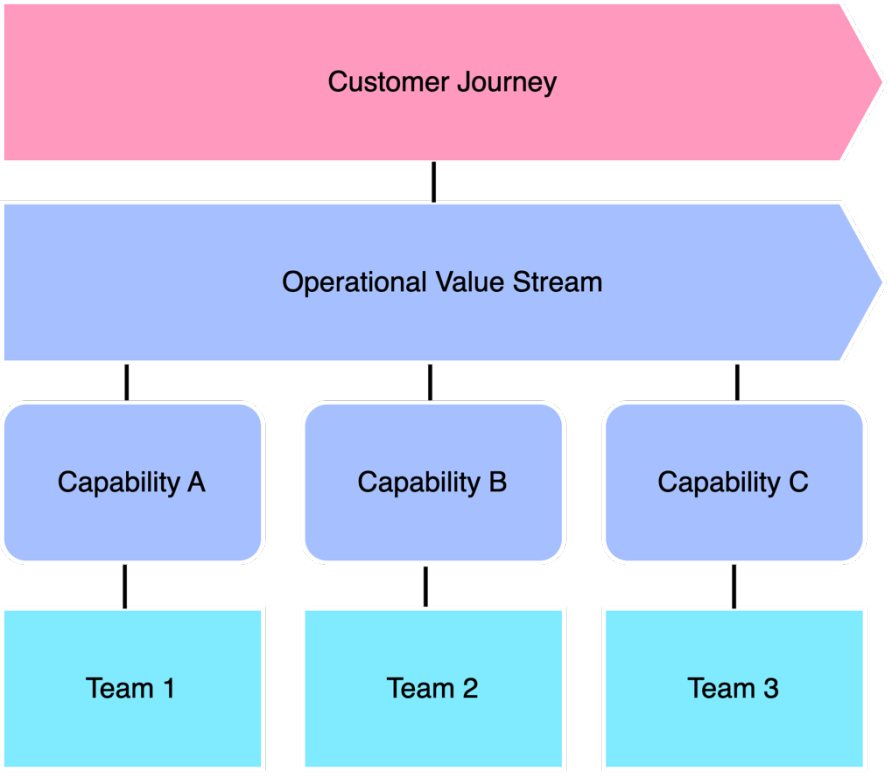


Figure 424: Operational Value Stream requires business capabilities.

Organisation according to value streams is related to tribe-model (introduced in the chapter above). This organisation model is based on the customer journeys and customer needs. The operations (the operational value streams or core processes) are organised to support

the customer journey. Management and executives are playing a supporting role as shown in the inverted pyramid figure below.

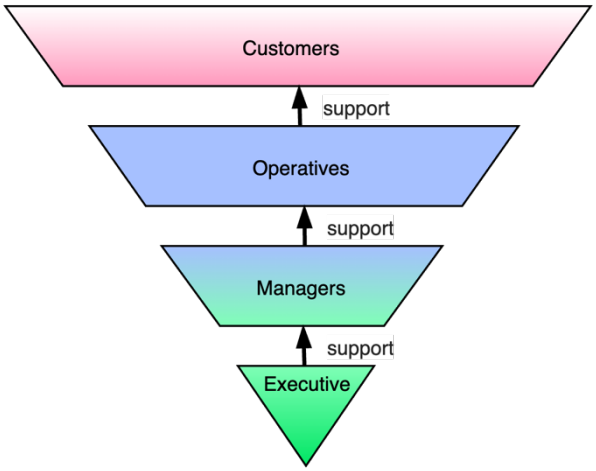
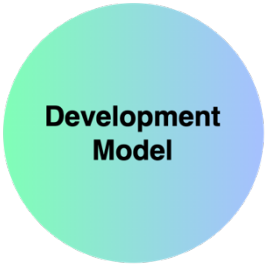


Figure 425: Inverted pyramid.

7.3.13 Development Model



A development model defines *how* an enterprise makes changes to its operations: how it builds and evolves its digital products, services, processes and systems for the operating model - according to its business model and strategy. A development model is not just for building software - it's meant for driving all types of change in a modern enterprise.

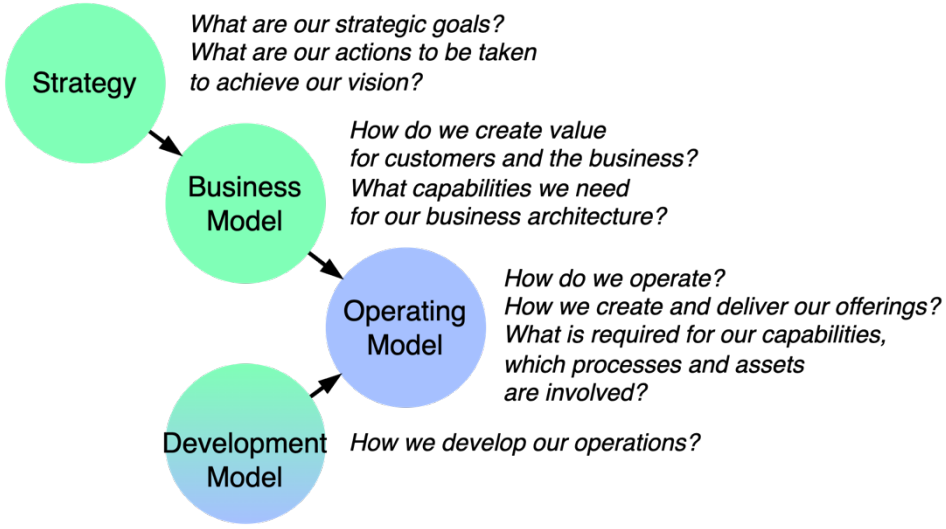


Figure 426: Development model focused on how the changes are made to operations.

Development model consists of:

- How teams are structured (e.g. according to Team Topologies)
- How work flows (e.g. agile, waterfall, DevOps)
- How responsibilities are distributed (e.g. product ownership, architecture)
- How tools, practices, and platforms are used (e.g. CI/CD, testing, versioning)

A **development model** focuses on the "how we develop" the enterprise.

A development model covers both the behavior and structure:

- **Behavior**: development process (development value stream)

- **Structure**: organisation units, groups or teams organised within the development process

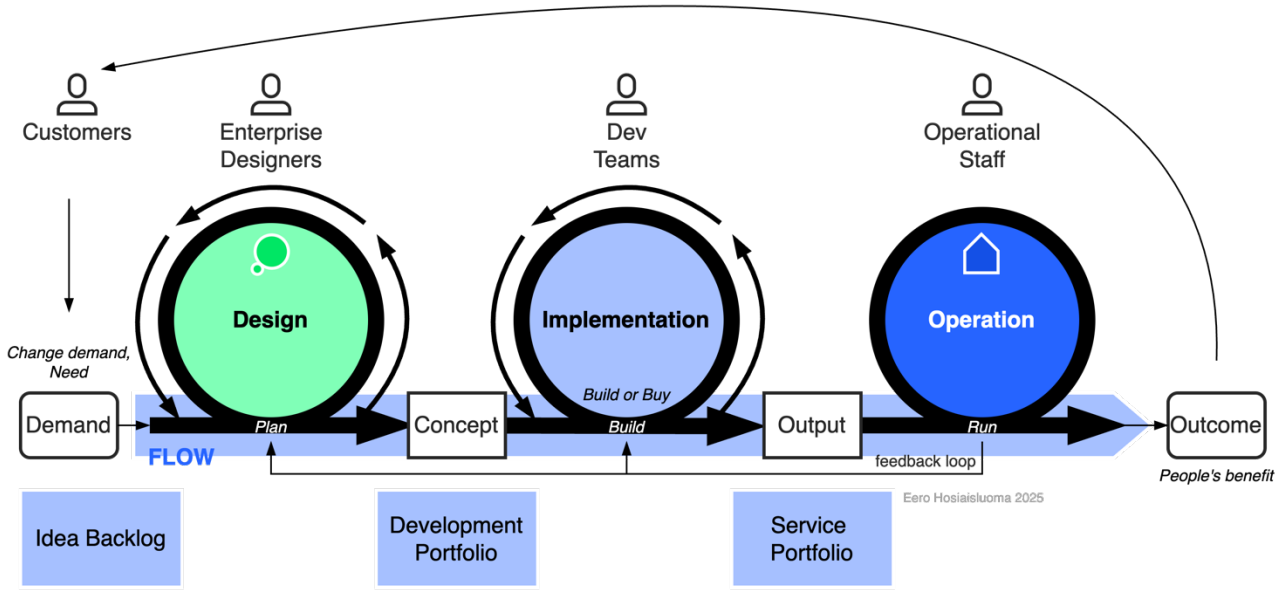


Figure 427: Development process basic structure.

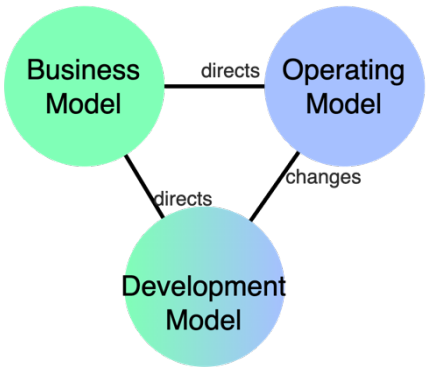
A development model includes, but is not limited to:

- Building custom software applications
- Integrating COTS (Commercial Off-The-Shelf) systems
- Configuring and deploying cloud services
- Evolving business processes and operating models
- Designing customer journeys
- Enabling infrastructure and platform changes
- Delivering continuous improvements across teams.

Typically the development is based on agile frameworks, methods and tools such as SAFe, Scrum, Kanban and related software tools that support managing epics, stories and tasks etc.

The development model is the engine behind the enterprise's digital capability. It connects strategy (business model) and execution (operating model) through how teams build software applications.

Comparison to other models:



Model	Focus	Key Question It Answers
Business Model	How the enterprise creates, delivers, and captures value	"How do we make money and serve customers?"
Operating Model	How the enterprise is organized to deliver its business model	"How do we work together to run the business?"
Development Model	How the enterprise builds and evolves digital products/systems	"How do we design, build, and improve software?"

A strong development model means that the enterprise isn't just planning well, it's building well. The development model is how to turn ideas into working software, consistently,

collaboratively, and at scale. It shapes how teams, work together, deliver changes, evolve products and respond to feedback.

A development model is the engine for enterprise change. It guides how you design, build, deliver, and evolve all digital and operational capabilities - not just code. While software is a big part, the development model applies to everything that changes how the enterprise works - systems, services, processes, and platforms alike.

Business capabilities are the starting point - also for development - because they describe what the business must be able to do to deliver value. And every change we develop, whether it's a new app, a process update, or a system integration, should support and strengthen one of those capabilities. For development, this means:

- We shouldn't start with tech, we shall start with what the customers needs to do, and then what business has to do to serve the customers' needs.
- Then we model, design, and build the right solutions to right capability that

Why the development model matters:

- **C-level**: It's how strategy becomes reality - faster, cheaper, safer.
- **Managers & leaders**: It's we you align people, teams, and priorities.
- **Teams**: It's how we build things that matter, without hassle, chaos or burnout.

A **development model** defines how an enterprise builds and evolves its digital products and systems.

7.3.13.1 Comprehensive view of enterprise development

Ultimately, development is closely interconnected with all other aspects and models of the overall enterprise design:

- The strategy sets the direction, the business model defines how we create value, the operating model shows how we deliver it, the customer-centric model ensures it's meaningful to the customer, and the development model tells us how we evolve and improve over time.

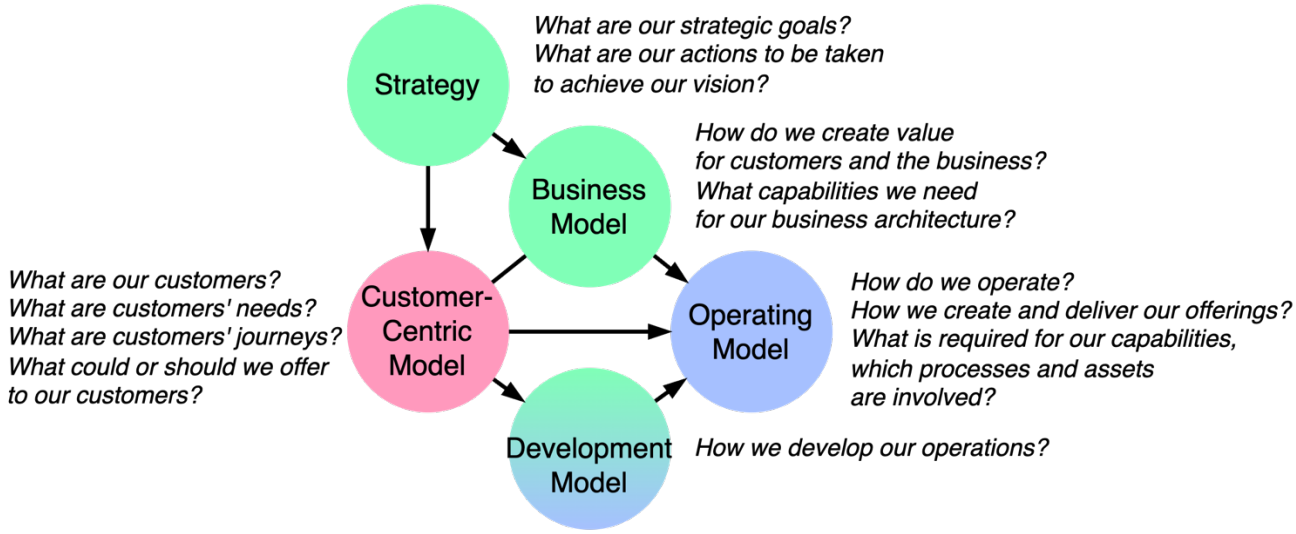


Figure 428: Relations between the models affecting on the enterprise.

Strategy sets the intent, vision, and priorities - including the commitment to being customer-centric. The customer-centric model operationalises that intent by translating it into practices, structures, offerings, and experiences that create value for customers. Strategy defines why and where to operate; the customer-centric model defines how to engage and deliver value to customers.

The customer-centric model and the business model are deeply interconnected, they shape and reinforce each other. The customer-centric model defines how the enterprise understands and serves customer needs, while the business model ensures those efforts are sustainable and aligned with the enterprise's purpose. Customer-centricity drives relevance; the business model ensures resilience. Together, they form the foundation for sustainable, purpose-driven value creation in any sector.

- The **strategy** sets the direction and drives and guides the overall development
- The **business model** defines what value the enterprise creates and how it captures it.
- The **customer-centric model** defines how that value is shaped around real customer needs and experiences.
- The **operating model** defines how the enterprise is structured and runs to actually deliver that value at scale.
- The **development model** defines how the enterprise evolves, how it learns, innovates, adapts, and improves over time.

Concept	Role	Description
Strategy	The destination and compass	Where we're going and why.
Business model	The vehicle	How we make money and create value.
Operating model	The engine and roads	How people, processes, and technology deliver the business model.
Customer-centric model	The map seen from the customer's view	Ensures we serve real needs along the journey.
Development model	The fuel and pit stops	How we improve, adapt, and innovate to keep moving and stay relevant.

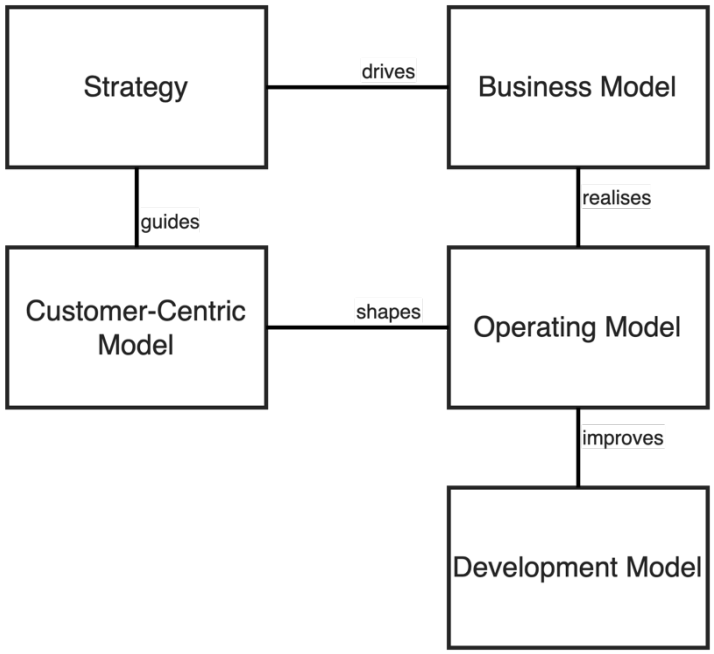


Figure 429: Conceptual model of the aspects of enterprise design & development.

In enterprise design, development is part of a dynamic system - it both affects and is affected by strategy, operations, and customer needs.

7.3.14 Domain-Driven Design (DDD)



Domain-Driven Design (DDD) is a strategic and tactical approach to software design and development that focuses on creating a deep connection between business needs and software solutions. At its core, DDD is about:

- Modeling the business domain in close collaboration with domain experts,
- Structuring the software around that model to reflect real-world complexity.

The **domain** is the starting point for modeling and design. Everything - language, models, systems - should reflect that business domain. This makes DDD a business-aligned approach to software, not just a technical one.

Business related Domain-Driven Design (DDD) main concepts:

DDD Concept	Description
Domain	The business area an enterprise operates in. E.g., logistics, insurance.
Subdomain	A specific functional part of the domain. E.g., claims handling, order management
Bounded Context	A well-defined business and language boundary where a specific model applies.
Ubiquitous Language	Shared language used by both business and tech, based on the business's own terminology.

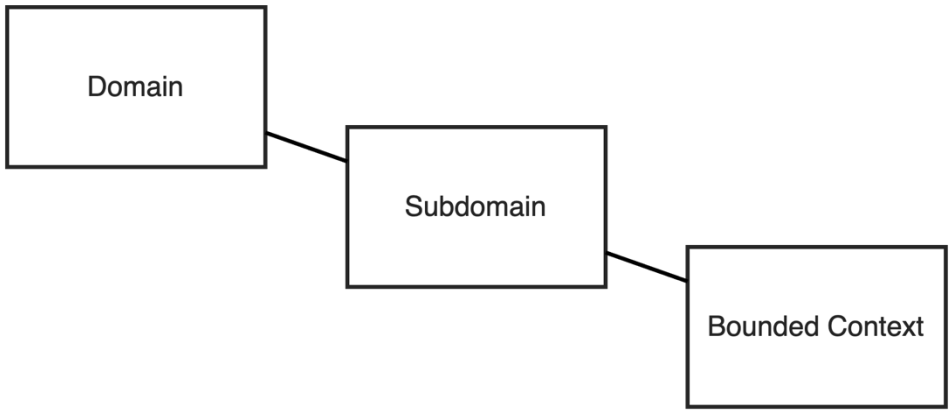


Figure 430: Business related core concepts of DDD.

These concepts helps us:

- Align software to real business capabilities of actual business operations
- Reflect how people actually work
- Ensure teams speak the same language
- Design around value-creating flows, not technical silos.

What? DDD is a methodology and mindset for building software that closely reflects the real-world business it serves. It helps teams align business knowledge, language, and systems, so that software delivers meaningful value.

Why? DDD helps you design software that thinks like the business:

1. Closes the gap between business and technology
2. Builds smarter software by modeling real business logic
3. Reduces complexity through clear boundaries and ownership
4. Enables scale by aligning architecture with business capabilities
5. Accelerates delivery in complex domains (especially with microservices or modular platforms)

Domain-Driven Design (DDD) is a methodology and mindset for building software that closely reflects the real-world business it serves.

Key concepts of DDD:

- **Domain**: The specific sphere of knowledge or activity that the software is designed to model. It represents the business problem space.
- **Subdomain**: A distinct area of the overall business domain. It encapsulates specific business functions or responsibilities within the larger domain. There can be core-, supporting- and generic subdomains.
- **Model**: An abstraction that describes selected aspects of a domain and can be used to solve problems related to that domain.
- **Entity**: An object defined by its identity rather than its attributes. It has a unique identifier and a lifecycle.
- **Value Object**: An immutable object that is defined by its attributes. It has no identity and is interchangeable with other value objects with the same attributes.
- **Aggregate**: A cluster of domain objects that can be treated as a single unit. It ensures consistency within the boundary defined by the aggregate root.
- **Aggregate Root**: The main entity within an aggregate that controls access to the other entities and value objects in the aggregate.
- **Domain Service**: A stateless service that encapsulates domain logic which doesn't naturally fit within an entity or value object.
- **Domain Event**: An event that signifies a change or occurrence within the domain that domain experts care about.
- **Bounded Context**: A boundary within which a particular domain model is defined and applicable. It ensures that the model remains consistent and unambiguous.
- **Context Map**: A visual representation of the relationships between different bounded contexts, illustrating how they interact and integrate.
- **Repository**: A mechanism for encapsulating storage, retrieval, and search behavior which emulates a collection of aggregates.
- **Factory**: A design pattern used to encapsulate the creation of complex objects or aggregates, ensuring that the creation process adheres to the domain's invariants.
- **Ubiquitous Language**: A common language shared by all team members (developers, domain experts, etc.) that is used to connect all the activities of the team with the software. It ensures clear communication and understanding of the domain model.

7.3.14.1 DDD Domains

A DDD “domain” is the same as the business domain the enterprise operates in: it’s the area of knowledge, activity, and value creation that software applications are meant to support. The domain is the subject area enterprise works in, and the focus area of the software applications (custom built or customised COTS).

The term “domain” in DDD is intentionally borrowed from business domain. It creates a shared understanding between business and tech. It keeps DDD grounded in real-world problems and goals, not just technical abstraction. That's true to both business architecture and DDD thinking.

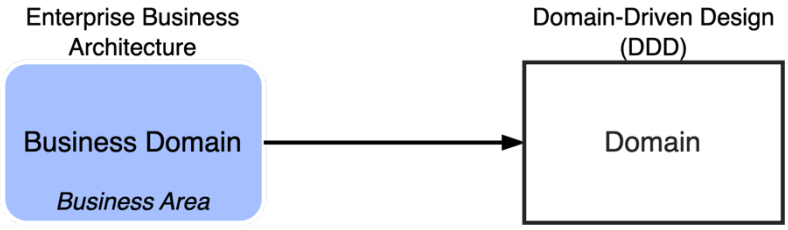


Figure 431: Analogy from Business Domain to DDD domain.

In DDD, the domain is just the business area your software is built to support, so the same business domains we talk about in strategy are the ones we model in our code.

Domain is a business area or problem space the software is built to support.

7.3.14.2 DDD Subdomains

A smaller, distinct area within the broader domain, typically aligned with a business capability. Core domain is the most strategic and valuable part of the business domain where the enterprise's competitive advantage lies. Business capabilities describe what the business needs to do, and DDD subdomains are the parts of the business we design software for to support those capabilities.

A **subdomain** is a focused part of the business that software needs to support.

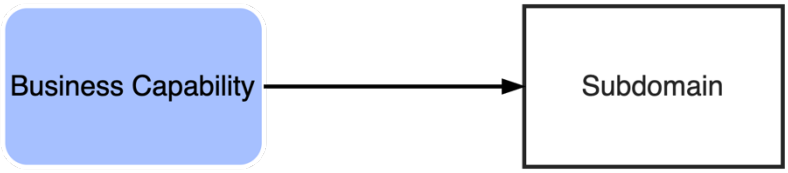


Figure 432: Business Capabilites form the basis for DDD subdomains.

A DDD subdomain is a business-aligned building block, it helps us organise software around what the business actually does.

- Subdomains help us break down complexity
- You can design each subdomain with its own bounded context
- Subdomains are often derived from business capabilities

This analogy aligns enterprise architecture with domain-driven software design.

- Business capabilities describe what the business does at a functional level
- DDD subdomains are the logical areas of responsibility within the domain that need to be modeled in software
- Therefore, "atomic" capabilities (at fine-grained level, e.g. the 3rd level) help identify and define subdomains, especially when mapping the enterprise into modular, aligned systems.

A **subdomain** bounds a business capability.

7.3.14.3 Subdomains vs. Bounded Contexts in DDD

While subdomains pertain to the business domain, bounded contexts are a DDD concept that define clear boundaries within which a particular domain model is applicable.

A subdomain can be implemented within one or more bounded contexts, depending on the complexity and requirements. For instance, the "Order Management" subdomain might be divided into bounded contexts like "Order Creation," "Order Fulfillment," and "Order Tracking," each with its own model and logic.

Concept	Subdomain (Business Capability)	Bounded Context
Description	A logical area of business responsibility (*what* the business does)	A design boundary in the codebase where a particular domain model is valid
Focus	Business behavior (according to strategy)	Technical and linguistic consistency
Owner	Business stakeholders, architects	Software teams, domain experts, developers
Example	"Loan Origination"	LoanApplicationContext (with its own model, terms like "Preapproval", "Score", etc.)
Represents	A problem space: ***what*** needs solving	A solution space: ***how*** it's solved

Bounded contexts are typically designed around subdomains**.** A Bounded Context maps to one subdomain, or a tightly coupled group of subdomains.

Bounded Context is a design boundary where a particular domain model applies with its own language and logic.

7.3.14.4 The Role of Applications in DDD

In DDD, applications are not the primary focus, but they do play a key role, especially when we move from domain modeling to implementation. Applications in DDD are the technical enablers of business capabilities, they run the logic defined in bounded contexts, which implement subdomains, which realize business capabilities.

In DDD, an application is:

- is a technical implementation that supports one or more bounded contexts,
- an executable system that implements the logic defined in a bounded context.

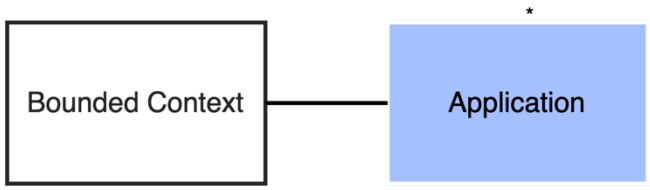


Figure 433: The application is how the bounded context runs in real life.

A bounded context defines a clear boundary where a specific domain model is valid. That model is realized in software, usually through one or more applications, services, or modules.

Applications support Business Capabilities:

- Business capabilities describe ***what*** the business must be able to do - to run the business
- Business capabilities map to subdomains in DDD.
- Subdomains are implemented inside bounded contexts.
- Bounded contexts are delivered as applications or services.
- Applications are where business capabilities become operational.

In DDD, applications are not the starting point, they are the result. They execute the business logic defined in a bounded context, which reflects a subdomain, which enables a business capability. Business capabilities are the starting point.

Bounded Contexts are implemented by applications.

7.3.14.5 Separation of Concerns and DDD

In DDD bounded context, business rules belong to the domain model, not the application code. This separation keeps the (business) logic testable, reusable, and aligned with real business behavior. In DDD bounded context, business rules and business logic live in the Domain Layer, not in the application layer.

Bounded Context layer	Responsibility
Domain Layer	Contains the core business rules and logic (e.g. policies, validations, decisions)
Application Layer	Orchestrates use cases: coordinates domain objects, doesn't contain business rules
Infrastructure Layer	Deals with technical details (databases, APIs, messaging)

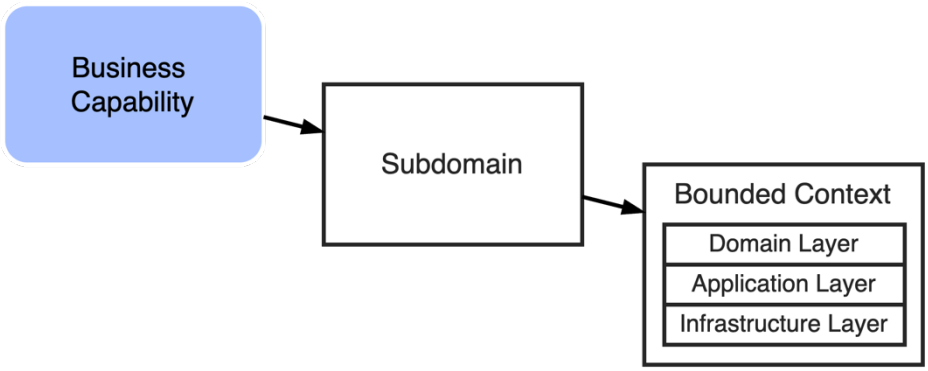


Figure 434: Layers inside Bounded Context.

7.3.14.6 DDD and EA concept mapping

Mapping Domain-Driven Design (DDD) concepts to Enterprise Architecture (EA) concepts helps bridge the gap between business strategy and software implementation. This alignment ensures that software systems effectively support and enhance business capabilities. Here's a table that outlines the correspondence between key DDD concepts and their EA counterparts:

DDD Concept	EA Concept	Description
Domain	Business Domain	A high-level area of business activity, such as Finance, Sales, or Human Resources.
Subdomain	Business Capability	A specific function or competency within a business domain, like Payment or Invoicing within Finance.
Bounded Context	Application / System Boundary	Defines the boundary within which a particular domain model is applicable. In EA, this aligns with the scope of an application or system supporting specific business capabilities.
Entity	Business Object	An object with a distinct identity that persists over time, such as a Customer or Order.
Domain Service	Business Service	A stateless operation that encapsulates domain logic not naturally fitting within entities or value objects.
Domain Event	Business Event	An occurrence within the domain that is significant to the business, such as Order Placed or Payment Received.
Ubiquitous Language	Common Business Vocabulary	A shared language between business and IT stakeholders, ensuring clear communication and understanding of domain concepts.
Context Map	Integration Architecture Diagram	Visual representation of relationships and interactions between different bounded contexts or systems, highlighting integration points and dependencies.

7.3.14.7 DDD Subdomains & Business Capabilities

A subdomain in DDD is responsible for a particular business capability, encapsulating the related business logic and processes.

“Subdomains are finer-grained problem domains whose goal is to provide solutions for specific business capabilities.”

[*Learning Domain-Driven Design*, Aligning Software Architecture and Business Strategy, Khononov V., O’Reilly, 2022]

A business capability refers to an enterprise’s ability to perform a specific business function, such as payment processing, customer onboarding, or inventory management. In DDD, these capabilities are represented as subdomains, which are distinct areas of the business domain with their own specific logic and responsibilities.

DDD Subdomains can be identified based on the enterprise's capability map.

- A capability map shows what the business needs to do.
- DDD subdomains show where software needs to support those things

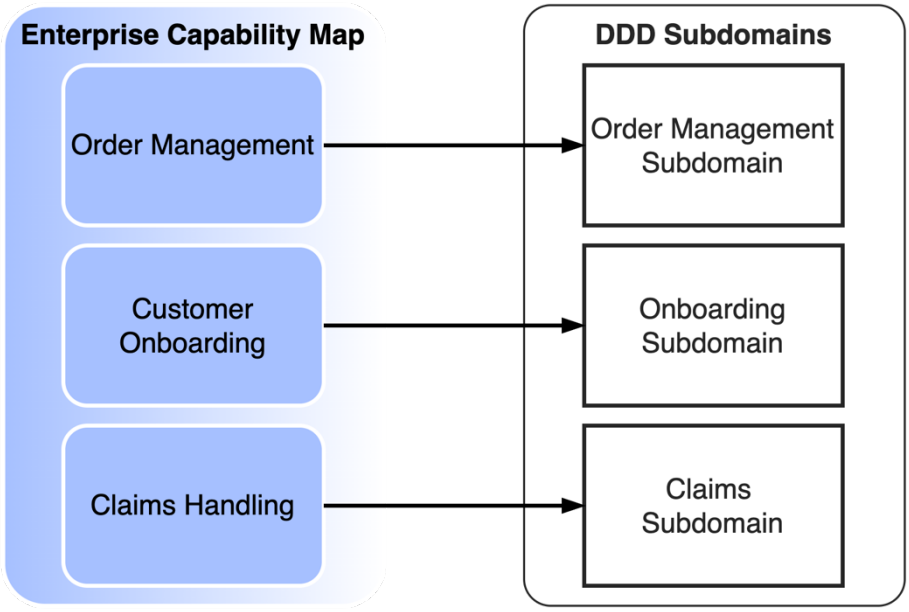


Figure 435: Subdomains can be identified based on the enterprise's capability map.

Subdomains can be identified based on the enterprise's Capability Map.

7.3.14.8 Business capabilities are the starting point in DDD

Business capabilities:

- Define what the organization must be able to do to deliver value.
- They help identify the most important subdomains in Domain-Driven Design (DDD).
- They guide how teams, systems, and software should be structured.
- They connect strategy to operations and implementation, creating alignment.

It is reasonable and practical to start with business capabilities, because they describe what really matters: the work that delivers value. From there, we identify subdomains, define bounded contexts, and build the systems and teams that support them.

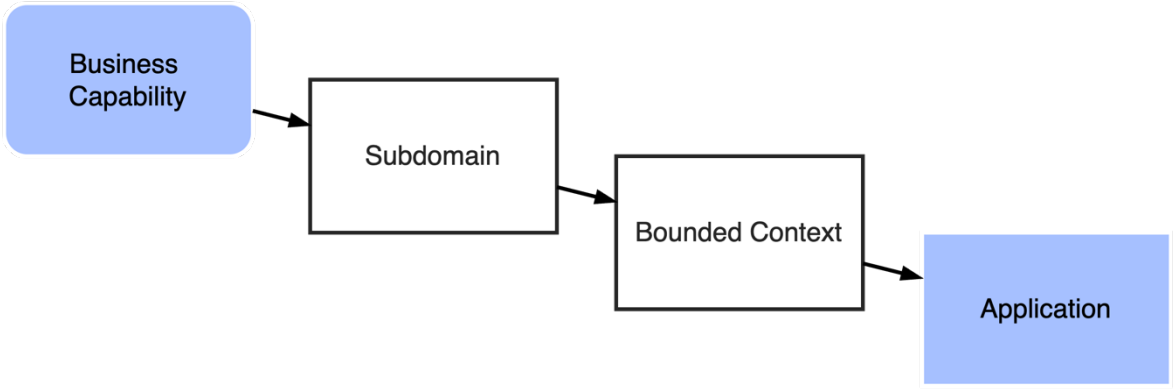


Figure 436: Business capabilities are the starting point - from business capabilities to applications.

Business capabilities are the starting point – also for development.

7.3.14.9 DDD concept mapping to business architecture

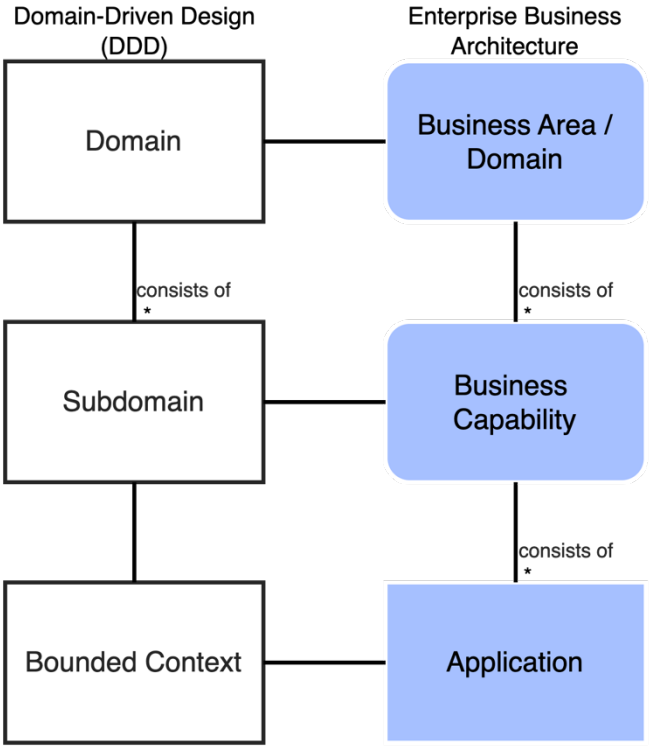


Figure 437: DDD concept analagies to business architecture.

DDD Is Especially Useful For:

- Complex business domains
- Systems needing long-term maintainability
- Microservices or modular architectures
- Cross-functional collaboration (business + tech)

DDD helps the enterprise to model software around the business itself: aligned with business capabilities that deliver value. At the operational level: Teams build, run, and own the capability. They know what value it delivers and how it works end-to-end. At the development level: Developers implement logic that matches real business capability business rules and policies. Nothing is lost in translation. No guessing. No rework. DDD brings clarity to development teams, and flow to the enterprise. Teams build software that mirrors how the business works, adapts fast, and delivers real customer value - because teams are aligned, not just integrated, with the actual business behavior.

Domain-Driven Design (DDD) aligns systems with how the business actually works. It helps the enterprise go from features to ***flow***, from silos to service, and from delivery to value.

7.3.14.10 DDD and Capabilities

When starting with Domain-Driven Design (DDD) and aiming to build a business-aligned enterprise flow, the recommended order is to start with customer journeys and the business capabilities. These give the strategic and real-world anchors for everything that follows.

Business capabilities link everything to business value. Business capabilities define what the business needs to be able to do. This helps to identify related subdomains (Core, Supporting, Generic), and helps connect business strategy to domain-driven design.

Business capabilities act as a starting point for identifying Subdomains.

Business capabilities are essential for strategic planning and business architecture. They define what the business does, should do, or intends to do in alignment with strategic goals. They are high-level, technology-agnostic, and focused on value delivery.

Common Pitfall:

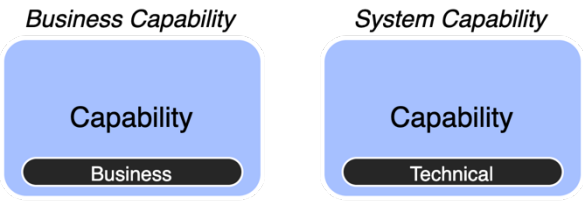
- The word “capability” is often used loosely across business and technical contexts, causing confusion. It is necessary to clarify whether you're referring to business capabilities or system-level abilities.

When talking about *capabilities*, people often mean different things, which leads to confusion.

- Some refer to *what the business* is doing or must be able to do to deliver value: these are business capabilities.
- Others use the term to describe *what a technical platform or application* can do, such as application functions or features. It's a common tendency to apply the word “capability” in a technical context, even when more accurate terms like system responsibilities, services, or functions would be clearer.

The term “*capability* “is often used loosely across business and technical contexts, causing confusion.

Without clarification, "capability" becomes a vague catch-all that mixes strategic, business, and technical concerns. This leads to misalignment between business and IT, especially in architecture, planning, and team conversations. Being intentional and consistent in using terms like *business capability* and *system capability* (a.k.a. *technology-platform capability* or *technology capability*) helps create shared understanding.



Terms are introduced in the table below.

Term	Definition	Used By	Example	Purpose / Use	Notes
Business Capability	What the *business* must be able to do to deliver value and meet strategic goals, and indirectly: to support customer needs	Executives, business architects, product owners	"Manage Orders", "Handle Inquiries"	Strategic planning, capability mapping, DDD subdomain identification	Stable, tech-agnostic, not a process or system
System Capability	What a *system* or service is responsible for doing to support business needs	Architects, platform teams, technical leads	"Generate Invoice", "Process Order Data"	Service boundaries, system design, team ownership, bounded contexts	Supports business capabilities; mid-level technical abstraction
Application Function	Backend operation or use case implemented in a system	Developers, solution architects	"Validate Payment", "Calculate Tax"	API/service implementation, technical decomposition	Often part of a bounded context
Application Feature	User-facing functionality that exposes system behavior	Product managers, UX designers, end-users	"Submit Report", "Download Invoice"	UI design, roadmap planning, user experience	May span multiple capabilities and functions

Key differences between business capabilities and system capabilities are shown in the table below.

Aspect	Business Capability	System Capability
Focus	What the business does	What a system can do
Level	Strategic / conceptual / business	Operational / technical /
Stability	More stable over time	Can change as tech evolves
Audience	Business leaders, strategists, architects	Developers
Example	"Manage Customer Data"	"Update customer address in CRM system"

7.3.14.11 Flow of Actions: Capability Map → DDD → Applications

Start from business needs (capabilities), organize them using DDD (subdomains + bounded contexts), and implement them as focused applications.

1. Start with the Capability Map
    - Identify *what* the business needs to do
2. Define Subdomains – based on business capabilities
    - Group capabilities into logical business areas (subdomains) based on purpose and complexity.
3. Identify Bounded Contexts
    - Set clear boundaries for each subdomain - define the terms, logic, and rules used inside them.
4. Design Applications
    - Build or structure applications (e.g. microservices, modules) around those bounded contexts.
5. Assign Teams
    - Align teams with the bounded contexts and applications they own and evolve.

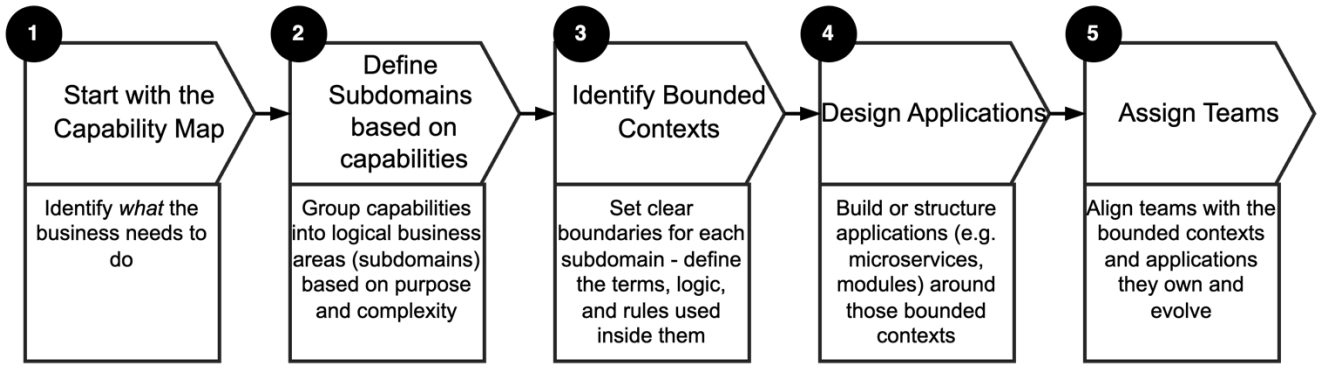


Figure 438: Flow of actions.

7.3.14.12 How DDD Relates to the Flow of Operational Business and Development

Central to applying Domain-Driven Design (DDD) not just as a modeling tool, but as a way to improve how business and development flow together. DDD isn't just a software technique, it directly supports the flow of operational business and connects to how development delivers value.

1. DDD reflects how the business actually works

- Domains and subdomains
    - mirror real business functions and flows
    - reflect real business areas: business domains
- Bounded contexts
    - define clear boundaries where these operations are modeled, owned, and executed.
    - match how responsibility is split across teams or departments.

2. DDD enables flow in development

- Each subdomain becomes a clear unit of work, linked to business outcomes.
- Bounded contexts become team-aligned modules that can be built, tested, and delivered independently.
- Developers know exactly which business capability they're supporting
- Development is organized around bounded contexts, which map to teams, systems, and services
- This matches Team Topologies thinking: stream-aligned teams own specific value flows
- Each team works with autonomy, clarity, and a shared domain language
- Less friction, faster delivery, fewer handovers - better flow of change.

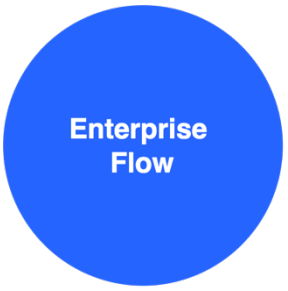
3. DDD supports end-to-end value delivery

- When designed around domains:
  - We can trace a customer journey to a business capability to a bounded context to a team/system
- This helps model the overall flow: the *Enterprise Flow*:
  - From need → to capability → to implementation → to customer value
  - Both business operations and development are aligned around continuous value flow.

DDD aligns business flow with development flow, so value moves smoothly from customer need to working software.

Domain-Driven Design (DDD) aligns operational business flow with development flow.

7.3.15 Enterprise Flow



WHAT? Enterprise Flow is a holistic, human-centric approach to understand, design, and manage how value moves through an enterprise - from customer needs to meaningful outcomes. It connects customer journeys, operations, and development, so that the enterprise can run, improve, and evolve in alignment with real customer value.

Enterprise Flow is the end-to-end movement of value through an enterprise - from customer need to delivered outcome. It shows how strategy becomes action, how teams collaborate, how systems operate, and how customers experience value.

Enterprise Flow is about the continuous movement of value - to customers, through operations, and across development - so the organization can deliver today and evolve for tomorrow.

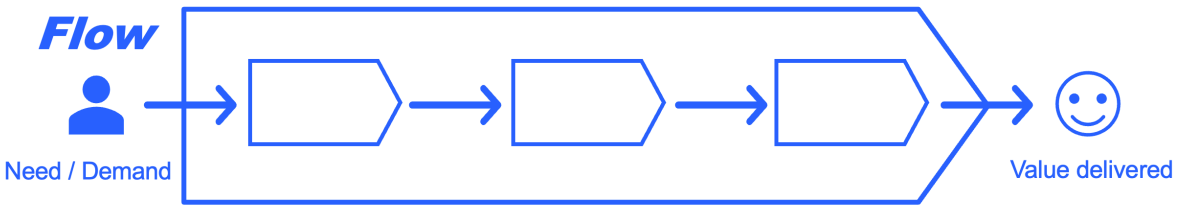


Figure 439: Enterprise Flow - is all about value flow.

The *value delivered* is the *outcome* of a ***flow of actions*** that benefits customers, users, employees, or the business. It's not just output - it's valuable outcome that makes a difference. Value delivered is the result of the flow - something that meets a customer need, improves a process, or advances the business.

A flow isn't just activity - it's purposeful movement toward delivering value.

Enterprise Flow is a comprehensive view of how an enterprise creates and delivers value - from understanding customer needs to achieving meaningful outcomes.

WHY? Enterprise Flow is important because it helps the whole enterprise work together to deliver better value, faster - to customers, employees, and the business.



Enterprise Flow aligns the whole enterprise to deliver value. It helps everyone understand how value actually moves through the organization - from strategy to customer experience. It shows where things connect, and where they don't. That's vital in today's complex, fast-moving world. Everyone knows where we're going and how to contribute, from C-level leaders to operational leve, to frontline teams.

- *We see the full picture, not just our piece of it.*

Enterprise Flow improves how we work. It gives teams the shared understanding to collaborate better, reduce waste and unnecessary *failure demand*, remove friction, and deliver outcomes faster. It helps prioritize what really matters. It makes the enterprise more adaptive, agile, aligned, and resilient. It reduces noise and confusion.

- *We spend more time creating value and less time fixing problems.*

Enterprise Flow improves customer experience and business results. When internal flow is smooth, the customer experience improves, failure demand drops, and employee engagement rises. This leads to better service and stronger performance.

- *Customers feel the difference - and so does the bottom line.*

Enterprise Flow helps organizations work better, flow smarter, and create more value - together. It's a way to make everything else work better - from strategy to systems, from journeys to teams.

Enterprise Flow helps the whole enterprise move in sync - from need to impact. It breaks silos, boosts collaboration, and keeps value flowing to customers, fast and with purpose.

The challenge with today's enterprises

Most enterprises weren't designed - they evolved. Piece by piece. System by system. Team by team. Over time, this led to a familiar problem:

- Strategy is disconnected from daily work.
- Customers experience suffers, as customers are forced to navigate complex, poorly designed services that cause extra work (*failure demand*) and frustration.
- Organisation units and teams operate in silos, struggling to collaborate.
- Technology grows fast, but value flows slow.

The result? Change becomes harder. People feel stuck. And customers feel it first.

It's Time for a new operating logic

The future belongs to enterprises that work like living systems - connected, adaptive, purpose-driven. They don't separate business from technology, or customers from operations. They work as one system, designed from the outside in and inside out. At the heart of this transformation is a new model: *The Enterprise Flow Model*.

Enterprise Flow - Designing the Modern Enterprise as a *living system*.

What makes the Enterprise Flow model different?

It's not just an approach or a framework - it's a way of thinking and doing. It brings structure, flow, and people together. The Enterprise Flow is:

- **Systemic** - connects the dots across experience, business and tech
- **Holistic** - sees the enterprise as one living whole
- **Human-centered** - puts people (customers, teams, stakeholders) at the center
- **Collaborative** - built through shared language (EDGY) and co-design
- **Composable** - made of modular parts that evolve with the business.
- **Designed** - utilises Enterprise Design practices, tools and methods.

Enterprise Flow is not “yet another framework” - it’s a way of seeing the enterprise as a living system of value. It is not a method - it's a mindset and a lens. Once we start seeing the enterprise in terms of flow, we begin designing systems, teams, and change around value - not around silos.

The Enterprise Flow model is how an enterprise "design the whole and deliver the flow." "From purpose to product, from journeys to teams." "A living model for human-centered, adaptive enterprises."

Enterprise Flow is how an enterprise aligns customer journeys, operations, and development into a continuous, collaborative, and comprehensive flow of value.

HOW? The Enterprise Flow helps the entire enterprise focus on what matters most: delivering value to customers - today and tomorrow. It connects three key flows:

1. **Customer Journeys** - What customers experience and need
2. **Operations** - How we deliver value efficiently every day
3. **Development** - How we improve, innovate, and adapt

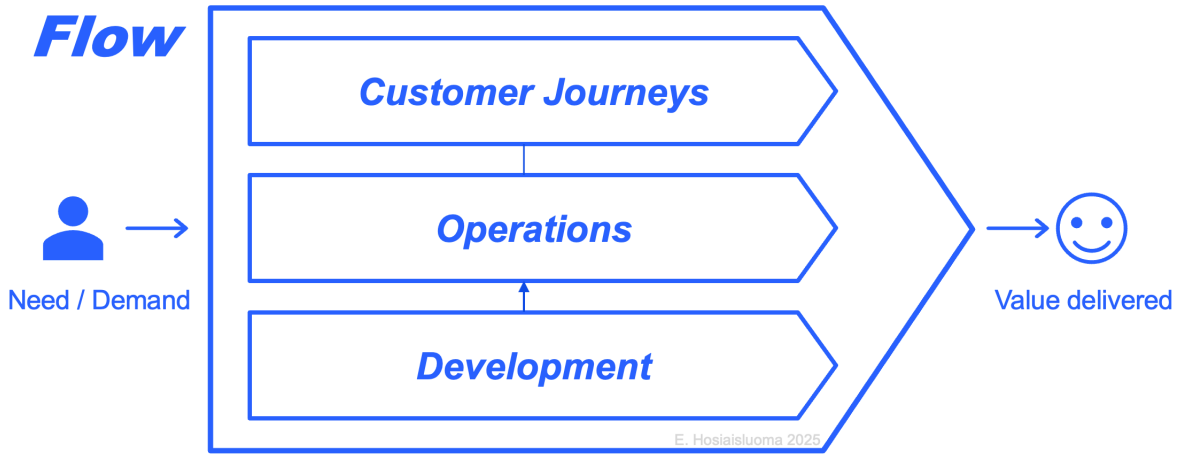


Figure 440: High-level flows of the Enterprise Flow.

When these flows work together, the enterprise becomes customer-centered, efficient in delivery, and agile in change. Instead of working in silos, everyone is part of a continuous, connected value flow - from frontline to leadership.

In Short:

- Customer Journeys (outside-in) = how value is experienced.
- Operations (inside-out) = how value is delivered internally.
- Development (change) = how value delivery is continuously improved.

Together, they form one continuous Enterprise Flow: from need, to delivery, to improvement - in sync.

The idea behind the Enterprise Flow:

- The Enterprise Flow represents the comprehensive, coherent, and cohesive integration of flows - customer journeys, operations, and development - working together in synergy to create a unified, continuous flow of value.

The Enterprise Flow makes visible the natural, yet often overlooked, processes happening already in modern enterprises. It doesn't necessarily create something entirely new, but rather brings clarity and structure to what is already occurring or should be occurring for optimal functioning. It clarifies how customer journeys, operations, and development are interconnected and work together to create continuous value.

The Enterprise Flow makes visible and aligns the natural, essential flows already happening in a modern enterprise.

The customer journeys, operations, and development flows are the three fundamental pillars of the Enterprise Flow. These flows are inseparable - they work together as one continuous system that creates value for customers and drives the business forward.

Each flow requires the others to function effectively. Customer journeys need smooth, efficient operations to fulfill promises. Operations depend on development to evolve, improve, and meet changing customer expectations. And development is guided by customer journeys and operational needs to create continuous, impactful improvements.

The flows of customer journeys, operations, and development are inseparable and interdependent: each one drives and relies on the others to deliver continuous value and innovation. These flows are meaningful only when integrated as a whole. By aligning these flows, the enterprise can create a seamless Enterprise Flow that ensures both optimal internal operations and exceptional customer experiences.

Integrated flows enable continuous value delivery by connecting what customers need with how the enterprise delivers and improves its services. When flows are integrated, the enterprise can operate efficiently, adapt quickly, and serve customers most effectively.

- Integrating customer journeys, operations, and development flows enables a seamless overall Enterprise Flow, driving optimal performance and delivering consistent value to both customers and the enterprise.

Customer Journeys, Operations, and Development are inseparable flows that need each other to create a seamless, value-driven experience for both customers and the enterprise.

Value delivered



In the Enterprise Flow, each flow - whether it's a customer journey, an operation, or development work - moves toward a valuable outcome. That outcome is called *value delivered*. Value delivered can be e.g.:

- A digital product or service that solves a customer need, problem or job(s) to be done
- A change in biz operations that improves efficiency, quality, or cost-effectiveness
- A feature or update (in a product) that enhances the customer or user experience
- A new product, service, process, report or experiment etc. based on innovation
- A business decision based on reliable insights or data
- anything that brings measurable benefit to people or the business.

Value delivered is the useful result of a flow - something that solves a problem, improves a situation, or creates new opportunity.Value delivered for different groups and audiences:

Value delivered	
For customers	*Value delivered* means customers get something that actually helps - a product, service, or experience that works, solves the problem.
For operational Staff (Ops)	*Value delivered* is the result of the work making things run better - for customers, colleagues, or the business. It's how our effort creates real impact.
For designers	*Value delivered* means the outcome of the design work actually solves a real user problem and fits into the larger flow of how value reaches people.
C-level (Executives)	*Value delivered* is the measurable outcome of how our enterprise flows - it's what turns strategy into real-world results for customers and the business.

Flows create outcomes that matter. In an enterprise, a flow is the movement of work, knowledge, and effort toward a result. That result, or outcome, is what delivers value.

A flow produces something valuable: for the customer (e.g. a product or service), for the business (e.g. a process improvement or new capability), or both.

Value delivered is the useful result of a *flow of actions* - something that solves a problem, meets a need, or improves things for customers or the business.

7.3.15.1 Enterprise Flow anatomy

7.3.15.1.1 **Core Flow - Where Customer Needs Meet Operational Excellence**

The Core Flow is where customer journeys and operations meet - the core business in action, showing how value is experienced and delivered in real life. Customer journeys and operations are both flows - two sides of the same coin. Customer journeys show how value is experienced from the outside, operations show how that value is delivered from the inside. They are tightly interconnected - when one changes, the other is affected.

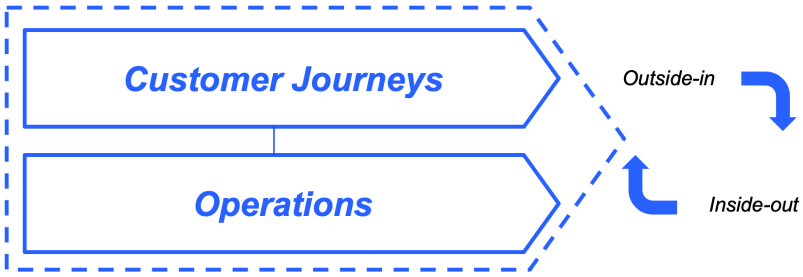


Figure 441: Core flows.

Core Flow:

- connects *what* customers need with *how* the business delivers
- links customer *experience* with operational *architecture*
- integrates customer journeys and operations

Core Flow aligns customer journeys and operations into one unified flow, ensuring that both sides play complementary roles in delivering value and driving business outcomes

Customer Journeys	Operations
The customer's experience of getting value.	The organisation's way of delivering that value.
What the customer does (journey steps, needs / tasks / jobs to be done, pain points).	What the business does (processes, roles, applications, data).
Outside-in perspective (customer view).	Inside-out perspective (organisation view).

Core Flow is the heartbeat of the enterprise. It's where customer experiences and business operations align, creating seamless value delivery.

7.3.15.1.2 **Development Flow - the engine of change.**

Development is the flow that enables change. It supports and improves both customer journeys and operations by building new capabilities, fixing pain points, and adapting to evolving needs.

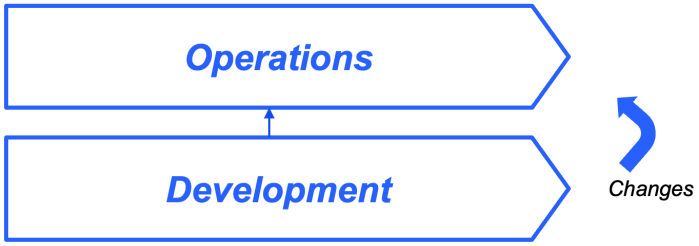


Figure 442: Development changes operations.

Development Flow:

- transforms ideas into action, driving continuous improvement and ensuring that operations evolve to meet ever-changing customer needs

- connects change with delivery, empowering the enterprise to evolve alongside customer expectations
- ensures that the enterprise remains agile

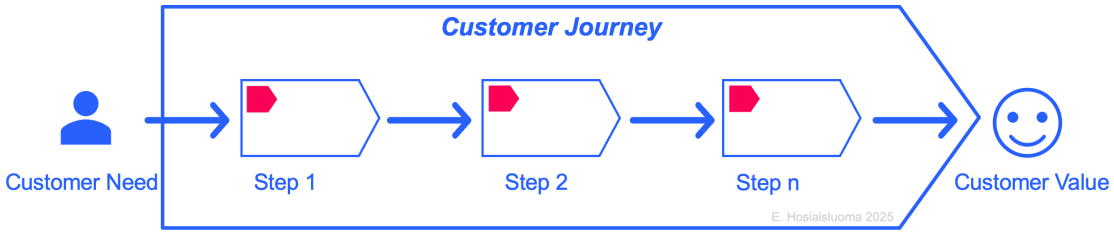
Development flow includes all the diverse disciplines and perspectives needed to deliver change: from design and user experience to coding, security, testing, and deployment.

Development is the umbrella term for all activities that close the gap between customer and/or business needs and operations - whether called *DesignOps*, *JourneyOps*, *DevOps*, *DevSecOps*, or other "*Ops*" approaches. The role of **concept design** is to transform demands, coming e.g. from customers, business goals, or strategy, into working solutions that can be implemented and operated successfully. Concept design acts as the bridge in development flow, turning demands into integrated, secure, and valuable solutions by balancing customer needs, business goals, and operational realities - all guided by Enterprise Design and EDGY.

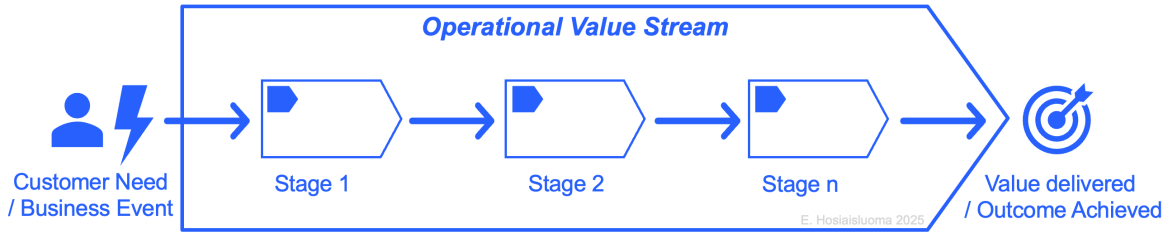
Development Flow ensures that the enterprise remains agile, enhancing both customer journeys and operations through constant innovation, adaptation and continuous improvement.

7.3.15.1.3 **Overall Flow**

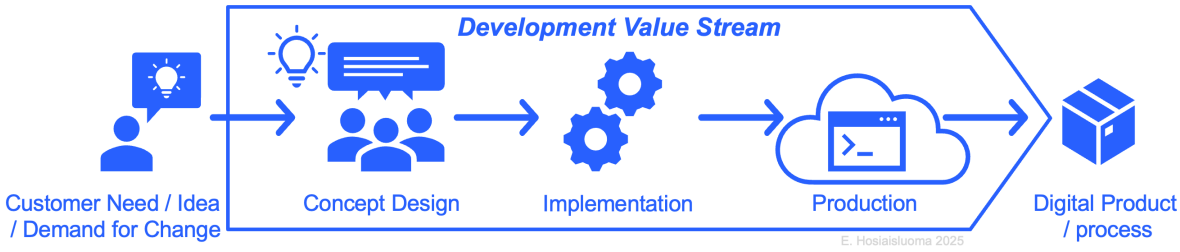
Customer Journey(s)



Operations / Operational Value Stream(s)



Development Value Stream



Flow area	Description
Customer Journeys	Flow of value to and from the customer - shaped by needs, experiences, and outcomes.
Operations	Flow of value through the enterprise - by turning inputs (effort, data, materials) into services or products.
Development	Flow of change across the enterprise - including change demands, ideas, learning, and the actual implementation of improvements, new capabilities, and innovations. It's how the enterprise evolves in response to strategy, customer needs, and operational insights.

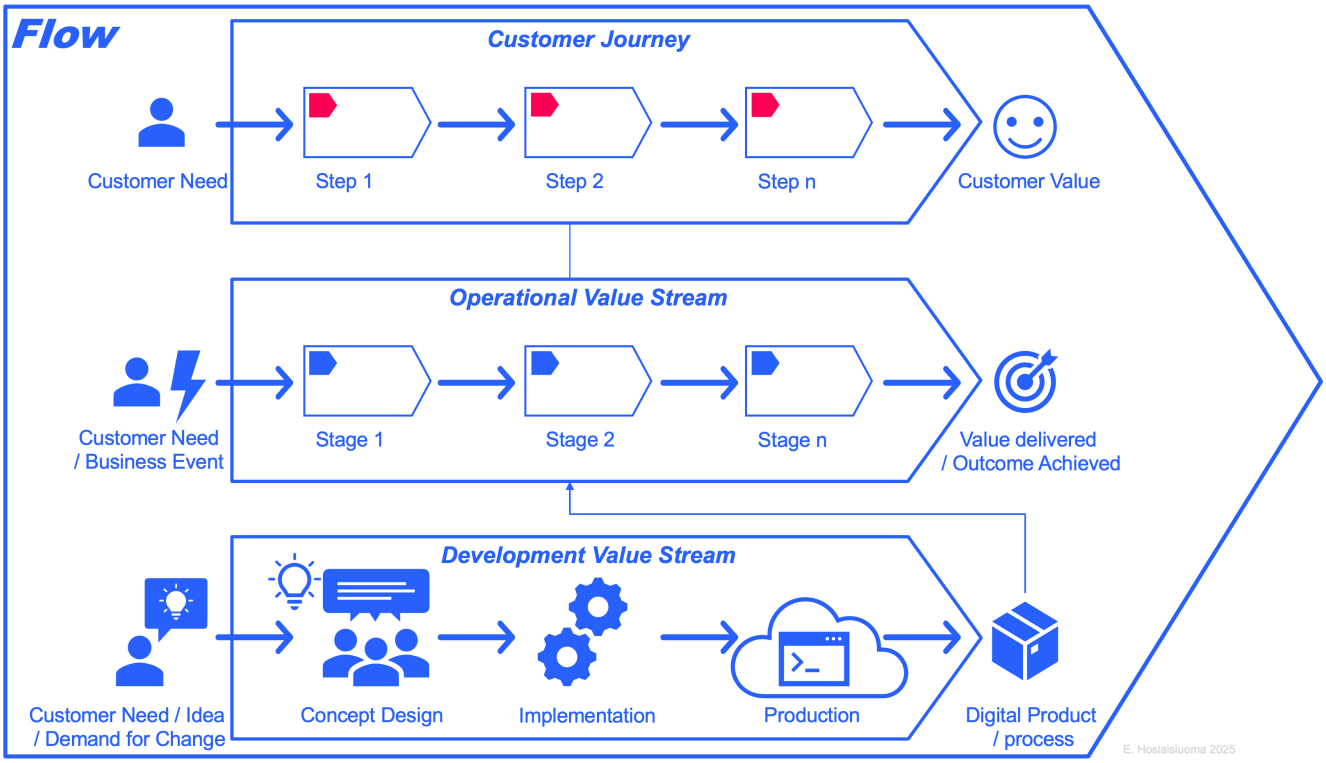


Figure 443: Enterprise Flow - a modern flow model of an enterprise.

Triggers and outcomes of flows:

Flow	Trigger	Outcome / Output
Customer Journey	A customer need, problem, or job to be done (e.g., apply for service, buy a product)	Customer achieves a desired result (e.g., receives service, gets resolution)
Operational Value Stream	A customer action or business event (e.g., order placed, request submitted)	Value is delivered to customer or stakeholder (e.g., product shipped, case resolved)
Development Value Stream	A need for change or improvement (e.g., feedback, strategy, regulatory change)	A new or improved solution, service, or capability is delivered

Enterprise Flow is about making sure that the entire organization works together - across teams, silos, and systems - to deliver smooth, valuable customer experiences. It aligns strategy, operations, and development around real outcomes.

The three (3) main flows and how they interconnect

1. **Customer Journey Flow** (*Outside-In*) - Starts with the customer and their experience.
   a) Describes what the customer wants to achieve (needs, tasks, jobs-to-be-done) and how they interact with the enterprise (channels, touchpoints, products, services).
   b) Reveals pain points, expectations, and opportunities.
   c) Drives everything else - it's the starting point of all meaningful change.

Feeds into…

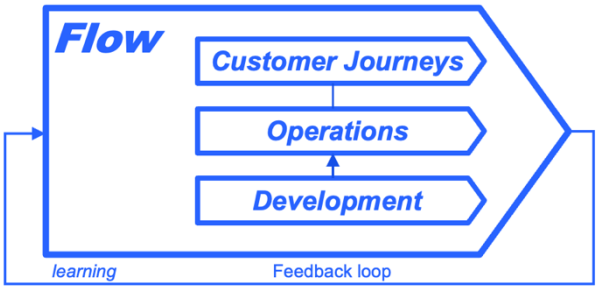
2. **Operations Flow** (*Inside-Out*) - Delivers what the customer needs, using business capabilities and processes.
   a) Translates customer journeys into internal workflows and services.
   b) Involves people, tools, applications (systems), and data needed to fulfill the journey.
   c) Connects cross-functional teams around end-to-end value delivery.

Needs support from…

3. **Development Flow** (*Change Flow*) - Builds, improves, and adapts the operations to better support journeys.
   a) Includes all change work: strategy execution, concept design, projects, product development, application upgrades, IT-services.
   b) Uses agile, lean, or traditional methods - but focuses on flowing value, not just completing tasks.
   c) Works in sync with operations, informed by real customer and operational needs. Leverages appropriate approaches to organise work and teams, e.g. utilising *Team Topologies*, *Domain-Driven Design (DDD)*, *Enterprise Design Hub* and multidisciplinary teams.

How they work together (*The Flow Loop*)

- Customer Journey identifies what needs to improve.
- Operations delivers the experience but highlights internal blockers or gaps.
- Development builds solutions to remove those blockers or improve the journey.
- The improved experience loops back into better journeys, and the cycle continues.



Why This Matters? Most organizations split these flows across departments - but customers experience the whole flow as one. Enterprise Flow makes sure:

- Everyone sees and works on the same value.
- Feedback from customers and operations informs development.
- Changes actually improve customer experience - not just systems or processes.

Enterprise Flow models how value flows across the entire enterprise - from customer need to delivery and continuous improvement, all together.

Ecosystem level. Enterprise Flow scales to the ecosystem level by connecting flows across multiple enterprises, each contributing its own customer journeys and related operations to a shared value network.

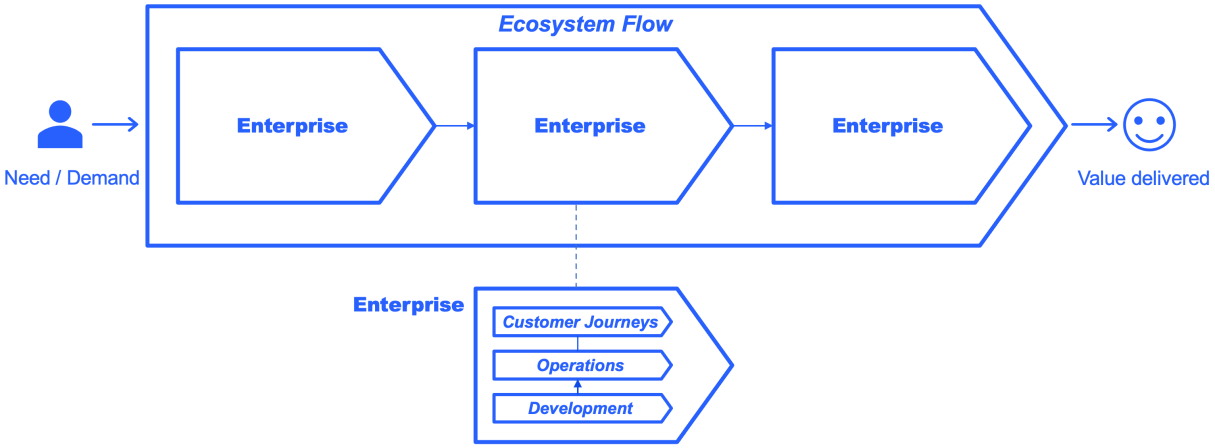
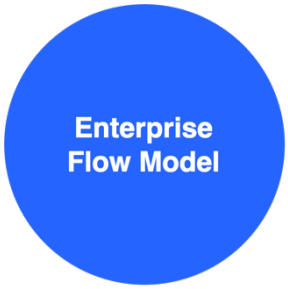


Figure 444: Ecosystem-level flow.

7.3.15.2 Enterprise Flow Model

The Enterprise Flow Model is a holistic, systemic and human-centered model for designing and running modern enterprises. It is a view of how an enterprise creates value - from customer needs to running solutions.

The Enterprise Flow Model covers all the models that support the overall enterprise design and development. It brings together all the essential models into one integrated framework.



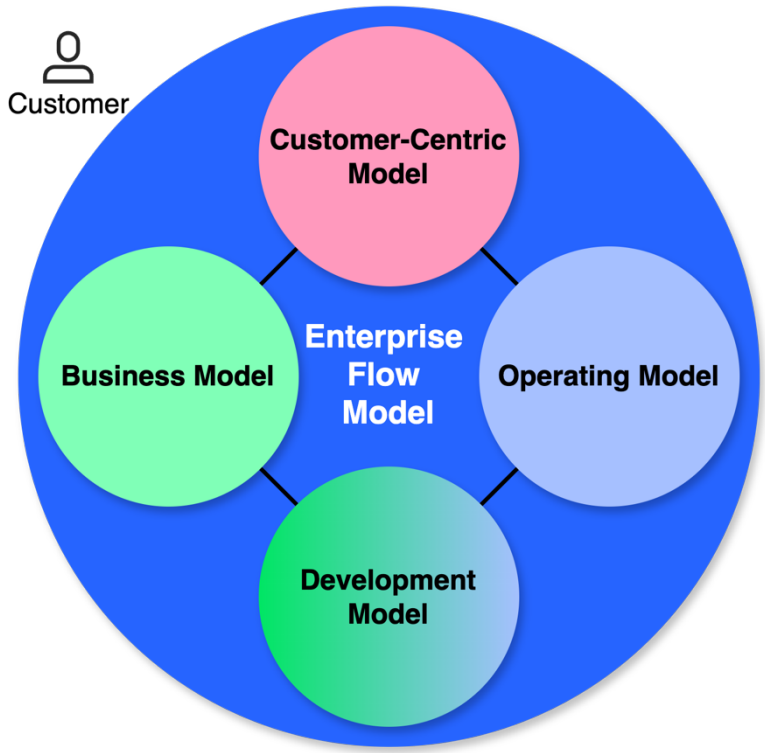


Figure 445: Enterprise Flow Model is a holistic, comprehensive view of an enterprise.

Enterprise Flow combines all the models into one.

Model	Questions	How it's represented in the Enterprise Flow model
Customer-Centric Model	What are our customers? What do they need? What do customers experience? What is offered to customers - via which channels?	Captures customer journeys, channels / touchpoints, customer needs (customer insight) and enterprise's products and/or services.
Business Model	How do we create value for customers and the business? What capabilities do we need?	Shows how value is created and delivered through value streams and capabilities.
Operating Model	How do we operate? How do we create and deliver our offerings? What is required for our capabilities, which processes and assets are involved?	Describes how people, roles, processes, and applications operate to support customers and the business.
Development Model	How we develop our operations?	Maps how ideas are turned into working solutions through teams, flows, and applications (systems).

The Enterprise Flow Model unites customer experience, business purpose, operations, and development into one clear, connected view of how the enterprise actually works.

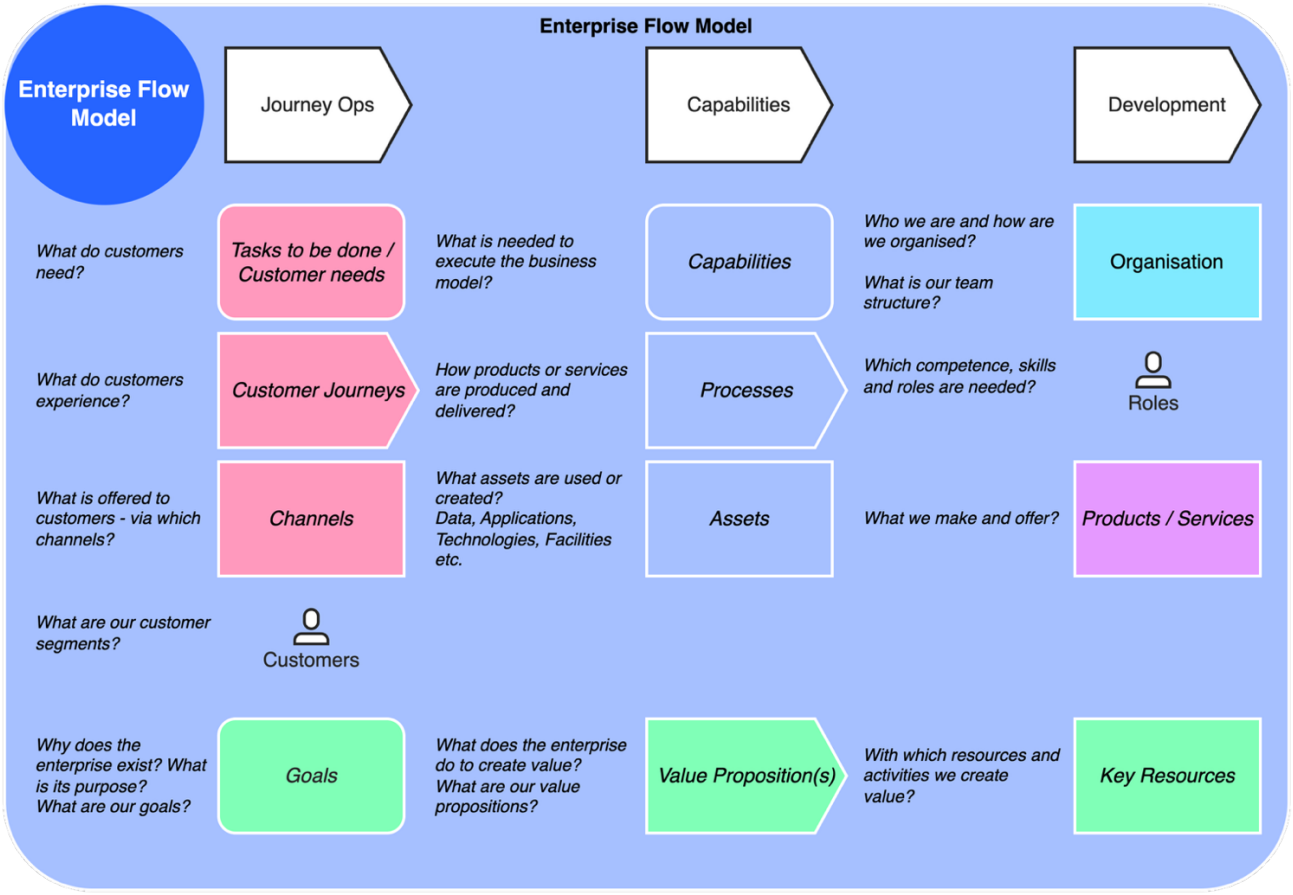


Figure 446: Enterprise Flow Model.

Enterprise Flow Model	
WHAT	Holistic, human-centric approach to understanding and managing how value moves through an enterprise - from customer needs to real outcomes. It connects customer journeys, operations, and development into one continuous flow, into one coherent value delivery system.
WHY	It helps the whole enterprise work together to deliver better experiences, faster - reducing friction, silos, and waste. Enterprises often operate in silos - strategy doesn't connect to delivery, and change feels disconnected. Enterprise Flow helps align everyone around what truly matters: the customer experience, the efficiency of operations, and the ability to evolve continuously.
HOW	Enterprise Flow aligns strategy to execution through customer journeys, mapping internal operational flows, and improving them with cross-functional teams.

The Enterprise Flow is not just a model - it's also a mindset and a culture.

- A shared mindset where everyone in the enterprise sees their work as part of an interconnected flow of value - to customers, colleagues, and the broader ecosystem - and takes ownership of continuously improving that flow.

The Enterprise Flow Model isn't a new framework, it's a unifying view that works with whatever frameworks, methods, or tools your enterprise already uses. Enterprise Flow can be built on top of any framework like SAFe, Scrum, ITIL, or TOGAF - it connects them to show how value actually flows through the enterprise. It's framework-agnostic and helps align all approaches around the same flow of value - from customer to outcome.

The Enterprise Flow is framework-agnostic and helps align all approaches around the same flow of value - from customer to outcome.

7.3.15.3 Enterprise Flow in practice

Enterprise Flow helps everyone see how their work fits into the big picture - and how we can move together toward better outcomes. It connects strategy, customers, teams, and systems into one shared flow.

How to start defining and implementing the Enterprise Flow:

A. Start with customer journeys to understand customer needs.
B. Align internal operational value streams and capabilities to deliver that value
C. Use a structured development flow to design, build, and implement improvements.

Steps to be taken:

1. Start with customer journeys to understand customer needs.
    - Understand what customers need and how they experience the services of the enterprise by getting the *customer insight*.
    - Identify the journey steps and customer pains and gains. Utilise service design methods and tools with EDGY.
    - Choose key customer journeys to focus on first
2. Connect customer journeys to operations - the *Outside to the Inside* (Operations)
    - Look at what business capabilities, applications (systems) and teams are behind each step of the customer journey.
    - Identfy, define and visualise the operational processes and related capabilities (internal behavior) that support the customer journeys. Visualise the overall customer journeys with internal operations together (utilise e.g. service blueprints).
    - This shows how internal work affects customer experience.
3. Organise development work around value flow
    - Align strategy, operations, and development efforts with real customer and business value. Running and improving the business go hand in hand - they flow together.
    - Identify ownership of capabilities and related development teams.
    - Define the ***development process***, use cross-functional ***Enterprise Design Hub*** virtual team to handling incoming change demands with coordination, and multidisciplinary teams to own and improve entire flows, not just tasks.

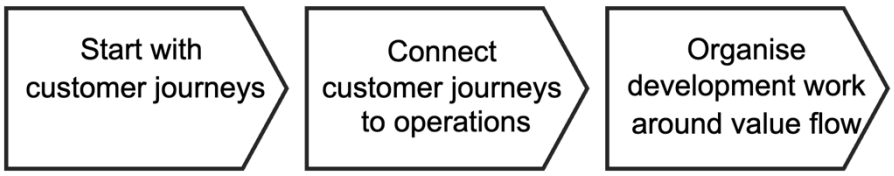


Figure 447: Enterprise Flow in practice (flow of actions).

Be customer-driven in everything:

- Everything begins with understanding real customer needs (*customer insight*).
- Focus on customer journeys.
- Design around the customer's journey - not just internal structures.
- Decisions and priorities are based on what brings value to the customer.

Collaborate across teams:

- Work together across silos to keep value flowing end-to-end.

Learn and adapt continuously:

- Improve based on feedback - from customers, operations, and each other.

Enterprise Flow Principles:

#	Principle	Description
1	Value flows end-to-end	We design, run, and improve the enterprise around the continuous flow of value - from customer needs to real outcomes, across all parts of the enterprise.
2	Customer-centricity guides everything	Everything starts with understanding customer needs. We design around customer journeys - not just internal structures - and measure success by the value we deliver.
3	Operations and development are interconnected	Running the business and improving the business go hand in hand. They are two sides of the same coin and support each other continuously - synchronized and mutually reinforcing.
4	Flow Over Fragmentation	We avoid breaking work into disconnected parts. Instead, we collaborate, co-design, and work across teams and roles to keep value flowing smoothly through the whole organization.
5	Adaptive by Design	We build our ways of working to be flexible. Our flows are designed to adapt, respond to change, and evolve over time.
6	Shared Understanding, Shared Direction	We align around common goals and make the big picture visible - what we're doing, why it matters, and where we're heading. Enterprise Design helps us move as one team.
7	Learn and Adapt Continuously	We keep learning and improving together. We balance speed with quality, and short-term progress with long-term growth and resilience.

Enterprise Flow helps everyone see how their work fits into the big picture.

Flow layers:

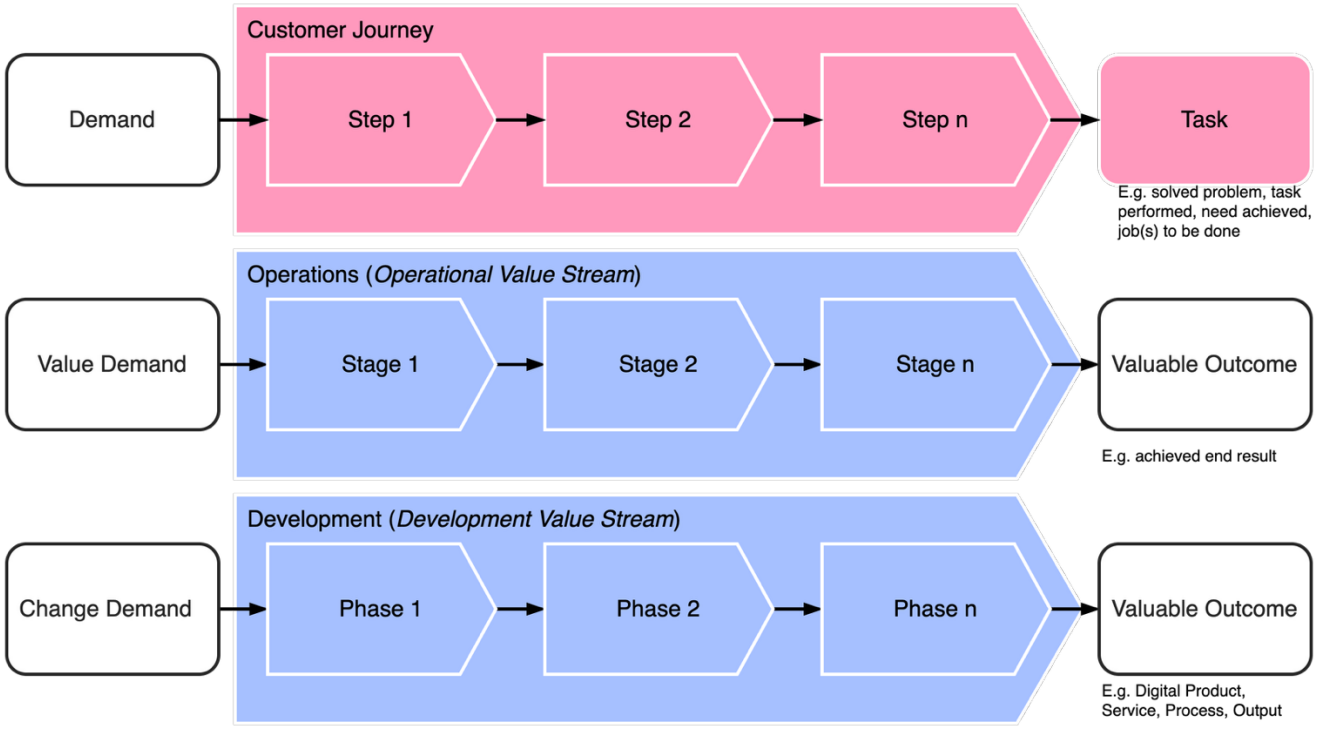


Figure 448: Value flow layers of the value flow.

Valuable outcome can be diverse things that create value for the customers or the business. For example:

- An output - a tangible or intangible result (object), such as artifact, document, insight or piece of knowledge etc.

- A product - such as a digital product or service created to benefit people by solving a specific customer need.
- A process - a change in operations that improves how the work is done (e.g. through Lean practices, automatisation/RPA, or AI).

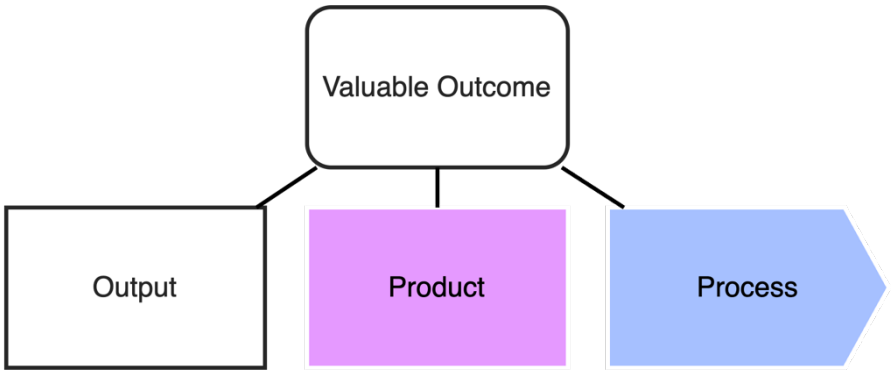


Figure 449: Outcome with value – valuable outcome.

Valuable Outcome is anything useful and meaningful that solves a problem, meets a need, or improves something - for people or the enterprise.

7.3.15.3.1 **Flow of value - the value flow - within the flow of actions**

Value is realised as *outcomes* for different stakeholders. It flows through the system (such as enterprise) via chains of actions / activities. Three concurrent flows:

1) Customer Journey (Use flow) - actions by customers → customer outcomes (needs met, time saved, risk reduced).
2) Operations (Run flow) - actions by the organisation → service outcomes (reliable delivery, quality, cost, compliance).
3) Development (Change flow) - actions by product/tech teams → change outcomes (capabilities improved, features released, risks mitigated).

Outcome alignment:

- Customer outcomes = what customers want to achieve.
- Organisation outcomes = what the organisation can consistently produce for customers and the business.
- Development outcomes = what teams can implement to improve operations and the journey.

Value is the outcomes produced for customers and the business, carried through the enterprise by a *flow of actions* across the Use (Customer Journey), Run (Operations), and Change (Development) streams.

Common pitfall to avoid: calling *outputs* (e.g., “new feature shipped”) “value.” The value is the resulting *outcome* (e.g., higher conversion, fewer errors).

7.3.15.3.2 Enterprise Flow advanced aspects

A practical implementation of the Enterprise Flow Model brings together five powerful practices into a single, connected approach:

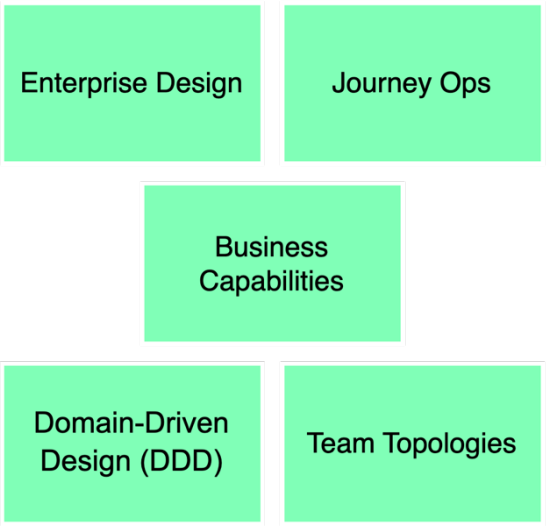


Figure 450: Enterprise Flow parts in practice.

1. **Enterprise Design** - designing the whole

Enterprise Design gives us the tools to see the big picture - and act on it. It helps us design the enterprise as a whole, across three core facets:

- Identity - Why we exist, what we promise, and where we're going
- Experience - How people interact with us across touchpoints
- Architecture - The capabilities, systems, and roles that make it real

It also connects what often stays siloed - brand, product, organisation - so we can co-create across disciplines. Enterprise Design thinking is collaborative, human-centered, and holistic. It helps us make sense of complexity - and build better systems with people, not just for them.

2. **Journey Ops** - flow from the customer perspective

Journey Ops turns customer journeys from static diagrams into living flows.

- It connects real customer behavior to operations
- Monitors journeys across silos
- Helps teams collaborate around outcomes, not just functions

This is how we make customer-centricity operational, continuously.

3. **Business Capabilities** - stable building blocks of value delivery

Capabilities describe what the business does, independent of teams, tools, or org charts.

They provide:

- A common language between business and tech
- A modular way to organize, fund, and evolve the enterprise
- A stable anchor point to connect journeys, systems, and teams

4. **Domain-Driven Design (DDD)** - build what reflects reality

DDD helps us design systems that match the way the business thinks and works.

With clear *bounded contexts*, shared domain language, and well-defined interfaces, we build software and services that are:

- Easier to understand
- Easier to scale
- Easier to evolve

5. **Team Topologies** - organize for flow and focus

Teams are the units of delivery. When we design them with intention, we reduce friction and increase flow.

Team Topologies helps us:

- Align teams to value (stream-aligned)
- Support them with platforms and enabling teams
- Design for fast learning and low hand-offs

Layers	Description
Customer Journeys	How customers experience value and interact with the organization
Business Capabilities	What must the business be able to do to deliver that value
Subdomains & Bounded Contexts	How work is logically modeled and structured (DDD)
Applications & Systems	How capabilities are implemented and run in technology
Teams	Who builds, owns, and operates each part (Team Topologies)

And, Enterprise Flow includes a feedback loop to help the enterprise learn and improve continuously.

High-level layers are:

- Customer Journeys
  - First start from the customer experience and focus on customer journeys and customer needs
- Capabilities
  - Next identify business capabilities that are required to realise products and services for the customers
- Systems (applications)
  - Finally identify applications that are used by the capabilities for managing the data.

Enterprise Flow is the blueprint of how value moves through your enterprise. It helps you align business, tech, and teams around what matters most: flow, outcomes, and customers.

Enterprise Flow is a systemic and holistic way to build adaptive, customer-centered enterprises that flow with change, not against it.

7.3.15.3.3 **Enterprise Flow analysis and design**

Enterprise Flow builds on the **Enterprise Design** approach and **EDGY** language. This means we can map intentions, experiences, structures, and platforms in a unified way, and translate strategy into action across the enterprise. This gives structure and credibility, especially to architects, designers, and strategists.

The EDGY Facet Model (figure below) is a powerful tool to analyse and design the overall Enterprise Flow because it helps map, understand, and align all the essential elements that affect how value flows through an enterprise - from customer journeys to operations and development.

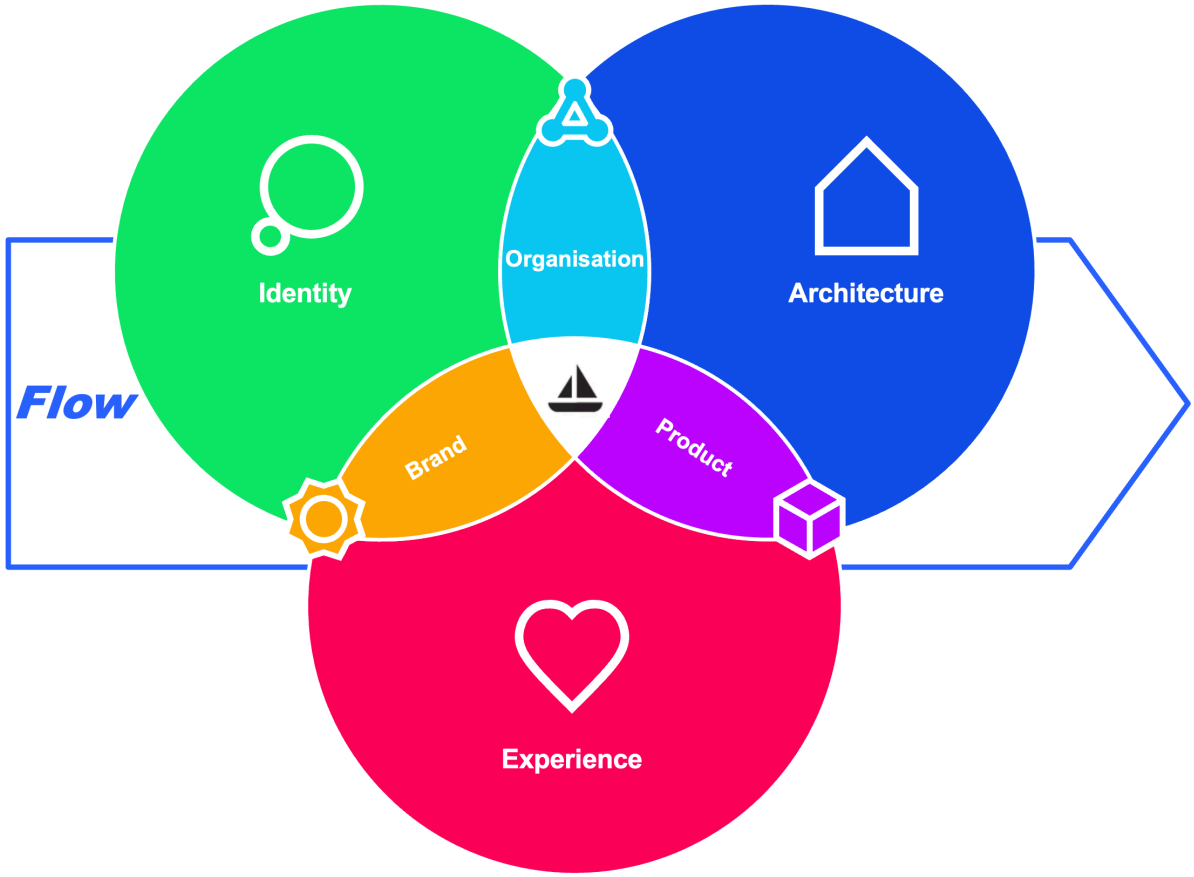


Figure 451: Enterprise Design supports the Enterprise Flow.

The Enterprise Design approach and the EDGY language are particularly well-suited for analyzing and modeling the Enterprise Flow and its main parts - customer journeys, operations, and development - because they offer a structured, visual, and systemic way to understand and align complex enterprise realities.

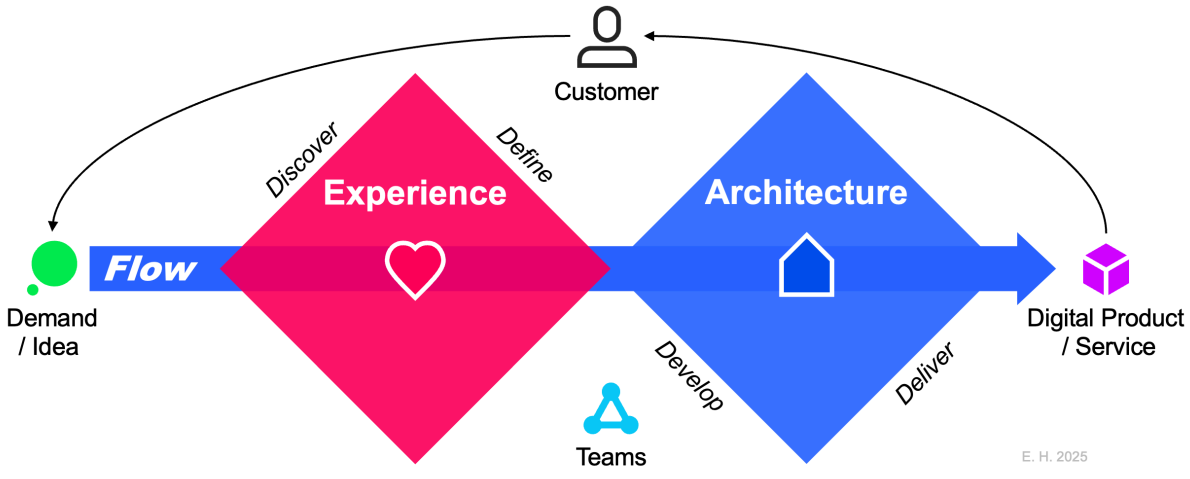


Figure 452: Enterprise Flow analysis & design – from experience to opeartions.

The Enterprise Design approach and the EDGY language are particularly well-suited for analyzing and modeling the Enterprise Flow and its main parts - customer journeys, operations, and development - because they offer a structured, visual, and systemic way to understand and align complex enterprise realities.

Enterprise Flow is about integration - EDGY makes it visible. Enterprise Flow connects customer journeys, operations, and development into one continuous, value-focused system.

Enterprise Design and EDGY give us the elements to see, understand, and improve how value flows through the enterprise - across customers, teams, applications, and strategy.

The EDGY language provides a visual, shared vocabulary to map and align all parts of the Enterprise Flow. EDGY provides all the relevant elements that are needed for overall analysis, design and development of the Enterprise Flow such as *Journey, Task, Capability, Process, Asset, Product, Organisation* etc. as shown below.

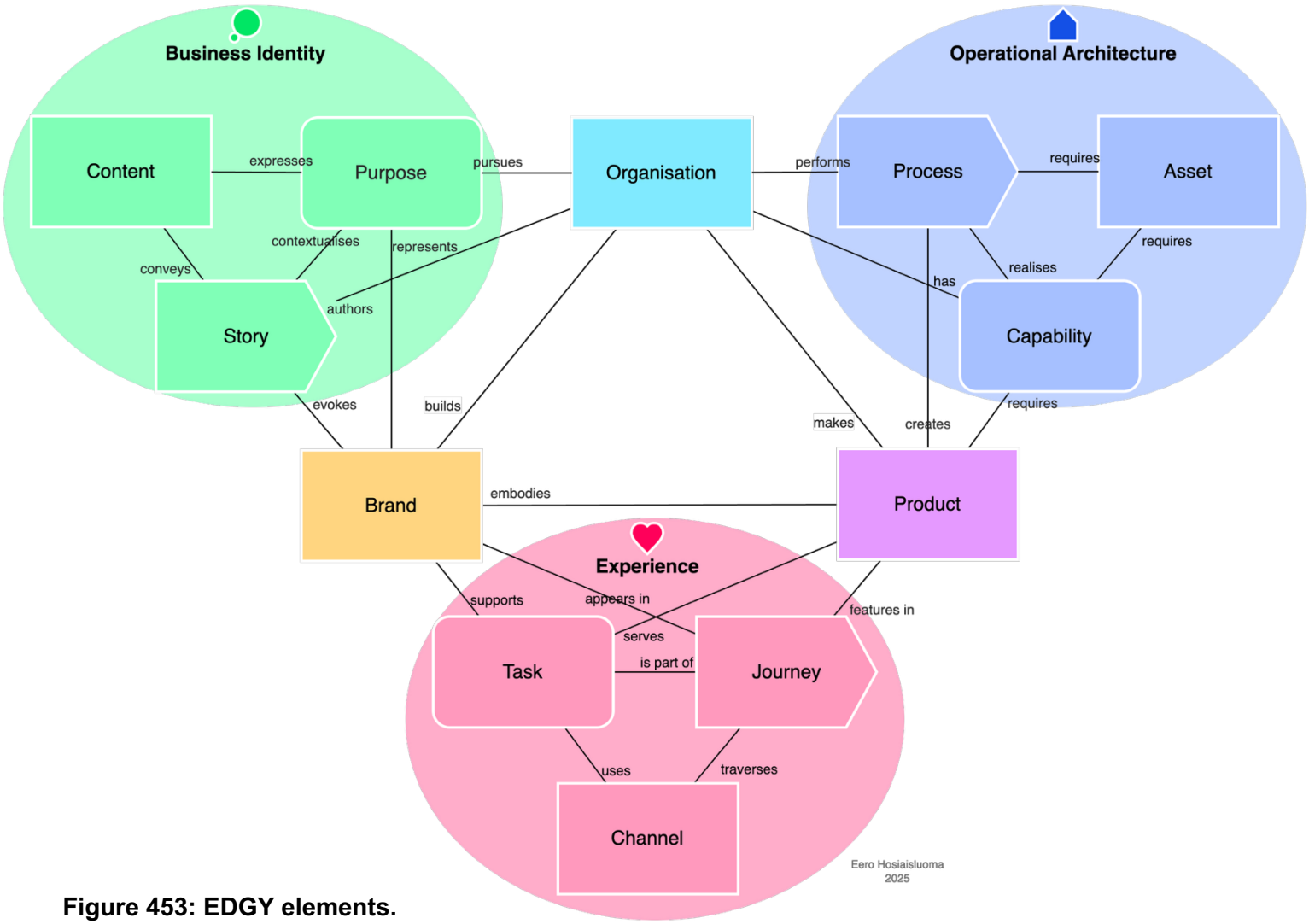


Figure 453: EDGY elements.

Visualise, align, and improve:

- Utilise EDGY as a common language, use and/or create visualisations of journeys, capabilities etc., use service design methods when appropriate.
- Use maps and views of the flows and related elements for collaborative co-design and common understanding - so everyone sees the same picture.
- Fix the biggest blockers, reduce waste, and focus on outcomes.

Enterprise Design approach with EDGY laguage is a practical method for analysis and design of the overall Enterprise Flow.

7.3.15.3.4 **Customer Perspective**

Customer-centricity is an approach where the customer is placed at the center of all design and decision-making to ensure that products, services, and experiences meet their needs. Customer-first is a business strategy, where the customer is at the core of the business.

Enterprise Flow design from the customer perspective covers elements as shown in the simplification below. EDGY provides concepts with which it is possible to visualise all that is meaningful in the context of enterprise. The customer perspective can be analysed with EDGY elements Task, Journey and Channel, which open up the important aspects from customer's point of view. These elements cover the outside-in view of enterprise's business. The inside-out view is then covered with the customer-facing elements Brand and Product, which are then connected to other elements of the enterprise, Capability, Organisation and Purpose.

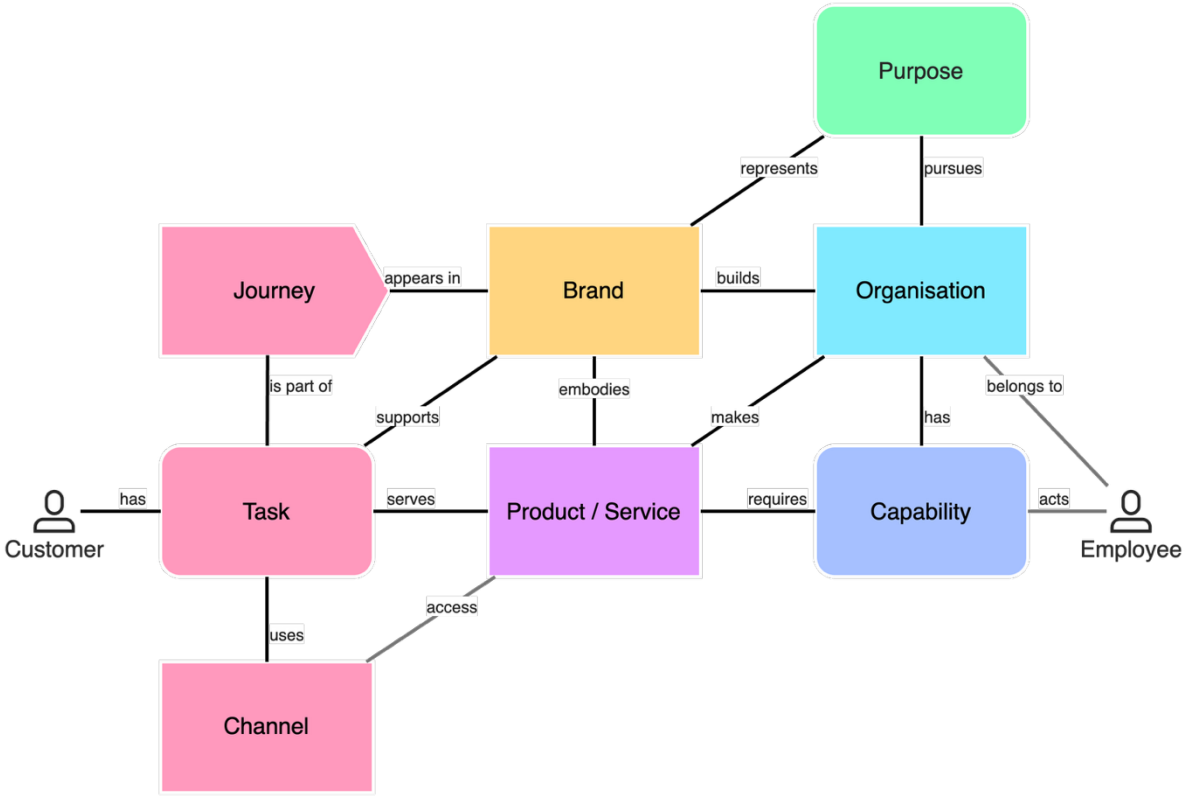


Figure 454: Customer experiences the Enterprise.

Figure explained: A customer has task(s) to do that are served by the products and/or services, which are produced by the capabilities of an organisation. A customer traverses a journey (of several steps), that represents what a customer experiences while doing task(s). The customer becomes aware of products and/or services with the help of the brand of the organisation. The customer contacts the products and/or services via channels. Customers' access journey steps (stages, phases) via channels when they perform their tasks. Tasks are served by the products and/or services (offerings) that require certain capabilities from the organisation

A customer journey represents what a customer experiences - and how they experience the enterprise.

7.3.15.3.5 **Development Process**

Development process (a.k.a. Development Value Stream) refers to the set of activities that create and evolve the systems, products, services, or capabilities that operational value streams use to deliver value.

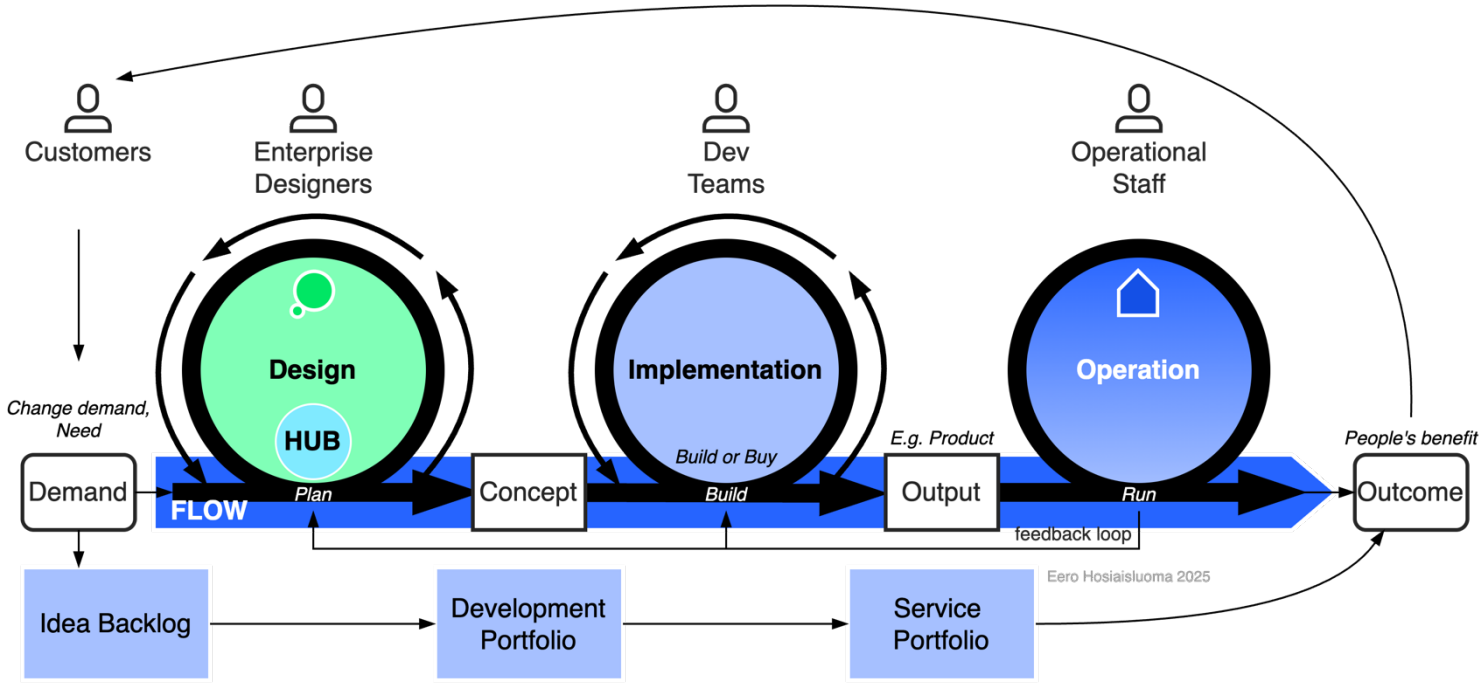


Figure 455: Development process (*Development Value Stream*).

The organization's development process (a.k.a. development value stream) consists of several key phases that transform needs and ideas into delivered value. These phases typically follow a structured flow, ensuring that change demands are effectively processed from conception to implementation.

The development process can be effectively divided into three high-level phases: 1) Design (Plan), 2) Implementation (Build & Deliver), and 3) Operation (Run). The Enterprise Design Hub is positioned primarily in the Design phase, but its influence extends into the Implementation phase as well.

Typically the development is based on agile frameworks, methods and tools such as SAFe, Scrum, Kanban and related software tools that support managing epics, stories and tasks etc.

Development is the flow of change that enables better customer journeys and operations.

7.3.15.3.6 Development Capabilities - from Idea to Production

Incoming change demands are handled through the centralized Enterprise Design Hub, where concepts are shaped and then directed to multidisciplinary teams via portfolio management. Finally, digital products are deployed into production and integrated into operational value streams. This development flow of *idea to production* (*idea to value delivery*) contains certain capabilities such as Demand Management and Portfolio Management, on the way to production.

