COMBITECH

White paper

From vision to value: Strategic implementation of AI

What the journey looks like

The development within artificial intelligence (AI) is advancing extremely rapidly. Organisations exploring AI can often identify potential value, and understand some of its strengths and weaknesses, but it can still be challenging to know what to invest in to scale up and in what order. Organisations find themselves asking the following questions:

- Which third-party solutions can be trusted regarding data security and integrity, and will those solutions still be around in five years?
- Is there a risk that solutions we invest in today will become much cheaper or even free of charge in the future?
- Does the organisation have the necessary capabilities to adopt and derive value from these solutions?

Define the current and desired state

To determine the degree and order in which an organisation should invest in AI capabilities and solutions, a suitable way forward is to first understand the current state and to set the desired state for the organisation:

- The current state defines the organisation's capabilities in terms of operational readiness and technical enablers, serving as a baseline for the desired state.
- The desired state defines the organisation's future ambitions, based on the current state assessment, customer demand and the competitive situation the organisation faces in its domain.

Create a clear roadmap

Once the desired state is defined, a clear roadmap can be created with the highest priority investments first in line. Many organisations are in an early maturity phase regarding the implementation of both AI capabilities and solutions. Typically, it becomes clear that organisations need to invest in both.

Invest in capabilities

To build the right AI capabilities in the organisation, it is important to analyse current gaps in several dimensions, such as strategic, technical, operational, organisational and governance aspects. A common capability to invest in early on is skill development. This includes proper handling of ethics, integrity and information security to meet customer and industry requirements in which the organisation operates.

Invest in solutions

Prior to investing in solutions, internal exploration is often necessary to enable the integration of AI into the organisation's product and service offerings. Deploying building blocks for an AI chatbot on top of a secure cloud platform is one way to meet basic compliance requirements, such as protected, secure and anonymised data.

Realise value from AI

The AI capabilities and solutions mentioned above are common to invest in early on with the aim of quickly realising value, both in terms of internal efficiency within the organisation, as well as integrated into the organisation's products and services.

Investing in capabilities

In this chapter, we will delve deeper into the crucial step of investing in your organisation's capabilities within AI. This involves identifying and assessing the necessary components of where your organisation stands today, by structuring how tasks will be done and the appropriate knowledge to do them effectively. This AI framework can be visualised as a matrix of operational readiness and technical enablers, with five key pillars to guide investment decisions.

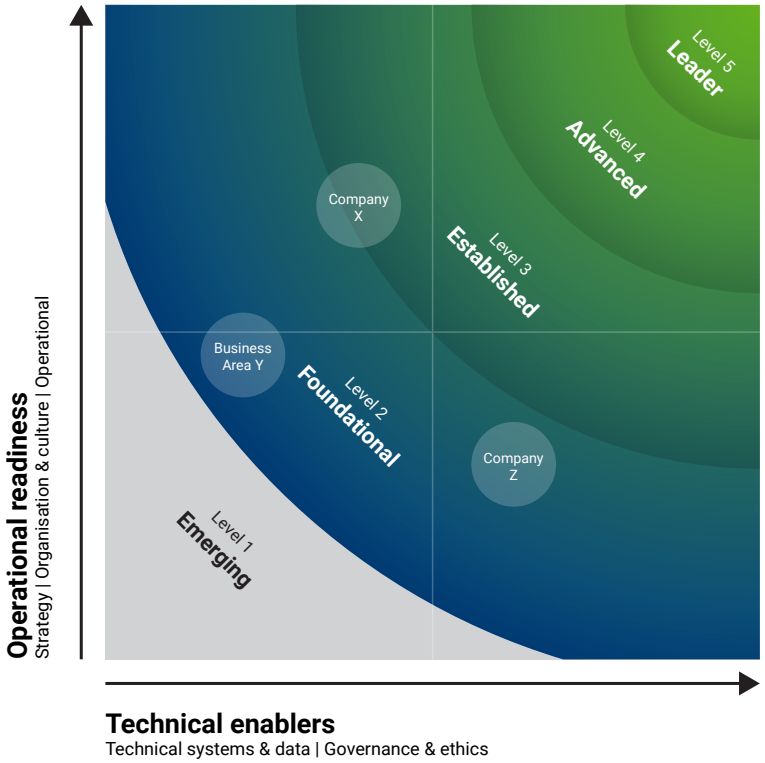

Figure: Maturity assessment

Pillar 1: Strategy

Evaluates the integration of AI into the company's strategic planning, and how actively senior leadership and strategic partners are involved in promoting AI initiatives.

> **Example question to ask:**
> To what extent does your organisation incorporate AI into its strategy?

Pillar 2: Organisation and culture

Evaluates the organisational knowledge and experience of AI, cultural readiness to new technology, and the extent to which AI competence is developed and encouraged among employees.

> **Example question to ask:**
> To what extent does your company have measures in place for AI competence development?

Pillar 3: Operational

Evaluates how AI is integrated into business processes and operations, looking at organisational support for AI initiatives, and the effectiveness of AI in improving services, processes and innovation from concept to maintenance.

> **Example question to ask:**
> To what extent does your organisation have a structured framework for AI initiatives?

