

Knoco Guide to AI strategy

Why you need a strategy

You need an AI strategy to guide your AI implementation. It sets the context and direction for your Artificial Intelligence activity. It tells you what to do, and equally importantly what not to do. It stops you wasting effort on non-strategic work. Without a strategy, you cannot focus or prioritise your plan. There has been a tendency in the past for organisations to put AI solutions ahead of a strategy.

When to write your strategy

An Artificial Intelligence strategy is needed early in your Al journey, after you have a commitment to (at least) trial AI, and ideally after you have a good objective assessment of the current state. The Knoco AI strategy is scaleable from a full AI implementation down to a specific tool or solution area.

How to write your strategy

We develop your strategy either in a workshop with, or through individual interviews with, your senior management. We will

- Discuss the concept, and its application to your company
- Share stories from other companies, to show the value that Al can deliver
- Facilitate discussions around the main components of the strategy as described below.

KM strategy and ISO 30401

ISO 30401, the management systems standard for Knowledge Management, does not require you to have an AI strategy in place. However, many of the elements of clause 4 require you to have defined strategic elements, such as KM outcomes, stakeholders, issues etc, which can be usefully documented in a KM strategy. These are also directly applicable to AI also. In addition, Annex C provides a useful overview of the relationship of these KM approaches to AI.

Determine the business issues and outcomes for the strategy

The first step in developing an AI strategy is to determine the business issues and outcomes. AI is not something you do just because it's a "good thing" to do, or "latest trend", or "we need to keep up"—you do it because it adds value to the business. So, we ask— what is the business issue AI will solve, and what outcome will AI deliver? Some of the common outcomes are as follows;

- Reduction in cost. Here AI needs to focus on operational efficiency, on reduction of rework and repeat mistakes, and transfer of performance improvements from project to project, or from one branch to another.
- Operational effectiveness. Here AI needs to focus on the development and use of best practices in delivering the organisational objectives.
- Operational growth. Here Al needs to focus on the deployment of operational knowledge to new staff, or to staff with little experience of the new growth area.
- New markets. Here AI needs to focus on developing knowledge of how to compete in the new markets and rapidly disseminating this to the people who need it.
- New product creation. Here AI needs to focus on streamlining the R&D process, and the transfer of knowledge along the value chain.
- Customer service. Here Al needs to focus on the knowledge of the customer, and using this for the guidance of sales, marketing and customer support staff.

You can see that your Al approach may have a different outcome depending on your business issues. You may in fact need a blend of outcomes and approaches, depending on the range of issues you want to solve.

Determine the key stakeholders and their needs

Discuss the interested parties that are relevant to the artificial Intelligence system, both internal and external to the organisation, and the relevant requirements of these interested parties for the AI system (ie what it will do for them).

Try to prioritise the main requirements and the main stakeholders, rather than making too long a list.

The critical knowledge topics that you will identify are key areas of knowledge that the company either needs to retain to deliver their current business or acquire to deliver future business. These critical knowledge areas can be ranked on two axes; the current level of in-house knowledge, and the level of maturity of that knowledge (i.e. whether it is new knowledge with a significant rate of evolution, or old established knowledge which is no longer evolving). These two variables allow the knowledge areas to be plotted on the matrix below.

Agree the scope of the implementation

You need to know where the boundaries of your AI program will be. Do you include the whole company, or one division? Do you include partners, suppliers, customers? Do you include just the operations, or the support functions as well? You need to know this, before you can plan and budget the implementation properly.

New emergent Competitive Strategic knowledge competence competence Core Non-core Old established competence competence knowledge Low level of in High level of in house knowledge house knowledge

This plot allows the knowledge areas to be categorized into four types. Each of these knowledge types may need to be managed in a different way.

Define your critical strategic knowledge

Once you have determined the business drivers, the next step is to determine the critical knowledge and processes that needs to be managed to support these drivers. By concentrating on the critical knowledge and processes, you can focus your AI efforts and ensure they are aligned with the business drivers and strategy. One company we worked with, discussed this at length with their most senior managers, and as a result decided to focus entirely on supporting sales growth. This was a highly successful strategy.

Develop an overview AI framework

In order to manage your critical knowledge, you are going to need a management framework of technologies, processes, roles and governance. Framework Design is often done separately from the Strategy, as it needs input from people at multiple levels in the organisation, not just senior management. However, some organisations like to address the management framework within their strategy document, listing the main elements of the framework.

Discuss and agree your strategic principles Discuss pilot opportunities. for implementation

There need to be some principles agreed and set of the implementation program, and in all but the smallest implementations, we suggest the following.

Discuss business areas or business problems which AI will help, and which might be ideal for piloting AI related practices, roles and technologies. These should be areas or problems which the senior management are really interested in addressing, and which you feel AI has a good capacity to help.

AI will be implemented as a change program.

Every management system requires a supporting culture, and implementing a new management system requires culture change. In the case of Artificial Intelligence, the new culture is one where people (internal and clients) interact with the AI technology in a controlled environment, guided by governance principles and a holistic set of objectives and outcomes from the process. So implementing AI is a culture change process, and

AI will be introduced as a stage-gated program.

culture change is hard and takes a long time.

The recognition that AI involves culture change, means that AI needs to be introduced in a series of stages. Your management need to be aware of these and need to buy into the idea that they will be consulted, and asked to offer guidance and make decisions, at the end of each stage. The stages are ...

- 1. assessment
- 2. strategy
- 3. proof of concept of the system elements
- 4. piloting
- 5. roll out
- hand over

Artificial Intelligence will need to be embedded into existing processes.

The aim of implementation is to introduce a new management focus and a new management discipline, but this needs to be embedded within the existing organisational framework and structure. There will need to be some adaptation of this structure for AI to fit well. This needs to be accepted as part of your strategy before you begin, otherwise you may find challenges later.

Determine risks and opportunities

The final part of the discussion covers the risks and opportunities that face Artificial Intelligence within the organisation. The senior managers themselves might know how to mitigate these risks, and it should be your job to identify the mitigating actions.

After your strategy, comes the implementation plan

Assuming you have held your strategy workshop, and got management input and steer into the business drivers, the scale of the prize, the areas of priority focus, the scope, and the principles of the model and of the implementation, then you have the framework you need to start planning

The planning session usually involves determining the steps to be taken, estimating the resources needed and the timing of the steps, and building an implementation plan using post-it notes. Once the tasks, timing and resources are agreed, they can be transferred to Excel or to planning software.