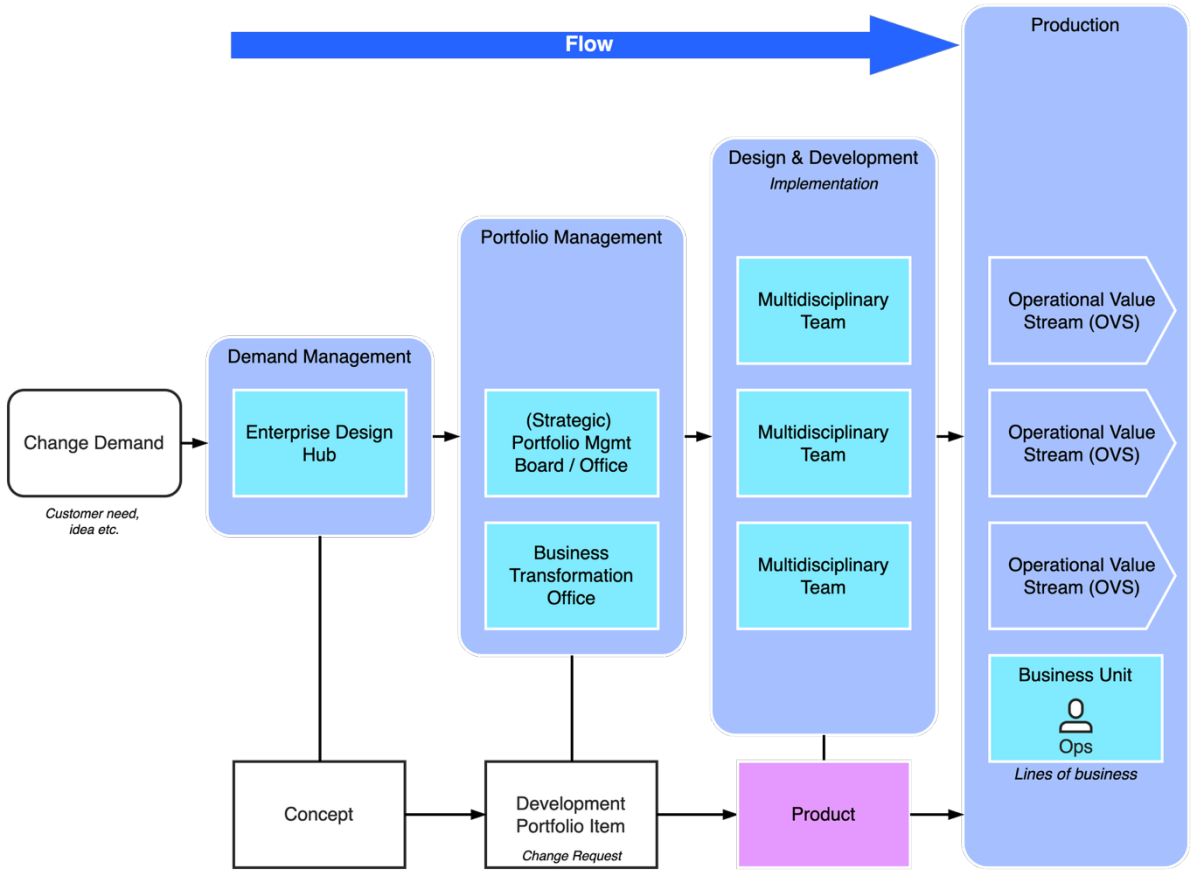
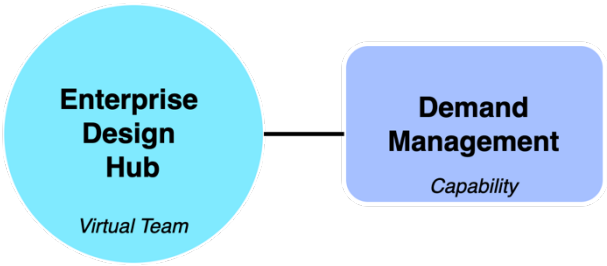


Figure 456: Incoming change demands are handled in the centralised Hub, from which all the concepts are directed to multidisciplinary teams via portfolio management.

7.3.15.3.7 Enterprise Design Hub

Enterprise Design Hub (Hub for short) is a virtual team responsible for managing change-related demand(s). It is integrated in the *development process* of the enterprise. It steers work toward multi-skilled multidisciplinary teams that turn validated concepts into concrete solutions - including new digital products and -services and operating models. For more details see chapter: Enterprise Design Hub (EDH). [7.2.2]



The Enterprise Design Hub provides a structured way for managing enterprise change demands from concept to operations. By combining service design and business architecture (among others), it ensures that changes align with enterprise goals, and solutions are designed with both the customer and the organisation in mind.

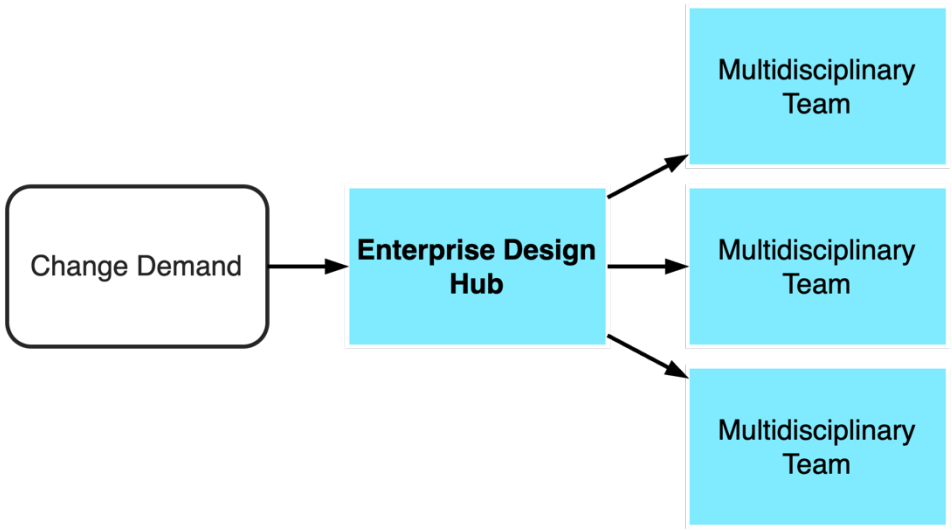
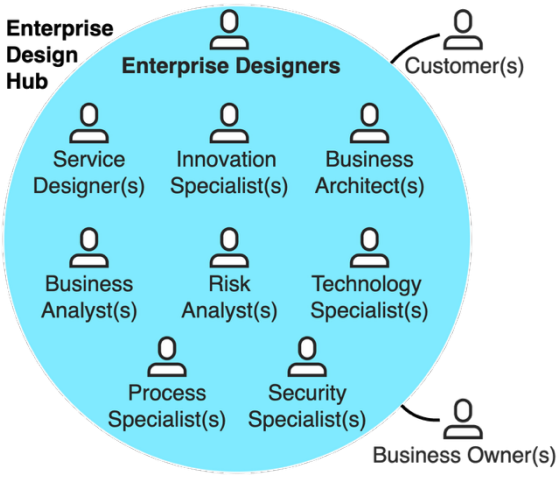


Figure 457: All the change demands are processed in a centralised Hub, from which the development work is directed to multidisciplinary teams.

The Enterprise Design Hub is a cross-functional, multi-disciplinary and collaborative. All the relevant disciplines are involved, such as service designers, business architects, innovation specialists, security specialists, risk analysts, process specialists, technology experts - to collaboratively drive enterprise change and innovation. They share methods and tools, and utilizes agile practices.



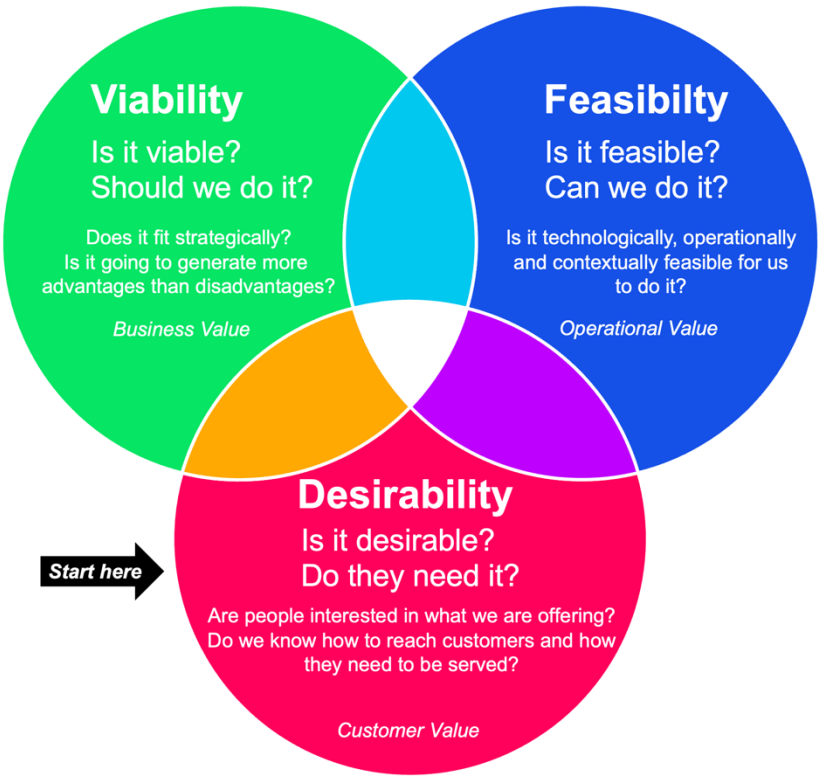


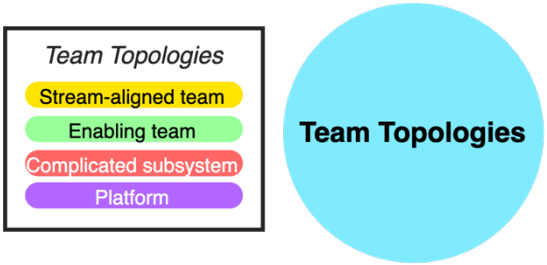
Figure 458: The EDGY Facet model can be used for analysis.

It operates through continuous meetings (e.g. weeklys) and uses a Kanban board to manage tasks, ensuring collaboration and transparency across disciplines. Examples of roles involved are shown in the figure.

The Enterprise Design Hub ensures that all changes are processed systematically, using a design governance model that prioritizes strategic goals (viability), operational feasibility, and customer value (desirability). This avoids duplication, misalignment, and silos. The EDGY Facet Model can be used for analysing the change demand.

The **Enterprise Design Hub** is a joint-force practice for managing the change demands of an enterprise.

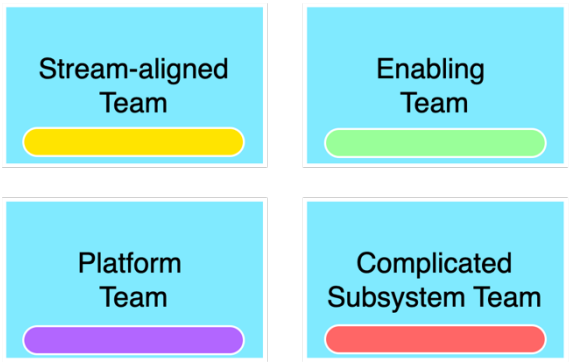
7.3.15.3.8 **Team Tooplogies**



Team Topologies provides a practical framework for structuring teams, improving collaboration, and reducing bottlenecks in software development and operations (*DevOps*). By focusing on flow, clear team roles, and adaptable structures, it helps organizations achieve better alignment between their teams and their goals, leading to faster and more efficient delivery of value.

Team types:

- Stream-aligned team
- Enabling team
- Complicated subsystem team
- Platform team



The Team Topologies approach provides significant benefits by structuring teams around value delivery, collaboration, and adaptability. It is particularly effective in dynamic and complex environments, such as software development or large-scale systems engineering.

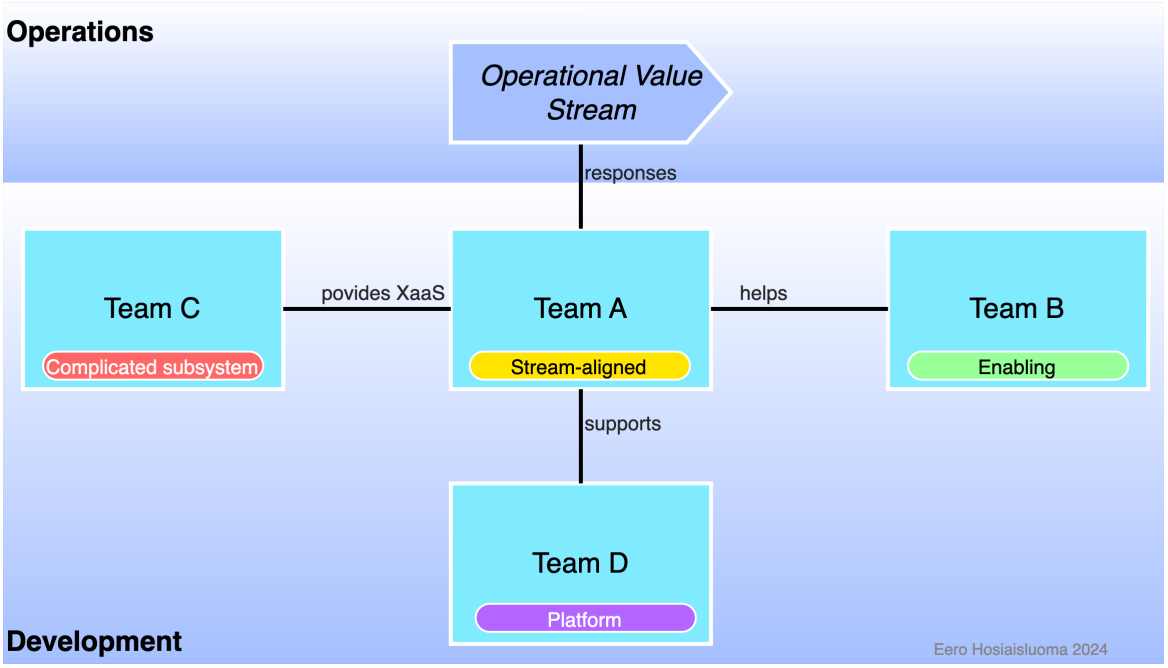


Figure 459: Team Topologies in practice.

The Team Topologies approach improves employee satisfaction by:

- Reducing cognitive overload.
- Empowering teams with autonomy and clear roles.
- Facilitating productive collaboration and support.
- Providing opportunities for mastery and growth.
- Promoting a culture of continuous improvement and work-life balance.

Team Topologies is a modern approach to structuring software development and operational teams to optimize collaboration, value delivery, and adaptability in an enterprise.

7.3.15.3.9 **Domain-Driven Design (DDD)**



Domain-Driven Design (DDD) is a strategic and tactical approach to software design and development that focuses on creating a deep connection between business needs and software solutions. At its core, DDD is about:

- Modeling the business domain in close collaboration with domain experts,
- Structuring the software around that model to reflect real-world complexity.

DDD core concepts map well to business architecture concepts, especially to business capabilities:

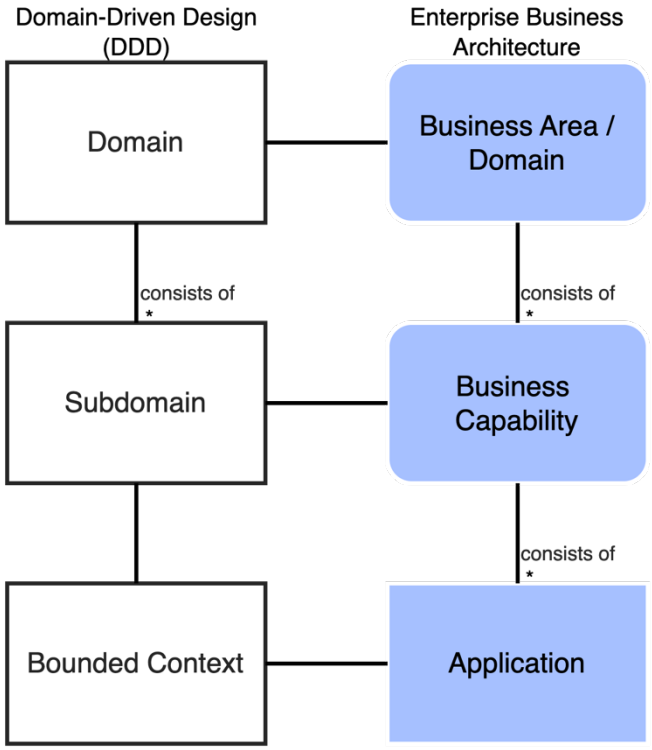


Figure 460: DDD core concepts map well to business architecture.

Business capabilities are the starting point in DDD, as Business capabilities:

- Define what the organization must be able to do to deliver value.
- They help identify the most important subdomains in Domain-Driven Design (DDD).
- They guide how teams, systems, and software should be structured.
- They connect strategy to operations and implementation, creating alignment.

It's reasonable and practical to start with business capabilities, because they describe what truly matters: the work that delivers value. From there, we identify subdomains, define bounded contexts, and build the supporting systems through aligned teams.

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- Define what the organization must be able to do to deliver value.
- They help identify the most important subdomains in Domain-Driven Design (DDD).
- They guide how teams, systems, and software should be structured.
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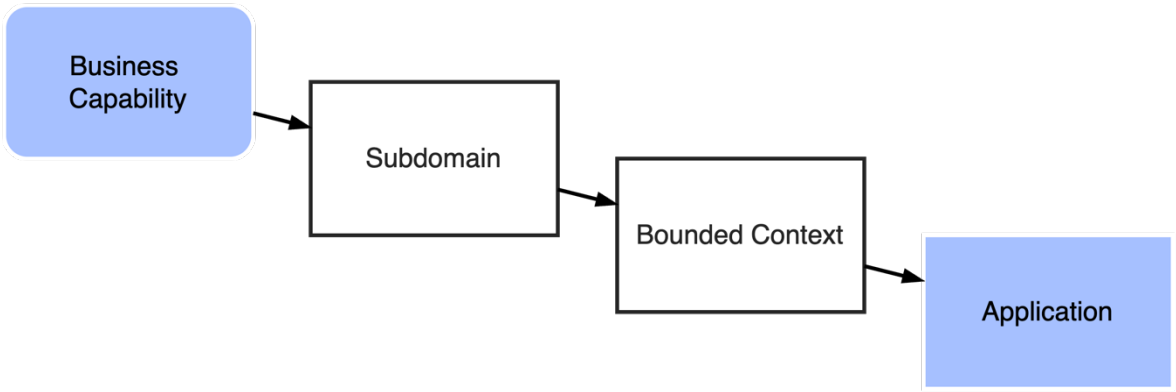


Figure 461: Business capabilities are the starting point - from business capabilities to applications.

Business capabilities connect the customer journeys, operations and development.

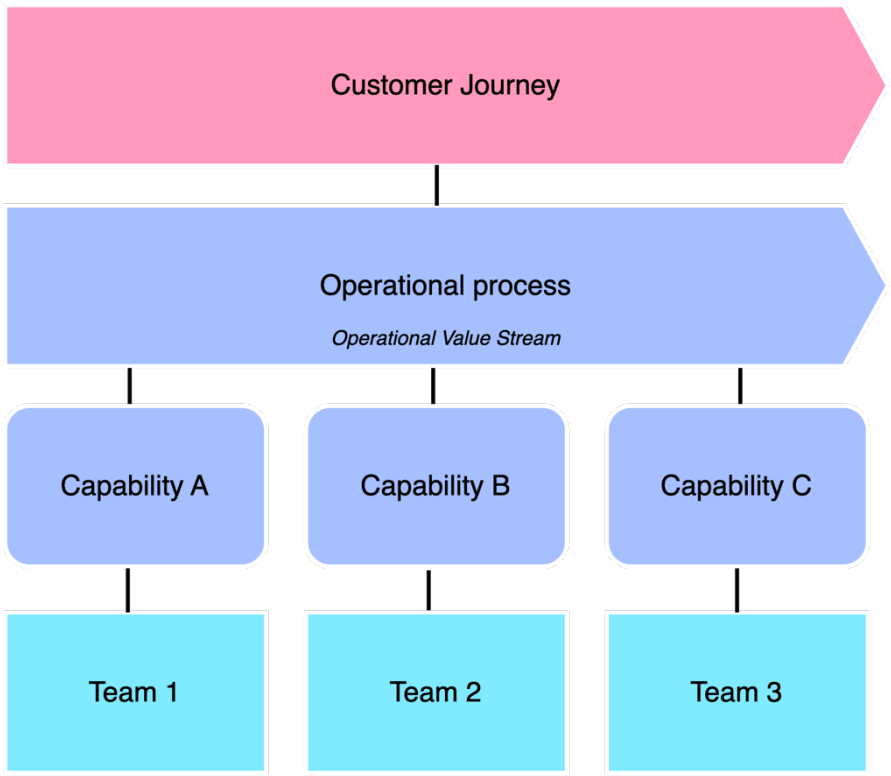


Figure 462: Customer journeys connected with operations and development via capabilities.

Domain-Driven Design (DDD) aligns systems with how the business actually works. It helps the enterprise go from features to ***flow***, from silos to service, and from delivery to value.

7.3.15.3.10 **Roles**

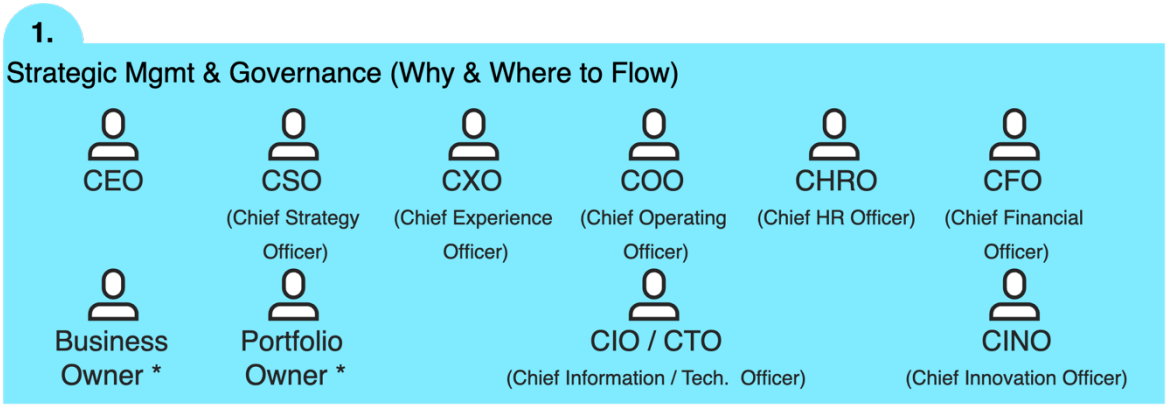


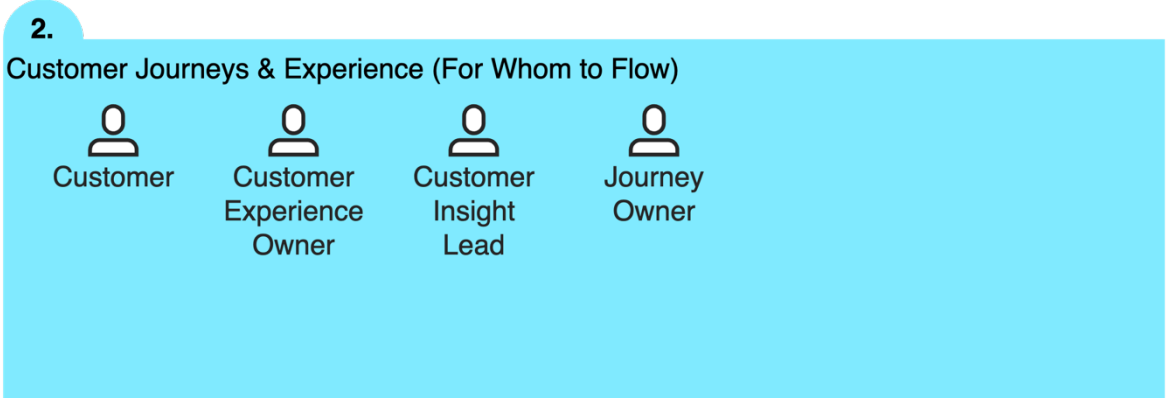
While everyone (!) in the enterprise contributes to the flow of value - through customer service, operations, or development - there are specific roles that are notable, emerging, or newly defined in the context of Enterprise Flow. These roles help to see, shape, and steer how value flows across journeys, operations, and development.

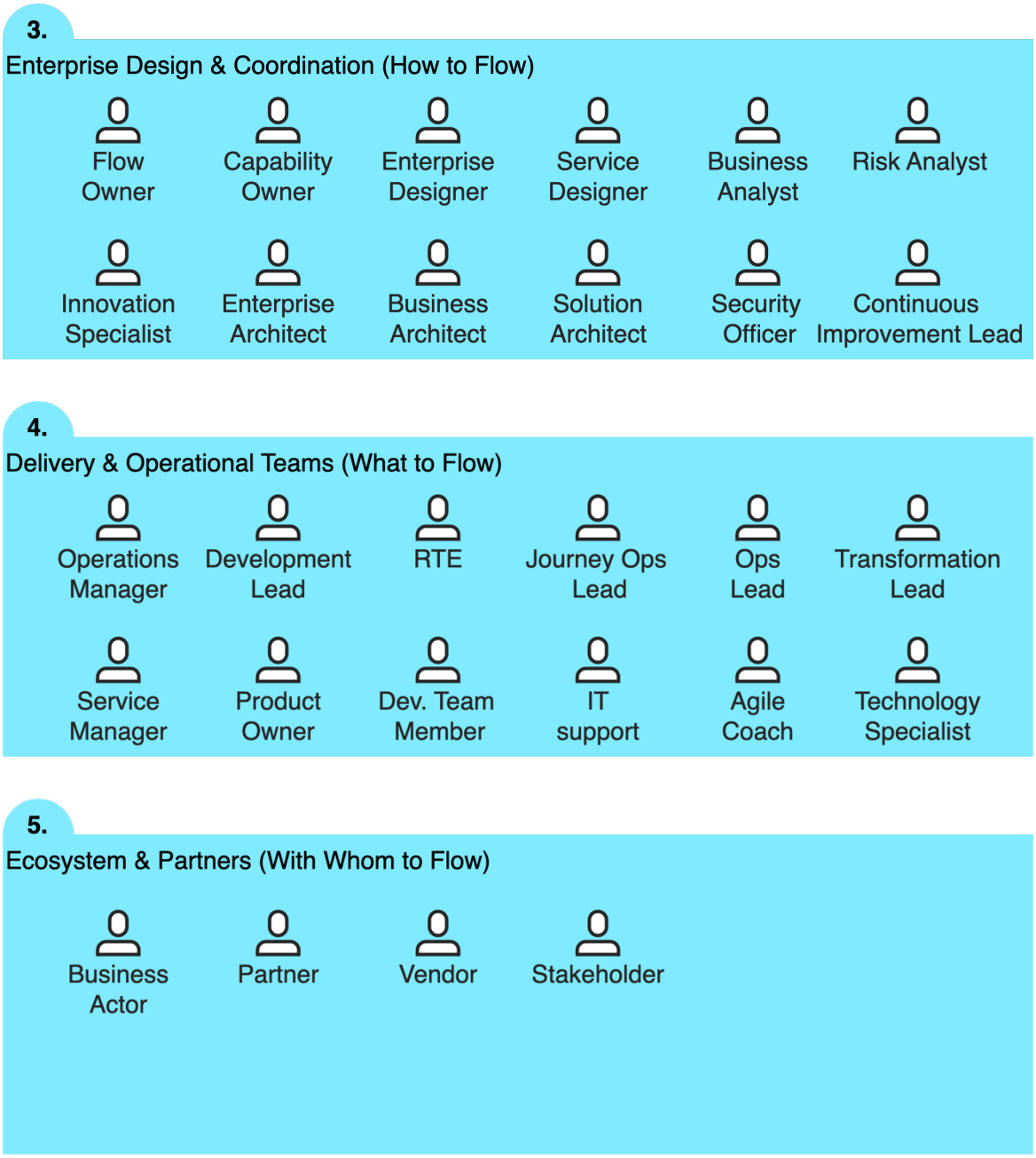
Roles are enterprise-specific and should be identified based on what is appropriate for the context - including the required competencies and specialisations. However, certain roles are especially important in the Enterprise Flow, even though the whole enterprise is involved in making value flow.

Examples of roles are grouped based on the focus area as shown below.

1. **Strategic Management & Governance**
   Why & Where to Flow — Setting vision, goals, and prioritizing value streams.
2. **Customer Journeys & Experience**
   For Whom to Flow — Understanding and designing customer needs, journeys, and experiences.
3. **Enterprise Design & Coordination**
   How to Flow — Architecting, integrating, and coordinating across capabilities and teams.
4. **Delivery & Operational Teams**
   What to Flow — Executing the work, delivering products, services, and operational value.
5. **Ecosystem & Partners**
   With Whom to Flow — Collaborating across external partners and extended enterprise networks.






3.
Enterprise Design & Coordination (How to Flow)
Flow Owner
Capability Owner
Enterprise Designer
Service Designer
Business Analyst
Risk Analyst
Innovation Specialist
Enterprise Architect
Business Architect
Solution Architect
Security Officer
Continuous Improvement Lead
4.
Delivery & Operational Teams (What to Flow)
Operations Manager
Development Lead
RTE
Journey Ops Lead
Ops Lead
Transformation Lead
Service Manager
Product Owner
Dev. Team Member
IT support
Agile Coach
Technology Specialist
5.
Ecosystem & Partners (With Whom to Flow)
Business Actor
Partner
Vendor
Stakeholder

1. Strategic Mgmt & Governance (Why & Where to Flow)	
Role	Description
CEO / Managing Director	Champions flow thinking across the enterprise. Ensures strategy, culture, and structure support end-to-end value delivery. Accountable for defining strategic goals.
CSO (Chief Strategy Officer)	Connects long-term goals to flow-level initiatives. Makes sure strategic change is translated into operations and development.
CXO (Chief Experience Officer)	Ensures positive interactions with enterprise's customers. Primarily responsible for overseeing an enterprise's customer experience (CX) strategy, fostering brand and customer loyalty, customer journey management, and ensuring a customer-centric approach to business operations.
COO (Chief Operating Officer)	Oversees operational value streams. Focused on optimizing business processes and operational excellence.
CHRO (Chief HR Officer)	Ensures organizational design, skills & competences, and culture support collaborative flows across silos.
CFO (Chief Financial Officer)	Ensures flow performance is tied to financial outcomes. Invests in value streams that drive results.
CIO / CTO (Chief Information / Technology Officer)	Ensures technology enables flow, scalability, and adaptability. Oversees development flows and tech capabilities.
Chief innovation officer (CINO)	Generates new ideas and identifies opportunities for innovation and change that can propel the enterprise forward. This position is usually at the top of the R&D department. The CINO might work closely with the CTO or CIO to research and implement innovative ideas.
Business Owner	Accountable for the business outcome(s) of a specific business of a flow, capability, product, initiative (such as program, biz transformation etc.) or certain area, domain etc. of business. Sets priorities, sponsors change, and ensures value is realized.
Portfolio Owner	Accountable for the performance of a value stream or capability, from idea to impact.

Other C-level roles e.g. CDO (Chief Digital Officer), CMO (Chief Marketing Officer).

2. Customer Journeys & Experience (For Whom to Flow)	
Role	Description
Customer	Uses the services and/or products of the eneterprise. Provides real-life insights and feedback to co-design the journey.
Customer Experience Owner	Focuses on understanding and improving the customer journey. Works to remove friction and enhance customer experience.
Customer Insight Lead	Gathers customer insight, research, feedback, and data to inform customer journey improvements.
Journey Owner	Ensures a specific customer journey delivers value, removes friction, and aligns with strategic goals and business operations.

3. Enterprise Design & Coordination (How to Flow)	
Role	Description
Flow Owner	Ensures that the customer journey is aligned with operations and development.
Capability Owner	Responsible for a single business capability, across both operations and development, making sure it delivers value today and in the future. Designs and owns capabilities that enable flow. Because capabilities are the backbone of how value flows in an enterprise, having a named Capability Owner ensures: accountability over critical business functions, consistency across silos, a clear bridge between strategy, operations, and development.
Enterprise Designer	A broad strategic role focused on shaping the enterprise as a whole system - from purpose to operations, from customer journeys to operations - and beyond, when necessary, into the ecosystem. Ensures that the journey perspective is integrated with operations at enterprise level. Bridges strategy, customer needs, operations and applications / systems.
Service Designer	Translates customer needs into business opportunities and capability needs (togehether with biz architects). Supports customer-driven approach in every level of the eneterprise.
Business Analyst	Gathers and refines requirements from customers and business representatives (units, biz owners, users etc.). Bridges gaps between business needs and technical teams.
Risk Analyst	Identifies, assesses, and helps manage potential risks that could negatively impact an enterprise's operations, strategy, or financial performance. The role is about helping the enterprise make informed decisions by understanding what could go wrong, how likely it is, and what the consequences might be.
Innovation Specialist	Helps an enterprise discover, develop, and implement new ideas that create value - for customers, the business, or both. Their focus is on driving change, enabling creativity, and turning ideas into reality.
Enterprise Architect	Designs and aligns the enterprise architecture with enterprise goals. Ensures solutions fit holistically within the Enterprise Flow.
Business Architect	Translates customer- and business needs into business opportunities and capability needs (togehether with service designers). Designs and aligns the business architecture with enterprise goals.
Solution Architect	Designs and aligns the technical solution architecture with enterprise architecture. Ensures solutions fit technically within the Enterprise Flow.
Security Officer / Specialist	Ensures all flow activities comply with security, privacy, and regulatory requirements.
Continuous Improvement Lead	Monitors flow performance and drives iterative improvements. Uses data and feedback to optimize value delivery.

4. Delivery & Operational Teams (What to Flow)	
Role	Description
Operations Manager	Manages operational processes that deliver services/products Ensures smooth, efficient daily operations aligned with business goals.
Development Lead	Drives changes and new developments in products or services. Coordinates multidisciplinary teams (DevOps, DesignOps, etc.).
RTE (Release Train Engineer)	Facilitates Agile Release Trains (ARTs) in the SAFe framework. Acts as a servant leader and coach for teams, ensuring alignment, planning, and smooth execution of value delivery across multiple teams working together.
Journey Ops Lead	Coordinates and optimizes the end-to-end customer journey by ensuring smooth collaboration across teams, touchpoints, and channels. Focuses on experience flow, removing friction and enabling continuous improvement of customer journeys.
Ops Lead	Responsible for ensuring that day-to-day business operations run smoothly and effectively. This role bridges strategic goals and frontline execution, focusing on operational performance, process efficiency, and continuous improvement.
Transformation Lead	Responsible for driving and coordinating large-scale change initiatives across the enterprise. This role ensures that strategic transformations - whether digital, operational, cultural, or business model-related - are successfully delivered and adopted.
Service Manager	Ensures that IT services are aligned with business needs, delivered effectively, and continuously improved. The role is central in both strategic and operational aspects of IT service management (ITSM).
Product Owner	Translates demands into actionable development tasks.
Dev. Team Member	Developers, designers, testers, operations staff working collaboratively in multidisciplinary teams. Responsible for daily execution and delivery within their domain.
IT support	Supporting IT-related matters
Agile Coach	Guides individuals, teams, and the eterprise in applying Agile principles and practices. Helps build a culture of collaboration, continuous learning, and adaptability across development and operational workflows.
Technology Specialist	Provides support for certain specific technology, product or platform.

Obviously, operational staff (Ops) and frontline workers as well as certain leadership roles are crucial in operational business, and they are involved in co-design.

5. Ecosystem & Partners (With Whom to Flow)	
Role	Description
Business Actor	Other actor of the network or ecosystem related to the enterprise
Partner	Contribute to capability and service delivery. Their role in flows must be managed and integrated.
Vendor	Contribute to capability and service delivery. Their role in flows must be managed and integrated.
Stakeholder	Any other stakeholder that has interests on the enterprise (such as owner, public/government authority)

7.3.15.3.11 Maps and Views to be utilised

There are several maps and views (diagrams from a certain viewpoint) that can be created and/or used when designing the Enterprise Flow e.g. as follows:

- Customer Journey Map
- Service Blueprint
- People Map (Stakeholder Map)
- Ecosystem Map
- Capability Map

See examples on chapter 10 Templates.

7.3.15.4 Enterprise Flow is aligned with the enterprise goals

The Enterprise Flow is closely aligned with the strategic goals of the enterprise by ensuring that the entire organization operates as a unified system designed to deliver value to customers while achieving business objectives.

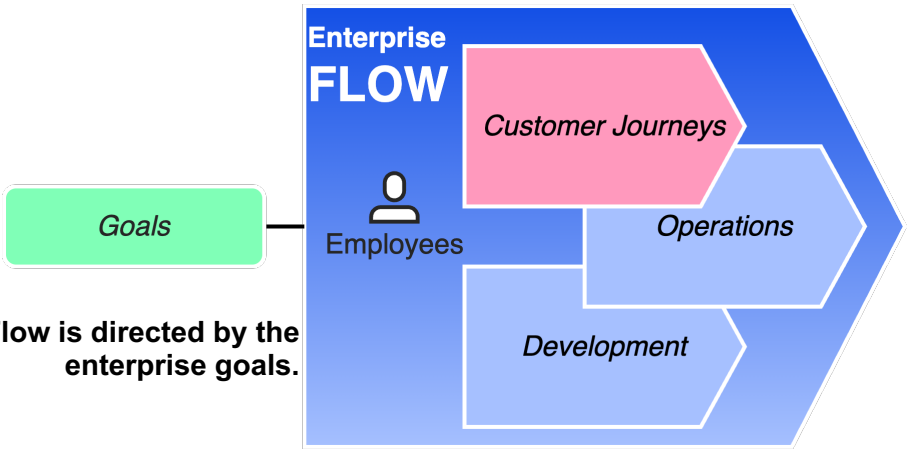


Figure 463: Enterprise Flow is directed by the enterprise goals.

7.3.15.4.1.1 Customer Journey Map

Customer Journey focuses on the customer's perspective, capturing their emotions, needs, and interactions as they engage with a service across different touchpoints.

Customer journeys are focal points of customer-centric enterprises. A customer journey expresses what people go through in their lives: what a person feels, does or experiences over time. A journey represents a 'slice of life'. It is a chronological and simplified representation of complex experiences.

A customer journey is an end-to-end process that a customer goes through while accomplishing some task(s). A customer journey represents a coherent whole from the customer's perspective in a certain context. It is a completeness that is meaningful to examine as a coherent whole.

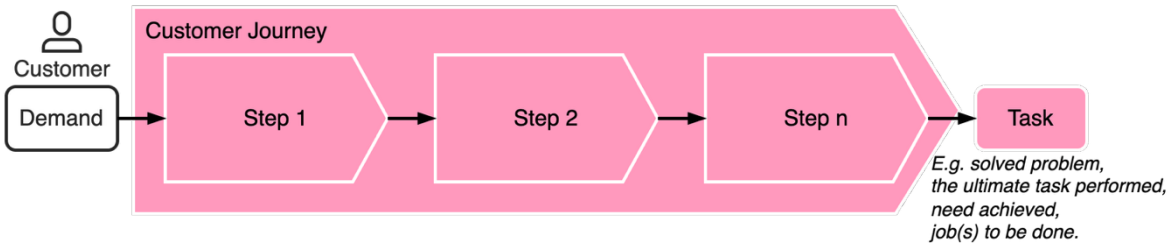


Figure 464: Customer Journey.

A Customer Journey Map is a visual representation of a customer's experience as they interact with an enterprise's products, services, or brand across touchpoints and channels, over time.

- Focus: Customer's perspective
- Goal: Understand the needs, emotions, pain points, and goals at each stage of their journey
- Typical components:

- Customer stages or phases or steps (e.g. Awareness → Consideration → Purchase → Use)
- Channels / Touchpoints (e.g. website, customer service, app)
- Emotions and thoughts
- Pain points and opportunities

It helps align the enterprise around a shared understanding of what matters most to the customer.

Template:

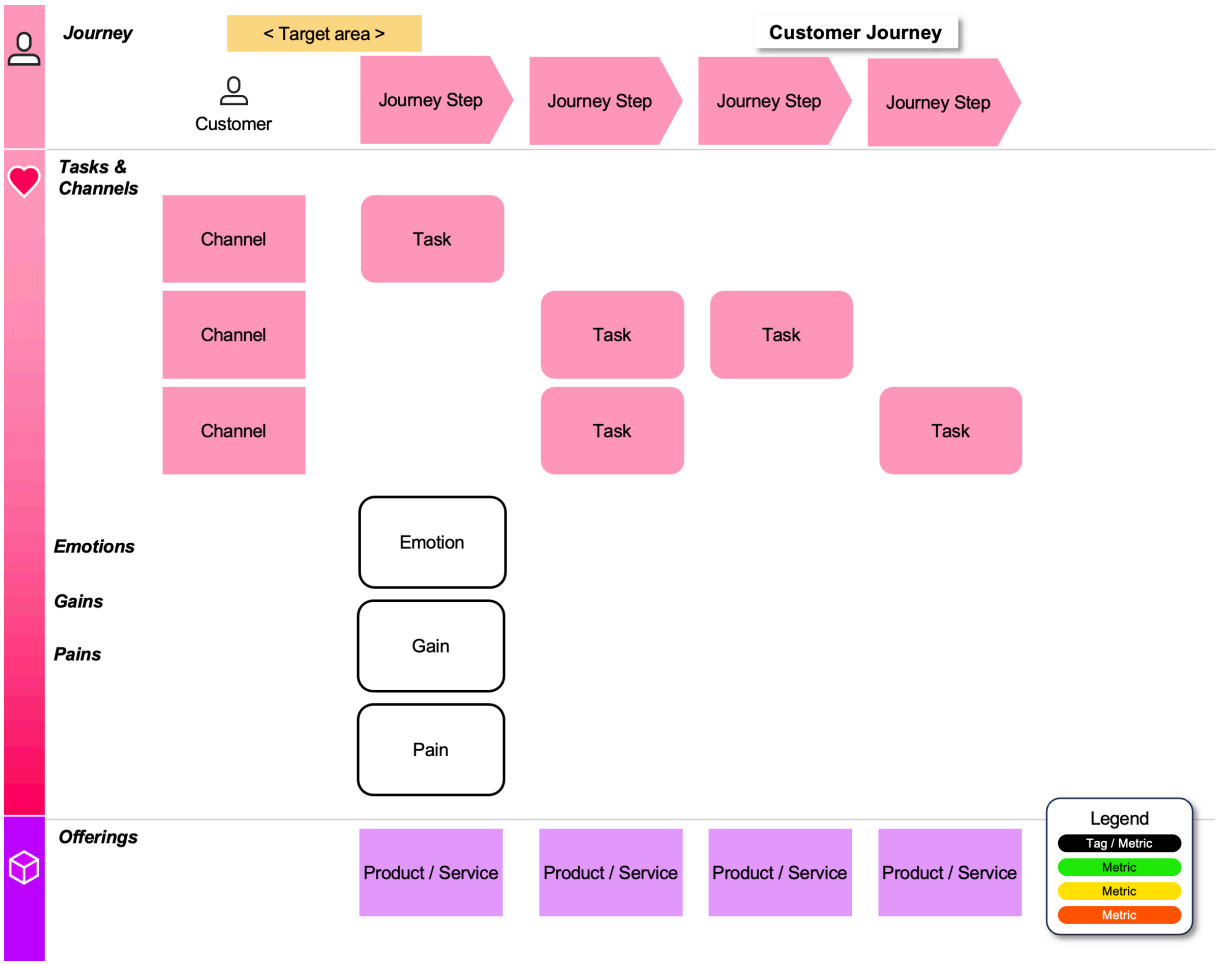


Figure 465: Customer Journey Map template.

Customer journey mapping is the process of visually outlining a customer's interactions with a business to understand and improve their overall experience.

7.3.15.4.1.2 Service Blueprint

A Service Blueprint defines the customer journey, detailing the customer's activities alongside the services, products, and activities of the enterprise. It enables the analysis of the entire stack, from the customer's perspective to the organisational perspective. The Service Blueprint provides a holistic, human-centric, and collaborative view of a service, integrating both customer and organisational perspectives.

The Service Blueprint builds on the customer journey map by adding a backstage view: it visualises the people, processes, systems, and technologies needed behind the scenes to deliver the customer experience.

- Focus: Both frontstage (what the customer sees) and backstage (internal operations)
- Goal: Identify how internal processes support the customer journey
- Typical components:

- Customer actions (from the journey map)
- Frontstage interactions (e.g. customer service)
- Backstage processes (e.g. internal processes, applications, and related organisation structures such as teams)
- Supporting processes, applications, teams
- Line of visibility (what is visible to customer vs. internal)

Why it matters: It connects customer experience with operations (processes and assets) – enabling more coherent, efficient, and aligned service delivery.

High-level template (Level-1): business capabilities as high-level abstractions:

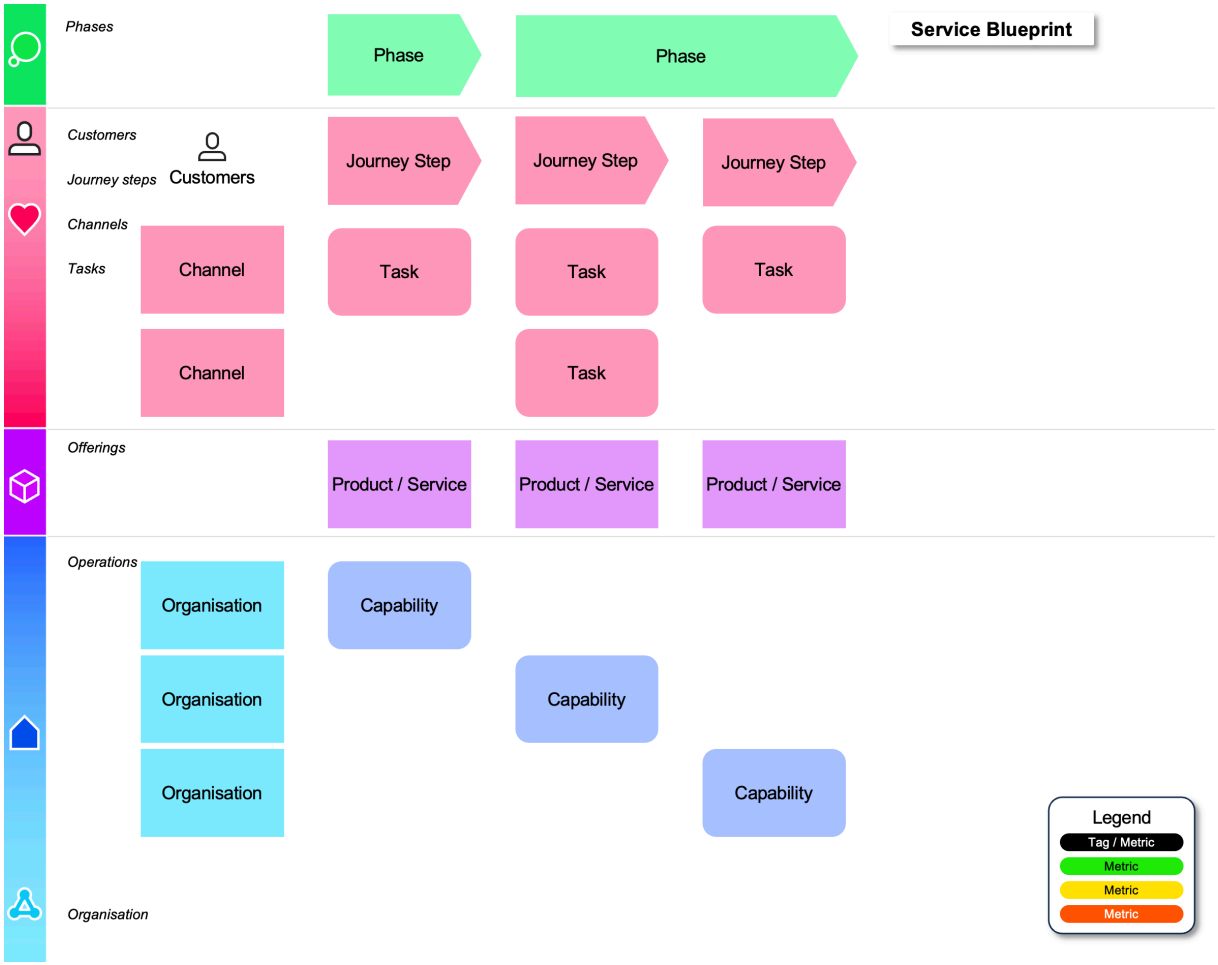


Figure 466: Service Blueprint template (level-1).

At a high level (Level 1), we may not know the details - or they may not be relevant at this stage - so we model internal behaviour using abstractions, such as capabilities. Later, when more detail is known or needed, we can identify the actual processes involved at a more detailed level (Level 2).

Detail level template (Level-2): business processes and assets (such as applications and/or data):

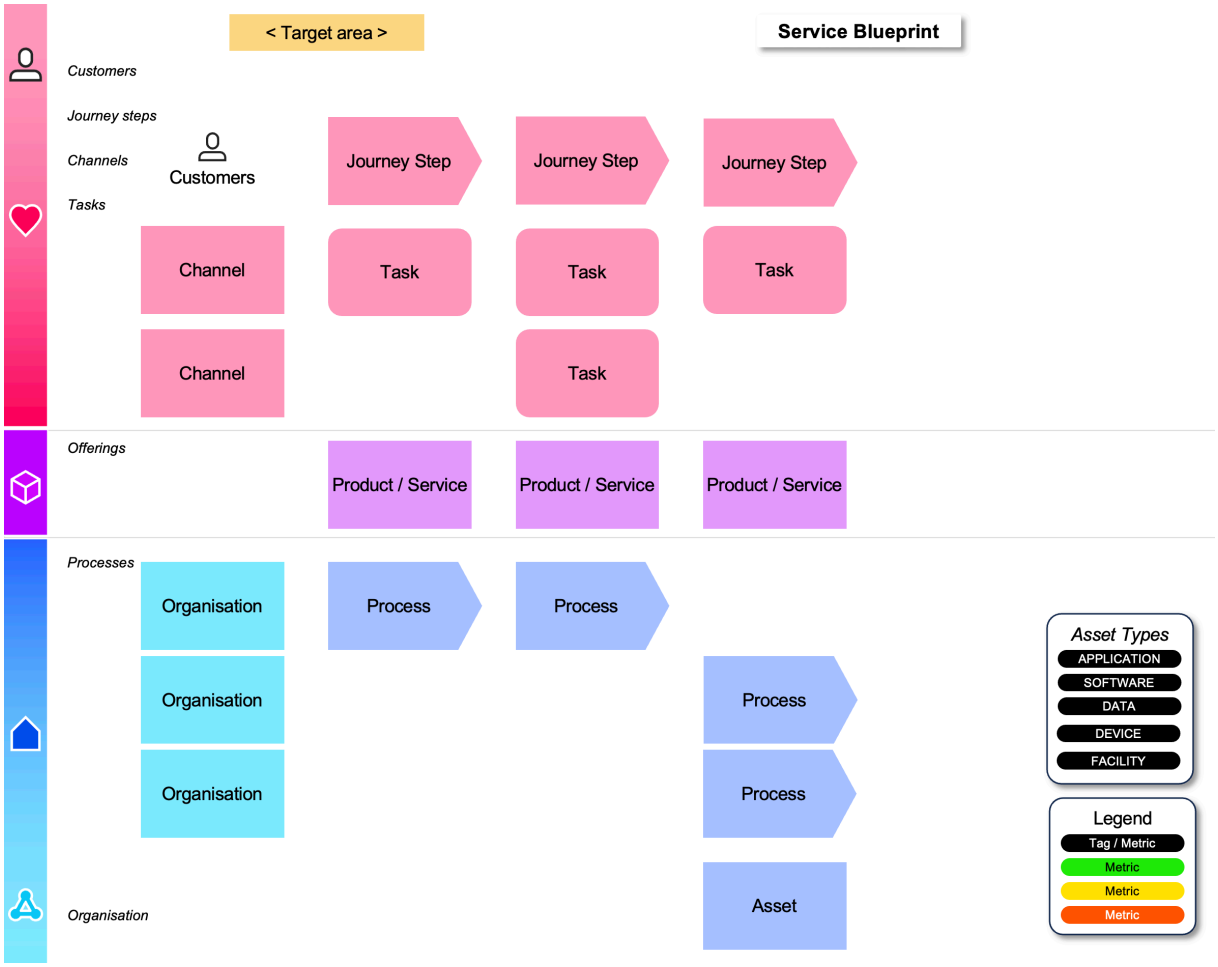


Figure 467: Service Blueprint template (level-2).

7.3.15.4.1.3 Flow of Actions

Flow of Actions is a simple, high-level Enterprise Flow diagram that visualises how a customer journey and internal processes are connected. It shows key steps from the customer's perspective alongside the enterprise's internal actions, with flow relations indicating the logical order and dependencies between activities. This helps everyone understand how value is delivered step by step - from customer interaction to internal execution. The level of detail and scope can vary depending on the context and what is appropriate or fit for the purpose.

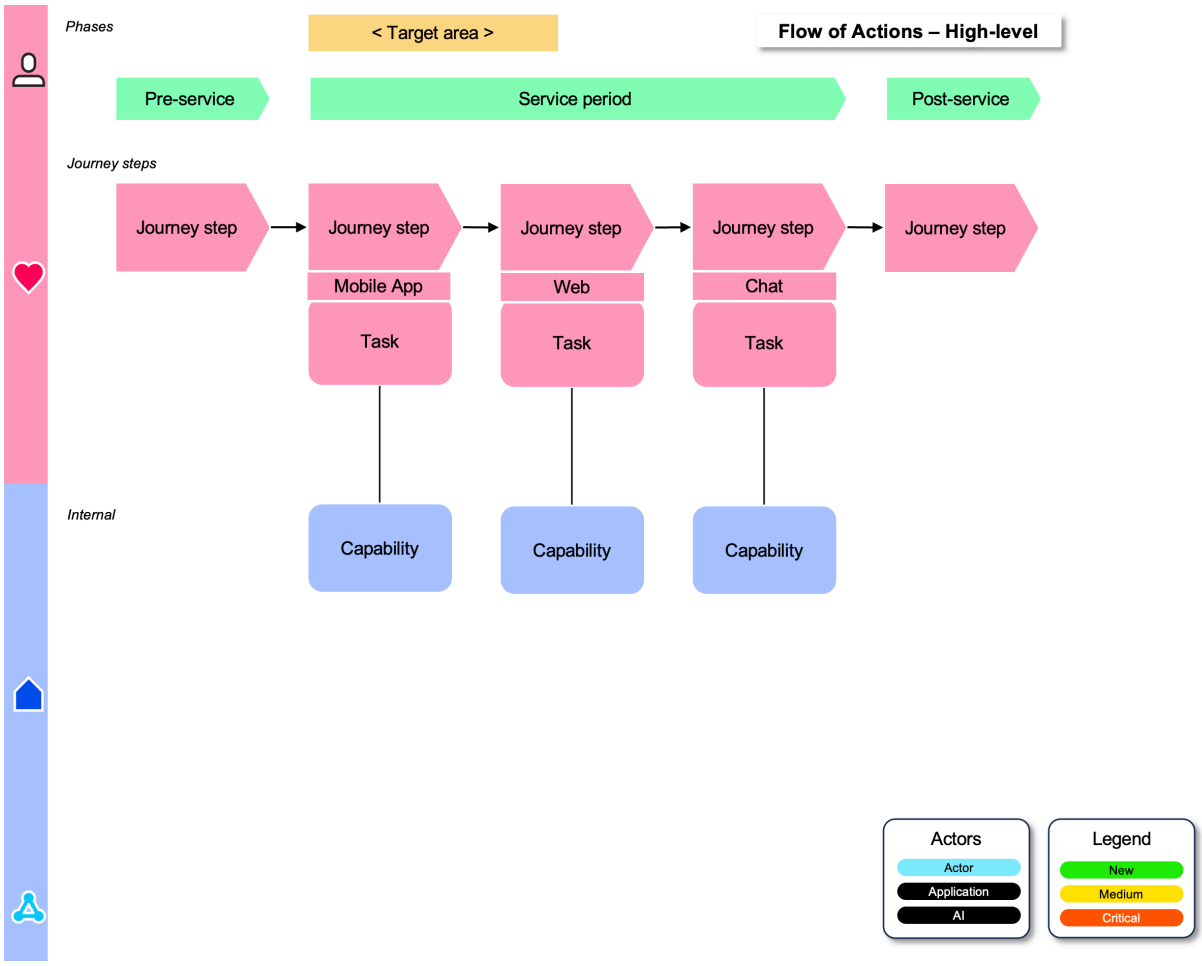


Figure 468: Flow of actions high-level template.

High-level view (above) connects the customer needs with the business capabilities that are required to support those needs.

Detailed view (below) connects customer behaviour with the organisation behaviour.

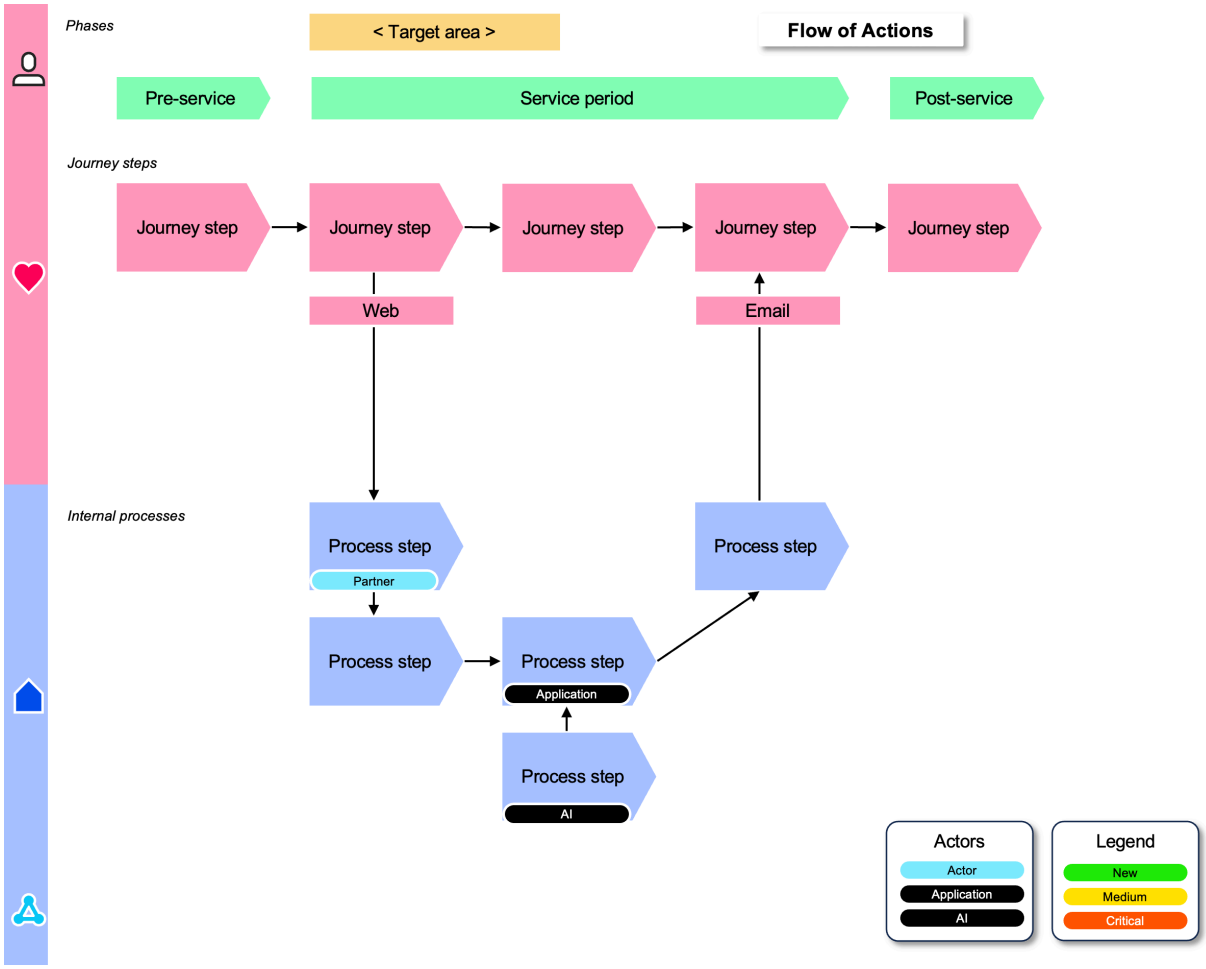


Figure 469: Flow of actions template.

7.3.15.4.1.4 People Map / Stakeholder Map

A stakeholder map typically consists of circles (like an onion), starting from the ‘core’ (inner circle), and then introducing other levels of stakeholders in other circles. Identified stakeholders can be placed into a stakeholder map that can be visualised a) from the customer perspective or b) from the organisation perspective. The customer perspective puts the customer in the middle, and other stakeholders into circles depending on their visibility from the customer’s point of view.



Figure 470: Stakeholder Map template.

7.3.15.4.1.5 Ecosystem Map

The ecosystem map represents the business actors within an ecosystem and their possible interactions.

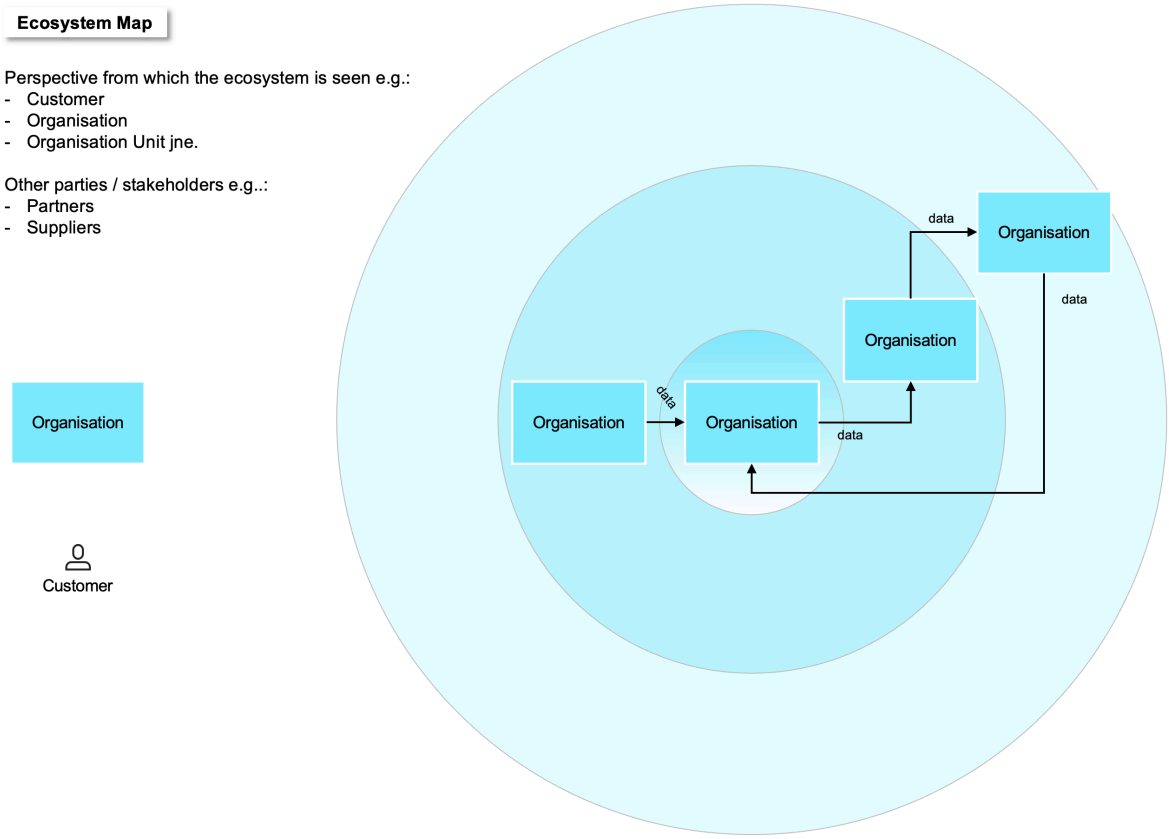


Figure 471: Ecosystem Map template.

7.3.15.4.1.6 Interaction Map / Cooperation View

Information flows between actors. A similar idea can also be used between actors (organisations, teams etc.), applications, and processes.

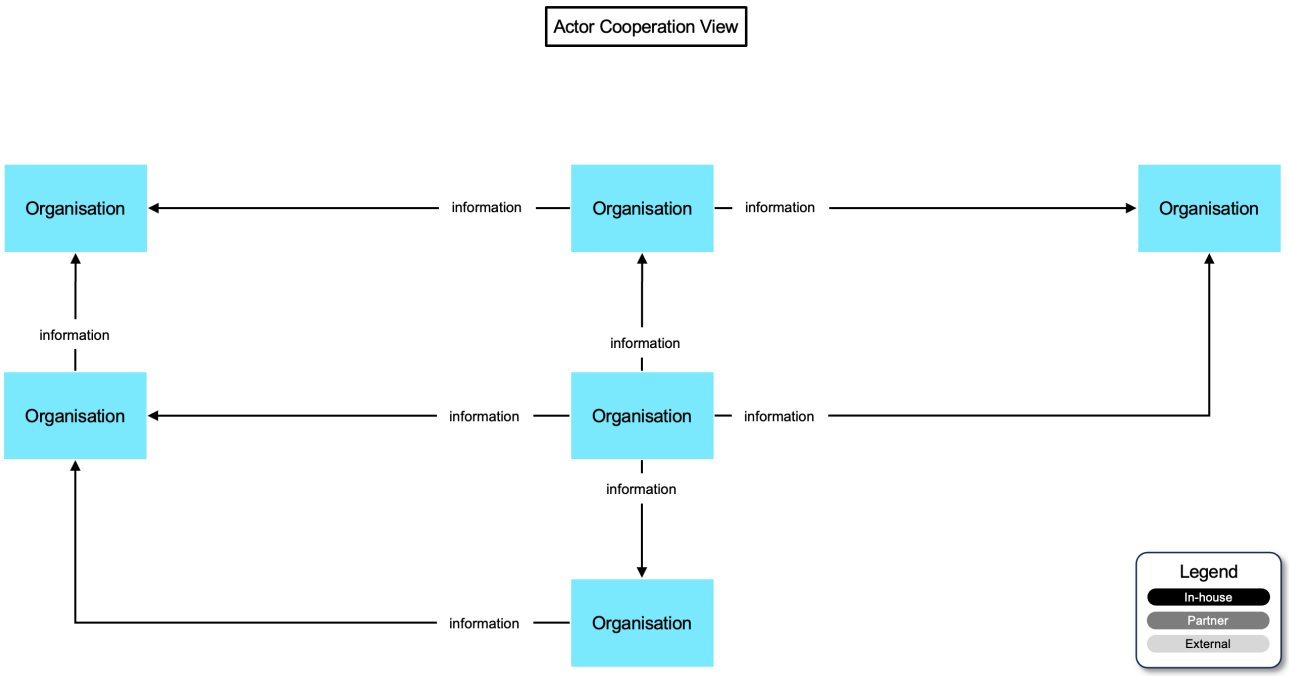


Figure 472: Actor cooperation view example.

7.3.15.4.1.7 Enterprise Map (Milky Way Map)

A Milky Way Map is a visual representation of the whole business or some part of it. A Milky Way Map is a visualisation of the geography of the business of the enterprise. It shows the big picture in a single view, including what are the customer activities or tasks to be done, and how the enterprise serves those tasks, and why the enterprise is doing all this. The Milky Way Map combines the customer's perspective and the enterprise's business perspective. All in one map, the Enterprise Map.

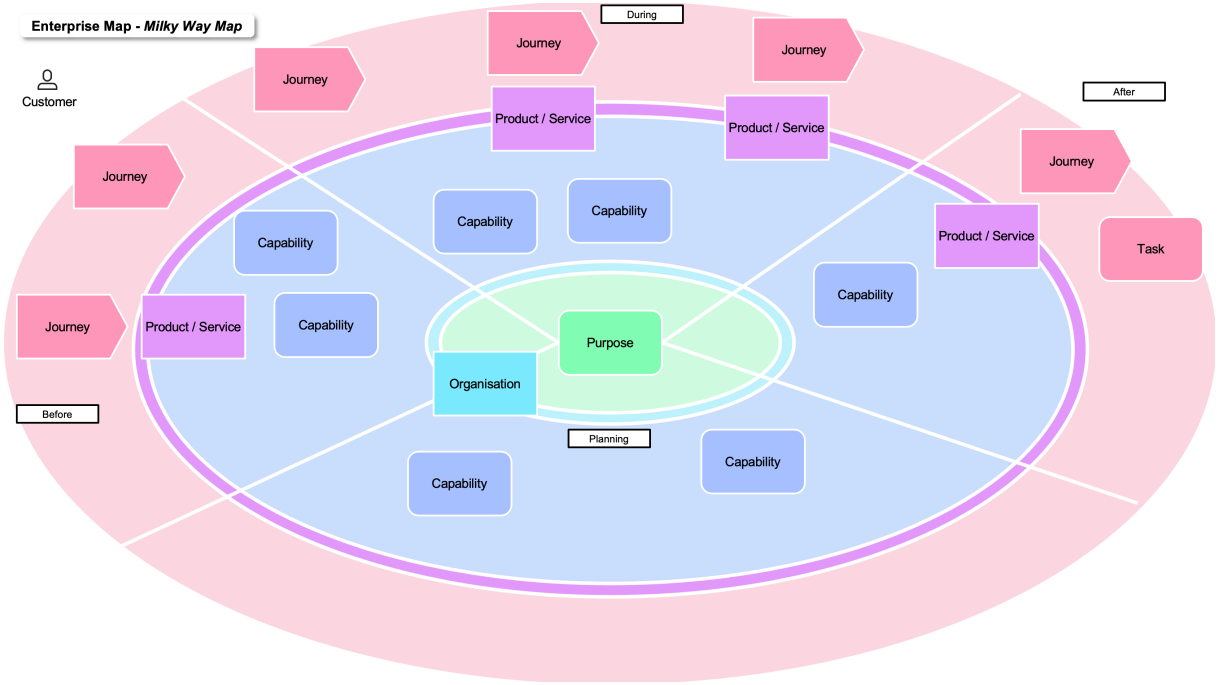


Figure 473: The enterprise map.

The Milky Way Map is divided into sectors that represent the value stages of the business value flow (a.k.a. value stream). The customer journey steps (or tasks) are shown on the outer circle. The capabilities are positioned in the middle circle, and the purposes, the goals are shown in the inner circle.

7.3.15.4.1.8 Capability Map

A capability map is the master structure of an enterprise, as it contains all the major abilities from which the business is made. A capability map is a one-page illustration of what an enterprise does. A capability map is the base map of the business.

A business capability map is a visual representation of the enterprise's key capabilities. It usually categorises capabilities into groups (such as operational, strategic, or customer-facing). This map can be used for assessing the enterprise's readiness for strategic changes, identifying improvement areas, and guiding resource allocation etc.

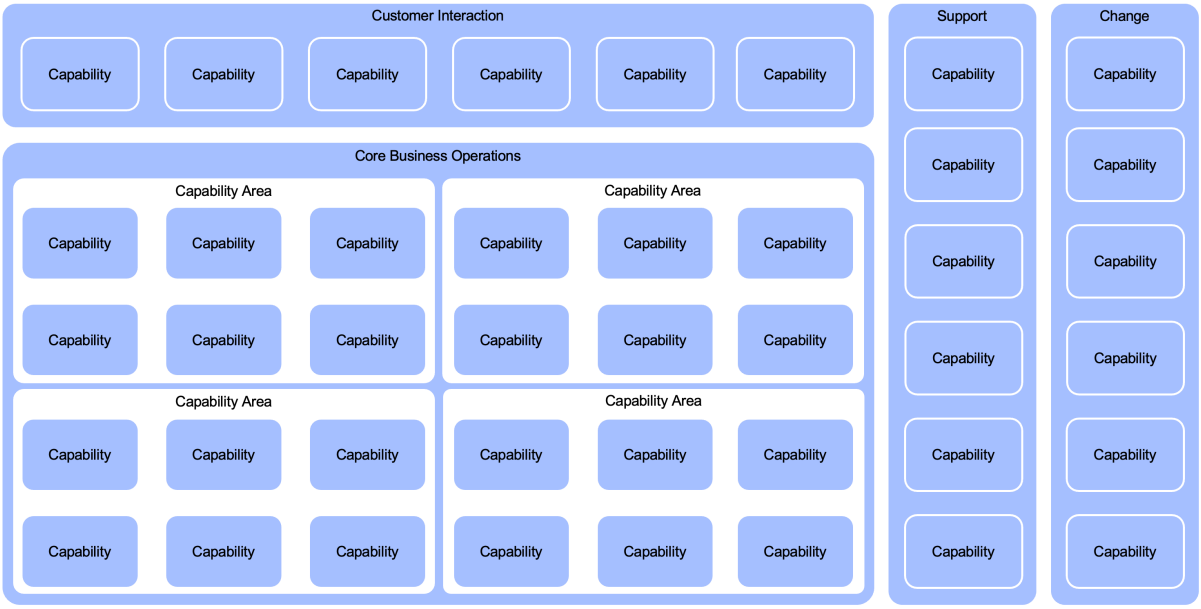


Figure 474: A capability map template.

A capability map introduces all the capabilities of an enterprise in different levels, typically in 1 to 3 levels. Decomposition of capabilities is breaking down a high-level capability into smaller, more specific sub-capabilities. This helps businesses better understand and manage the individual components (elements) that contribute to overall business success. By decomposing capabilities, an enterprise can more effectively allocate resources, improve processes, and drive targeted improvements according to strategic goals and more operational change activities.

7.3.15.4.1.9 Capability

A capability defines 'what we are able to do by orchestrating people and assets'. As such, capabilities are organisational business components. They are containers for everything that belongs together and that is needed so that the enterprise is able to perform a certain behavioural part of its business.

A capability is a center of gravity that magnetises things that belong together. A capability exposes its behaviour by products and/or services. A capability can be connected with certain organisation structures. Capabilities are required for producing the offerings (products or services) of the organisation.

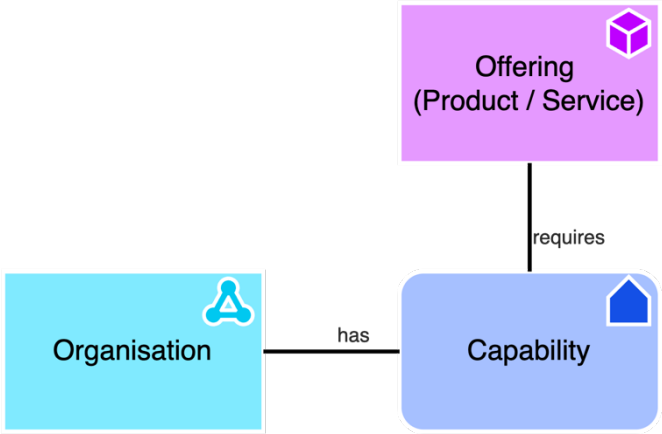


Figure 475: A capability is required for the delivery of an organisation's offerings.

A capability defines what we are able to do by orchestrating people and assets.

A capability consists of people, processes and assets.

People represent the skills and competency roles required within a capability.

A **process** is a series of related activities that are performed in a specific sequence to achieve a particular business outcome.

Assets are resources that the enterprise owns or controls and that have economic value. These assets are used in the operation of the business to create value, provide goods or services, or support the overall goals of the organisation. Enterprise assets are anything of value that the enterprise can leverage to achieve its business goals. Assets can be classified into several categories as shown below.

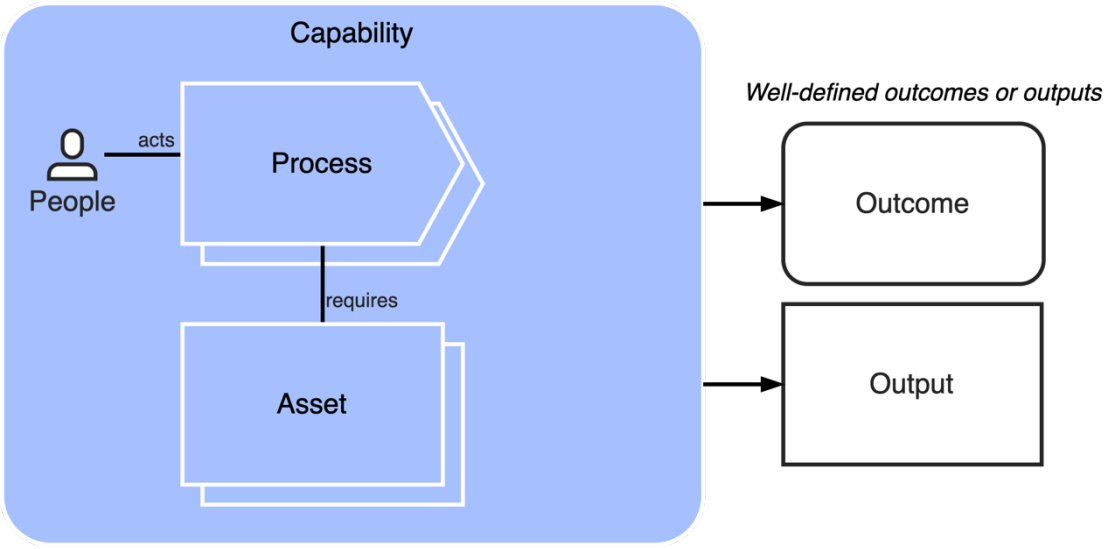


Figure 476: Capability.

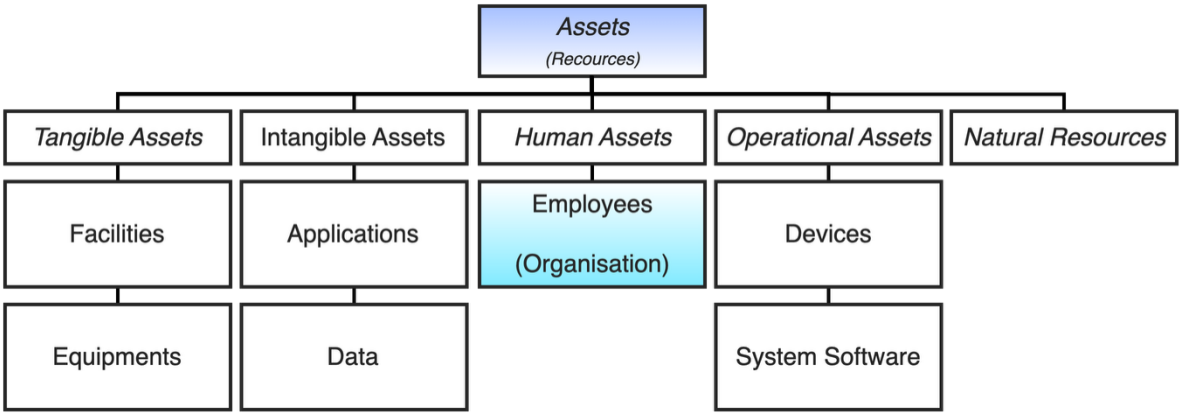


Figure 477: Asset categories.

A capability consists of people, process and assets.

A capability is a composition of elements that belong together: all what is needed so that an enterprise can perform certain capability. As such, a capability consists of people with skills and competences, processes and assets such as applications and data. Capability-Based planning extends the core content of a capability to other aspects such as ownership- and financial aspects. This enables us to connect all the relevant elements around a capability to make visible all what affects or is affected by a capability.

A capability can be connected with aspects such as ownership, costs, risks, goals etc. as shown in the figure below.

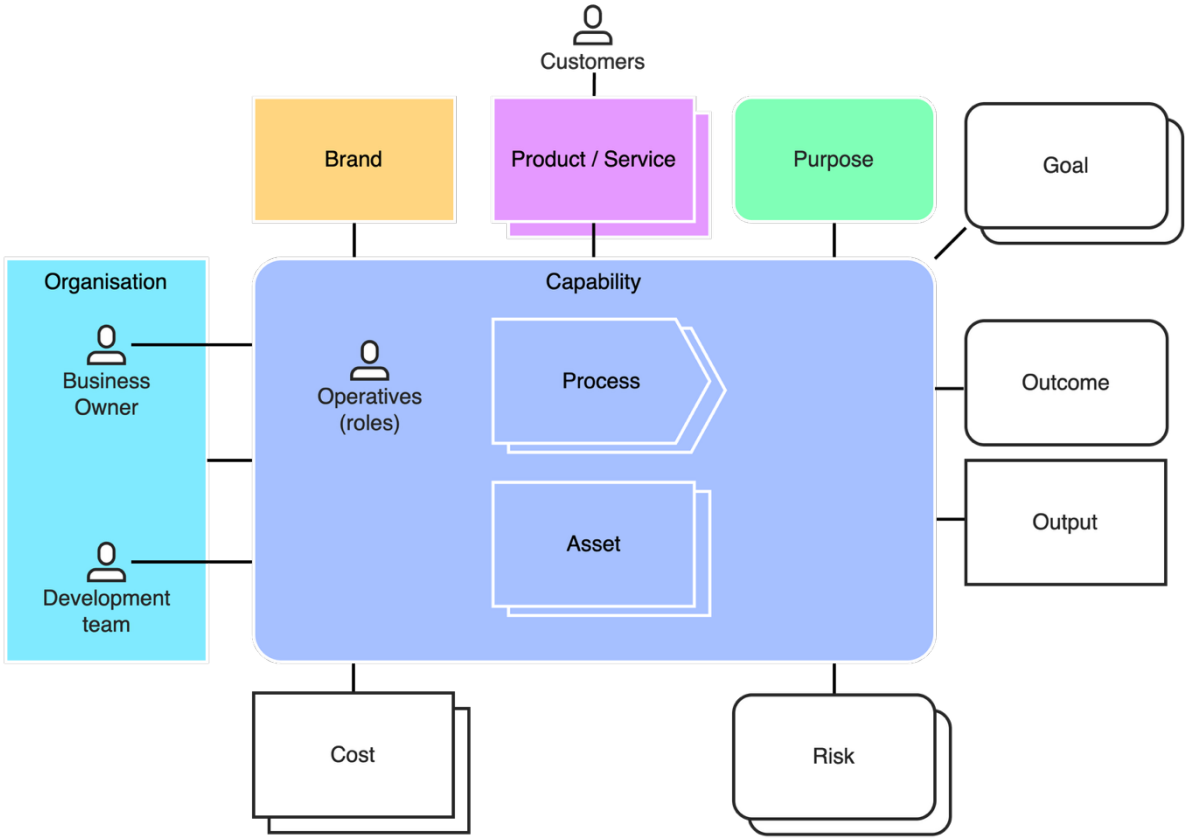


Figure 478: Capability attributes and properties.

Capabilities are business- and outcome-oriented focusing on what the enterprise does.

Capabilities are a foundation for organising people and work in both operations and development

Business capabilities represent what an enterprise must be able to do to deliver value. Because they are stable, business-centered, and technology-agnostic, they provide an ideal foundation for organising both operations and development. When aligned with Domain-Driven Design (DDD), each capability can act as a subdomain, connecting business intent with software implementation.

Capabilities are useful as building blocks that bridge strategy, people, processes, and systems - enabling clear ownership, team alignment, and modular architecture. Capabilities offer a shared structure that connects strategy to execution, making them ideal for organising teams and work across operational and development domains.

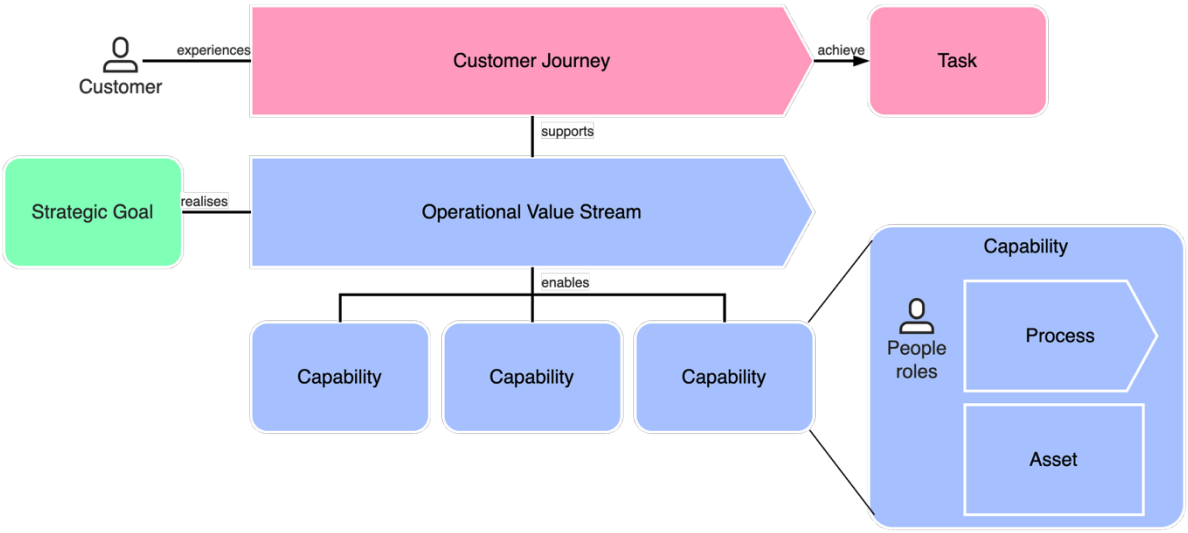
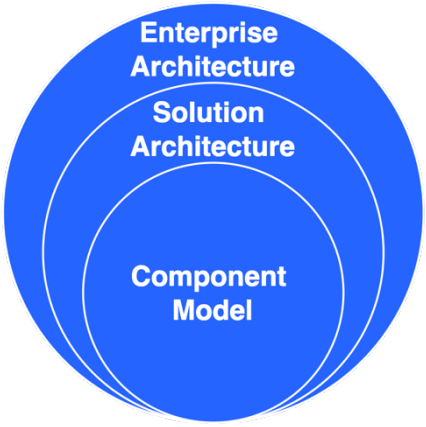


Figure 479: Capabilities are a foundation for organising people and work in an enterprise.

Business capabilities provide a stable, business-driven foundation for organising people and work across both operations and development.

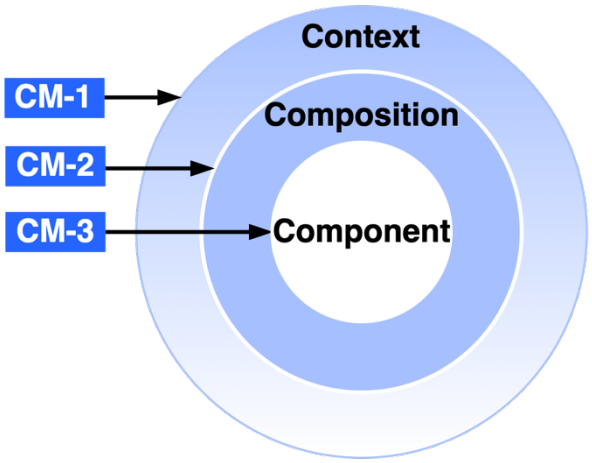
7.3.15.4.1.10 Architecture

Component Model for Detailed Architecture in Enterprise Flow



As we move from high-level Enterprise Flow analysis (customer journeys, operations, development) toward concrete architecture and design, we need a way to describe what the enterprise is made of - in detail. This is where the Component Model comes in.

An enterprise consists of structural parts, all of which are components of the whole. An enterprise can be viewed as a component model consisting of high-level components, the capabilities, each of which includes applications that are composed of modules, and so on. As such, an enterprise is a hierarchical system of systems, a system of components, that can be considered ***fractal*** by nature. Fractal due to its hierarchical and recursive structure.



The Component Model views the enterprise as a whole comprised of individual components. It is important to understand which components the enterprise consists of and the role each component plays as part of the whole. Capabilities are enterprise-level components, each of which consists of components such as applications, data, processes and people.

Component Model (CM 1-2-3) is an application architecture modelling approach, in which a target application is depicted on different abstraction levels: 1) Context-, 2) Composition- and 3)

Component levels. These abstraction levels (CM-1, CM-2, CM-3) cover the architecture of a solution, the solution architecture.

> A ***fractal*** entity (in this context) refers to a system, structure, or concept that exhibits self-similarity across different levels or scales. This means that its overall pattern or behaviour is mirrored in its smaller subcomponents, regardless of the level of abstraction. A fractal entity is composed of smaller components or subsystems, each reflecting the properties of the whole.

All parts of the enterprise are components of the whole.

7.3.15.4.1.11 Enterprise Flow is aligned with the enterprise goals

The Enterprise Flow is closely aligned with the strategic goals of the enterprise by ensuring that the entire enterprise operates as a unified system designed to deliver value to customers while achieving business objectives.

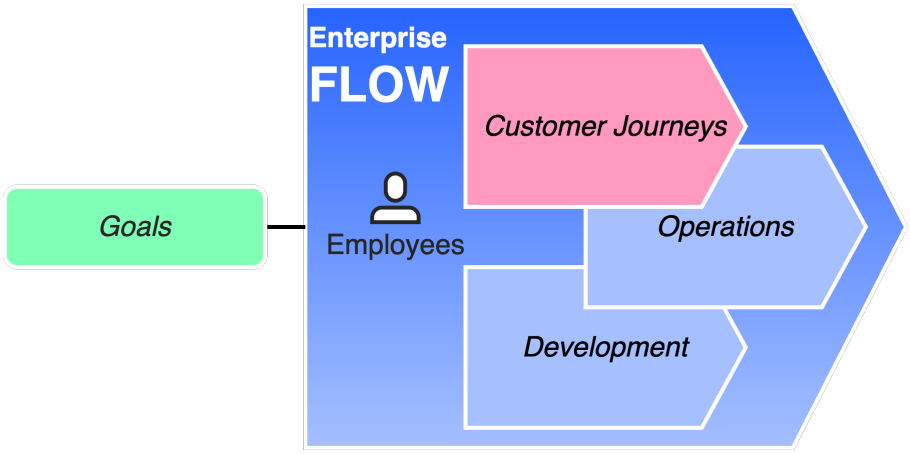


Figure 480: Enterprise Flow is directed by the enterprise goals.

7.3.15.5 Enterprise Flow as a Meta-Framework

Enterprise Flow model is a meta-framework - a big-picture model that helps the enterprise see, manage, and improve the flow of value across all parts of the business.

Enterprise Flow helps everyone see how their work fits into the big picture - and how we can move together toward better outcomes. It connects strategy, customers, teams, and systems into one shared flow.

Enterprise Flow is close with benefits everyone understands:

Executives	Middle Management	Teams & Ops
Better strategy-to-execution alignment	Easier prioritization and coordination	Clarity on purpose and contribution
Reduced silos, faster change	Integrated view of journeys and capabilities	Less friction, better flow of work
Stronger customer value focus	More efficient resource use	Support for doing meaningful work

The Enterprise Flow model is not a competing *methodology* or rigid *framework* - it is a *meta-framework* that provides a shared structure and language to align and integrate various approaches like SAFe, Scrum, TOGAF, ITIL4, IT4IT, COBIT, Lean, and more.

The Enterprise Flow :

- focuses on flow as the primary unit of design, coordination, and improvement - not on specific roles, processes, or stages.
- helps visualise and connect how strategy, design, operations, and IT contribute to end-to-end value flow.

- provides a coherent backbone (e.g., journeys, value streams, capabilities) on which other tools and frameworks can operate effectively.

Enterprise Flow doesn't replace current tools or frameworks - it helps align them. It's like a map that helps everyone see how things connect. It helps leadership see the big picture - and helps teams see how their work matters. It's the common language that ties strategy, design, operations, and technology together. Enterprise Flow works with what you already use. Whether it's TOGAF for architecture, SAFe for scaling Agile, ITIL for service management, or Lean for operations - Enterprise Flow helps align them around value.

Key principles that make Enterprise Flow a meta-framework:

- **Customer-centricity**: All frameworks are aligned to customer journeys and value creation.
- **Flow-first thinking**: Emphasizes outcomes, feedback loops, and minimizing handoffs.
- **Structural alignment**: Uses value streams and business capabilities as fundamental building blocks (business components, core DNA of the business).
- **Framework-agnostic**: Works with any toolset or methodology, providing integration without disruption.
- **Holistic, system-of-systems view**: Helps leaders see how strategy, work, architecture, and delivery all interrelate.

Enterprise Flow model is a ***meta-framework*** - a big-picture model that helps the enterprise see, manage, and improve the flow of value across all parts of the business.

7.3.15.6 Enterprise Flow discussion

The Enterprise Flow connects customer experience and operational architecture with the identity and purpose of the enterprise.

An example of a high-level overview of the Enterprise Flow is shown below.

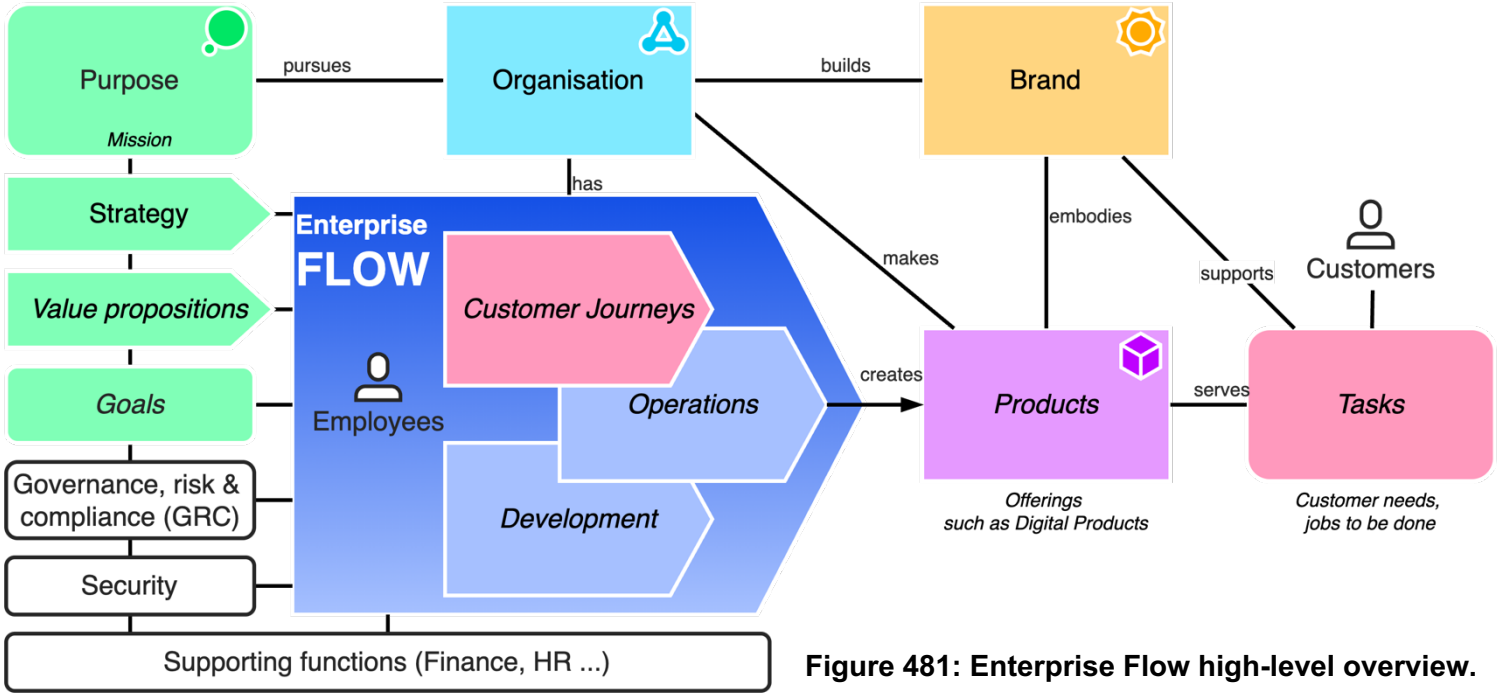


Figure 481: Enterprise Flow high-level overview.

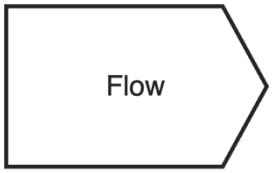
The Enterprise Flow is a practical model for implementing a flow-based, holistic and comprehensive approach within an enterprise.

The idea behind the Enterprise Flow is related to other initiatives and approaches, e.g.:

- The **Flow Manifesto**, an open initiative to help enterprises become better and more purposeful.: https://flowmanifesto.io/

- The **Flow System™**, "provides a re-imagined system for organizations to understand complexity, embrace teamwork, and autonomous team-based leadership structures." https://flowguides.org/guide.php

7.3.15.7 Flow as a concept



"Flow" exists in all levels and aspects of an enterprise, you can describe it as the core movement of value, work, and change - from strategy to service delivery, from individual tasks to organization-wide transformation.

What flows in Enterprise Flow context, examples shown below:

- Customer steps with customer needs on customer journeys
- Work and services, information, decisions, and collaboration
- Improvements and new solutions

The *flow* as a concept especially in the context of the Enterprise Flow, is defined as follows:

- Flow is how value moves, how people collaborate, and how the enterprise adapts.
- Flow is the continuous movement of value through the enterprise - from customer need to delivery and improvement.

> ***Flow*** is the continuous movement of value through the enterprise
> - from customer need to delivery and improvement.

There are types of flows in and around an enterprise is essential for designing an effective Enterprise Flow. These flows represent how value, information, and work move across the organization and its ecosystem. Here's a high-level classification:

1. Value Flows - These are core operational flows that deliver value to customers and stakeholders.

a) Customer value flows (a.k.a. operational value streams): From customer request to fulfillment (e.g. order-to-cash, claim-to-resolution).
b) Product/service delivery flows: How services or products are developed, maintained, and delivered.
c) Support flows: How internal functions (e.g. HR, finance, IT) support value delivery.

2. Information Flows - These describe how knowledge and data circulate across the enterprise.

a) Decision-making flows: Business intelligence, strategy updates, governance directives.
b) Feedback flows: Customer feedback, usage analytics, incident reports.
c) Knowledge flows: Internal learnings, best practices, training content.

3. Work Flows - These include how tasks and initiatives are planned, executed, and iterated on.

a) Project and initiative flows: From concept through design, implementation, and delivery.
b) Change and demand flows: How new requests (features, fixes, improvements) move from intake to implementation.
c) Incident and operations flows: How incidents, risks, or outages are managed.

4. Capability and Evolution Flows - These relate to enterprise adaptability and capability development.

a) Capability evolution flows: How business capabilities are discovered, improved, or retired.
b) Innovation flows: Idea to incubation to scaling. From idea to production.
c) Technology and platform flows: Evolution of platforms, APIs, technical building blocks.
d) Business transformations: how enterprise changes through transitions.

5. External and Ecosystem Flows - Flows that cross enterprise boundaries.

a) Partner and supplier flows: Contracts, orders, data integration.
b) Regulatory flows: Compliance reporting, audits, legal interactions.
c) Market and environmental sensing: Trends, competitive intelligence, policy shifts.

6. Financial Flows

a) Revenue and cost flows: Cash-in and cash-out tracking.
b) Investment flows: Budget allocation, ROI tracking.
c) Pricing and value capture flows: Monetization and value measurement.

In general, typical flow types in an enterprise are e.g. as follows:

#	Flow type	Description
1	Information Flows	Movement of data, knowledge, and communication. Examples: Business objects (such as Customer data), data, reports, decisions, design specifications, customer feedback. Can be structured (data pipelines, dashboards) or unstructured (emails, conversations).
2	Cash (Financial) Flows	Movement of money in and out of the organization. Examples: Payments, invoices, salaries, investments, cost allocations.
3	Material Flows	Physical movement of goods and resources. Relevant in manufacturing, logistics, retail. Examples: Raw materials to factory, products to customers, returns.
4	Work Flows	Movement of tasks or processes through systems or people. Examples: Order processing, onboarding, software development cycle.
5	Energy Flows	Especially in production or infrastructure-heavy industries. Includes electricity, fuel, water, etc. Can also relate to computational energy in data centers.
6	Human Flows	Movement or interaction of people across roles, teams, or geographies. Examples: Staffing, role transitions, support handovers.
7	Service Flows	Provision and consumption of services. Includes both internal and external services. Examples: IT helpdesk support, API calls between services.
8	Decision Flows	How decisions are initiated, escalated, and finalized. Includes approval processes, governance, and strategy deployment.

These above-mentioned flows often interact and influence each other.

For example:

d) A customer order initiates information flow (order confirmation), cash flow (payment), and material flow (product delivery).
e) A feature request creates an information flow that turns into a work flow in development, possibly impacting cash flow if it adds new value.

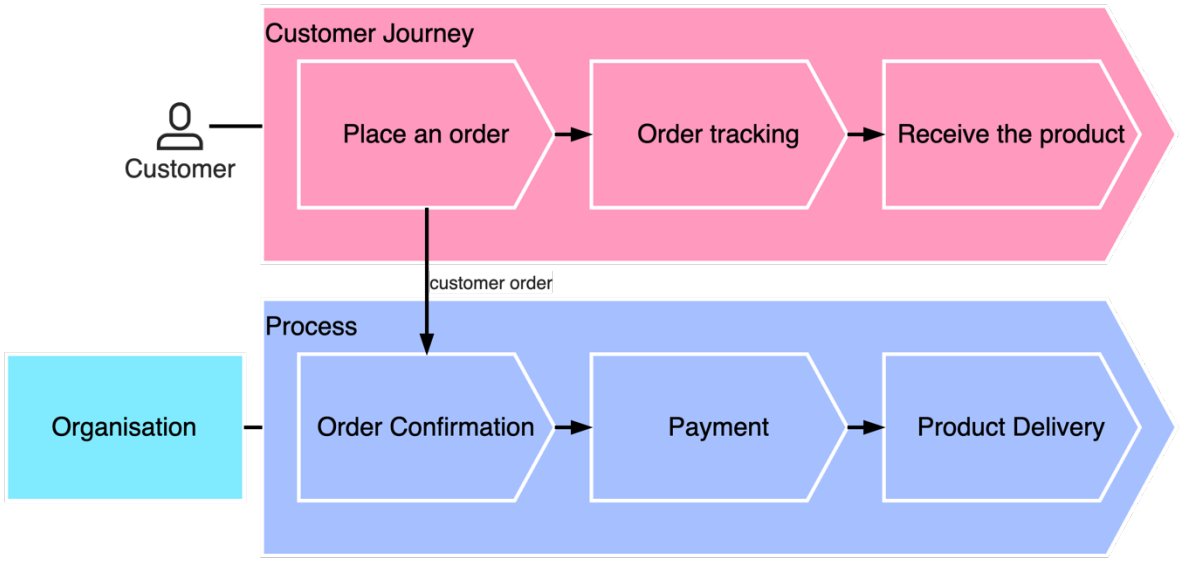


Figure 482: Example interaction of customer journey and internal process as a flow.

Business transformation is an example of a high-level *evolution flow*.

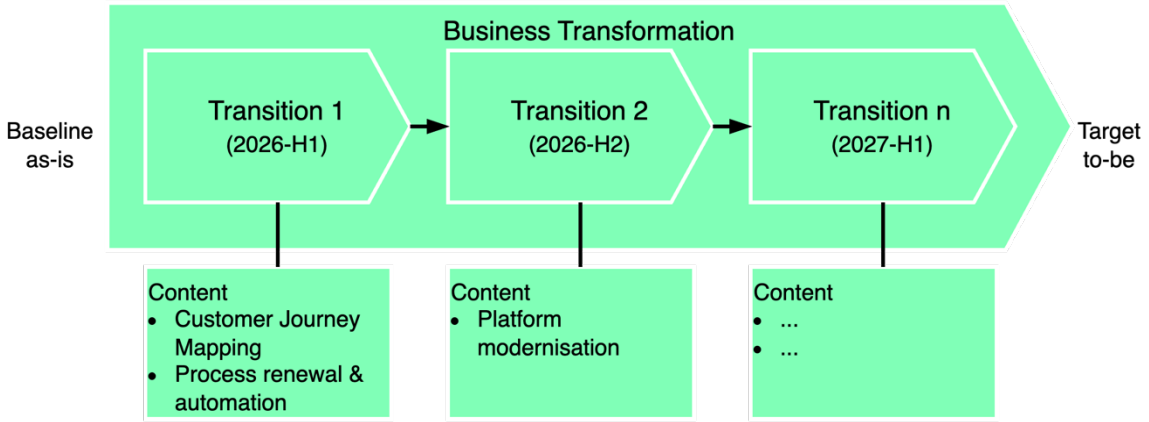


Figure 483: Business transformation as a flow.

Mapping these flows holistically is central to Enterprise Design and supports flow-optimized operations. All in all, *flow* exists everywhere in the enterprise and in every level:

Levels	What flows
Strategic level	Intent, goals, decisions, investment
Operational level	Processes, work, services, products, customer interactions
Customer level	Needs, journeys, emotions, expectations
Team level	Collaboration, tasks, communication, ownership
Individual level	Focus, energy, contributions, feedback

Flow exists across all aspects:

Aspect	What flows
Customer journeys	Needs → steps → experiences → outcomes
Operations	Demands → work → decisions → services → outputs/outcomes
Development	Ideas → designs → solutions → value (value delivered)
Information systems	Data → signals / impulses / triggers / events → decisions
Governance	Intent → guidance → prioritisation
Culture	Values → behaviors → norms

Flow is how the enterprise lives and breathes.

At its core, a flow is a process.

While we may abstract flows into concepts like value streams or customer journeys, what we're ultimately dealing with is a sequence of activities - a process. The term 'flow' emphasizes the continuous, dynamic nature of this movement. It's a simple but powerful way to understand how value moves through an enterprise.

At the end of the day, flow is a ***process***. It may sound abstract, but in practice, flow is simply how work gets done - step by step, from trigger to outcome. We can talk about customer journeys, value streams, capabilities, or systems - but behind every one of them, there is a process. A process is a flow of actions. A process is a flow.

Flow is just a clearer, more human way of seeing that everything moves, and everything happens through a process:

- A customer need becomes a request
- A request becomes an action (activity)
- An action becomes an outcome
- And that sequence is a flow - a process in motion.

Why say "flow" instead of just "process"? Because:

- Flow puts focus on movement, not just steps
- Flow invites us to ask: is it smooth, fast, meaningful?
- Flow helps us see the big picture, across silos
- Flow aligns better with how customers experience our work

Flow is a higher-level, unifying concept. It describes all the meaningful movement of value, needs, work, information, and change in and around the enterprise. It covers:

- Customer Journey Flow - the customer's path from need to outcome
- Operational Flow - how the enterprise delivers value day-to-day
- Development Flow - how the enterprise adapts, improves, and evolves
- Decision Flow - how choices and governance move through the system
- Information Flow - how knowledge is shared and used
- Value Flow - the result of it all - value moving toward impact.

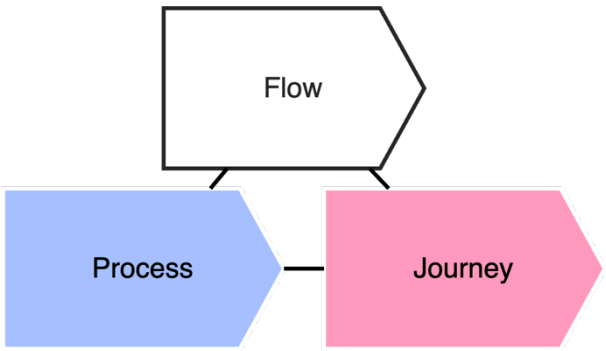


Figure 484: Flow is high-level abstraction.

A flow is a high-level abstraction of a process, and a customer journey is a specialized form of process focused on the customer's perspective. Flow is the pattern that connects. Instead of managing isolated parts (projects, silos, systems), we focus on how everything flows together - from purpose to outcome. Flow is the enterprise's "big motion picture" - it shows how everything moves, aligns, and delivers. We can call it a process, a journey, or a value stream. But when it works - when it really delivers - it flows.

In practice, the flow is the process - and the process is the flow.

7.3.15.8 Understanding Enterprise Flow as a concept

Why is understanding the Enterprise Flow essential? What is the (business) case for Enterprise Flow: why it matters? Why focus on Enterprise Flow: what's the value?

Here are few answers:

- Understand the whole: what is the behavior and structure of our enterprise.
  - See how everything is connected: customer journeys, operations, development, teams, and applications.
- See how customers actually experience the business
  - Understand how customers use our services and products, and how they connect to our internal operational processes.
- Make the business visible
  - Reveal how enterprise actually works, how value flows through people, processes, and platforms.
- Clarify how development supports the business
  - Align development with real operational needs, not just technical ideas or internal requests.
- Create a shared map of change
  - Visualising the overall flow makes it easier to plan improvements, onboard people, and communicate strategy.
- Improve Communication and Collaboration
  - Help teams talk the same language and work toward the same goals - no more working in silos.

We analyse and visualise the Enterprise Flow to understand how value moves - so we can improve how customers are served, how people work, and how the business evolves.

7.3.15.9 Enterprise Flow as a Brand

Enterprise Flow is a holistic way to understand and improve how value moves through an enterprise - across customer journeys, operations, and development. It connects strategy to execution, breaks silos, and aligns people, processes, and systems around real customer and business outcomes. By making flows visible and actionable, Enterprise Flow helps enterprises work smarter, adapt faster, and deliver better experiences - together.





Enterprise Flow is a way of seeing, designing, and improving how value flows through an enterprise - from customer journeys to operations and development. It connects strategy to execution, breaks down silos, and helps everyone focus on what matters most: creating better experiences and real outcomes - for creating better enterprises.



Enterprise Flow is not just a model - it's a mindset and culture of working together, improving continuously, and delivering value with clarity and purpose. It connects customer journeys, daily operations, and development work into one big picture - so everyone understands how their work creates value for customers. It helps break down silos, fix slow or broken processes, and keep teams aligned and moving in the same direction.

- When everything flows, the enterprise works.

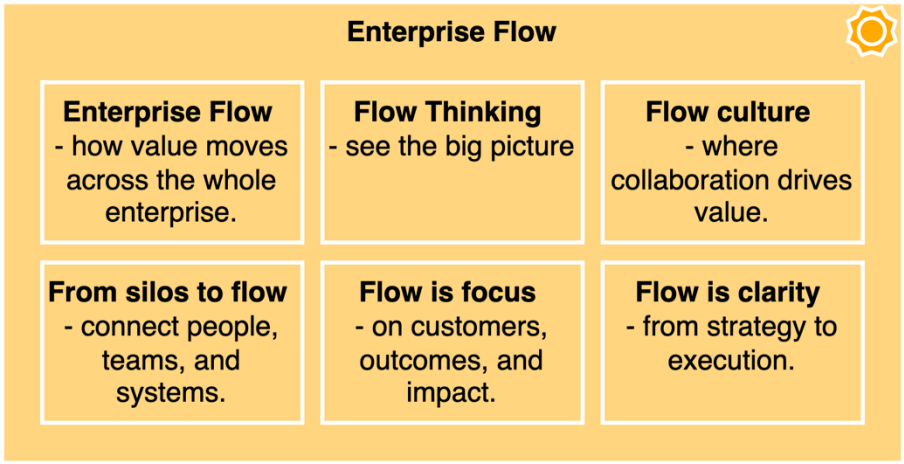


Figure 485: Enterprise Flow.

Enterprise Flow is not just a model - it's a way of thinking, working, and improving together.



7.3.15.10 Enterprise Flow Executive Summary



Enterprise Flow is important because it helps the whole enterprise work together to deliver better value, faster - to customers, employees, and the business.