Pillar 4: Technical systems and data

Evaluates the infrastructure and data resources necessary for AI, assessing the implementation of AI platforms, data collection, processing, and the availability and quality of data crucial for AI applications.

> **Example question to ask:**
> To what extent does your organisation have the technical infrastructure to support AI initiatives?

Pillar 5: Governance and ethics

Evaluates frameworks and policies in place to manage AI responsibly, covering data governance, compliance with data regulations and ensuring ethical AI use, including risk management.

> **Example question to ask:**
> To what extent does your organisation have mechanisms in place for data governance and compliance, specifically regarding AI?

Investing in solutions

The struggle of finding valuable use cases and knowing where to start can create inaction. This chapter outlines a streamlined process for identifying, developing and evaluating high-value AI use cases, enabling businesses to transition swiftly from experimentation to operational solutions without losing pace.

Some use cases have proven to deliver almost immediate value, while others may never. For example, tasks like translation of technical documentation according to certain standards have shown quick return on investment (ROI), whereas more complex or infrequent tasks like having a dedicated PESTLE (i.e. political, economic, social, technological, legal and environmental) analysis tool with knowledge of your business and market could preferably be done in a general tool, rather than building a dedicated assistant.

An important factor when introducing AI is to gain early traction while avoiding common pitfalls. Identifying the right use cases is important, but being fast in testing and evaluating selected use cases is even more important. Below, we provide a short, practical step-by-step guide to help your organisation identify its first high-value AI use case.

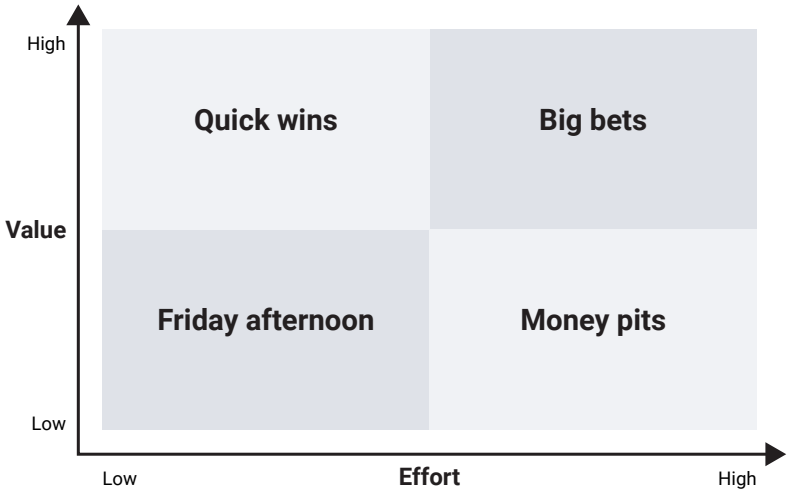

Figure: Use case evaluation matrix

Step 1: Identify high-impact use cases

Start by identifying areas where AI can deliver the greatest value. By targeting impactful areas, organisations can focus efforts on use cases that yield results quickly. Key questions could include:

- What are the bottlenecks or challenges within your organisation (e.g. cost, growth and innovation)?
- Given AI's possibilities, what use cases could help your organisation?
- Are the use cases performed frequently, performed by a large number of employees or time-consuming?

Step 2: Define clear requirements

Once high-impact use cases are identified, set clear requirements involving both business and technical leaders. Establishing these criteria upfront helps avoid delays during implementation. Key questions could include:

- What defines successful performance and how do we measure it?
- What risks are there, to what extent are they acceptable and how will they be managed?
- What system integrations are required and how much customisation is needed?
- Do we have or need upper management approval or budget to initiate?

Note! Open tools (e.g. ChatGPT and Gemini) can often be used to create a simple concept of the use case. Use that to evaluate and possibly tweak the use case before initiating the next step.

Step 3: Assess capabilities

Evaluate your organisation's internal AI capabilities. Is additional talent or external support needed? For some AI solutions, bringing in external expertise might be the key to accelerating development. Conducting a gap analysis helps determine whether to move forward in-house or seek outside help. If uncertain, a maturity assessment as described above could be useful to understand your organisation's current AI capabilities.

Step 4: Build and evaluate your MVP

Mobilise a small team to validate the AI solution, combining domain knowledge, technical AI competence and AI business know-how. Focus on developing the minimal viable product (MVP) and iterating based on feedback and stated requirements from step 2. If the solution shows results, it is time to scale. If not, document learnings and start over with a new idea.

Realising value from AI

To successfully invest in AI, it is important to:

- Define the current and desired state.
- Invest in both capabilities and solutions.
- Create a roadmap with prioritised investments.
- Ensure a high level of data security and integrity.

By following these steps, organisations can not only stay competitive, but also create long-term value through the effective use of AI.

Further, understanding the current state of your organisation is a critical step towards successful AI implementation. By assessing your AI capabilities across operational readiness and technical enablers, organisations can identify strengths and gaps, enabling targeted investments in capabilities and strategic actions.

Finally, identifying the right use cases is important, but being fast in testing and evaluating selected use cases is even more important. Even the initially most promising use cases can become challenging when unforeseen obstacles arise. Therefore, speed and agility are key when embarking on your organisation's AI journey. Rapid iterations and adapting based on new insights can make the difference between successful AI adoption and stalled projects.

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