Why it matters:

- It puts customer experience first
  - In fragmented enterprises, customers feel the pain first. Enterprise Flow aligns all parts of the business - strategy, operations, and development - around customer journeys and outcomes. It helps ensure that what we do internally actually improves what people experience externally.
- It connects strategy to daily work
  - Many teams don't see how their work fits into the bigger picture. Enterprise Flow helps connect high-level goals to frontline execution. It brings clarity and alignment to all levels, so people can work with purpose - not just complete tasks.
- It breaks down silos
  - Silos slow down decisions and create duplicate effort. Enterprise Flow encourages collaboration across business units and teams. It focuses on how value moves across the enterprise, not just within one function.
- It improves speed, adaptability and agility
  - Enterprises need to respond faster to change. Enterprise Flow helps us to see where work gets stuck, where value leaks, and how to fix it. It makes the whole enterprise more responsive and resilent, not just individual teams.
- It supports smarter investments

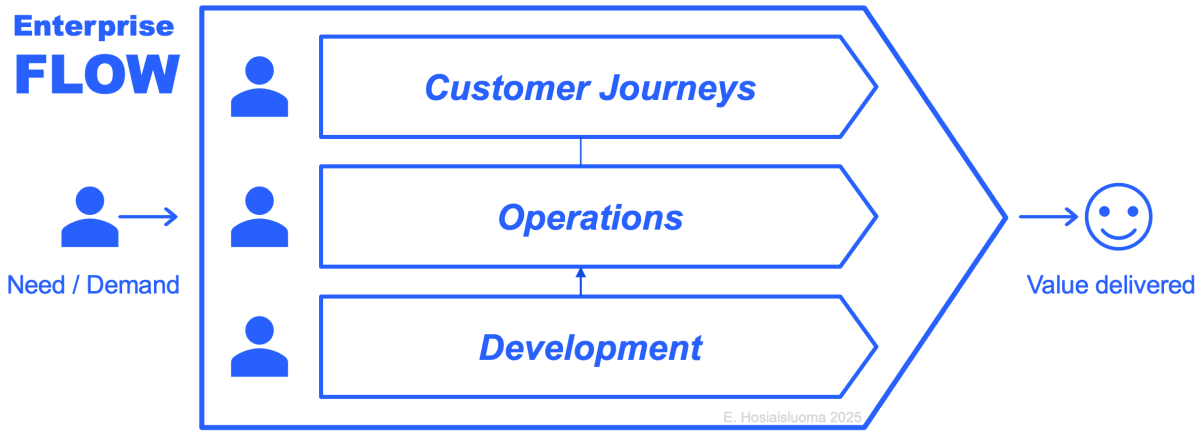
- It's not about doing more - it's about doing what matters. *Doing the right things, at the right time, with the right people involved.* With clear flow, we can prioritize better: which journeys to improve, which capabilities to strengthen, which applications (systems) to modernize. This avoids waste and boosts ROI.

It builds a shared culture

- People want meaning in their work. Enterprise Flow fosters a flow mindset and culture - where teams are connected by purpose, not just process. Everyone understands how their work contributes to something bigger.

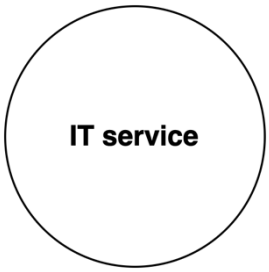
In Summary:

Enterprise Flow is how we move from effort to impact - together. It brings coherence, speed, and focus to the entire enterprise by aligning around what matters most: creating meaningful value through better experiences.



7.3.16 IT-Services

An IT service is made up of a combination of information technology, people and processes. An IT service is an ITSM (IT Service Management) concept, to which a ticket is directed in case of failure in production environment of an application (or applications). An IT service can be managed as an asset of the enterprise, so it can be modelled with the *Asset* element of EDGY.



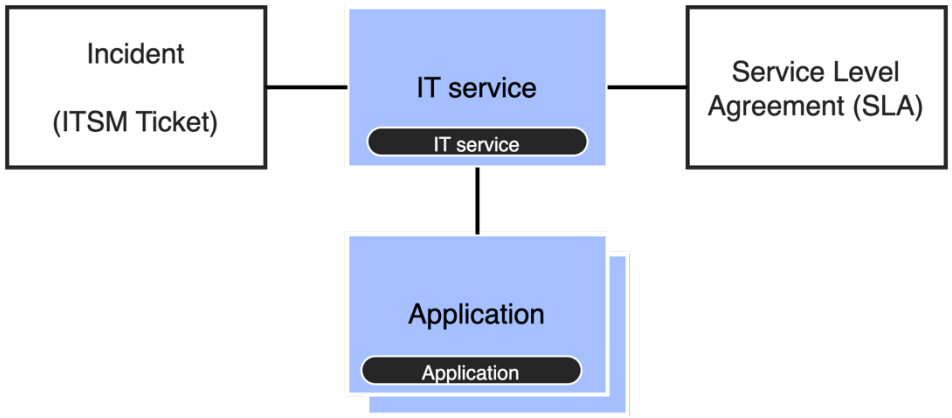


Figure 486: IT service and IT application (a.k.a. IT system).

An IT service can be associated with one or many IT applications. An application is a packaged software that provides functions, which are required by an IT service. In case of application failure, an incident (an ITSM ticket) is directed against the IT service.

An IT service is developed by a development team, that is developing new features (epics, stories) based on the product backlog. That is managed by the product owner (PO) role, which is a business representative who manages requirements of the target application, the product (in agile context). Typically the development team also operates the target application, the product, in the production environment, which refers to the DevOps practice (or DevSecOps).

An IT service can be associated with a service level agreement (SLA), which is a contract between service provider and consumer parties.

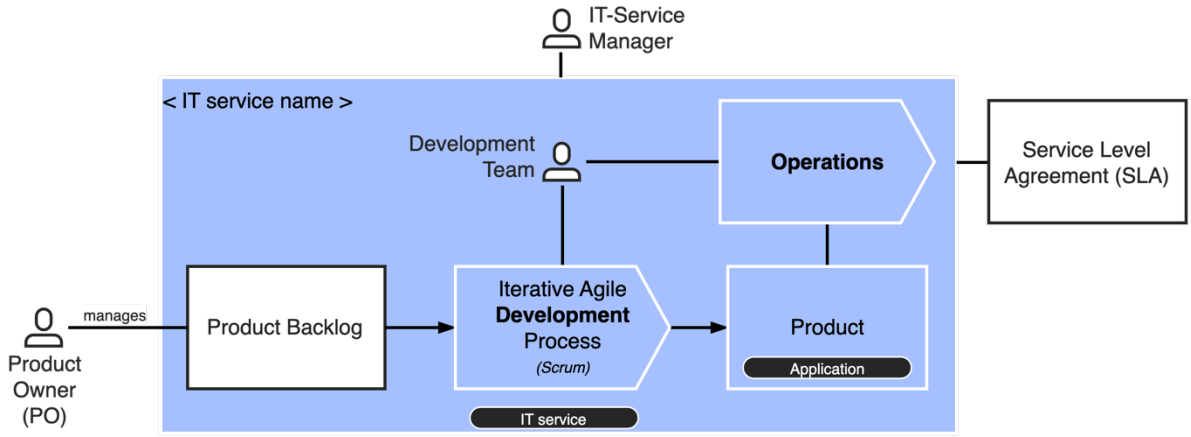


Figure 487: IT service.

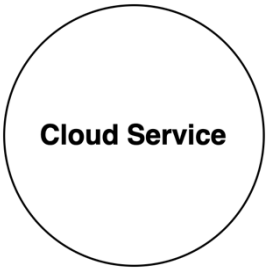
An IT service:

- is not a behavioral or structural component of enterprise architecture. It is an abstract asset / entity, it is not concrete as an application that performs e.g. data processing.
- is not used by users (business people, or business at all). Compared to an application that is used by users when they are handling information (create, read, update or delete, CRUD) . An IT service is not developed like an application. An agile team is organised around a product, typically a software product such as application.
- does not contain any intelligence, it does not perform any actions, and it is not directly used by users or the business. However, an IT service is needed by the business to ensure that certain applications can function in production.

An **IT service** is *NOT* used by users, but it is needed by business to operate.

7.3.17 Cloud Service Models

Assets can be managed by different models according to management levels: assets can be managed by the enterprise itself, or managed by service providers. This distinction is a strategic choice that is related to the nature of the business. In this digital age, cloud services are very popular as they enable new business- and operating models.



For example, if the core business is related to certain business processes, not the technology, the enterprise can outsource its IT management. That can be done partly or completely according to different models introduced in the figure below. There are several factors such as costs of maintenance, business criticality, security etc. that have to be considered when choosing the strategy.

- **On-premise**:
  - all the applications and required platforms and infrastructure is managed and hosted by the enterprise and/or on the enterprise's facilities.

Cloud-hosting models are as follows at high-level:

- **IaaS** (Infrastructure as a Service):

    - on-demand access to cloud-hosted physical and virtual servers, storage and networking - the backend IT infrastructure for running applications and workloads in the cloud
- **PaaS** (Platform as a Service):
    - on-demand access to a complete, ready-to-use, cloud-hosted platform for developing, running, maintaining and managing applications
- **SaaS** (Software as a Service):
    - on-demand access to ready-to-use, cloud-hosted application (software).

[Source: IBM, https://www.ibm.com/topics/iaas-paas-saas]

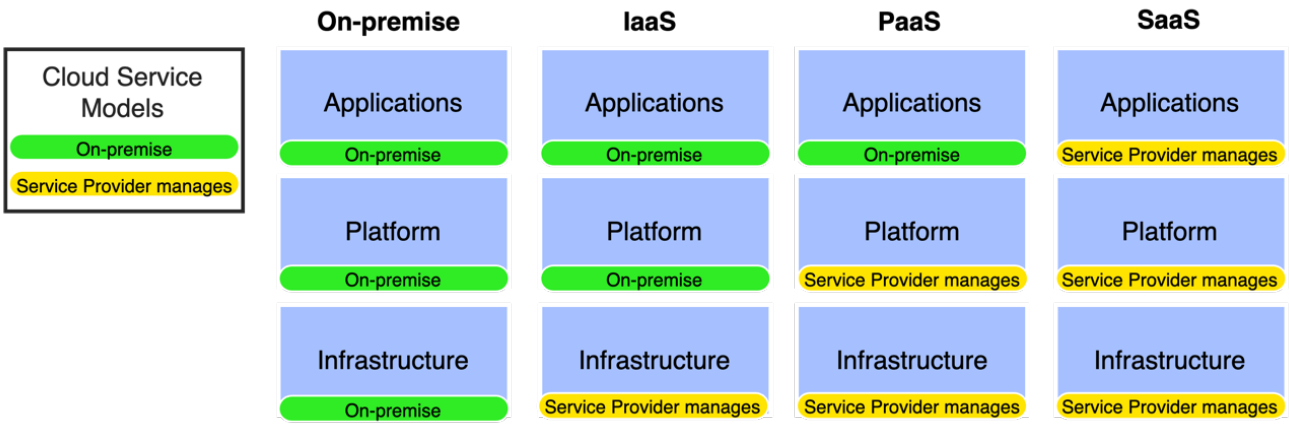


Figure 488: Cloud service models (high-level).

There are several variations of these XaaS models, in which “X” can be used for many different meanings according to the model, e.g. Business Process as a Service (BpaaS), Container as a Service (CaaS) etc.

More detailed cloud service models are illustrated in the figure below.

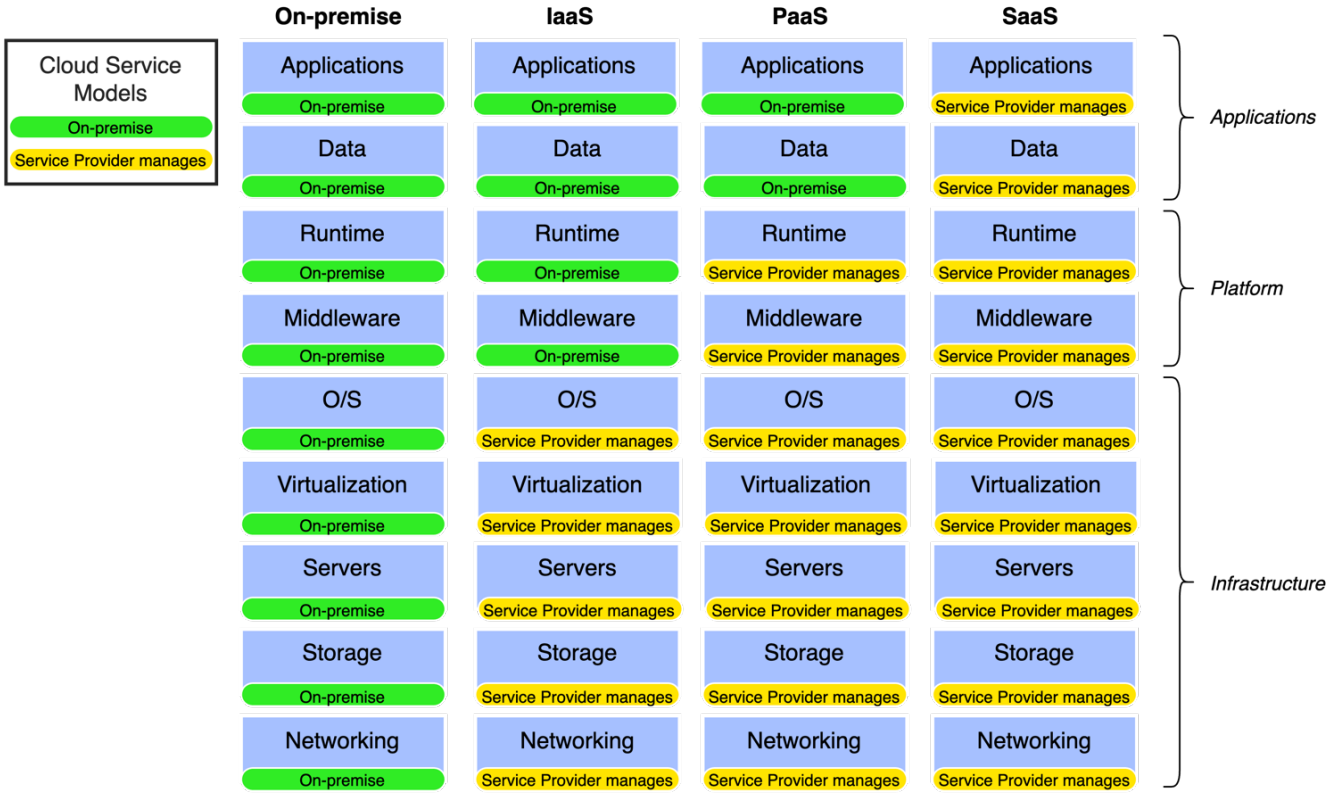


Figure 489: Cloud service models.

Note! Networking covers the communication network infrastructure within an enterprise, including network components such as routers, load balancers, switches, hubs, as well as firewalls, network segments, and zones (e.g., DMZ).

7.3.18 Output and Outcome

Outputs and Outcomes are interconnected, but are different by their nature.

- Output: direct results or deliverables produced by an activity (such as process, product or project).
- Outcome: effects or changes that result from the outputs.

Typically an activity produces an outcome, which enables an outcome to be achieved.

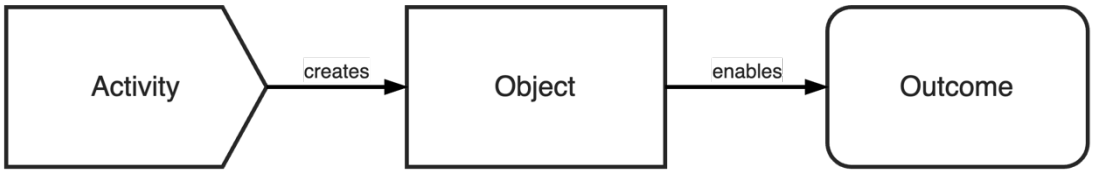


Figure 490: Relation between the Output and Outcome.

Finally, at the end of the day, outcomes are what matters. Outcomes are what the customers want to achieve, tasks they want to get done. Outcomes represent the value (customer value, the business value), the benefit that can be achieved – with the help of outputs. Outputs are enablers of outcomes.

To shift the mindset from Outputs to Outcomes means changing the focus from outputs to outcomes that are associated with *value*. Previously, we were taught to 'shift from projects to products,' but now we should focus on 'shifting from products to outcomes' - the real benefits that help customers achieve their desired end results. For example, the “customer doesn’t want a drill, they want a hole in the wall”. So they can hang a picture.

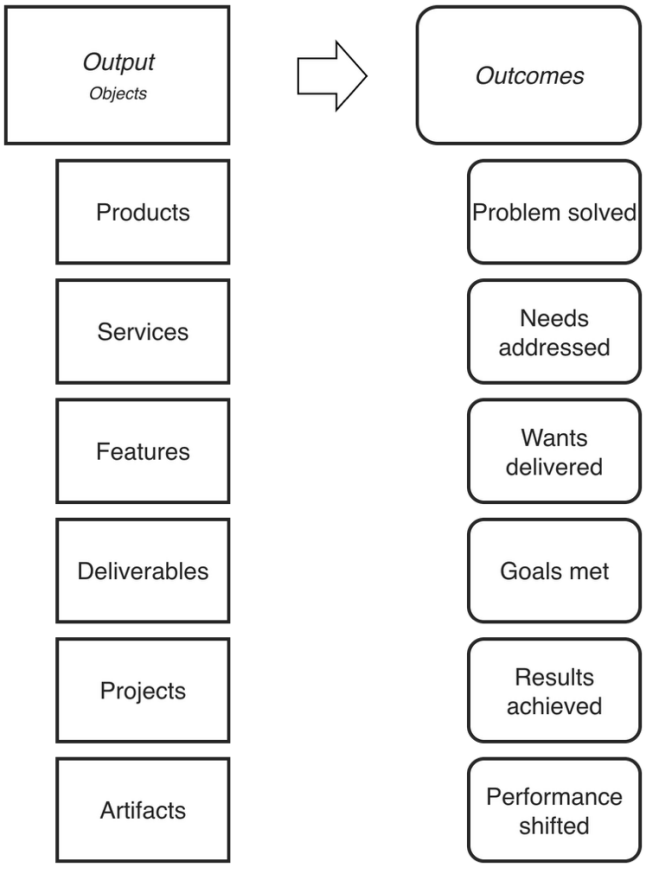


Figure 491: Outputs and Outcomes. [Applied from Gartner material by Gaughan, D.]

Outputs are needed to deliver an outcome - the value.

7.3.19 OODA loop

In contrast, for example, to the **PDCA** cycle, the **OODA** loop illustrates how a fast-moving enterprise can survive in a volatile environment. The OODA loop (*Observe, Orient, Decide, Act*) is developed by the US Air Force Colonel John Boyd for fast changing combat operations. The OODA loop represents a loop, which is going through continuously, again and again, from end to end or partly. This represents the phases of human and machine cooperation in rapidly changing situations. This same analogy can be applied to any activity, for example to quickly changing business environments.

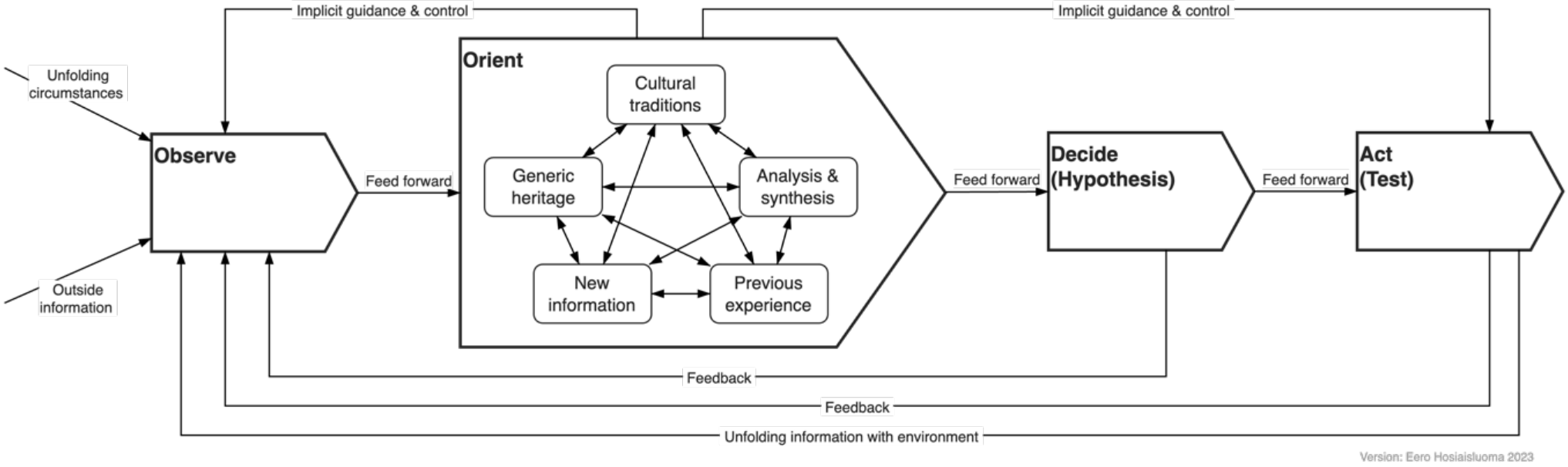


Figure 492: OODA loop.

7.3.20 Lean Enterprise Architecture (*Lean EA*)

Lean Enterprise Architecture, *Lean EA* for short (also known as *LEAD*), integrates Enterprise Architecture (EA) function (*Enterprise Architecture Management, EAM*) with the development process (*development value stream*) of an organisation. Lean EA utilises lean and agile practices. The goal of Lean EA is to create a more agile, efficient, and value-driven enterprise architecture that responds quickly to change while minimizing waste and unnecessary complexity.

For more details about Lean Enterprise Architecture see following materials:

- *Lean Enterprise Architecture Method for Public Sector*, Hosiaisluoma et al., 2018, Research Gate (link), pdf direct link, blog link.
- Lean Enterprise Architecture Development (*LEAD*), blog link.
- Lean EA Framework (*LEAF*), blog link (incl. ArchiMate® versions for Archi- and Sparx EA tools)
- Lean Enterprise Architecture Development (LEAD) method - A practical approach, blog link

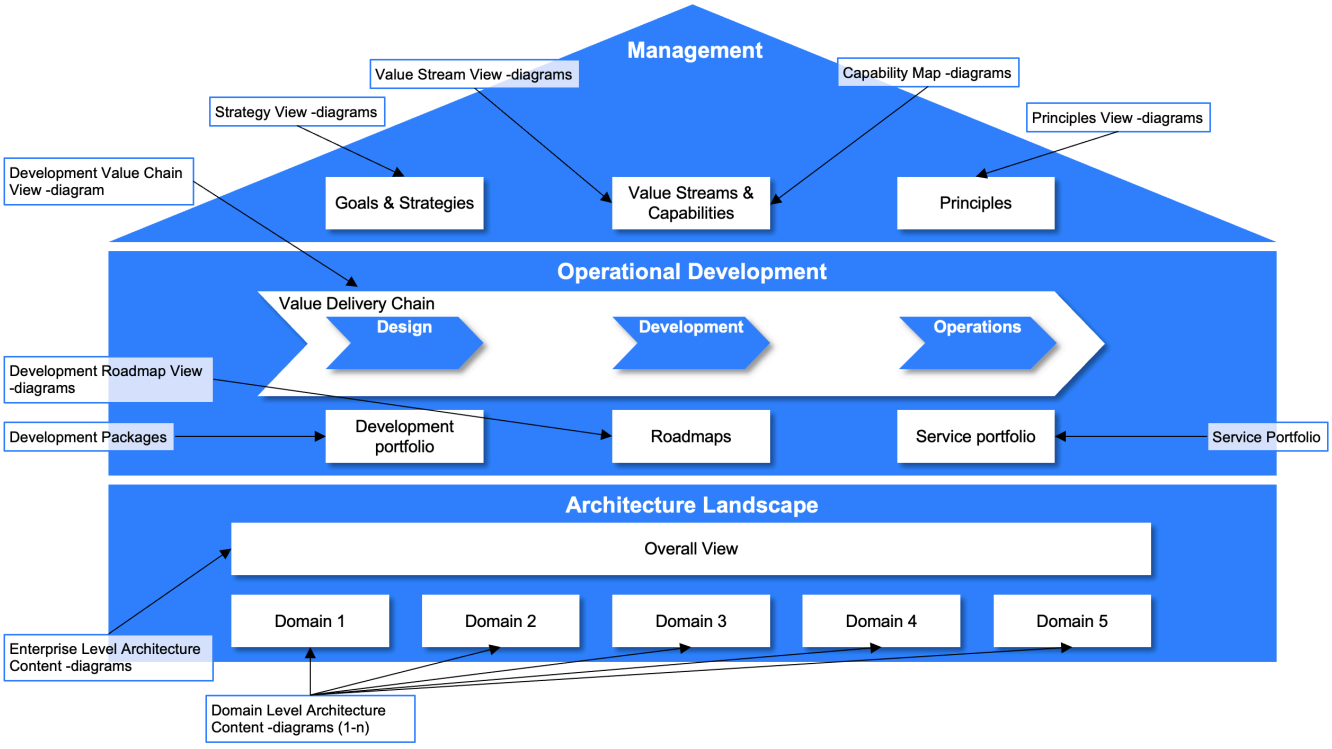
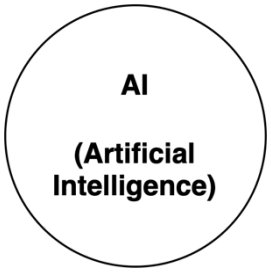


Figure 493: Lean EA Framework (LEAF).

7.3.21 AI supported Enterprise Design



Artificial Intelligence (AI) [53] can enhance the Enterprise Design approach by offering tools and insights that support strategy, operations, and experience design in a holistic, human-centric, and collaborative manner.

By integrating AI into enterprise design strategies, enterprises can ensure their approaches remain forward-thinking, inclusive, and effective in solving real-world problems collaboratively. AI empowers the Enterprise Design approach by providing data-driven insights, enabling automation, and enhancing collaboration. By integrating AI into motivations, operations, and experiences, enterprises can achieve greater efficiency, innovation, and customer satisfaction while maintaining a human-centric, holistic, and collaborative design philosophy.

Examples below.

Enterprise Design supported by AI	
Holistic Approach	AI enables a comprehensive view of systems, processes, and interactions across an enterprise by: • Data Integration & Analysis: AI can aggregate and analyze data from various sources (e.g., customer feedback, market trends, operational data) to provide a unified understanding of the enterprise's environment and challenges. • Systems Thinking: AI-powered tools like process optimization algorithms and simulation models help visualize and optimize interconnected workflows and systems, ensuring all components align with broader organizational goals. • Scenario Planning: AI can simulate future scenarios based on multiple variables, helping enterprises anticipate challenges and opportunities across different functions
Human-Centered Design	AI helps prioritize and focus on user needs and develop intuitive, user-friendly solutions: • Personalization: AI analyzes user preferences and behaviors to deliver personalized experiences, whether it's a product interface, service design, or internal process. • User Research at Scale: AI-driven tools like sentiment analysis and natural language processing (NLP) can analyze large volumes of user feedback (from surveys, social media, etc.) to uncover key pain points and desires. • Prototyping & Testing: AI can generate and test multiple design prototypes efficiently, using predictive analytics to assess potential user reactions without the need for extensive physical trials. • Accessibility: AI-powered tools can design solutions that are more inclusive by addressing accessibility needs, such as generating adaptive interfaces for users with disabilities.
Collaborative Design	AI fosters collaboration within teams and across organizational boundaries by: • Real-Time Collaboration Tools: AI enhances digital collaboration platforms by automating workflows, summarizing discussions, and suggesting next steps or solutions during meetings. • Knowledge Sharing: AI can create intelligent repositories that catalog and recommend relevant information, enabling teams to access insights and best practices from across the organization. • Conflict Resolution & Alignment: AI tools can analyze differing viewpoints in teams and propose compromises or highlight areas of agreement, fostering alignment in decision-making. • Global Collaboration: AI-powered translation and language processing tools break down language barriers, enabling diverse, distributed teams to work effectively together.

[53] **AI** It refers to the simulation of human intelligence processes by machines, particularly computer systems. These processes include learning (acquiring information and rules for using it), reasoning (using rules to reach approximate or definite conclusions), and self-correction. Common applications of AI include machine learning, natural language processing (NLP), computer vision, and robotics.

AI can contribute Enterprise Design as follows:

1. Assisting Strategy (Motivations)	AI helps enterprises define and refine their strategic goals and motivations by providing data-driven insights and predictive capabilities. • Trend Analysis: AI can analyze market trends, competitor behavior, and emerging opportunities to guide strategic decisions. • Scenario Modeling: Machine learning models simulate various scenarios to evaluate potential outcomes of strategic initiatives. • Goal Alignment: AI-driven tools can ensure that goals are consistently aligned with enterprise values and goals. • Example: AI identifies key growth areas by analyzing global market data, enabling enterprises to focus their strategy on high-value opportunities.

2. Optimizing Operations (Architecture)	AI supports operational efficiency by streamlining processes, automating repetitive tasks, and improving decision-making. • Process Automation: AI-powered robotic process automation (RPA) handles routine tasks, freeing up resources for higher-value activities. • Operational Insights: AI analyzes system performance and operational data to identify inefficiencies and suggest improvements. • Resource Optimization: AI helps allocate resources (e.g., people, applications, data) effectively by predicting demand and usage patterns. • Example: AI automates a supply chain process, reducing delivery times and operational costs while improving accuracy.

3. Enhancing Experiences (Experience)	AI enhances user and customer experiences by providing personalized, context-aware interactions and feedback loops. • Personalization: AI tailors customer interactions based on preferences, behavior, and real-time data, improving satisfaction. • Journey Mapping: AI analyzes customer journeys to identify pain points and optimize touchpoints for a seamless experience. • Sentiment (attitude, atmosphere) Analysis: Natural language processing (NLP) assesses customer feedback to understand emotions and improve engagement. • Example: An AI-driven chatbot provides personalized support, resolving customer issues efficiently while learning from interactions to improve over time.

4. Facilitating Collaboration and Decision-Making	AI enables better collaboration and decision-making within and across teams by providing shared insights and recommendations. • Knowledge Management: AI organizes and retrieves enterprise knowledge for faster access to relevant information. • Collaboration Tools: AI-driven platforms suggest ideas, resources, or solutions based on historical (project, program, design & development) data. • Decision Support: AI models evaluate multiple options and recommend the best course of action. • Example: AI assists cross-functional teams by aggregating data from different departments to create a unified enterprise-wide view.

5. Supporting a Human-Centric Approach	AI complements human creativity and decision-making rather than replacing it, ensuring a balance between technological efficiency and human empathy. • Augmented Creativity: AI generates ideas or visualizations that designers and strategists can refine and implement. • Bias Detection: AI helps identify and mitigate biases in decision-making processes. • Accessibility: AI-powered tools make services and products more accessible to diverse user groups. • Example: AI assists in designing an inclusive user interface that adapts to users with different accessibility needs.

6. Driving Innovation and Agility	AI accelerates innovation by uncovering patterns, generating ideas, and enabling rapid prototyping. • Pattern Recognition: AI identifies hidden opportunities in large datasets that can inform new products, services, or processes. • Rapid Prototyping: AI tools simulate and test design ideas quickly, reducing time to market. • Adaptability: AI continuously learns from real-world data, allowing enterprises to pivot quickly in response to changes. • Example: AI detects an untapped customer need and suggests a new product feature, which is quickly prototyped and tested.

7. Ensuring Continuous Feedback and Improvement	AI enables enterprises to monitor performance and implement continuous improvements in enterprise design. • Real-Time Analytics: AI tracks key performance indicators (KPIs) and user engagement metrics in real time. • Predictive Maintenance: AI predicts potential issues in systems or processes before they occur. • Feedback Loops: AI analyzes customer and employee feedback to inform iterative improvements. • Example: AI monitors user satisfaction metrics and suggests iterative updates to enhance customer experiences.

8. Appendices

8.1 Specialisations

Generic base elements:

Base elements		
Element	Symbol	Specialisations
Outcome		Event, Driver, End Result, State Change, Demand Parent class for subclasses Purpose, Task and Capability.
Activity		Action, behavior Parent class for subclasses Story, Journey and Process.
Object		Abstact Concept or Information Object, structure / structural thing. Parent class for subclasses Content, Channel and Asset.

Specialisations of the base elements:

Specialised elements		
Element	Symbol	Specialisations
Purpose		Goal, Objective, Mission, Meaning
Story		Narrative, Value proposition, Strategic theme
Content		High-level Offering, Vision statement, Principle, Value statement
Task		Need, Job to be done, Demand
Journey		Customer Journey, Journey step/-stage/-phase
Channel		Access and contact mechanism, Business Interface
Capability		Capability area, Capability, Function, Business area, Service area, Process area
Process		Process, Process Step/-Stage/-Phase, Workflow, Value Stream, Value Stage, Value Chain
Asset		Application, Data element, Facility, Device, Equipment, Document etc.
Organisation		Enterprise, Ecosystem, Organisation, Organisation Unit / Business Unit, Group, Team.
Product		Offering: Product or Service.
Brand		Name of an endeavour, Topic, Theme, Idea, Innovation etc.

8.2 Relationships in more detail

Structural-, dependency- and dynamic relationships can be modelled with between different element types or between same element types. Examples shown below.

8.2.1 Structural relationships

Structural- and dependency relations are modelled with the link relationship, where the label expresses the type of the relation. EDGY provides 24 pre-defined types of links: 7 links per each three facet, and 3 intersection links.

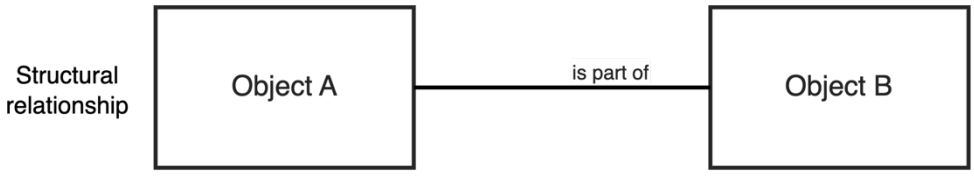


Figure 494: Structural relationship: object (A) is part of object (B).

Structural relationship typically connects structural elements of the same type. For example, organisation structure is typically a hierarchy of organisation parts, applications can consist of several sub-components and services can consist of more fine-grained services. However, structural elements can be composed with other types of elements, e.g. an organisation can make several products or services, a process can require several assets, a capability can require many assets, and an asset can support many capabilities.

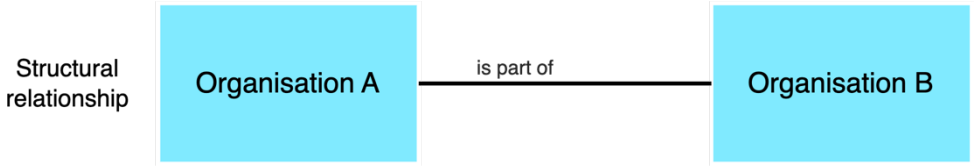


Figure 495: Structural relationship: organisation B is part of organisation A.

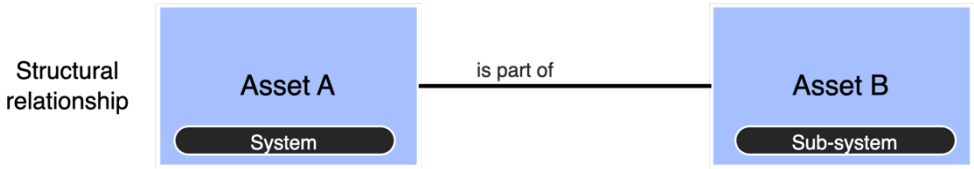


Figure 496: Structural relationship: asset B is part of asset A.

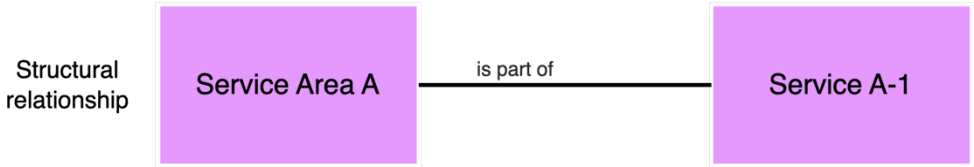


Figure 497: Structural relationship: service B is part of service A (e.g. service area).

8.2.2 Dependency relationships

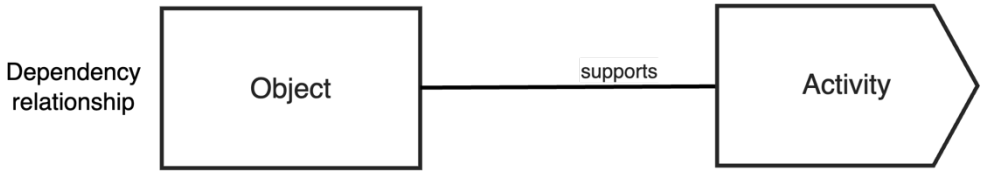


Figure 498: Dependency relationship: an object supports activity.



Figure 499: Dependency relationship: asset supports process.

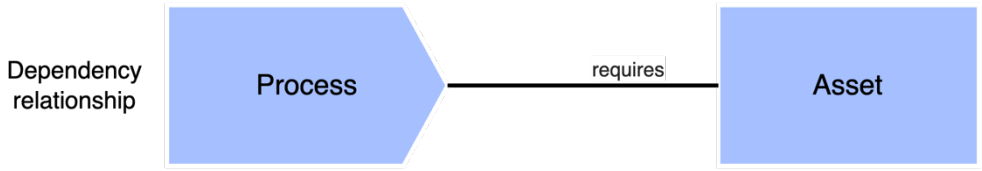


Figure 500: Dependency relationship: process requires asset.

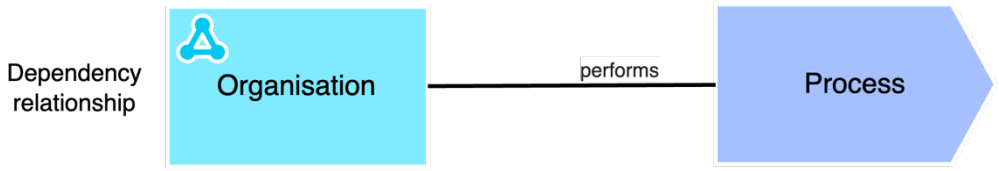


Figure 501: Dependency relationship: organisation performs process.

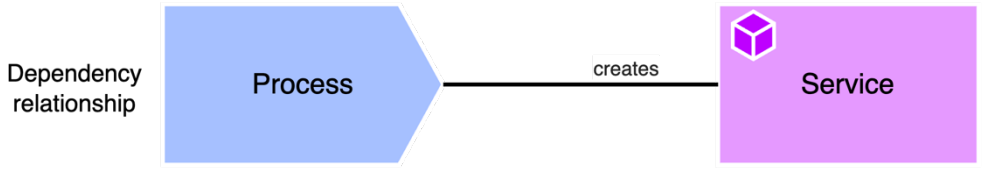


Figure 502: Dependency relationship: process creates service.

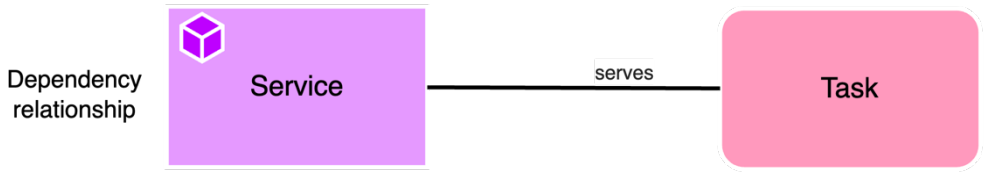


Figure 503: Dependency relationship: service serves task (customer need).

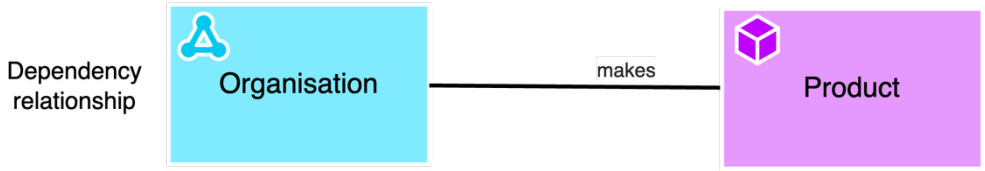


Figure 504: Dependency relationship: organisation makes product.



Figure 505: Dependency relationship: organisation makes product.



Figure 506: Organisation pursues (achieves, performs) purpose.

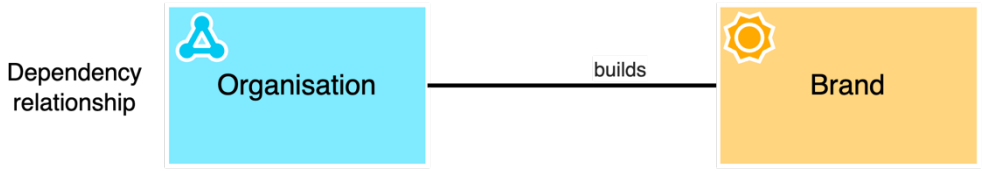


Figure 507: Dependency relationship: organisation builds brand.

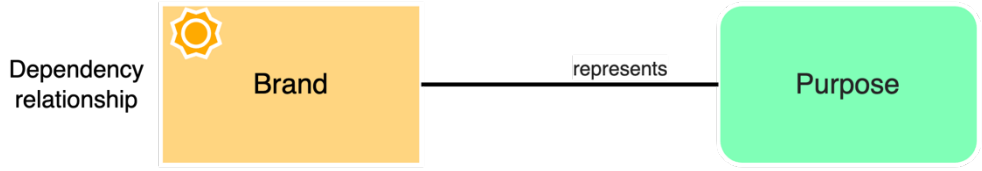


Figure 508: Dependency relationship: brand represents purpose.

8.2.3 Dynamic relationships

Dynamic relationships are modelled with the flow relationship, which indicates the direction of the relationship: e.g. which element is the active part of the interaction, or to which direction a business data is transferred. In addition, the flow relationship can contain a label that informs the name of the data that is switched between the elements.

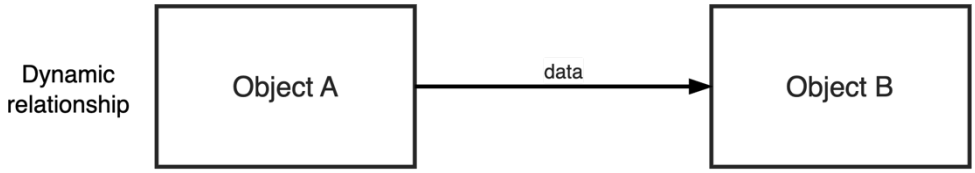


Figure 509: Dynamic relationship: object A transfers data to object B.



Figure 510: Dynamic relationship: application A transfers data (A-1) to application B.

This interaction above illustrates that the business data is transferred from A to B, so the A can be the active part of the interaction.

However, this illustration above is not telling explicitly which part initiates the interaction. This may not be interesting, as the only meaningful aspects are: a) what business data is transferred, b) to which direction (which application is the master storage, the source of the data). There can be cases where it is important to illustrate which part initiates the interaction. Then some more flows can be added into the diagram for indicating the dynamics in more detail level, e.g. adding the request flow such as an operation call / remote procedure call (RPC) as shown below. This interaction below illustrates that B starts the data

switching procedure by sending a request to the A, which in turn responses back by sending the data object A-1.

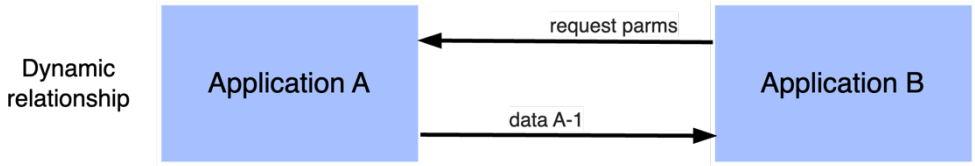
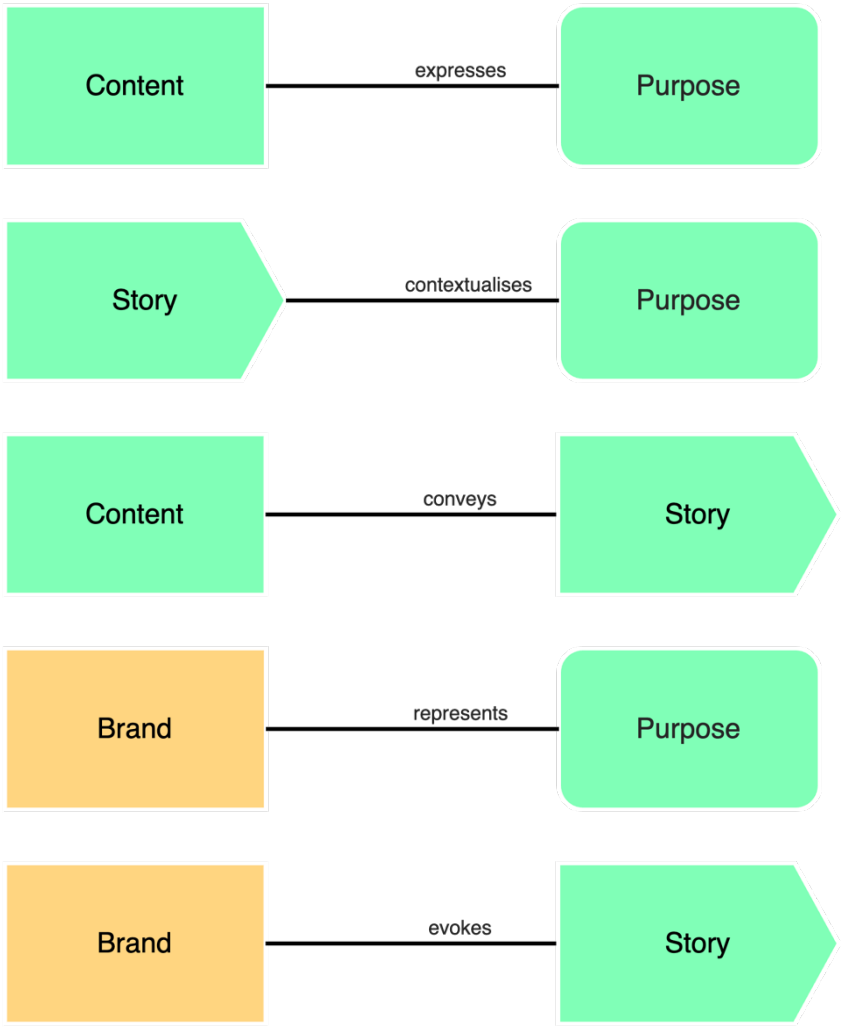


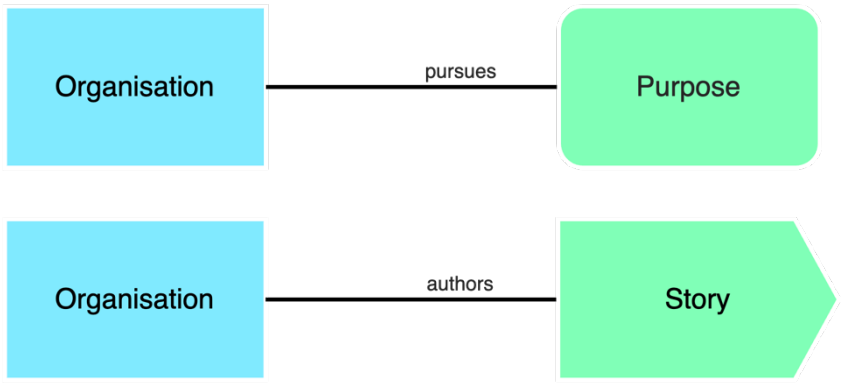
Figure 511: Dynamic flow of actions: 1) application B sends a request with parameters, 2) application A transfers data (A-1) to application B as a response.

This is so called *request-response* pattern of dynamics between applications, that can be either a) synchronous or b) asynchronous by nature. The former is real-time procedure, where the requested application responses immediately for the request. The latter can be e.g. a call-back, where the requested application receives the request but responses later back to the requestor application's interface. So the requestor sends a request and then waits for the response. The time delay between the request and response is caused by the actual processing that is performed by the requested application.

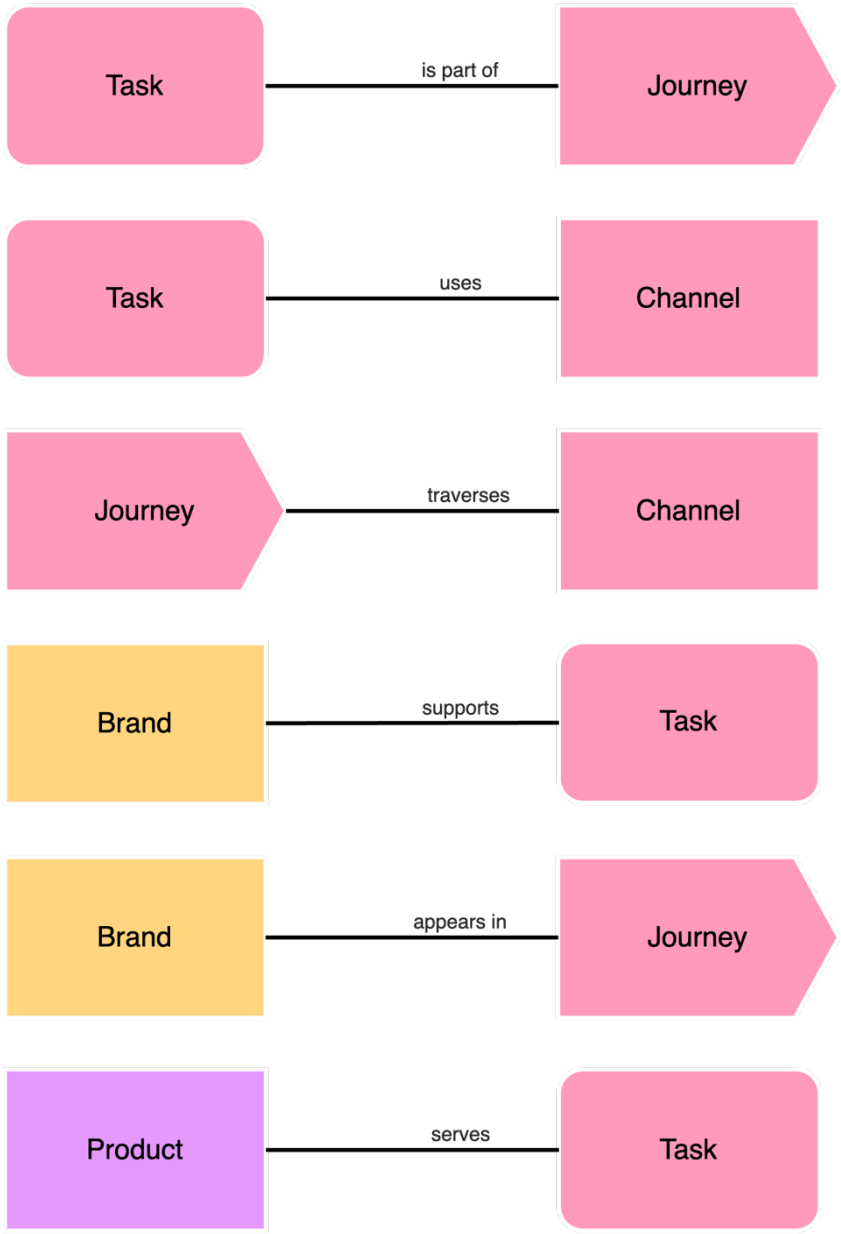
All the 24 pre-defined links introduced below per each facet.

8.2.4 Identity links





8.2.5 Experience links



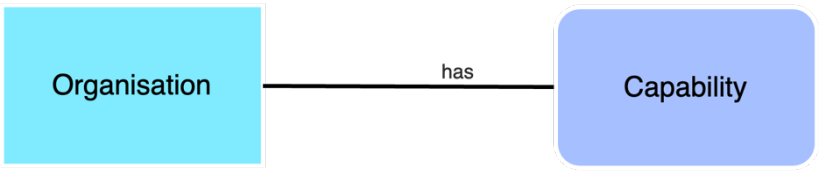


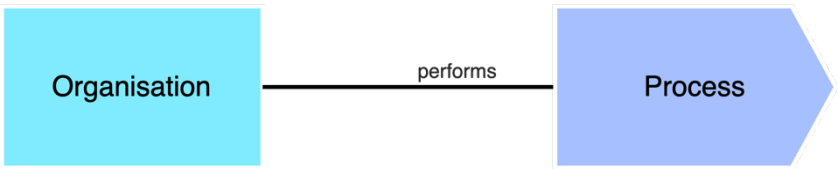
8.2.6 Architecture links







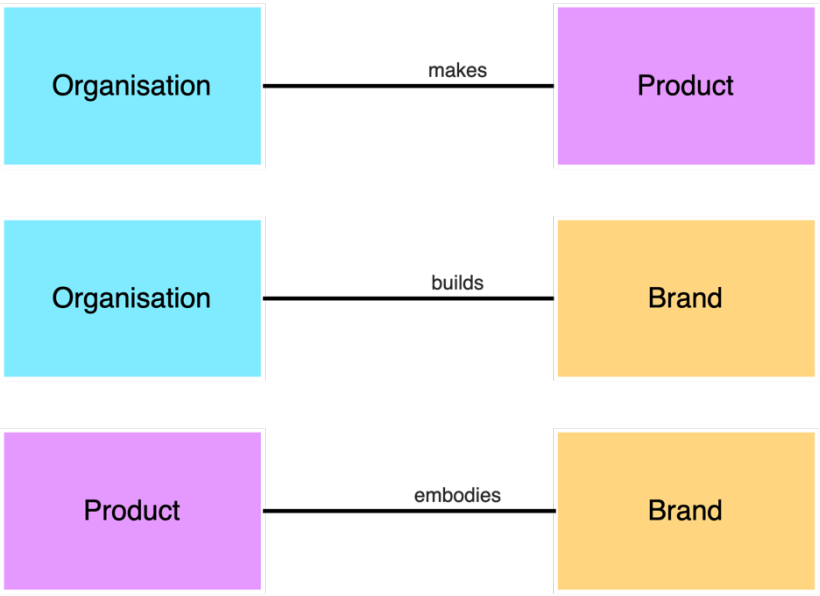








8.2.7 Intersection links (3)



8.3 Modeling Notation Comparisons

8.3.1 EDGY and ArchiMate® mapping

Base Elements		
EDGY	ArchiMate® proposed	ArchiMate® optional
People	Stakeholder	Business Actor, Business Role
Outcome	Outcome	
Object	Resource	ArchiMate has several elements that represent resources, see the figure below. For example, data modelling has two ele,ments for different levels: 1) Business Object and 2) Data Object.
Activity	Value Stream	Business Process, Application Process, Technology Process

The EDGY base elements have no clear counterparts in ArchiMate®, as the base elements are abstract by their nature. Respectively, the ArchiMate® provides more specific elements.

For example, in ArchiMate® a resource can be realised with several elements as shown below.

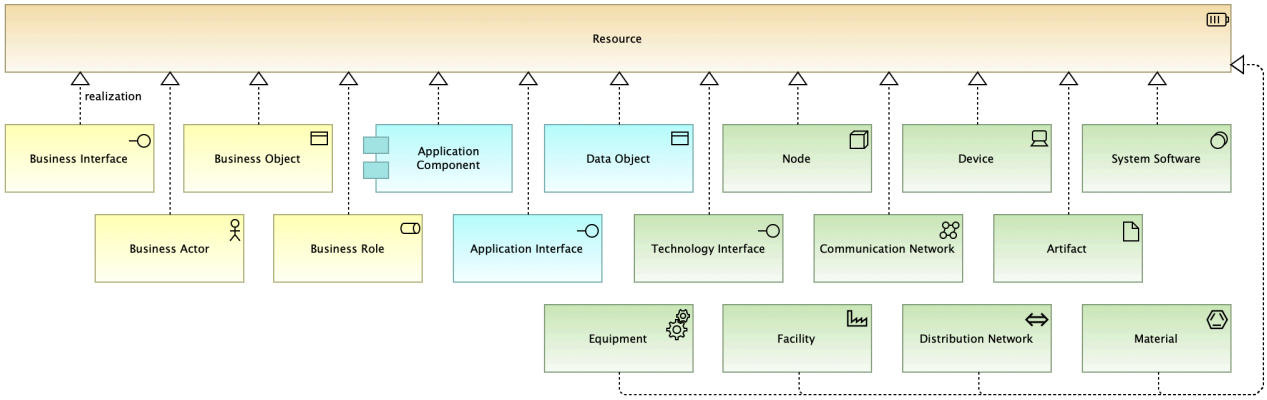


Figure 512: ArchiMate® resource realisations.

Relationships between elements is an important aspect of a modelling language. The EDGY and ArchiMate® represent different schools of modelling: the EDGY is a high-level language whereas the ArchiMate® constrained

Relationships		
EDGY	ArchiMate® Proposed	ArchiMate® Optional
link	association association	access access access composition aggregation assignment realization specialization serving
Flow	flow	triggering influence +/-

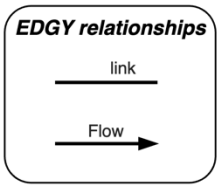


Figure 513: EDGY two (2) relationships.

ArchiMate® provides many relationships, each of which have strict rules and restrictions for their use. (Each ArchiMate® relationship is allowed only between certain from- and to - elements for certain direction.)

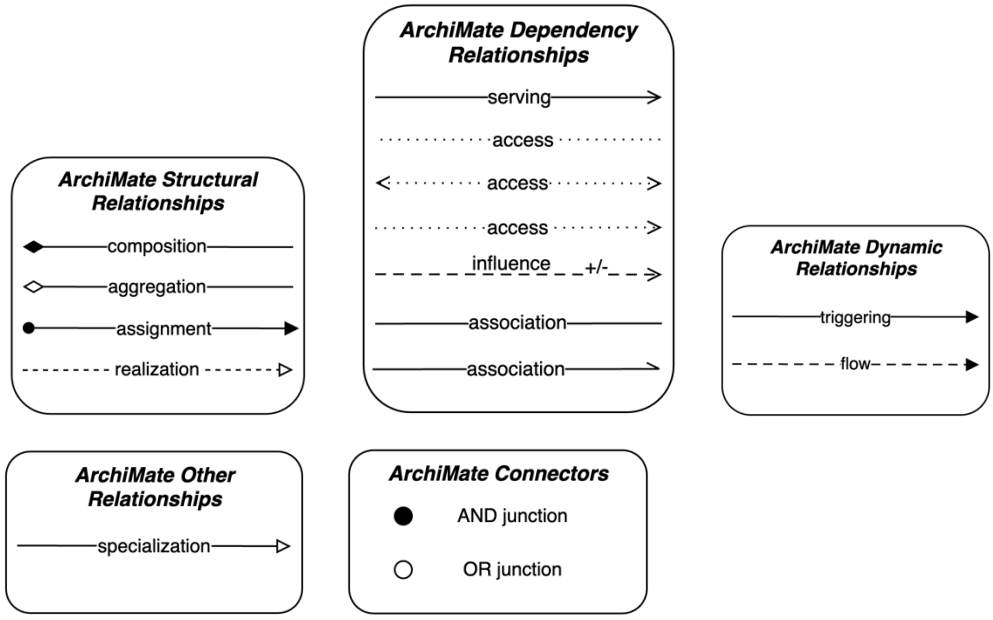
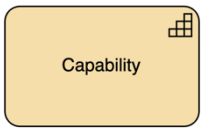
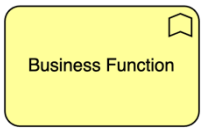
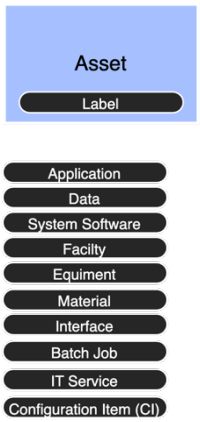
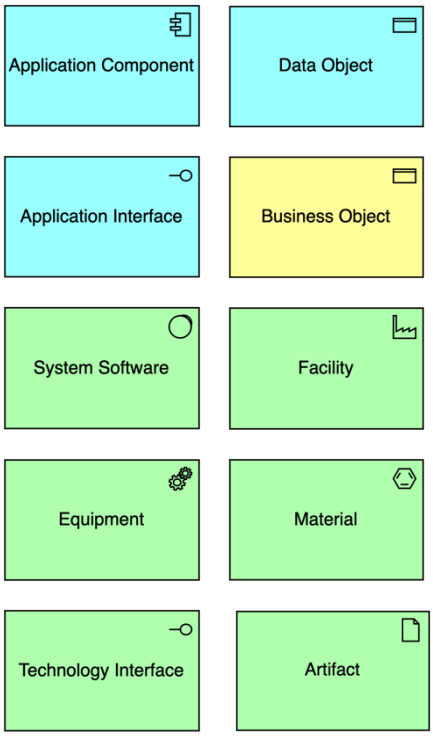
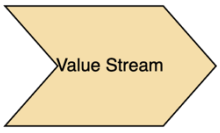
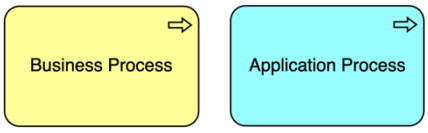
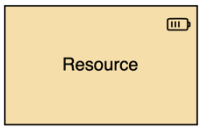
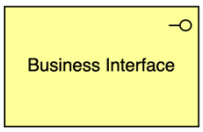
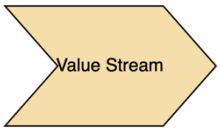


Figure 514: ArchiMate® fourteen (14) relationships and two (2) connectors.

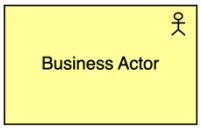
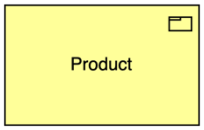
Identity Elements		
EDGY	ArchiMate® Proposed	ArchiMate® Optional
Purpose	Goal	Meaning
Content	Resource	Principle, Value, Requirement, Constraint
Story	Course of Action	

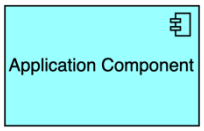
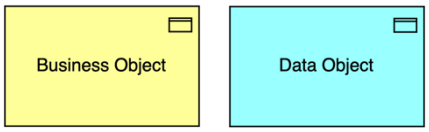
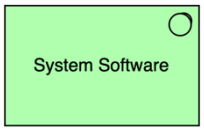
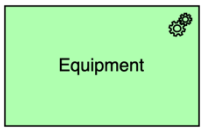
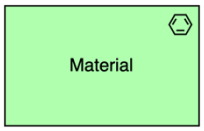
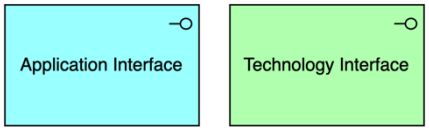
The EDGY identity elements have counterparts in ArchiMate® strategy- and motivation elements.

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<tr><th>EDGY</th><th>ArchiMate® Proposed</th><th>ArchiMate® Optional</th></tr>
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Experience Elements		
EDGY	ArchiMate® Proposed	ArchiMate® Optional
		
		
		

The EDGY experience elements have no clear counterparts in ArchiMate®. ArchiMate® it is focused on the enterprise architecture and the inside-out approach, the organisation view. Correspondingly, the EDGY is focused both the customer view and the organisation view.

Intersection Elements		
EDGY	ArchiMate® proposed	ArchiMate® Optional
		
		
		

Asset Specialisations by Tag lablel	
EDGY	ArchiMate®
	
	
	
	
	
	
	

8.3.2 EDGY comparison with ArchiMate®

Comparison	
EDGY	ArchiMate®
1. High abstraction level, common language 2. Target focus area: whole enterprise 3. For everybody: designers, architects etc. 4. Usage: experience- and business design, business operations (architecture) planning 5. The look and feel is attractive, colorful, and aesthetically pleasing (beautiful) 6. Simple to use; learning curve is short 7. Few elements (12 elements) 8. Few relationships (two relationships) 9. Few rules of relationships between the elements 10. Increasing tool support	1. Detailed level, specialised formal language 2. Target focus area: enterprise architecture 3. For architects and sw developers 4. Usage: enterprise- and solution architecture planning, strategy planning 5. Look and feel is technical 6. Difficult to use; learning curve is high & long 7. Many elements (60 elements) 8. Many relationships (14 relationships) 9. Strict rules of relationships between the elements 10. Wide tool support + model exchange file format standard for tool integration

All in all, these languages (notations) complement, not compete, with each other. The EDGY is suitable for high-level co-design when creating a common understanding of design challenges and development target areas. The ArchiMate® is suitable for detailed architecture planning when concentrating on technical details.

8.3.3 Other Modeling Notations

The EDGY is a simple, colorful and holistic visualisation language that fits to every discipline and practice such as service design, business architecture and strategy planning. EDGY is complementary, high-level language that provides an easy approach and common language for co-design and cooperation of different stakeholder groups. The EDGY is a “Rosetta Net” for every change activity in an enterprise. EDGY is simple but comprehensive enough and it is visually appealing. EDGY complements, not replaces other more specialised languages.

How does EDGY differ from other notations ArchiMate, BPMN and UML?

1. EDGY focuses on *high-level*, strategic alignment across different disciplines, offering a simple and colorful notation, while ArchiMate, BPMN, and UML are more technical, detailed, and specialized in their respective areas of enterprise architecture, software development, and business process modeling
2. EDGY is *cross-disciplinary* whereas the other notations are more discipline-specific.
3. EDGY provides a *holistic* view of the organisation and it is less concerned with the specifics or details while the other notations focus on specific aspects of the organisation.

Characteristics of the notations analysed different aspects below.

Purpose:

- EDGY provides a holistic view of an enterprise. EDGY is designed as a high-level multipurpose approach for enterprise design, focusing on the relationship between identity (purpose and vision), architecture (systems and structure), and experience (customer and user interaction). It is particularly suited for conceptual and holistic views of organizations.
- ArchiMate is a comprehensive enterprise architecture modeling language specifically designed to model an organization’s business processes, information flows, applications, and technology infrastructure.
- BPMN (Business Process Model and Notation) is a notation specifically designed to model business processes. It is used to visualize the flow of tasks and activities in a process.

- UML (Unified Modeling Language) is a general-purpose modeling language used primarily for software design. It helps model software systems and their relationships.

Audience / target group(s):

- EDGY is designed for strategists, designers, business architects, business analysts, business owners and leaders who need to align high-level organisational facets (identity, architecture, and experience) without diving into deep technical details. It's ideal for interdisciplinary teams that span business strategy, service design, and architecture.
- ArchiMate is targeted to enterprise architects and IT professionals who need to model and align business processes with technical systems. It's more technical and suited for detailed architecture work.
- BPMN is targeted at business analysts, process engineers, and stakeholders who are focused on optimizing and visualizing business processes. It is used by those who need to document or improve process flows within an organization.
- UML is a general-purpose modeling language used primarily for software design.

Visuals:

- EDGY uses simple, colorful visuals such as Venn diagrams to illustrate the overlap and relationship between key organisational facets (identity, experience, architecture) and their intersections (brand, product, organisation). This makes it easy for non-technical stakeholders to understand key concepts.
- ArchiMate utilises more detailed and structured diagrammatic representations of layers and views within the organisation, which are more suited for in-depth technical analysis and documentation.
- BPMN uses flowchart-like diagrams to represent business processes, with specific symbols for tasks, events, gateways, and flows. The visual language is highly structured but still intuitive for those familiar with process modeling.
- UML uses various diagram types (class, sequence, use-case, component etc.) to visualise software components, their interactions, and behaviors. Each diagram serves a specific purpose, often with highly technical notation.

Simplicity vs. Complexity:

- EDGY is intentionally simple and accessible, using a minimalistic visual style (like Venn diagrams) and color-coding to represent abstract concepts. It’s designed for ease of understanding and for fostering conversations among non-technical stakeholders, such as business leaders, strategists, business people and designers. Complexity Level: *Low*, designed to be intuitive and visual with no deep technical modeling requirements.
- ArchiMate is more complex, offering detailed views across various layers of the enterprise (business, application, and technology). It requires specialized knowledge to create and interpret the models. Complexity Level: *High*, as it models enterprise architecture in significant detail, which can involve many interconnected systems and processes.
- BPMN is more intuitive than UML or ArchiMate for business users but still requires understanding of process flows and technical details to create accurate process models. Complexity Level: *Moderate* to *high*, depending on the level of process detail and automation needed.
- UML can be complex, especially when used for large-scale software systems. It includes various diagram types (class, sequence, activity, etc.), which require technical expertise to understand and create. Complexity Level: *High*, especially in large software engineering projects, but provides specific diagrams for different views of a system.

Scope:

- EDGY is less concerned with technical details and more with cross-functional alignment between various aspects of the enterprise, such as branding, service design, and organizational structure. It offers a broad view of how different elements intersect to shape the enterprise.
- ArchiMate is focused on detailing the architecture of business, application, and technology layers within the organization, making it suitable for more technical, system-centric use cases.
- BPMN provides a graphical notation for specifying business processes in a process flow model. It's heavily focused on workflow and task automation, making it suitable for process optimization, business process management, and documentation.
- UML is highly technical and detailed, focusing on the design of software systems, their classes, interactions, and behaviors. It's used by developers and software engineers to document and visualize software architecture and functionality.

Use Cases:

- EDGY is inherently *cross-disciplinary* and adaptable, applying to various practices such as service design, business architecture, and strategy planning. It's used at a strategic level across multiple domains, making it more multipurpose than technical notations.
- ArchiMate is focused on enterprise architecture in detail
- BPMN is focused on business processes
- UML is focused on software design

Differencies				
Aspect	EDGY	ArchiMate	BPMN	UML
Purpose	Holistic, human-centric and collaborative enterprise design	Detailed enterprise architecture	Business process modeling	Software design
Audience	Strategists, designers, architects, business analysts, business owners	Enterprise architects, business architects, solution architects	Business analysts	Software developers
Visuals	Simple, colorful, high-level	Technical, multi-layered	Flowchart-style	Technical, varied diagrams
Complexity	Low	High	Moderate / High	High
Scope	Cross-disciplinary, conceptual	Business, applications, tech	Business processes	Software systems
Use Cases	Strategy, service design, architecture	EA, Business- and IT architecture	Process optimization	Software engineering

8.3.4 Visualisation

Visualisation is valuable and useful for facilitating shared understanding. Visualisation is a useful tool to analyse and communicate what's happening in and around the enterprise.

The most valuable aspect is the visualisation co-design process itself, during which the development target (the problem domain) is examined together, and all relevant aspects are identified and discussed, and a shared understanding of the whole is established and made visible for further evaluation.

We can identify two kinds of communities (schools) that use visualisation in their work: 1) non-technical business people and 2) technical development-oriented people. EDGY is positioned between these communities to bridge the gap between them, as EDGY provides both simple and comprehensive language that is familiar for most of us. See the figure below.

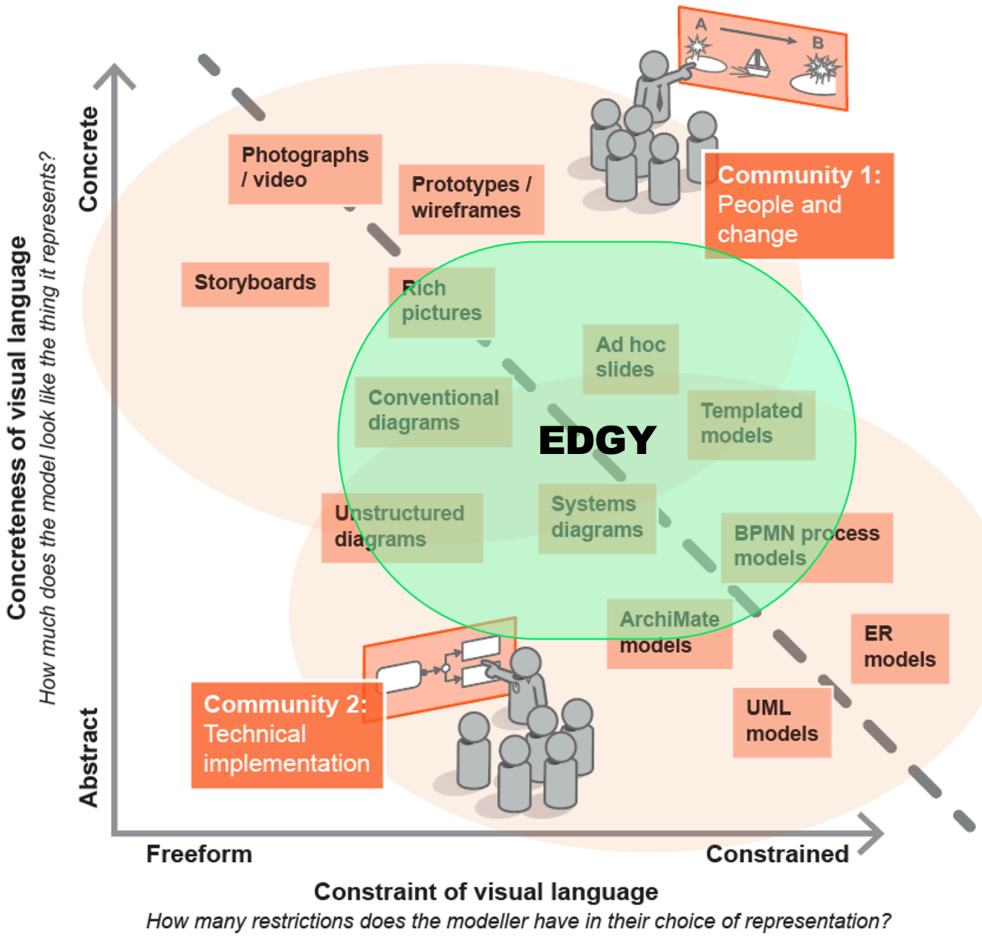
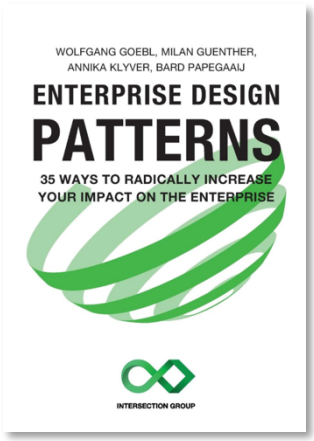


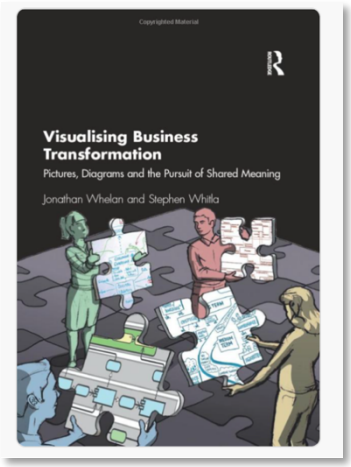
Figure 515: EDGY is positioned in the middle of "schools".

[Figure above from the book "*Visualising Business Transformation*".]

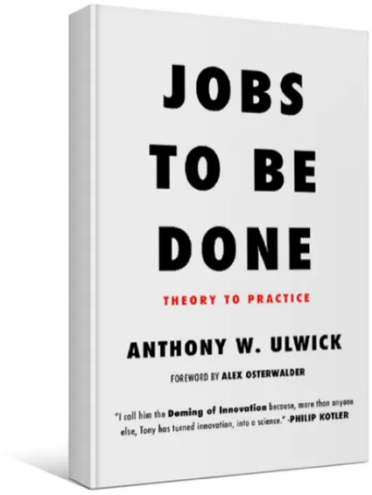
8.4 Good Reading

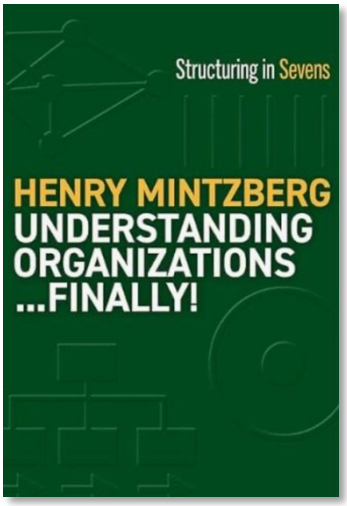










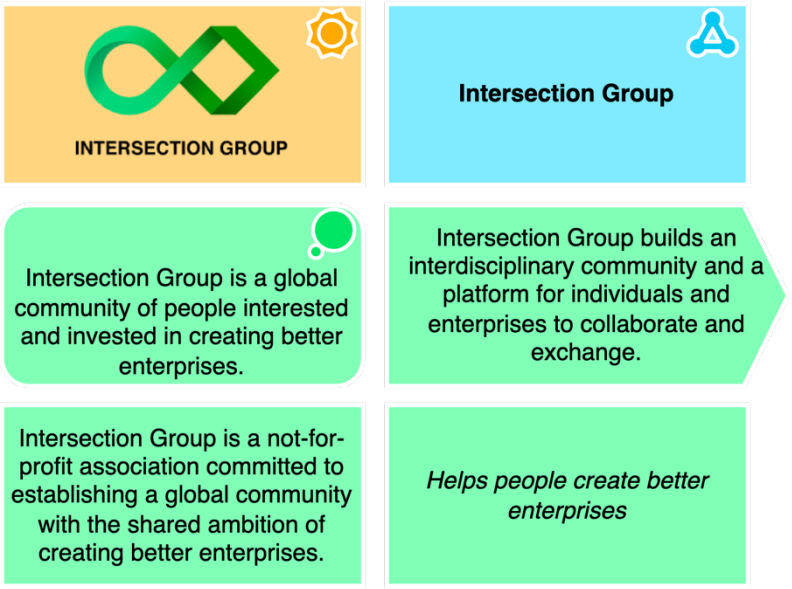


8.5 Intersection Group

Intersection Group is a global community of people interested and invested in creating better enterprises [1].

Intersection Group is run by a community of people organised as a not-for-profit association, committed to the idea of creating better enterprises.

Intersection Group brings together practitioners working with enterprises in internal roles or as external consultants, authors and academics from connected fields, as well as member organisations that partner with the community to develop the practice, tools and content. [1]



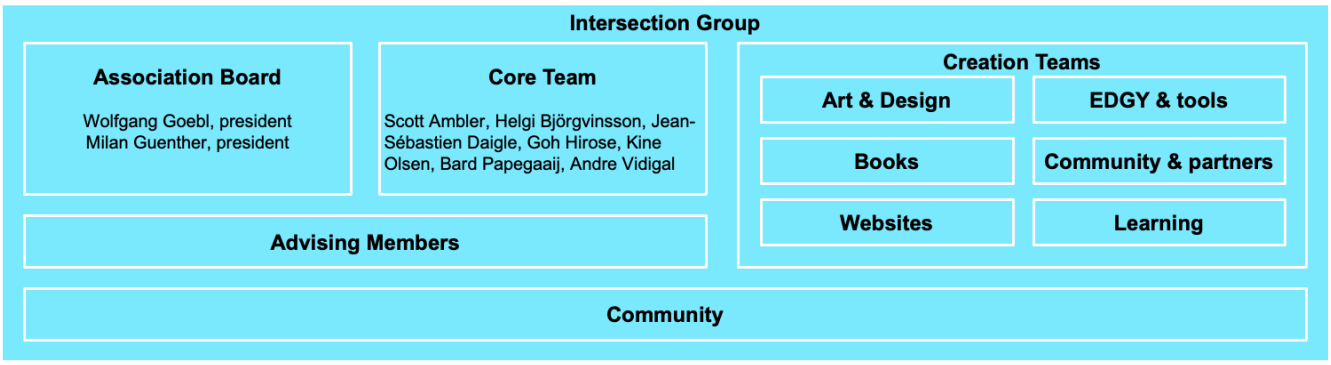


Figure 516: Intersection Group organisation & people.

The Intersection Group story began in 2012. For more information see the IG pages ([1])

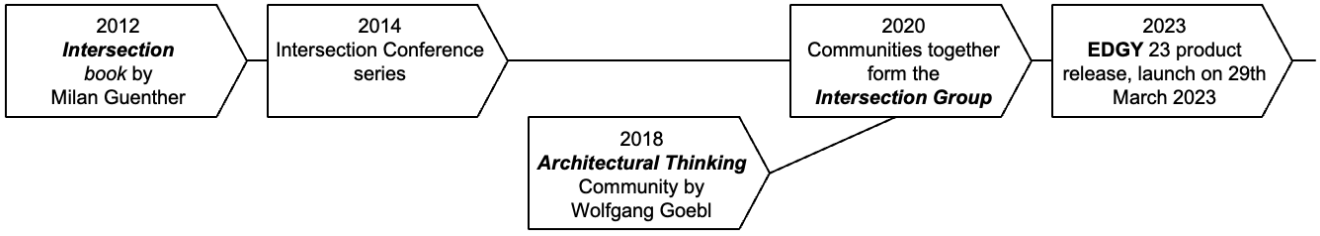


Figure 517: Intersection Group phases.

9. Terminology

Terms and concepts related to Enterprise Design.

Term / Concept	Description
Architecture	Behavior and structure of an enterprise (in this context). Architecture refers to operations and delivery of an enterprise. There are several levels of architecture dependng on their scope and scale, such as enterprise architecture (widest scope), solution architecture (related to a single solution of an enterprise architecture), information-/data-architecture (information focused), security-, and integration architectures.
Asset	Synonym: Resource.
Business Capability	Represents a fundamental ability or capacity of an organization to achieve its goals, focusing on what the organisation needs to do, rather than how it is done. Capabilities help align strategy with execution, enable agility, and provide a framework for decision-making and prioritization. They are a critical tool in enterprise architecture and business transformation efforts. See Capability.
Business Challenge	Any change demand, -request that aims to change business and/or business operations (operational business).
Business Design	An approach to creating and improving businesses that emphasizes innovation, user-centricity, and holistic thinking. It focuses on the strategic design of a business model, organisational structure, processes, and customer experiences to achieve better results and adapt to changing market conditions. Business design aims to align a company's strategy, operations, and customer value proposition in a way that creates a sustainable and competitive advantage. Here are key elements and principles of business design: 1) Customer-Centric Approach, 2) Design Thinking, 3) Business Model Innovation, 4) Process Optimisation, 5) Organisation Design, 6) Cross-Functional Collaboration, 7) Prototyping and Experimentation, 8) Adaptation and Resilience, 9) Sustainability and Social Responsibility and 10) Data-Driven Decision-Making. Business design is employed by organisations seeking to remain competitive and innovative in a rapidly changing business environment. It is often used in industries where disruption and adaptation are essential, such as technology, retail, and finance. Design thinking and human-centered design principles are often integrated into business design processes to ensure a focus on the end user and their evolving needs.
Business Event	An occurrence, a state change, which has effects in conditions or circumstances in the enterprise's business environment. Can be modelled with the EDGY *Outcome* -element.
Business operations	Refer to the day-to-day activities, processes and tasks that organisations use to produce and deliver goods and services, and ultimately achieve its business goals. These operations are fundamental to running an enterprise efficiently and effectively and play a crucial role in delivering value to customers, maintaining competitive advantage, and achieving overall business success. This includes planning, organizing, directing, coordinating and controlling the various aspects of production, such as procurement, manufacturing, distribution and marketing. In order to run an efficient and successful business, operations must be well planned, organized and managed. Examples: Accounting and finance, HR, manufacturing, marketing and sales, IT, customer service, regulatory compliance. Note! Business operations are close to business capabilities. See Operational Business.
Business Outcome	An end results of activities that is meaningful for the business: it generates business value.
Capability	Synonym: Business Capability. Components with which an enterprise runs its business operations. Composition of elements that belong together (people, processes and assets).

Term / Concept	Description
Co-design	Collaborative, conversational cooperation of various disciplines. An approach to solving design challenges. Analogous with, and similarities to the *co-creation* approach, but the focus is, not cooperation “an sich”, but the design methods and tools as primary means.
Core Function	Core functions are the essential, primary activities that an organisation performs to fulfill its mission and objectives. These functions can vary widely depending on the nature of the organisation and its industry. Examples of core functions might include production, sales and marketing, customer service, research and development, and supply chain management. Core functions within an organisation are often integral components of its value streams.
Culture	Synonyms in this context: Organisation culture / enterprise culture. Refers to the shared values, beliefs, norms, behaviors, and practices that characterise how people within an organisation/enterprise interact with each other and with external stakeholders. Organisational culture is the collective behavior and mindset that defines how work is done, how people interact, according to organisation values. It influences every aspect of the business, from daily operations to long-term strategy. A well-defined and positive culture can be a significant competitive advantage, driving success and sustainability.
Customer	Typically an individual (e.g. citizen) in a business-to-consumer (B2C) context, who purchase goods (products) or use services for personal use. Client, in contrast, refers typically to an organisational entity in a business-to-business (B2B) context, where long-term relationships and partnerships are common.
Customer Excellence	Refers to the practice of consistently delivering exceptional value and experiences to customers, exceeding their expectations and building strong, long-lasting relationships.
Customer Experience	See. Experience.
Customer Insight	Understanding and information about the customer’s life. Can be harvested e.g. by surveys. Customer data can be further analysed by Data Analytics methods and tools. With the analysed customer insight it is possible to create well-designed products and/or services that provide good customer experience. Defining desired outcomes (Tasks / jobs to be done) requires a deep understanding of customers’ problems.
Customer Journey	Refers to the complete sequence of (inter)actions a customer has with an enterprise, brand, products or services, from the initial contact through to the end of the relationship. It encompasses all stages of the customer's experience and helps organisations understand how customers perceive and engage with their offerings. A customer journey focuses on the sequence of interactions a customer has with an enterprise, from the initial awareness stage through to post-service period and beyond. It captures the customer’s perspective and emotional experiences. By focusing on the customer journey, businesses can gain a deeper understanding of their customers' experiences and make informed decisions to enhance satisfaction and loyalty.
Customer Journey Management	Ongoing practice of researching, measuring, designing, and optimizing a customer journey to improve the customer experience and achieve business goals. An extension of CX management and design thinking. [Source: theydo]
Customer Journey Mapping	Process of creating a visual representation of the customer journey, mapping out each stage and touchpoint to understand the customer experience better.
Customer Value	Refers to the perceived benefit or worth that a customer derives from the enterprise’s products or services. It can appera in diverse forms such as: a) functional value, b) emotional value, c) economic value, d) social value and e) experimental value (experience). Customer value can be affected e.g. by getting customer insight, by understanding customer needs.
Design Challenge	A change demand, innovation or transformation of any kind, size and scope. A certain matter or issue to be resolved.

Term / Concept	Description
Design Thinking	A human-centered, problem-solving and innovation approach that focuses on understanding and addressing user needs and preferences, fostering creative solutions, and rapidly prototyping and testing ideas. Design thinking typically involves a series of stages or steps as follows: 1) Empathize, 2) Define, 3) Ideate, 4) Prototype, 5) Test and 6) Implement.
Discipline	A *practice* of certain skill and competence area. A group of people with certain professions that are involved in enterprise design or have some concern about it e.g. as follows: service designers, UX- and CX-designers, product designers, product owners, organisation designers, business owners, business analysts, business developers, business-, enterprise- and solution architects, software developers, security experts, risk management experts, managers, strategy planners, IT service managers, testers, operational staff, partners etc. at any level of hierarchy, from strategic to operational level.
DPIA	Data Privacy Impact Assessment
EDGY	**E**nterprise **D**esign **G**raph Interplay**Y**, an open-source language for supporting the enterprise design. The EDGY is the common language for any group of people that is involved on business design & development. The EDGY breaks the language barriers between people, as they design their own enterprise together.
Enterprise	An enterprise is an endeavour of people with a shared ambition. [3] Can be any size or type of or structure where people unite around a shared ambition to achieve something, driven by a humanistic impetus. E.g. an organisation, corporation, sports club, non-profit association, or ecosystem.
Enterprise Design	A collaborative and conversational co-design approach. The enterprise design utilisation can be started by group of enterprise designers, who can facilitate co-design, teach and cooperate as mentors, with 'soft skills' – like 'gardeners'. This task force of enterprise designers can provide enterprise-level support for all the units, for all the design challenges, for all the concept design initiatives in the enterprise. The Enterprise Design approach is for everybody, for the overall enterprise in the big picture. But it can be started with small design challenges first, and then used in all the enterprise-level design challenges – by cooperation, co-design and co-learning, in a collaborative way. Enterprise Design is an umberella term for all (!) the other "X -desig"n approaches such as Service Design, Product Design, Organisation Design, Architecture Design, Ecosystem Design, Societal Design etc. All entities are parts of certain enterprise. Enterprise represents any entity that is interesting as a whole (see Enterprise).
Enterprise Design thinking	A large-scale, design thinking and architectural thinking integrated together. A complementary approach and concerned know-how for all the people involved in overall enterprise design.
Event	See Business Event.
Experience	People's experience of the enterprise and its products & services. The impact (emotional) of the enterprise or benefit (functional, monetary) it provides. People cover all the interest groups that have a relation to the enterprise, e.g. customers, employees, partners, investors / owners.
Facet Model	EDGY facets: Identity, Architecture, Experience; and intersections: Organisation, Product, Brand. The facets can be evaluated in any order, as long as their intersections stay in the same position and relation to facets: Brand is between Identity and Experience, Organisation is between Identity and Architecture, and Product is between Architecture and Experience.
Failure Demand	"Failure demand" represents customer demands / value demands that result from problems, errors, or failures in an organisation's products or services. Organisations aim to minimize failure demand by improving their processes, products, and services to prevent such issues from occurring in the first place, ultimately leading to better customer satisfaction and operational efficiency.

Term / Concept	Description
Function	Synonym: Business Function. Refers to specific tasks or areas of responsibility. It represents a specific area of responsibility or activity within the enterprise that contributes to its overall operations. Often represents a particular department or business role (e.g. Finance, HR).
Governance, Risk, and Compliance (GRC)	GRC stands for governance, risk (management), and compliance. *Governance* is the set of policies, rules, or frameworks that a company uses to achieve its business goals. It defines the responsibilities of key stakeholders, such as the board of directors and senior management. For example, good corporate governance supports your team in including the company's social responsibility policy in their plans. Good governance includes the following: Ethics and accountability, Transparent information sharing, Conflict resolution policies, Resource management. *Risk management*. Businesses face different types of risks, including financial, legal, strategic, and security risks. Proper risk management helps businesses identify these risks and find ways to remediate any that are found. Companies use an enterprise risk management program to predict potential problems and minimize losses. *Compliance* is the act of following rules, laws, and regulations. It applies to legal and regulatory requirements set by industrial bodies and also for internal corporate policies. In GRC, compliance involves implementing procedures to ensure that business activities comply with the respective regulations. For example, healthcare organisations must comply with laws like HIPAA that protect patients' privacy. Source: What is GRC (Governance, Risk, and Compliance)?
Identity	Defines what the enterrpise stands for, its reason for existence, and how it perceives itself and wants to be perceived by others. Identity shapes the norms, behaviors, and practices of an enterrprise. Identity includes its mission, values, purpose, and brand, serves as the foundation for enterprises's culture. Identity is enterprise's/organisatiion's core essence - the defining characteristics that distinguish it from other enterprises. Identity is enterprise's "DNA" - the unique combination of mission, vision, values, purpose, and brand that defines what it stands for, how it operates, and how it wants to be perceived. It is the foundation upon which the organisation's culture, strategies, and relationships with stakeholders are built.
Value Demand	"Value demand" refers to the demand for products, services, or solutions that provide value to customers or end users. It represents the customer's need or desire for offerings that fulfill specific requirements, solve problems, or deliver benefits. In a business context, understanding value demand is essential for aligning an organisation's products or services with customer needs and preferences. Key points are: 1) Customer-Centric Focus, 2) Value Proposition, 3) Product Development & Service Delivery. Understanding and aligning with value demand is essential for organisations seeking to create products, services, or solutions that are relevant, competitive, and capable of delivering customer satisfaction. See also Failure Demand.
Value Stream	A value stream represents the end-to-end series of activities that an organisation undertakes to deliver a product or service to a customer. Core functions are typically the key activities and processes that make up these value streams. A value stream focuses on the end-to-end processes within an organisation that add value to a product or service. It is concerned with how efficiently these processes operate and how they contribute to delivering value to the customer. Note! Value Stream focuses on organisation's *operational efficiency*, whereas a Customer Journey focuses on customer. The former is internal (inside-out) and the latter is external (outside-in) view.

Term / Concept	Description
Operational Business	Entirety of a business's activities that are essential for functioning enterprise. Focuses on the overall functioning and management of the business as a whole, covering both strategic and operational aspects. Covers all aspects of the business, such as production, service delivery, customer service, sales and marketing, finance and accounting, human resources, technology management etc.
Operational Excellence	Refers to the systematic approach to achieving superior performance across an organisation's processes and operations. It focuses on continuously improving processes, increasing efficiency, and delivering high-quality results consistently. The goal of operational excellence is to create value for customers while optimizing the use of resources and minimising waste.
Operations	See Business operations.
Outcome	Represent the changes or benefits that occur as a result of the outputs or activities. They refer to the ultimate impact or result achieved. Outcomes focuses on the quality or significance of the results and the extent to which they meet specific goals. Outcomes are often broader and more abstract than outputs and may take longer to materialize. They represent the changes or benefits that occur as a result of the outputs.
Output	Refers to the tangible or measurable deliverables produced by a process or activity, which are often directly observable and can be easily quantified.
Purpose	In the context of an organisation and business, purpose refers to the fundamental reason why the organisation exists (beyond just making a profit). It is the overarching goal or mission that guides the organisation's activities, decision-making, and long-term strategy. Purpose is deeply connected to the organisation's values and vision, serving as a guiding star that aligns efforts across the enterprise. An organisation's purpose acts as a foundational element that shapes its *culture*. And, the organisational culture reflects how well the purpose is embedded in daily practices.
Reframing	Using the EDY Facet Model to look at design challenges from different perspectives, to get clarity and a holistic view instead of focusing on certain viewpoints of specialized disciplines. 'To see the forest from the trees.' Unbiased, open and fresh thinking.
Stakeholder	A role of an actor (co-creator, individual, team, organisation etc.) that is interested or concerned of the enterprise.
Subject Matter Expert (SME)	A person with specialisations and qualifications in a particular field or work, whose experience, education and/or experience is a recognized expert on a particular subject- or topic area.
Systems Thinking	A holistic and interdisciplinary approach that seeks to understand how various components within a system interact and influence each other, rather than focusing on isolated parts. Systems thinking is used in various fields, including business, science, engineering, healthcare, and environmental management.
Visual-textual representation	Combines visual elements (such as EDGY elements and icons) with textual information to communicate information more effectively. This type of representation merges visuals and text to provide context, clarify complex content, or enhance understanding by appealing to both visual and verbal processing. Visualisation makes the content easier to absorb and understand.

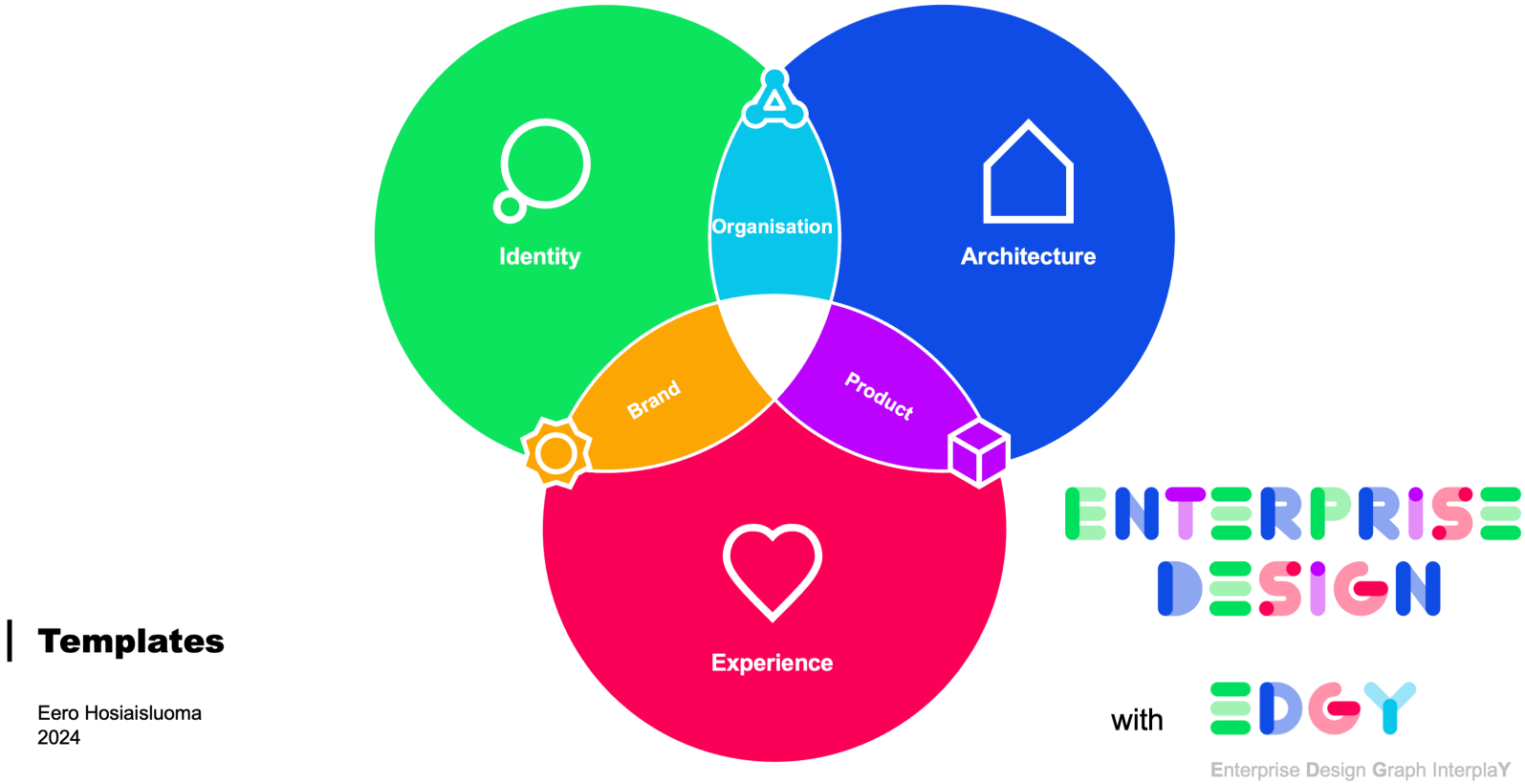
10. Templates

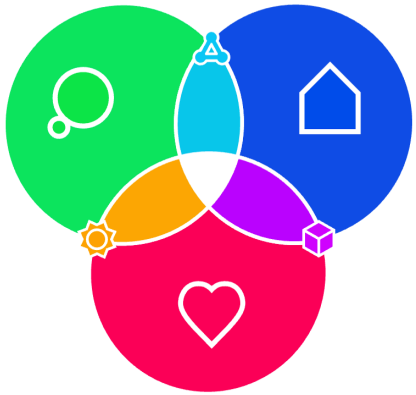
There are available free PowerPoint templates that can be used for ideation, innovation, brainstorming, concept design, sketching and reframing purposes, or just for sources of inspiration.

Get the full set of free PowerPoint templates (link) from here: https://hosiaisluoma.fi/design/edgy-templates/

Templates are for co-design, as visualisation is understanding together. "*How do we know what we think until we see what we say*" (E.M. Forster).

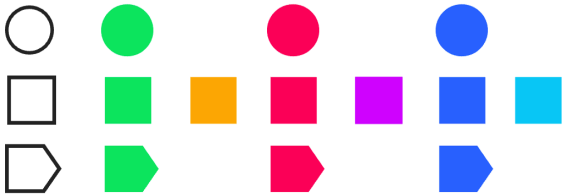
Some examples of the templates introduced in the following chapters.





Enterprise Design

- Use these templates for sketching, ideation, innovation, concept design, service design, architecture planning, transformations etc.
- Copy & paste EDGY elements from the last page
- Change the titles and content to fit for purpose



10.1 Enterprise Design Templates (Overviews)

10.1.1 Enterprise Design Overview

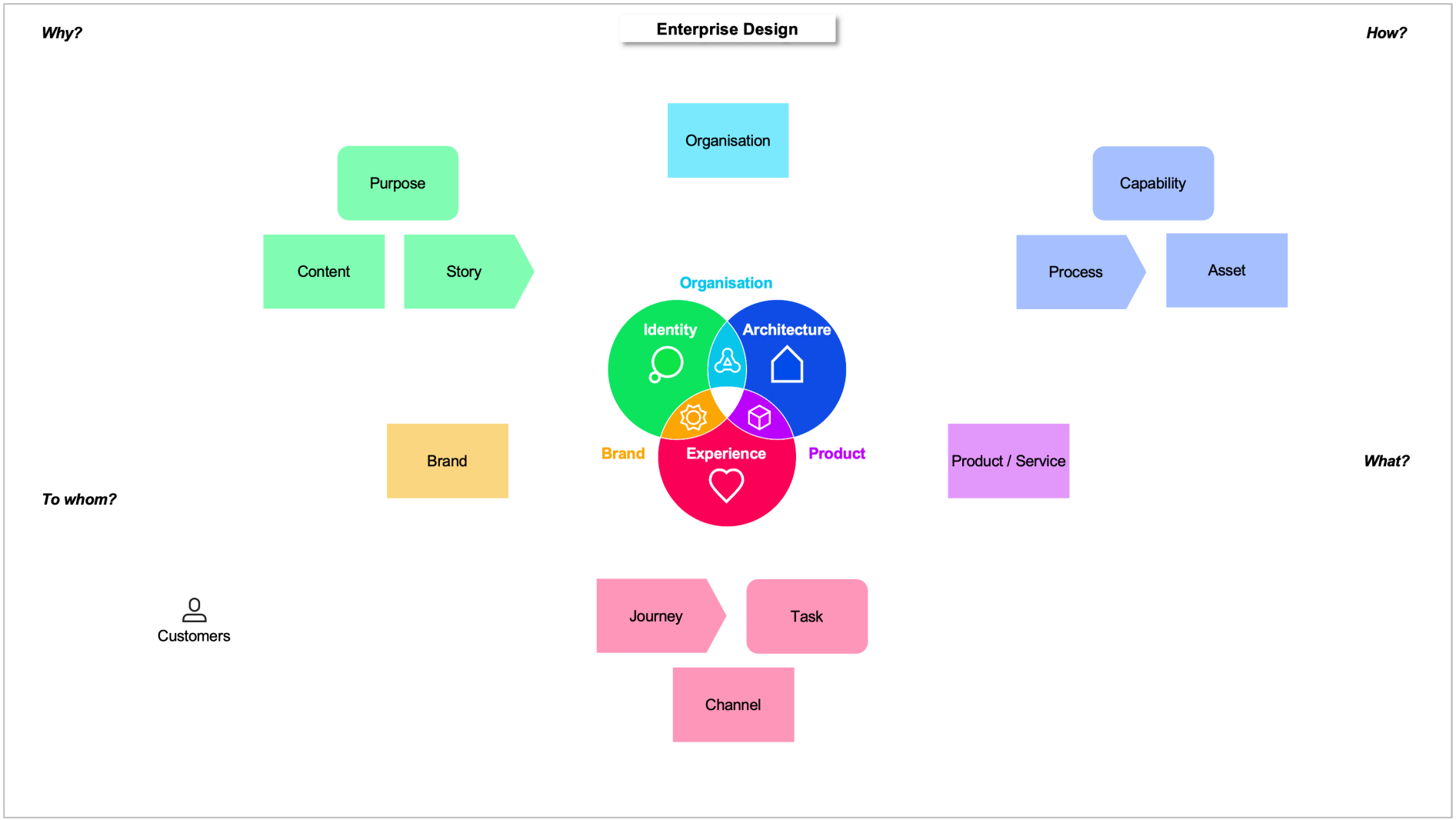


Figure 518: Enterprise Design.

10.1.2 Enterprise Design Model - Organisation View

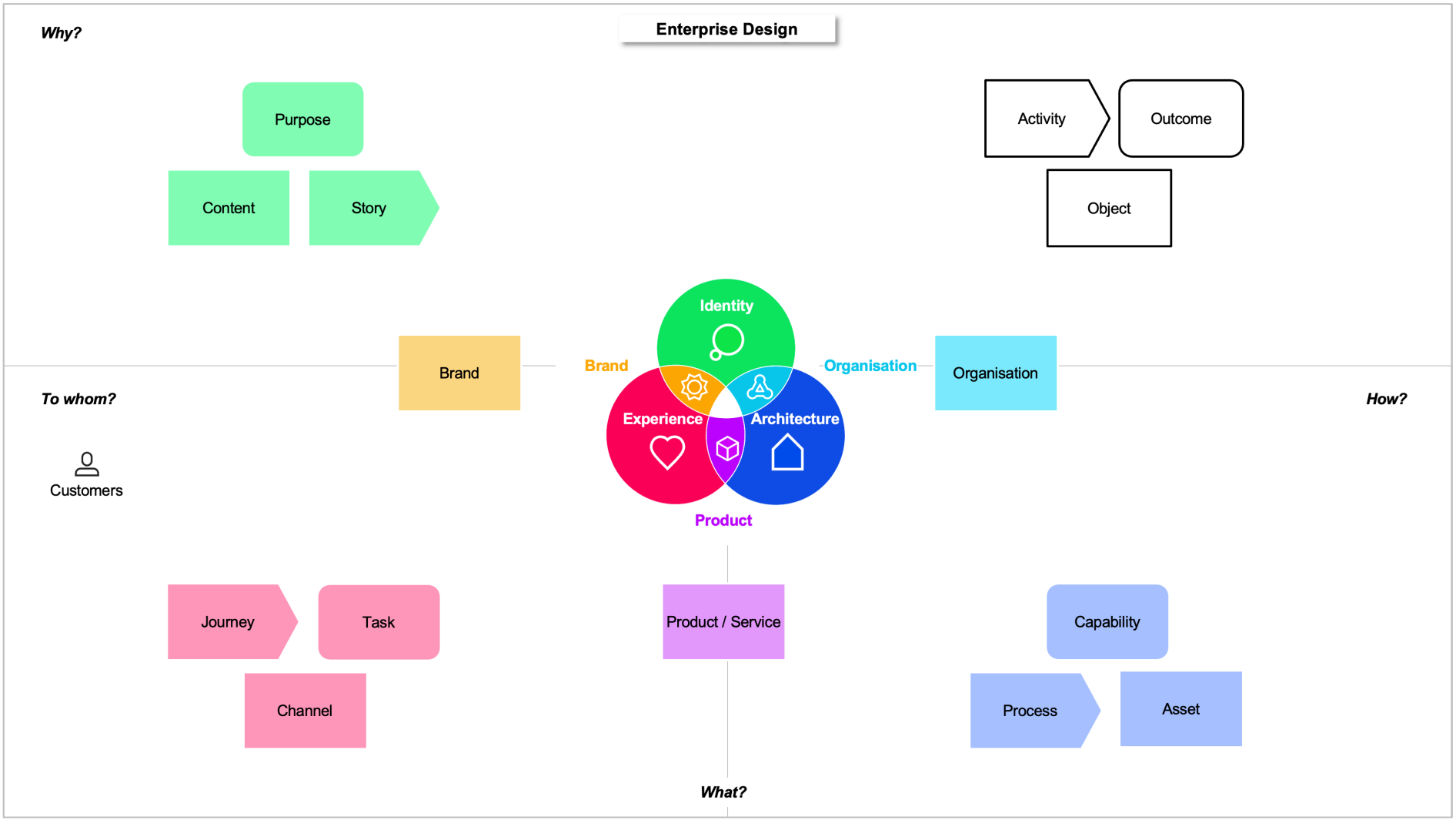


Figure 519: Enterprise Design - Organisation View.

10.1.3 Enterprise Design Model - Customer View

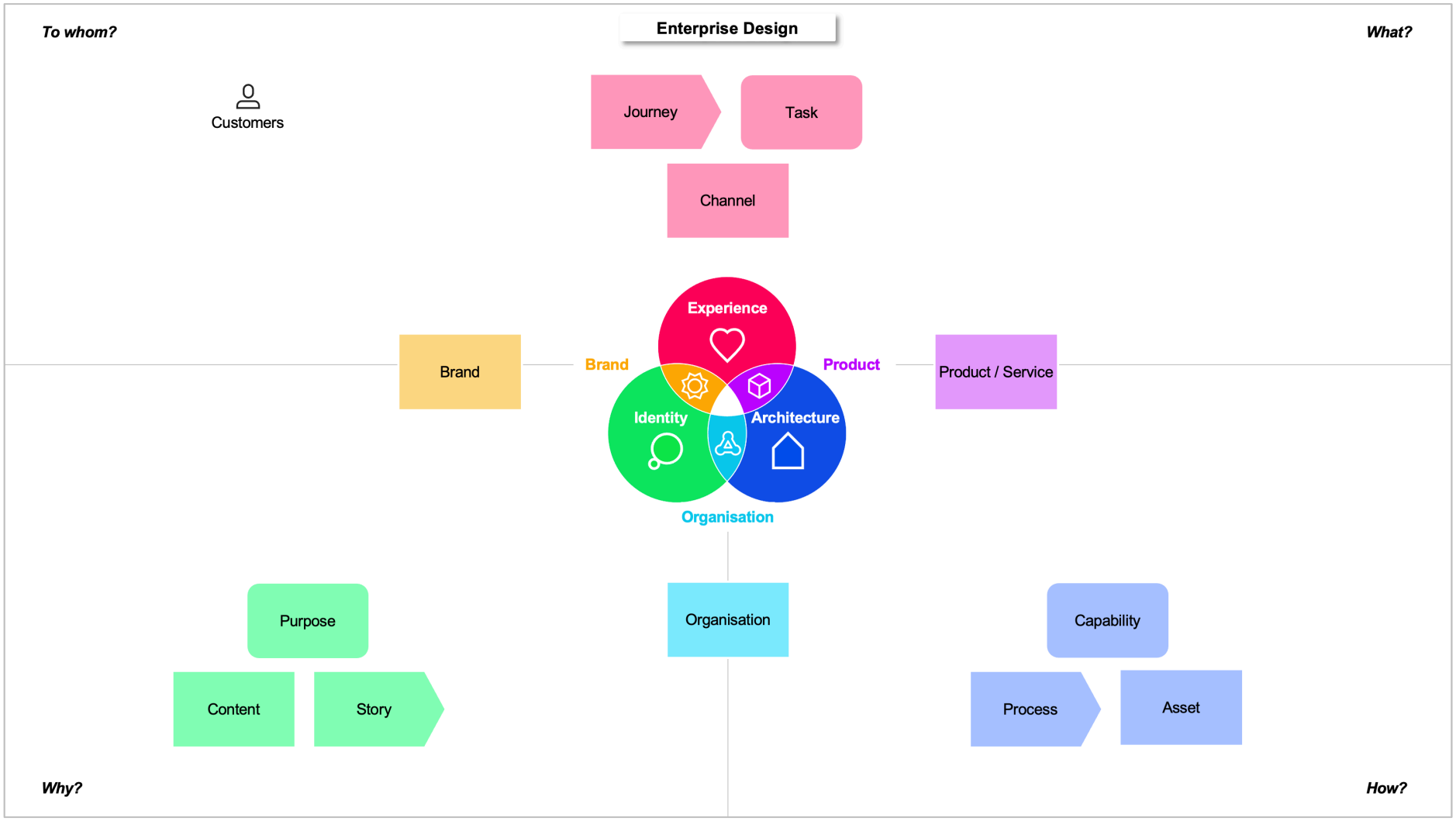


Figure 520: Enterprise Design - Customer View.

10.1.4 Enterprise Design Model - Operational View

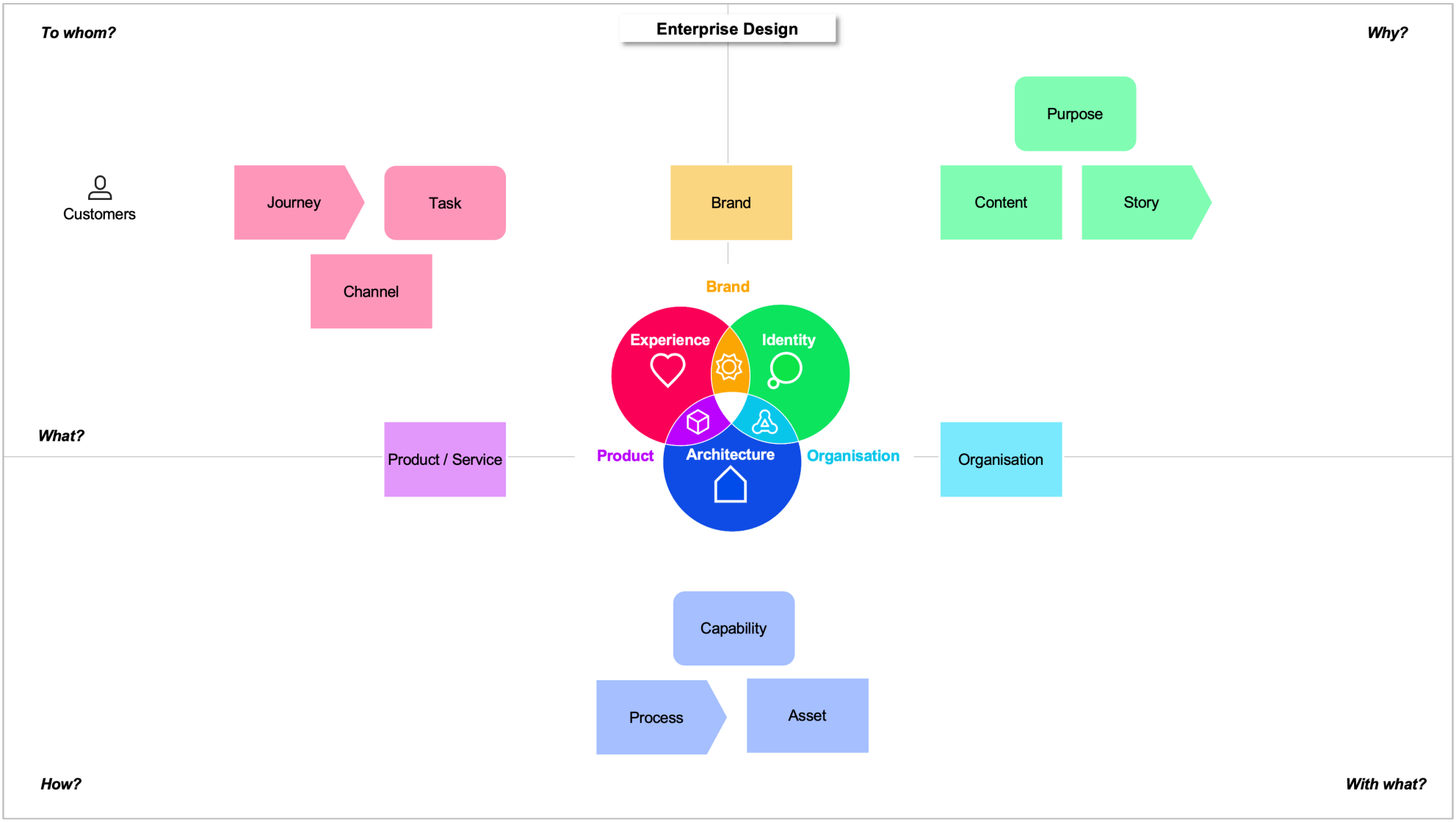


Figure 521: Enterprise Design - Operational View (Architecture View).

10.1.5 Enterprise Design House - Organisation View

This can be used e.g. as a *landing page* for all the diagrams of an enterprise.

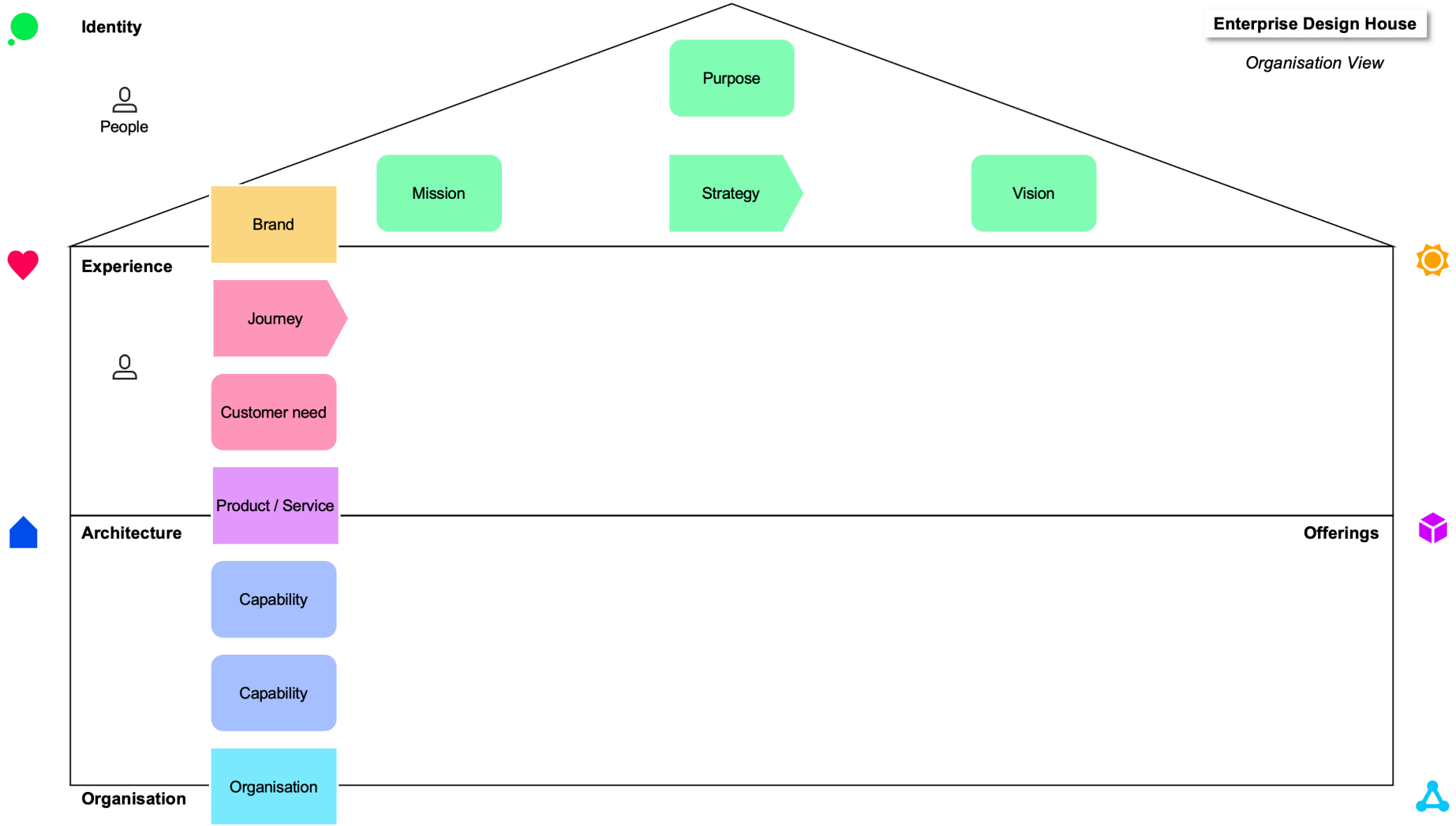


Figure 522: Enterprise House (Organisation View).

10.1.6 Enterprise Design Triangle - Organisation View

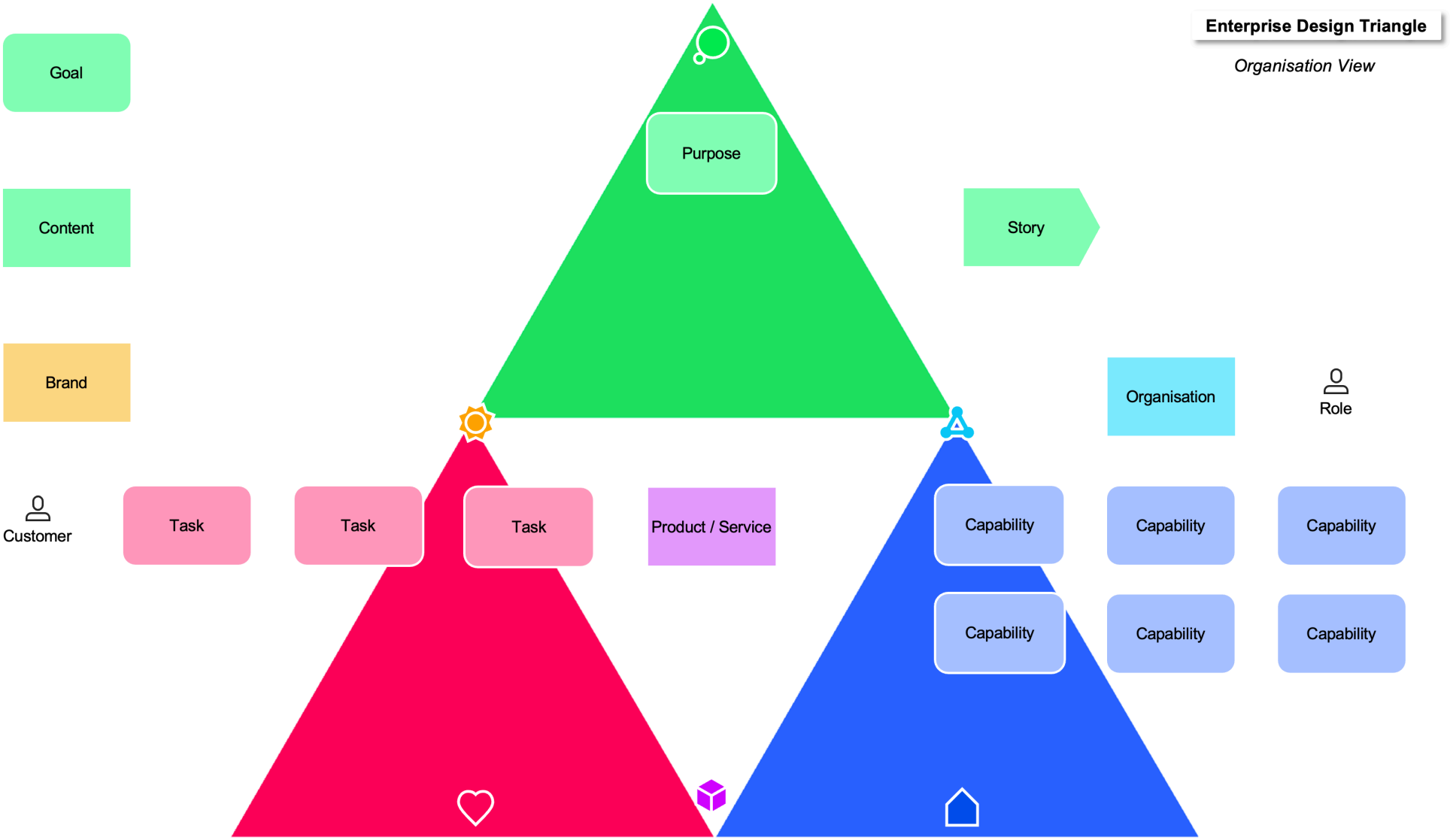


Figure 523: Enterprise Design Triangle - Organisation View.

10.1.7 Enterprise Design Triangle - Customer View

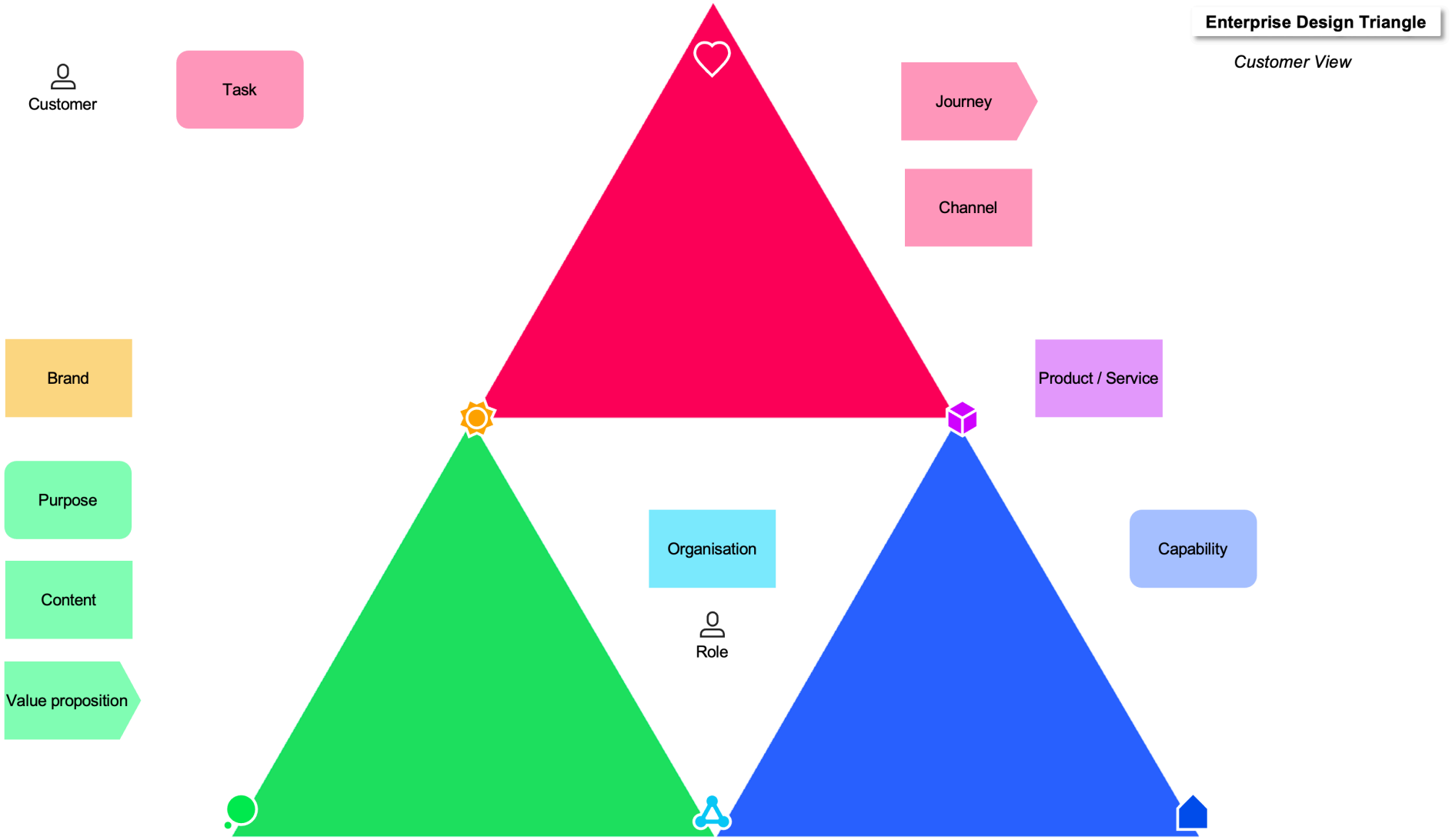


Figure 524: Enterprise Design Triangle - Customer View.

10.2 Identity Templates

These templates can be used for crystallizing the purpose of the business and its goals, strategy planning, mission and vision definition, business planning etc.

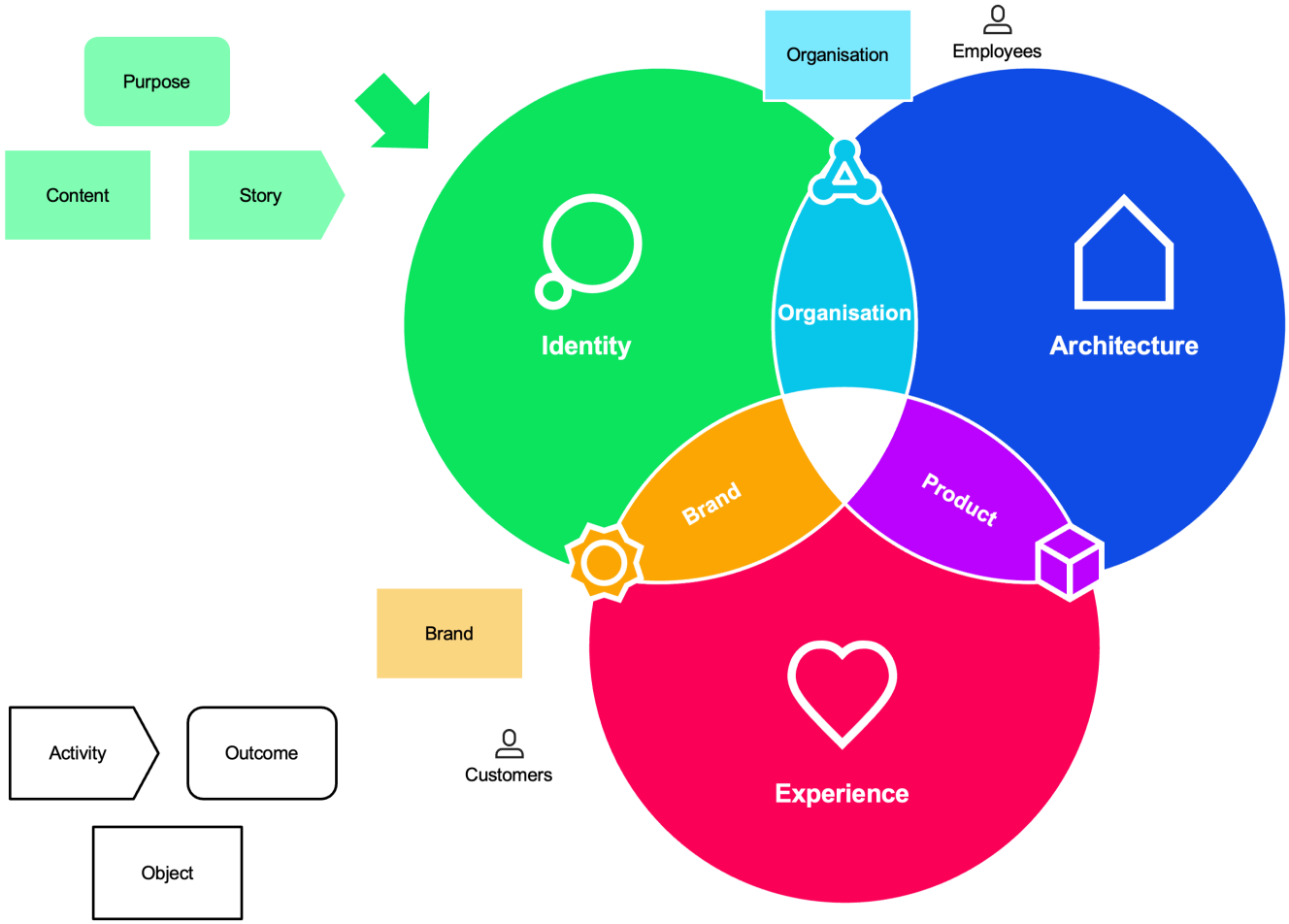


Figure 525: Identity Facet.

10.2.1 Business Overview

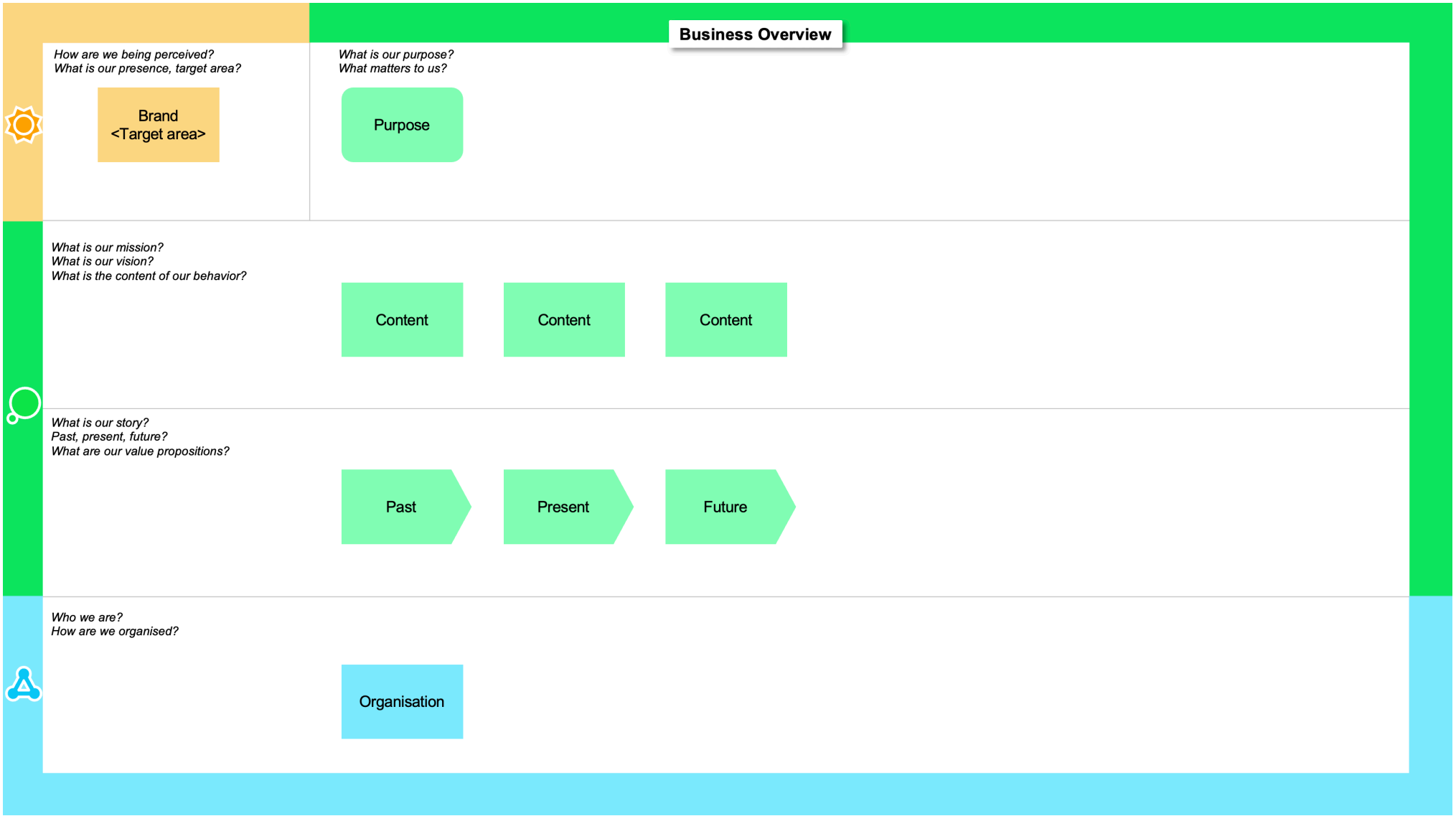


Figure 526: Business Overview.

10.2.2 Identity

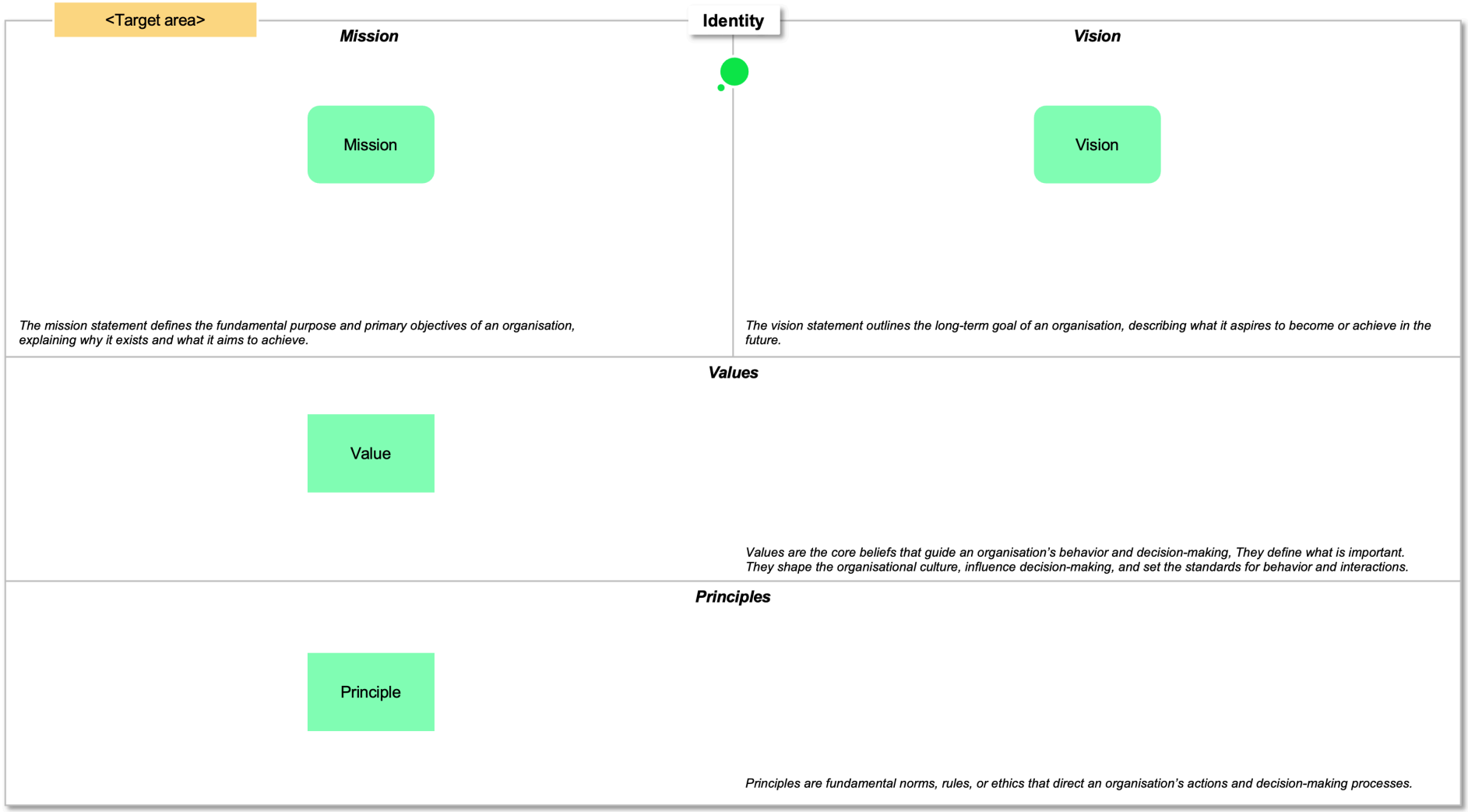


Figure 527: Identity.

10.2.3 Business Purpose

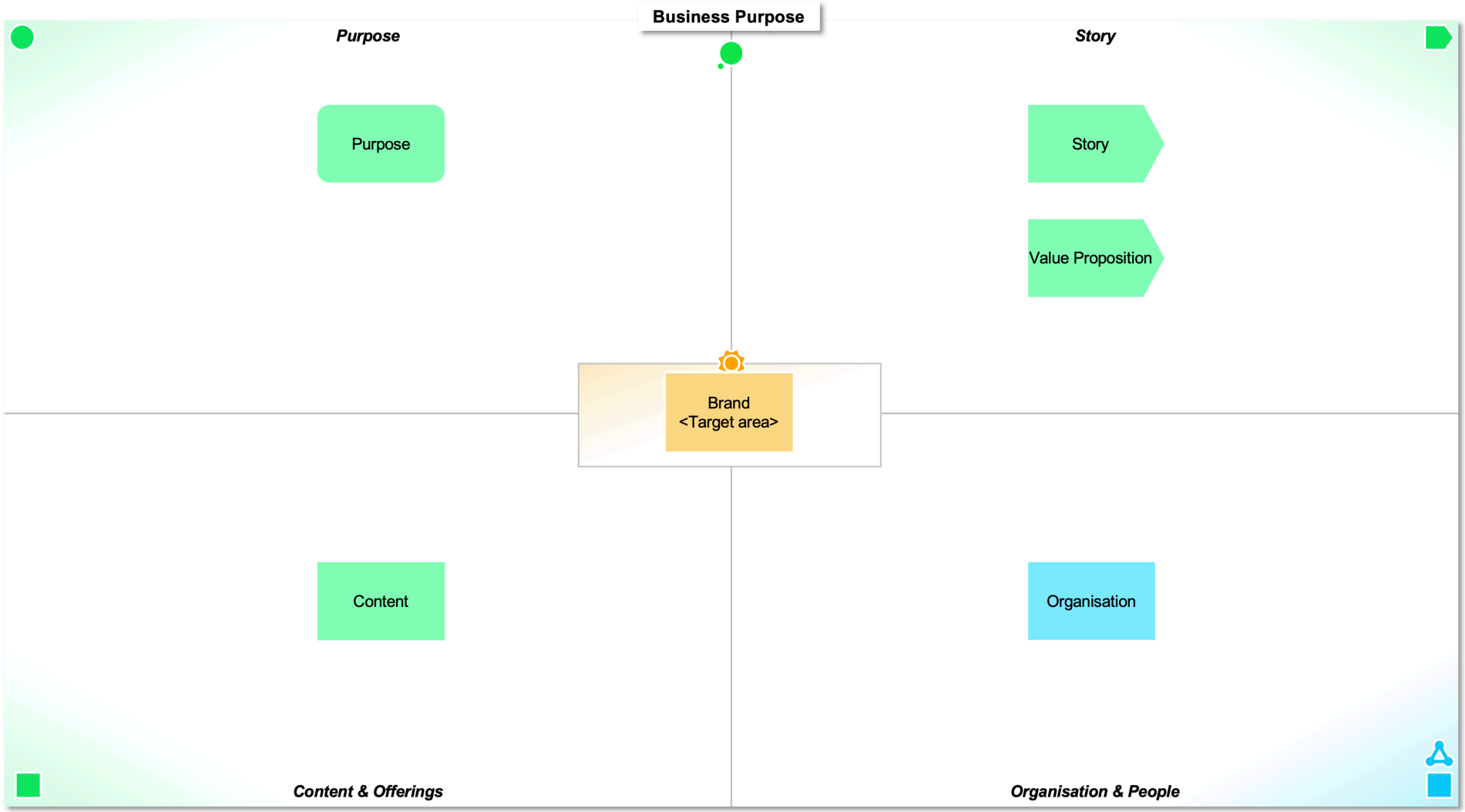


Figure 528: Business Purpose.

10.2.4 Story Map

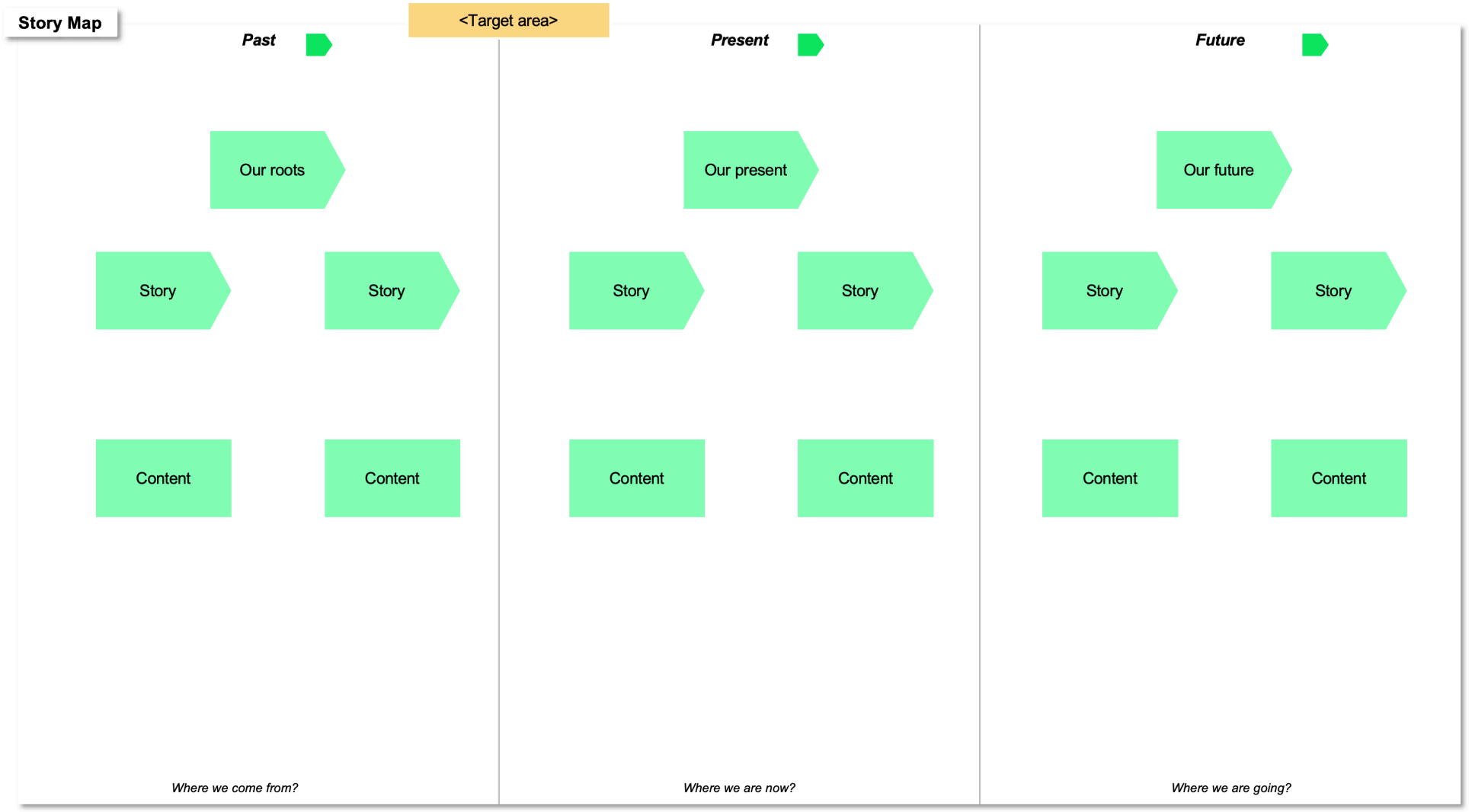


Figure 529: Story Map.

10.2.5 Vision

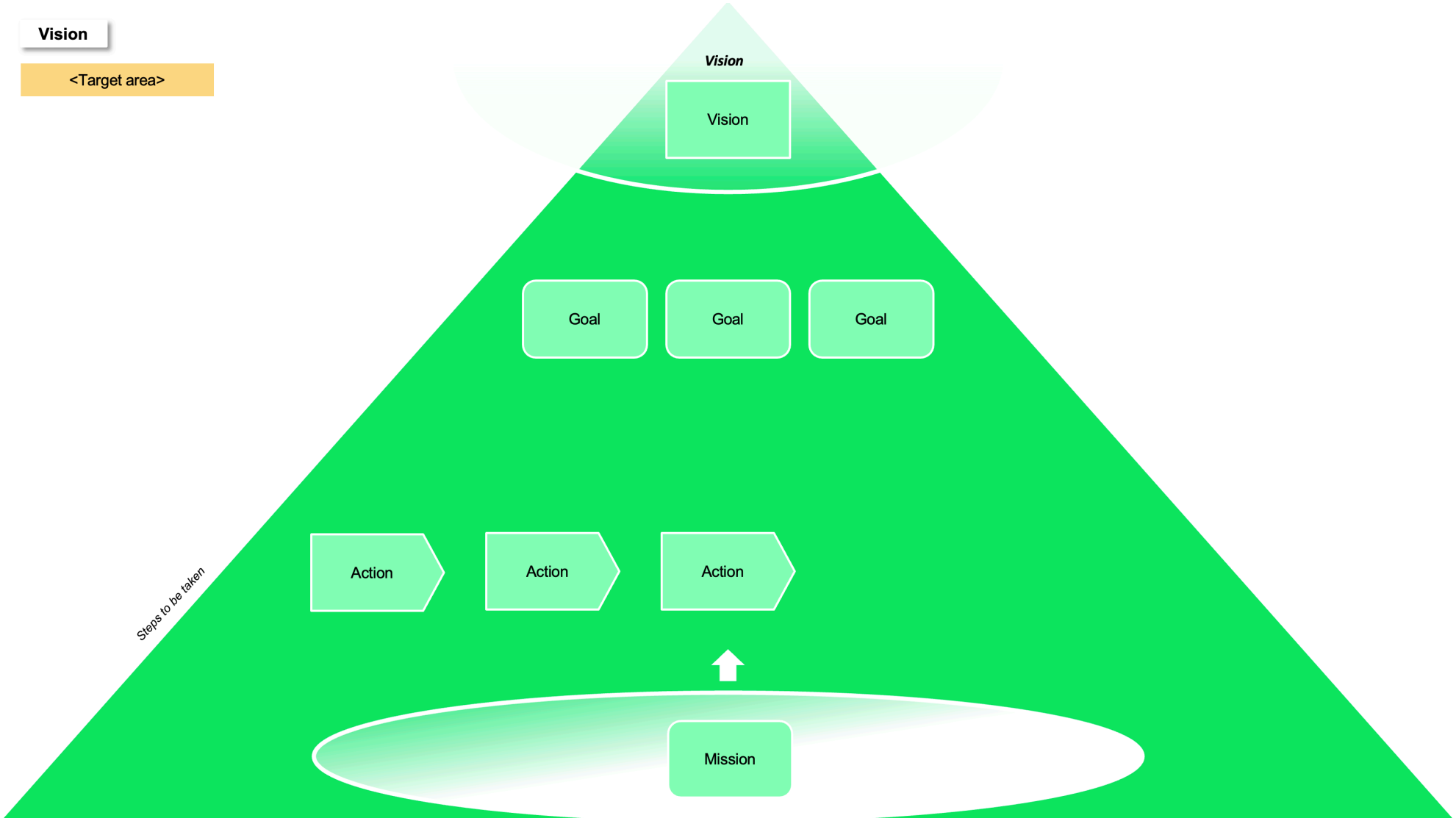


Figure 530: Vision.

10.2.6 VMOST (Vision, Mission, Objectives, Strategy, Goals) Analysis

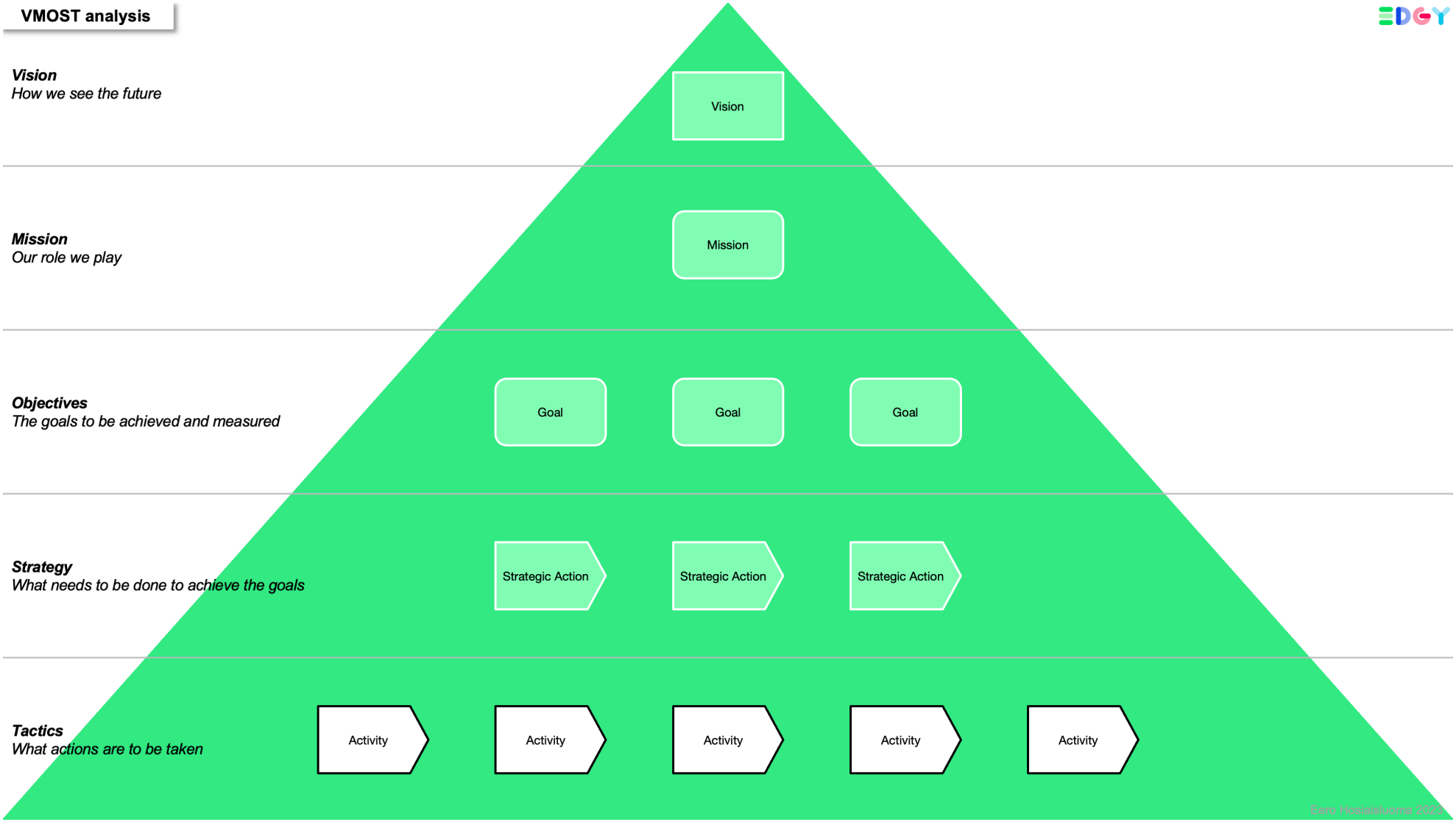


Figure 531: VMOST analysis.

10.2.7 Future Radar

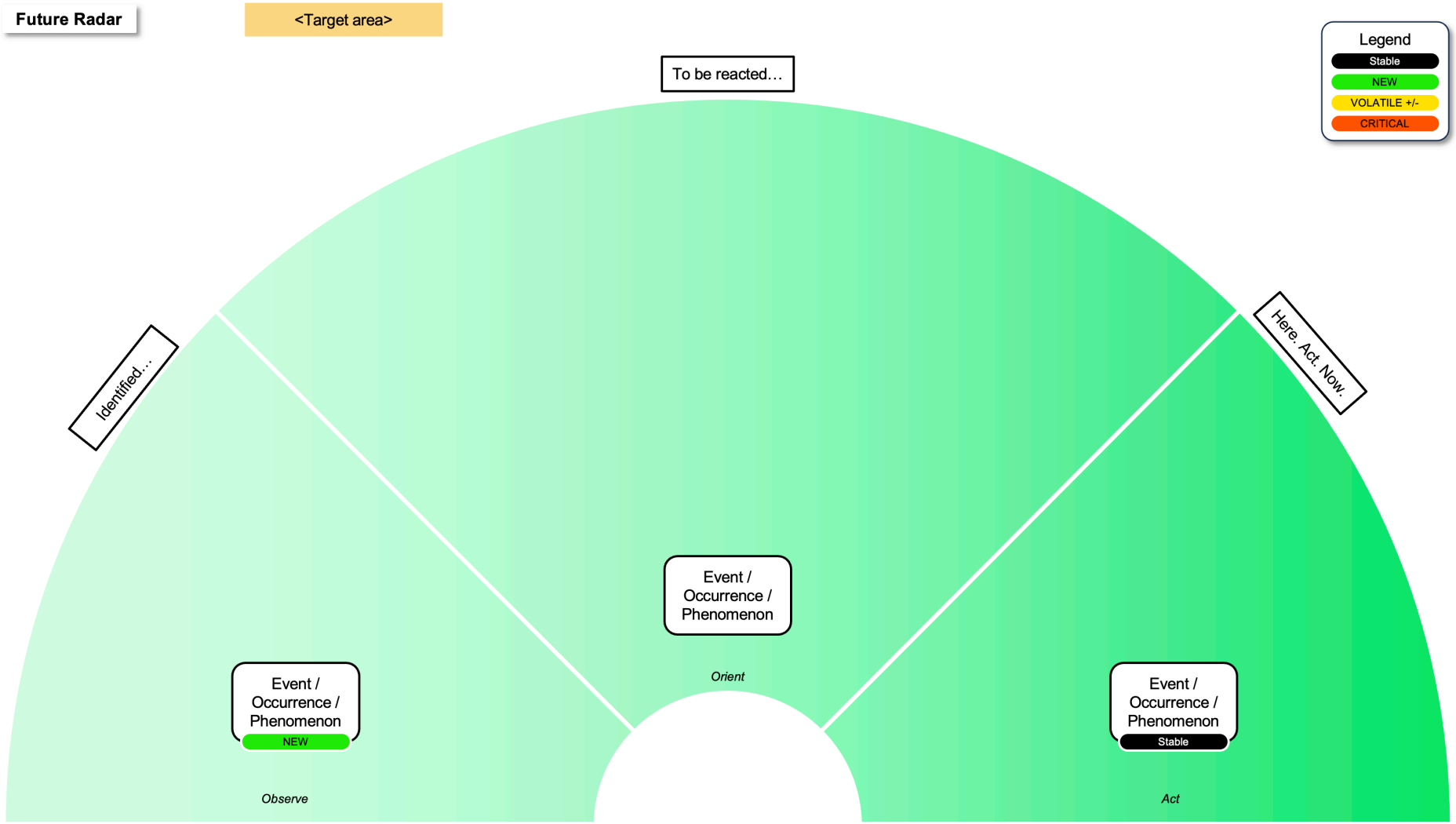


Figure 532: Future Radar.

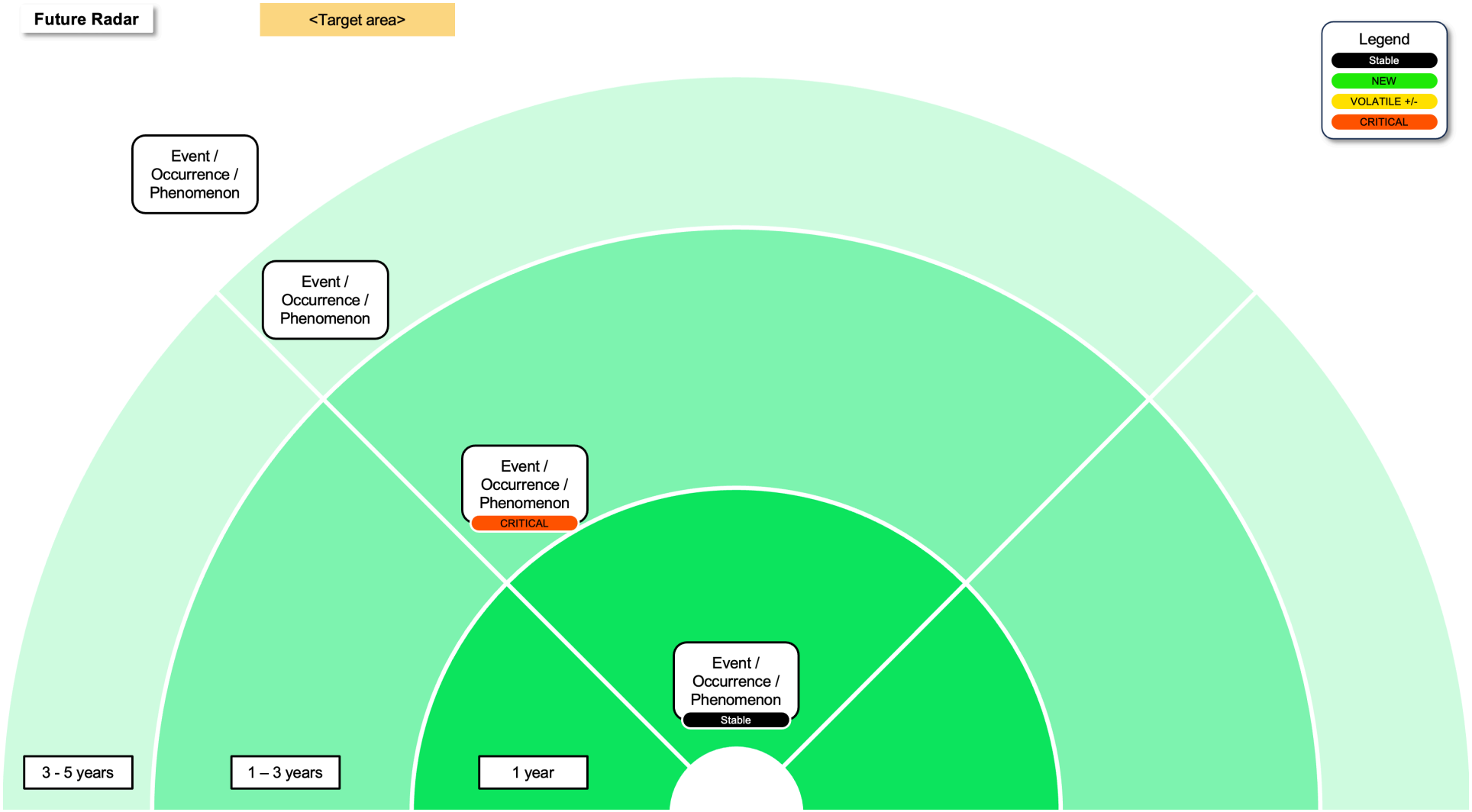


Figure 533: Future Radar.

10.2.8 Futures Triangle

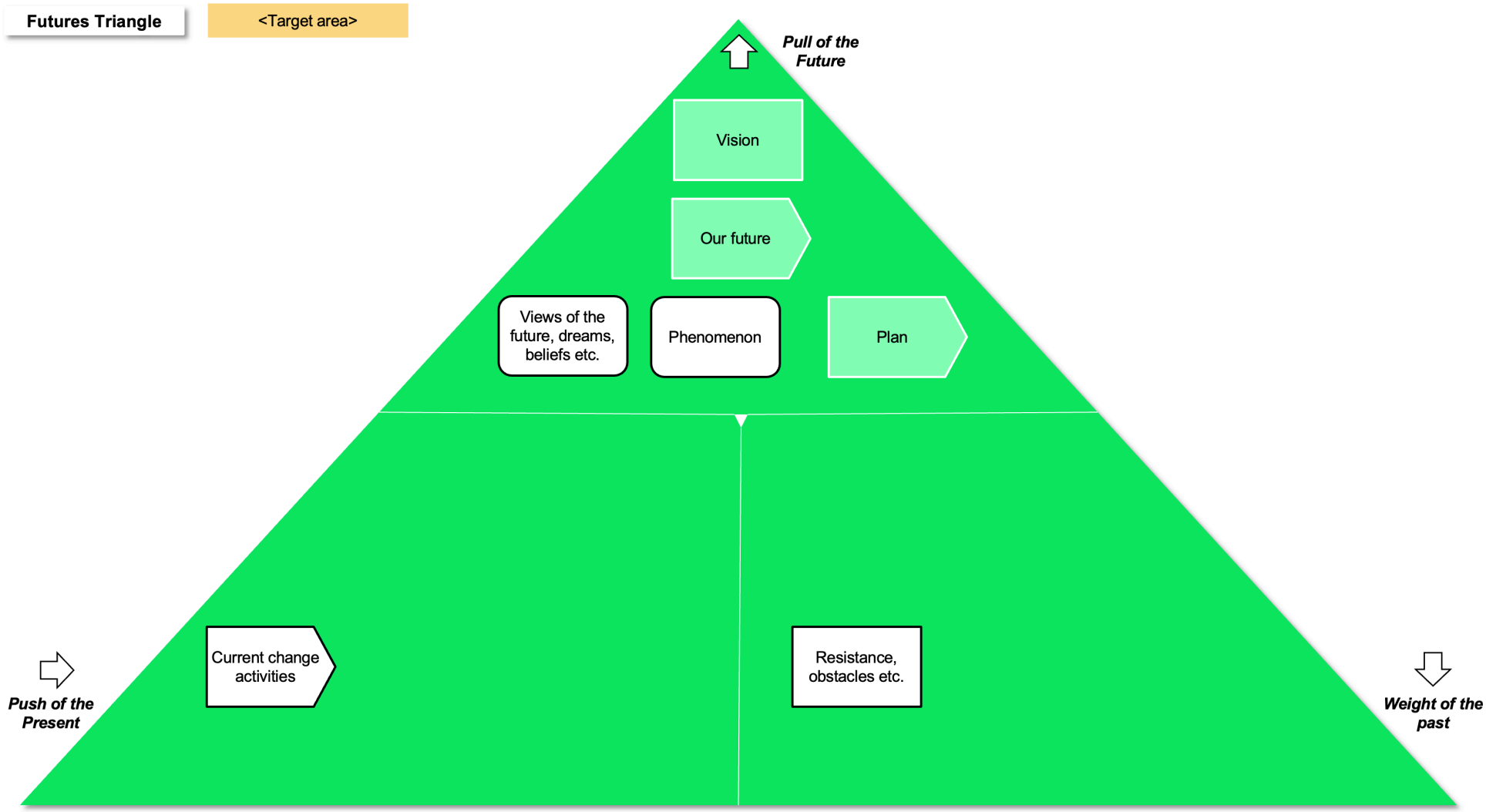


Figure 534: Futures Triangle.

10.2.9 SWOT-analysis

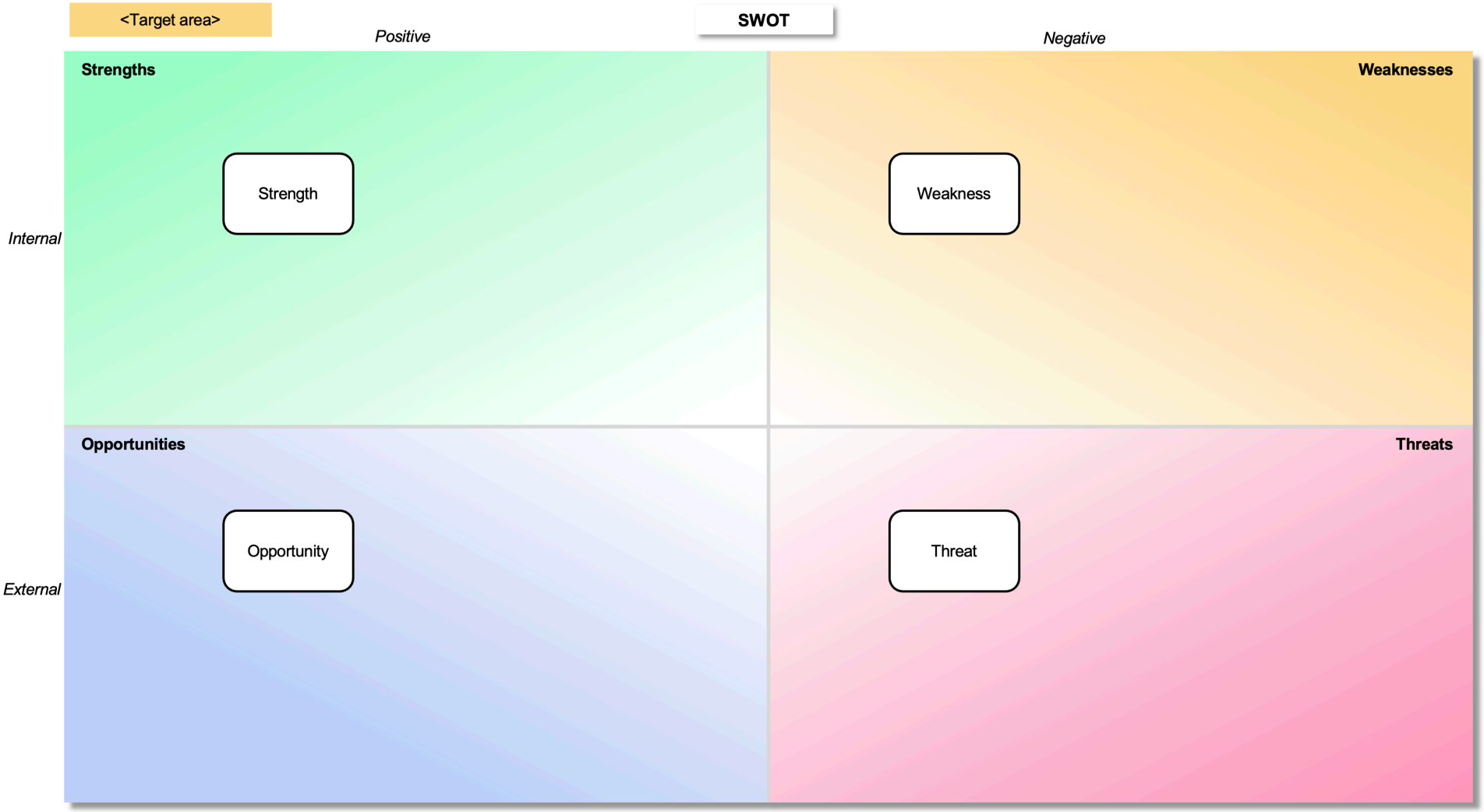


Figure 535: SWOT-analysis.

10.2.10 Status Analysis

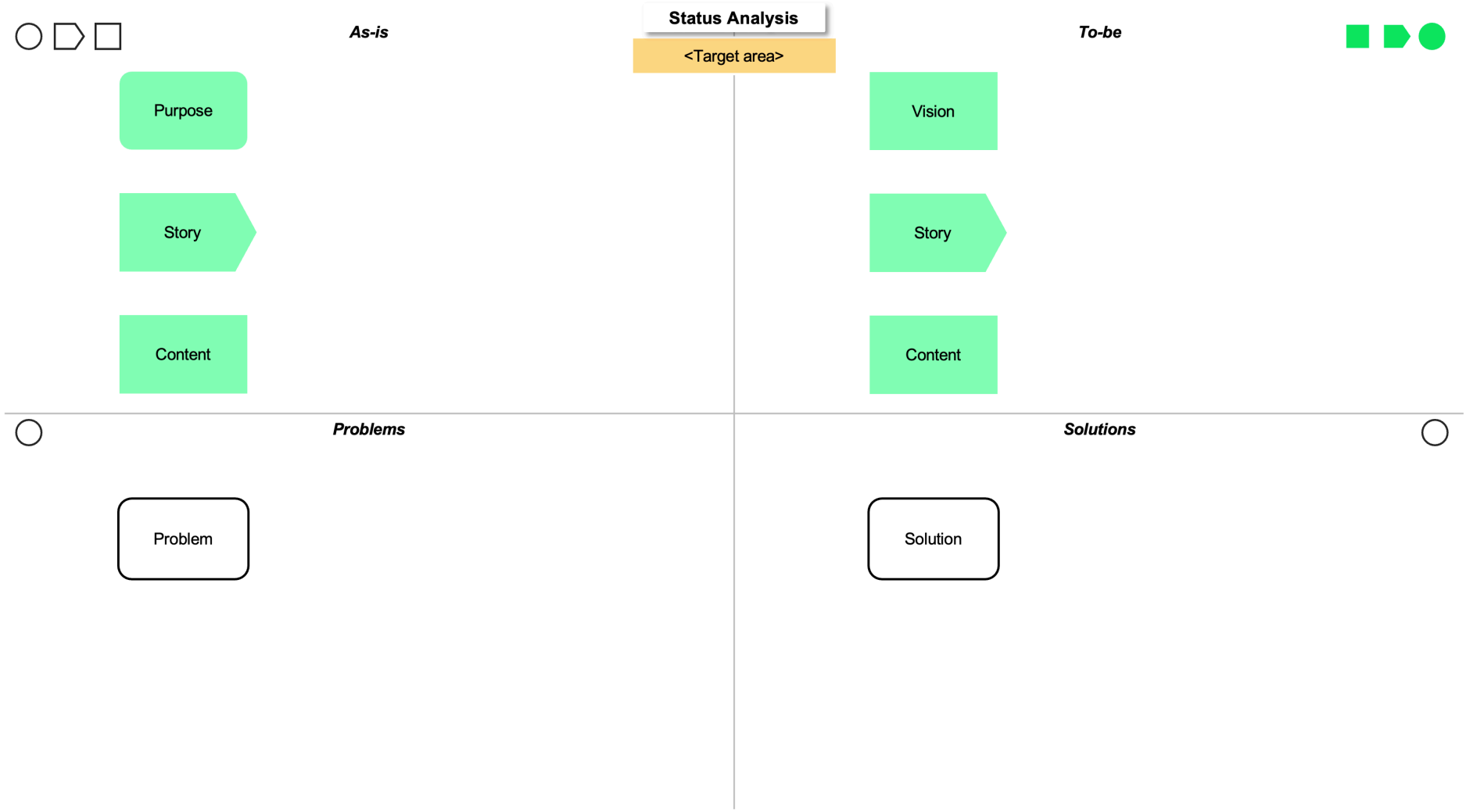


Figure 536: Status Analysis.

10.2.11 Business Motivation Canvas

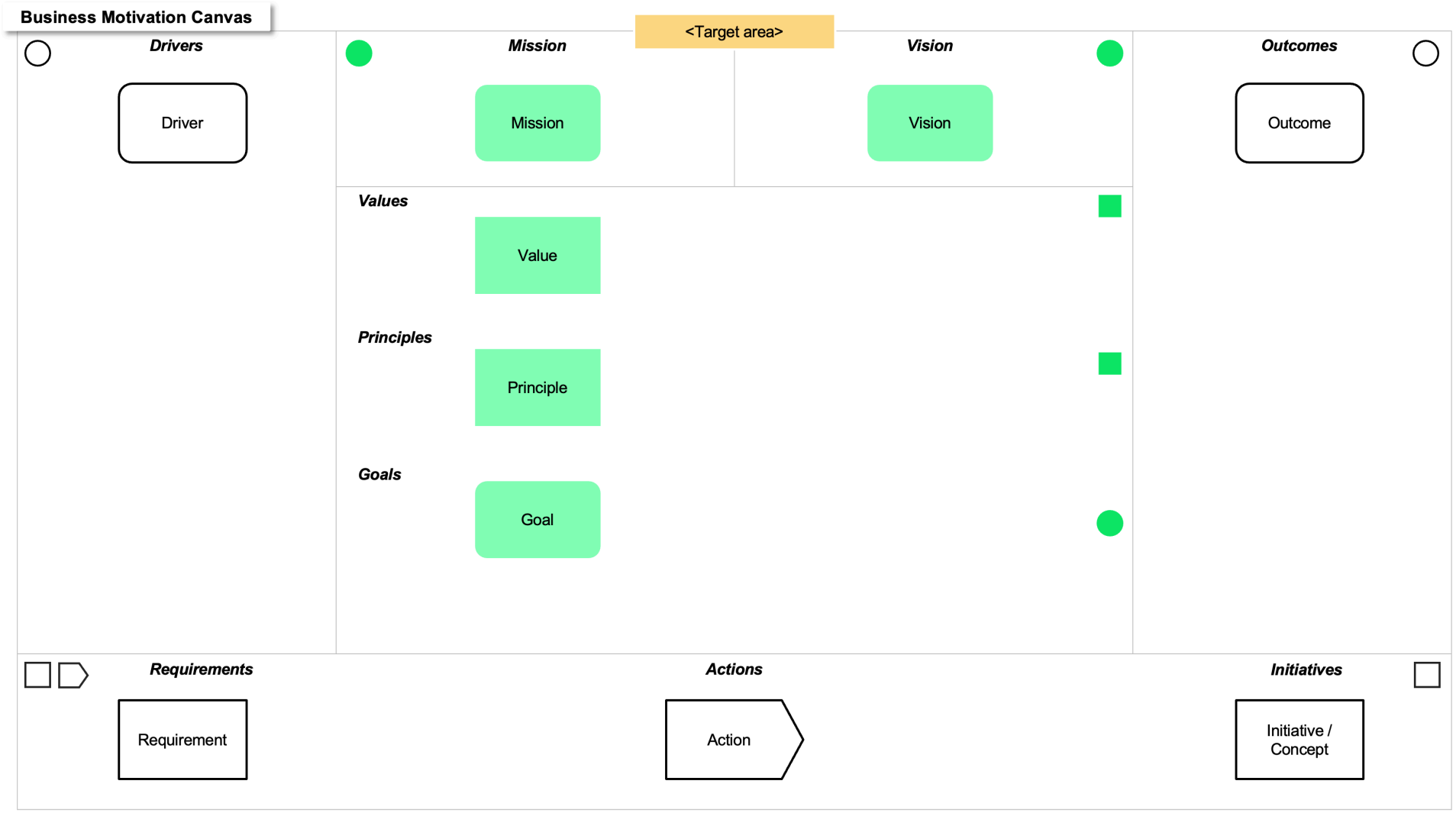


Figure 537: Business Motivation Canvas.

10.2.12 Strategy Process

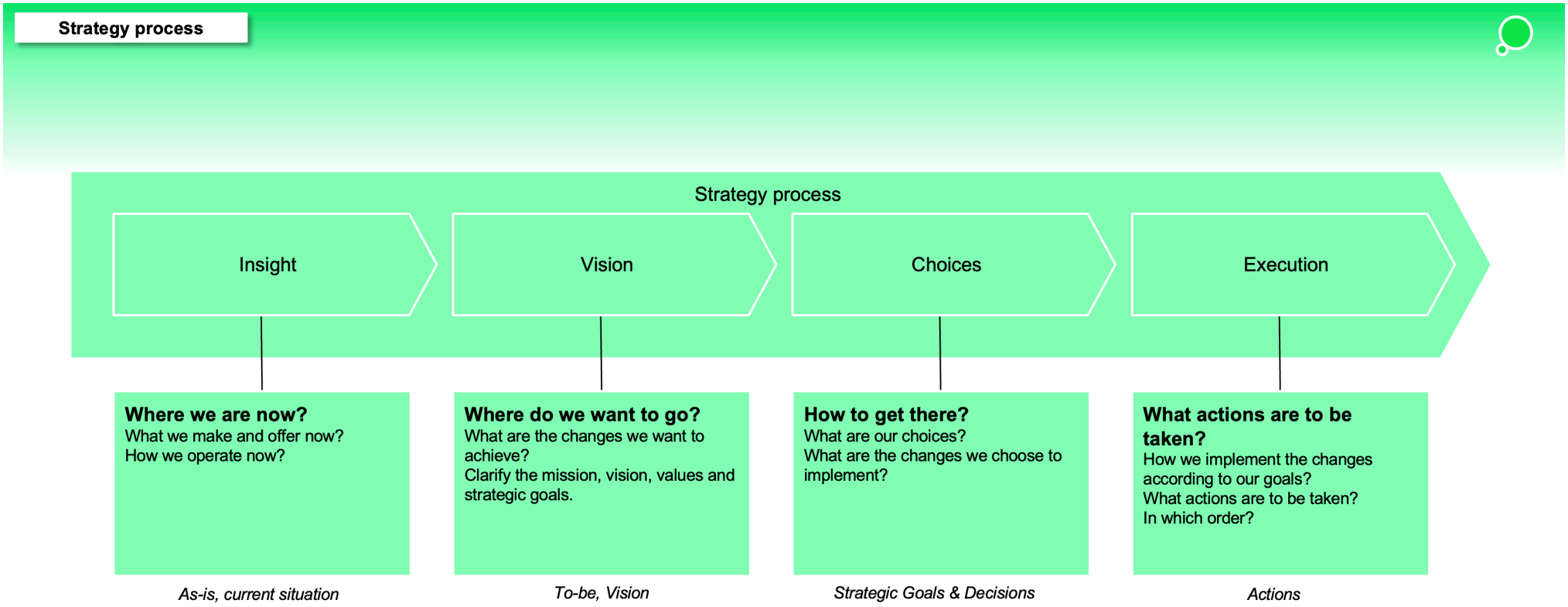


Figure 538: Strategy Process.

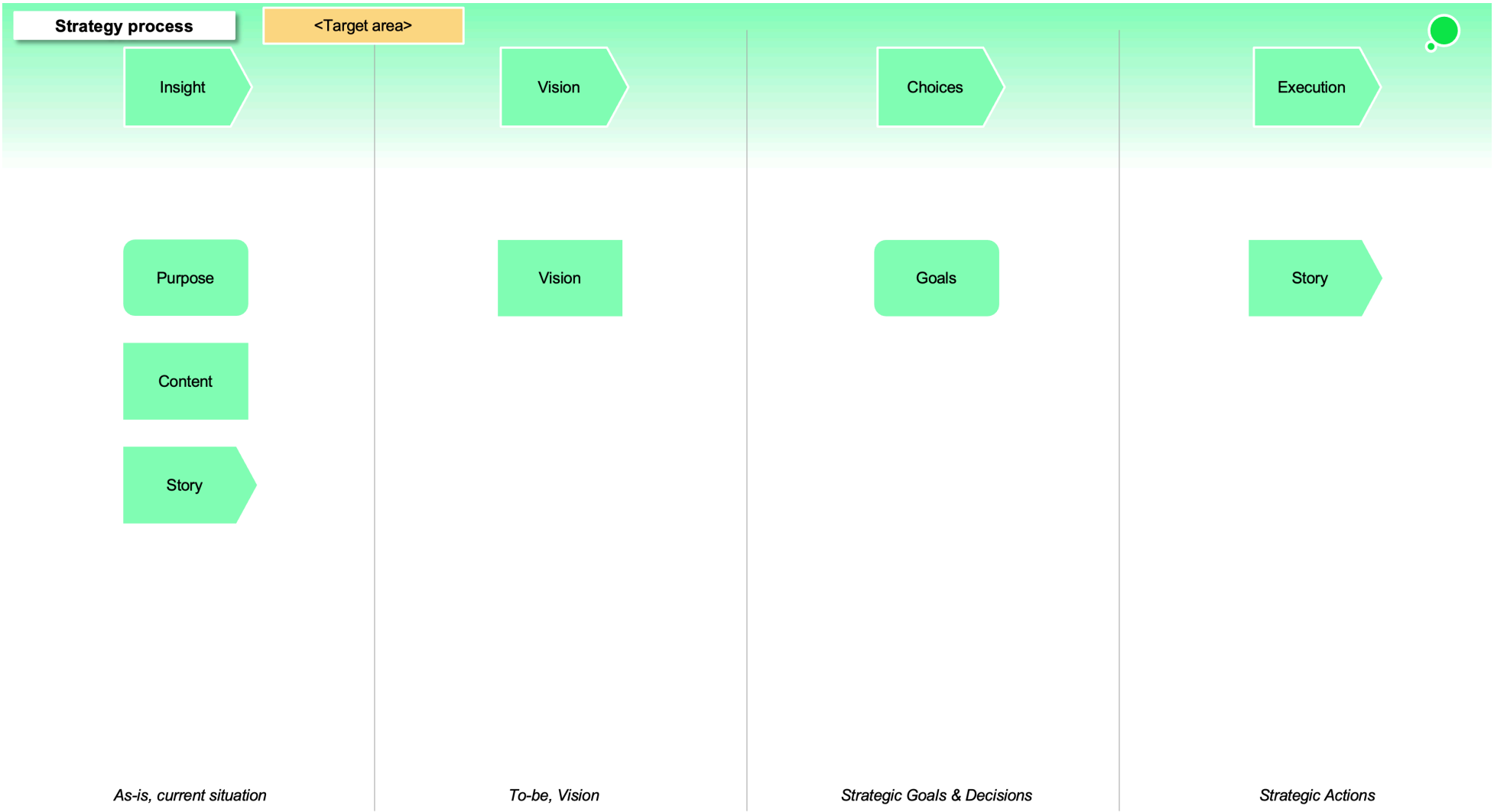


Figure 539: Strategy Process.

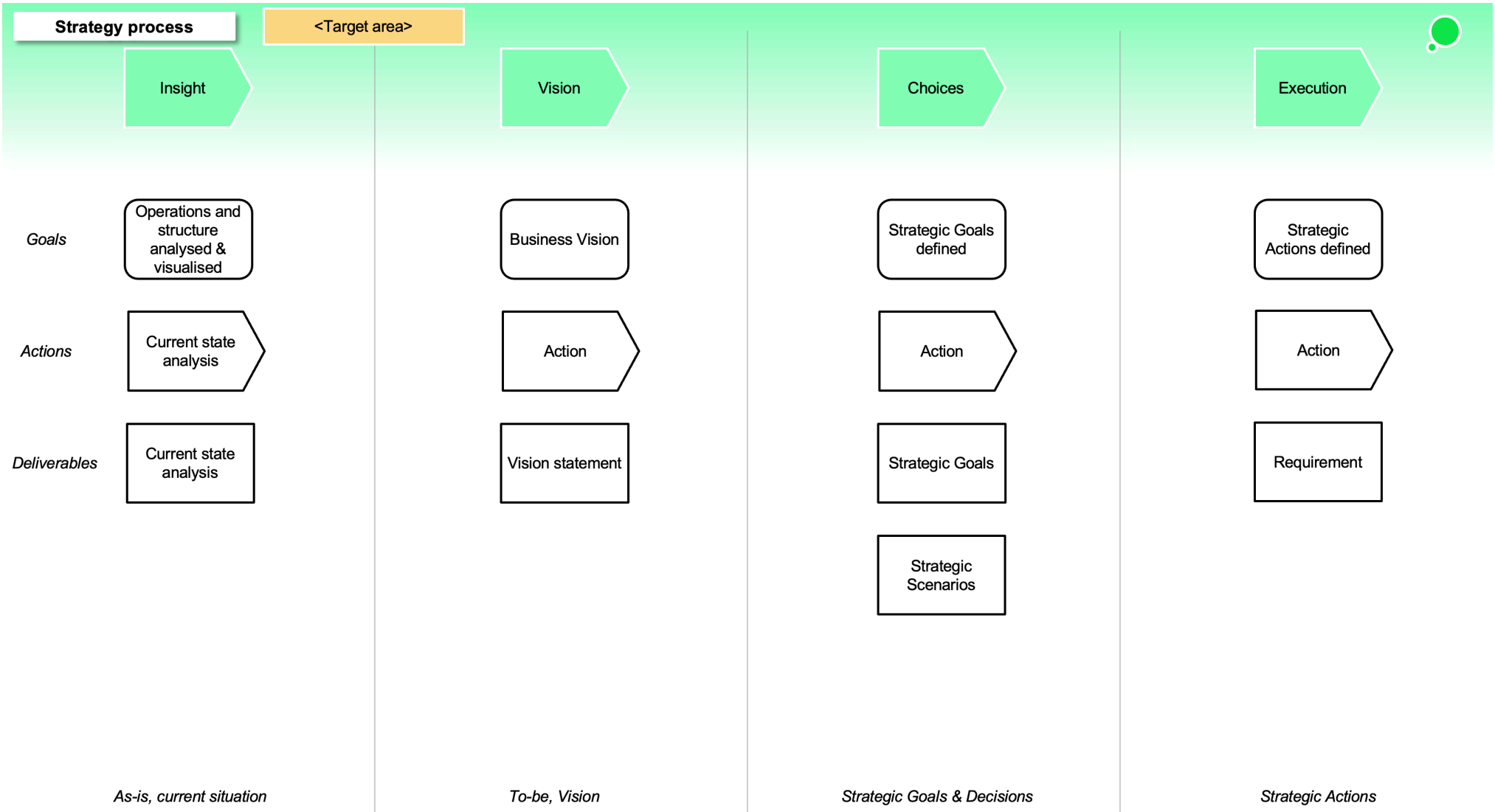


Figure 540: Strategy Process.

10.2.13 Strategy Canvas

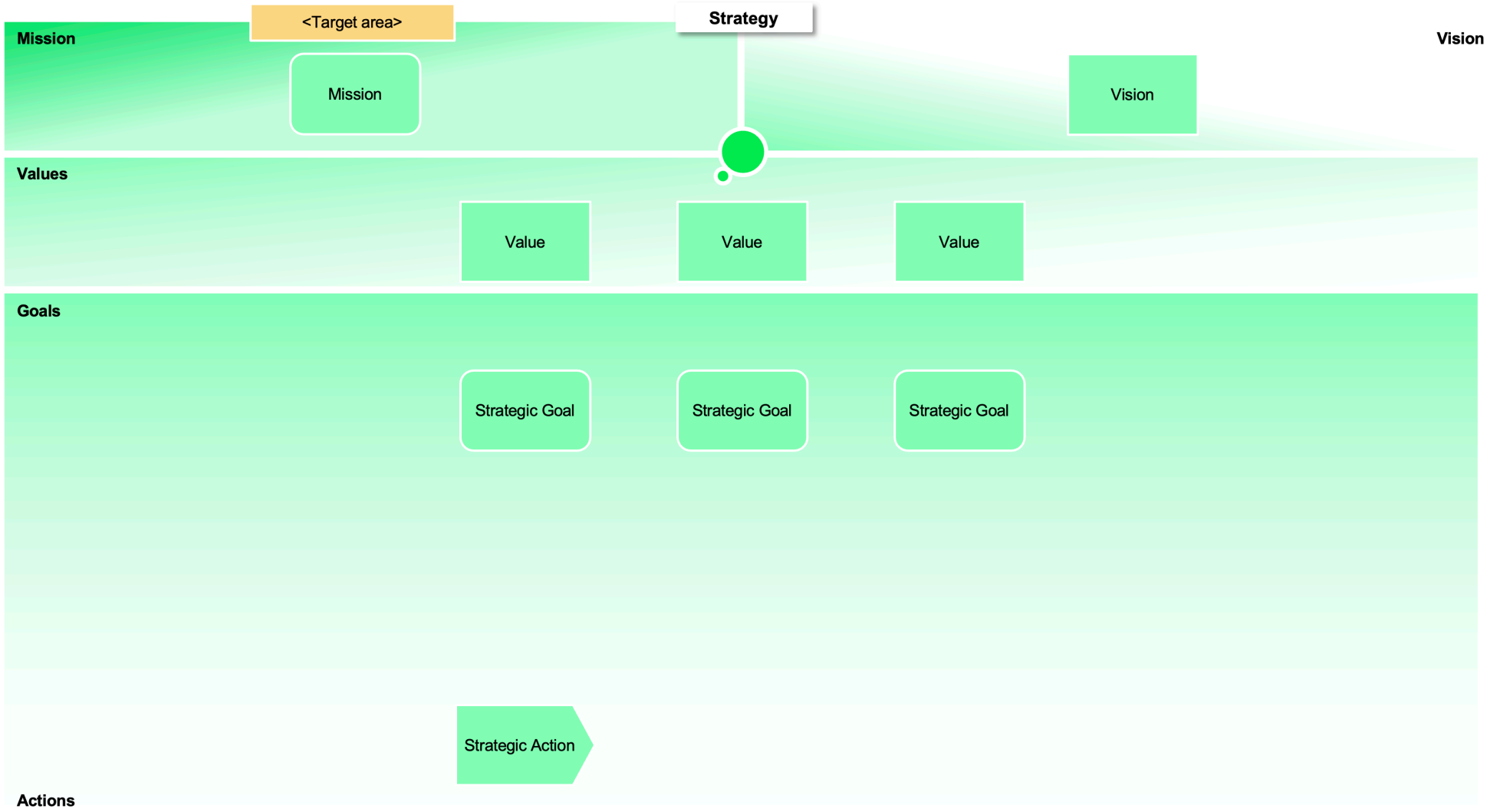


Figure 541: Strategy.

10.2.14 Strategy Map

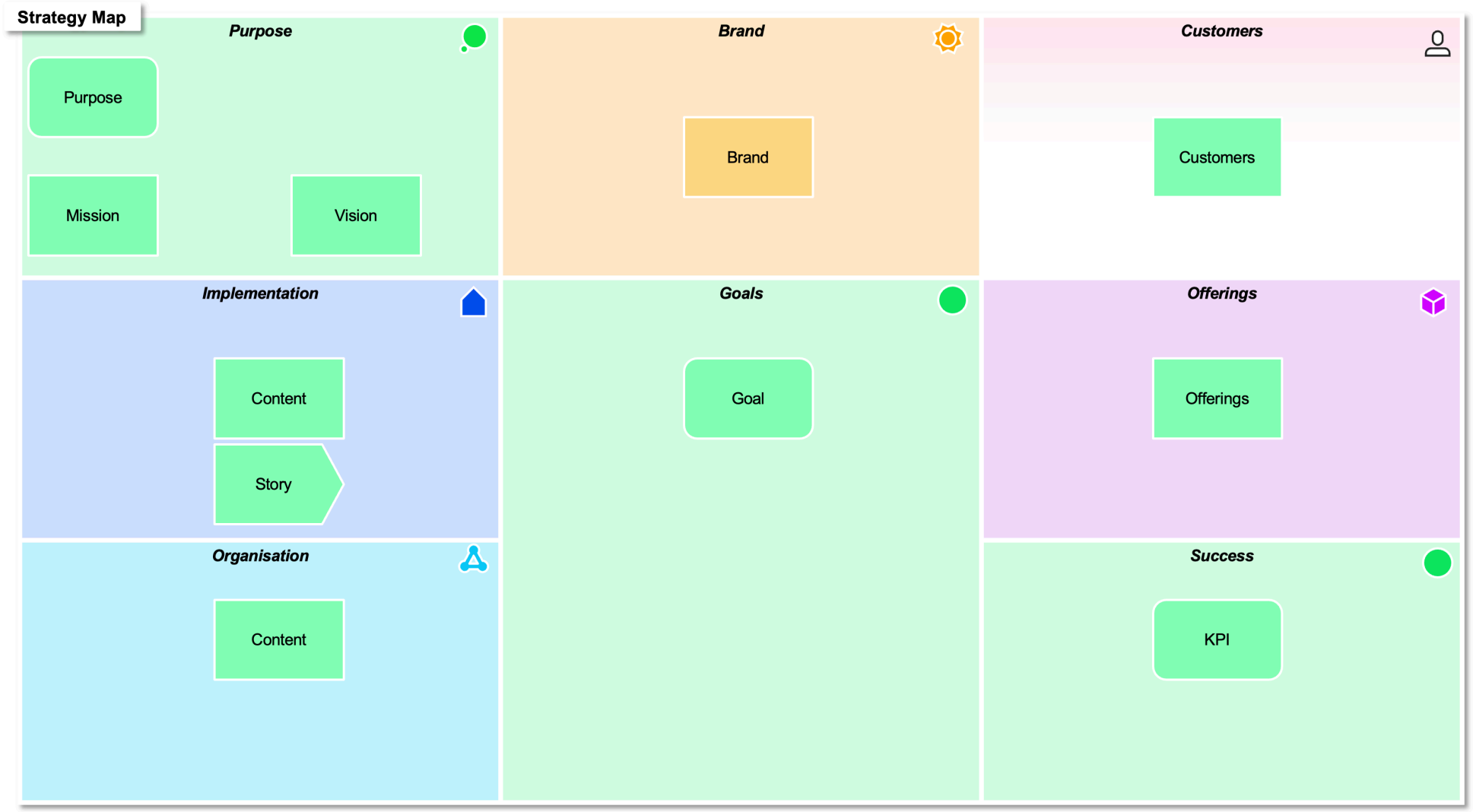


Figure 542: Strategy Map.

10.2.15 Balanced Scorecard

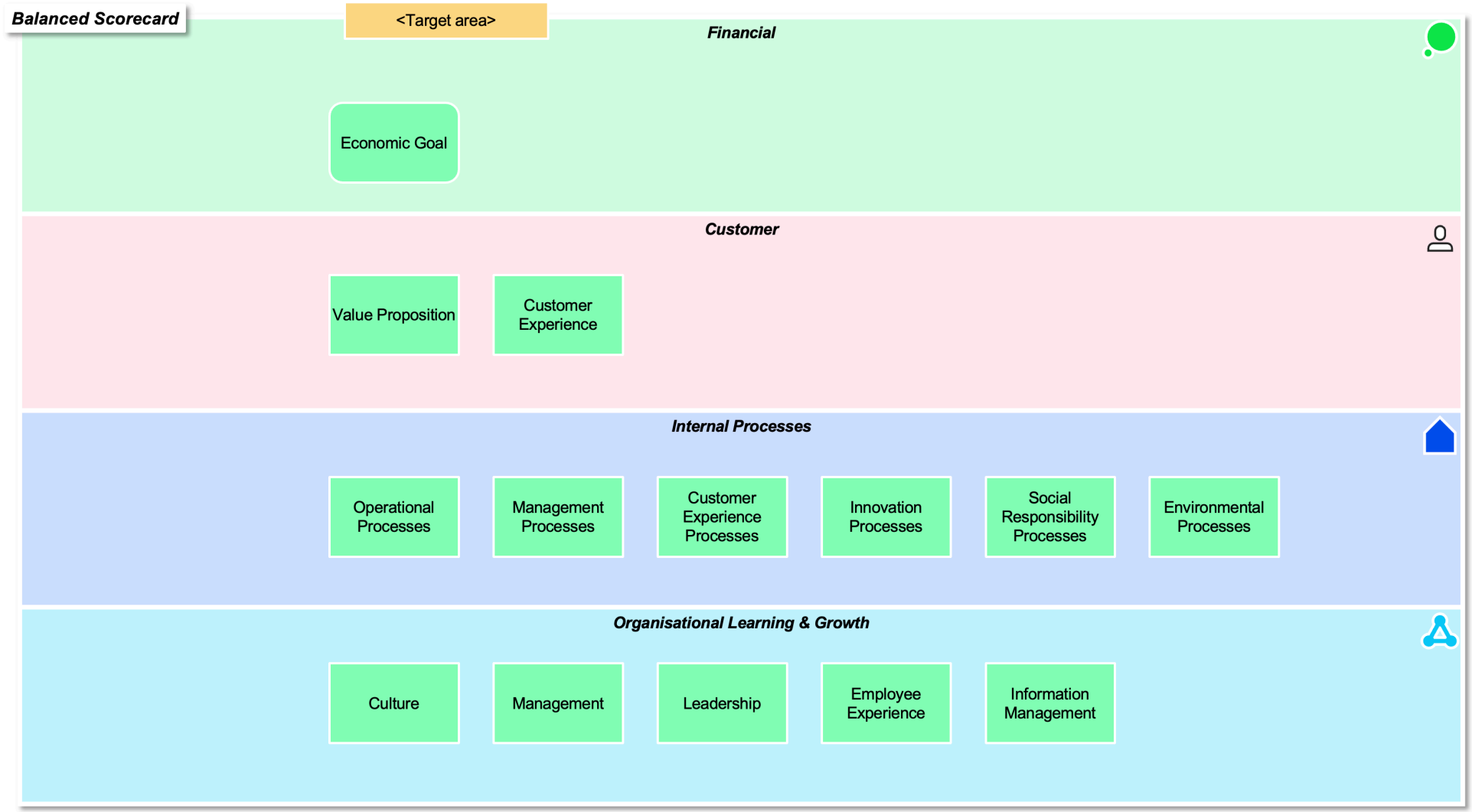


Figure 543: Balanced Scorecard.

10.2.16 Wardley Map - Strategic Scenario Analysis

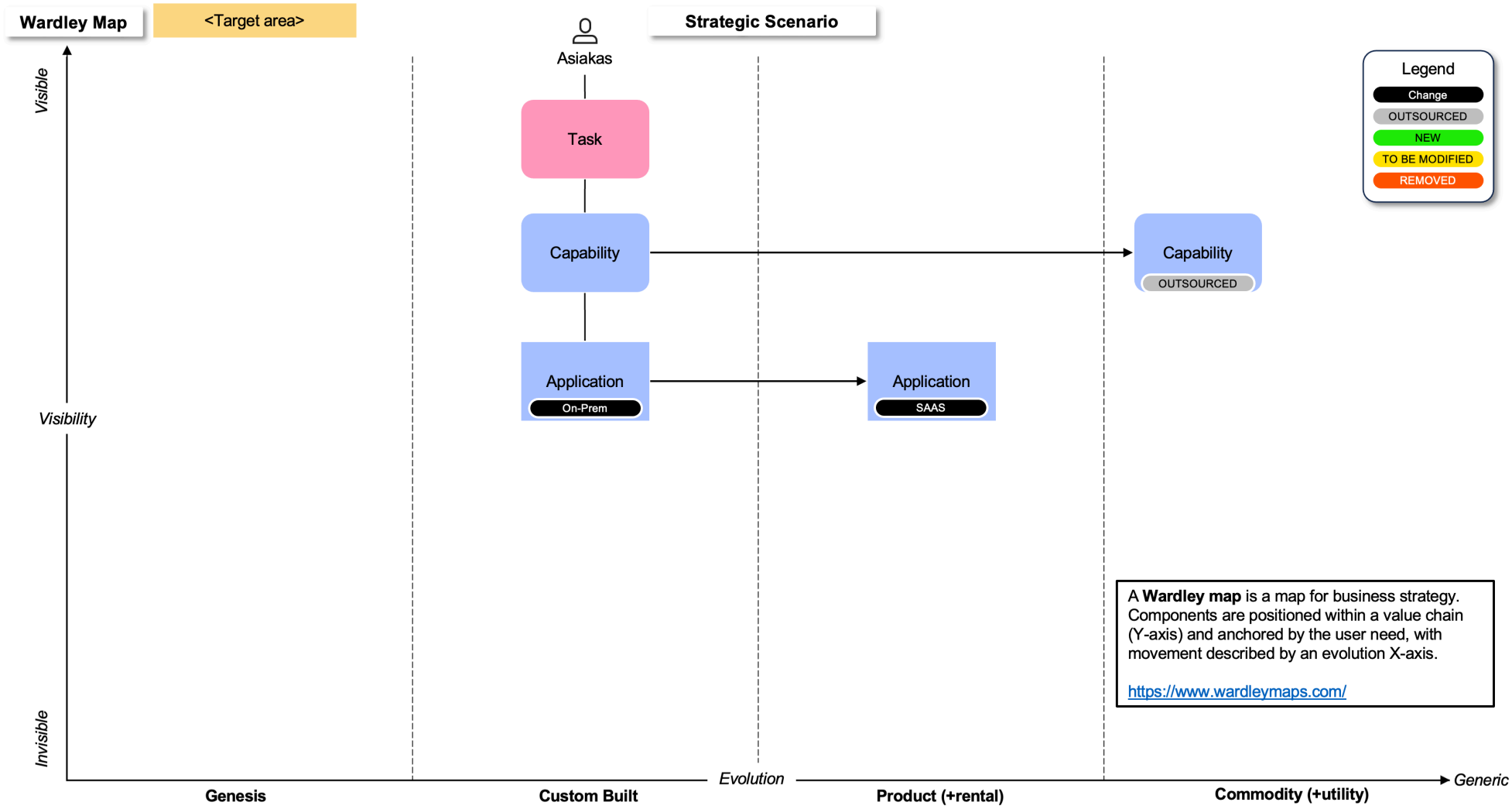


Figure 544: Wardley Map.

10.2.17 Goal Analysis

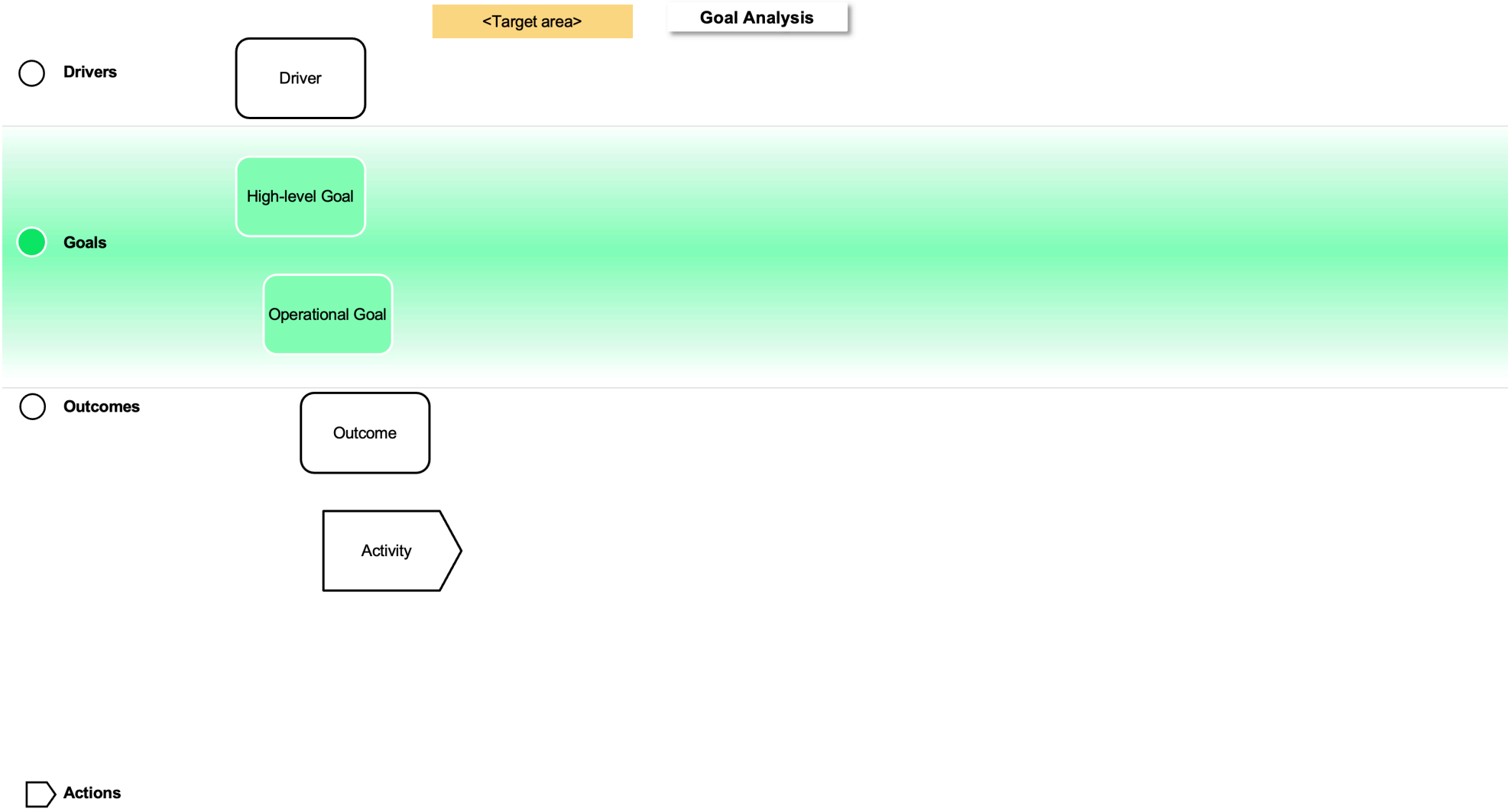


Figure 545: Goal Analysis.

10.2.18 Goal Map

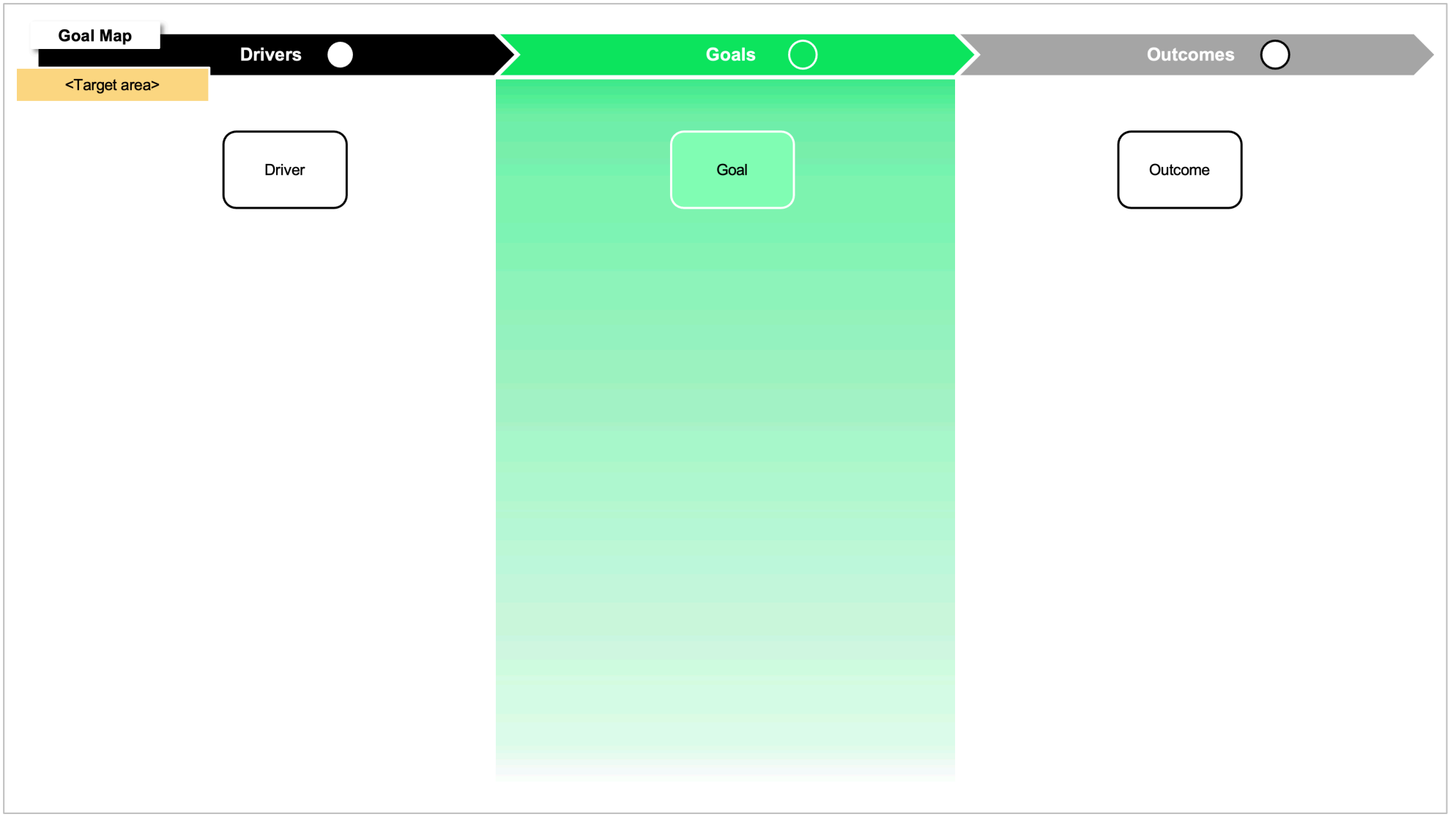


Figure 546: Goal Map.

10.2.19 Goals View

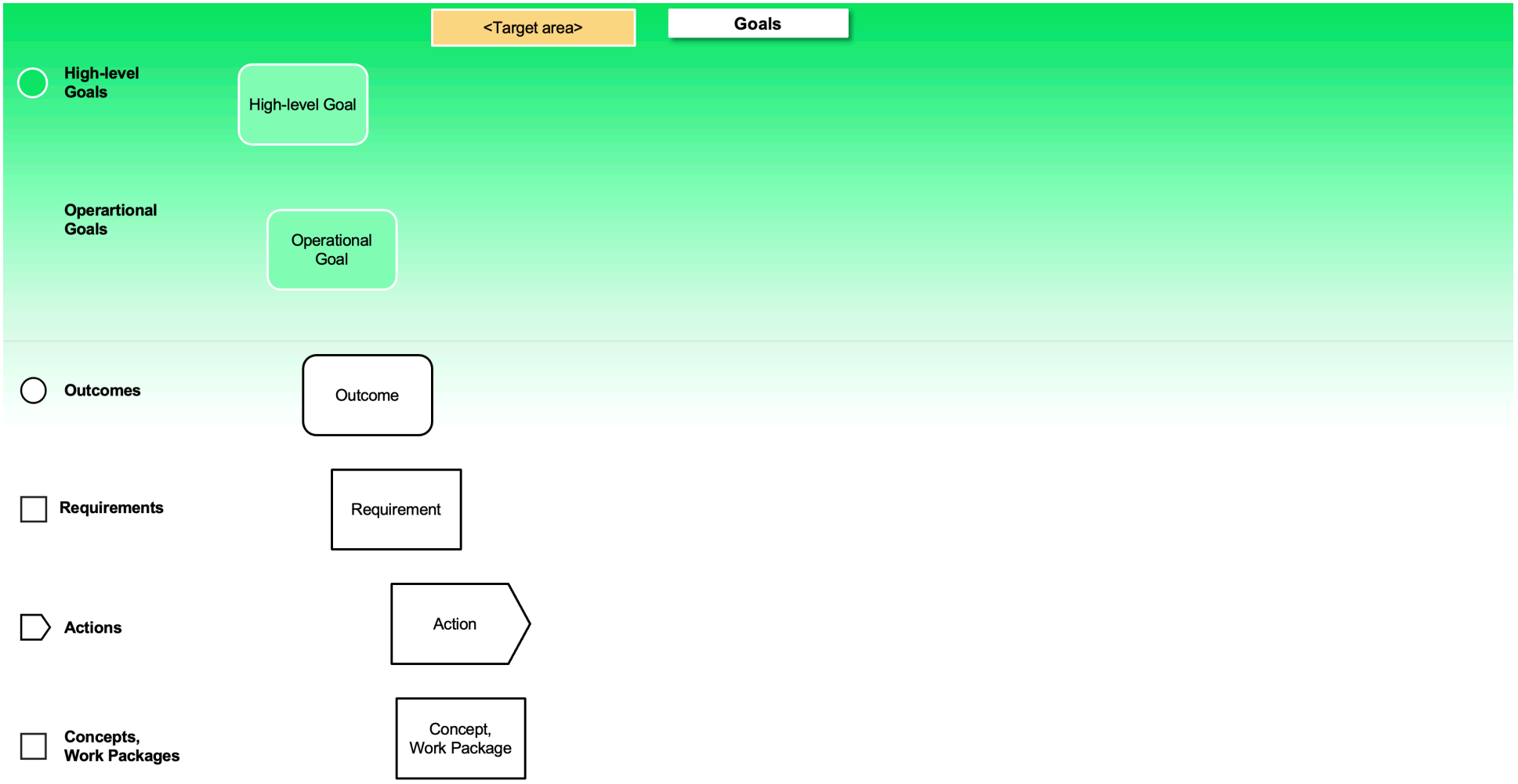


Figure 547: Goals & Actions.

10.2.20 Goals & Actions

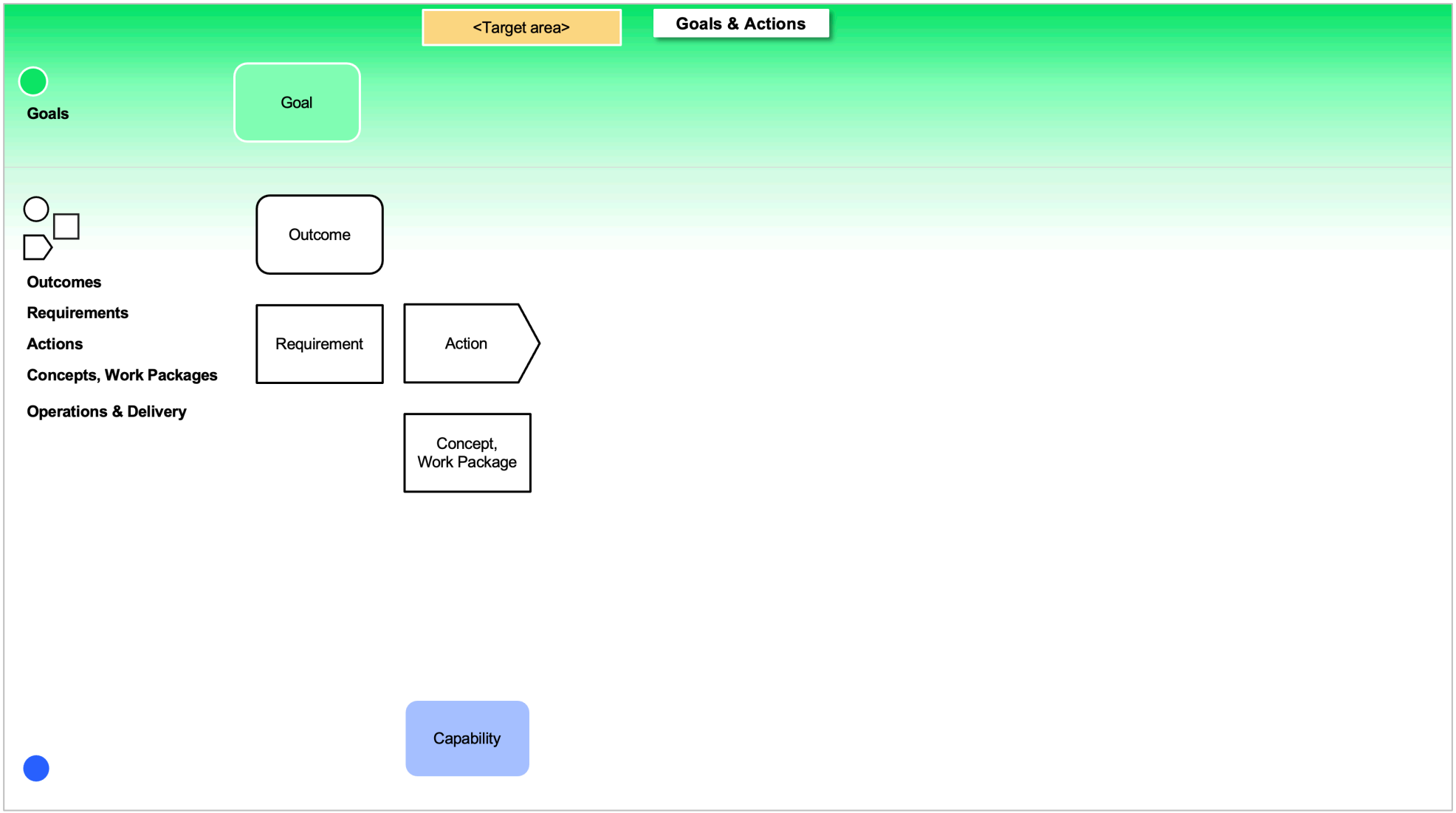


Figure 548: Goals & Actions.

10.2.21 Objectives and key results (OKR)



Figure 549: OKR.

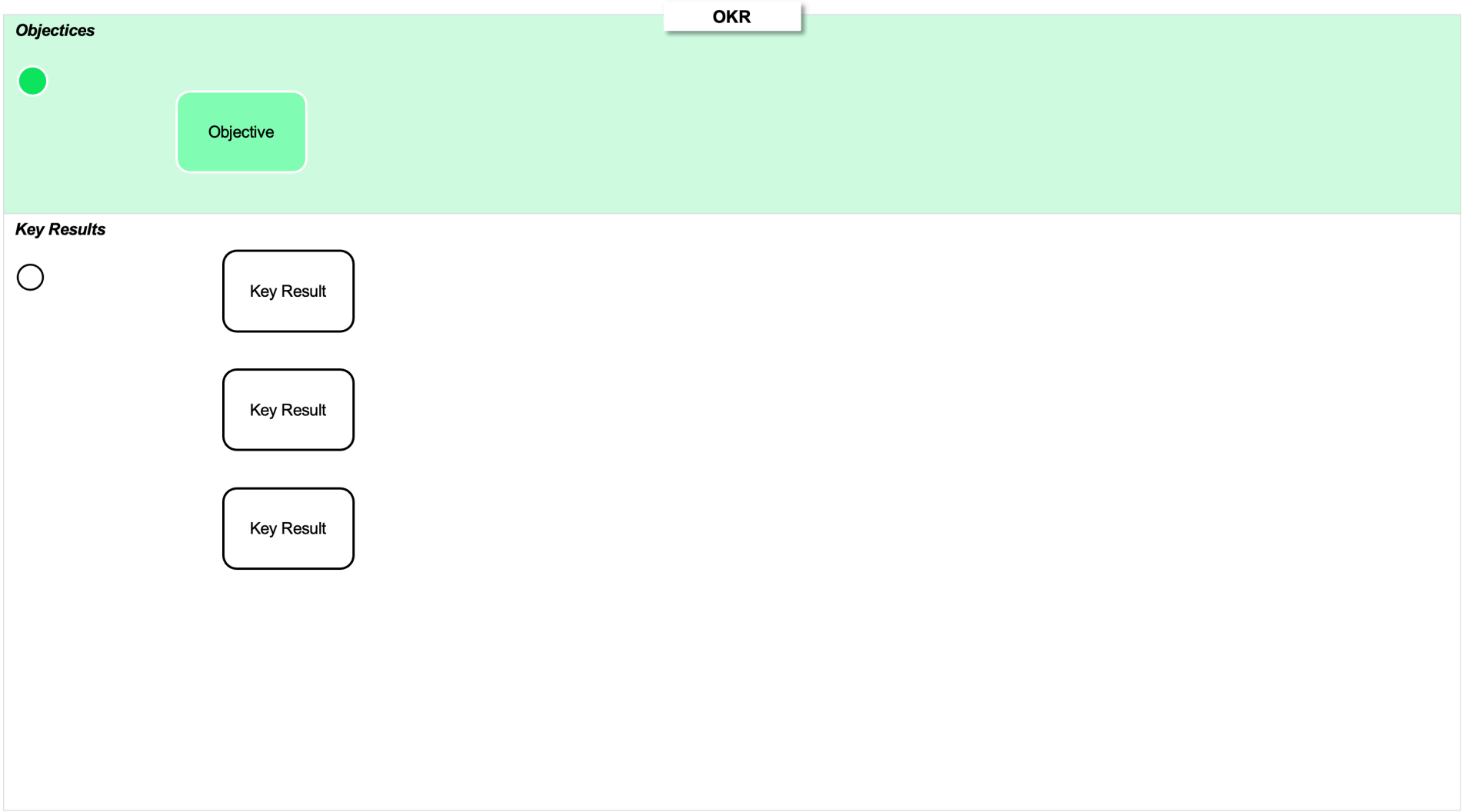


Figure 550: OKR.

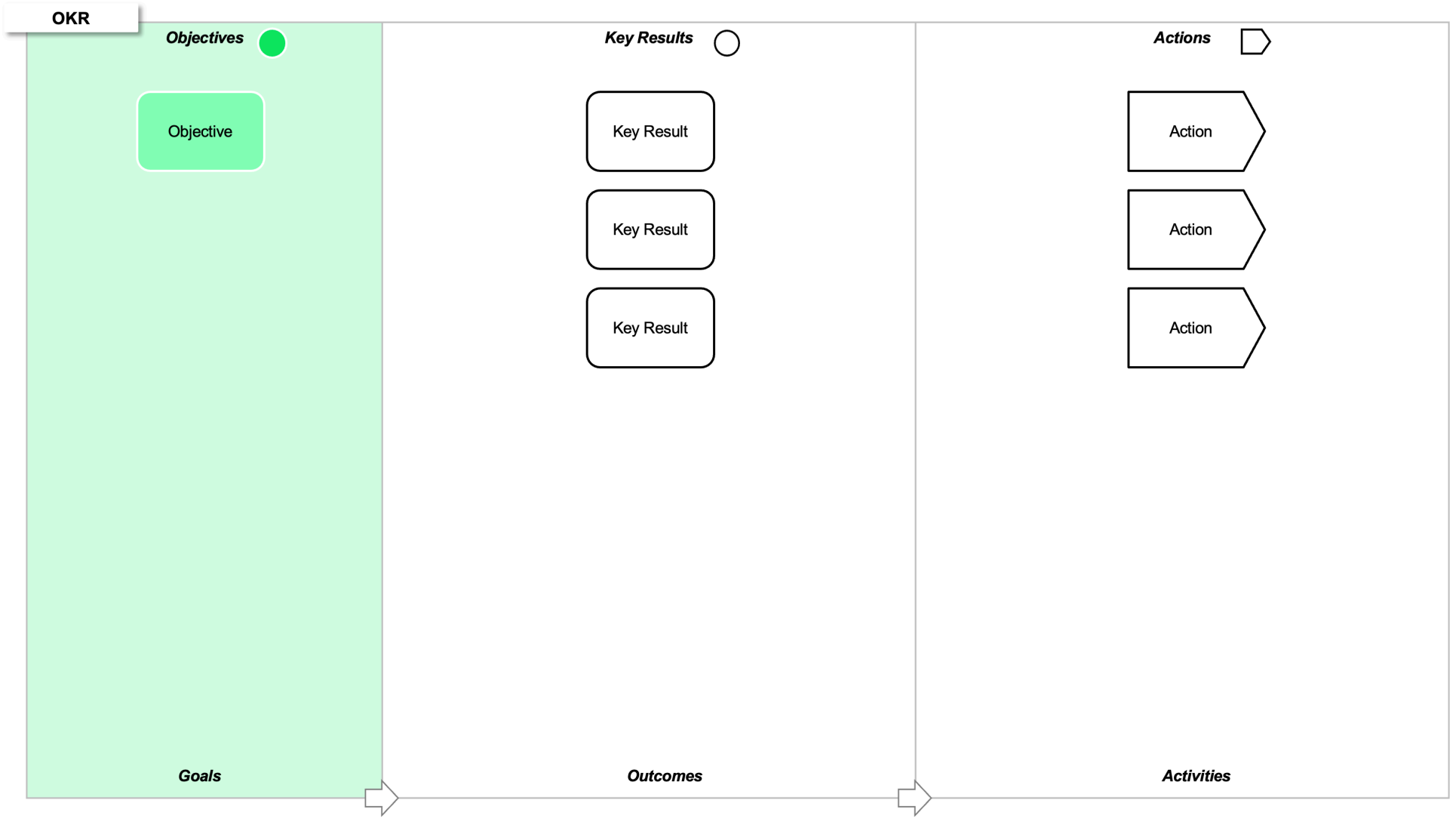


Figure 551: OKR.

10.2.22 Transition Plan

Business transformation planning.

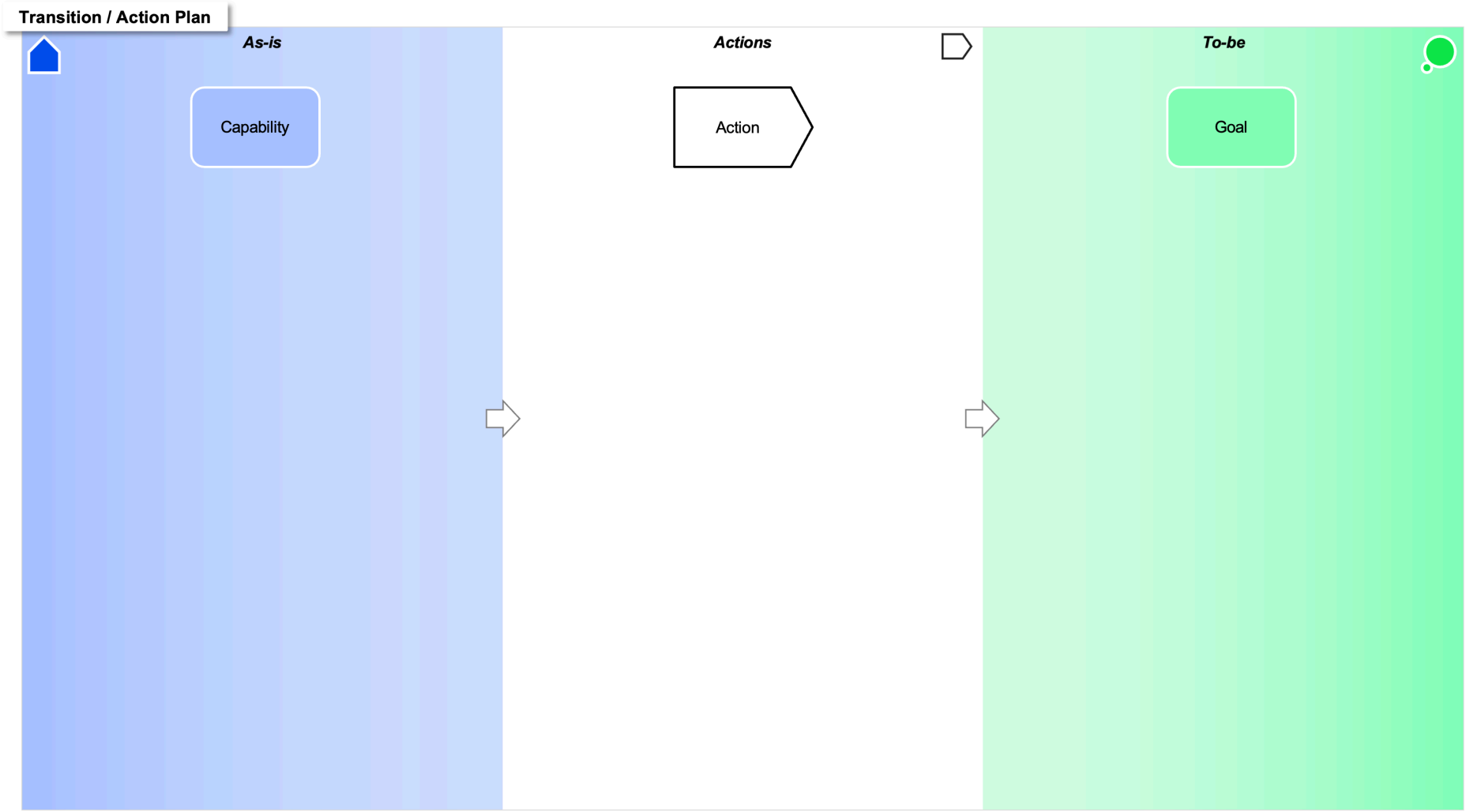


Figure 552: Transition Plan.

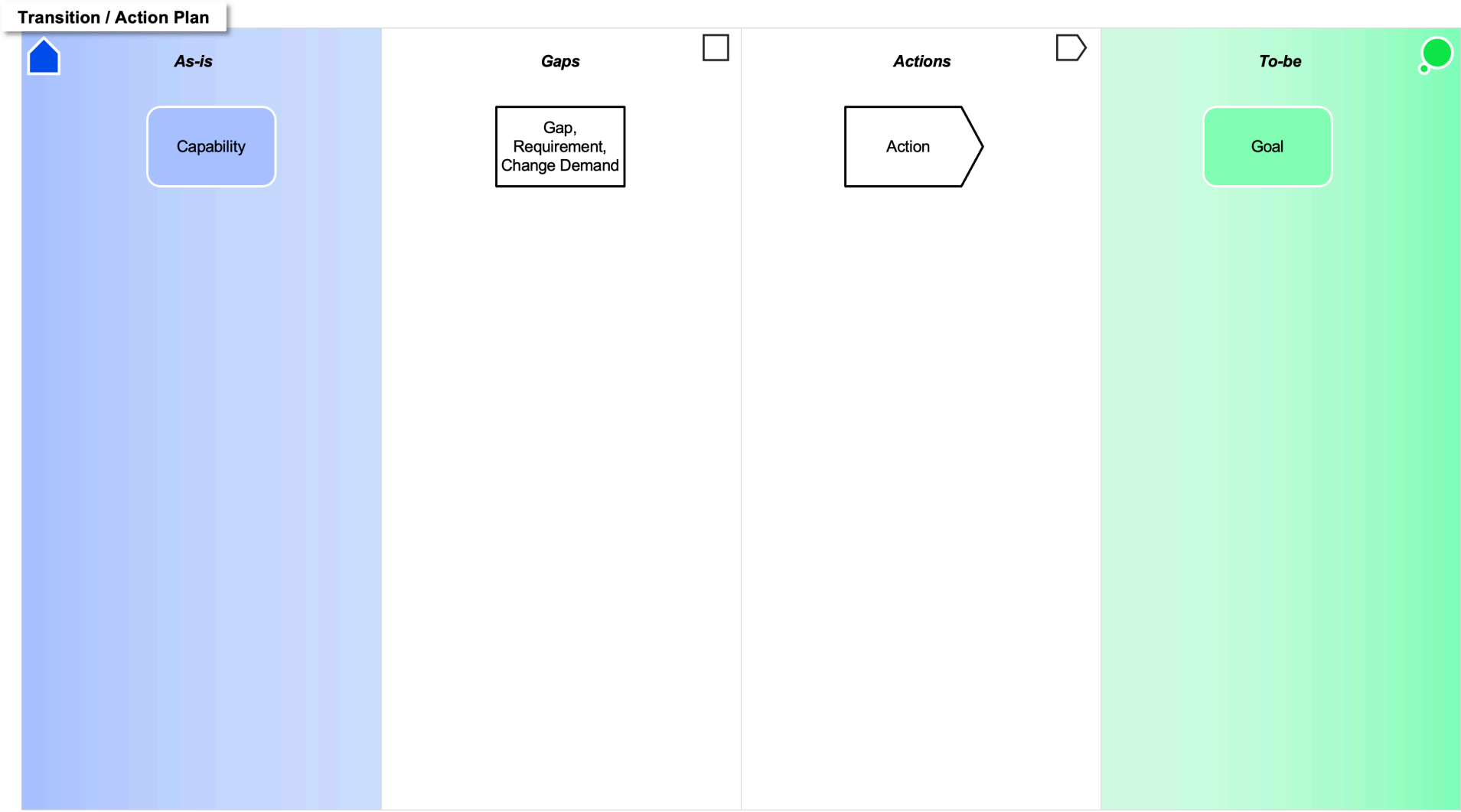


Figure 553: Transition Plan.

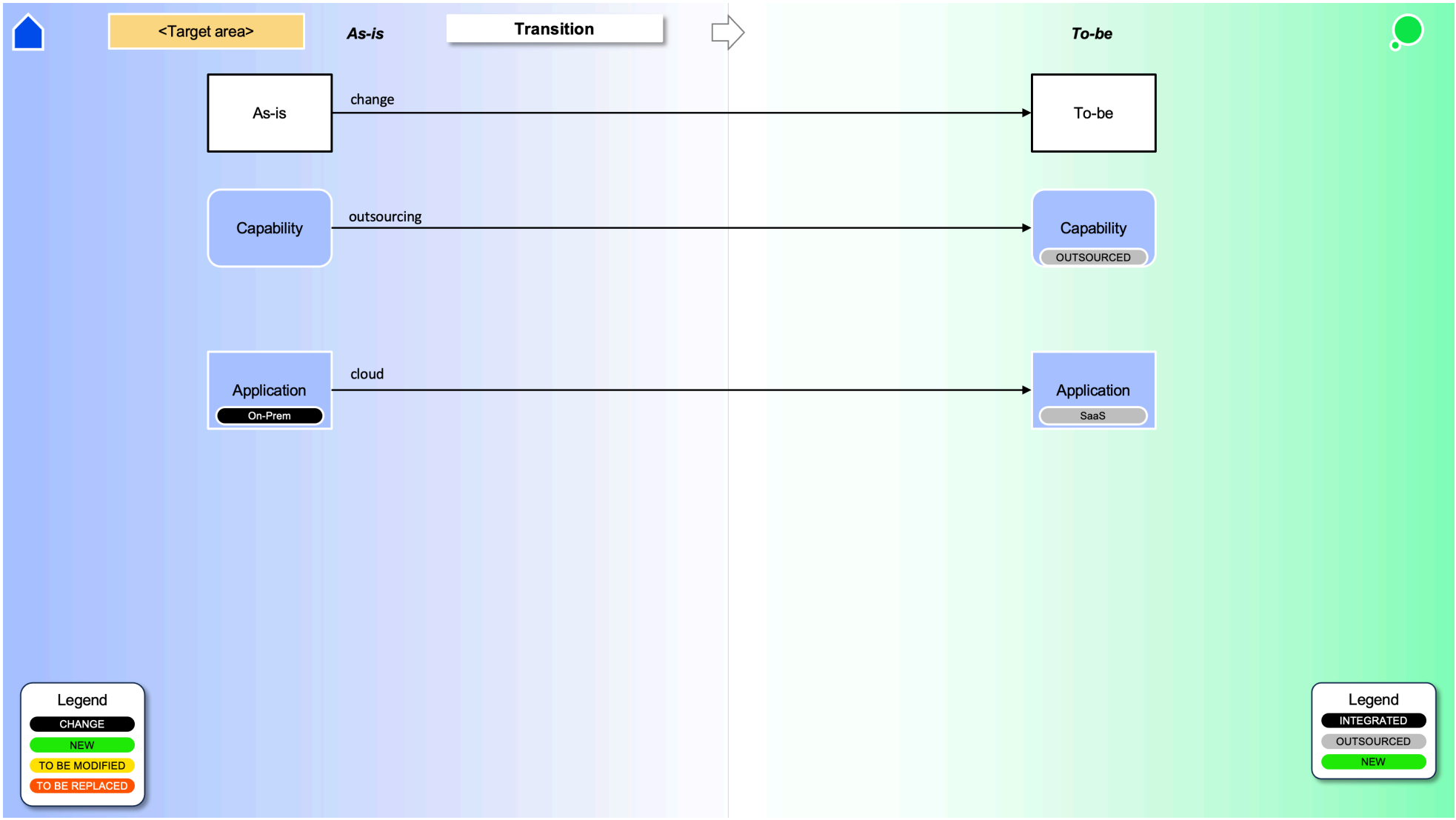


Figure 554: Transition.

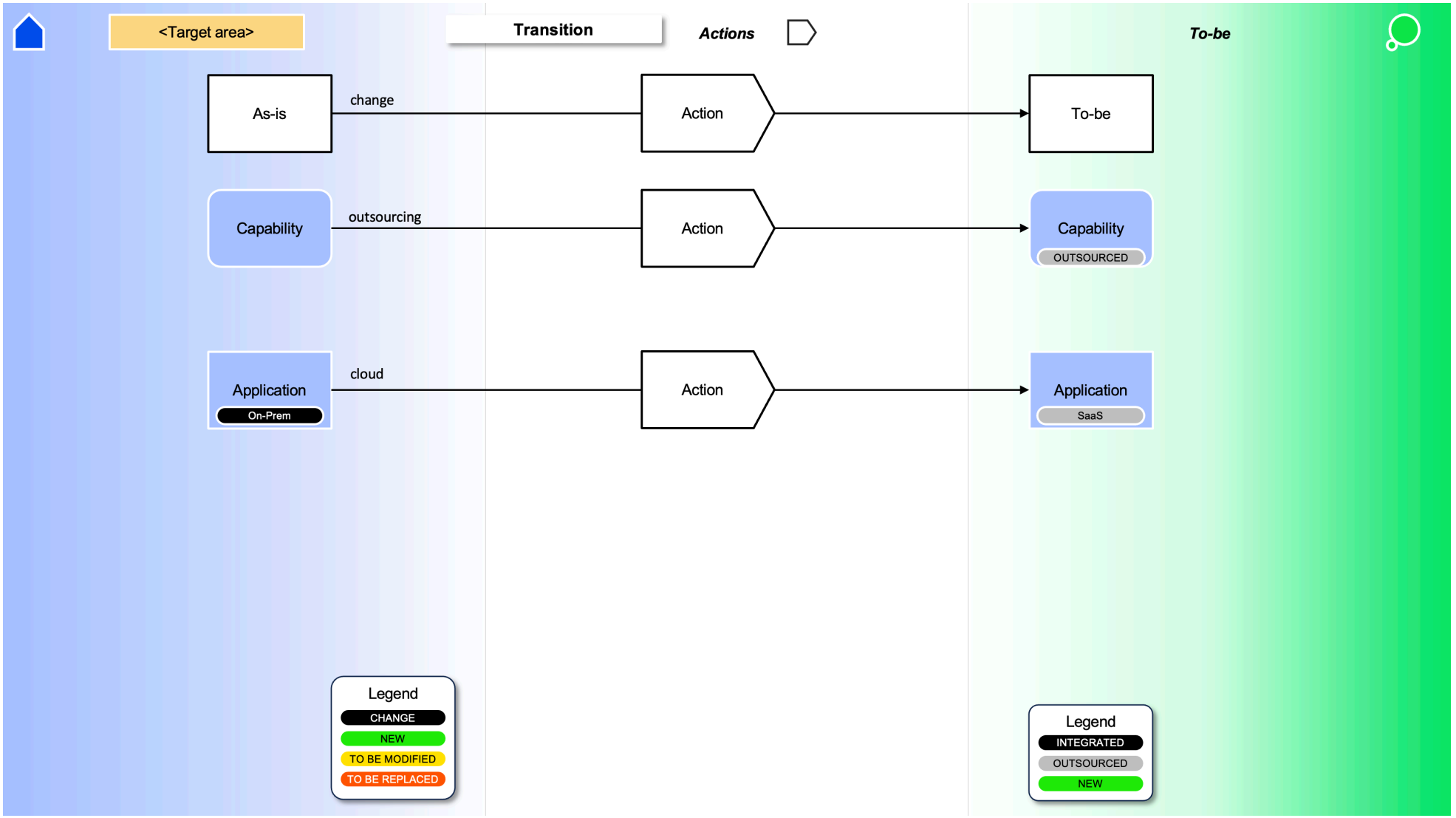


Figure 555: Transition.

10.2.23 Operational Action Plan

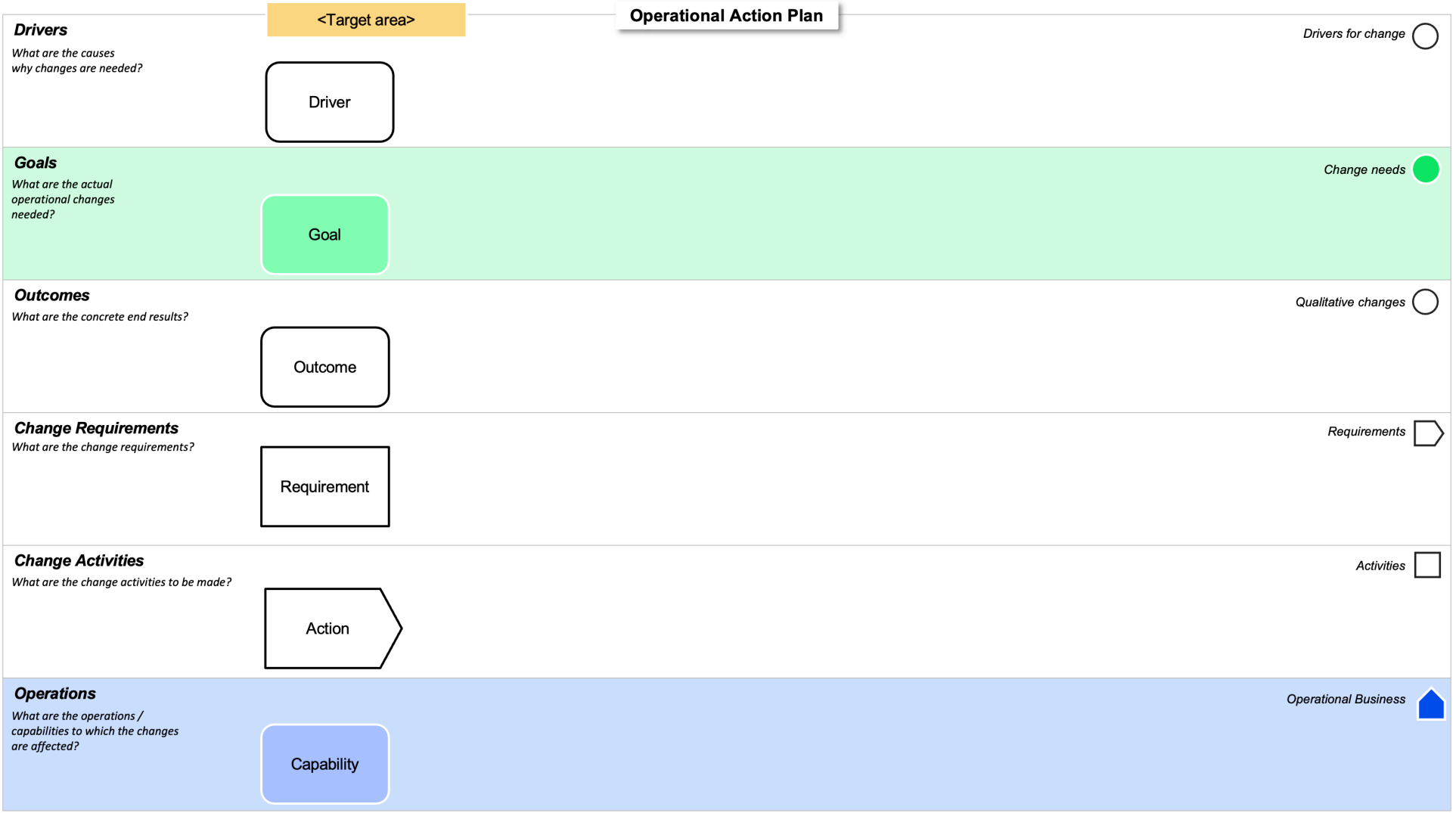


Figure 556: Operational Action Plan.

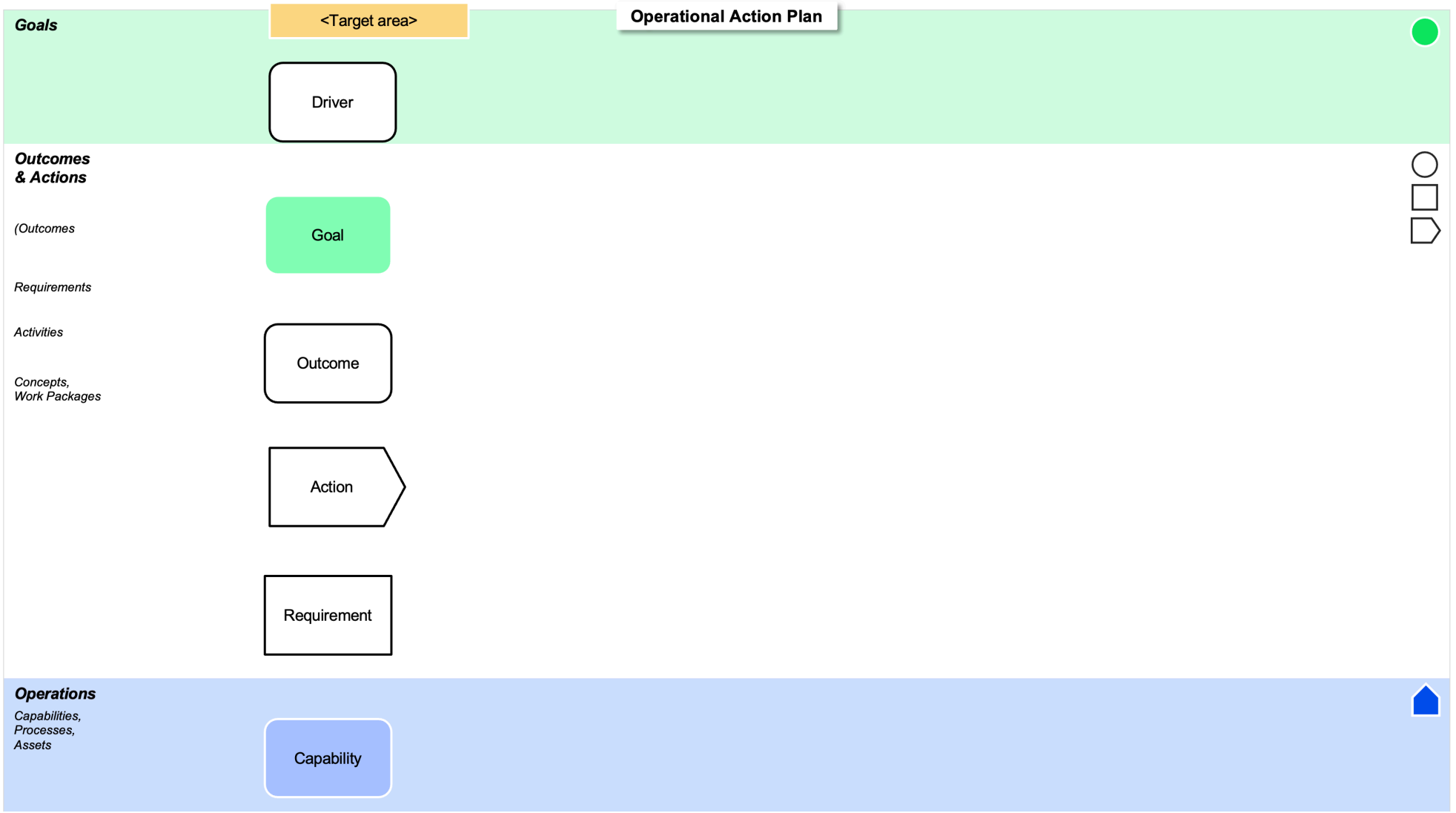


Figure 557: Operational Action Plan.

10.2.24 Plan

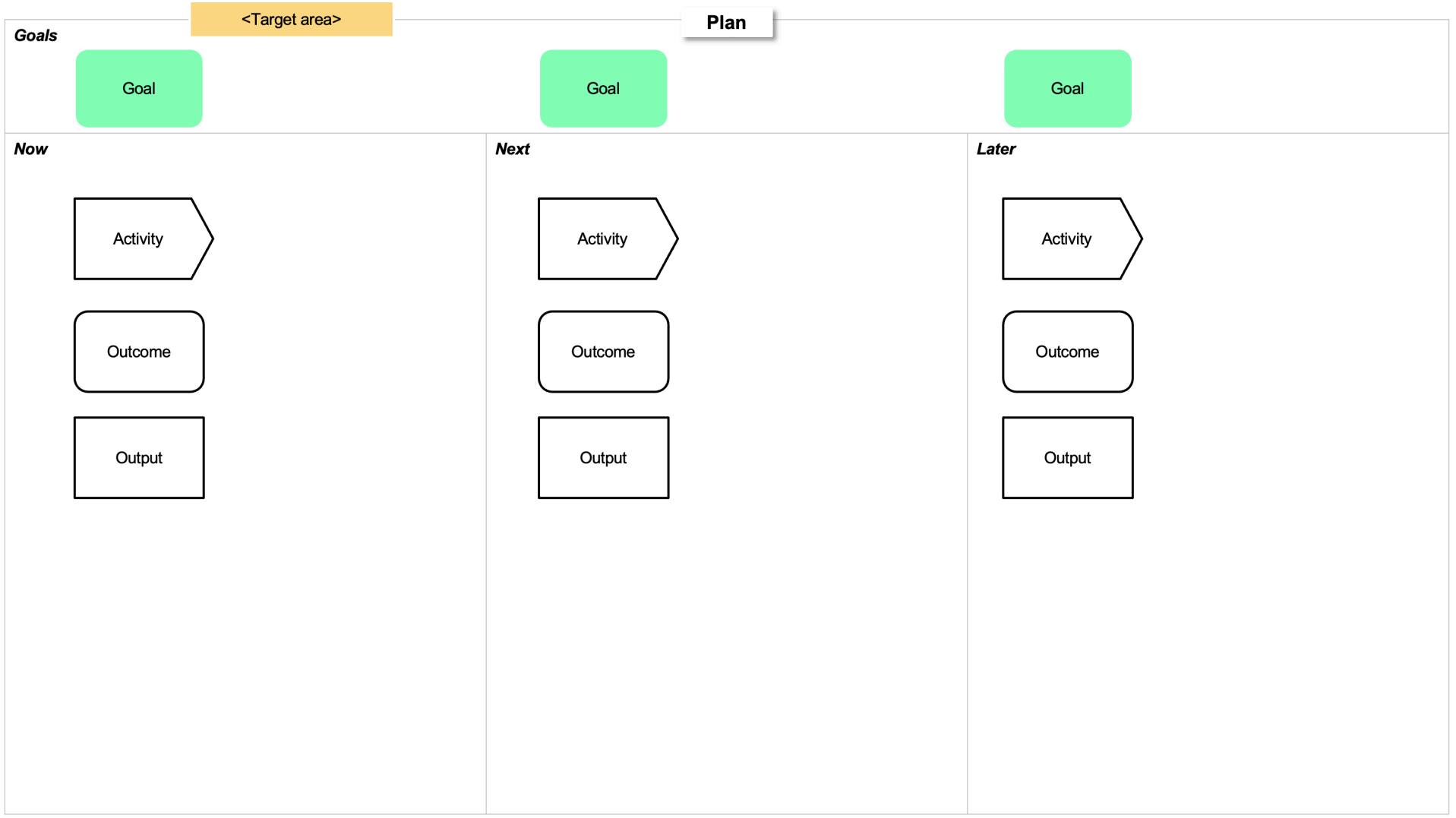


Figure 558: Plan.

10.2.25 Action Plan

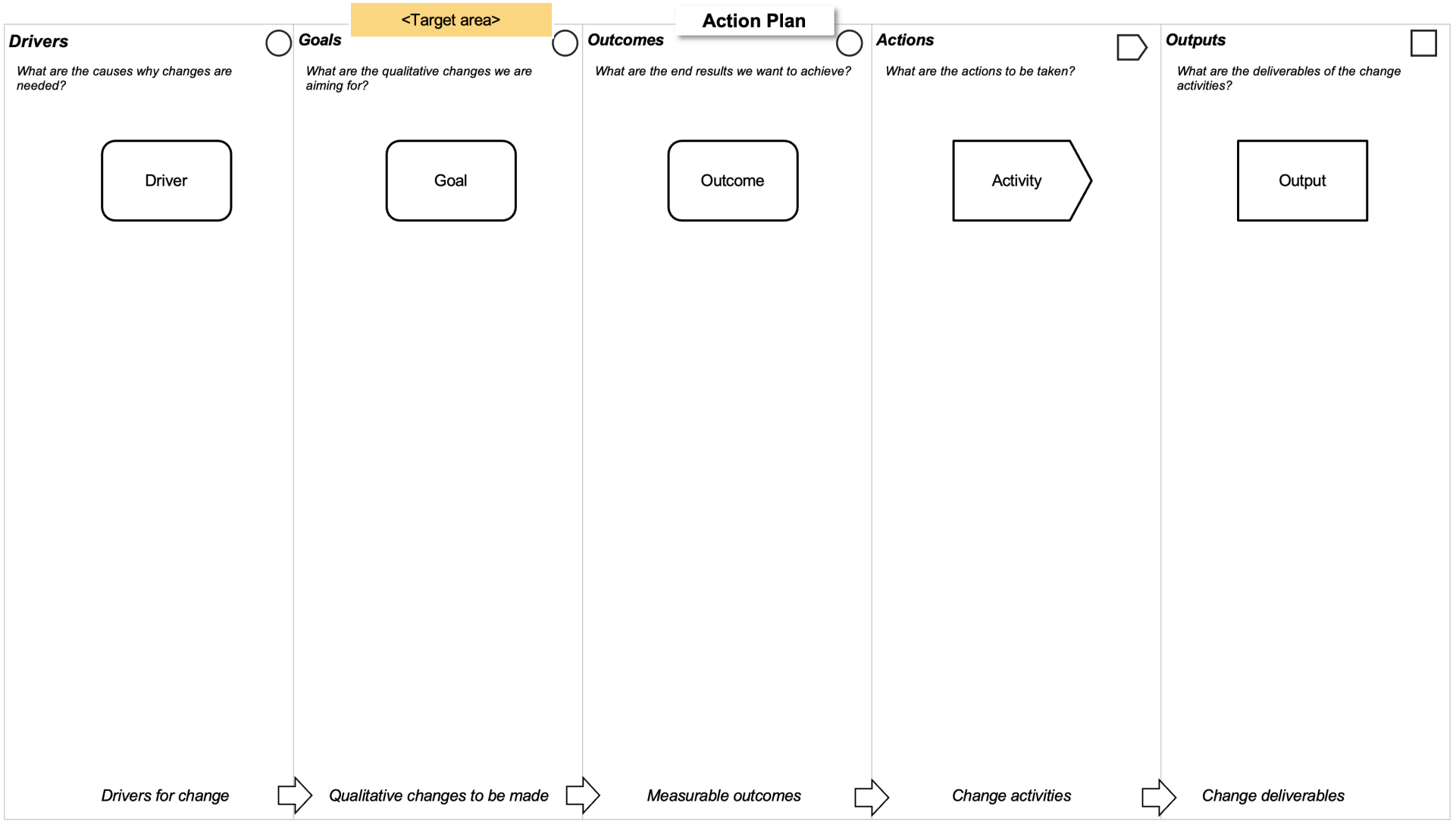


Figure 559: Action Plan.

10.2.26 Work Plan

Who is doing what?



Figure 560: Work Plan.

10.2.27 Roadmap

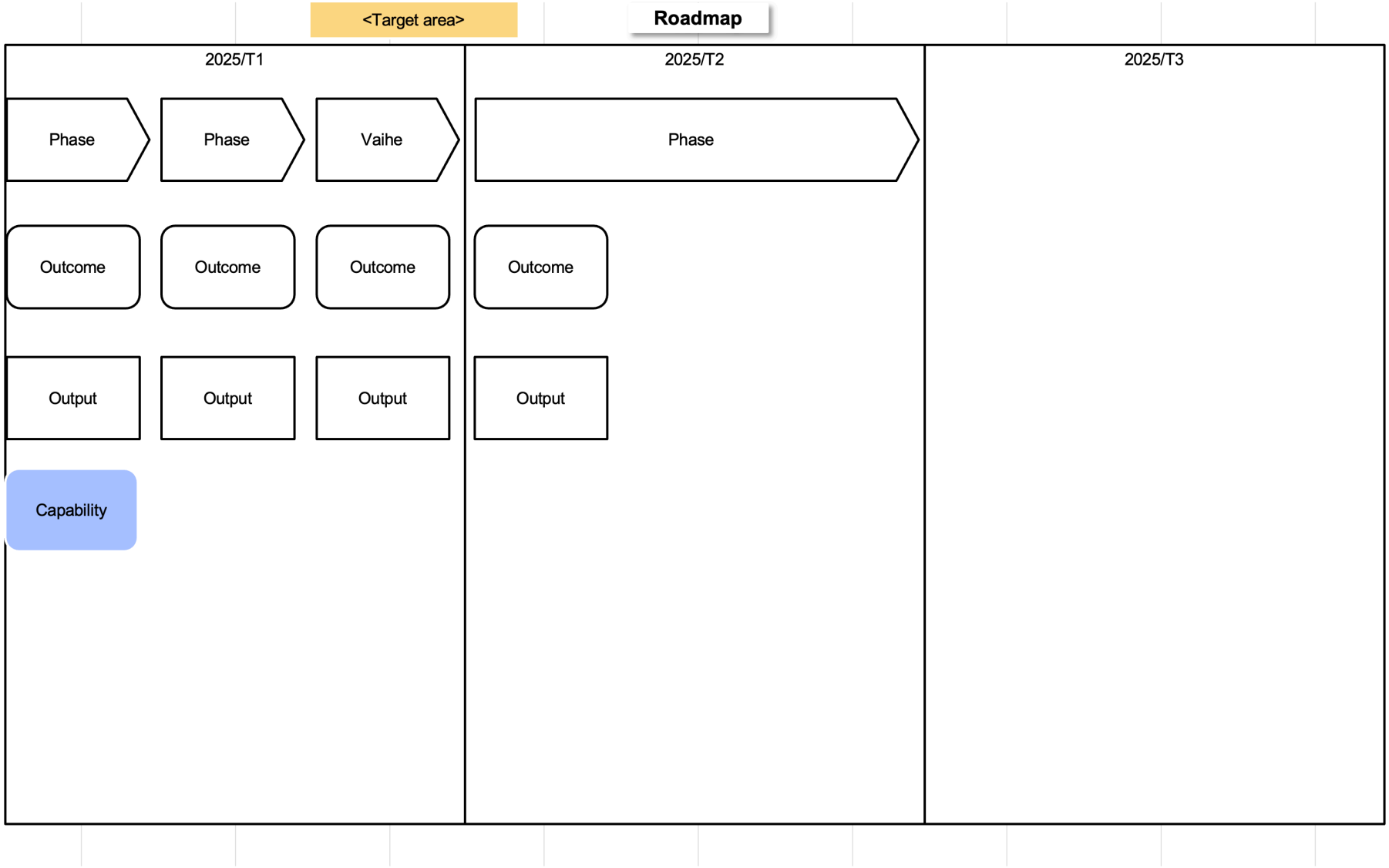


Figure 561: Roadmap.

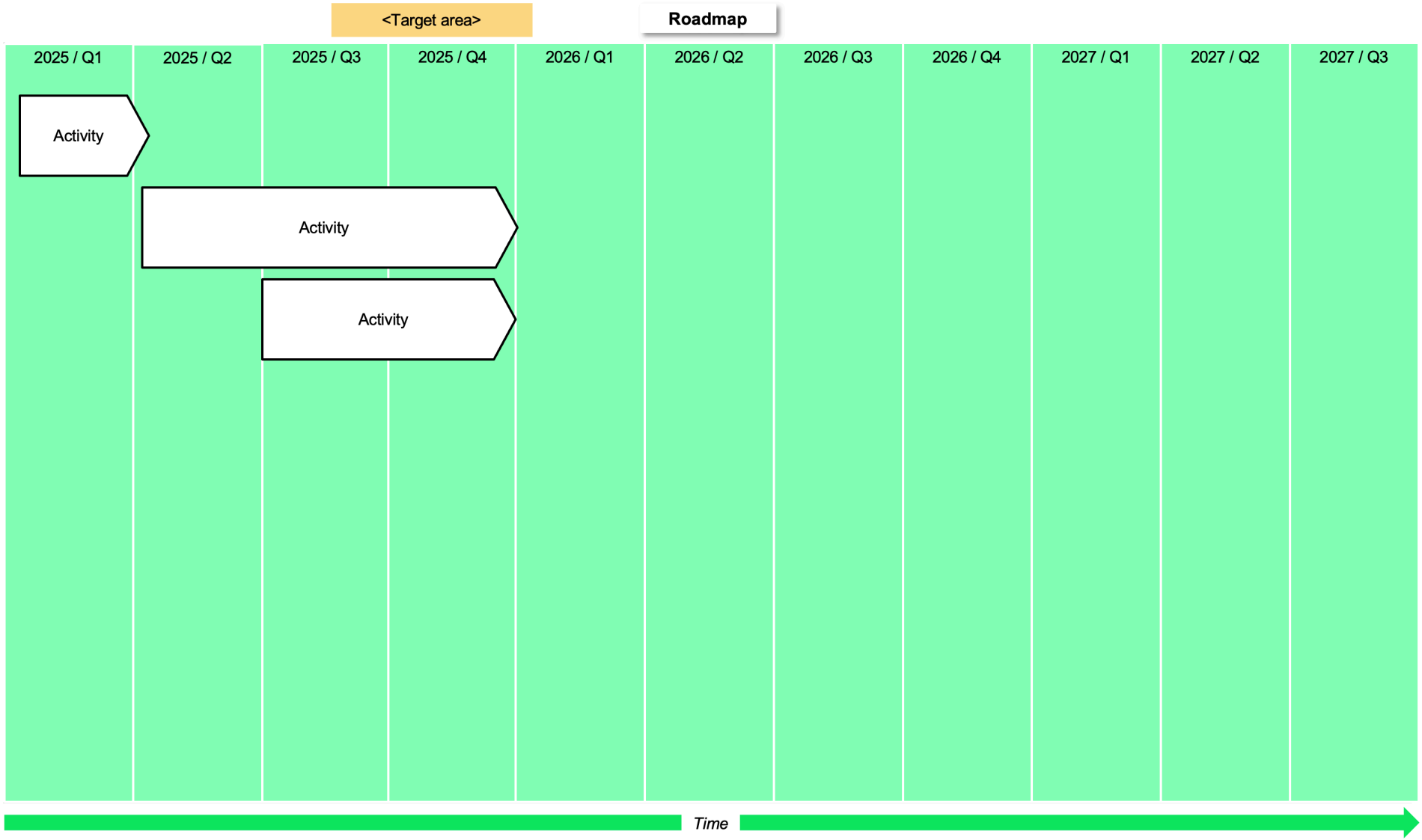


Figure 562: Roadmap.

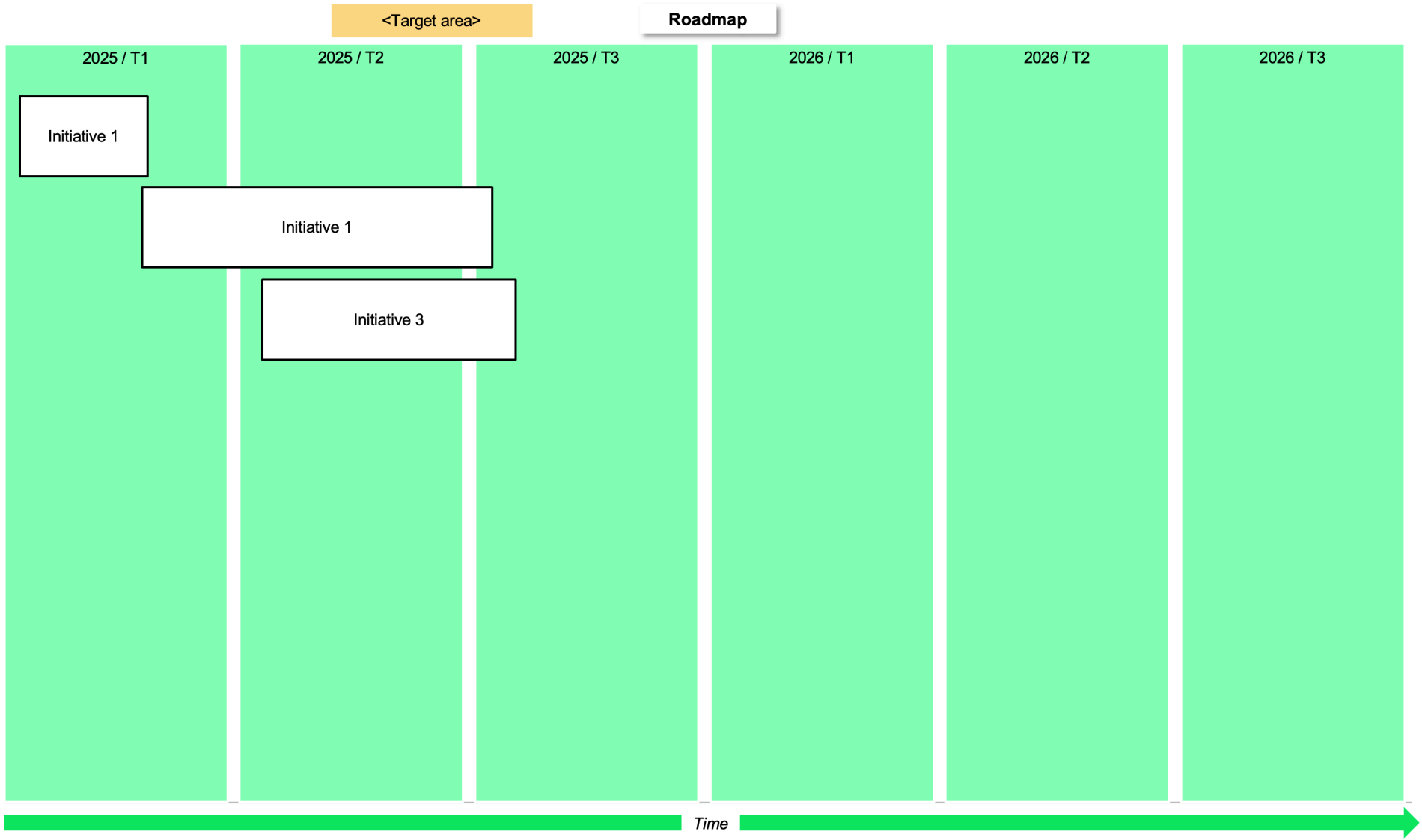


Figure 563: Roadmap.

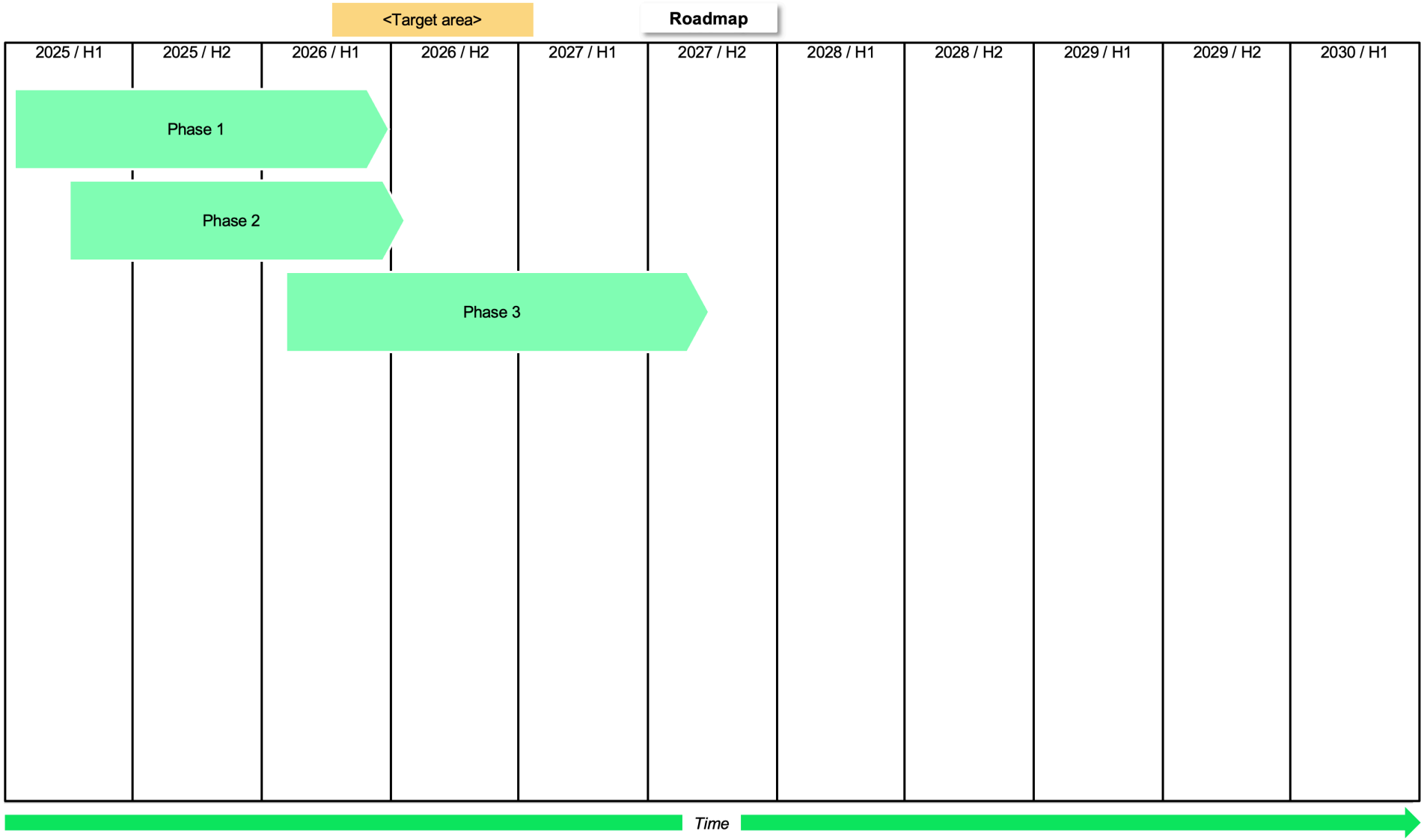
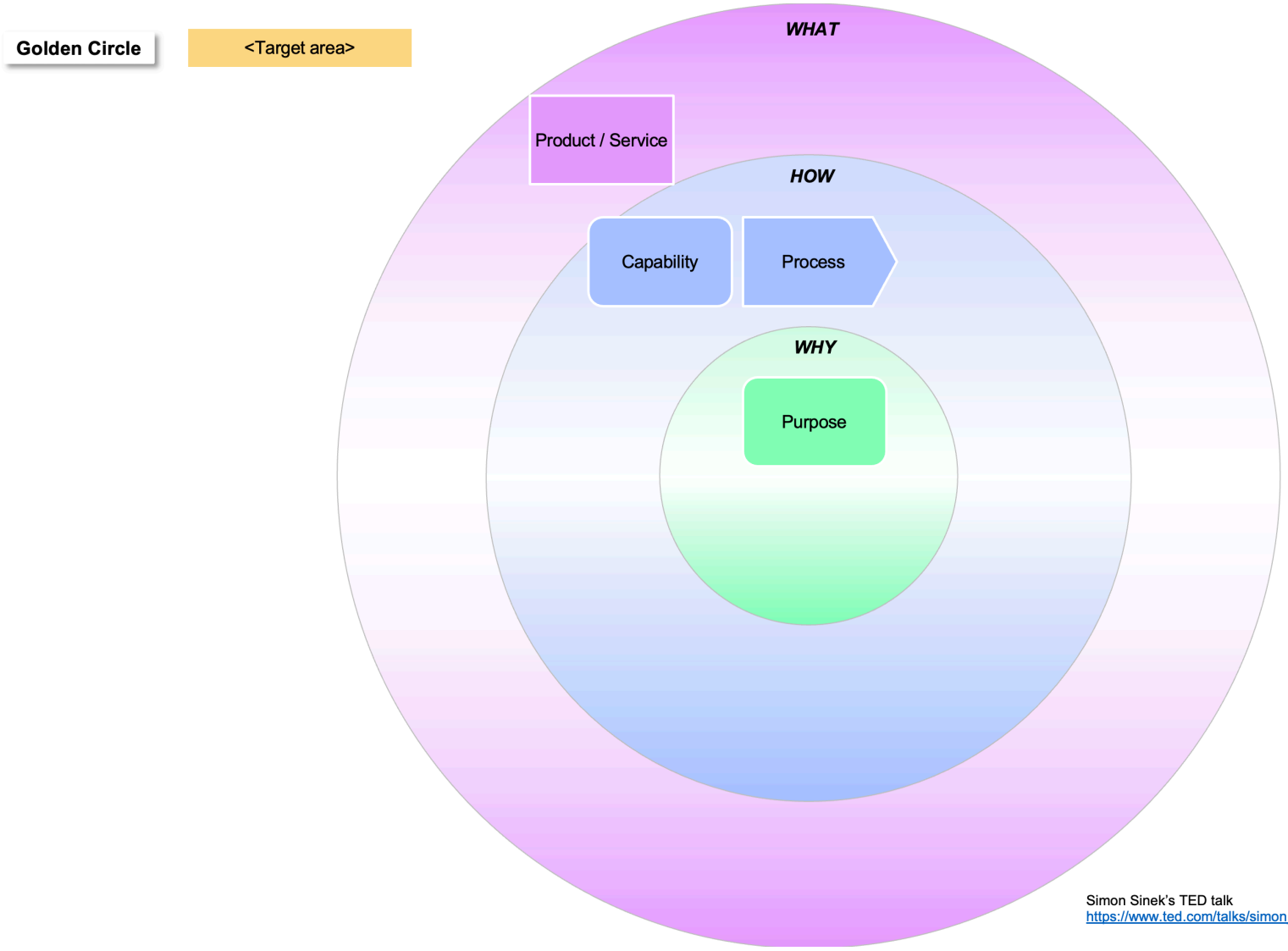
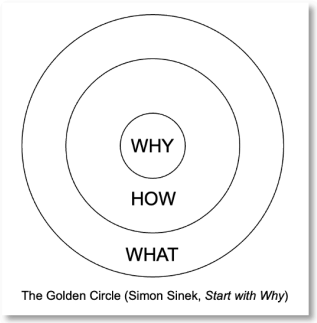


Figure 564: Roadmap.

10.2.28 Golden Circle





Simon Sinek's TED talk
https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action?subtitle=en

Figure 565: Golden Circle.

10.2.29 Business Design

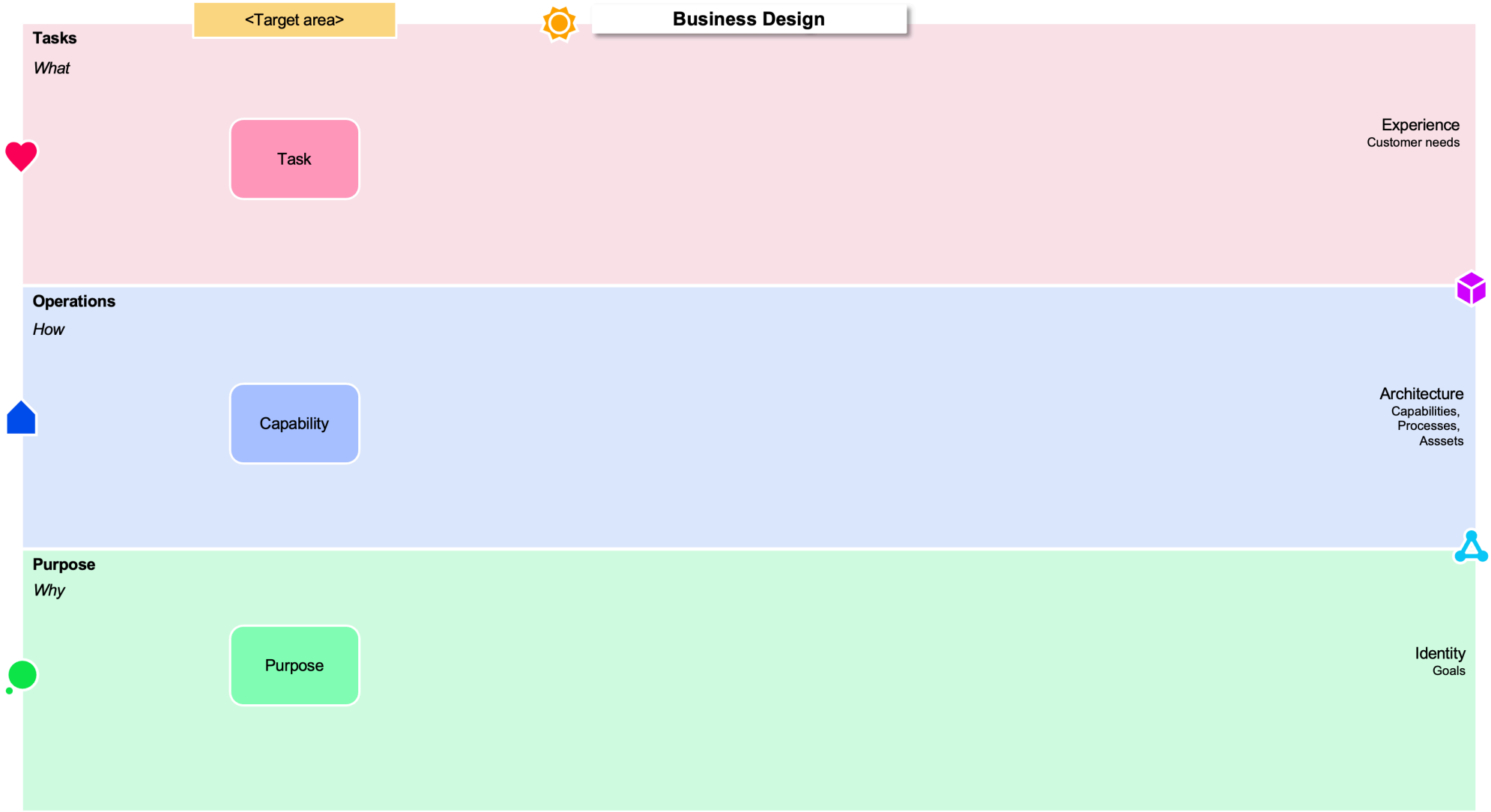


Figure 566: Business Design.

10.2.30 Stakeholder Map

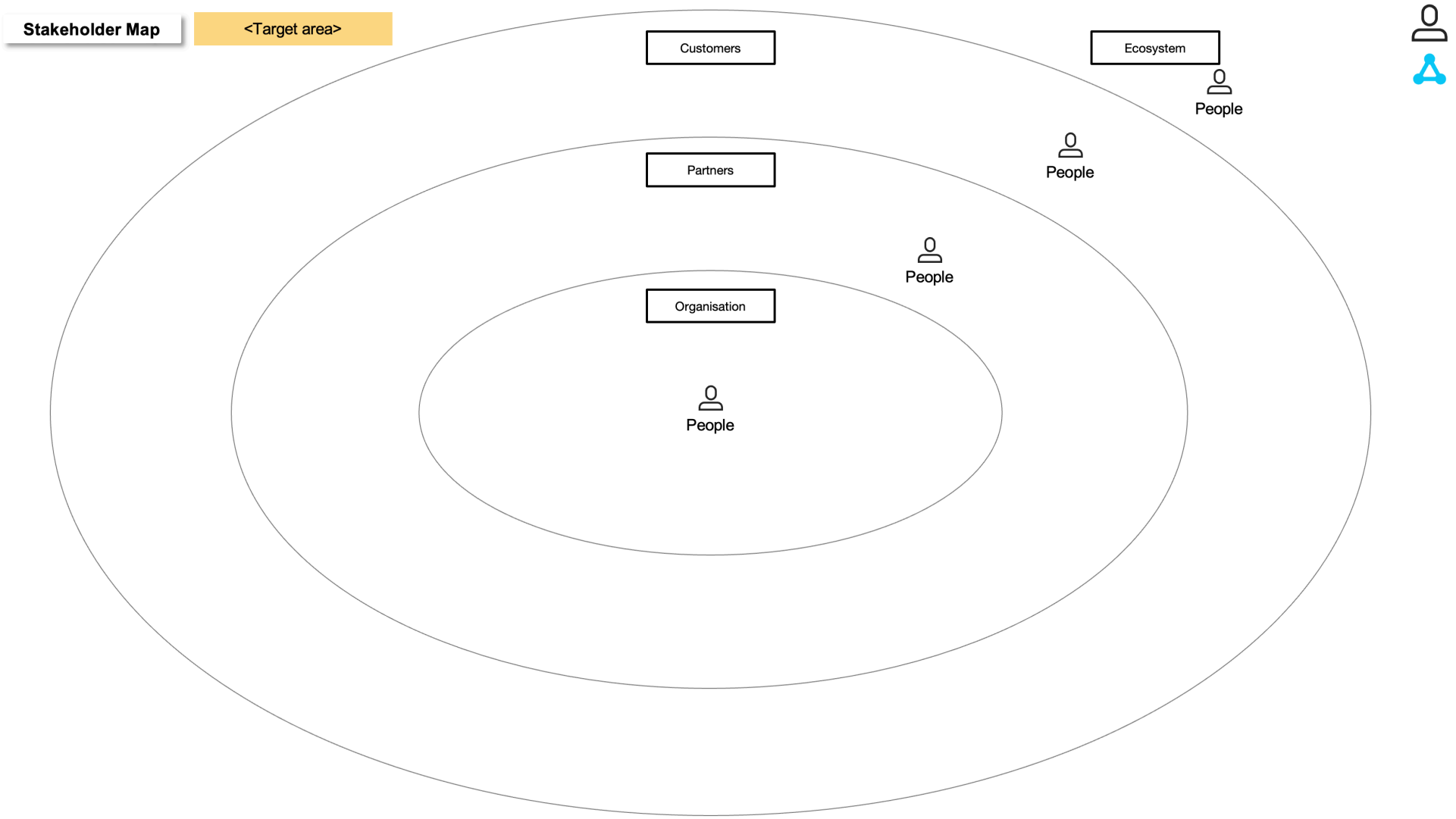


Figure 567: Stakeholder Map.

10.2.31 Stakeholder Analysis

Stakeholders can be mapped into a canvas as shown below. This helps enterprise designers to identify the stakeholder groups and understand their influence and level of involvement.

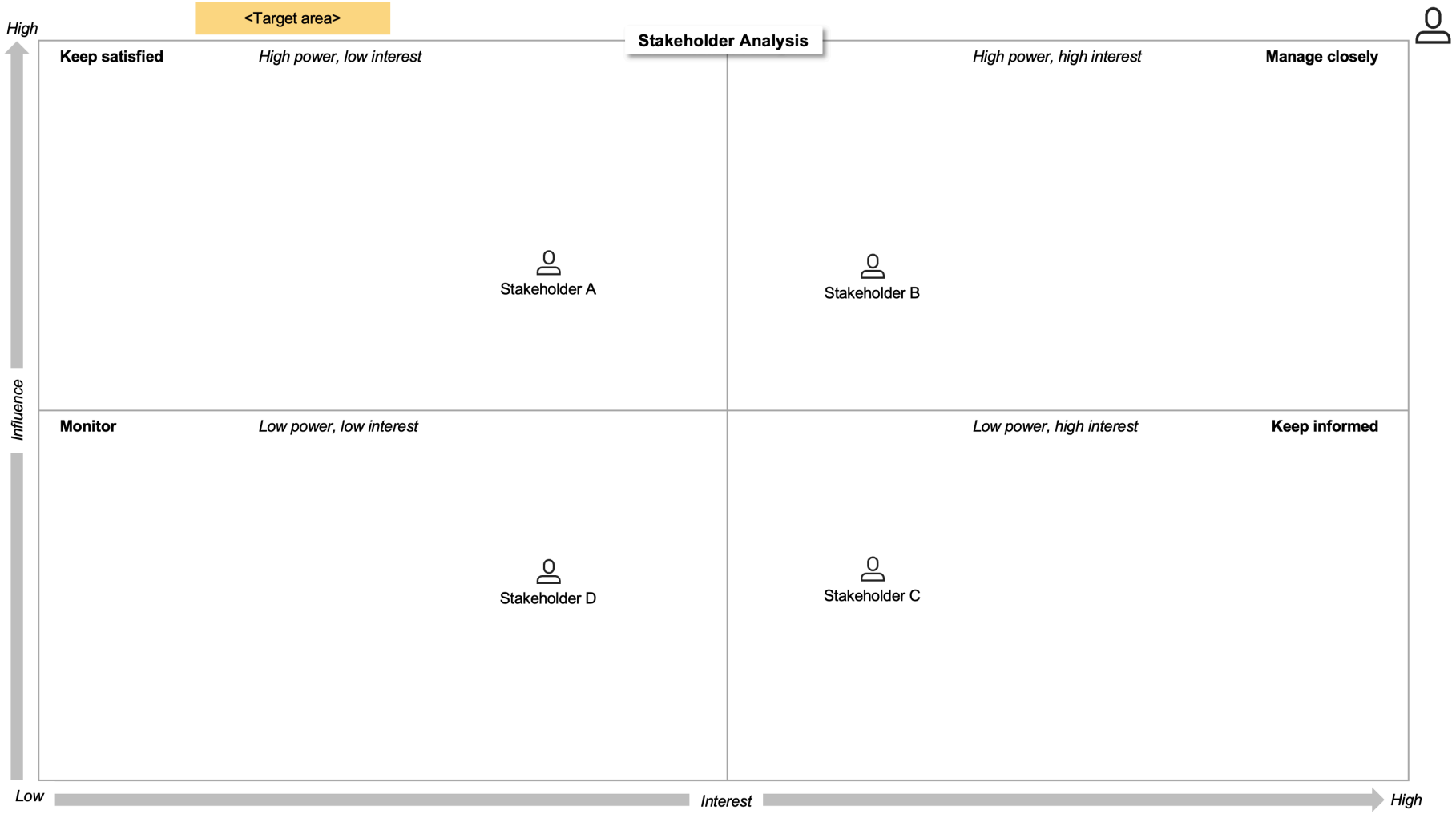


Figure 568: Stakeholder Analysis.

10.2.32 RACI Map

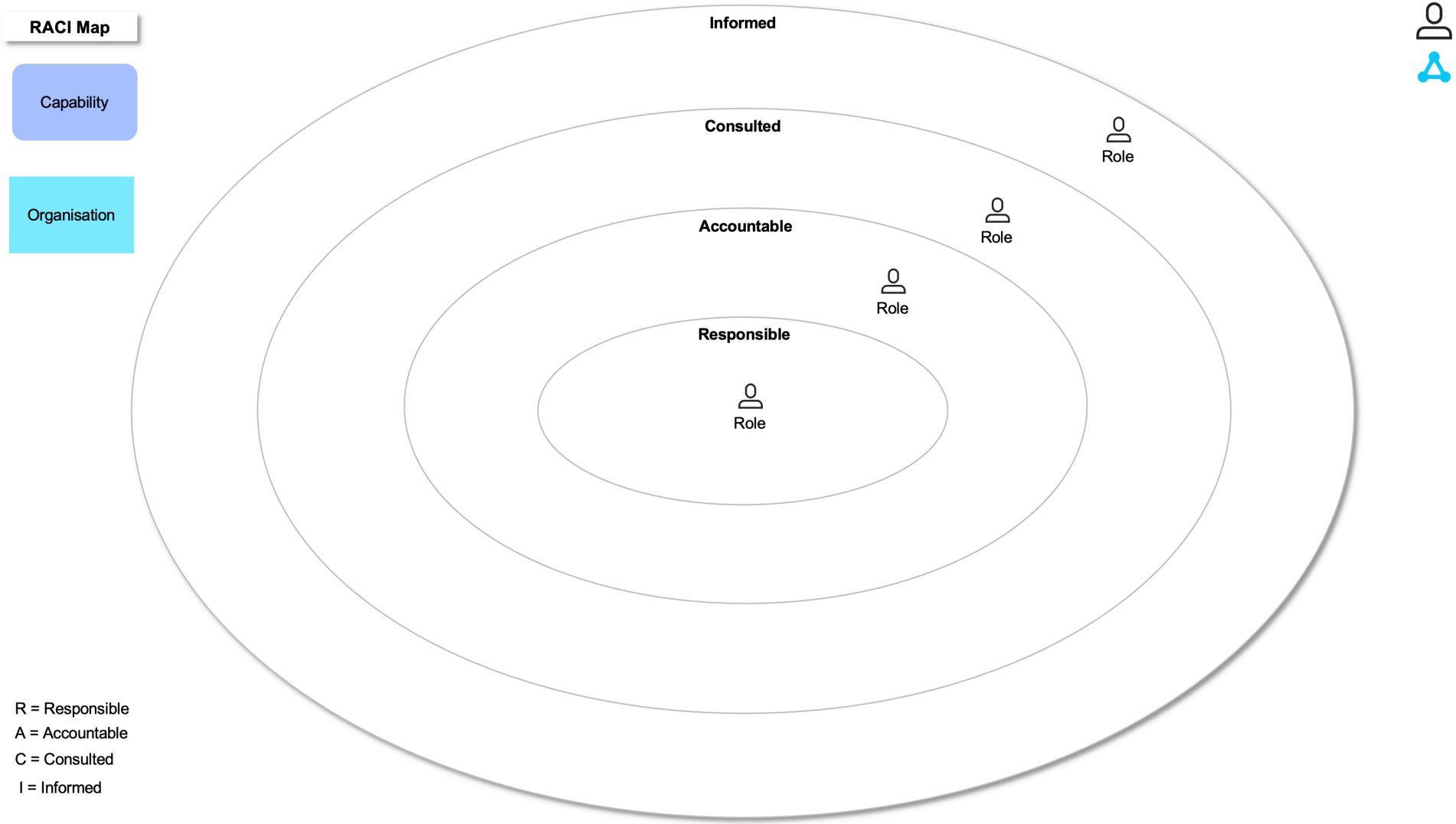


Figure 569: RACI Map.

10.2.33 RACI Matrix

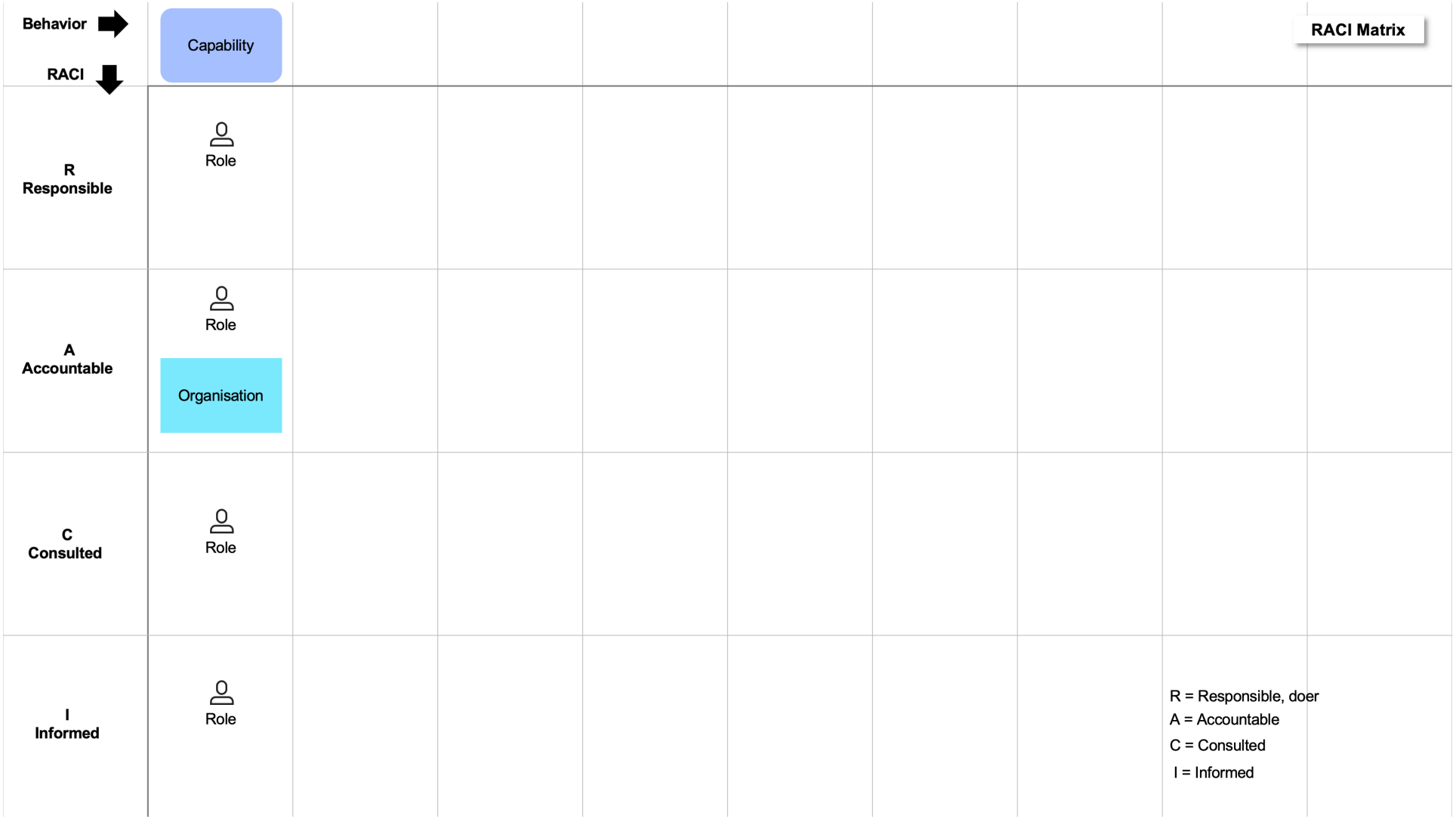


Figure 570: RACI Matrix.

10.2.34 Customer Value and Business Value Analysis

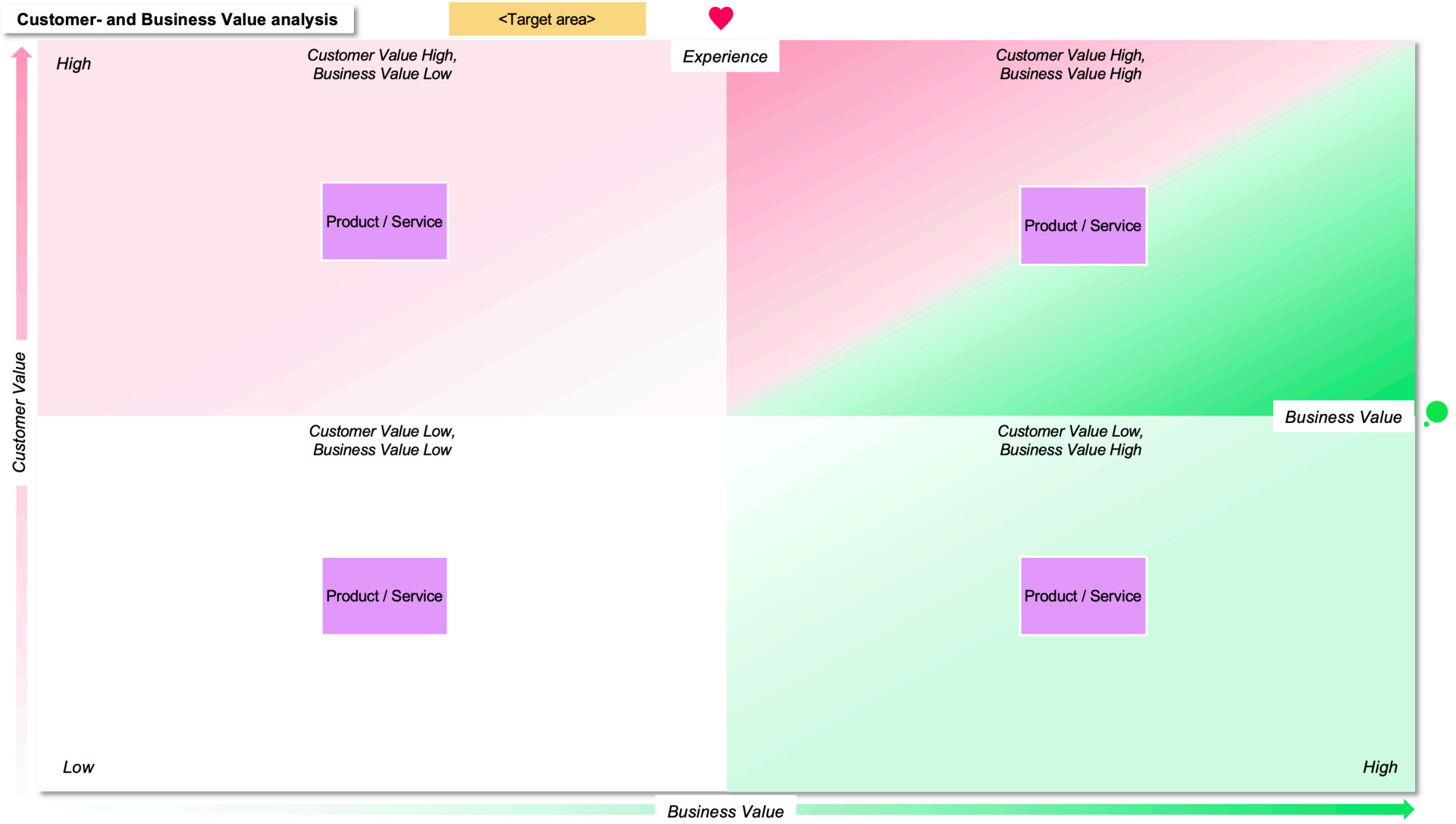


Figure 571: Customer Value and Business Value Analysis.

10.2.35 Boston Matrix

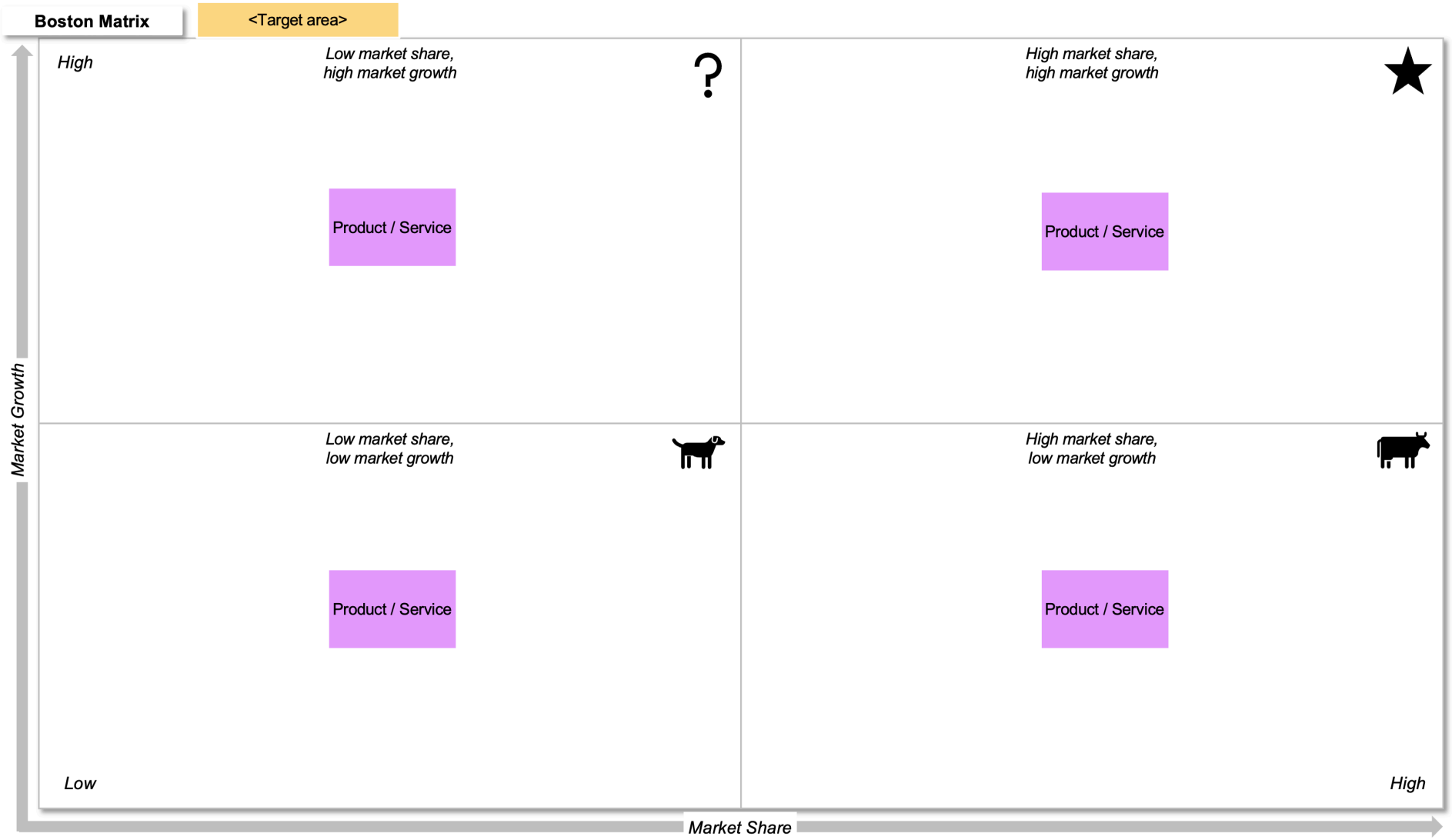


Figure 572: Boston Matrix.

10.2.36 Risk Identification & Assessment

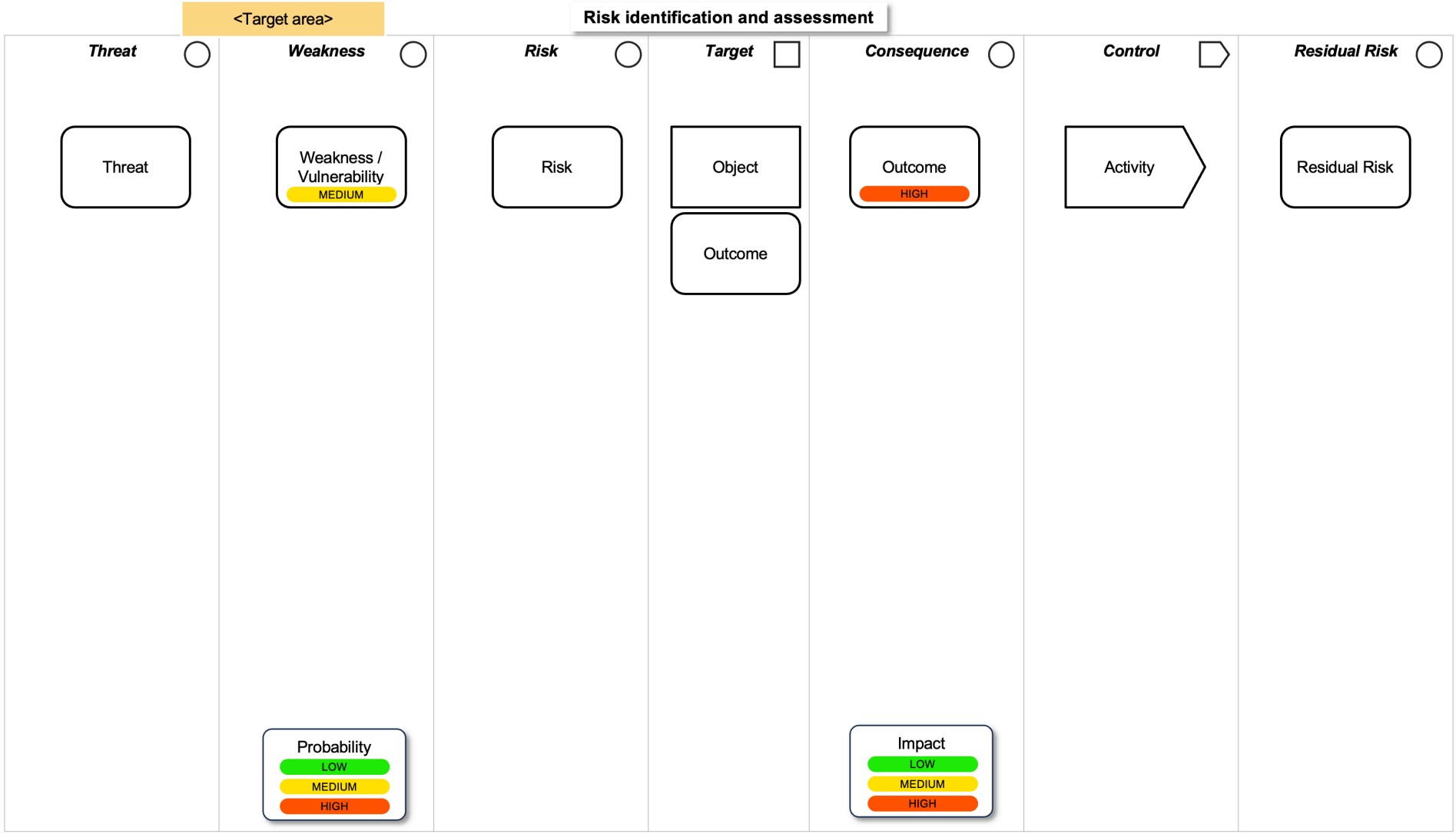


Figure 573: Risk Identification & Assessment.

10.2.37 Risk Analysis

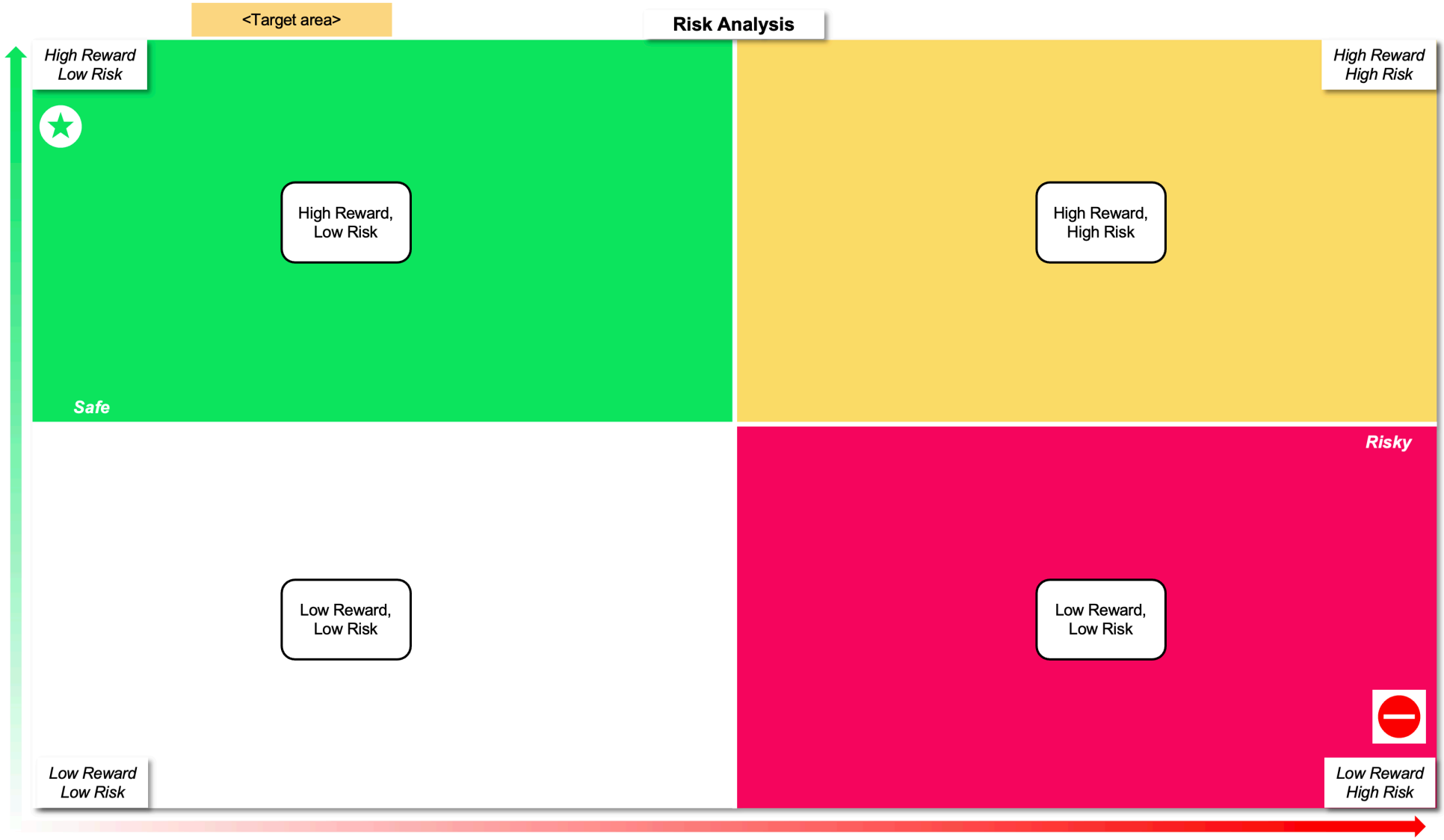


Figure 574: Risk Analysis.

10.2.38 Trends

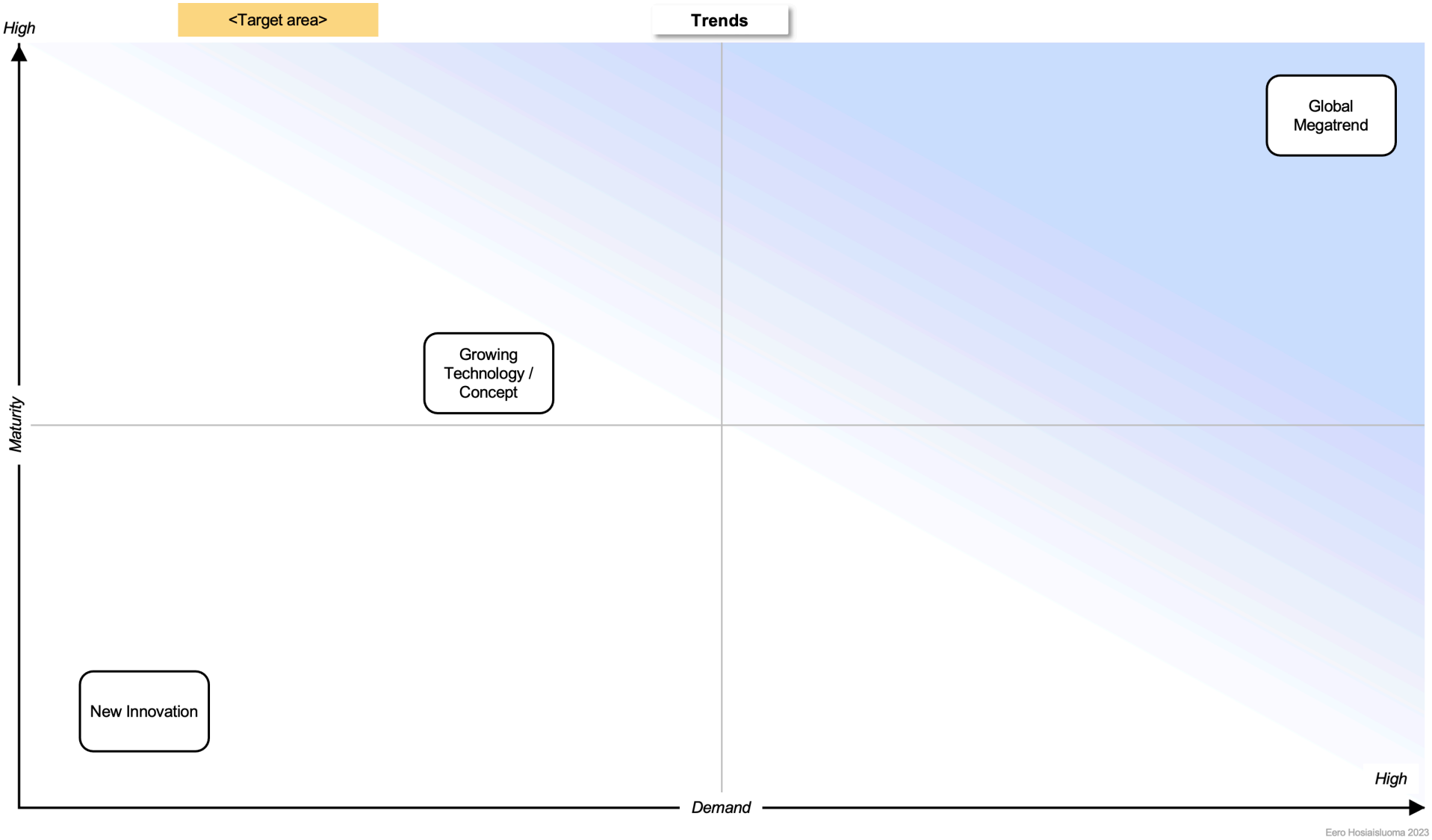


Figure 575: Trends.

10.2.39 Phenomenon Assessment

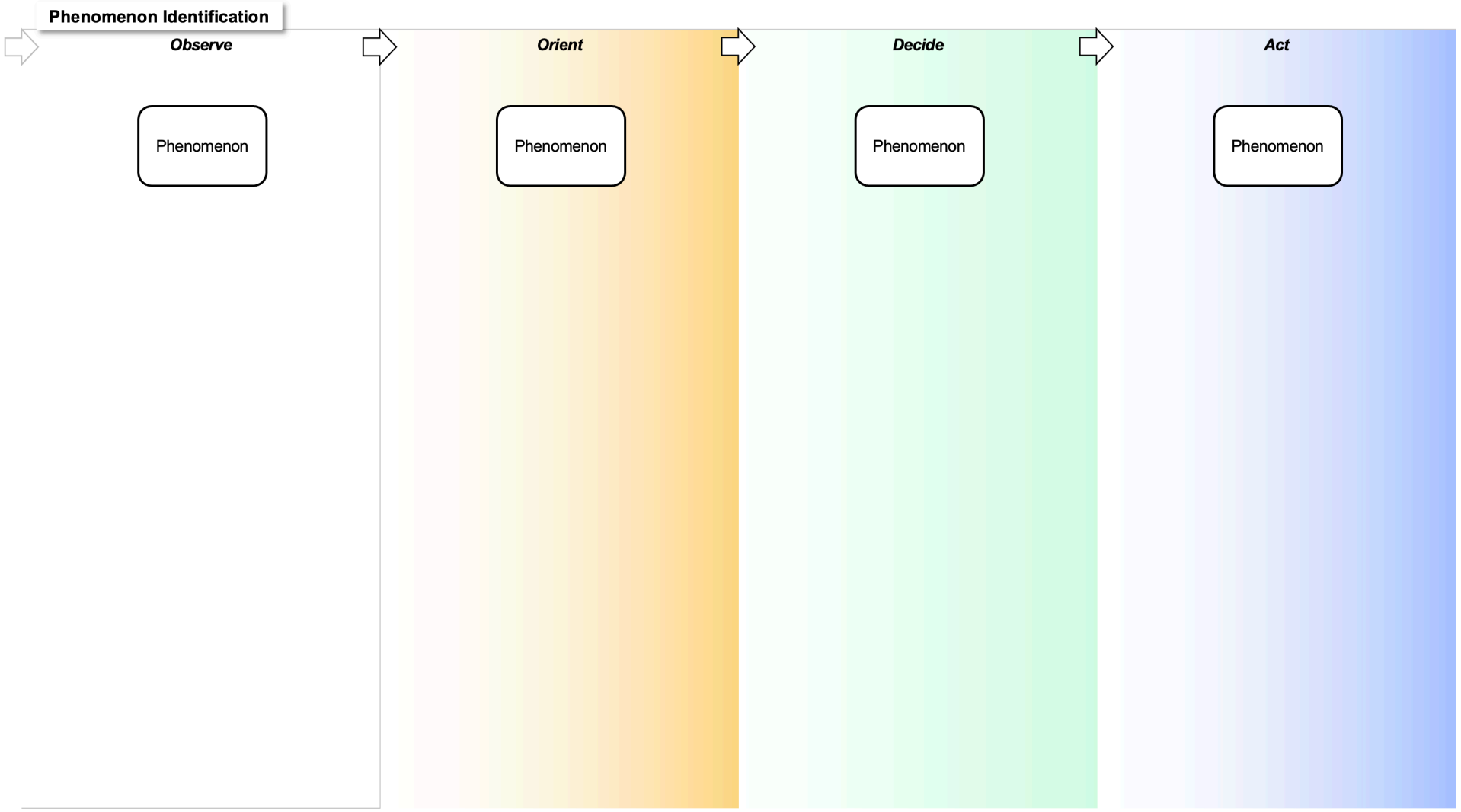


Figure 576: Phenomenon Assessment.



Figure 577: Phenomenon Assessment.

10.2.40 GQM (Goal, Question, Metric) analysis

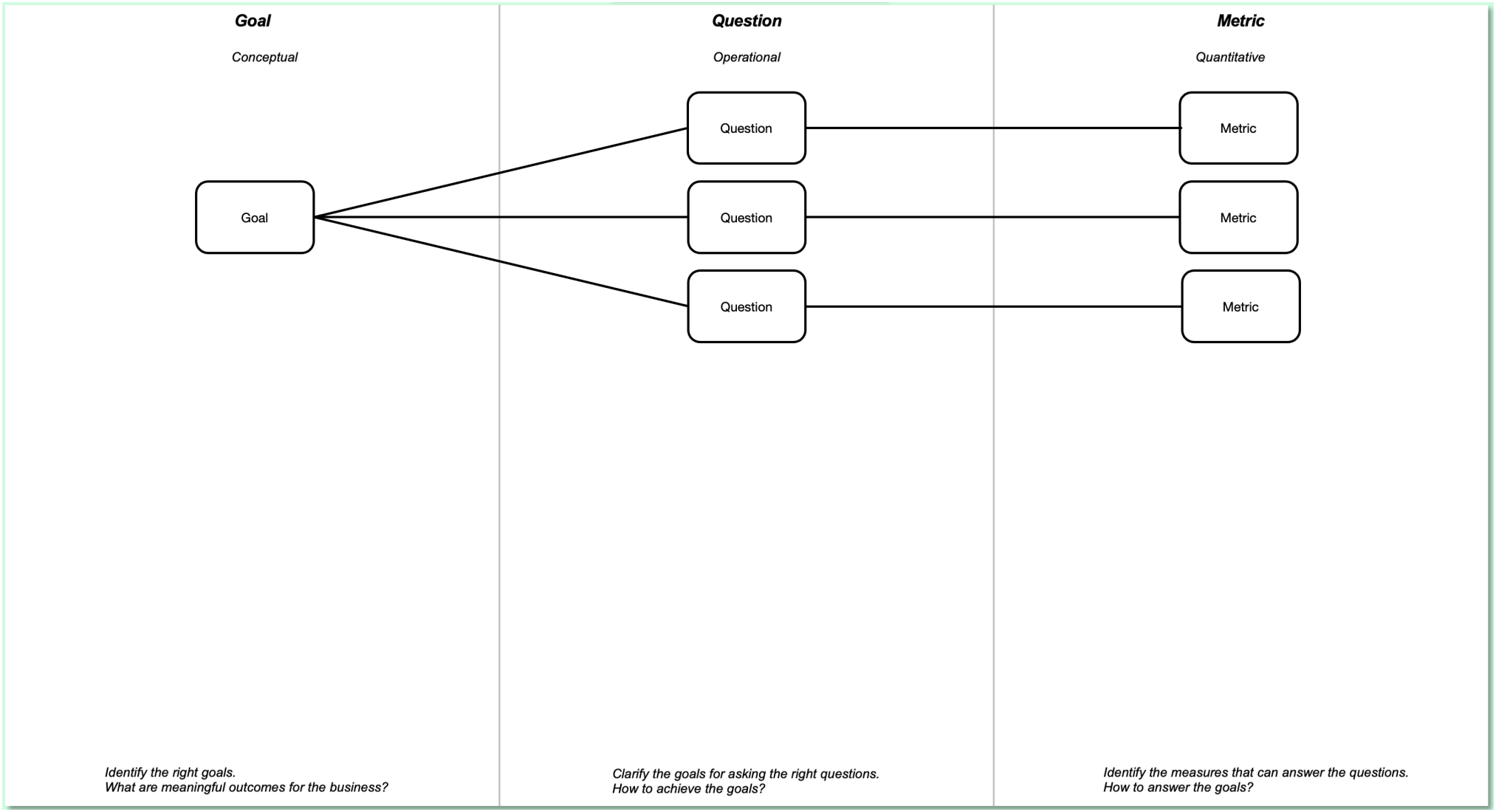


Figure 578: GQM - Goal, Question, Metric.

10.3 Ideation-, Innovation- and Concept Design Templates

10.3.1 Enterprise Design template

This is all-purpose ideation, innovation and sketching template for identifying elements of holistic approach.

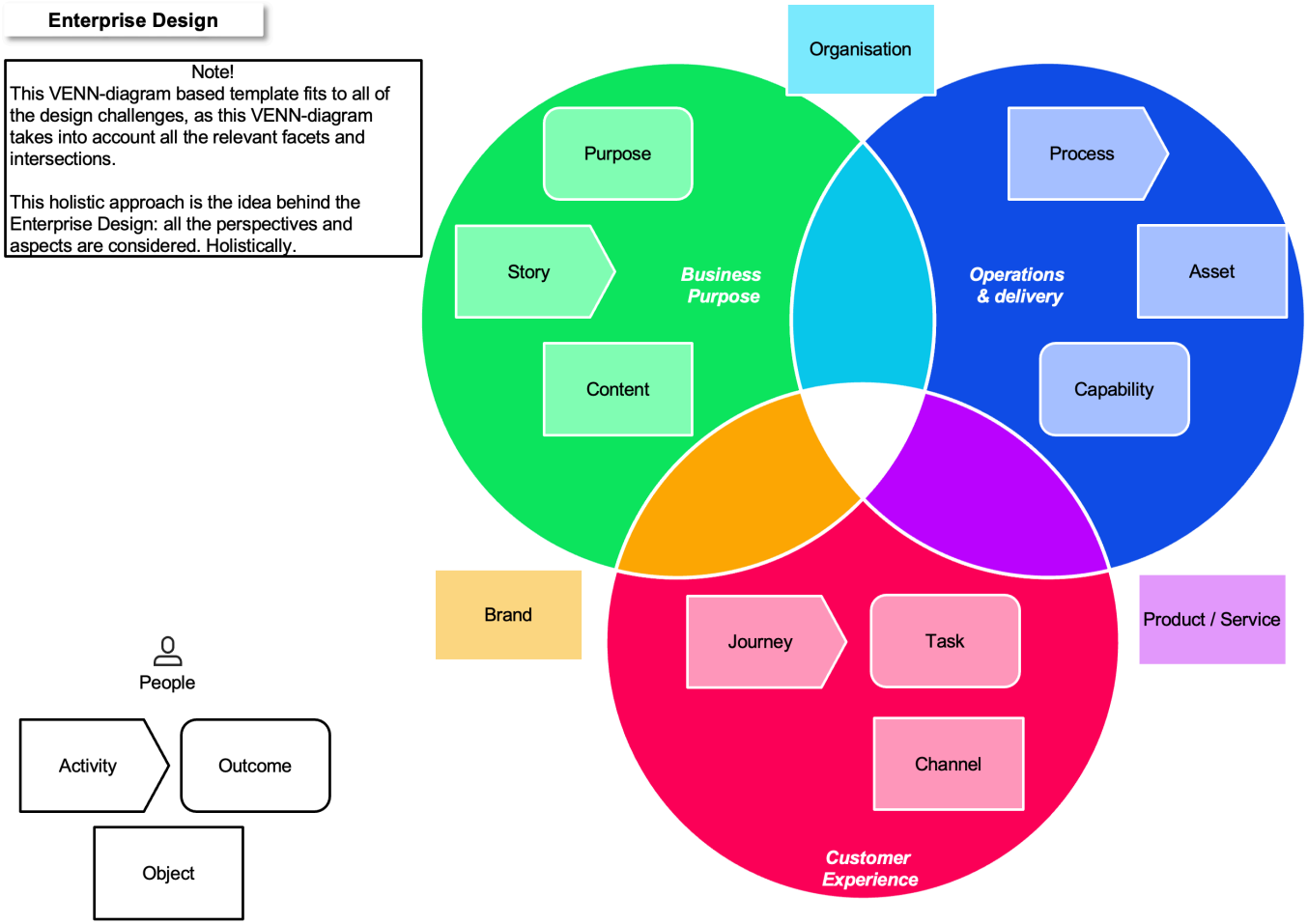


Figure 579: Enterprise Design template.

10.3.2 Problem Framing

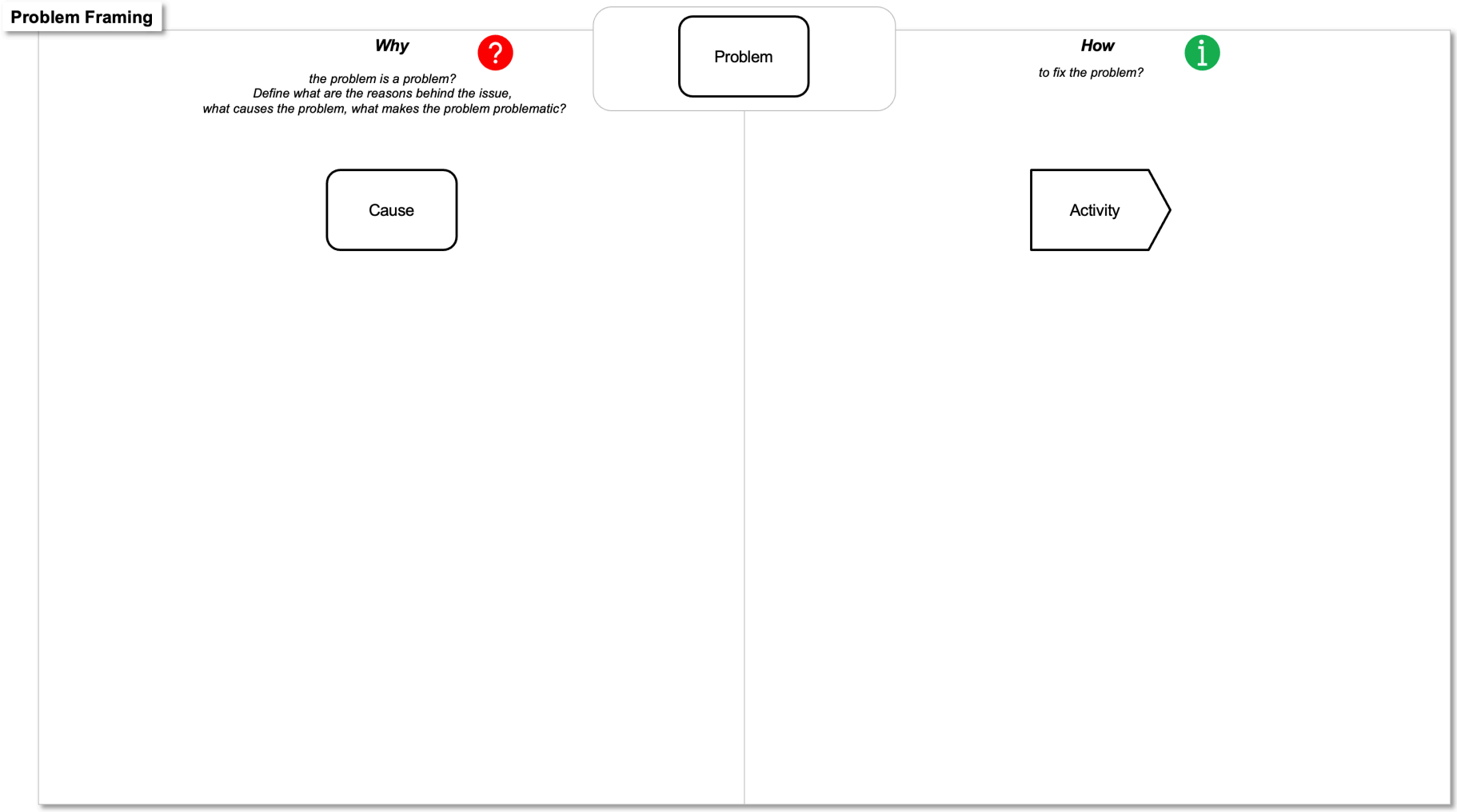


Figure 580: Problem Framing.

10.3.3 Problem Diagnosis



Figure 581: Problem Diagnosis.

10.3.4 Problem Statement



Figure 582: Problem Statement.

10.3.5 Idea Assessment

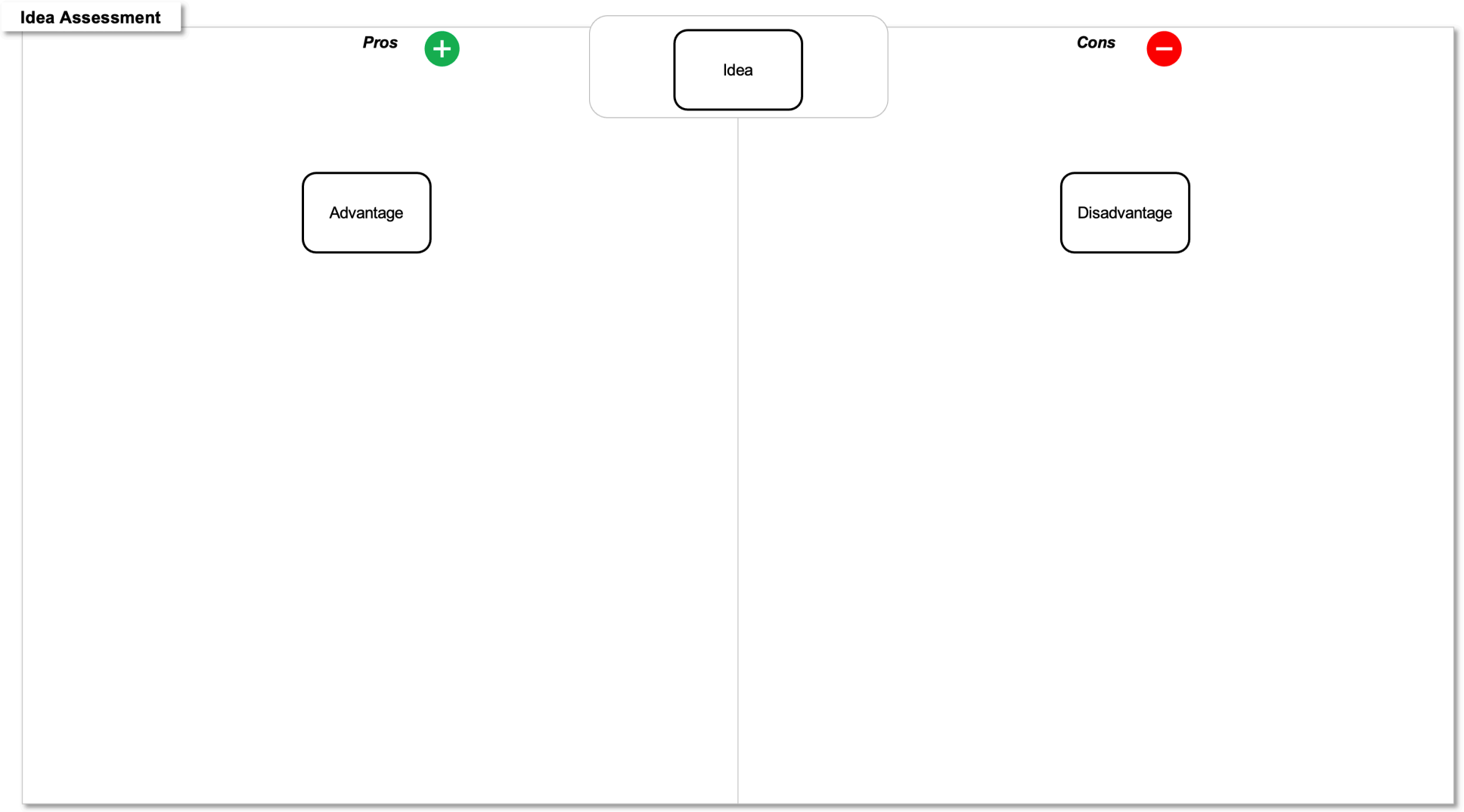


Figure 583: Idea Canvas.

10.3.6 Idea Matrix

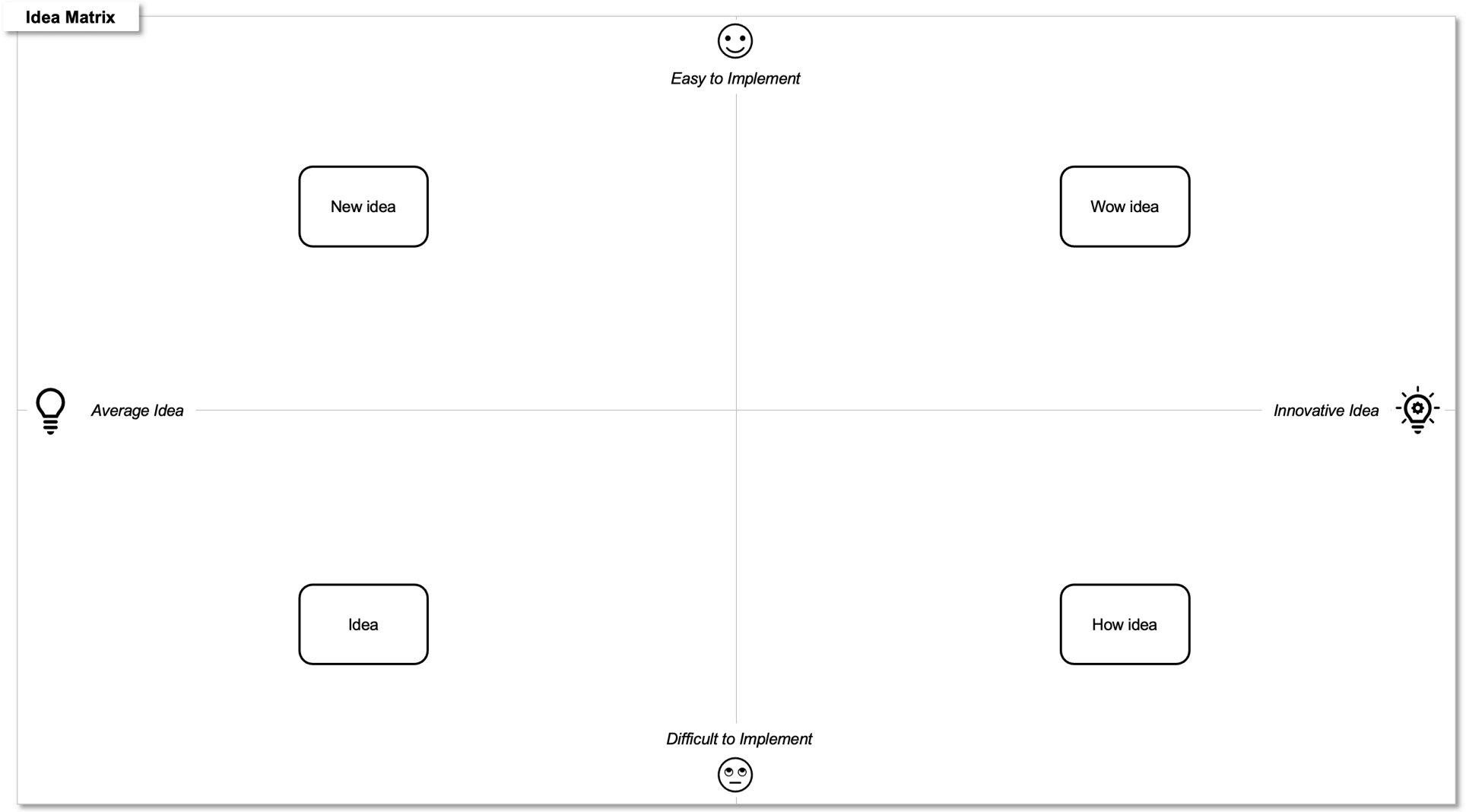


Figure 584: Idea Matrix.

10.3.7 Idea Funnel

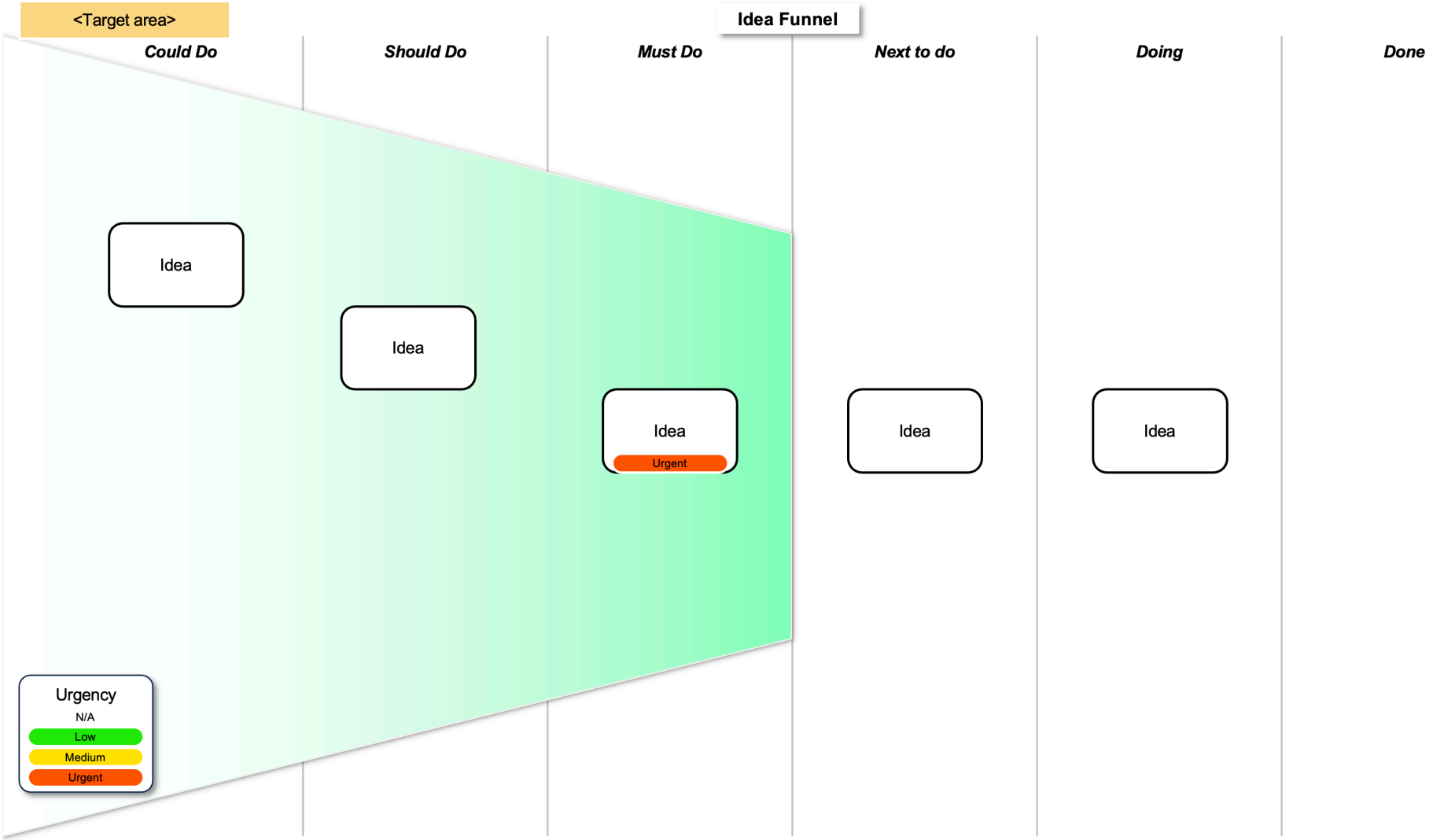


Figure 585: Idea Funnel.

10.3.8 Demand

On the left side: customer needs and causes can be defined: On the right side: solution and benefits.

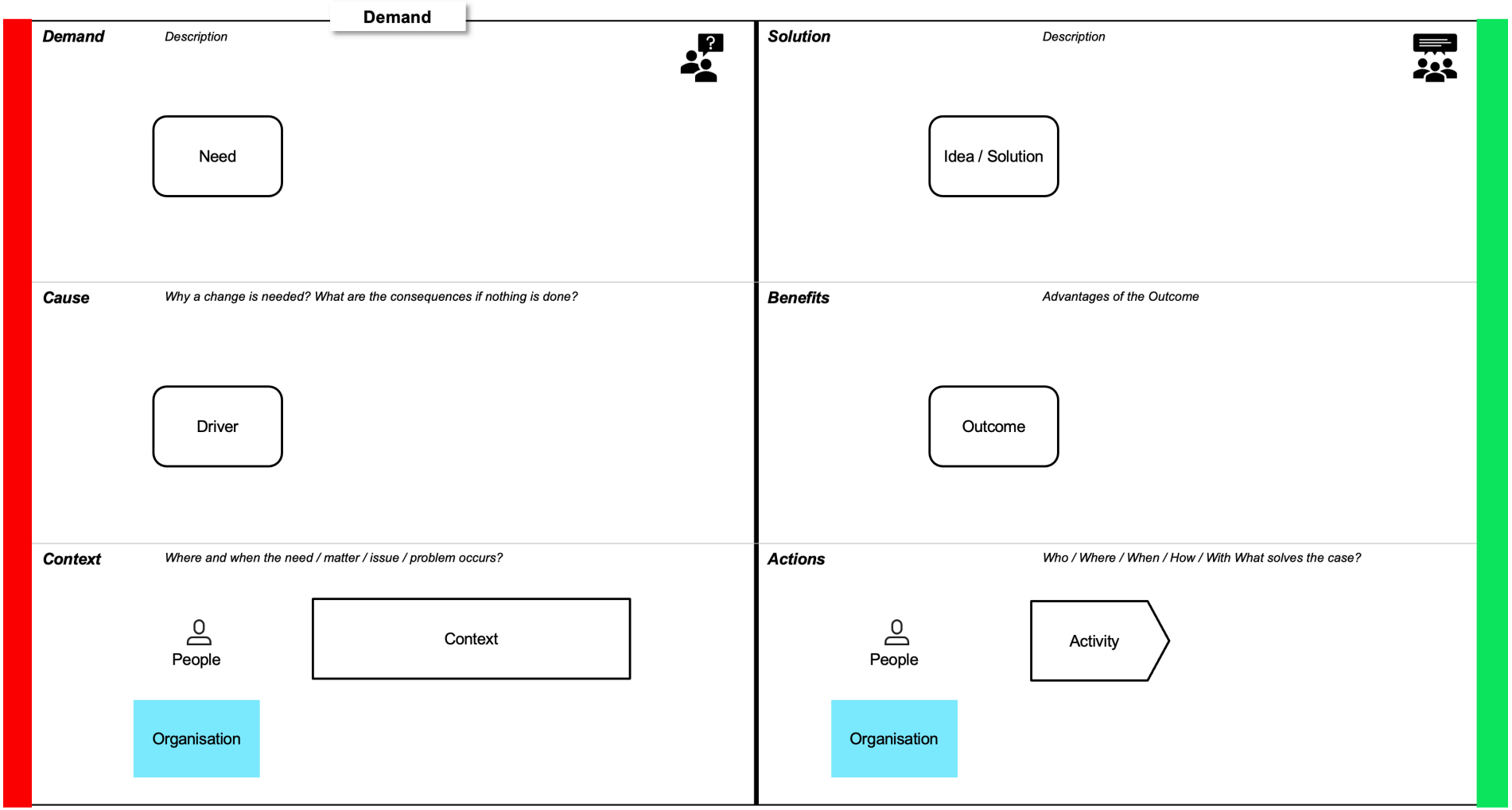


Figure 586: Demand.

10.3.9 Demand Analysis

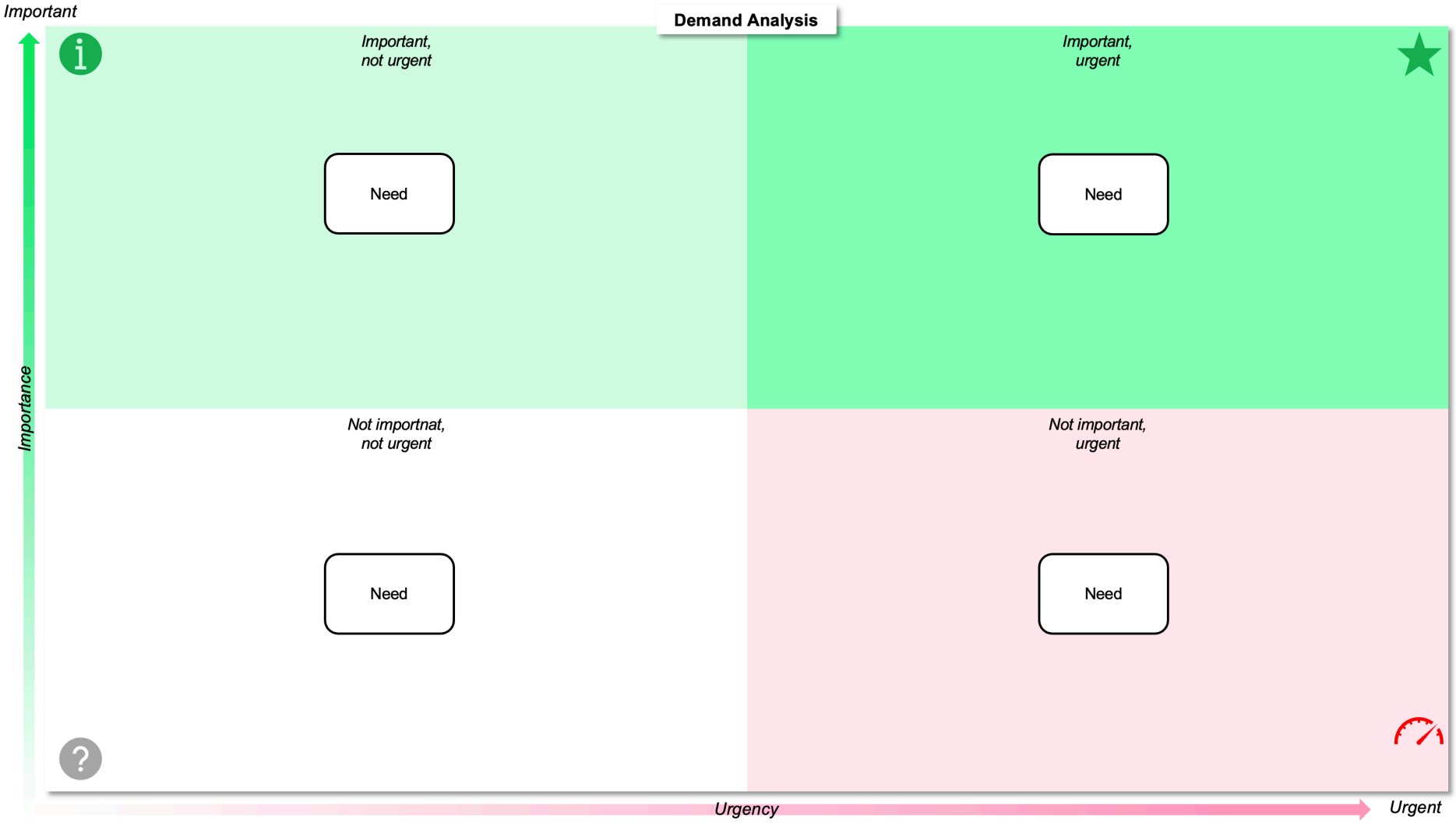


Figure 587: Demand Analysis.

10.3.10 Business Design Canvas

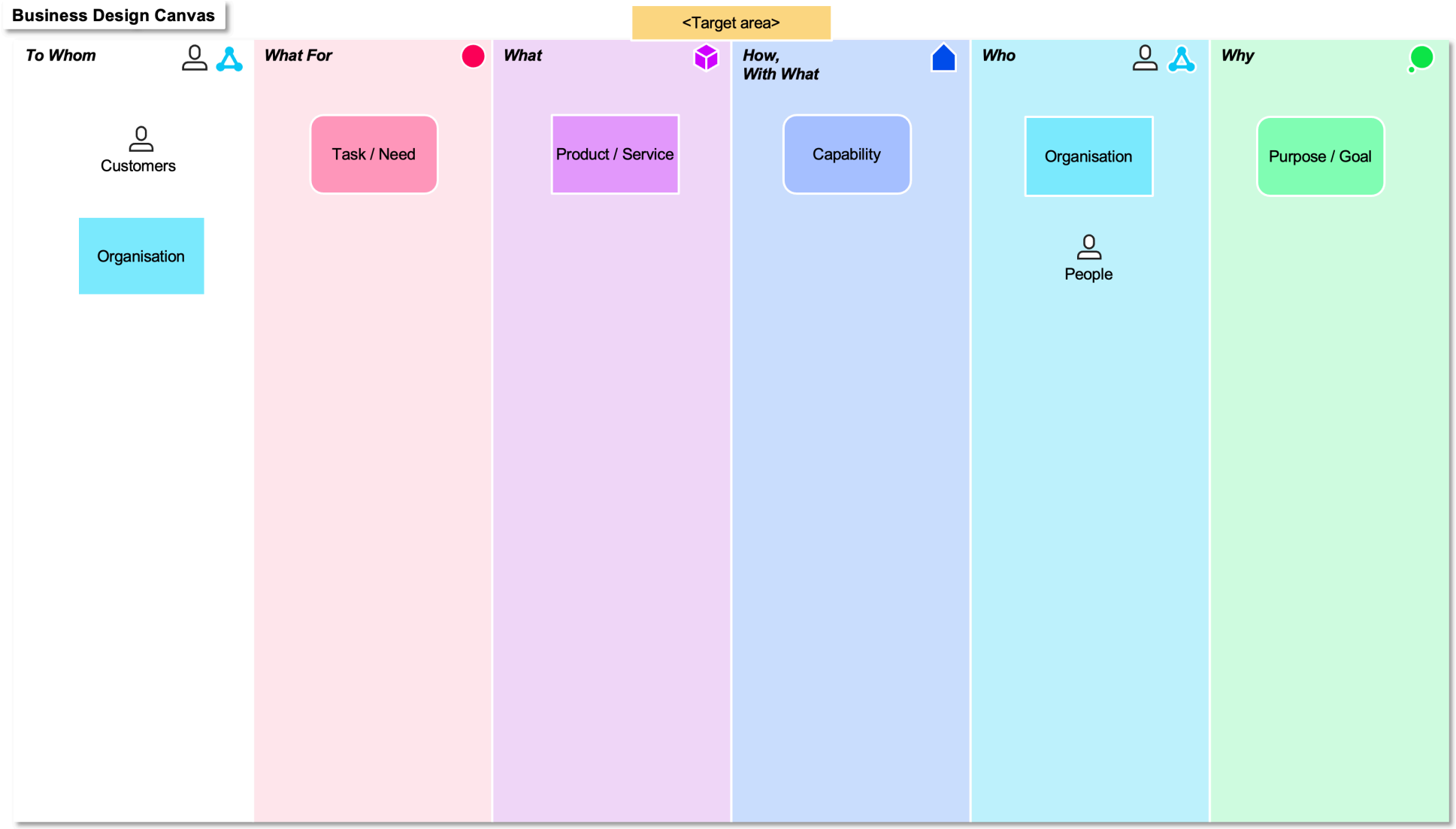


Figure 588: Design Canvas.

10.3.11 Design

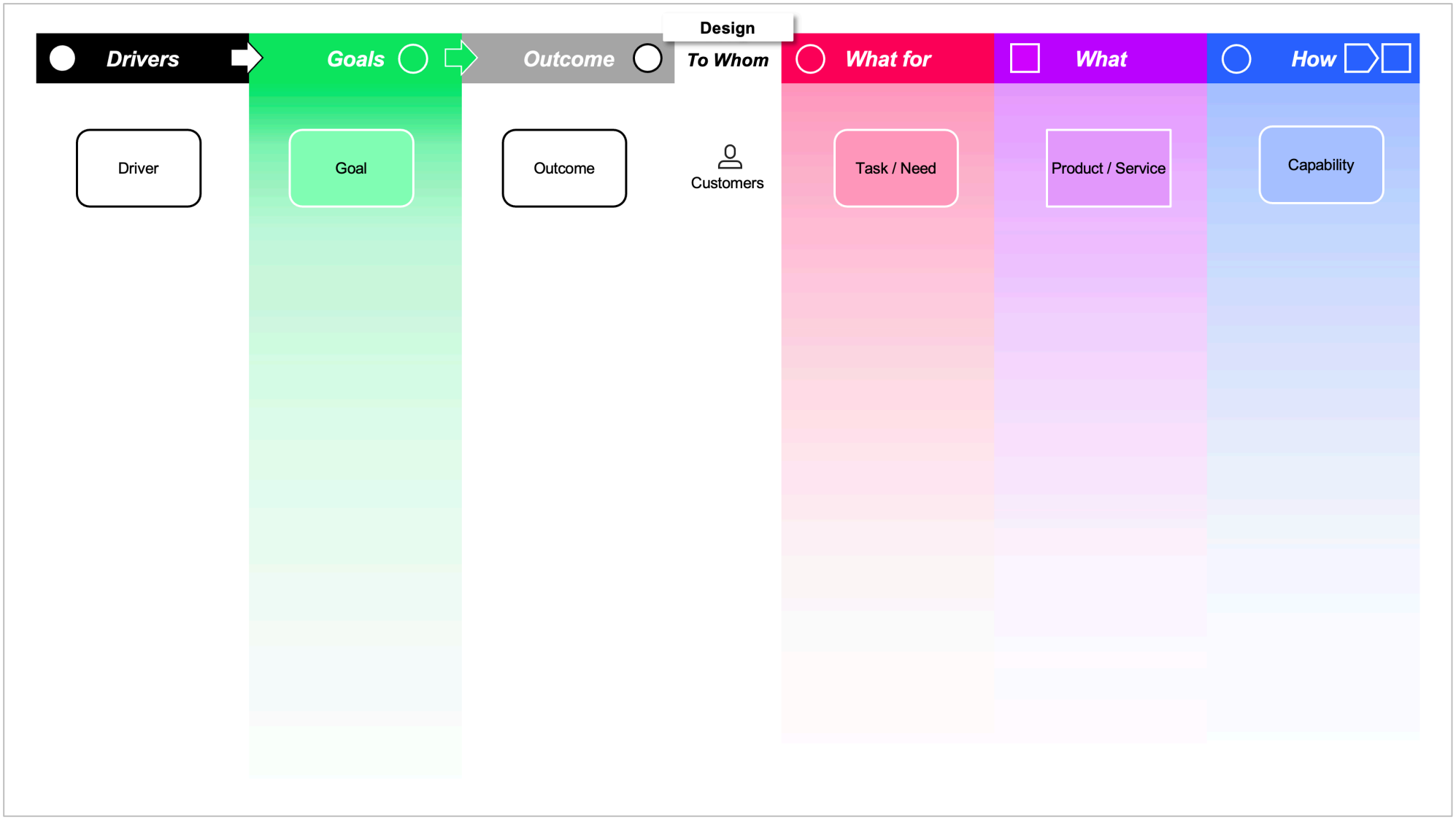


Figure 589: Design template.

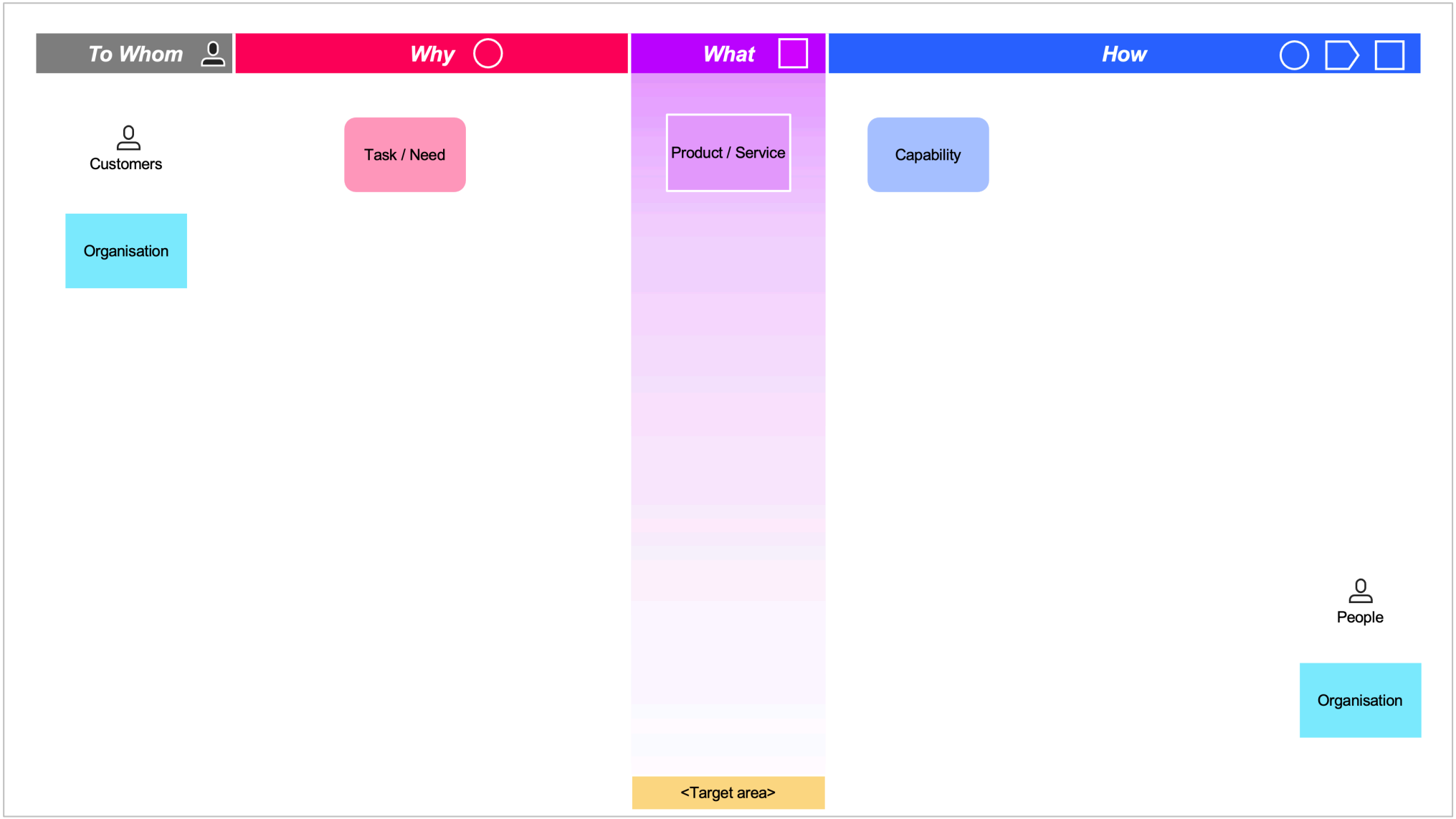


Figure 590: Business Design.

10.3.12 Eisenhower Matrix

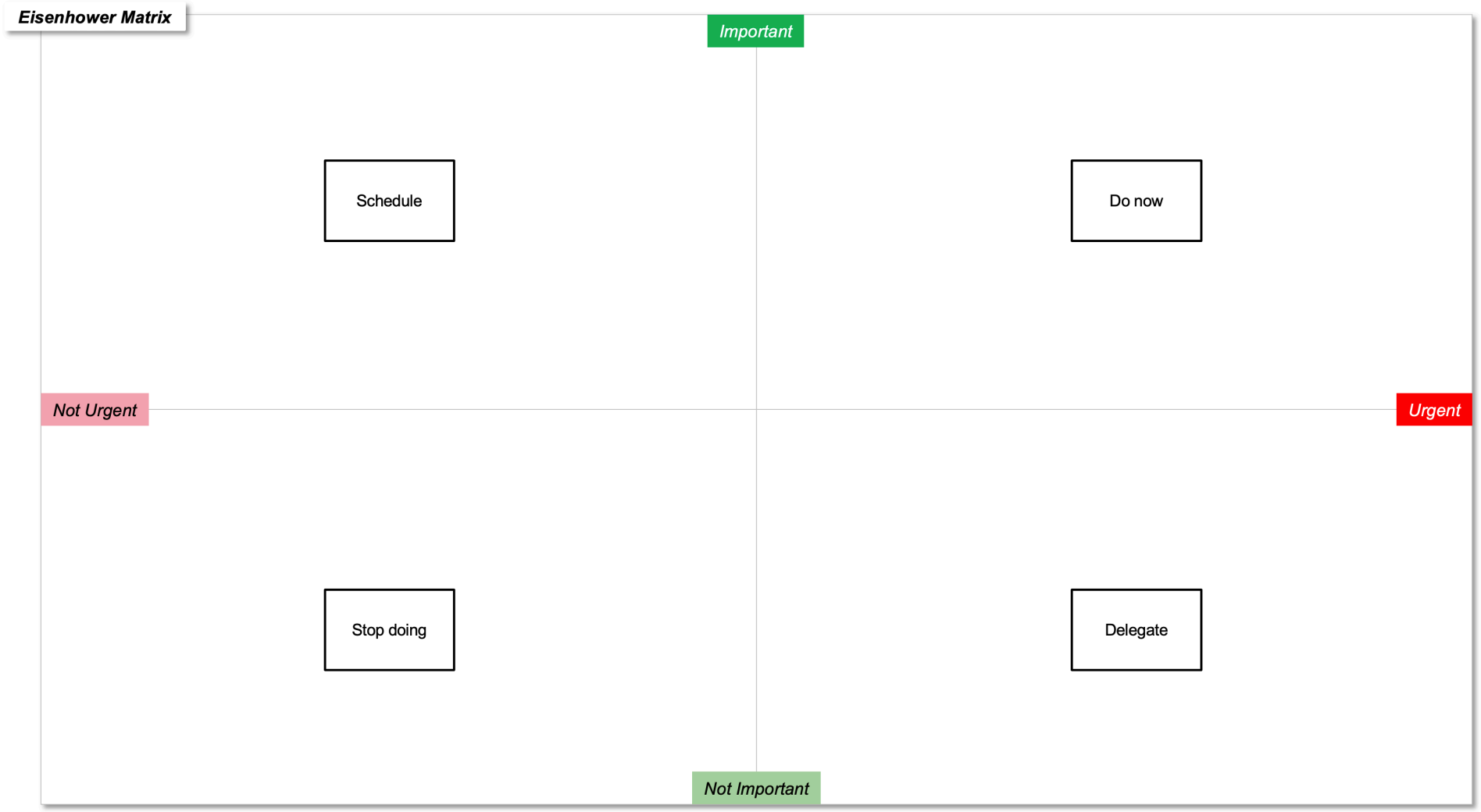


Figure 591: Eisenhower Matrix.

10.3.13 Prioritisation

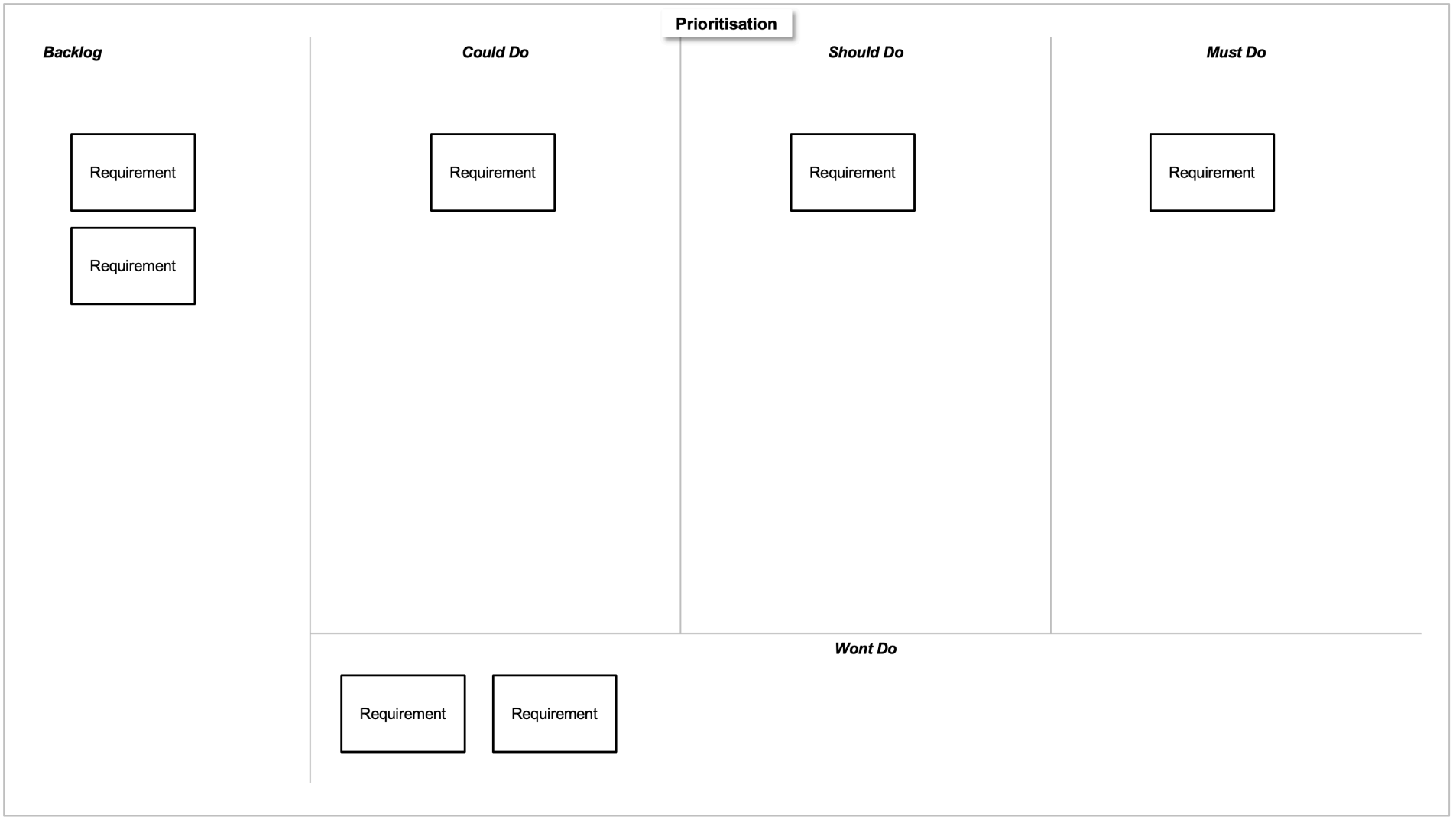


Figure 592: Prioritisation (of requirements. Applied from the *MoSCoW* -method, link).

10.3.14 Business Model Canvas (BMC)

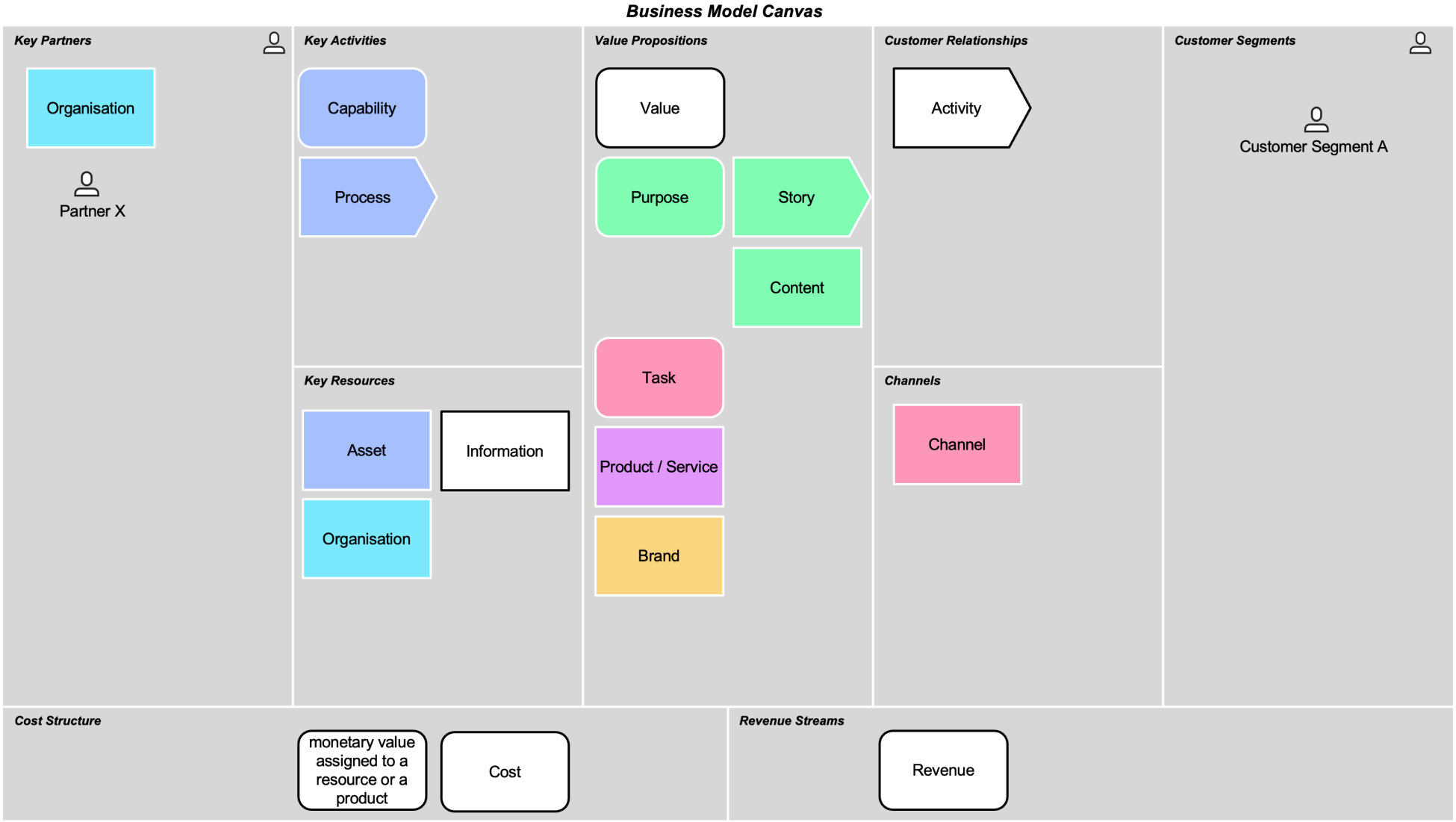


Figure 593: Business Model Canvas (BMC).

10.3.15 Business Design - What-How-Why

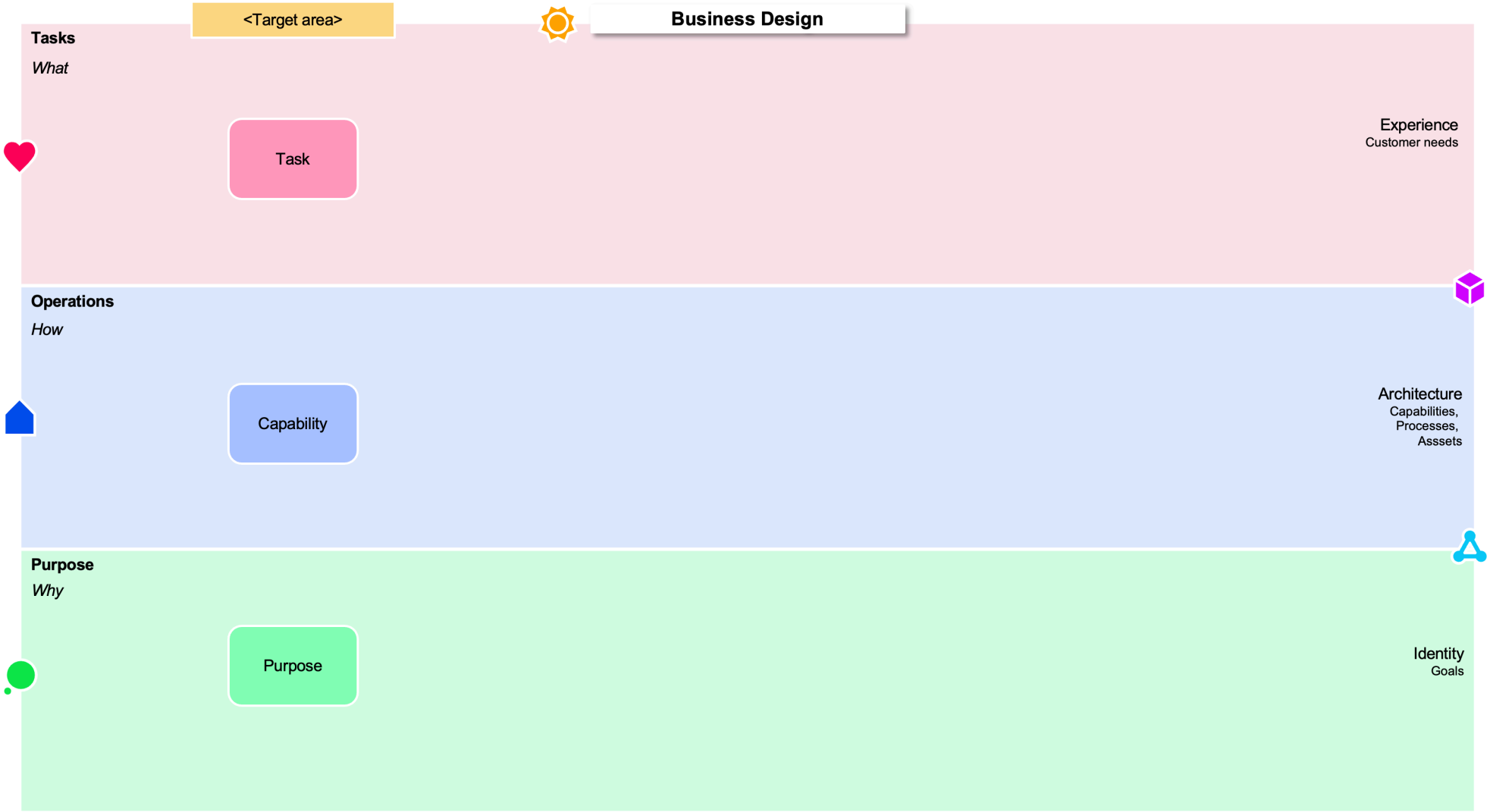


Figure 594: What-How-Why.

10.3.16 Lean Canvas

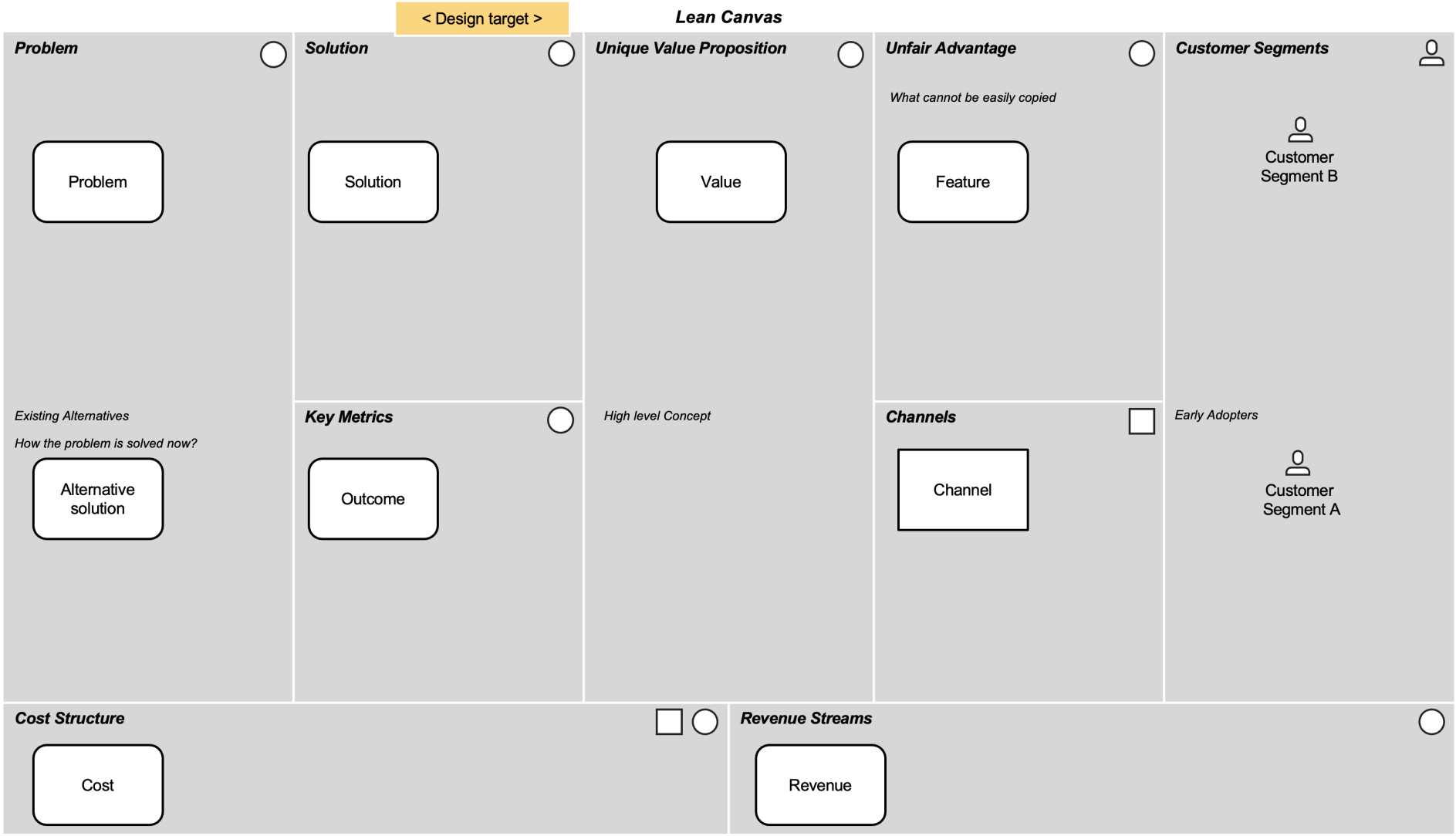


Figure 595: Lean Canvas.

10.3.17 Concept Canvas

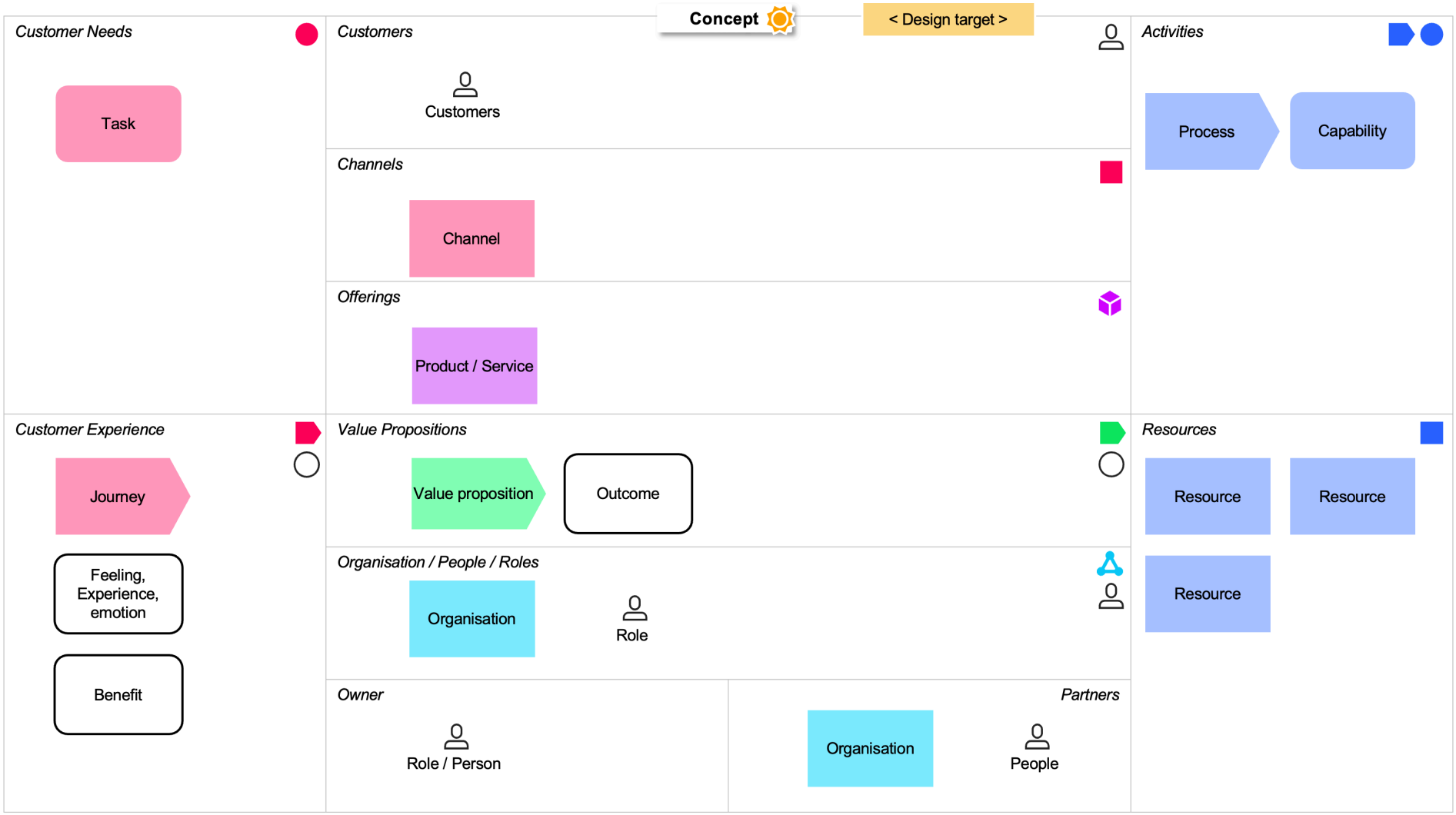


Figure 596: Concept Canvas.

10.3.18 Concept Plan

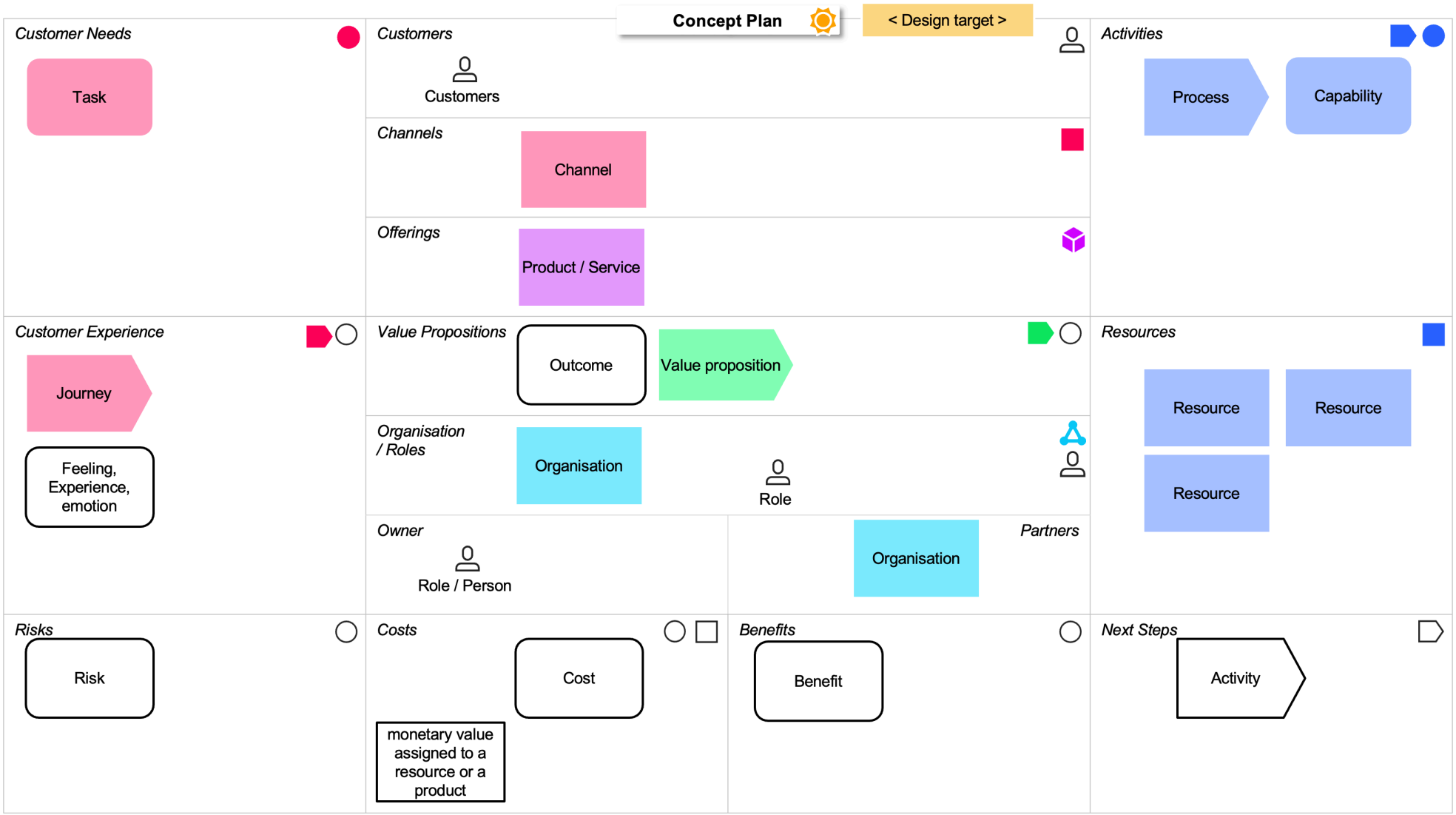


Figure 597: Concept Plan.

10.3.19 Minimum Viable Product / Service (MVP)

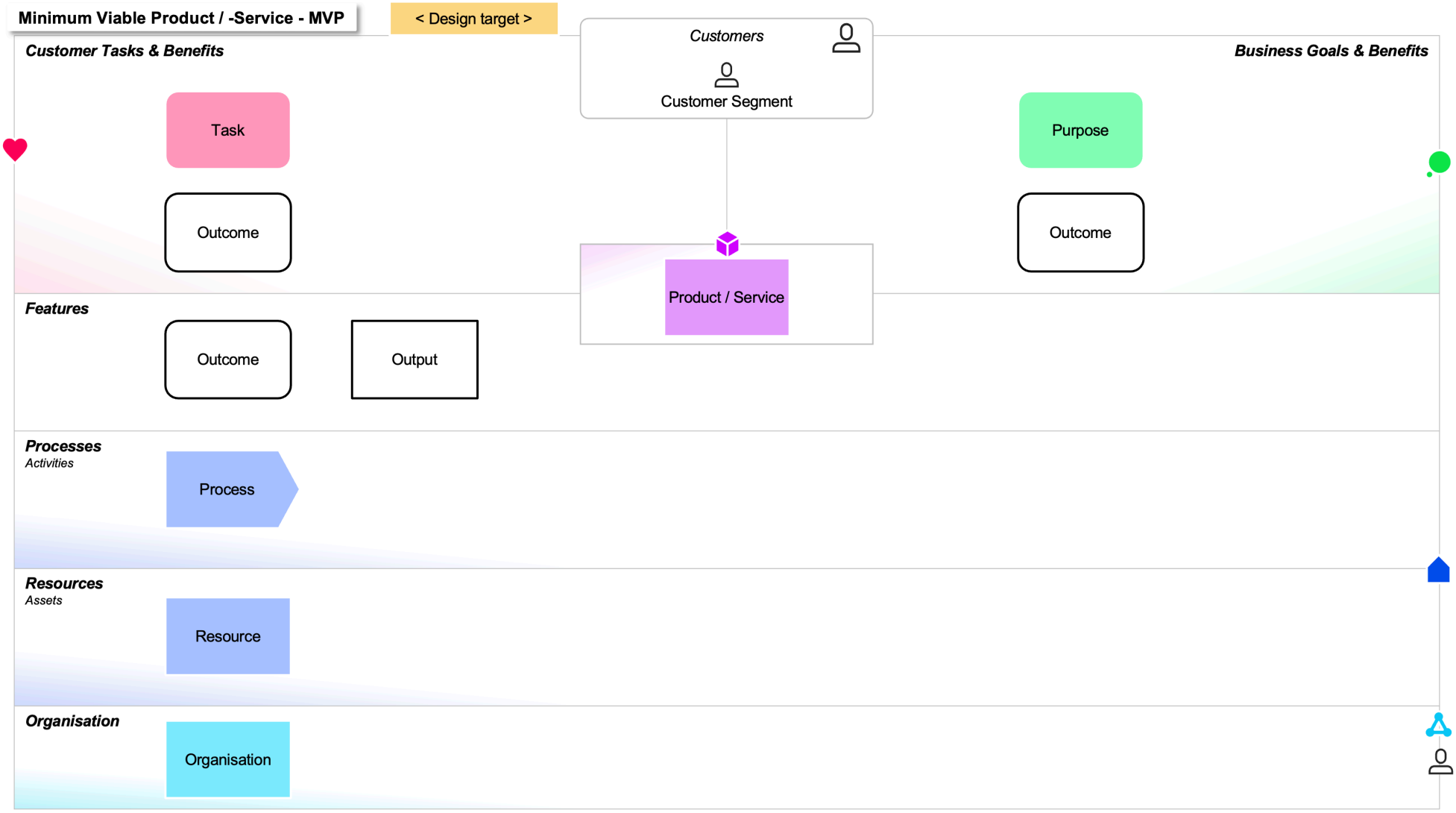
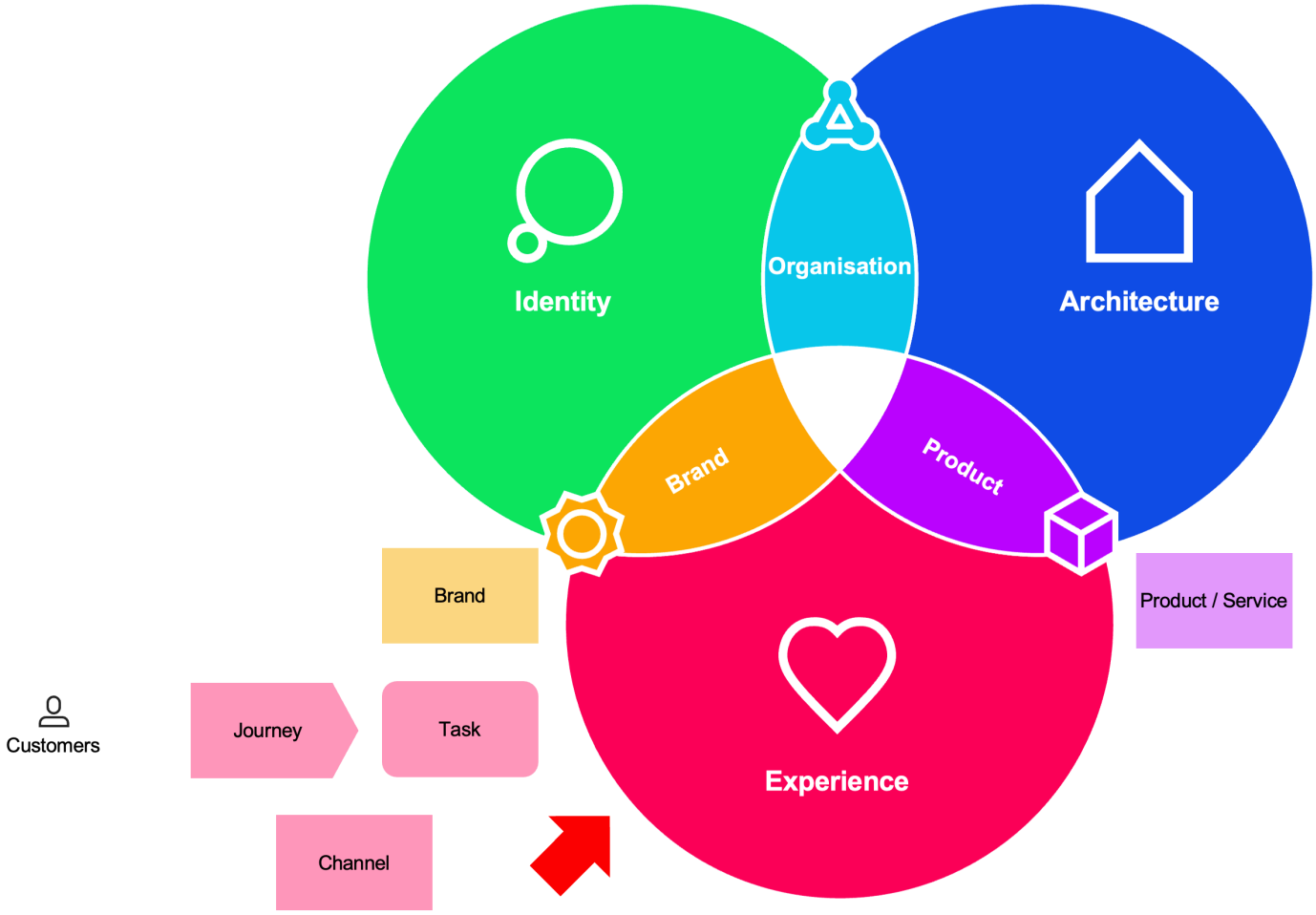


Figure 598: Minimum Viable Product (MVP).

10.4 Customer Experience Templates



10.4.1 Experience Design

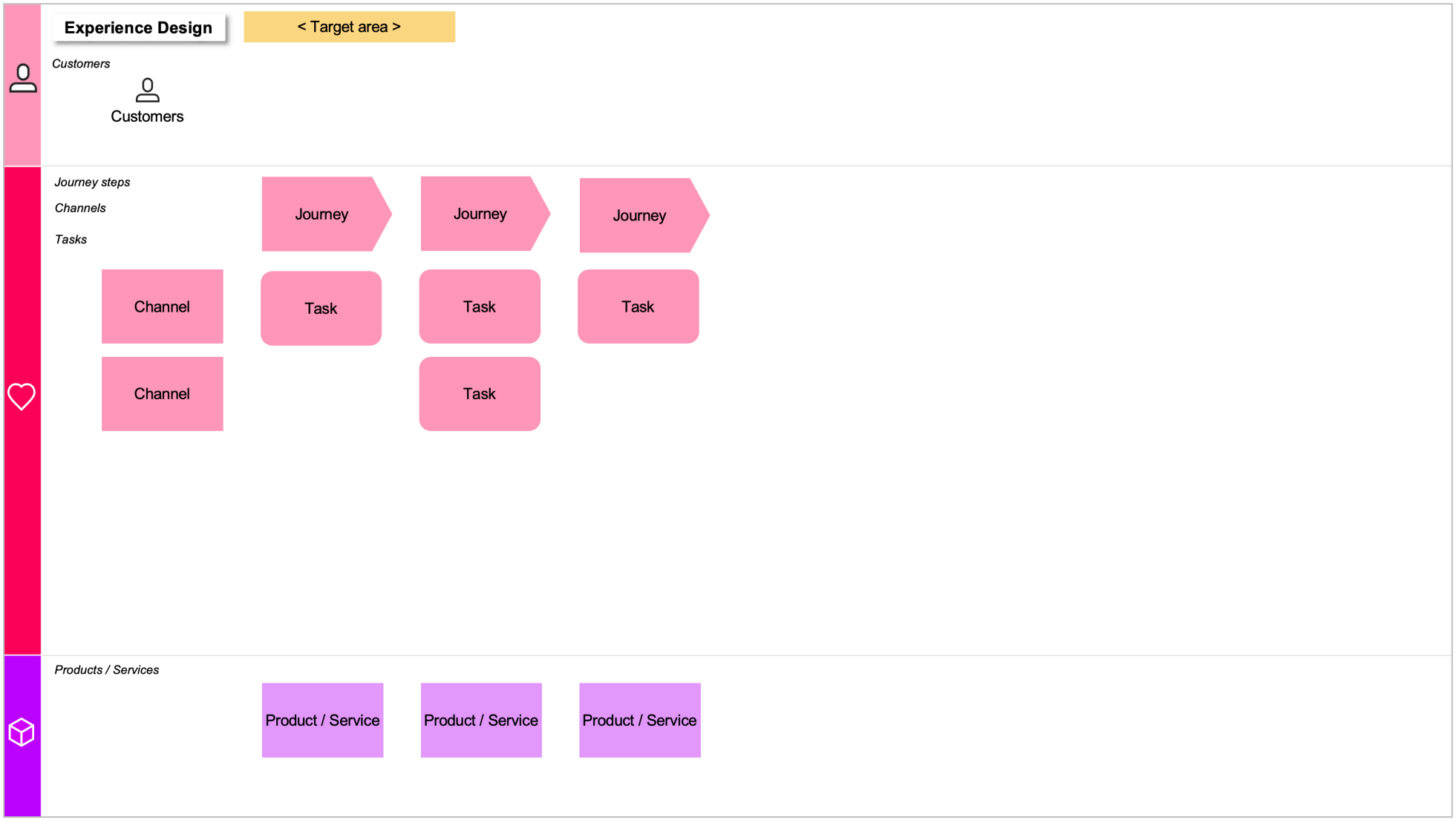


Figure 599: Experience Design.

10.4.2 Service Blueprint

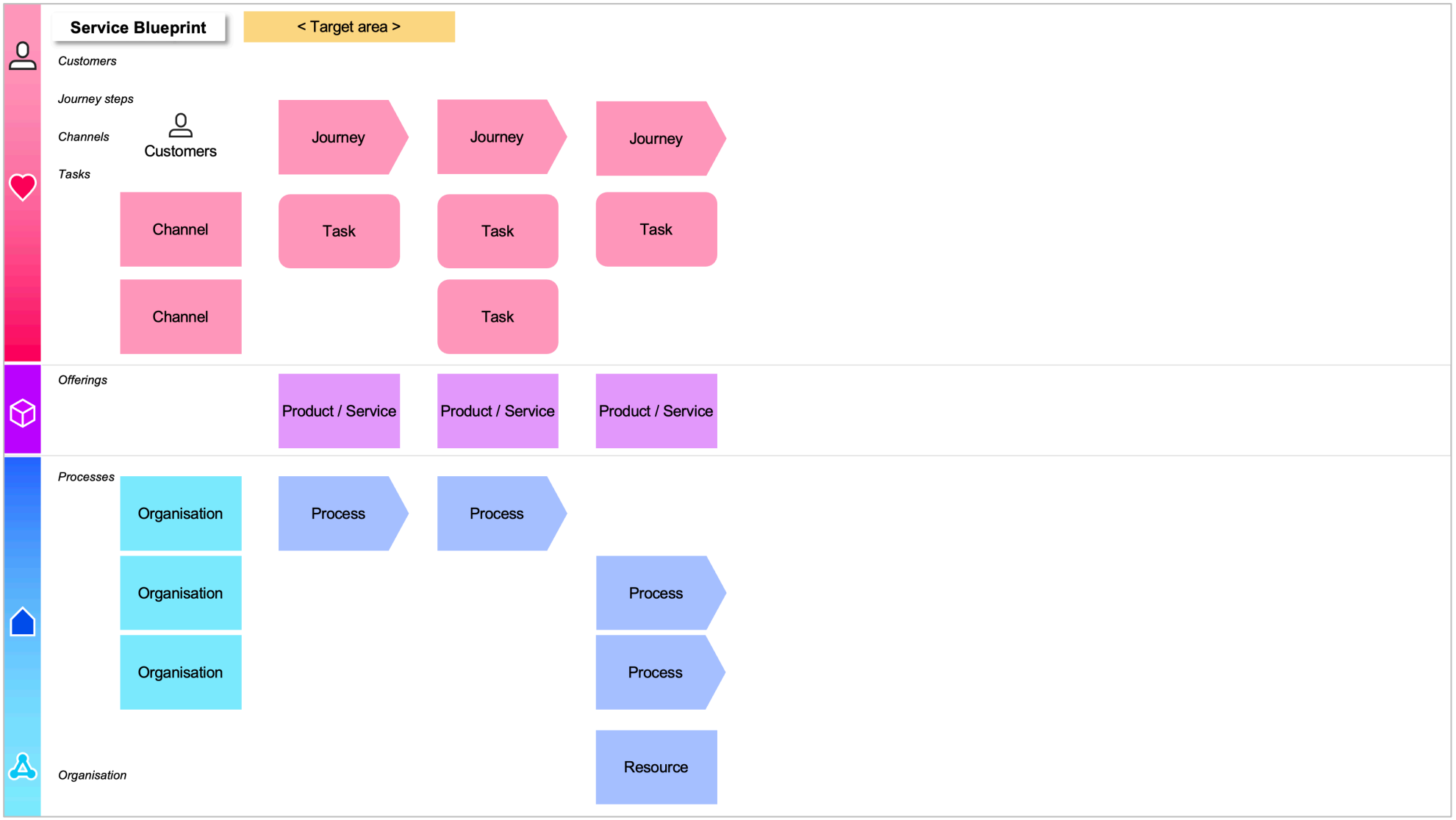


Figure 600: Service Blueprint.

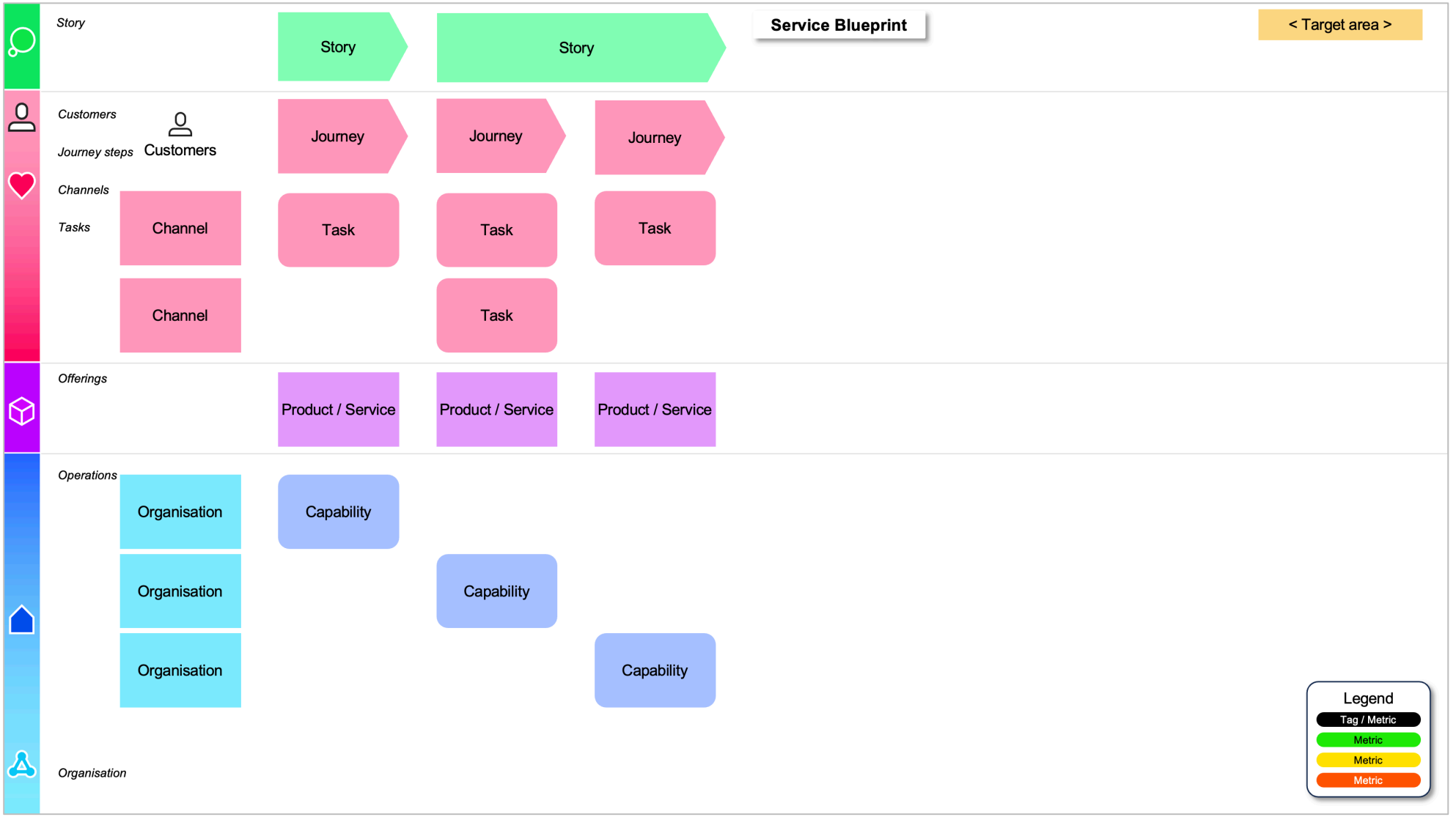


Figure 601: Service Blueprint.

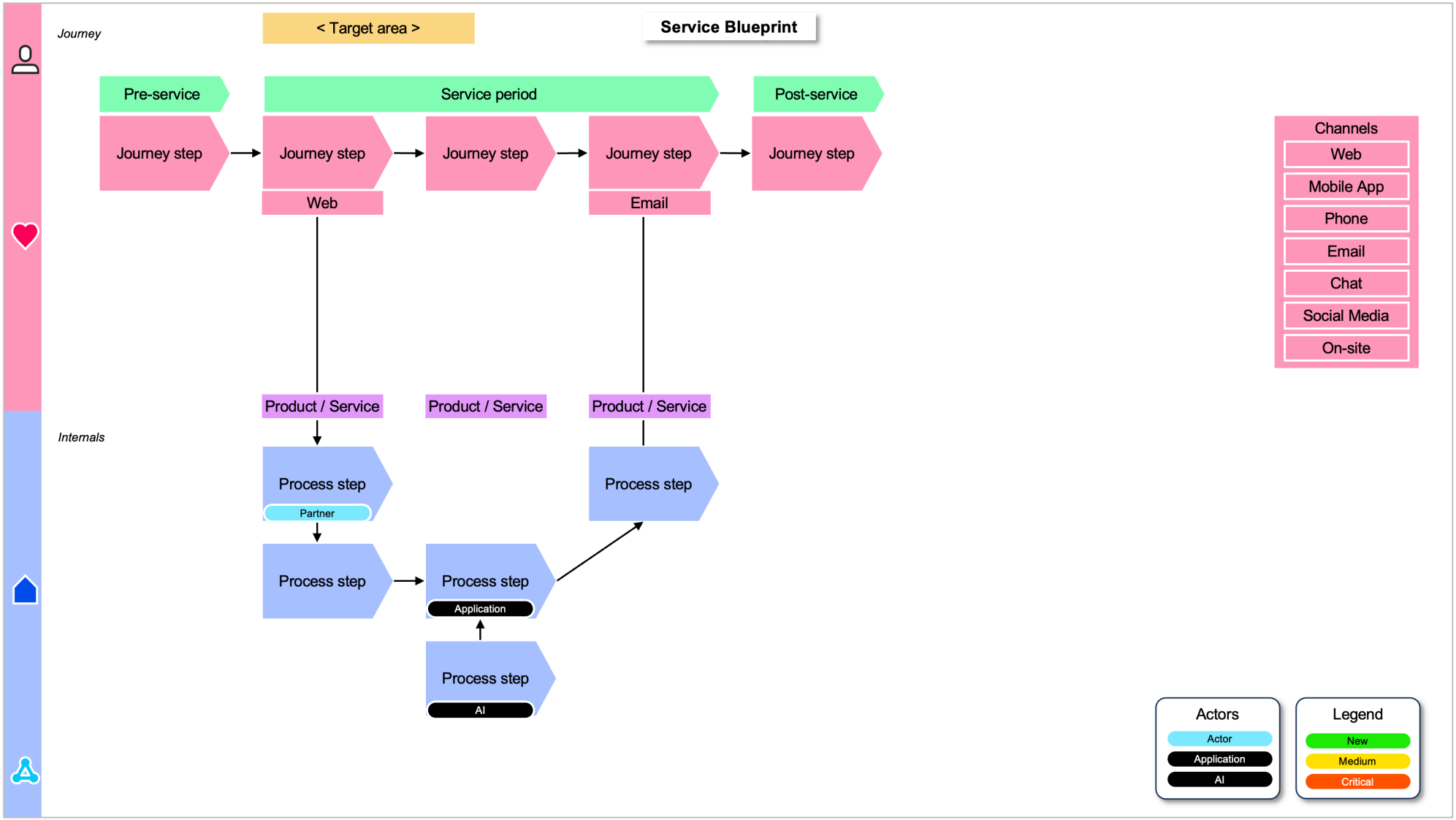


Figure 602: Service Blueprint.

10.4.3 Customer Journey

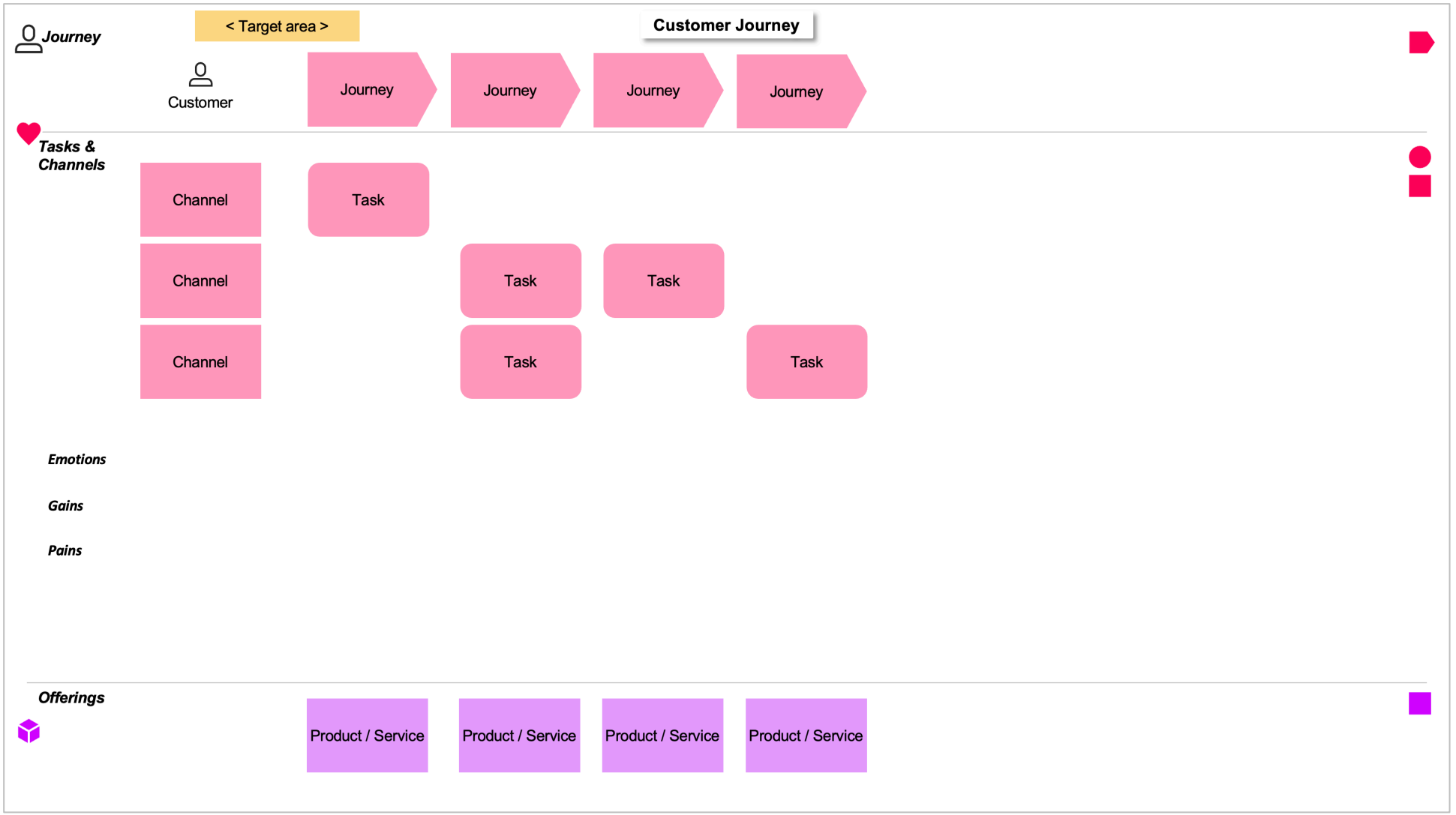


Figure 603: Customer Journey.

See more details from here: link.

10.4.4 Customer Journey Analysis

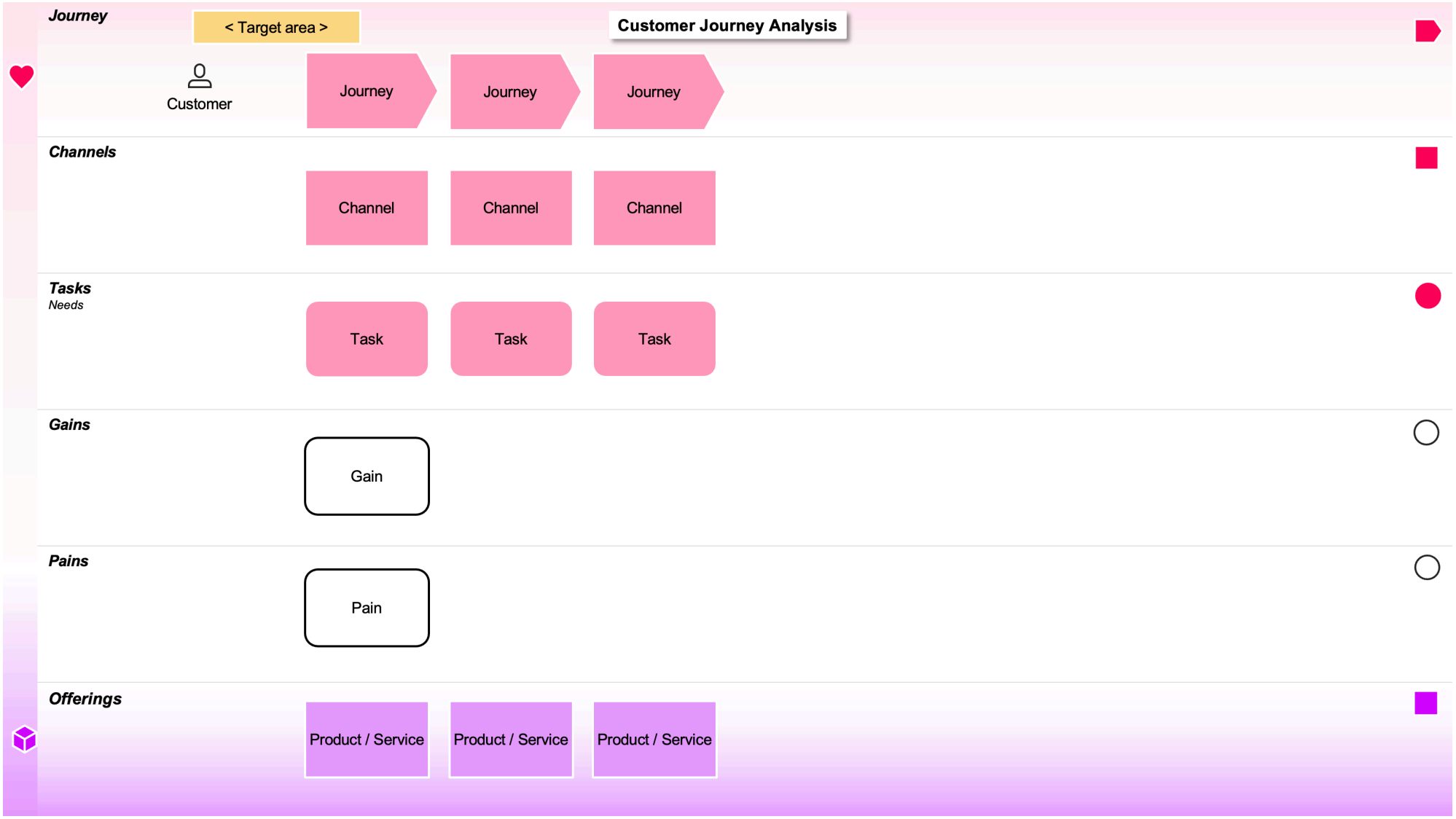


Figure 604: Customer Journey Analysis.

10.4.5 Flow of Actions

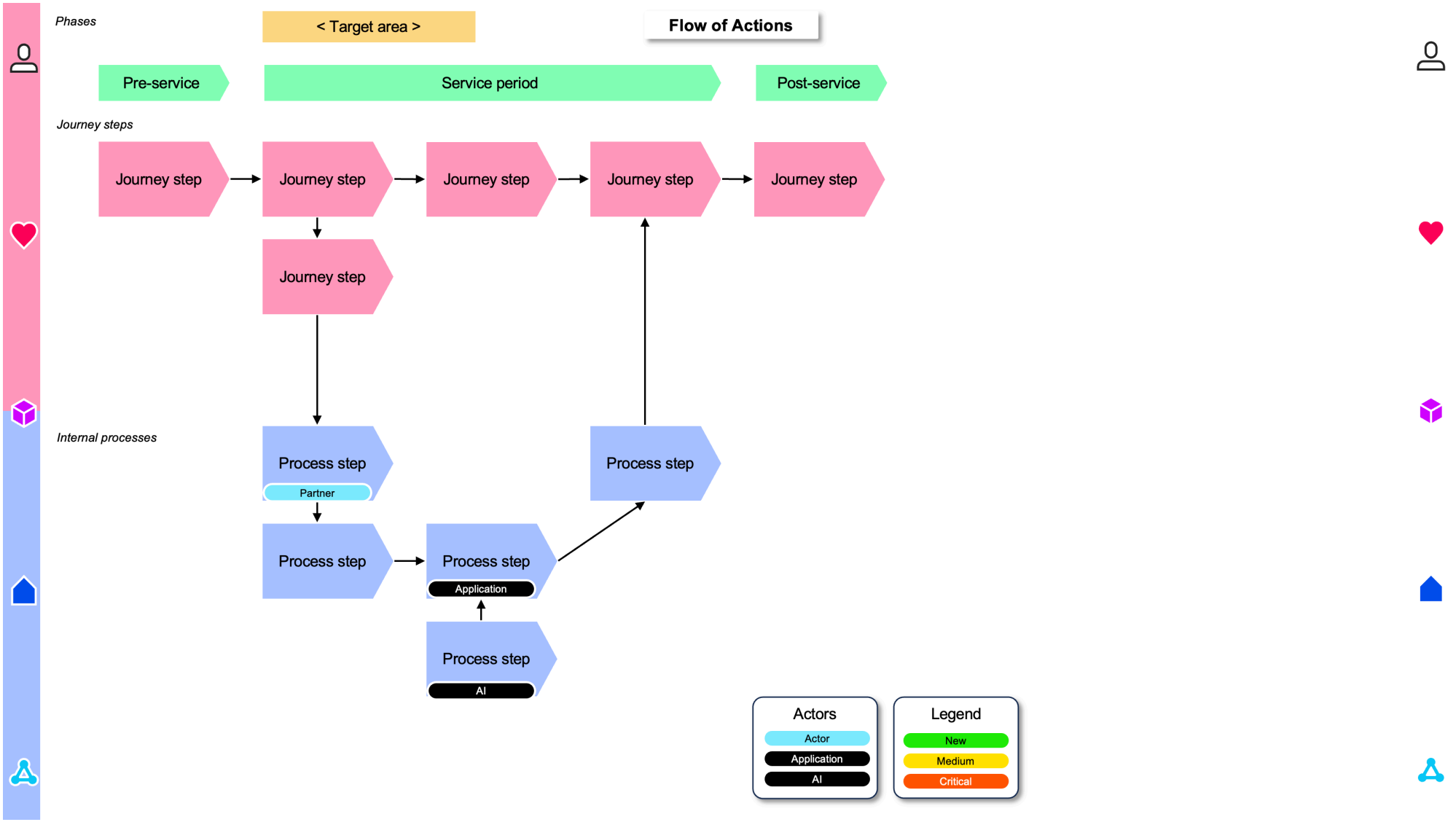


Figure 605: Flow of actions.

10.4.6 Customer Tasks

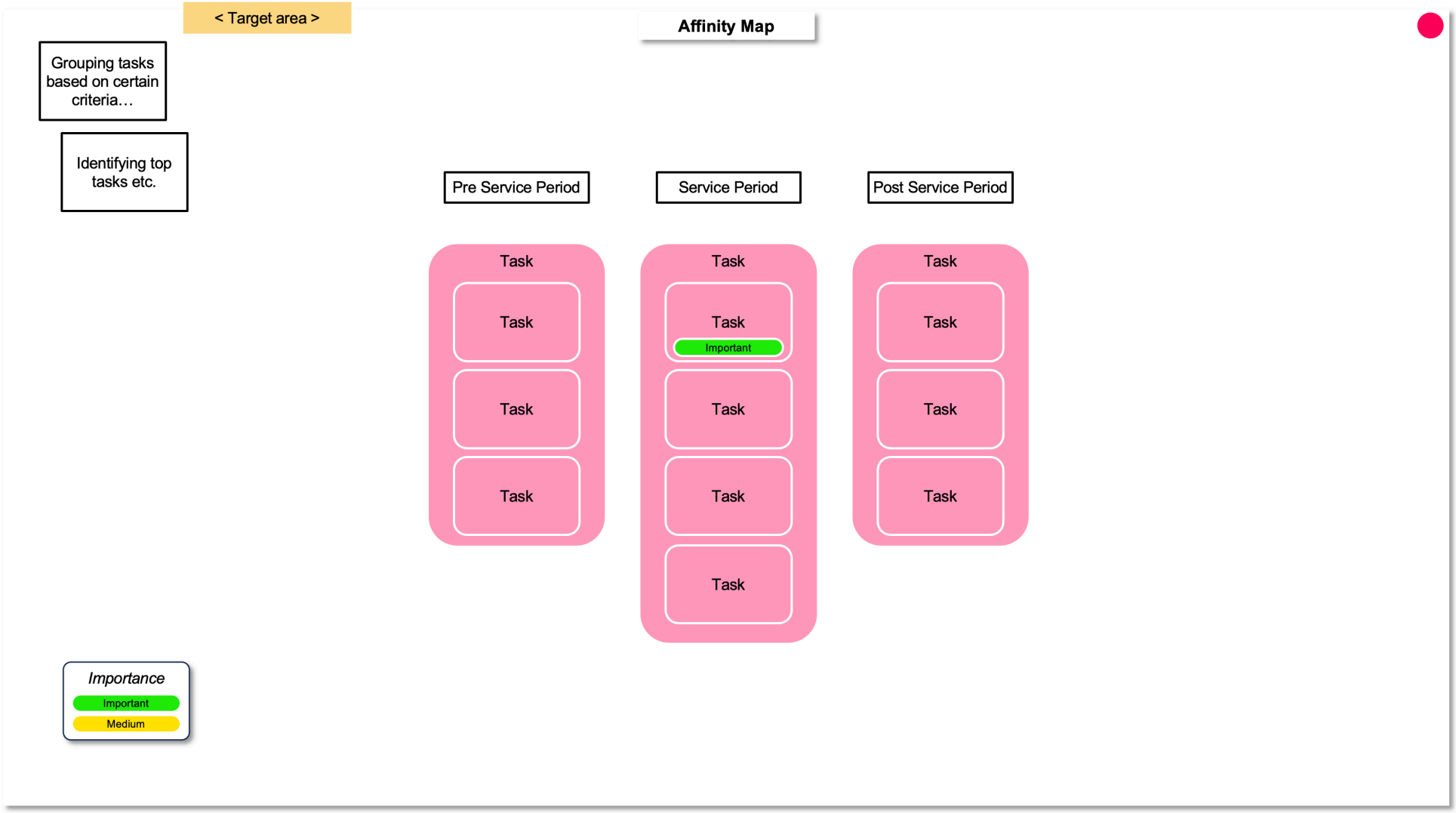


Figure 606: Tasks.

10.4.7 Job Map

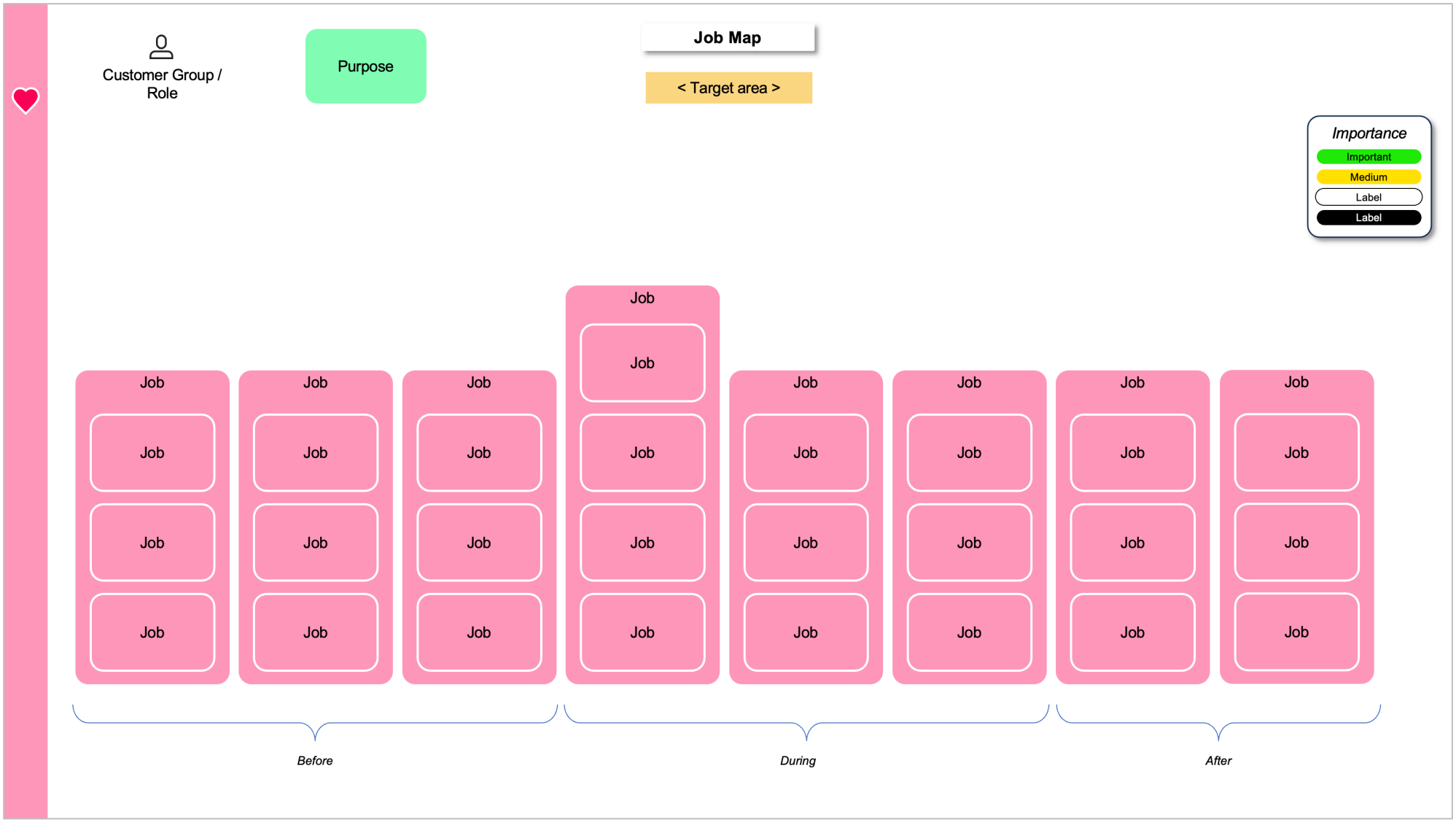


Figure 607: Job Map (JTBD Map).

10.4.8 Customer Tasks – Jobs To Be Done (JTBD)



Figure 608: Customer Tasks.

10.4.9 Jobs To Be Done (JBTD) Map

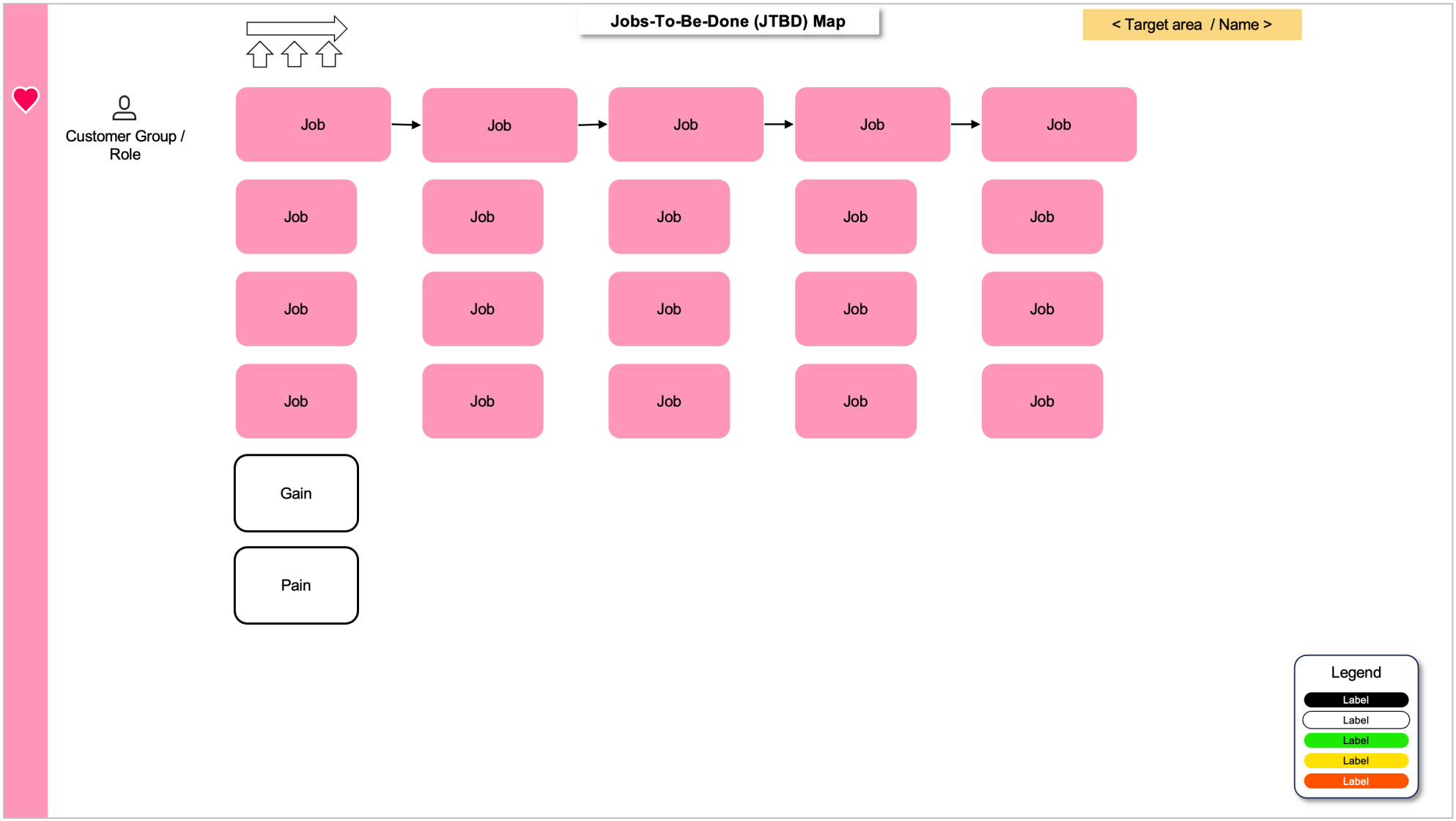


Figure 609: Jobs To Be Done (JTBD) Map.

10.4.10 Channels

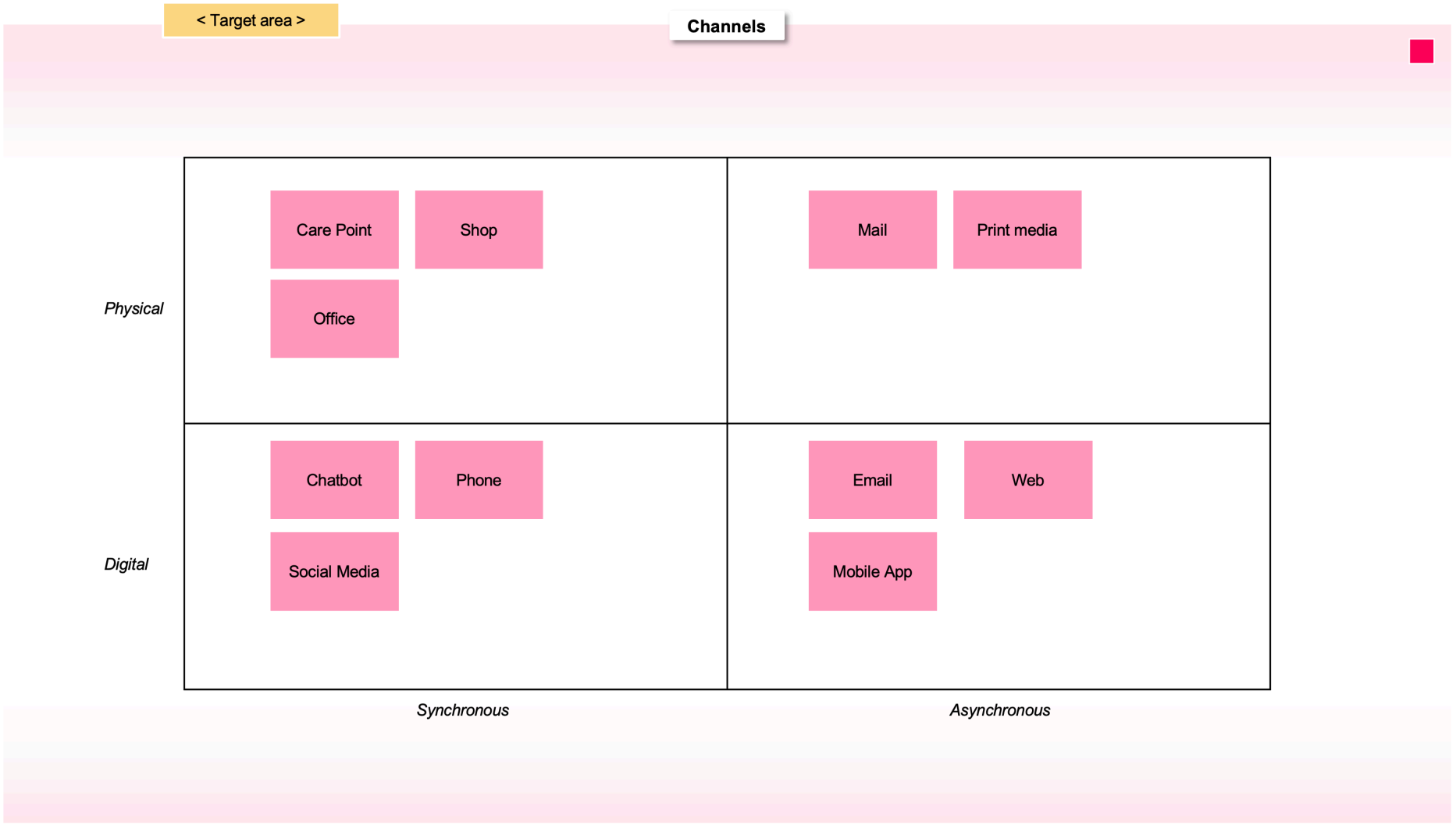


Figure 610: Channels.

10.4.11 Customer Segments

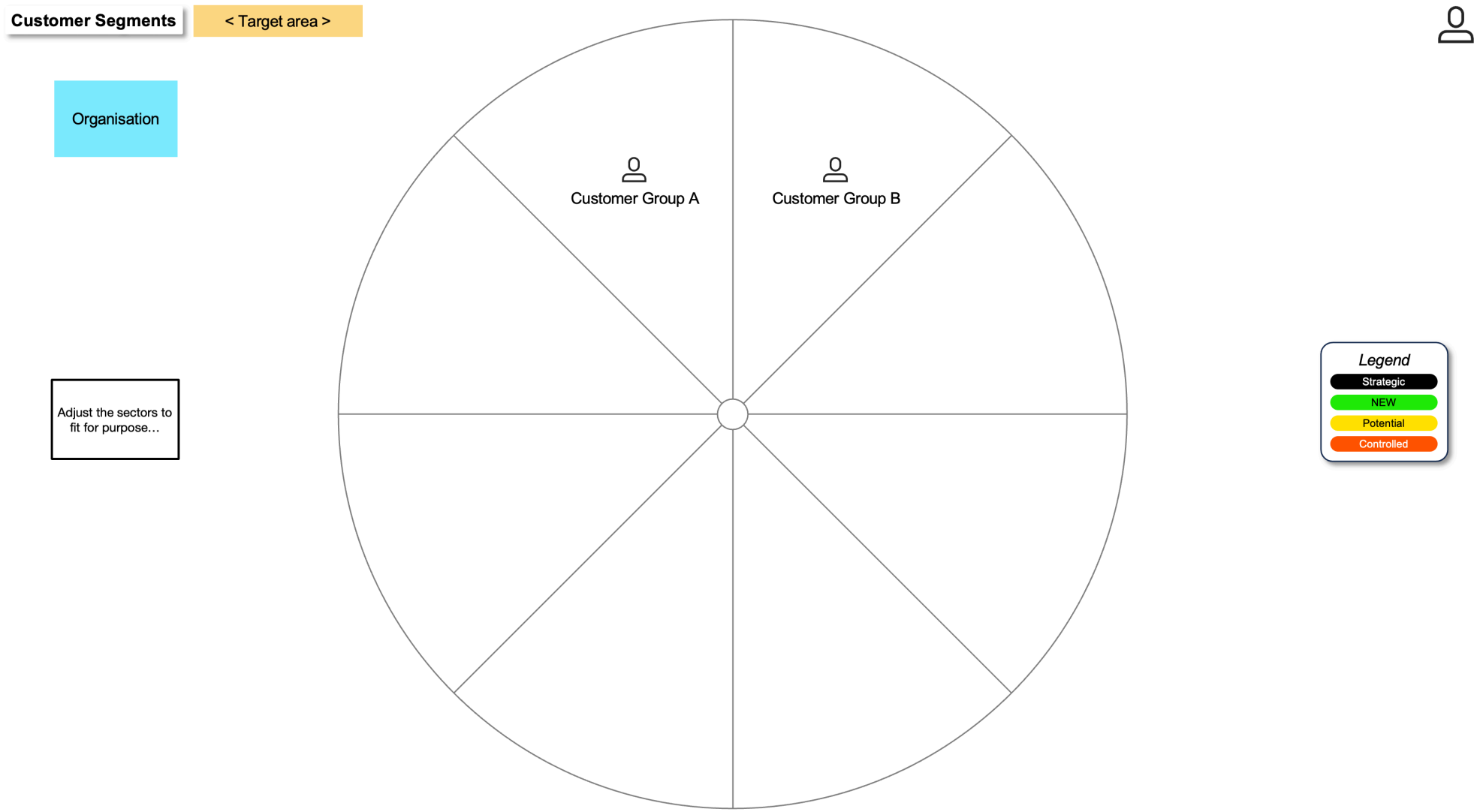


Figure 611: Customer Segments.

10.4.12 Stakeholder Map



Figure 612: Stakeholder Map – Customer Perspective.

10.4.13 Persona

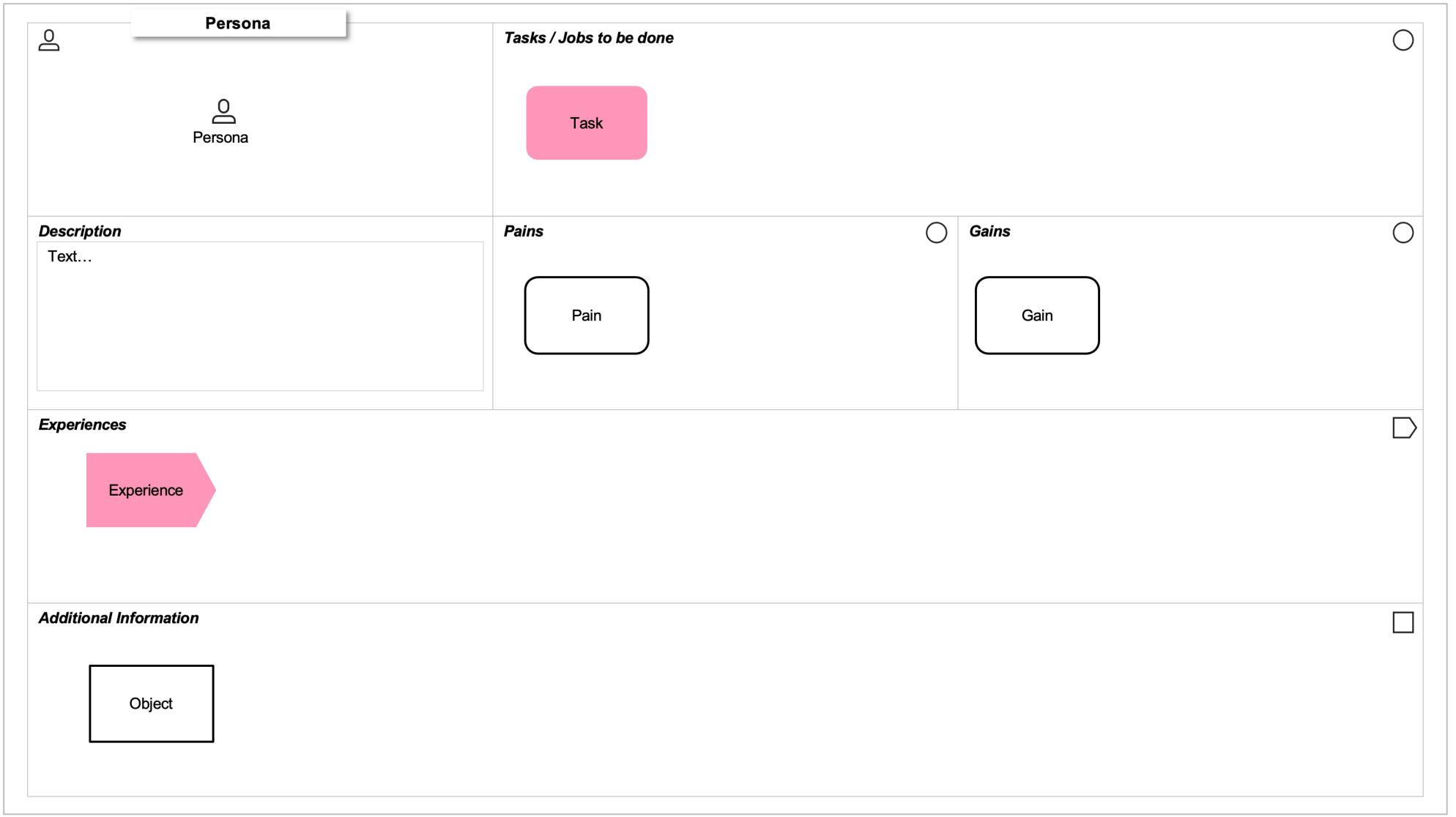


Figure 613: Persona.

10.4.14 Value Proposition Canvas

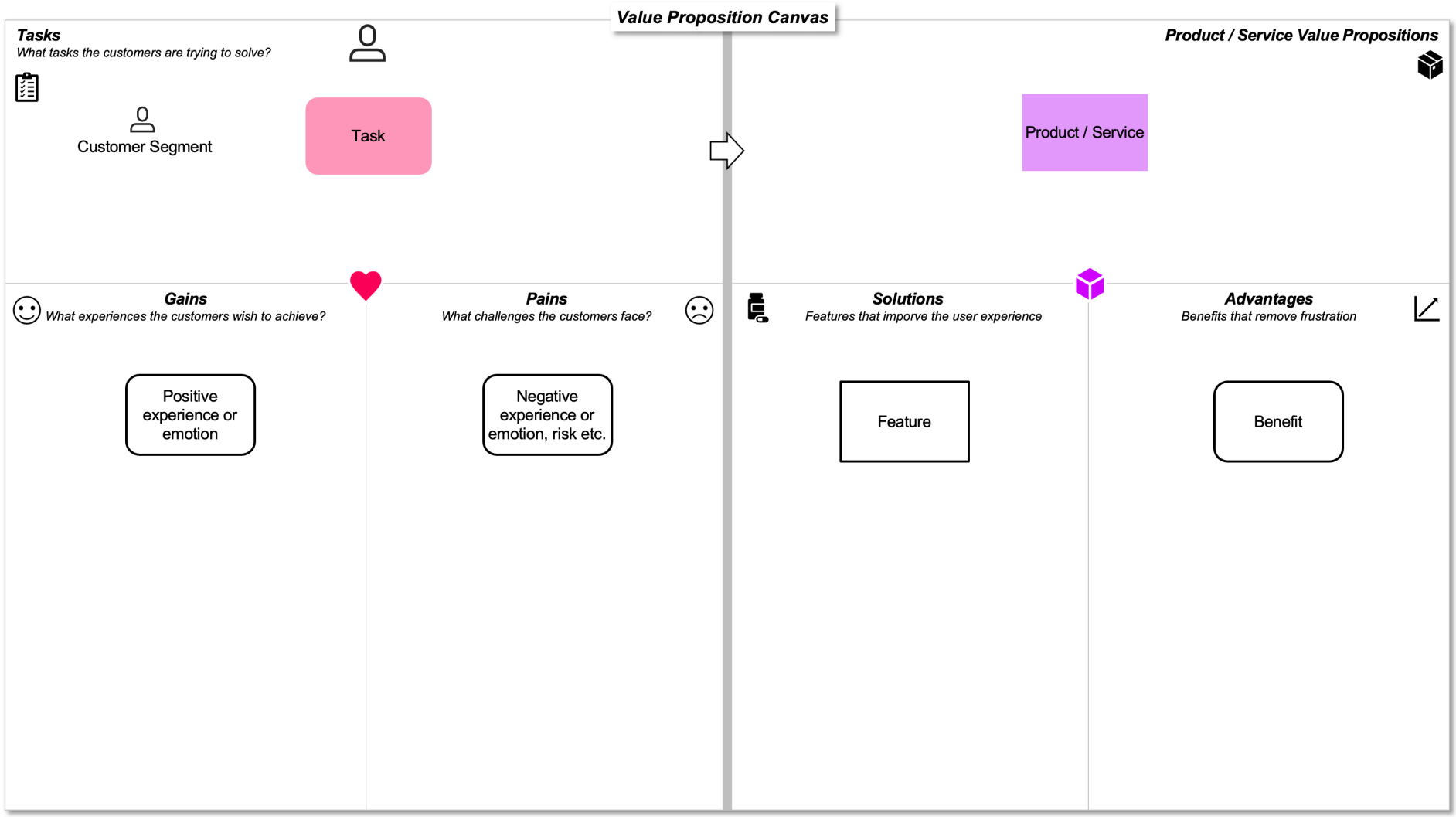


Figure 614: Value Proposition Canvas.

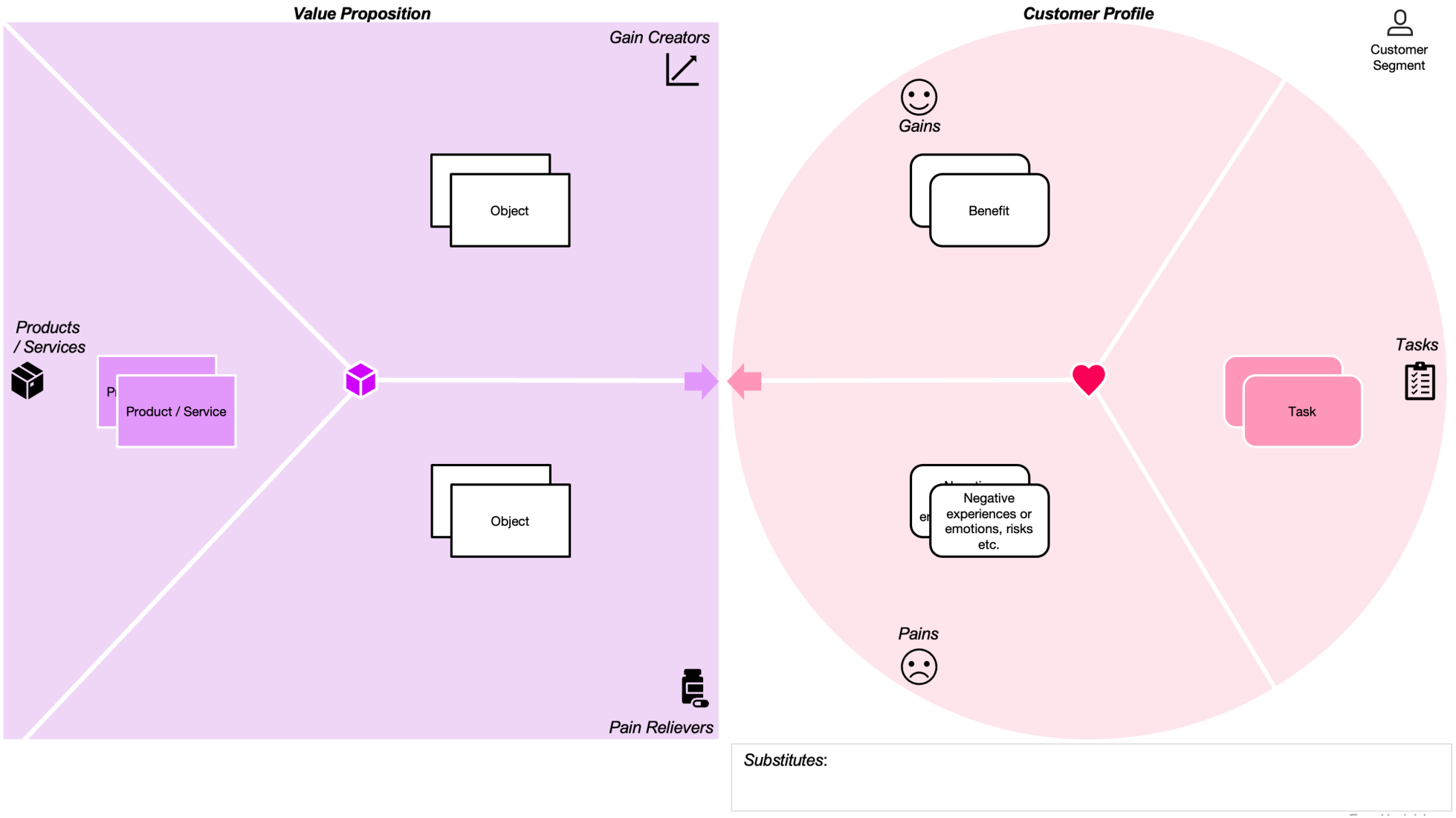


Figure 615: Value Proposition Canvas.

10.5 Architecture (Operations & Delivery) Templates

Templates that can be used for planning business operations and delivery.

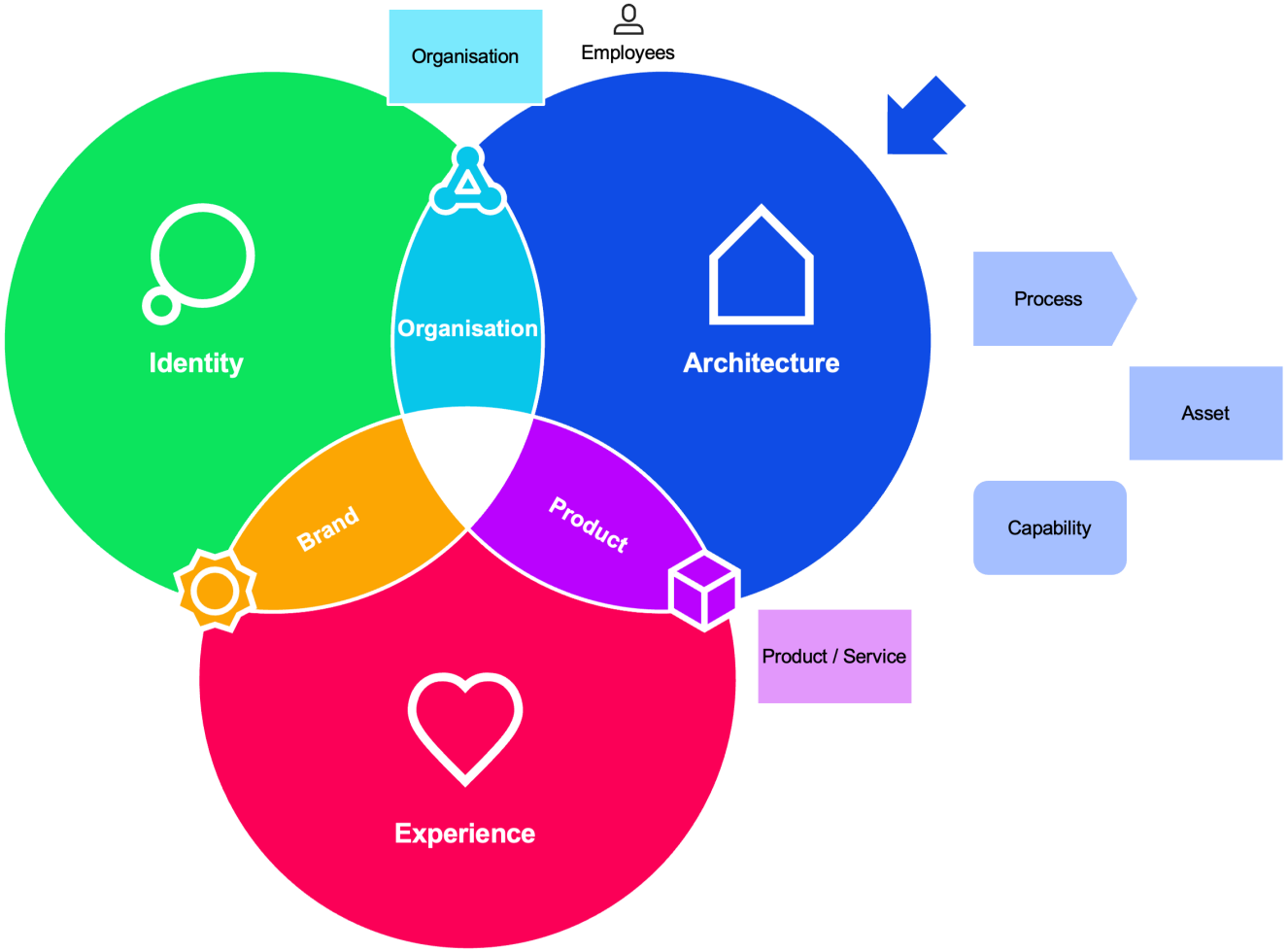


Figure 616: Architecture Facet.

10.5.1 High-level Operating Model

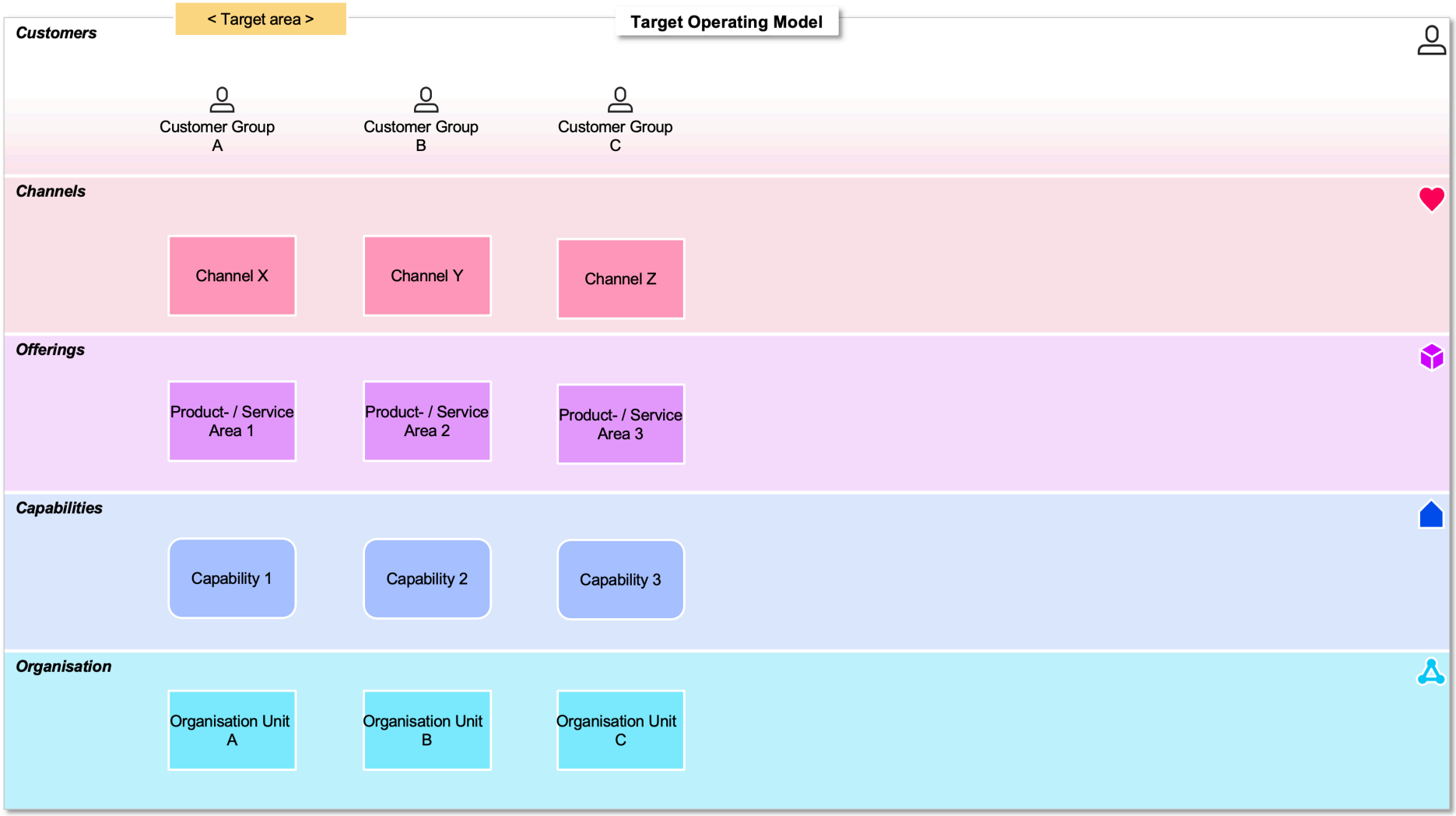


Figure 617: High-level operating model.

10.5.2 Business Design

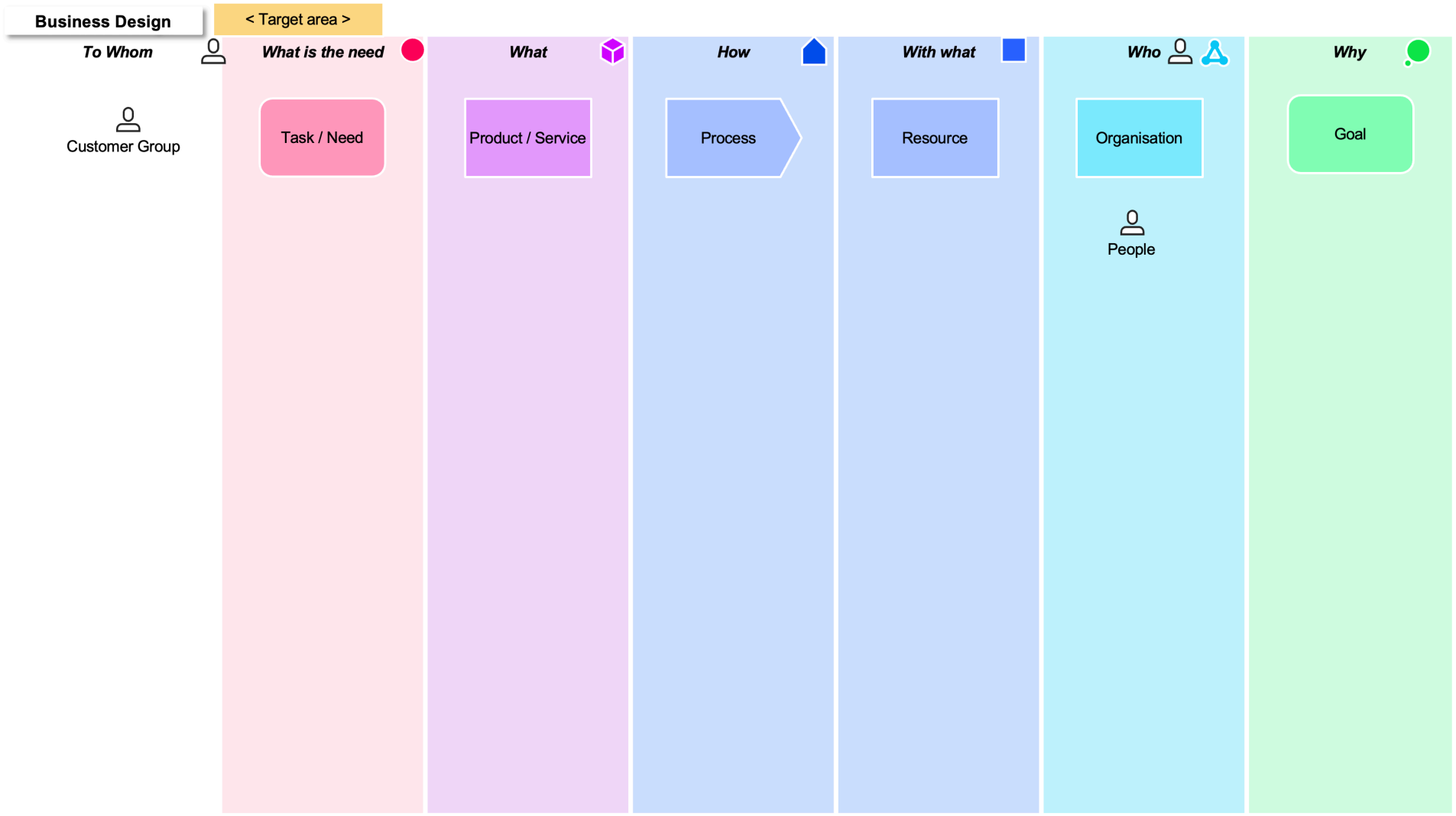


Figure 618: Business Design.

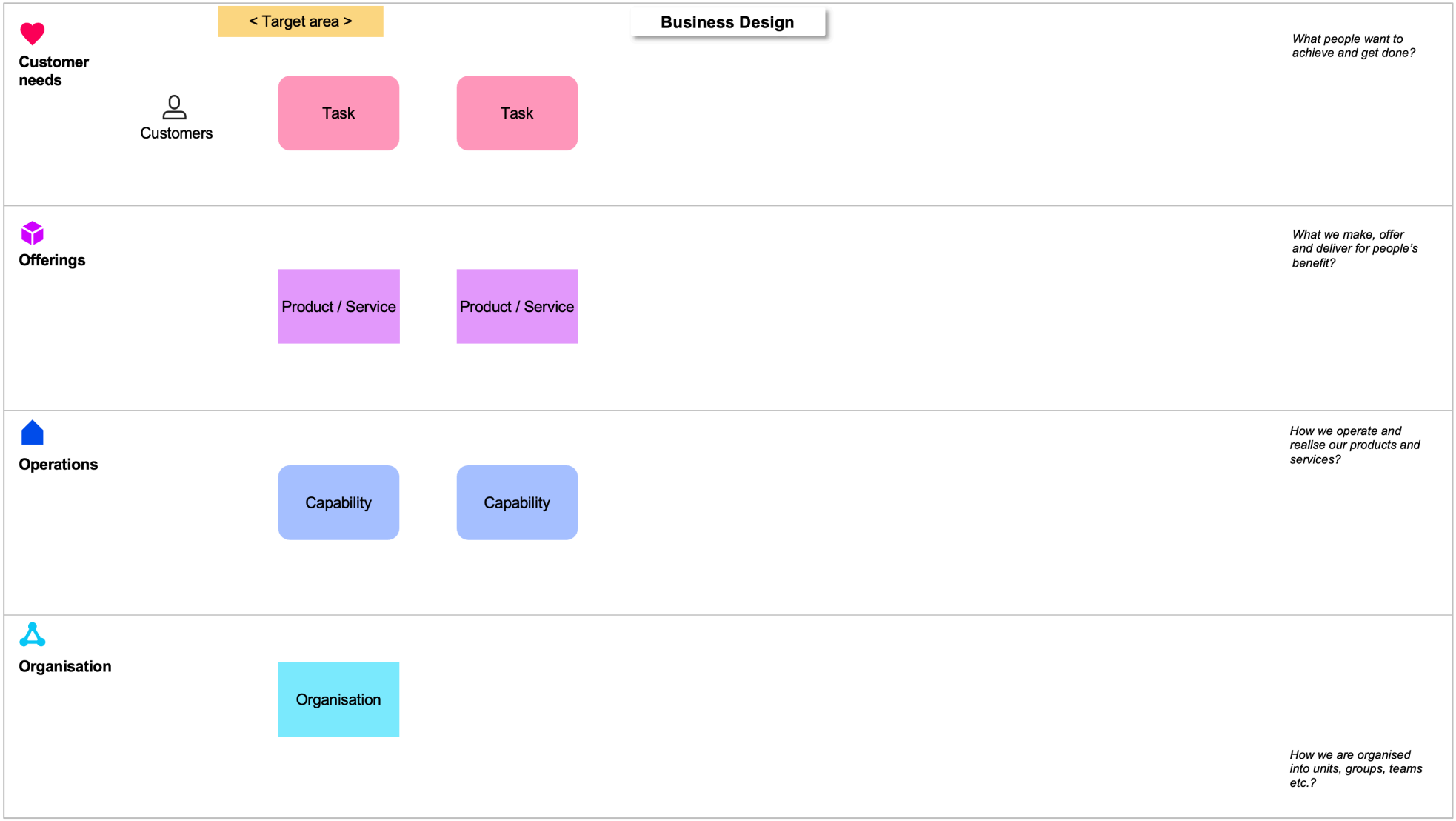


Figure 619: Business Design.

10.5.3 Business Architecture Design



Figure 620: Business Design.

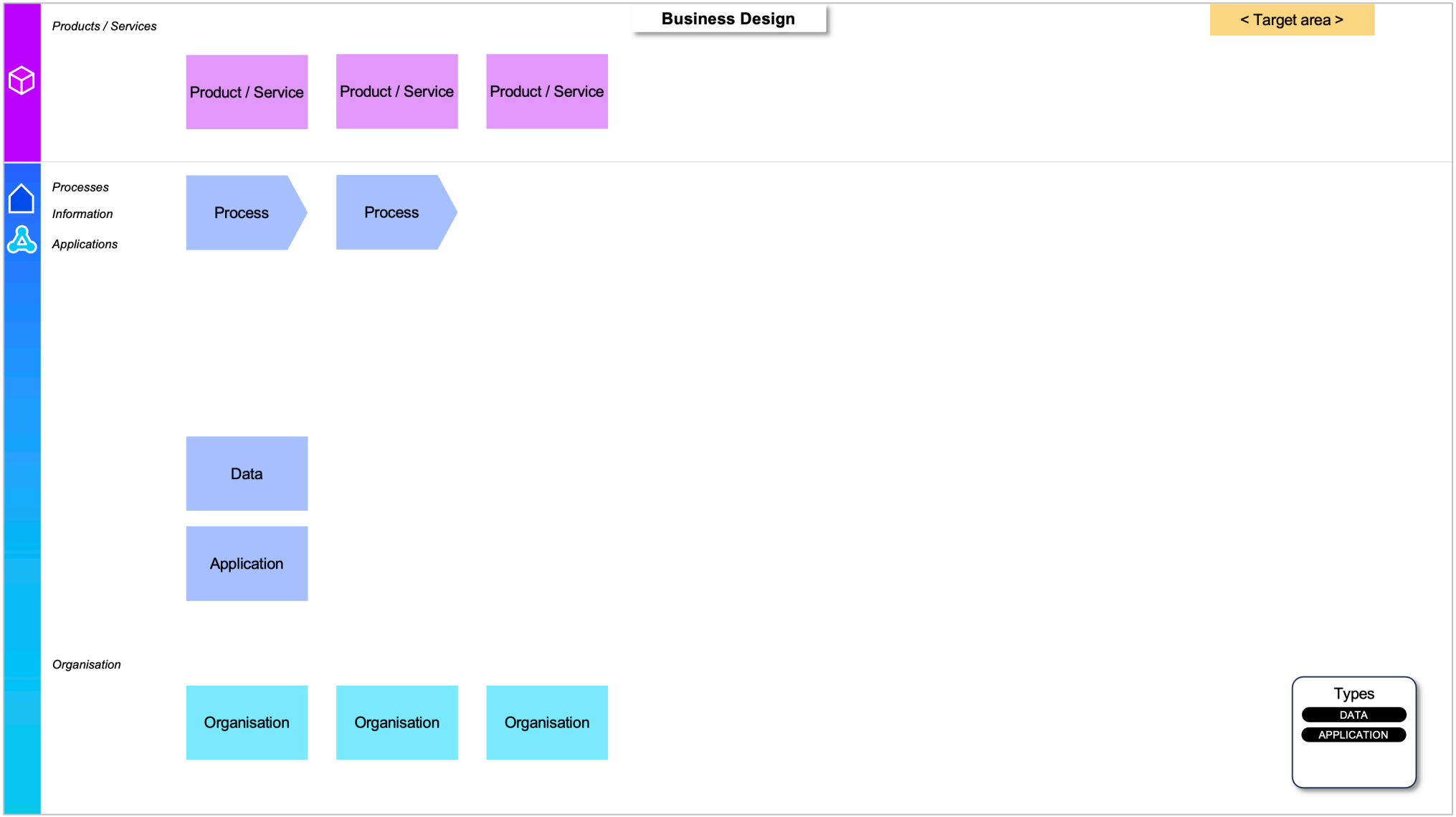


Figure 621: Business Architecture Design.

10.5.4 Service Provider View

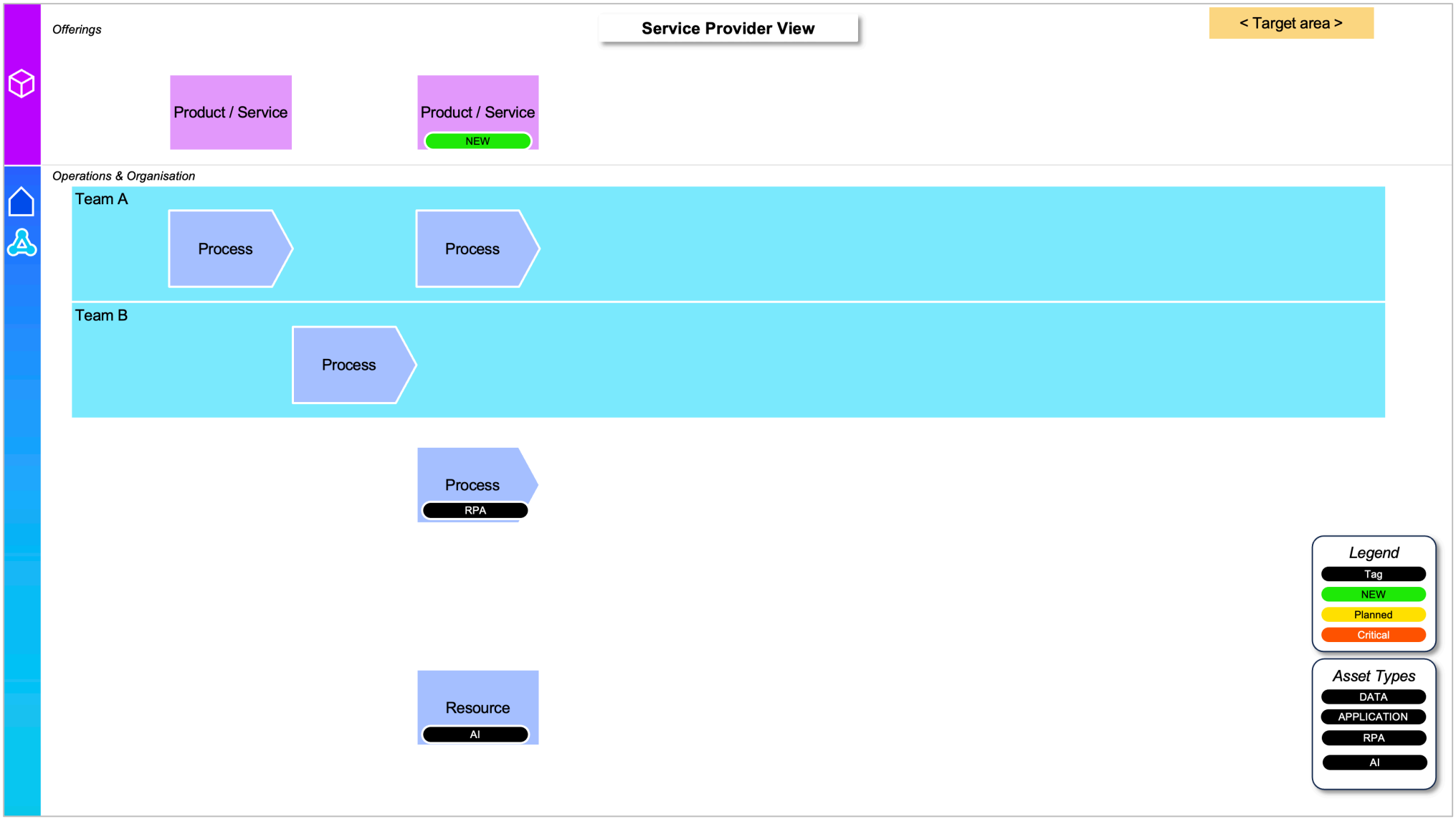


Figure 622: Service Provider View.

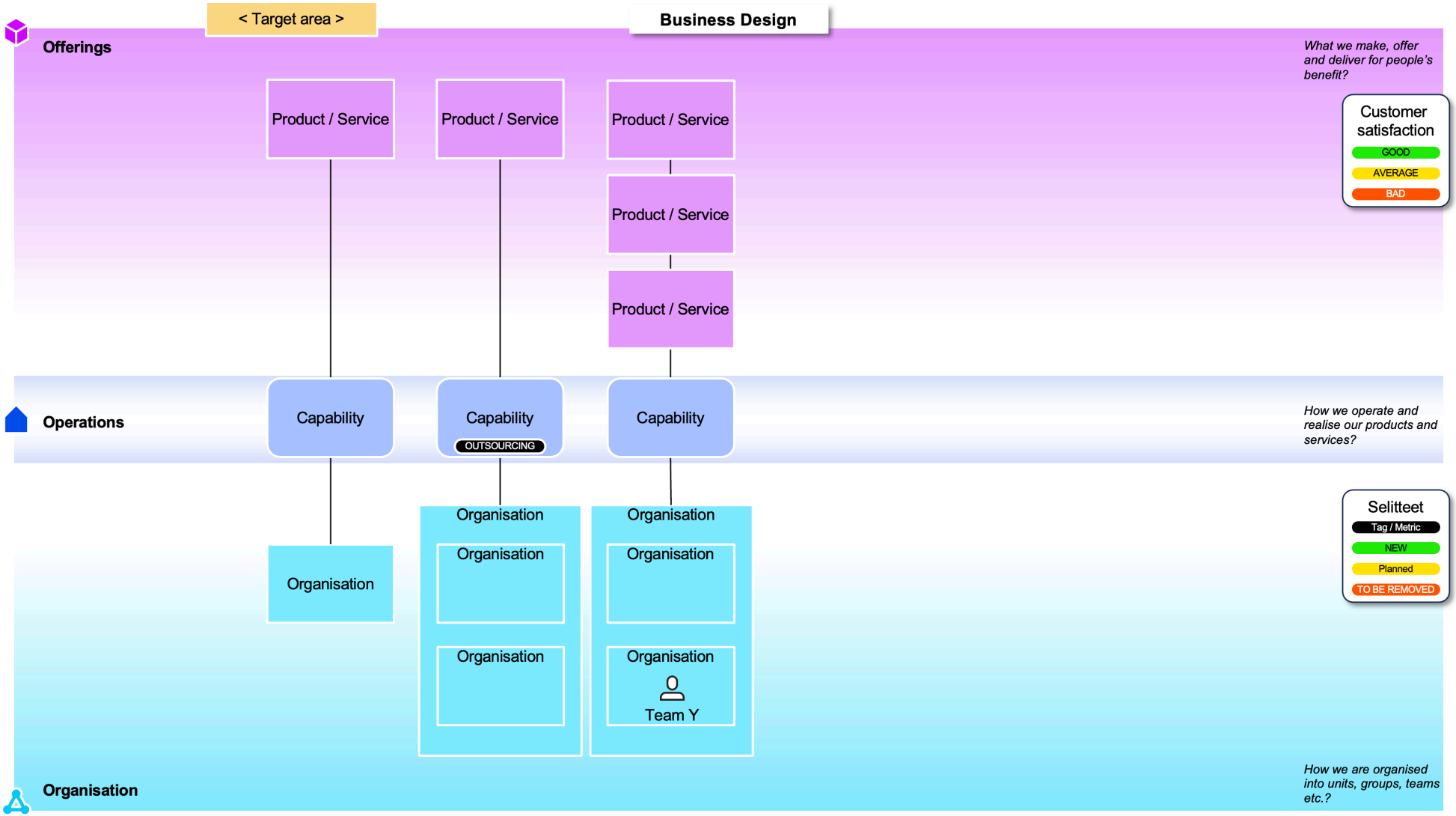


Figure 623: Business Design.

10.5.5 Information View

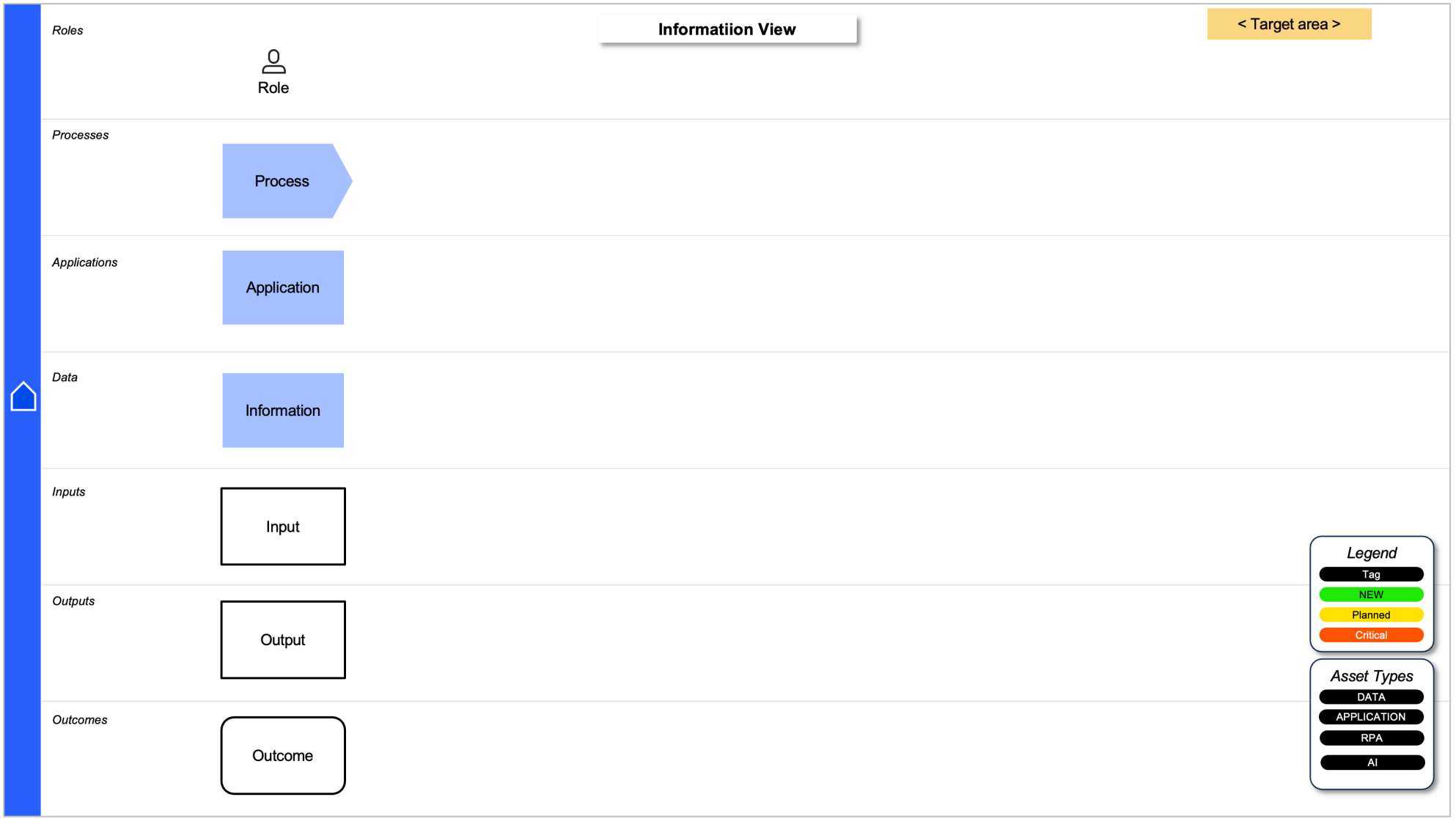


Figure 624: Information View.

10.5.6 SIPOC (Suppliers, Inputs, Process, Outputs, Customers)

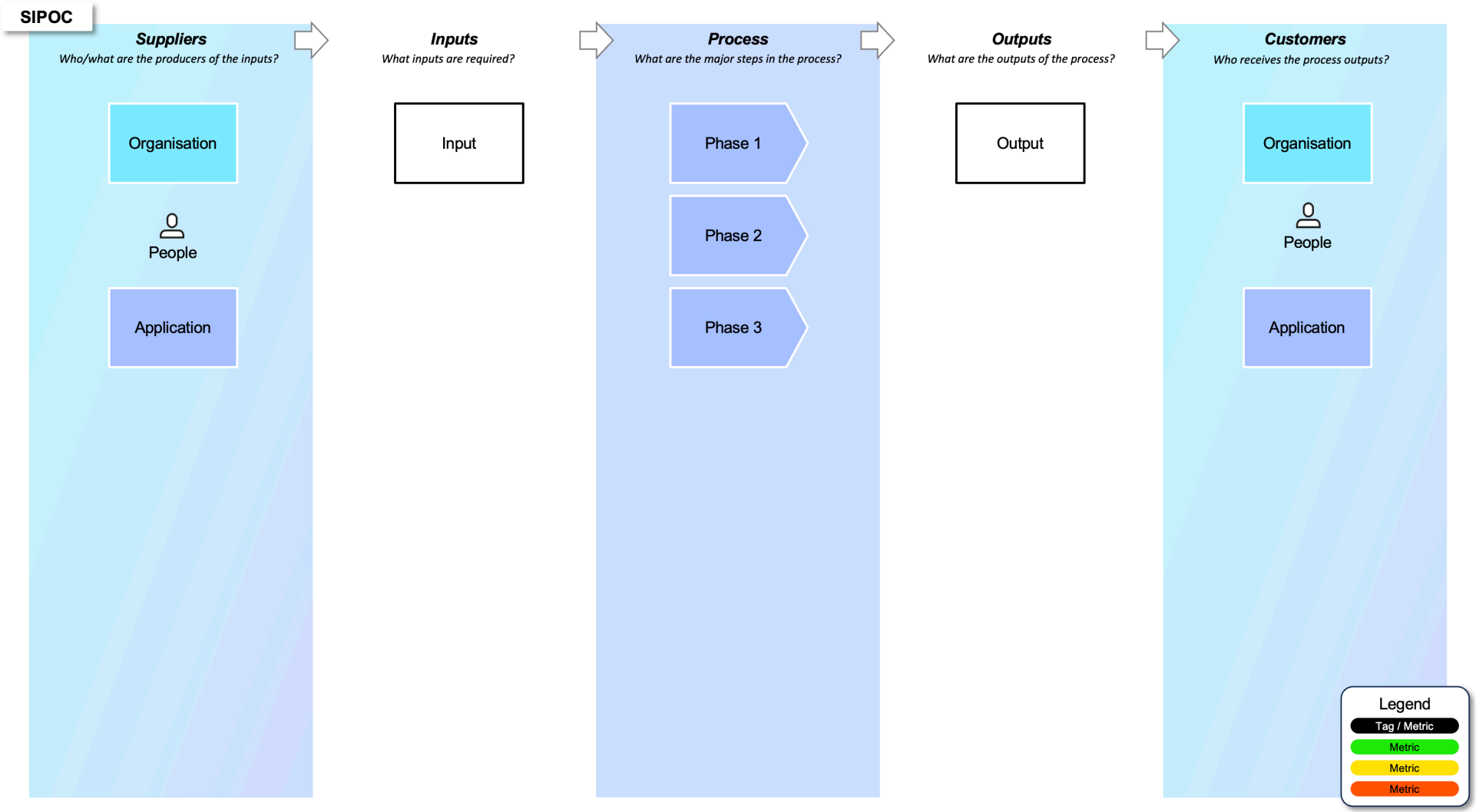


Figure 625: SIPOC.

10.5.7 Enterprise Map / *Milky Way Map (MWM)*

For more detailed description of the method, see: MWM with EDGY (https://hosiaisluoma.fi/design/milky-way-map-with-edgy/) and Annika Klyver's blog: https://annikaklyver.wordpress.com .

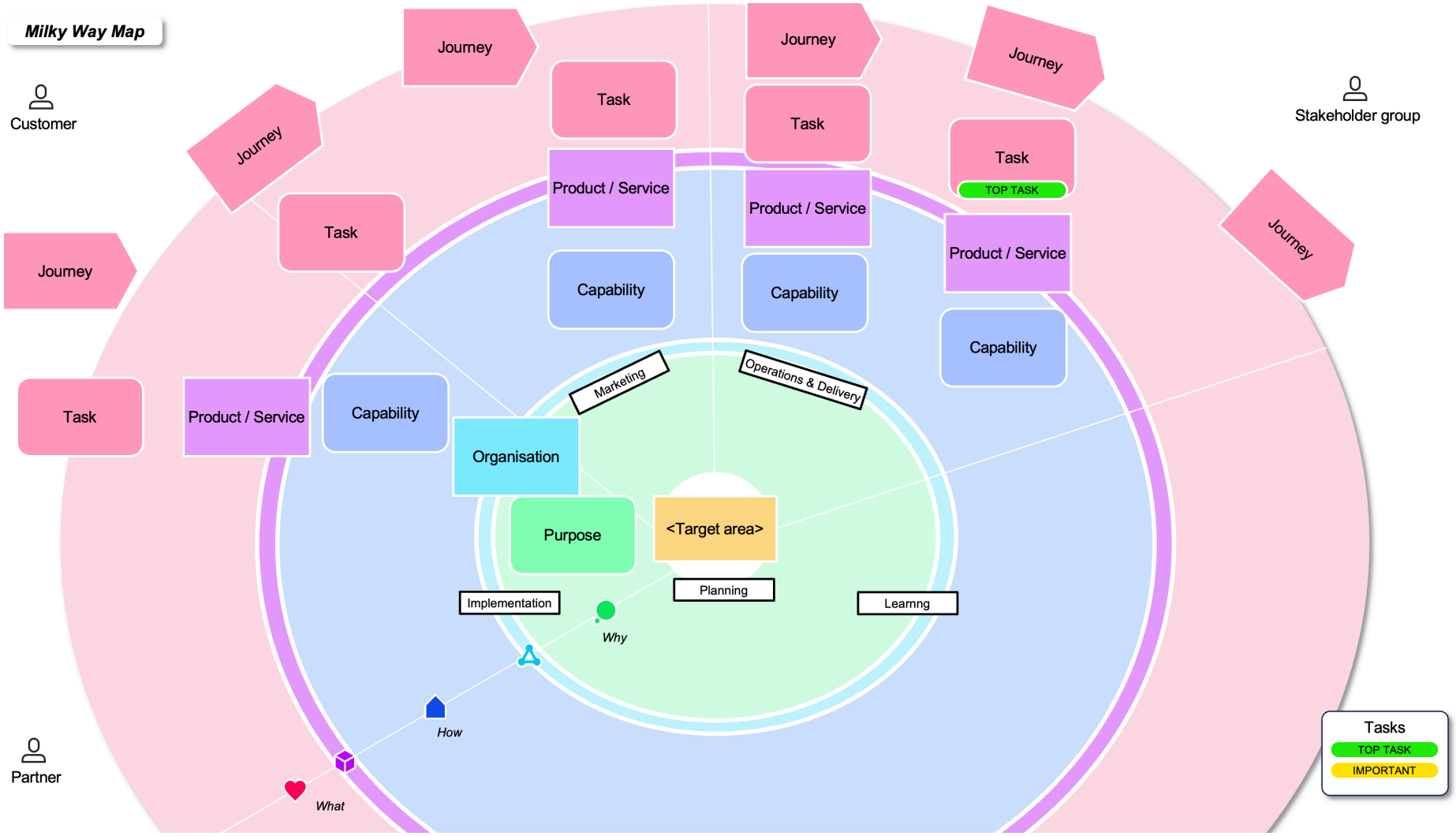


Figure 626: Milky Way Map.

10.5.8 Ecosystem Map

The ecosystem map represents the business actors within an ecosystem and their possible interactions.

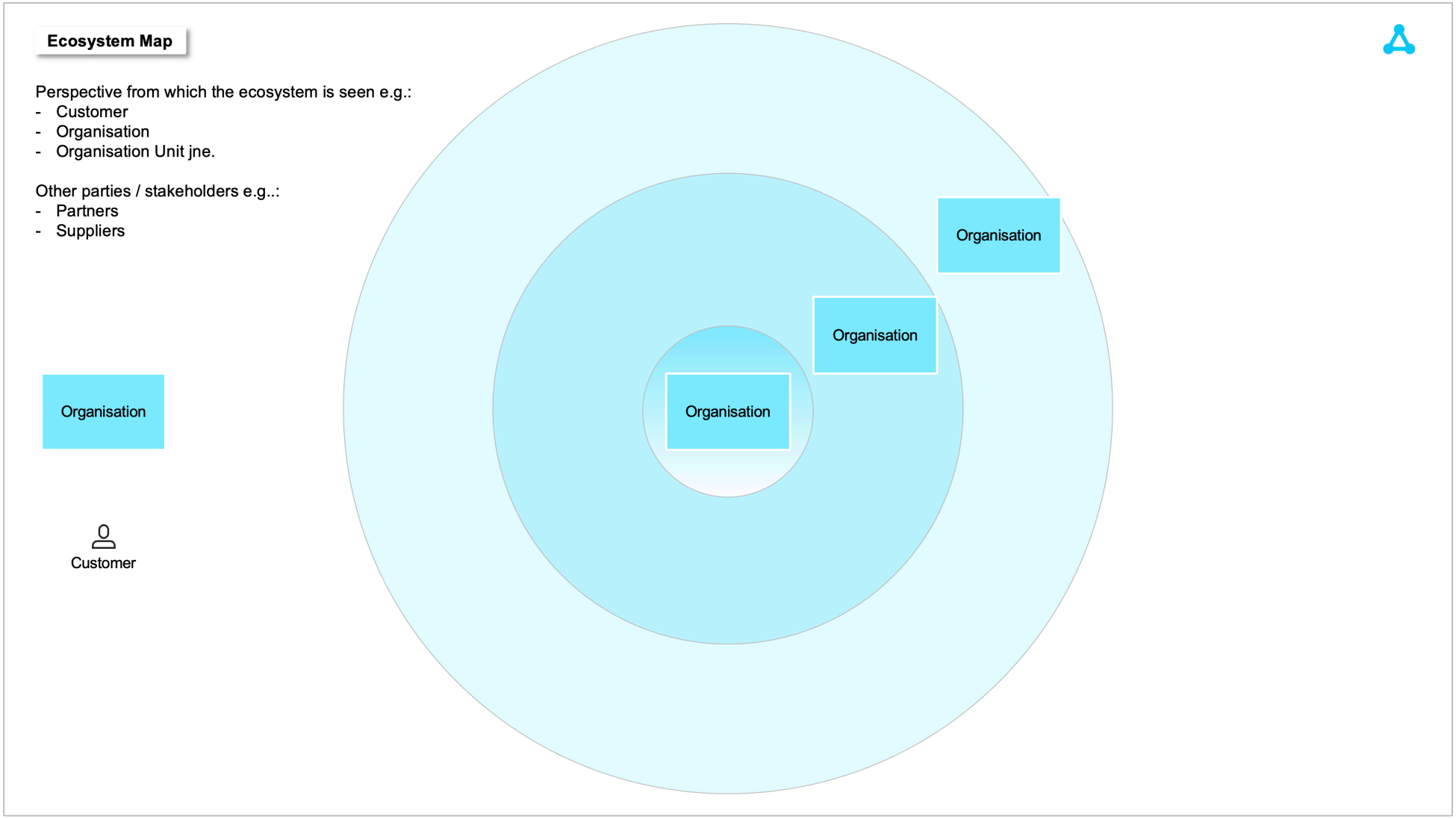


Figure 627: Ecosystem Map.

10.5.9 Offerings Map

What we make and offer (Products and/or Services, grouped in product- and/or service areas).

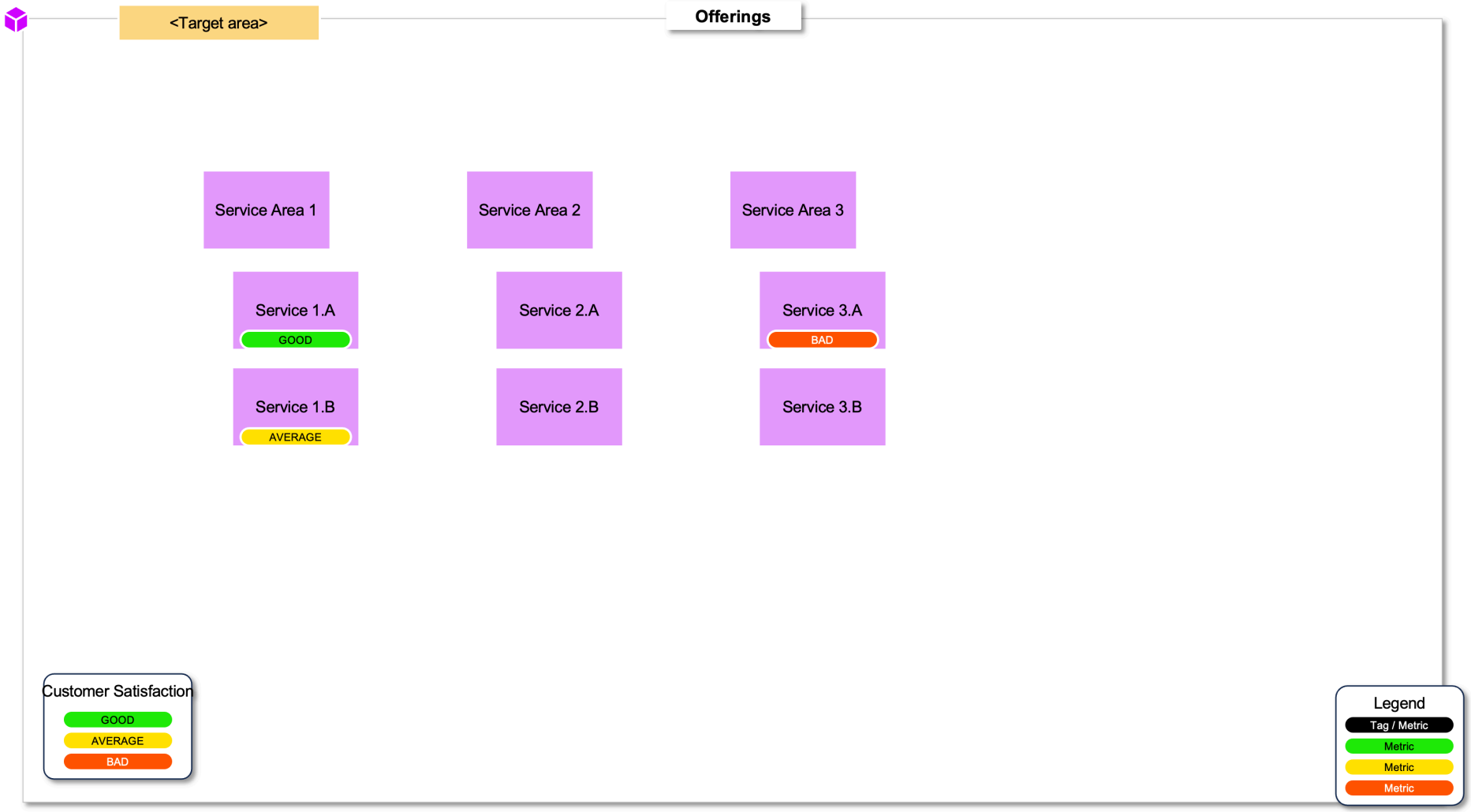


Figure 628: Offerings Map.

10.5.10 Process Map

Map of business processes.

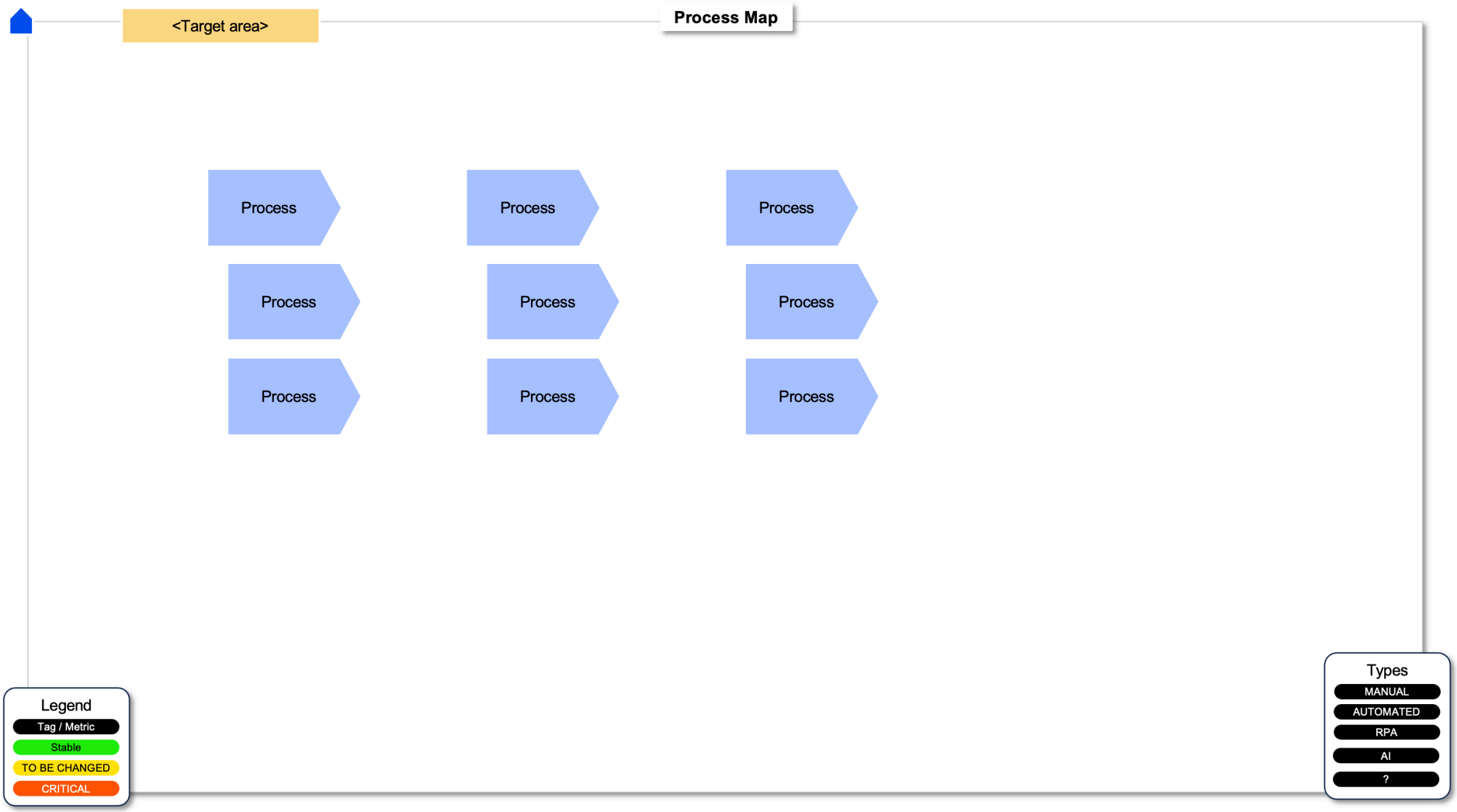


Figure 629: Process Map.

10.5.11 Organisation Map / Organisation Chart.

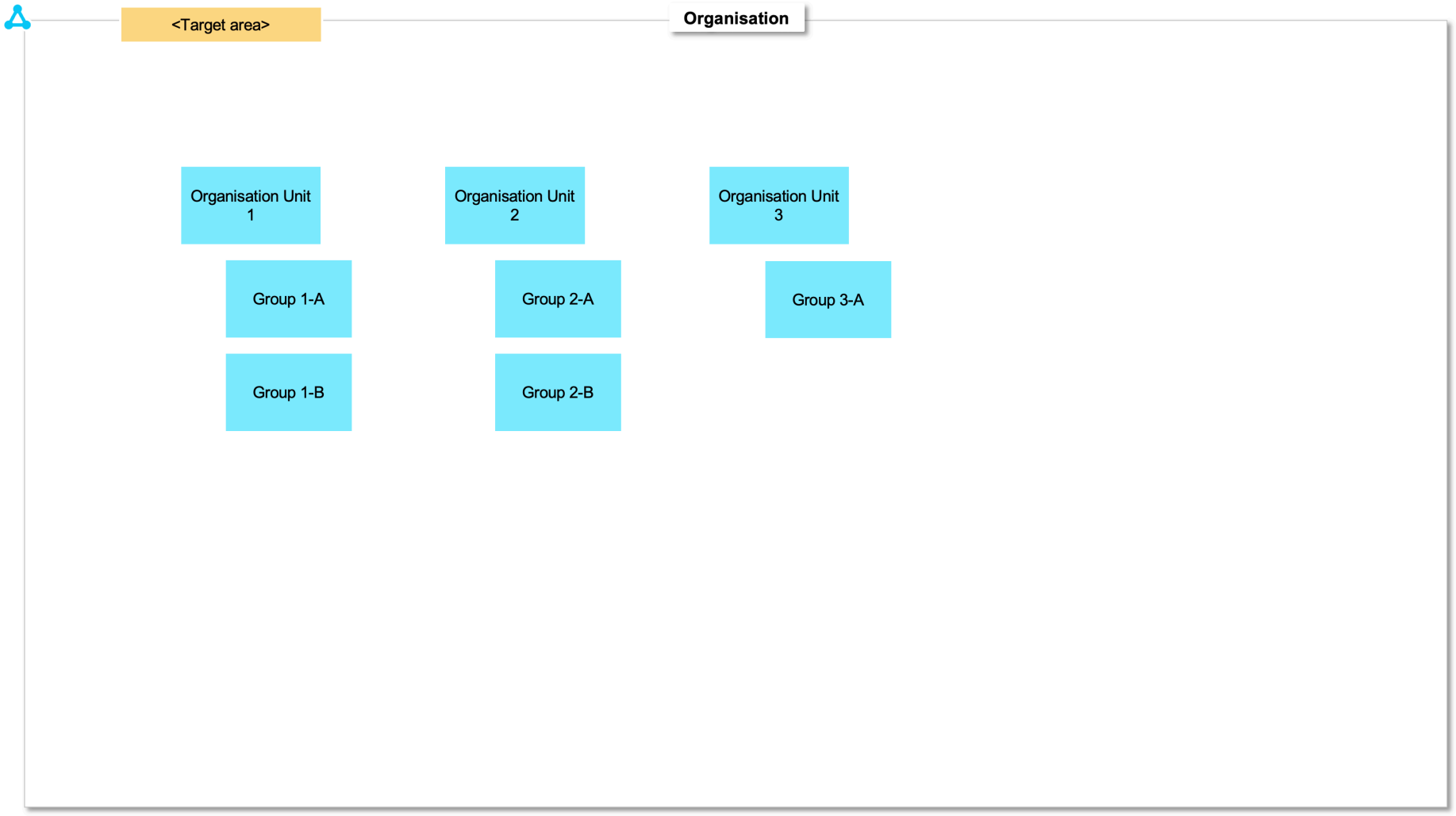


Figure 630: Organisation Map.

10.5.12 Roles

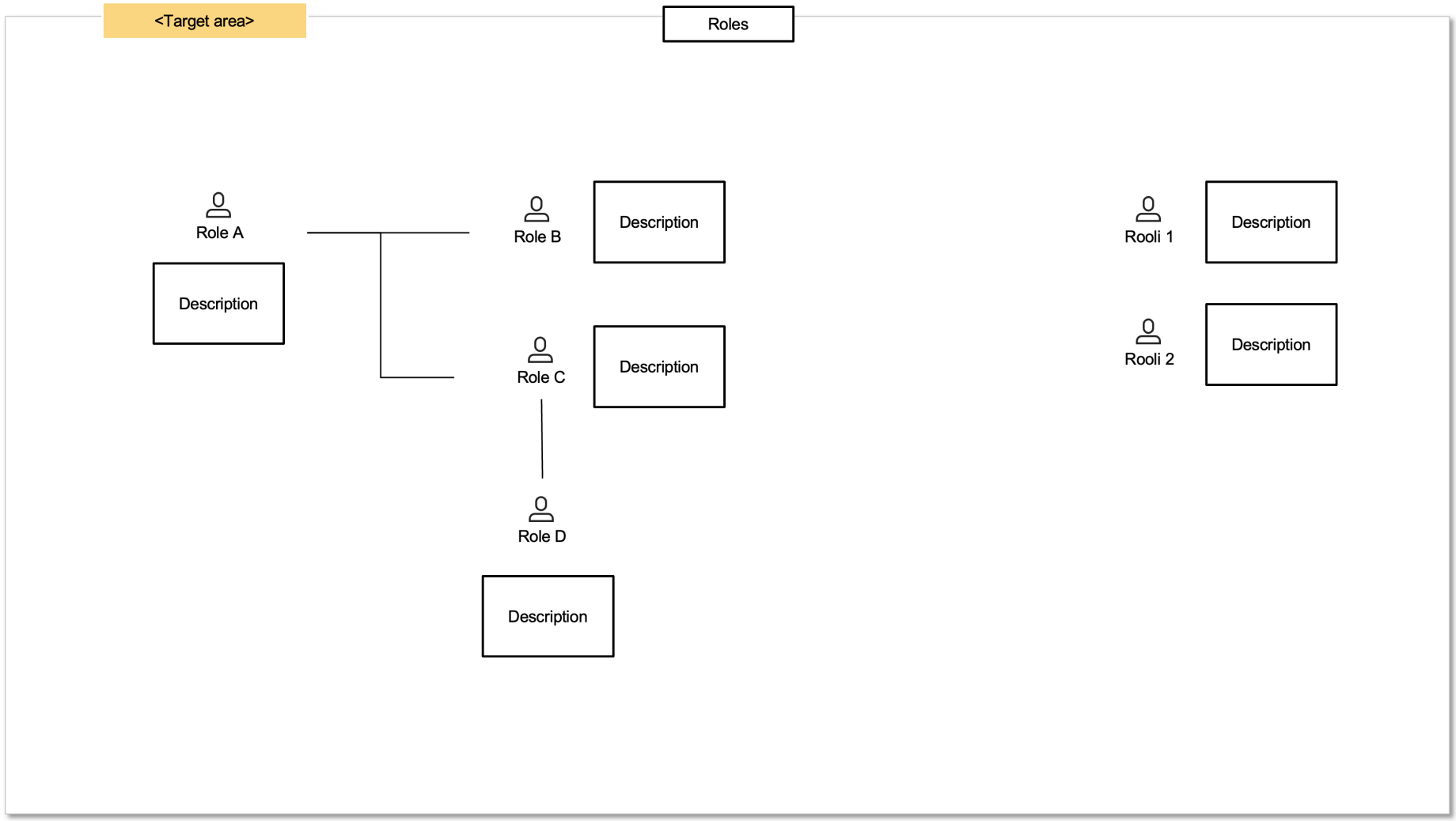


Figure 631: Roles.

10.5.13 Application Map

Application portfolio, e.g. grouped by organisation units.

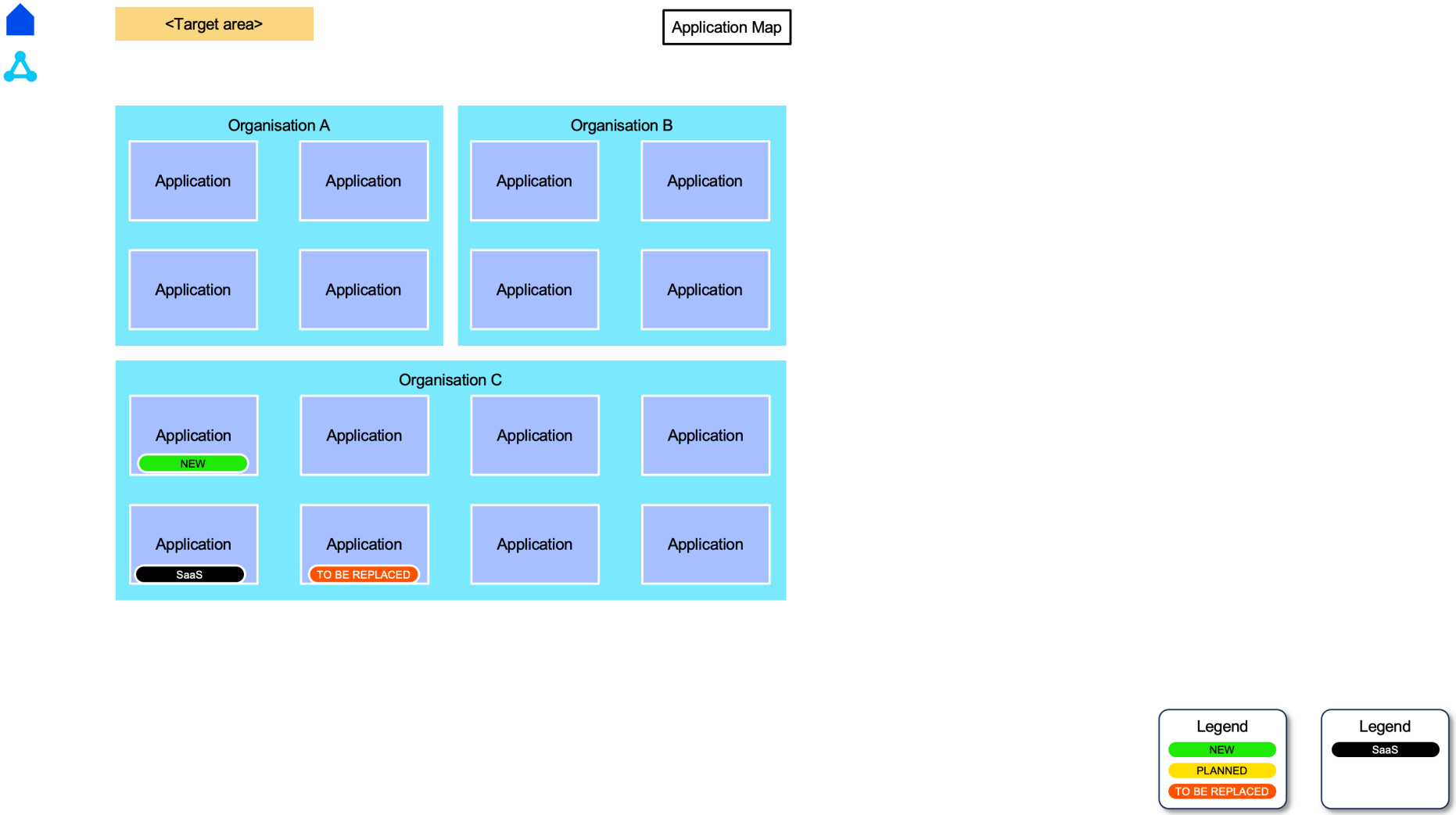


Figure 632: Application Map.

Applications grouped by business functions / capability areas.

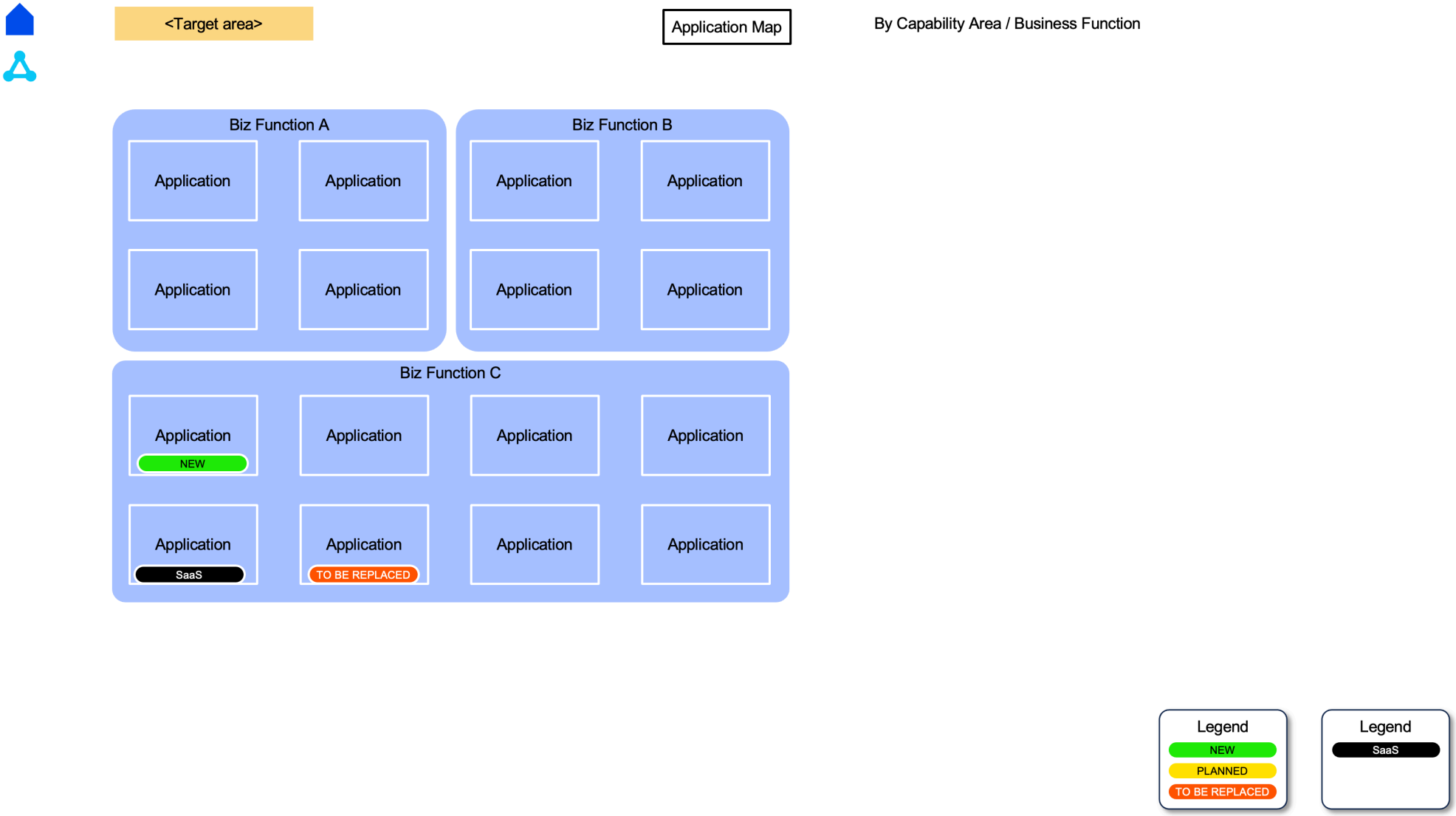


Figure 633: Application Map.

10.5.14 Data Flows

Information flows between the processes / process interactions / process cooperation view.

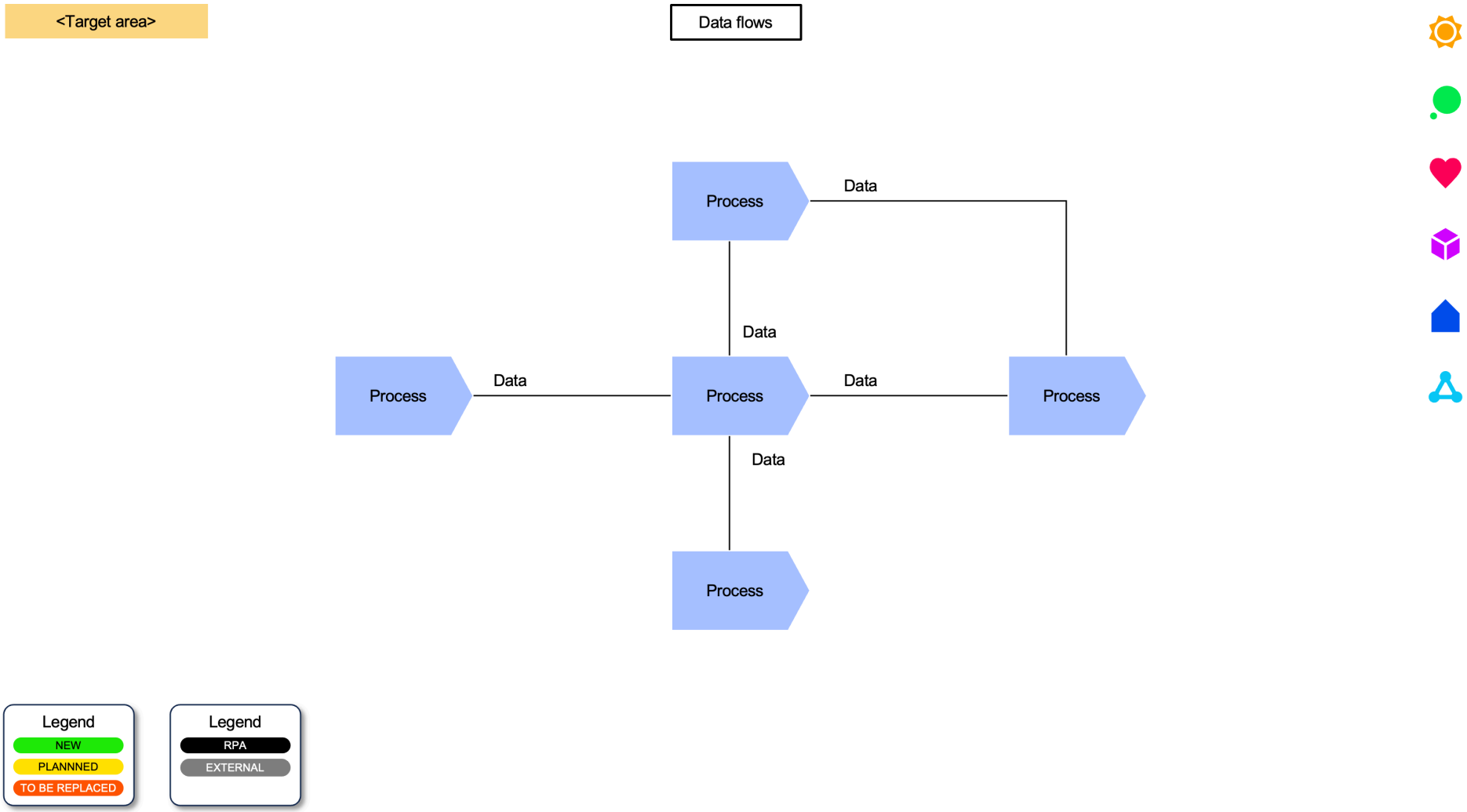


Figure 634: Process cooperation view.

10.5.15 Application Cooperation View

Data flows between the applications / Application interactions / application integrations.

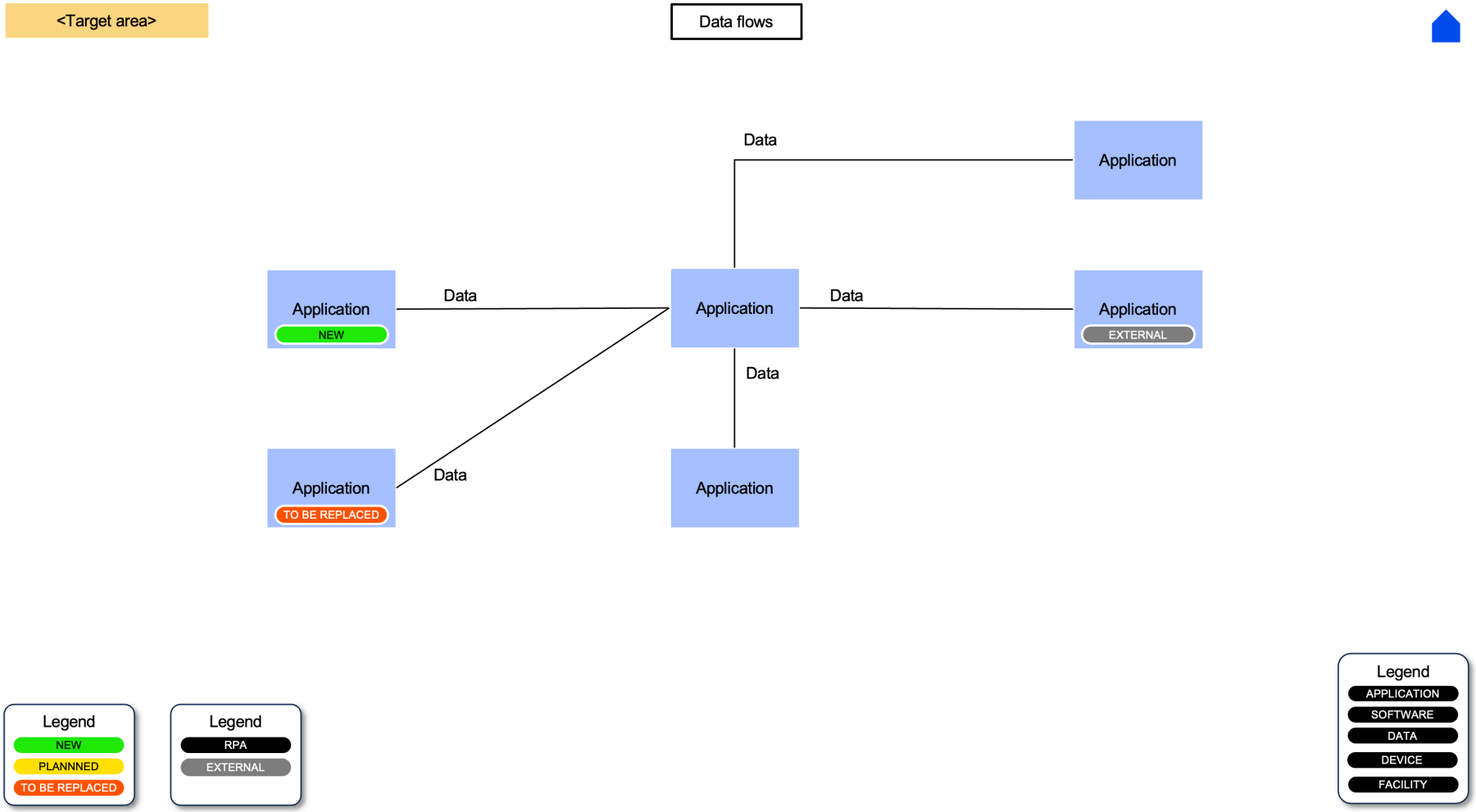


Figure 635: Application cooperation View.

10.5.16 Capability Map

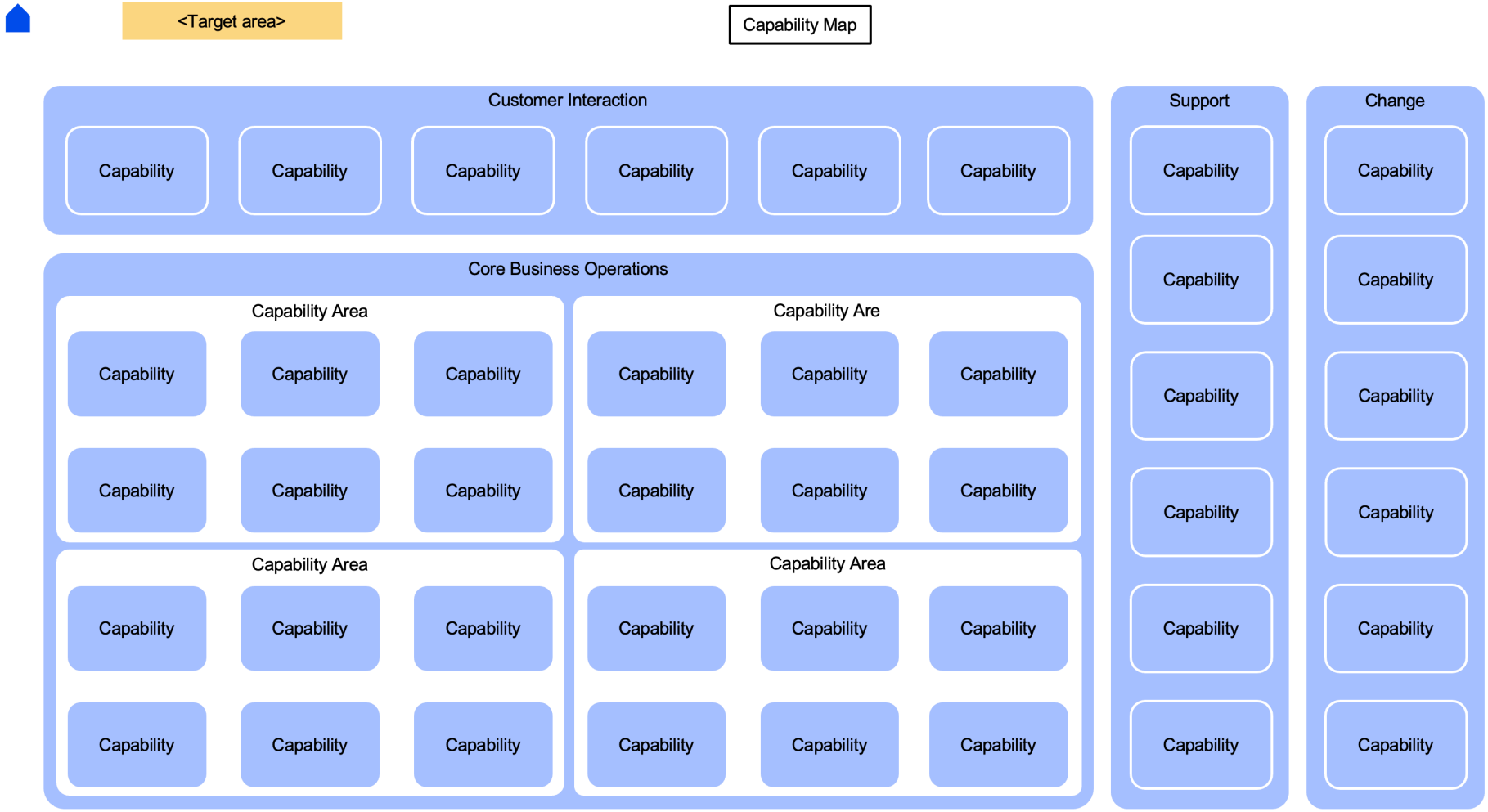


Figure 636: Capability Map.

Another version below.

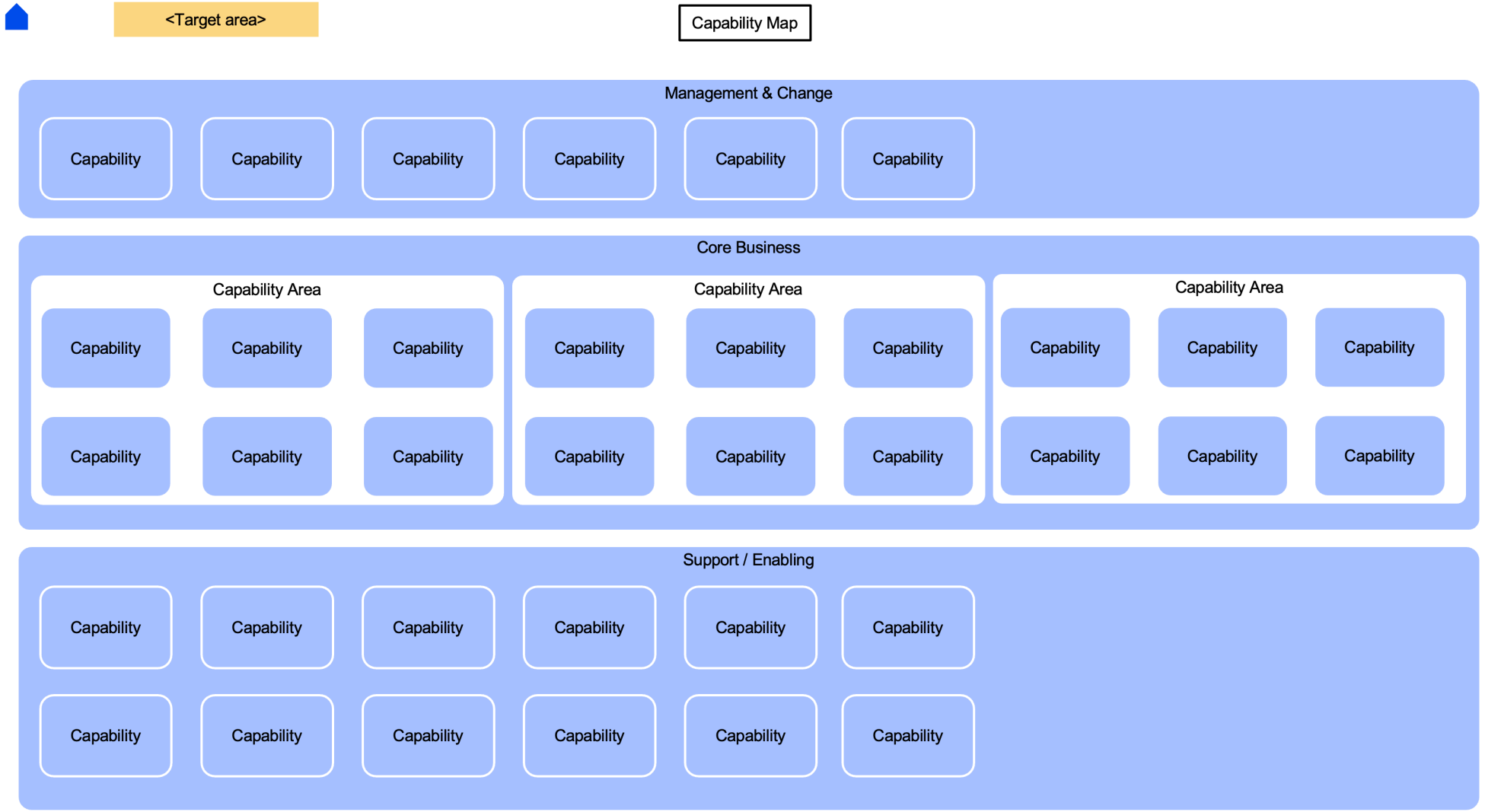


Figure 637: Capability Map.

10.5.17 Capability Canvas

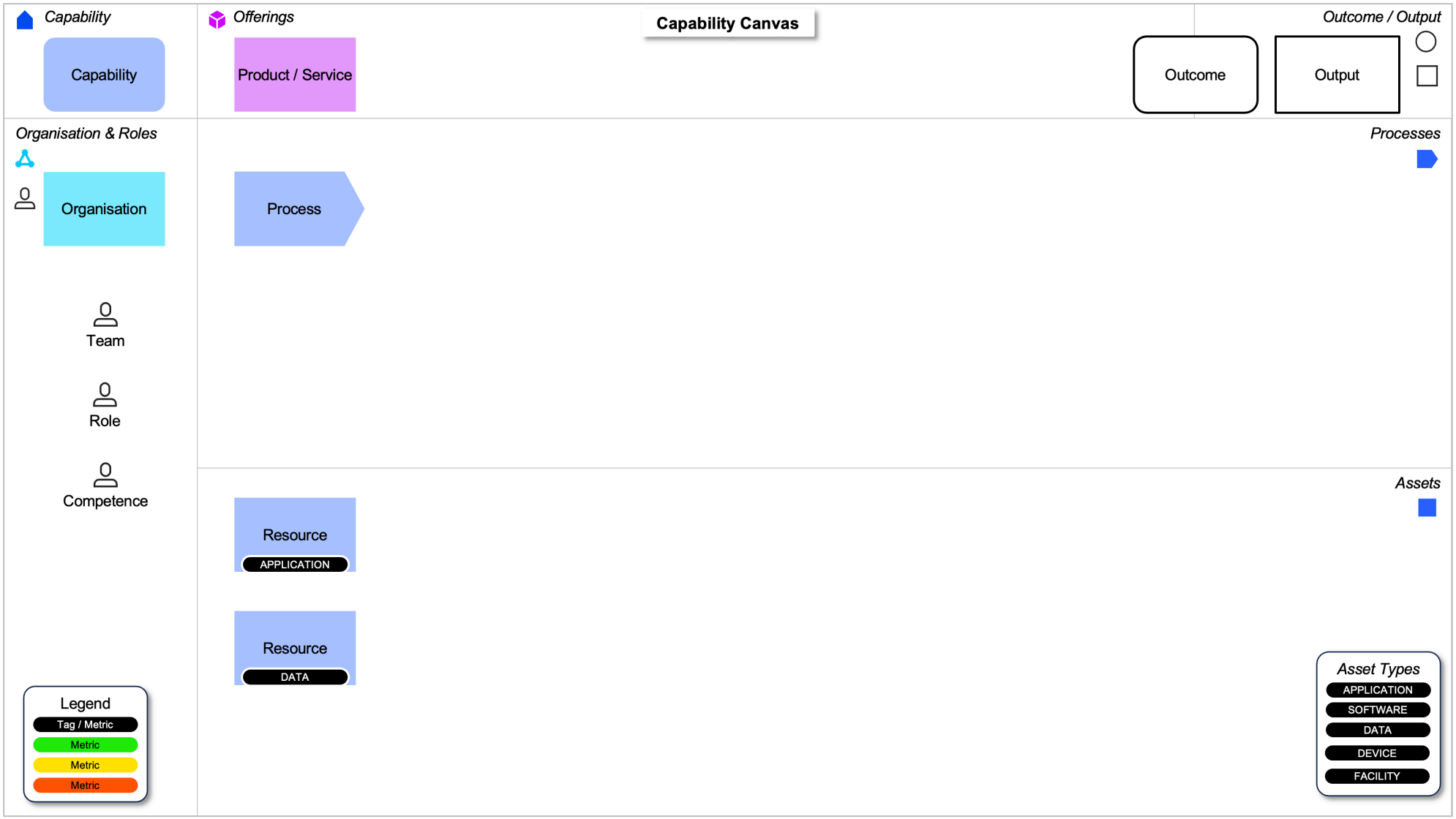


Figure 638: Capability Canvas.



Figure 639: Capability Canvas (operational view).

10.5.18 Capability Assessment

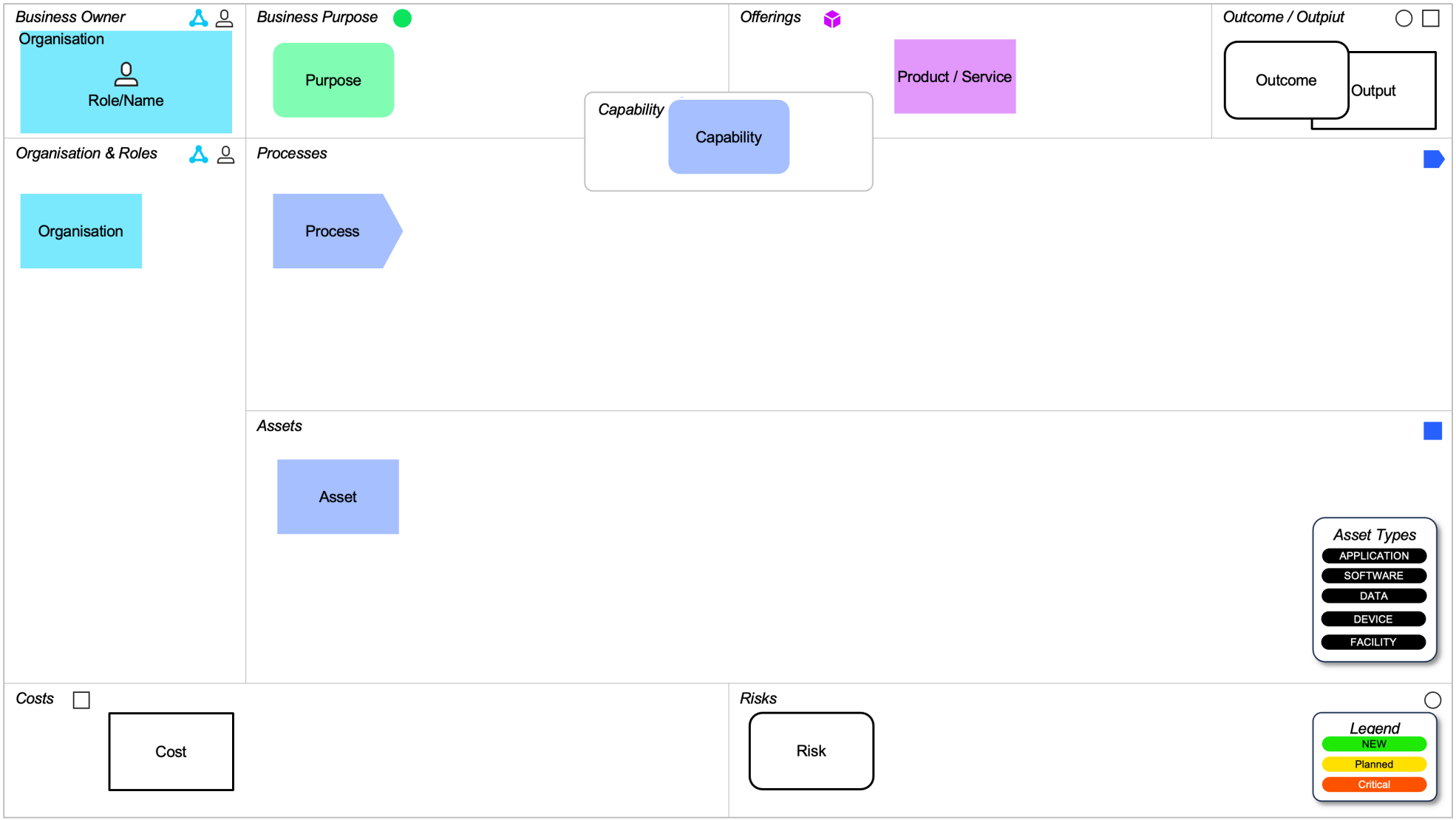


Figure 640: Capability Assessment.

10.5.19 Capability View

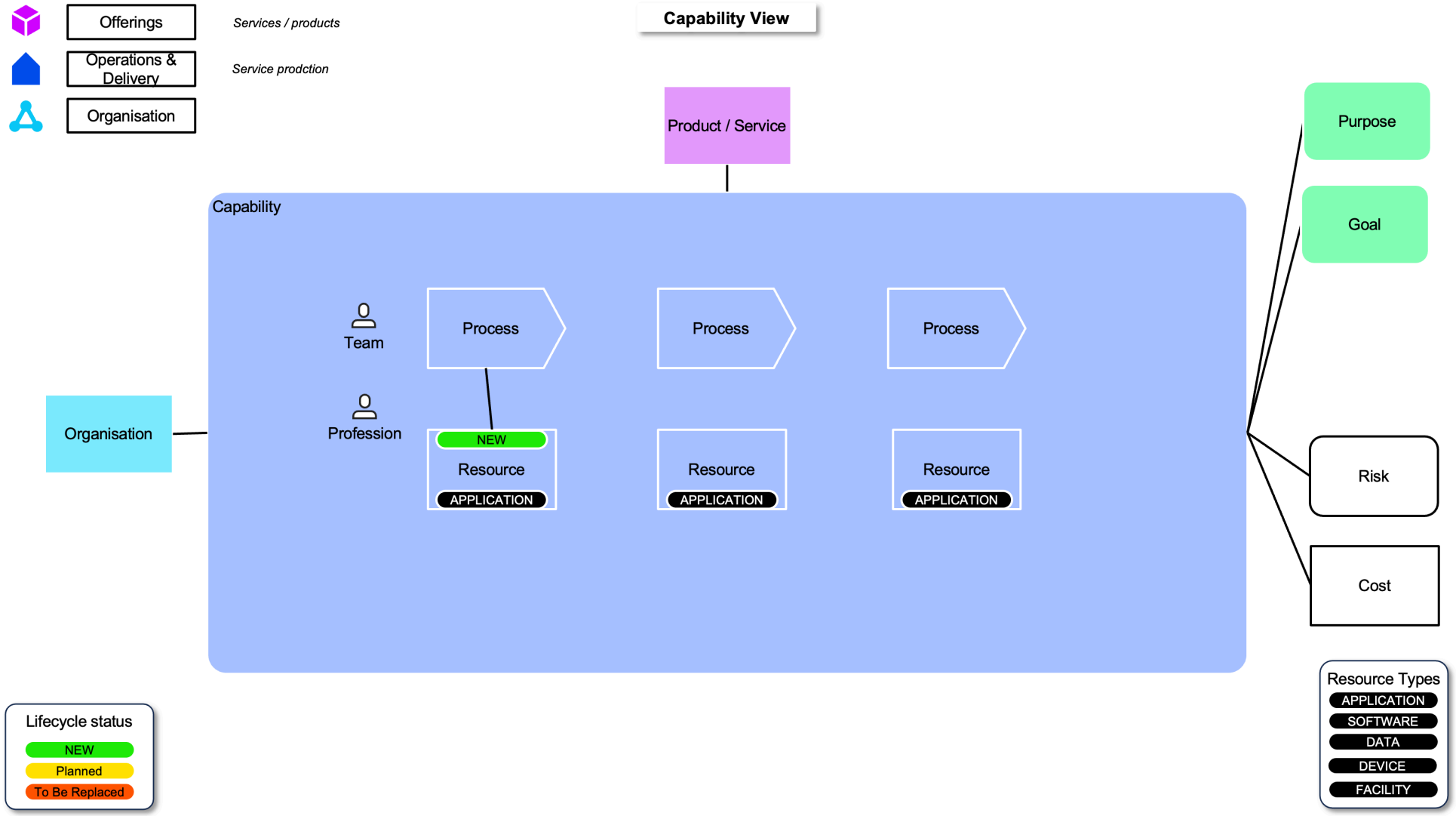


Figure 641: Capability View.

10.5.20 Solution Architecture

All the structural elements of a solution can be depicted with the Asset -elements. A tag can be added if the type of the Asset is important to be shown.

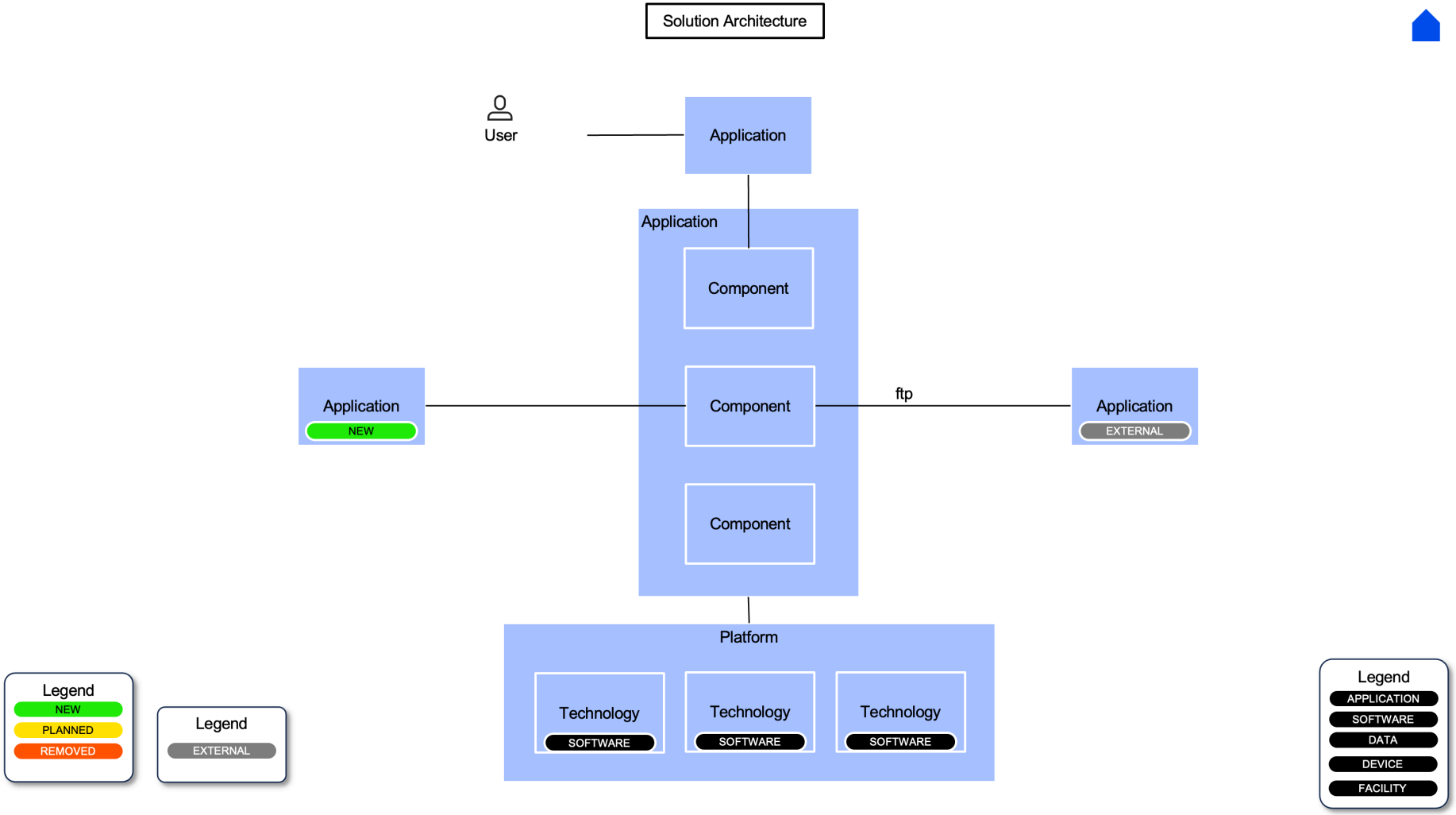


Figure 642: Solution Architecture.

10.5.21 Transition Plan

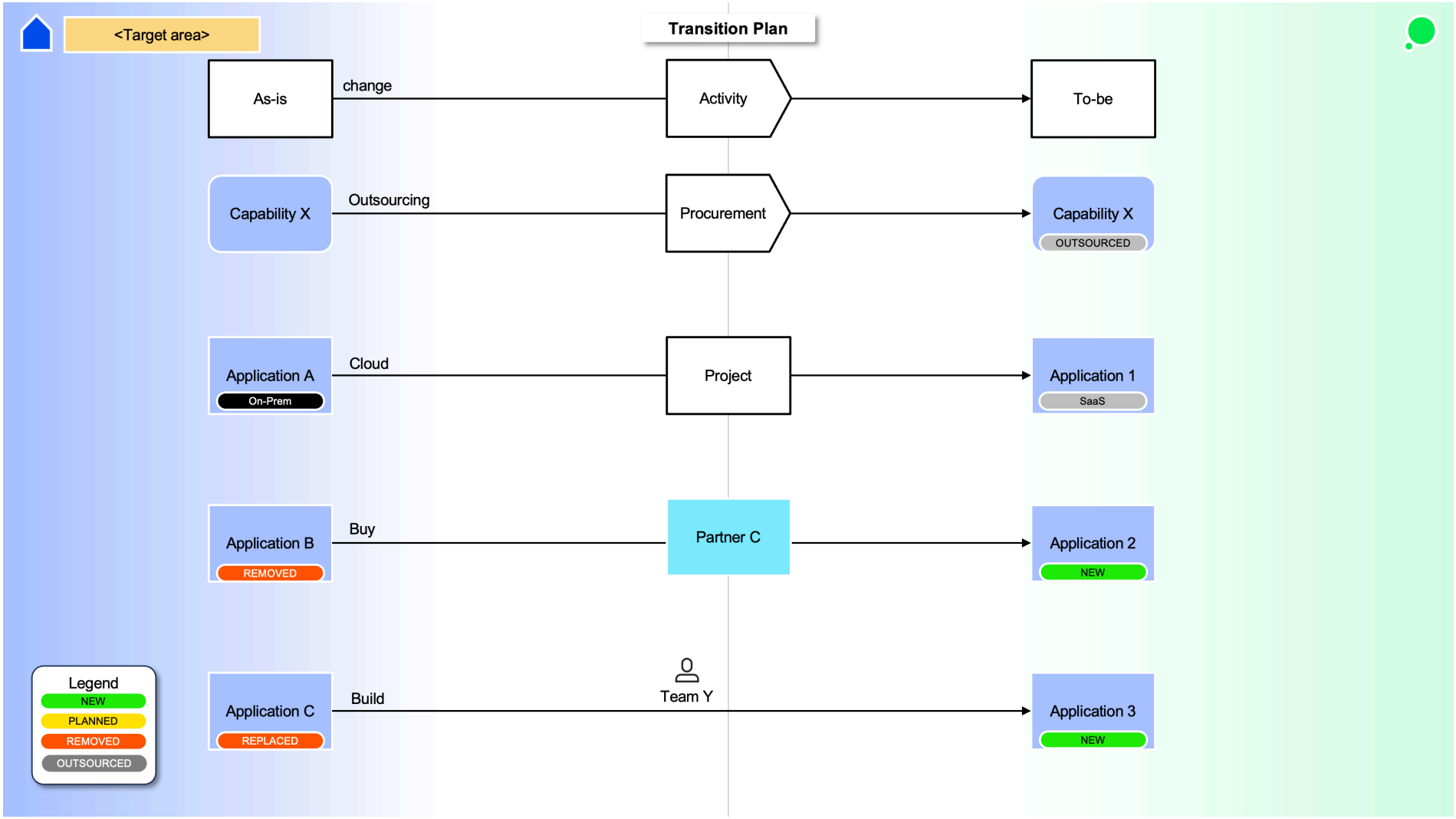


Figure 643: Transition Plan.

10.5.22 Team Topologies

Team Topologies is an approach for organising development teams according to topologies related to the business value streams. Some teams are aligned with the core business value stream, some support former teams, some specialize in complicated subsystems, and some provide platforms.

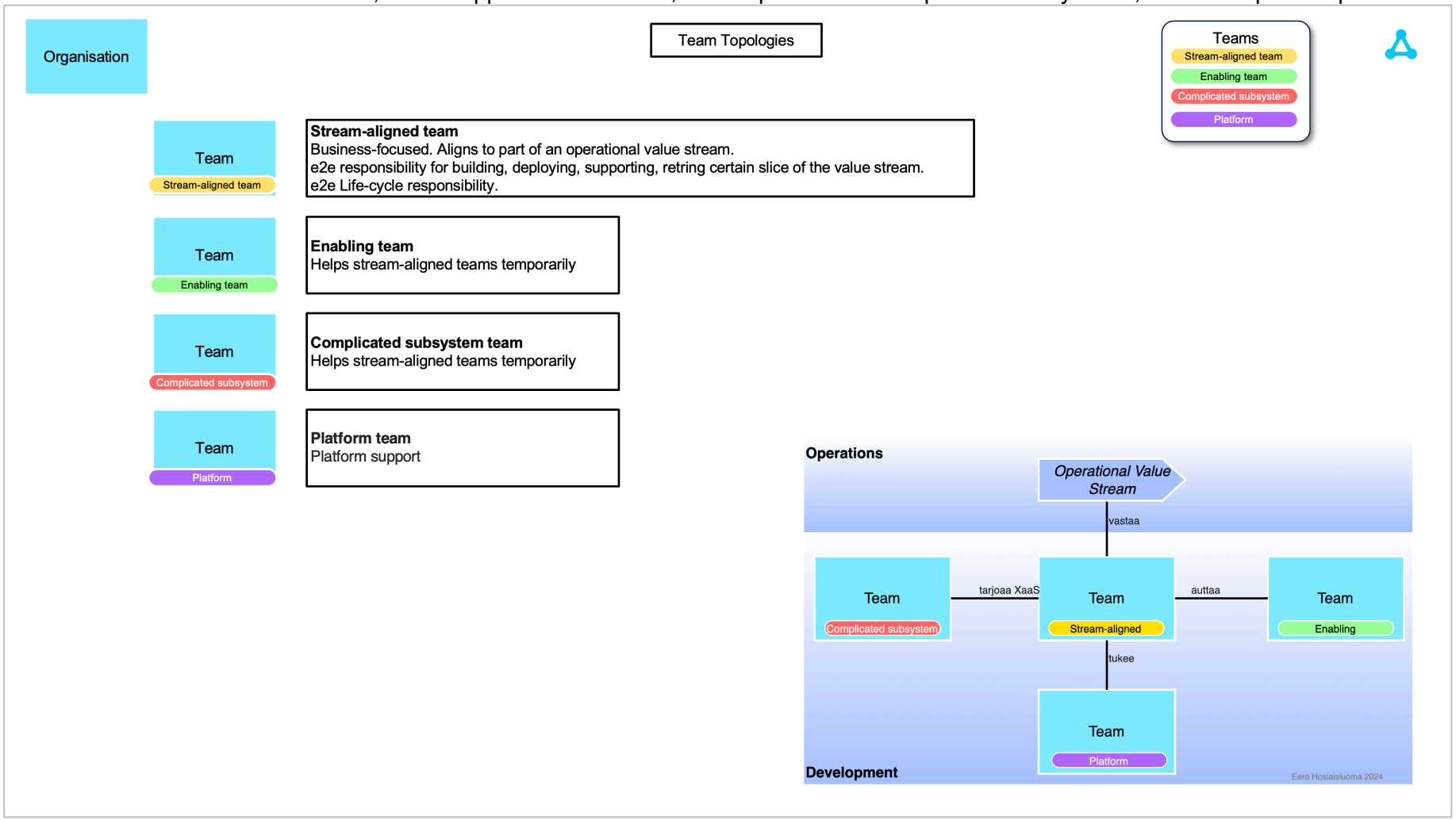


Figure 644: Team Topologies.

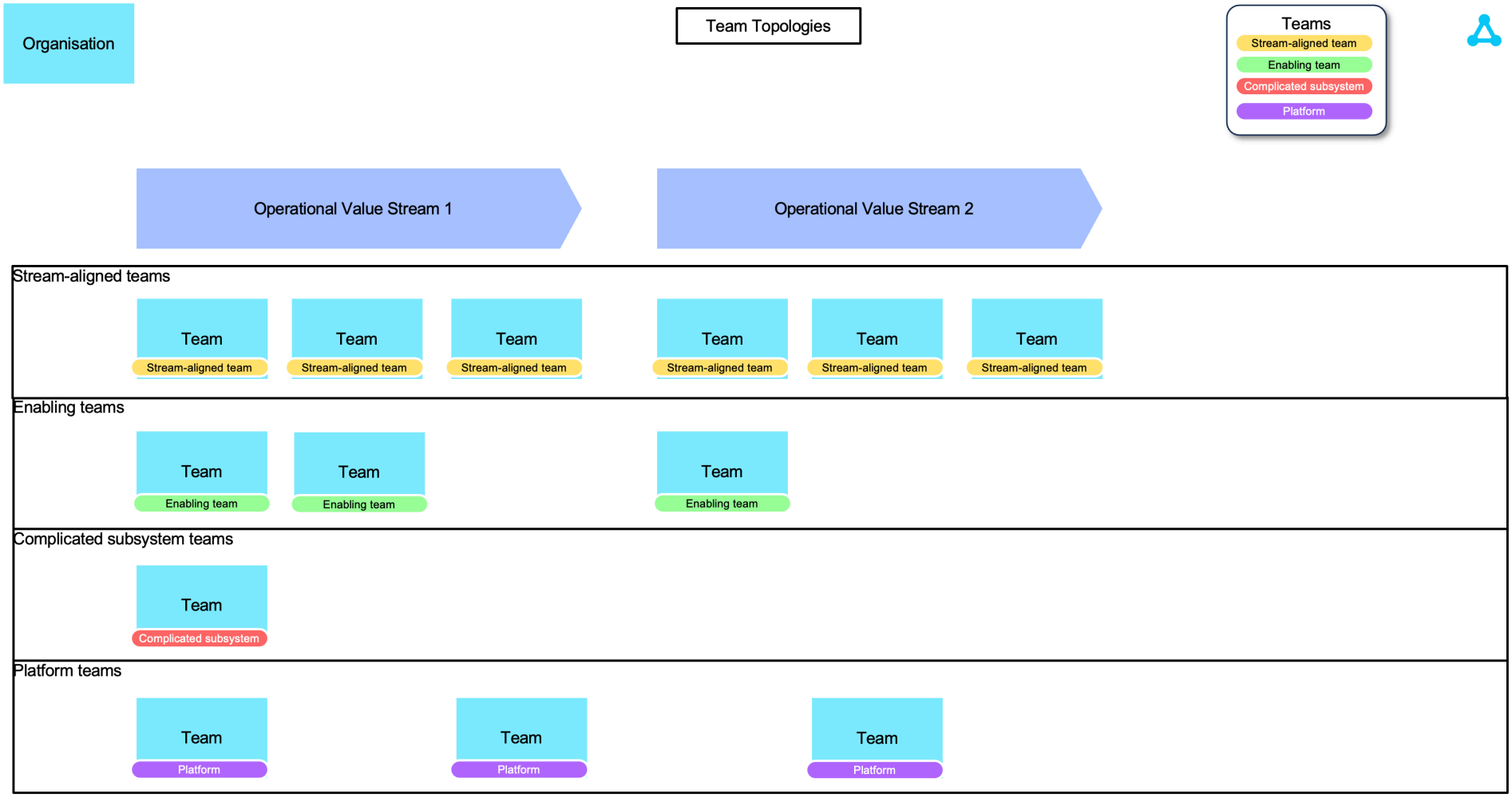


Figure 645: Team Topologies.

10.5.23 Team Interaction Map

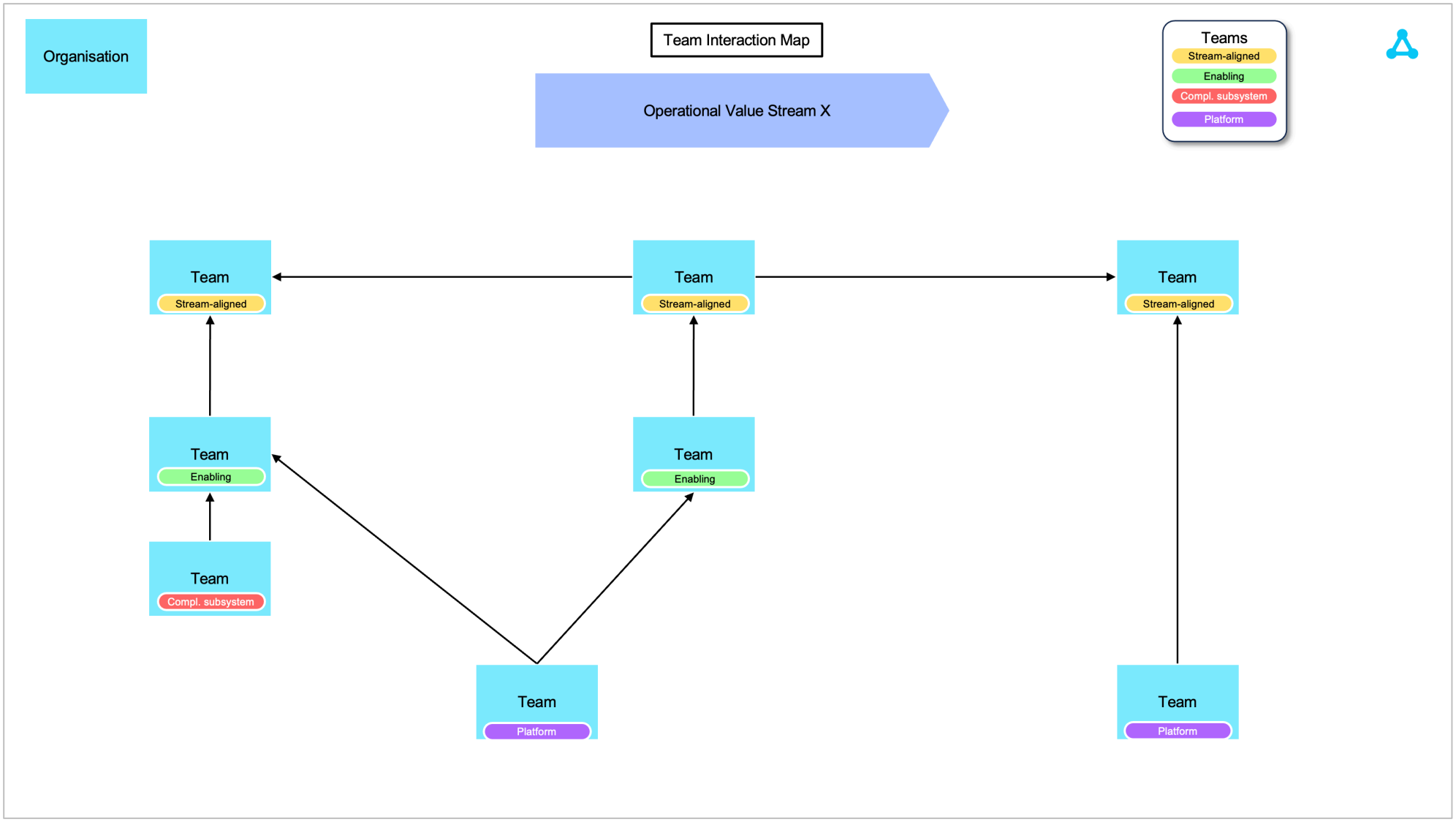


Figure 646: Team Interaction Map.

10.5.24 Team Responsibility Map

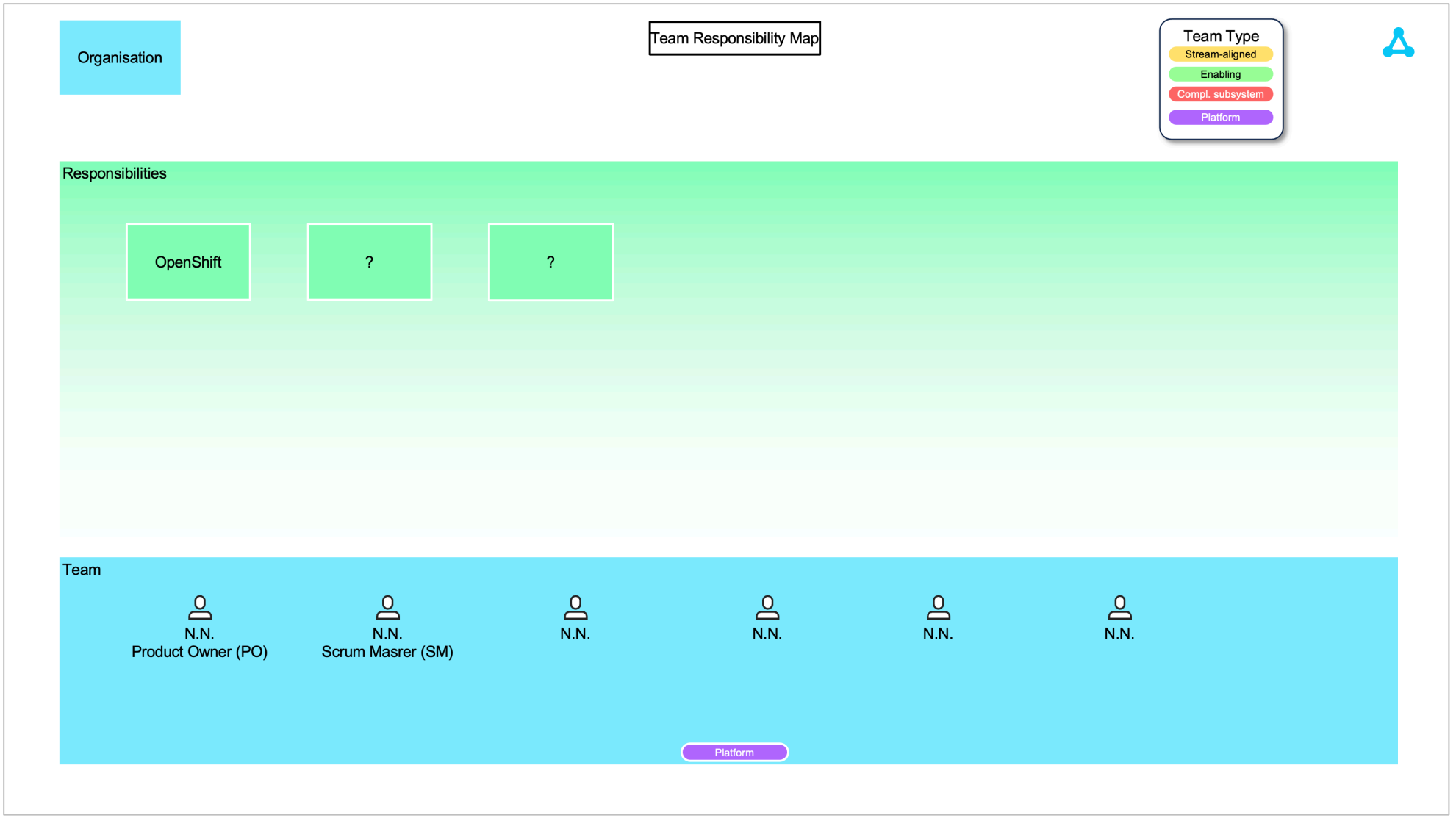


Figure 647: Team Responsibility Map.

10.5.25 IT Operating Model

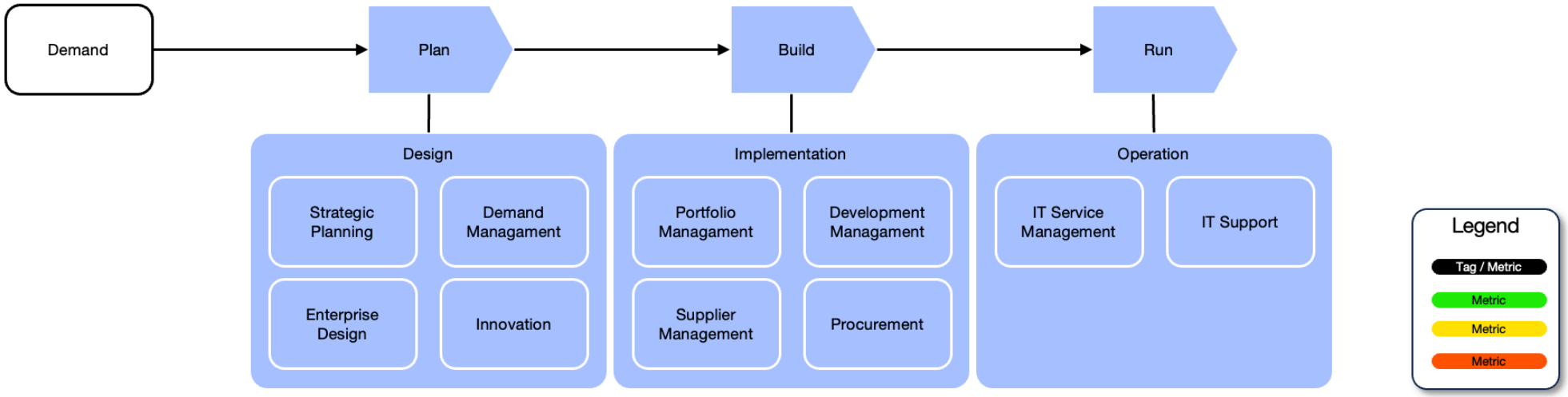


Figure 648: IT Operating Model.

10.5.26 Development Value Stream

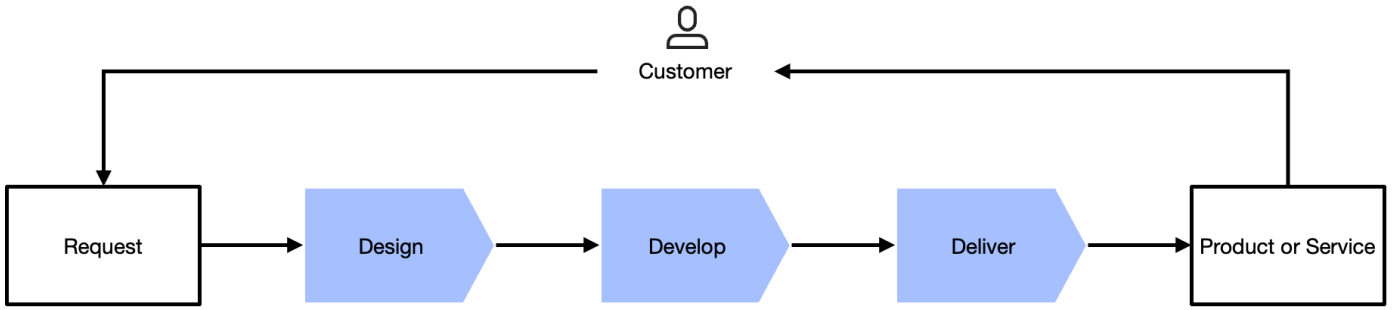


Figure 649: Development Value Stream.

Get PowerPoint template from here: link.

10.5.27 Capability Classification



Figure 650: Capability Classification.

10.5.28 Operating Model Canvas

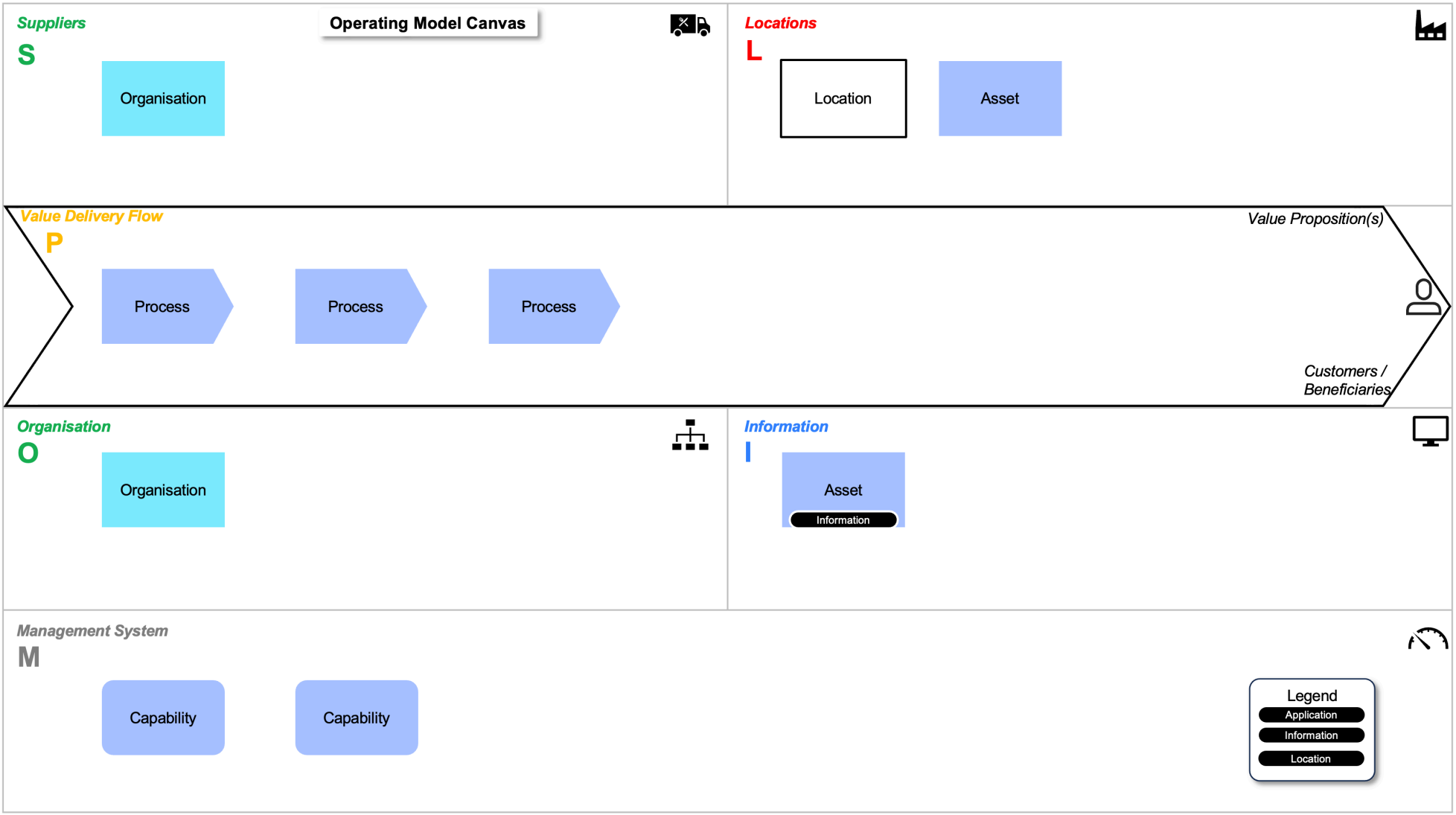


Figure 651: Operating Model Canvas.

10.6 Extras

10.6.1 Outcome Analysis

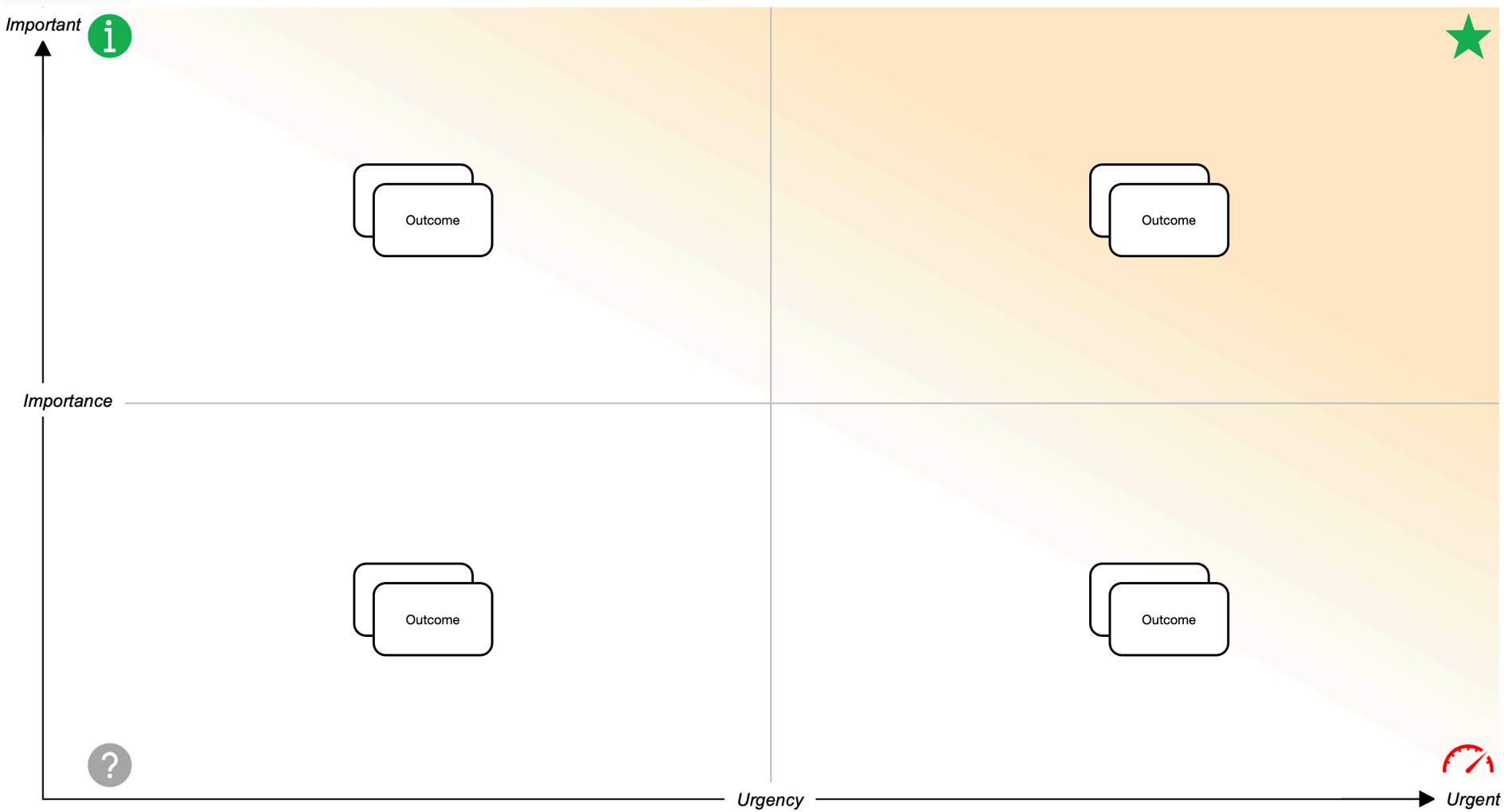


Figure 652: Outcome Analysis.

10.6.2 Risk Analysis – Bow Tie

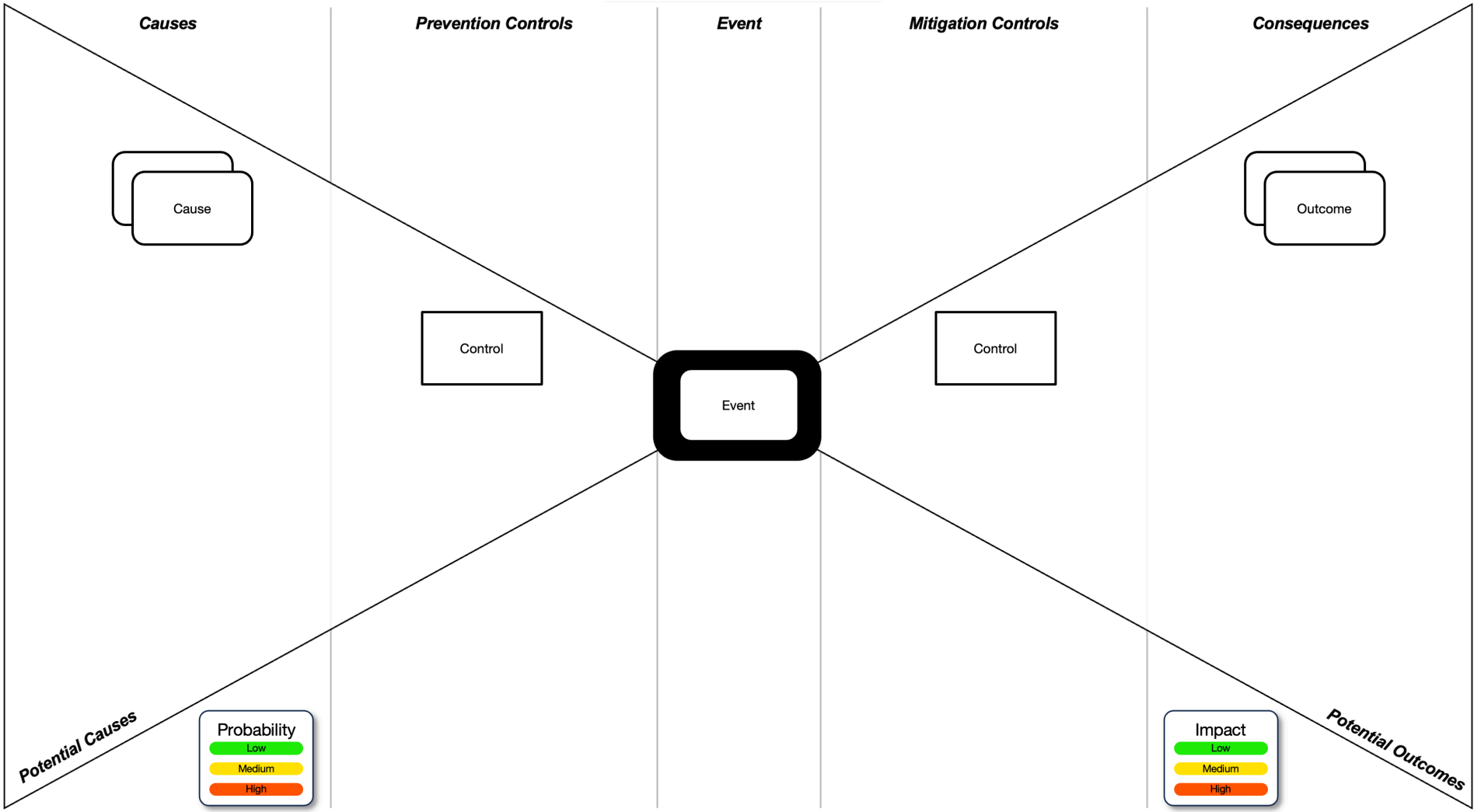


Figure 653: Risk Analysis - Bow Tie.

10.6.3 Fife Whys (5Ws)



Figure 654: Five Whys.

10.6.4 Cause and Effect Analysis

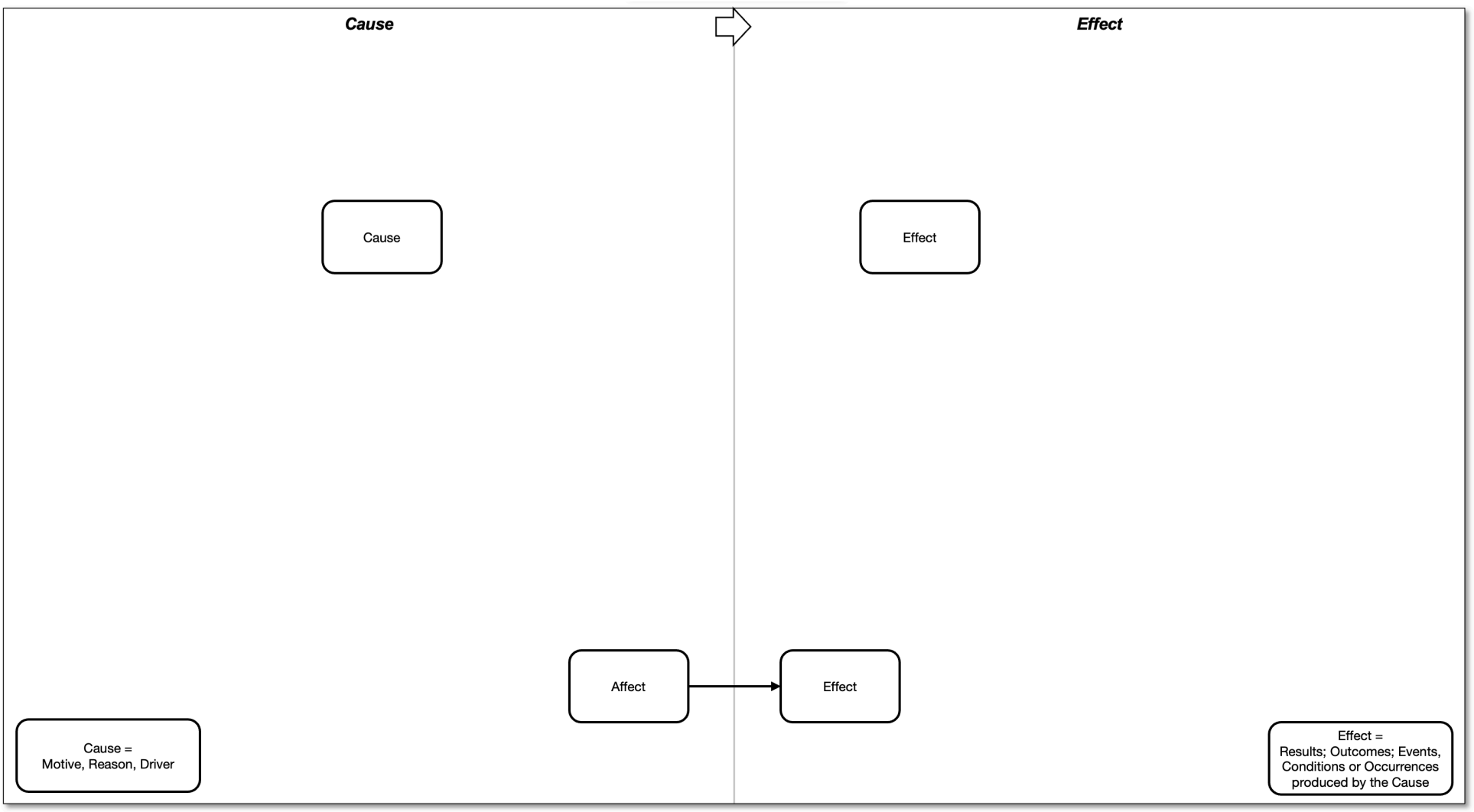


Figure 655: Cause and Effect Analysis.

10.6.5 Cause and Effect Fishbone diagram

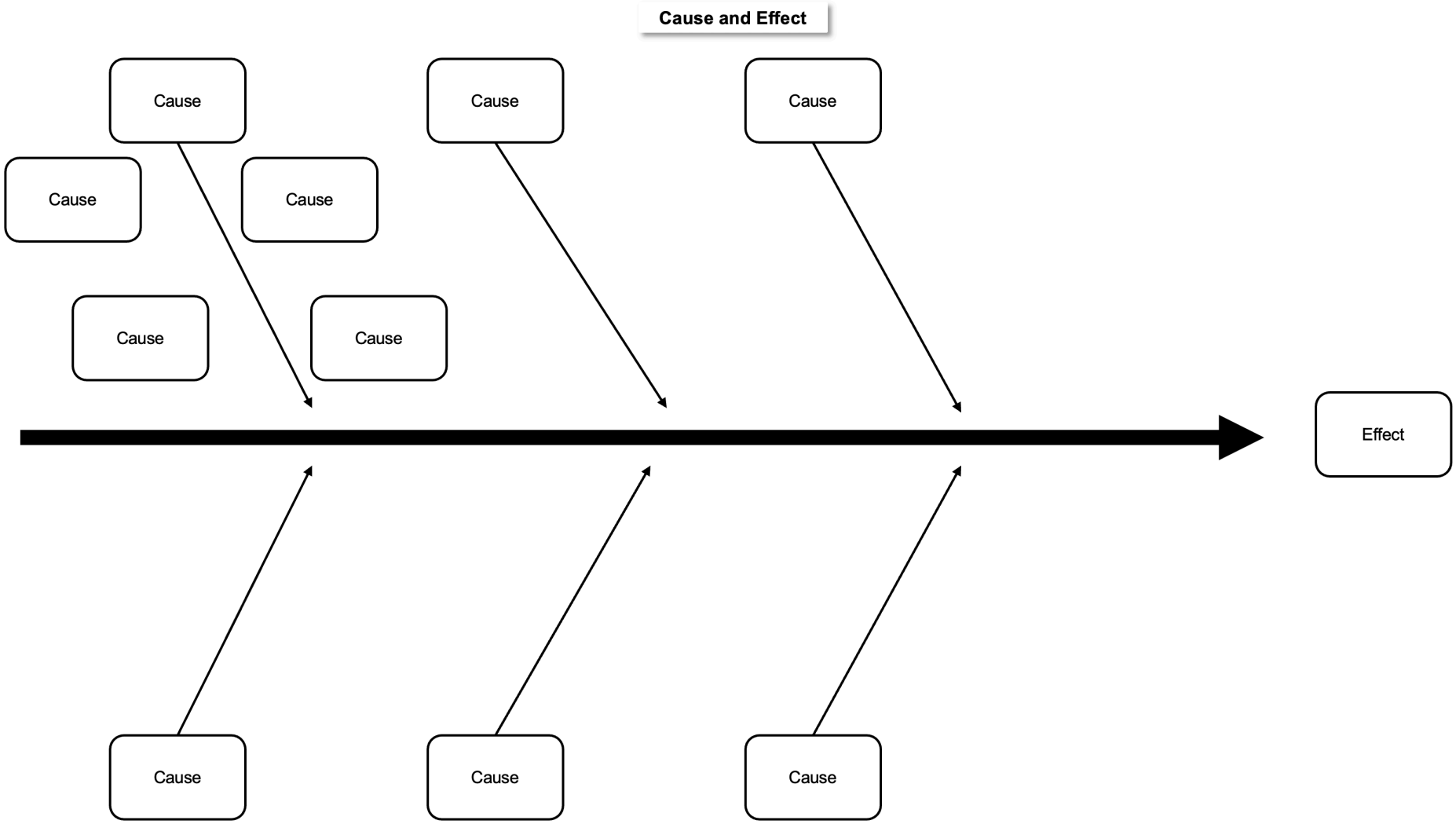


Figure 656: Fishbone diagram.

10.6.6 EDGY Elements

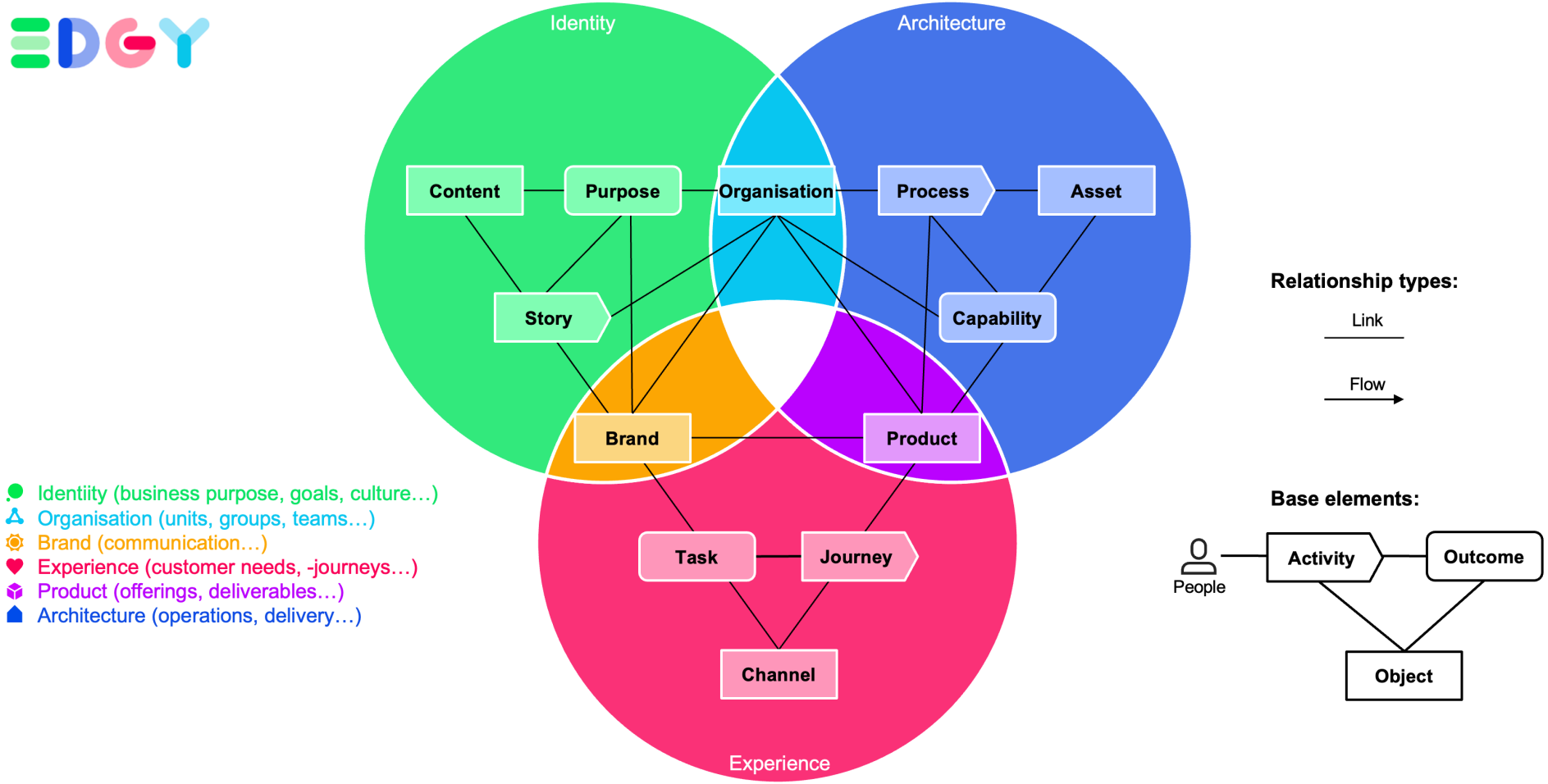


Figure 657: EDGY elements.

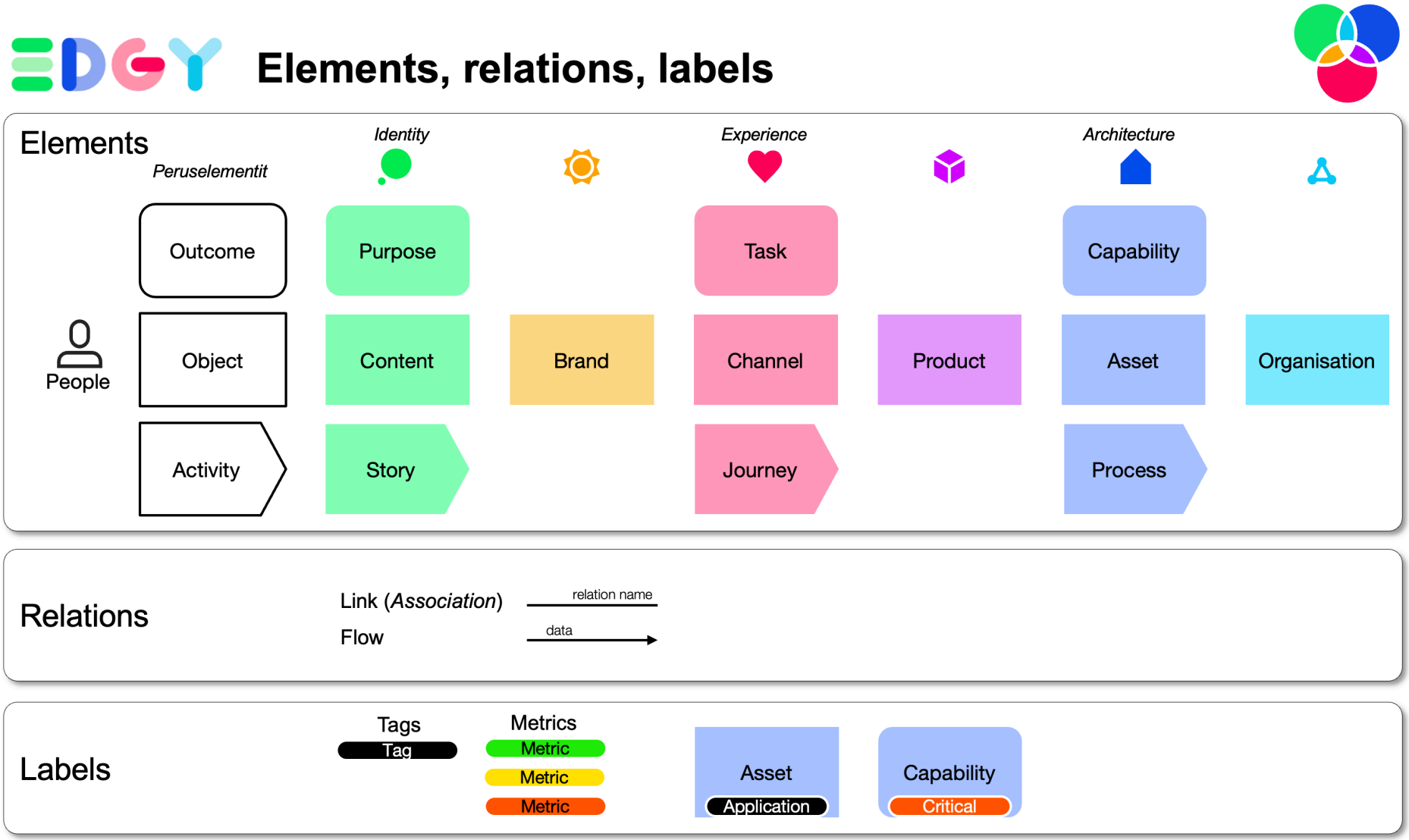


Figure 658: EDGY elements, relations and labels.

10.6.7 Enterprise Design with EDGY figures

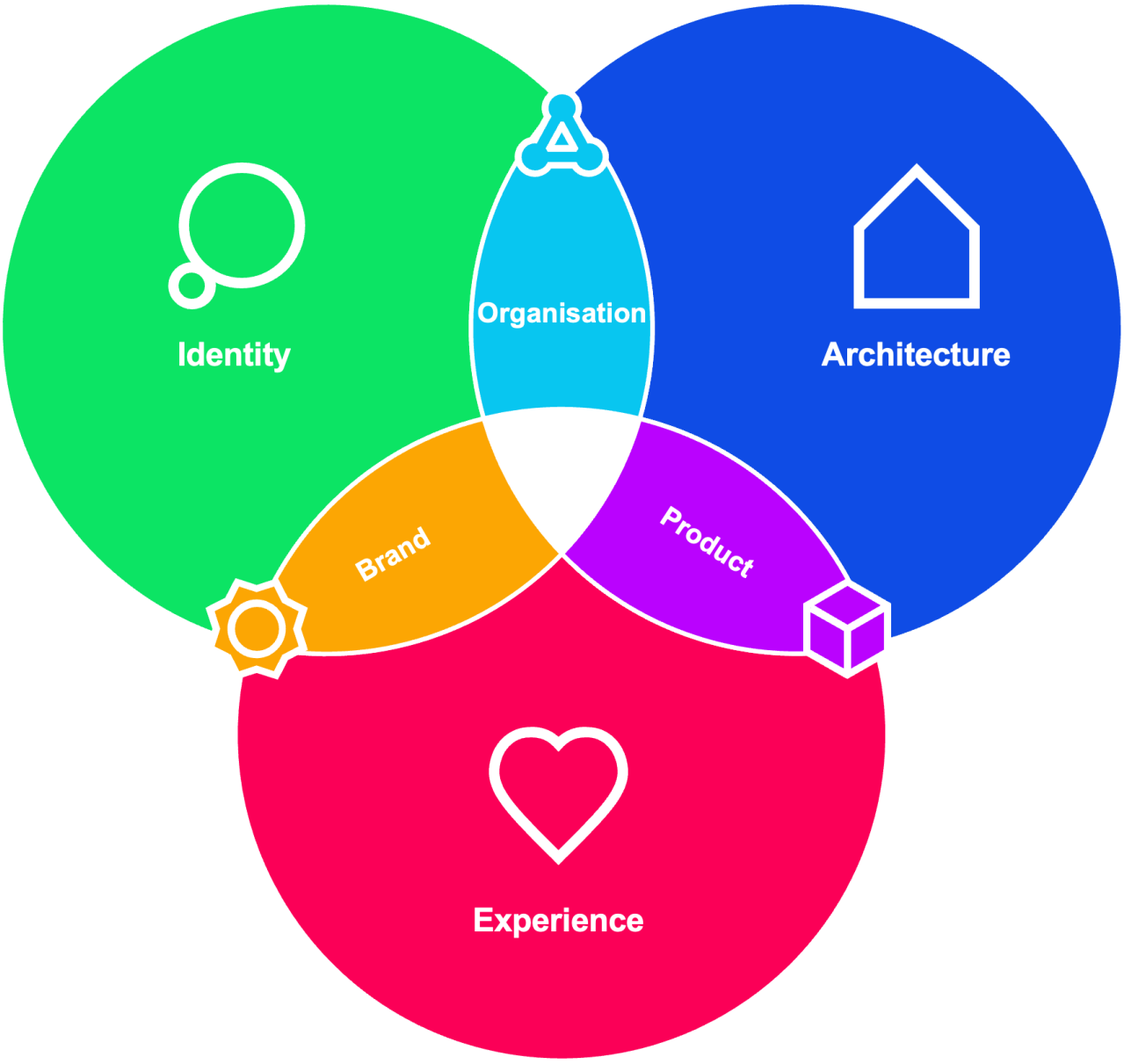


Figure 659: The Enterprise Design Facet Model.

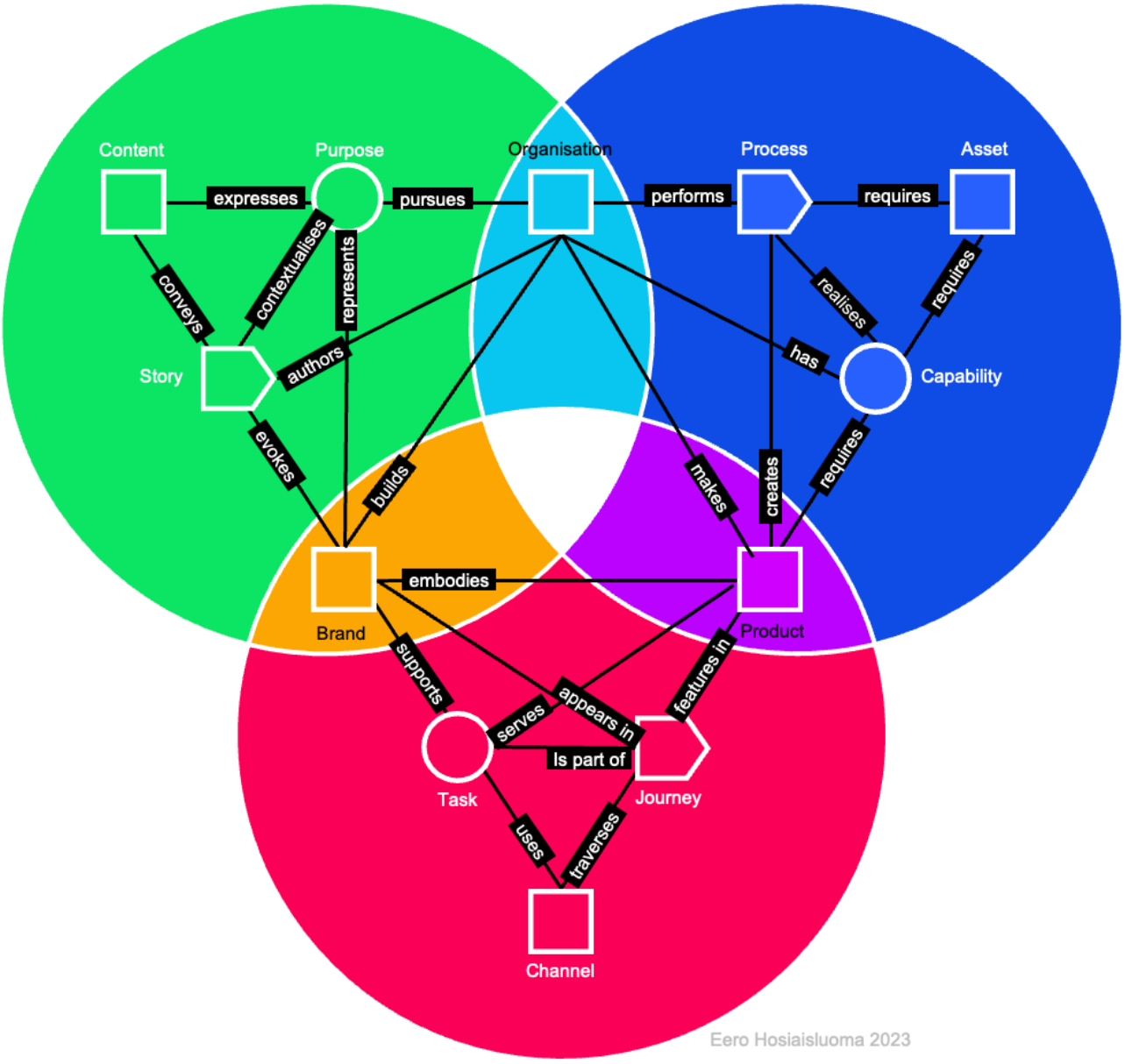
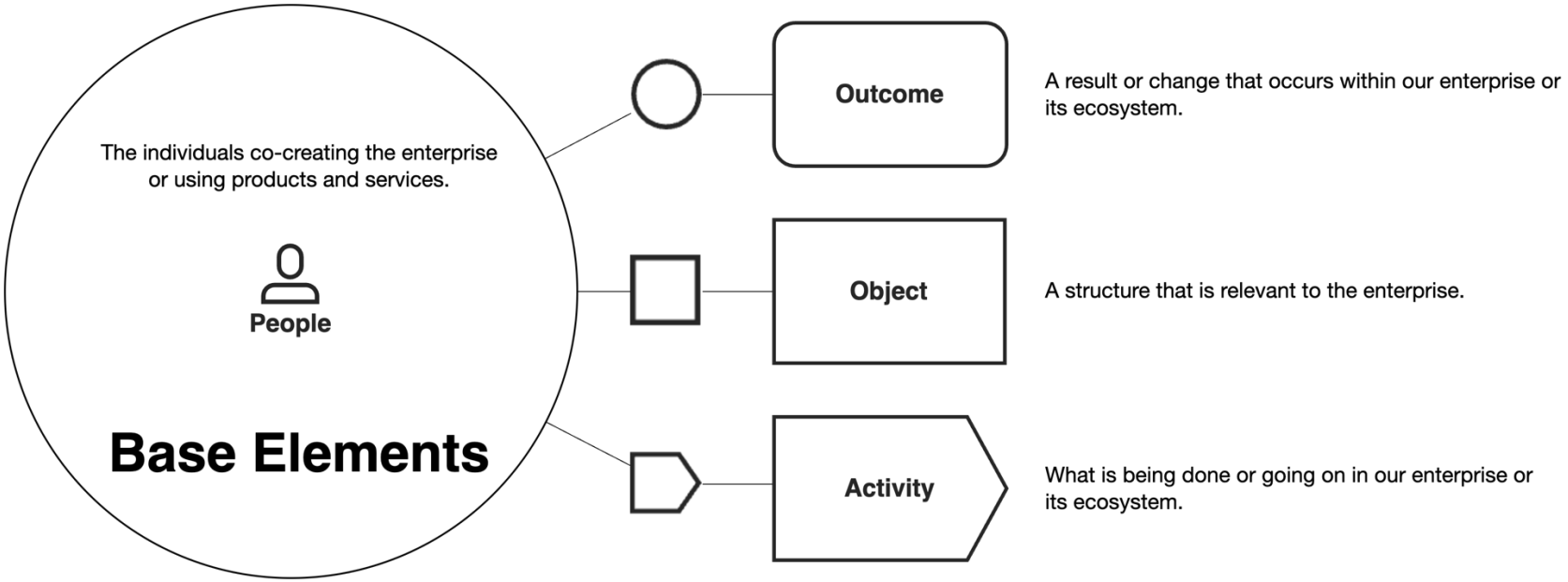
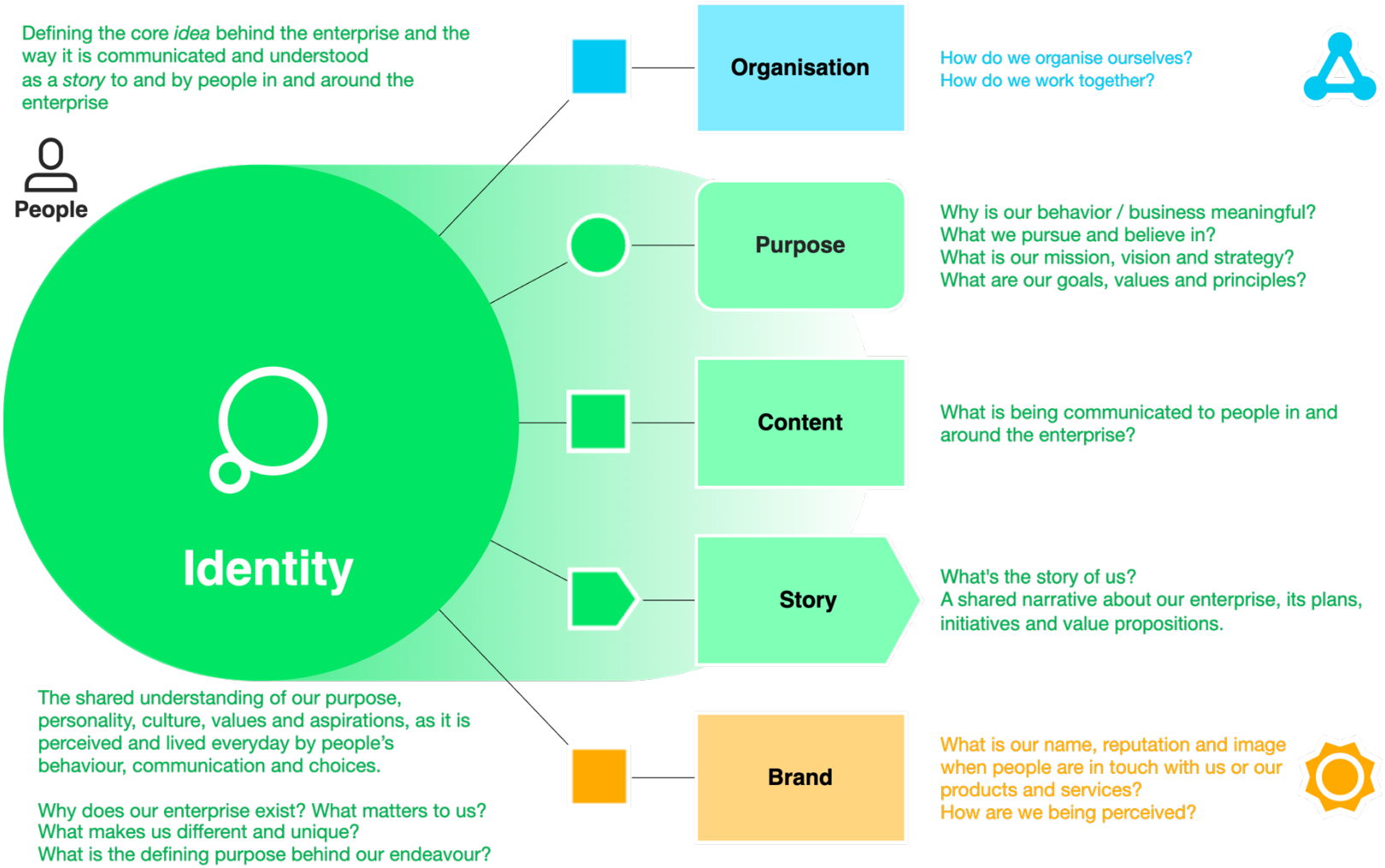
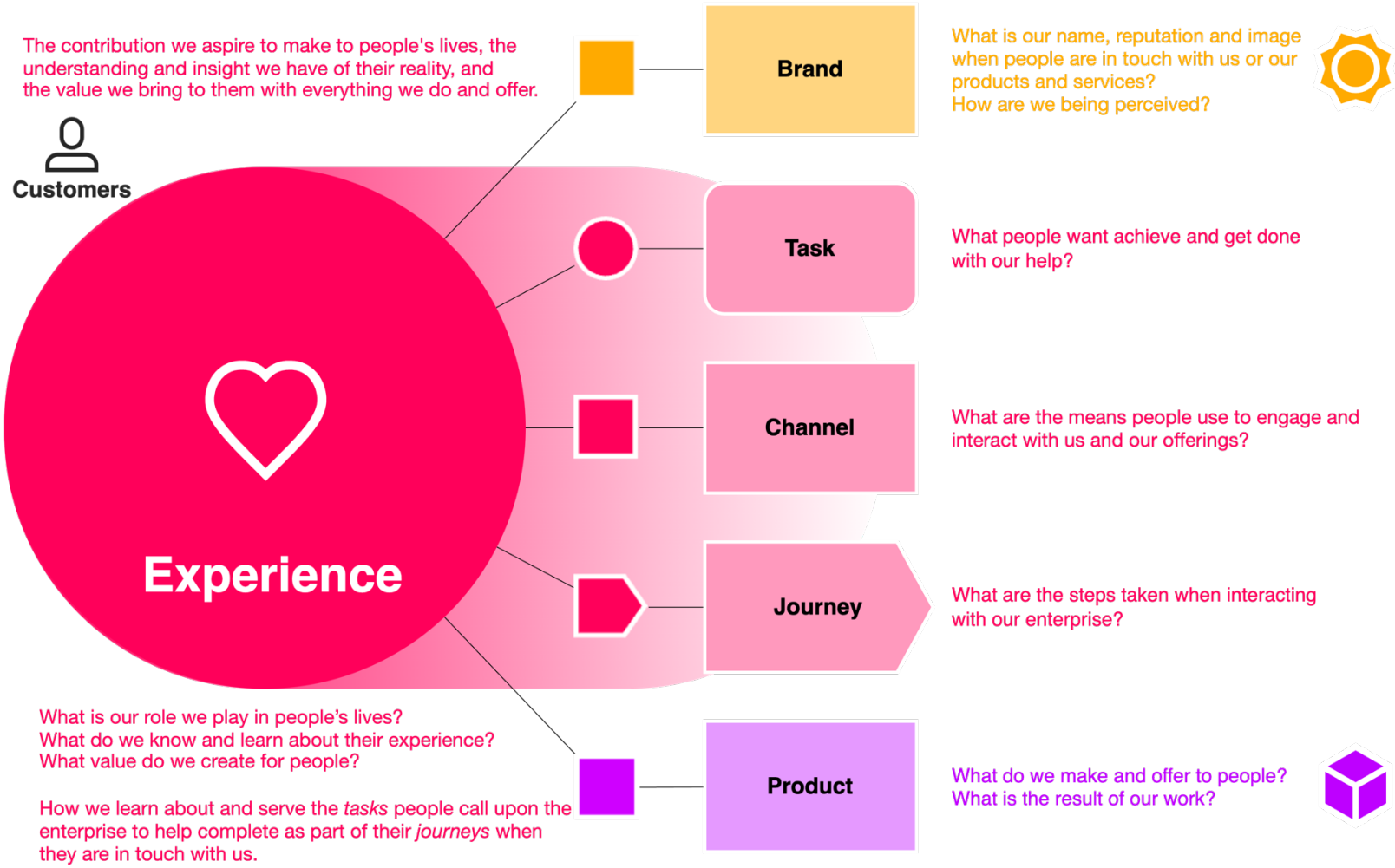


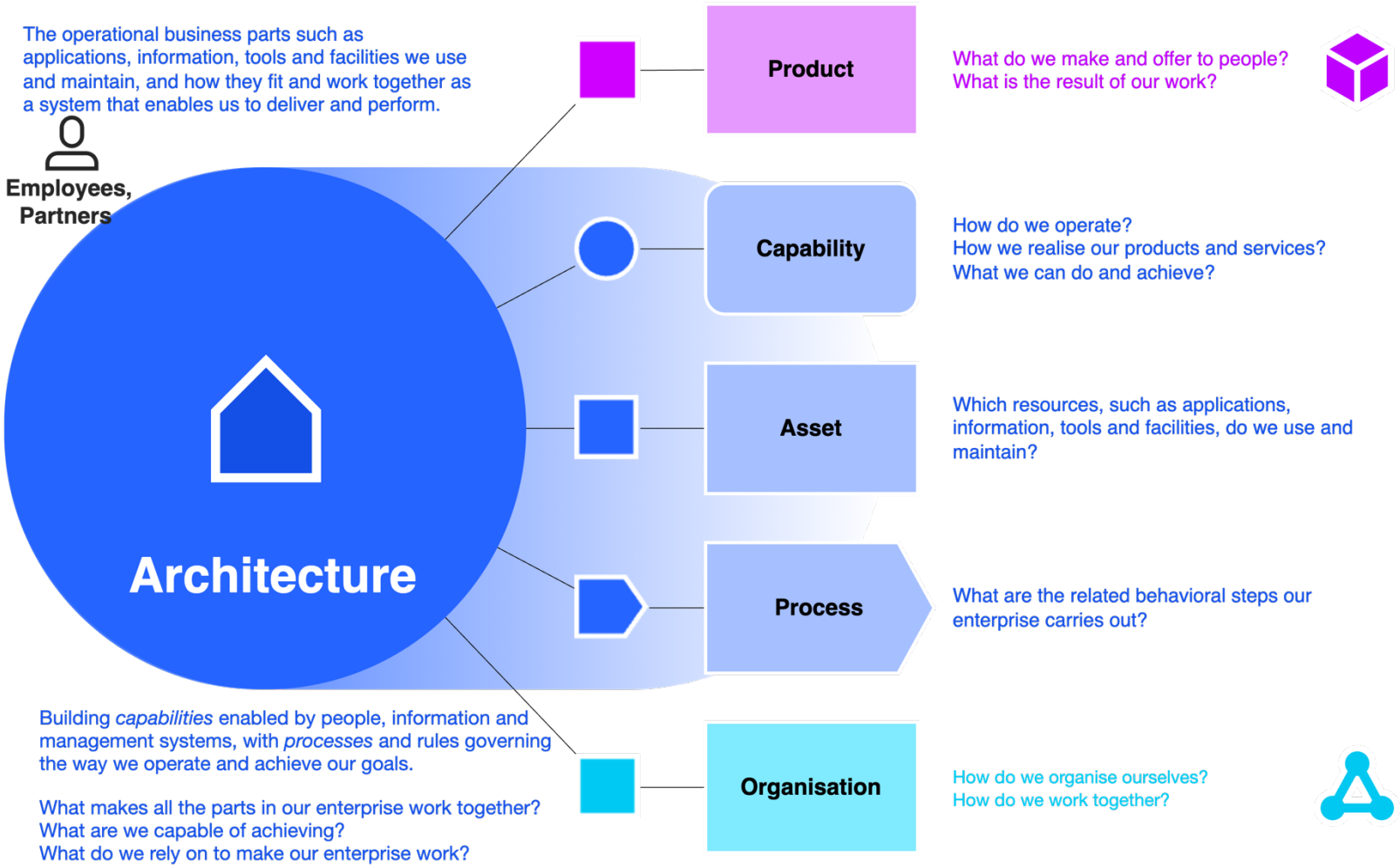
Figure 660: Elements and pre-defined relations of the Facet Model.

Each facet (perspective) covers 3 + 2 elements: three facet elements and two intersection elements.


The individuals co-creating the enterprise or using products and services.
People
Base Elements
Outcome
A result or change that occurs within our enterprise or its ecosystem.
Object
A structure that is relevant to the enterprise.
Activity
What is being done or going on in our enterprise or its ecosystem.


Defining the core *idea* behind the enterprise and the way it is communicated and understood as a *story* to and by people in and around the enterprise
People
Identity
The shared understanding of our purpose, personality, culture, values and aspirations, as it is perceived and lived everyday by people's behaviour, communication and choices.
Why does our enterprise exist? What matters to us?
What makes us different and unique?
What is the defining purpose behind our endeavour?
Organisation
How do we organise ourselves?
How do we work together?
Purpose
Why is our behavior / business meaningful?
What we pursue and believe in?
What is our mission, vision and strategy?
What are our goals, values and principles?
Content
What is being communicated to people in and around the enterprise?
Story
What's the story of us?
A shared narrative about our enterprise, its plans, initiatives and value propositions.
Brand
What is our name, reputation and image when people are in touch with us or our products and services?
How are we being perceived?


The contribution we aspire to make to people's lives, the understanding and insight we have of their reality, and the value we bring to them with everything we do and offer.
Customers
Experience
Brand
What is our name, reputation and image when people are in touch with us or our products and services?
How are we being perceived?
Task
What people want achieve and get done with our help?
Channel
What are the means people use to engage and interact with us and our offerings?
Journey
What are the steps taken when interacting with our enterprise?
Product
What do we make and offer to people?
What is the result of our work?
What is our role we play in people's lives?
What do we know and learn about their experience?
What value do we create for people?
How we learn about and serve the *tasks* people call upon the enterprise to help complete as part of their *journeys* when they are in touch with us.


The operational business parts such as applications, information, tools and facilities we use and maintain, and how they fit and work together as a system that enables us to deliver and perform.
Employees, Partners
Architecture
Building *capabilities* enabled by people, information and management systems, with *processes* and rules governing the way we operate and achieve our goals.
What makes all the parts in our enterprise work together?
What are we capable of achieving?
What do we rely on to make our enterprise work?
Product
What do we make and offer to people?
What is the result of our work?
Capability
How do we operate?
How we realise our products and services?
What we can do and achieve?
Asset
Which resources, such as applications, information, tools and facilities, do we use and maintain?
Process
What are the related behavioral steps our enterprise carries out?
Organisation
How do we organise ourselves?
How do we work together?

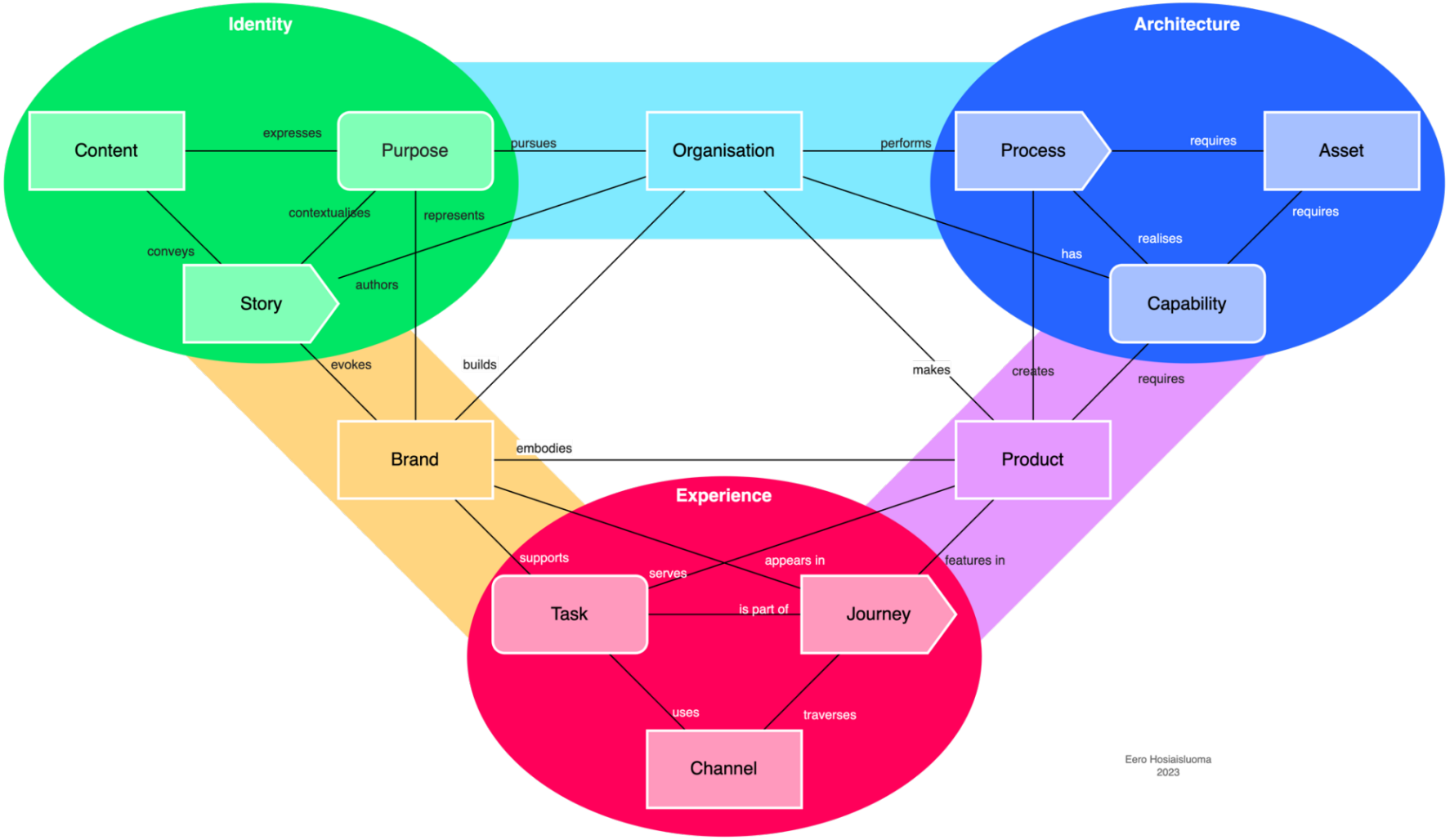


Figure 661: EDGY elements and relations.

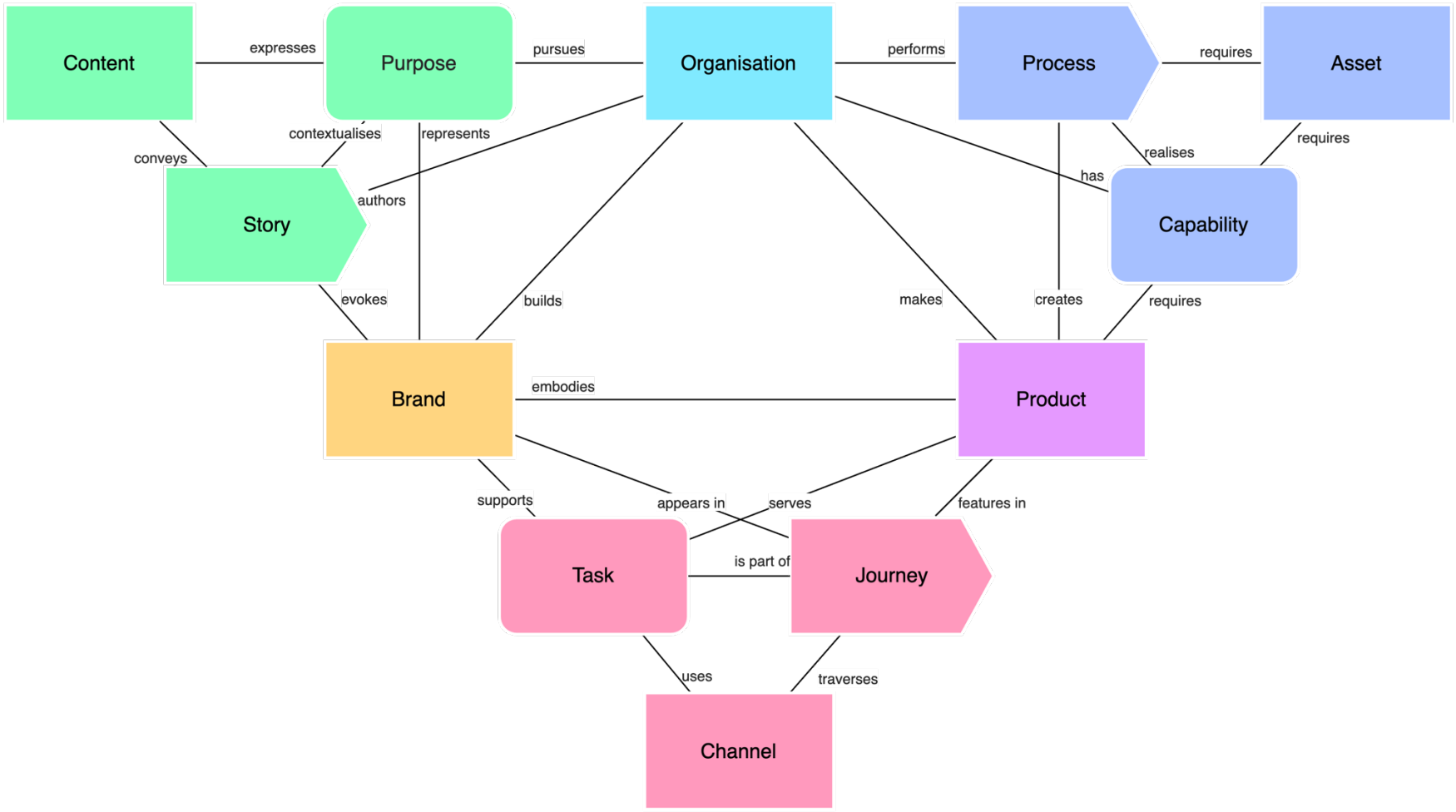
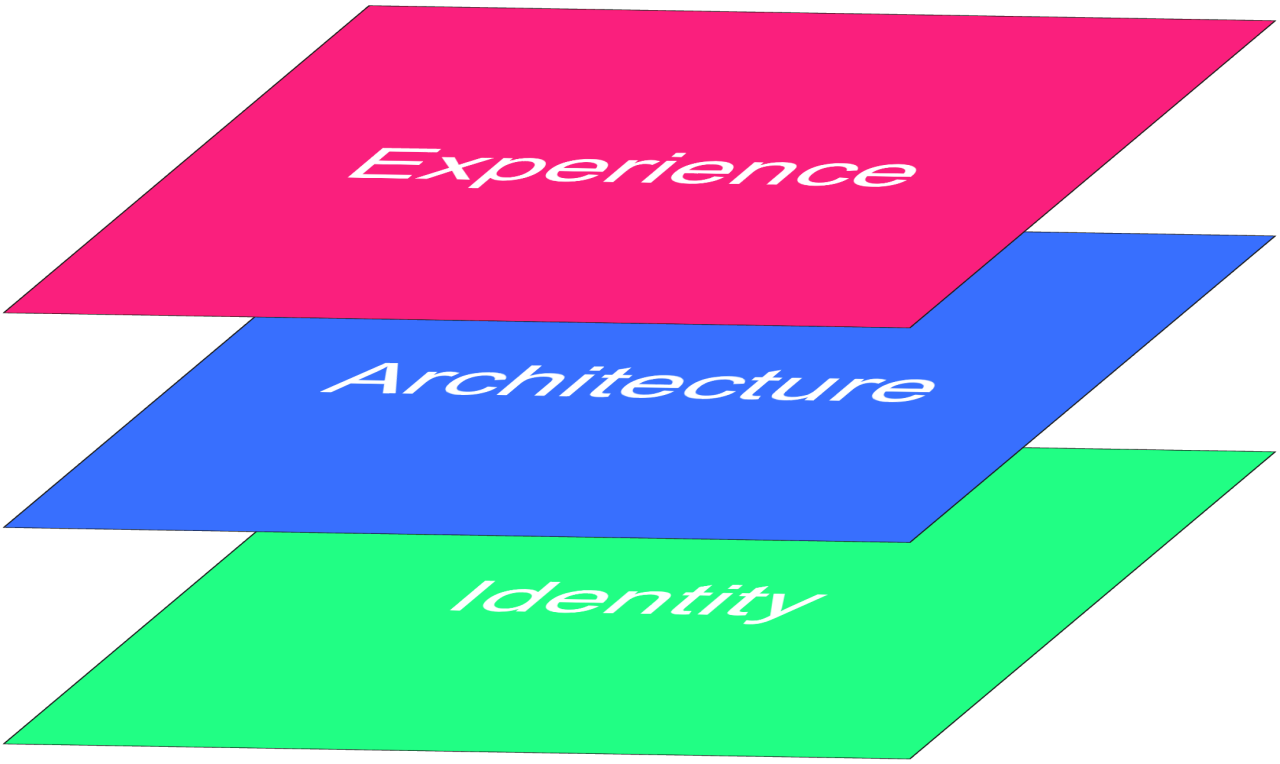


Figure 662: EDGY elements and relations.

Enterprise Design facets are not layered (in nature); they are interconnected as equal and coordinated aspects of an enterprise. However, we can take a customer-driven approach and start design from the customer experience, then define how customers can be served by operations and delivery, which are managed by the architecture. The identity aspect defines why we do what we do and ensures it is aligned with our strategy, goals, and aspirations.



The Enterprise Design Facets form a continuum, a simultaneously influencing cycle or whole, where all facets exist and are at play at the same time. Everything affects everything.

Enterprise Design is co-design with the help of the Facet Model.

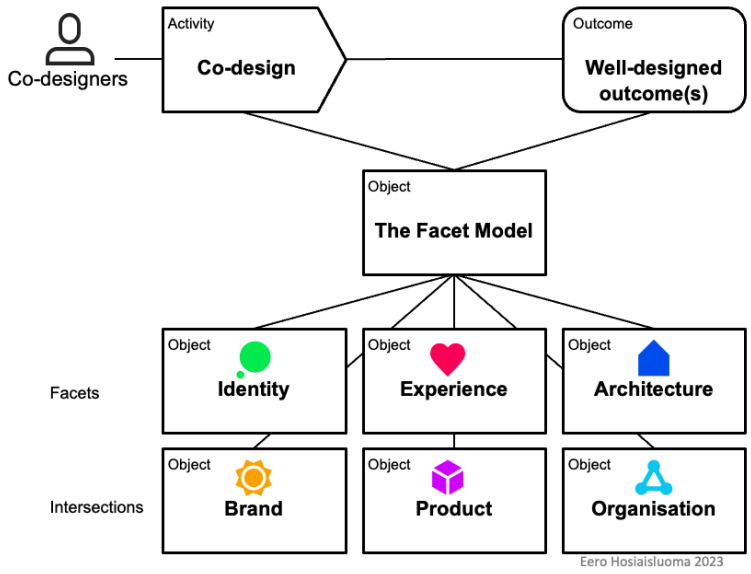


Figure 663: Co-design with the Facet Model.

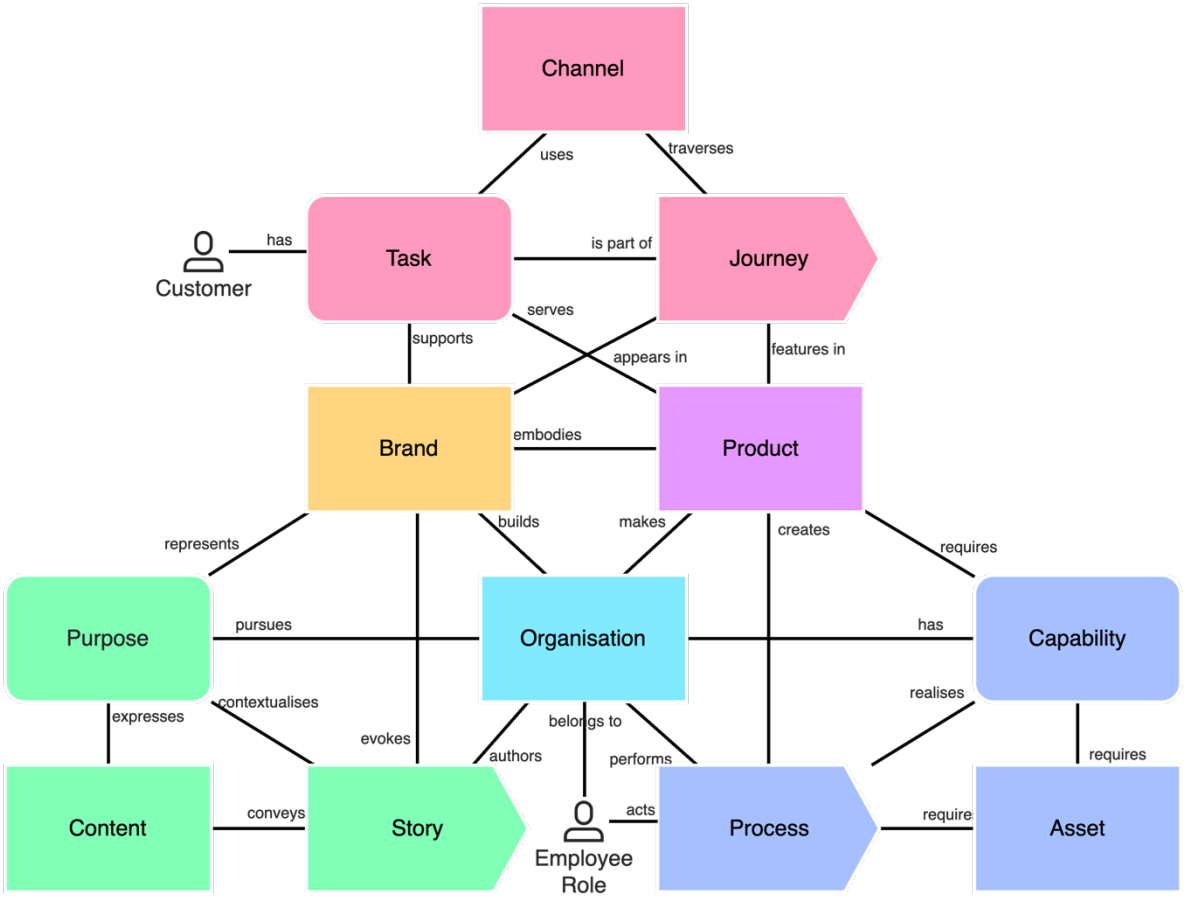


Figure 664: Overall Big Picture.

10.6.8 Simplified notation of EDGY elements

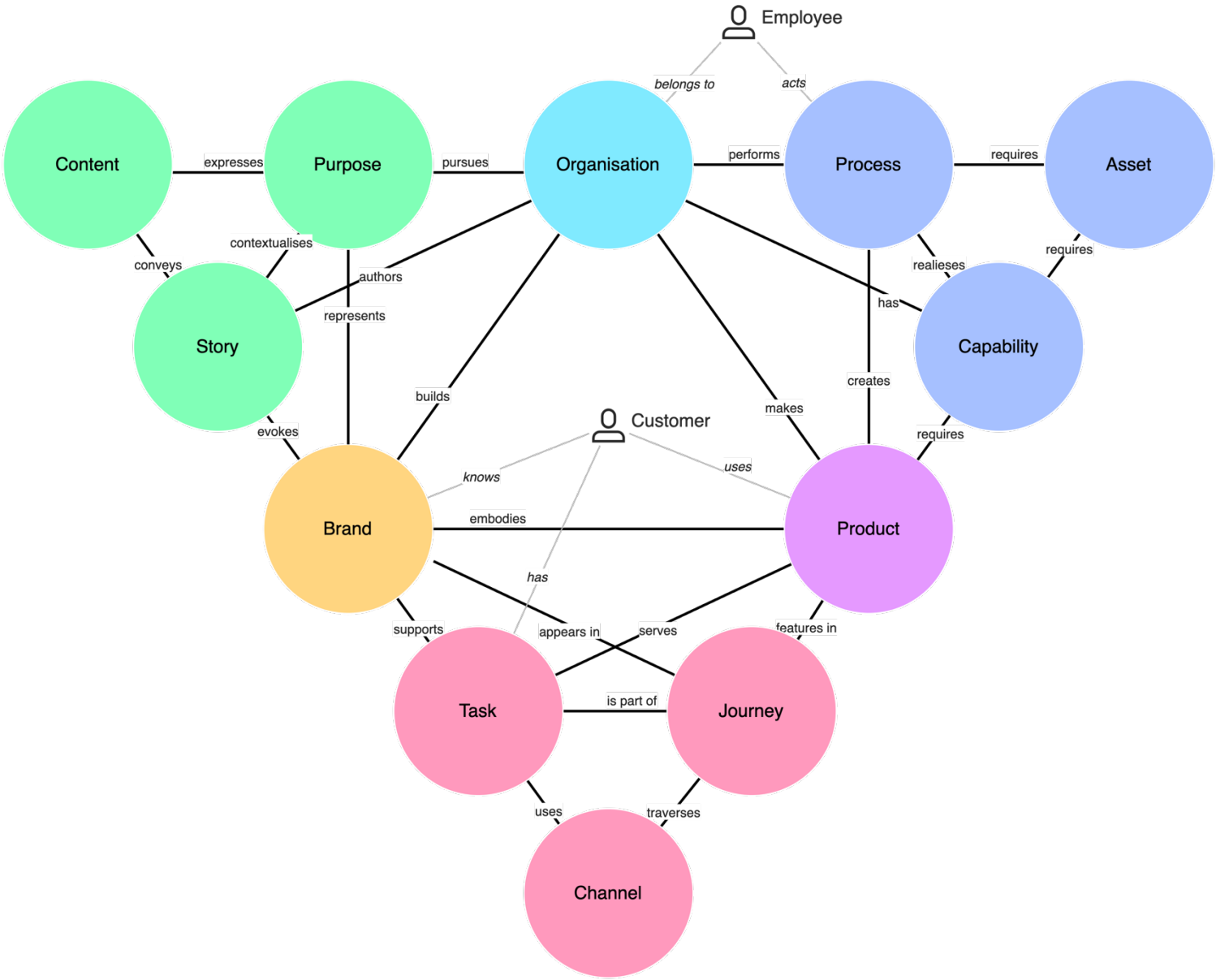


Figure 665: Simplified notation.

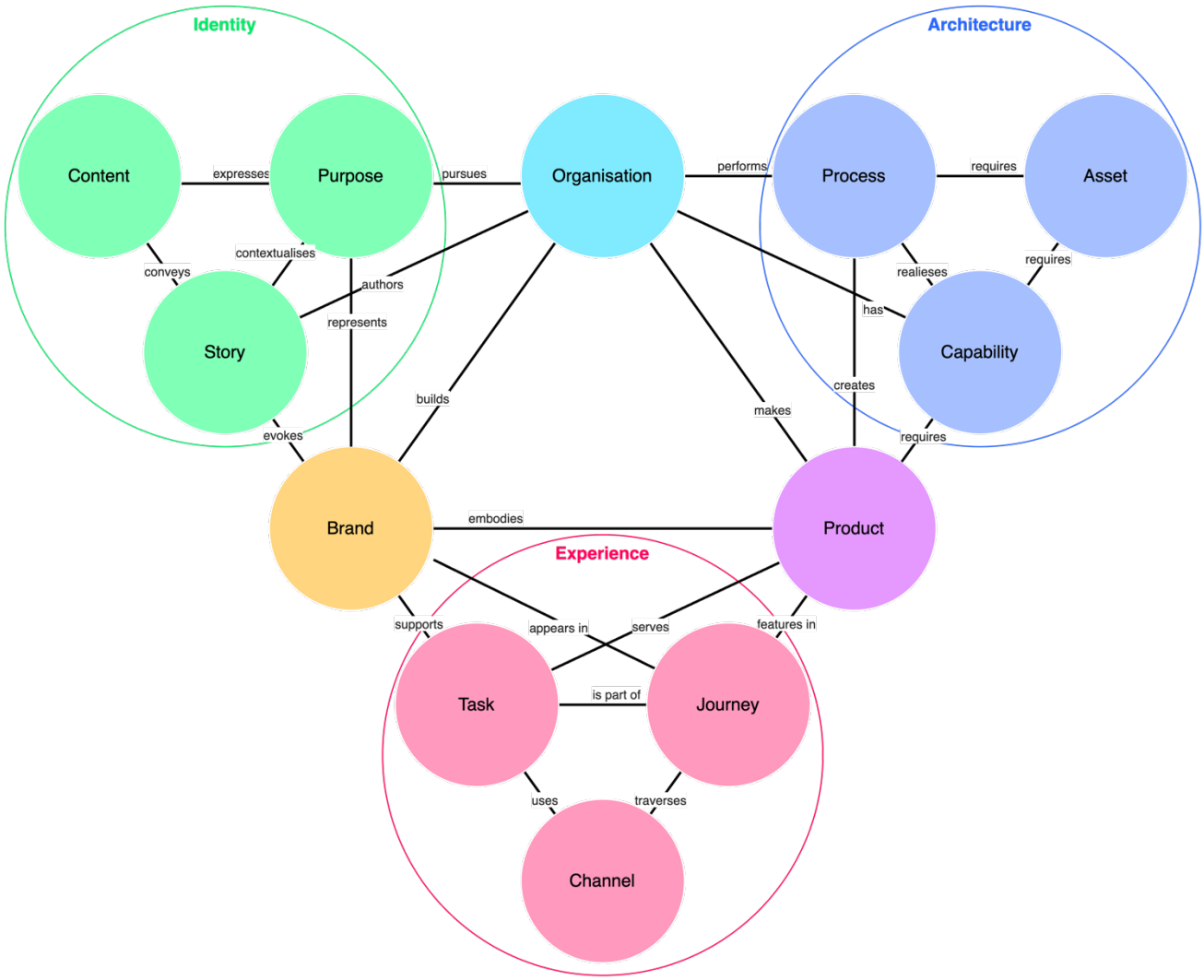


Figure 666: Elements and default relations.

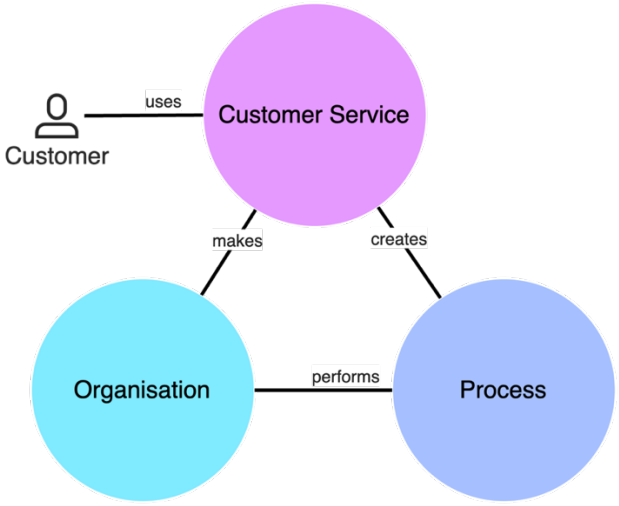


Figure 667: “Wireframe model” with simplistic notation.

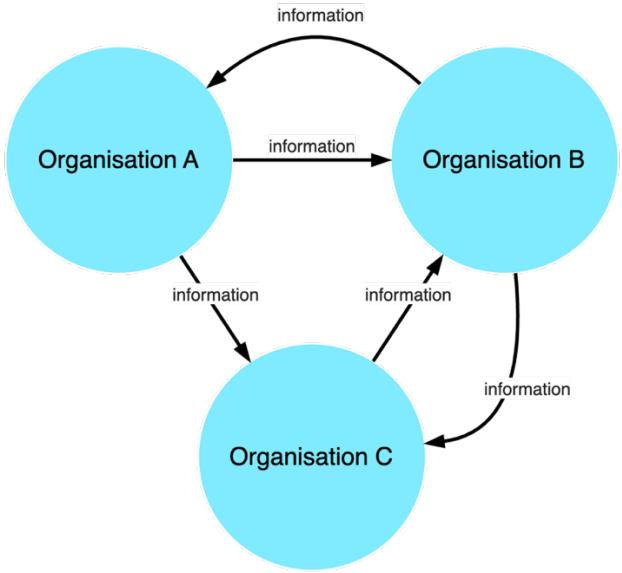


Figure 668: Information flows between organisations.

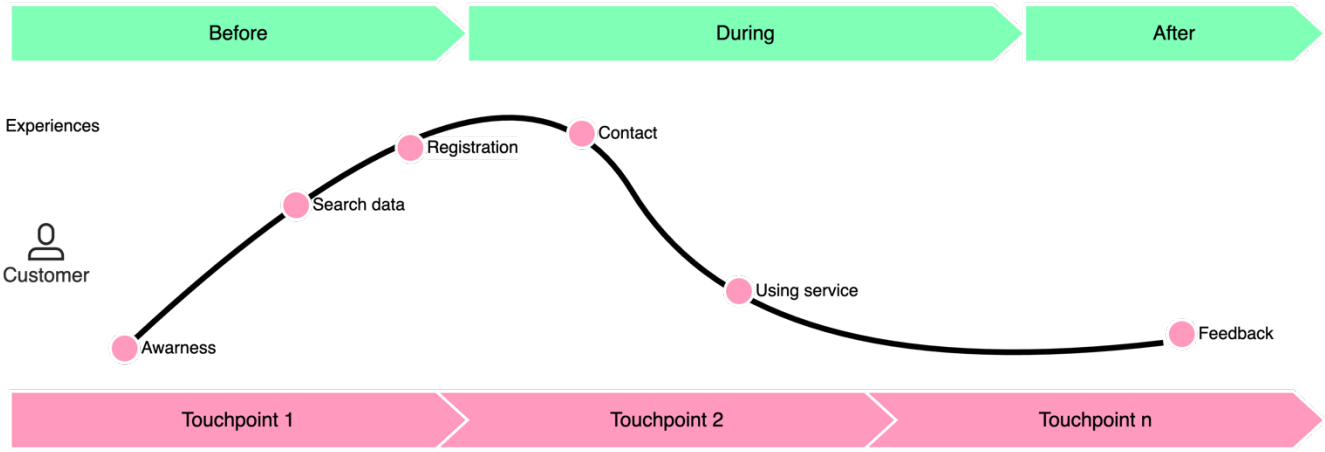


Figure 669: Customer Journey (versioned).

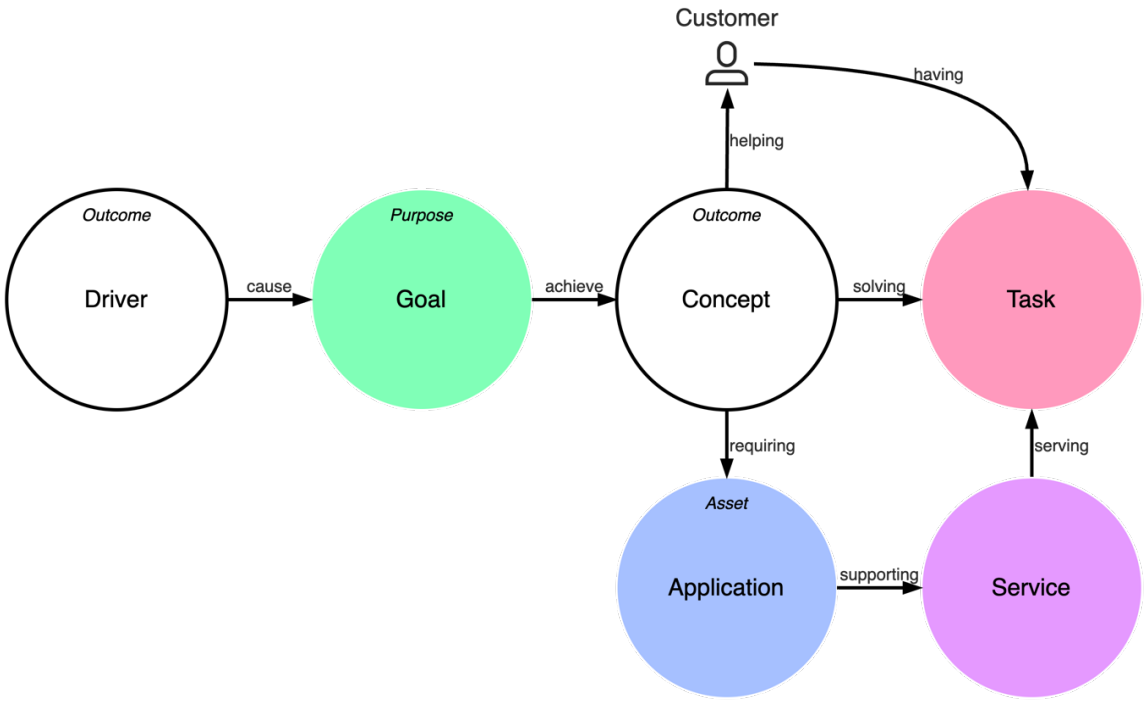


Figure 670: Concept design elements.

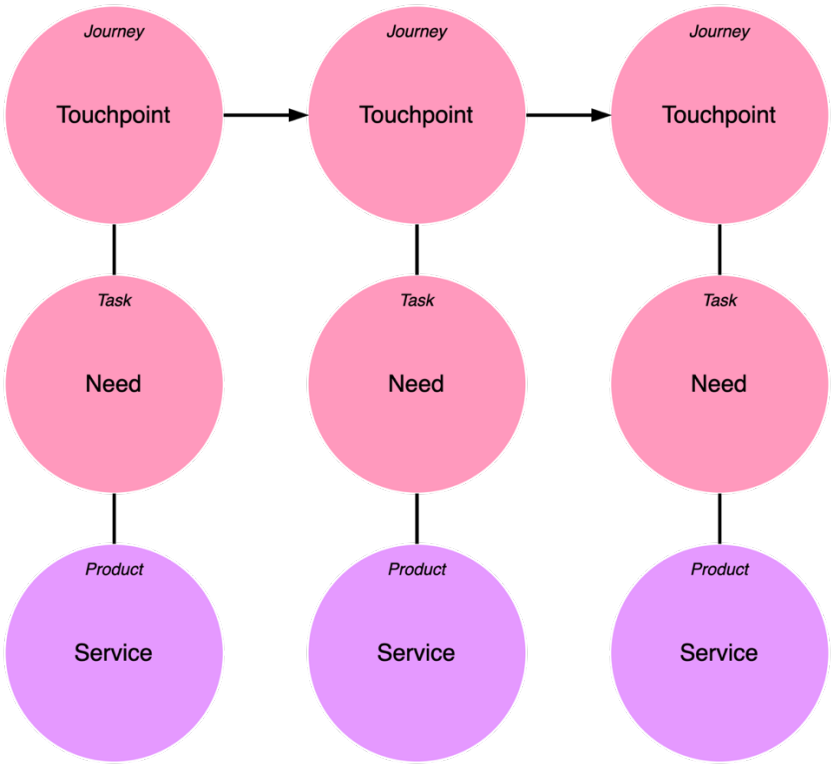


Figure 671: Customer Journey Mapping.

10.6.9 Enterprise Design Concepts

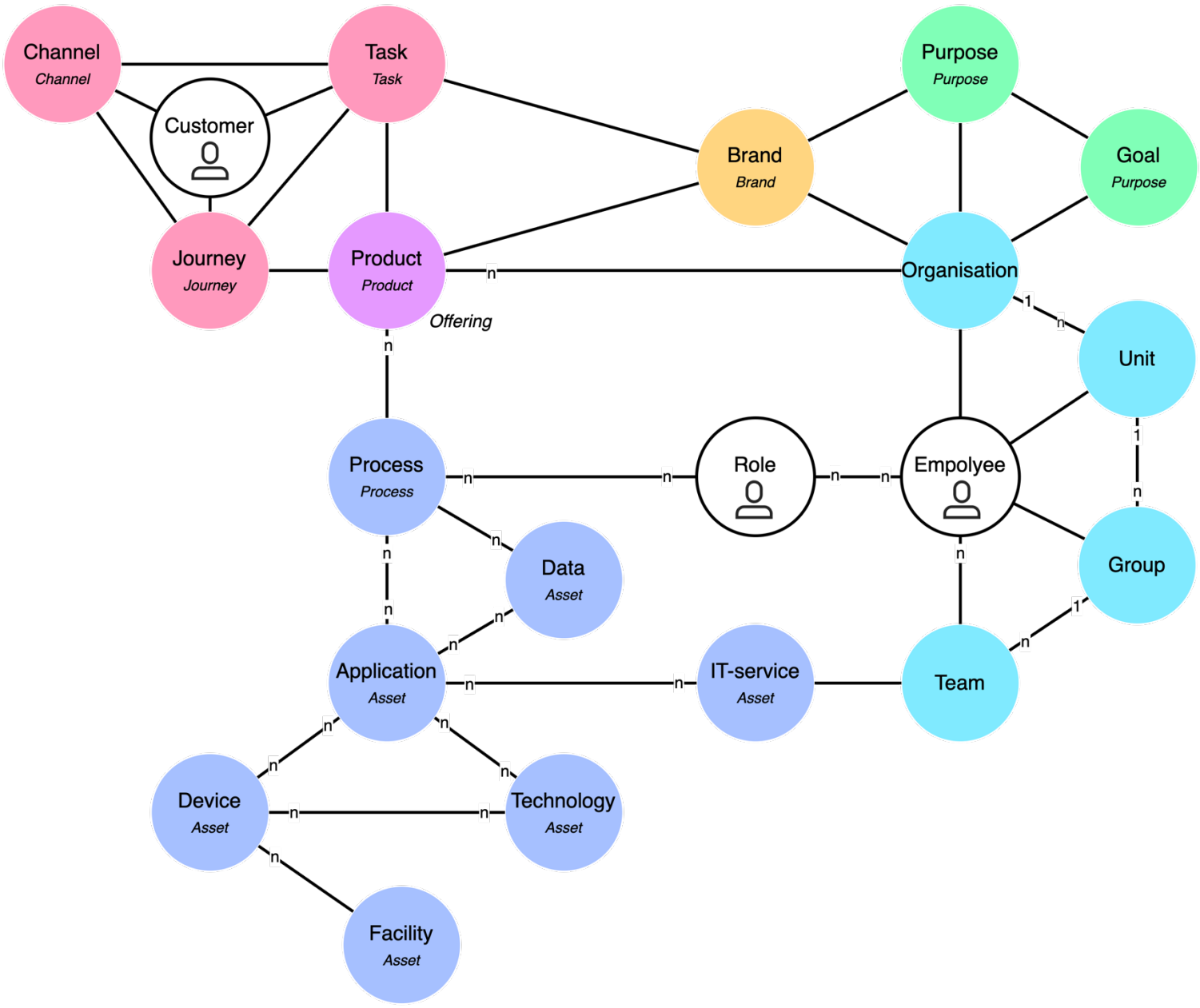


Figure 672: Enterprise Design concrete concepts.

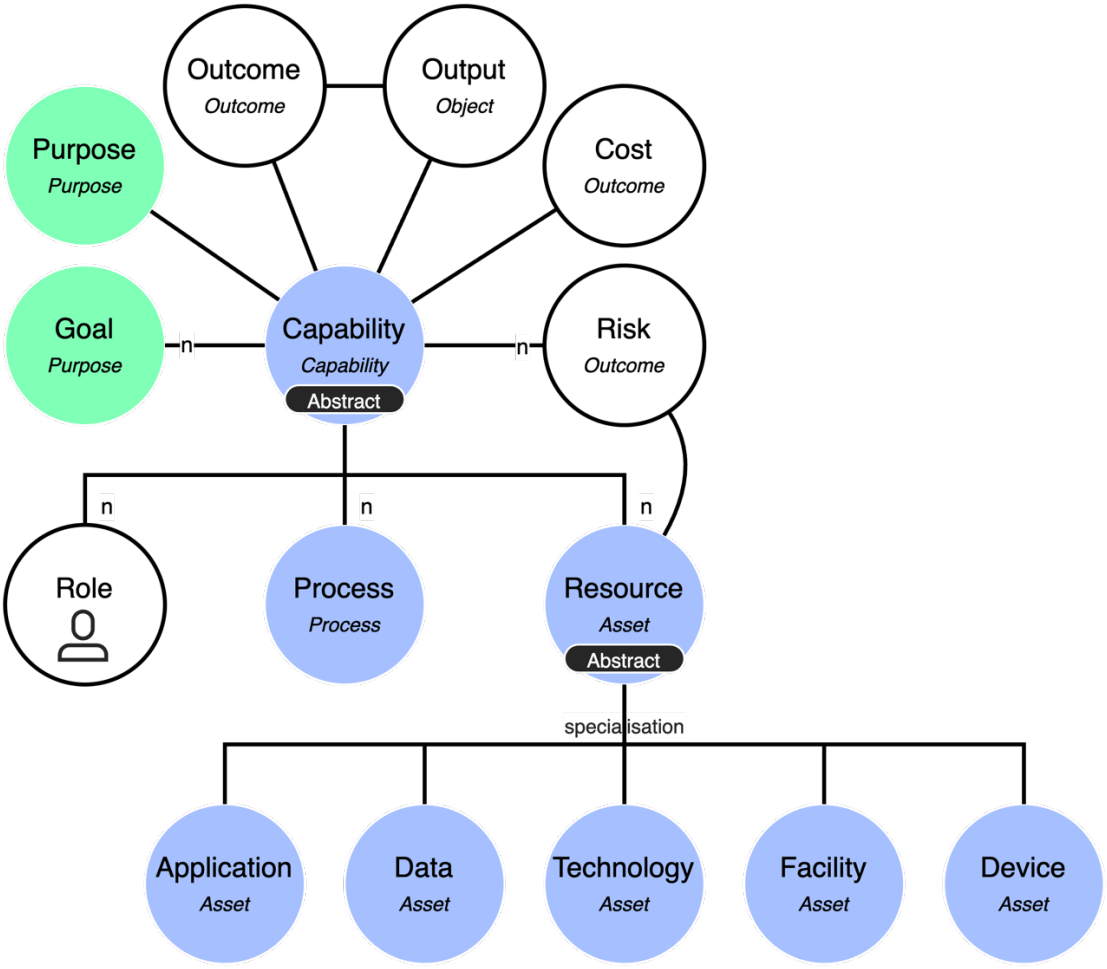


Figure 673: Capability concepts.

10.6.10 Version of EDGY notation

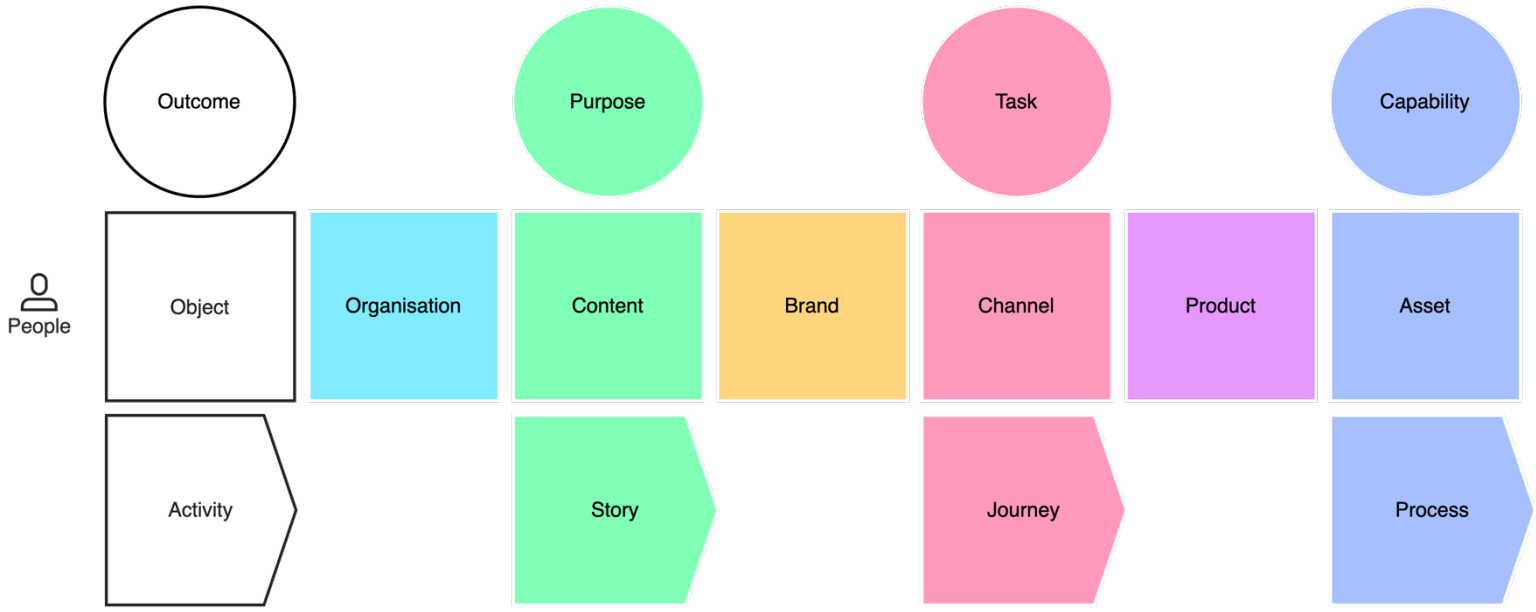


Figure 674: Version of EDGY notation.

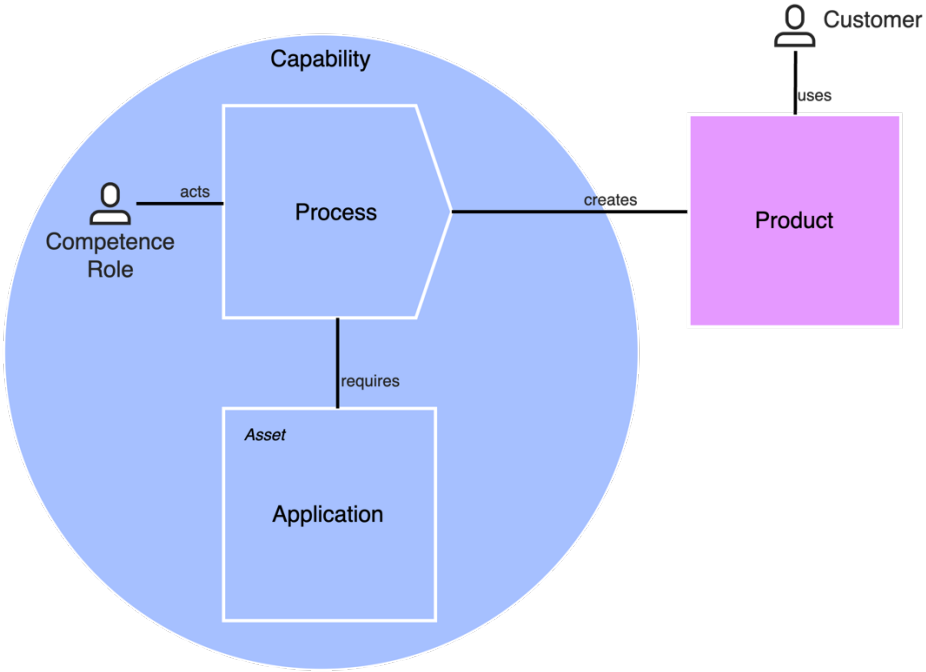
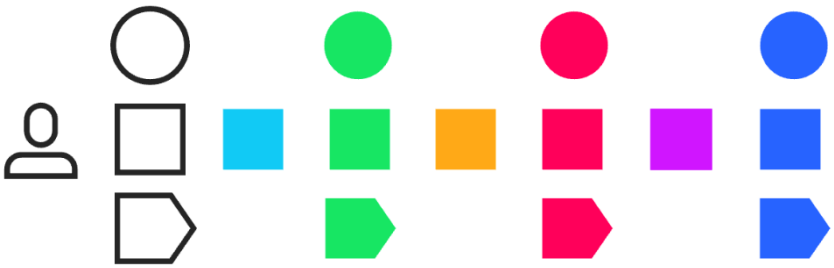


Figure 675: An example with alternative version of EDGY.



10.6.11 Enterprise Design Facet Model

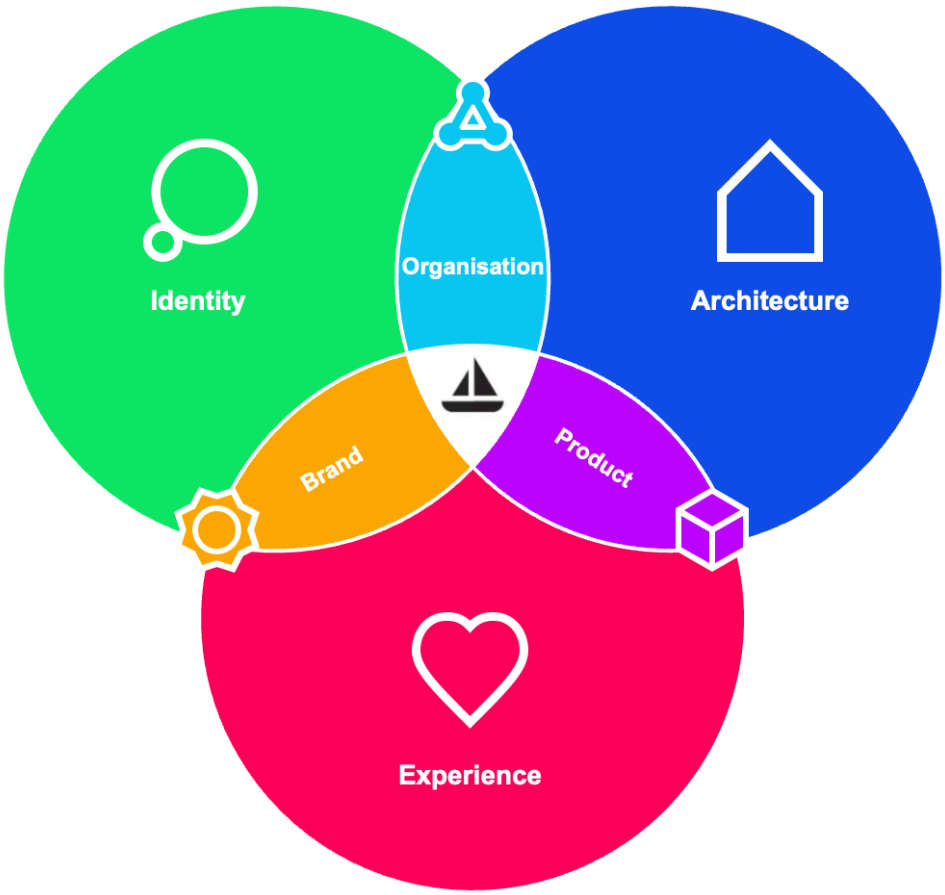


Figure 676: Enterprise Design Facet Model.