

Uncertainties and risks of strategy implementation

A framework helps executives classify and understand the risk profile of a strategic initiative, write Josef Oehmen, Pelle Willumsen, Bzhwen A Kadir and Torben Juul Andersen



In a [previous post](#), we talked about how two major dimensions shape the type of strategy work we need to do: 1) the degree of people impact, i.e., how many people the task at hand affects and how much it affects them; and 2) the degree of uncertainty it faces and subsequently addresses.

With this post, we are going to dive deeper into the uncertainty dimension. What are the key uncertainties (and subsequent risks) to successfully implementing a strategy? The point of departure for our research into this question was our risk management experience in large-scale technology programmes, for example in aerospace and defence, infrastructure development and autonomous vehicles. Those programs are good proxies for strategy initiatives in technology-driven companies – their success usually makes or breaks organisations, and the careers of people running them.

At the end of the day, there are two big uncertainties in strategy implementation: a) does the strategy make sense in the first place (i.e., is it actually a good strategy?), and b) if yes, can you execute it?

Through a number of case studies as well as a series of interviews with senior executives and their staff involved in strategy work, we collected examples of critical uncertainties and their related risks. We developed a framework to collect and describe them, so executives can use it as a checklist to properly classify and understand the risk profile of a strategic initiative. We have identified three major categories of uncertainty sources:

Uncertainties regarding ability to execute

The ability to gain buy-in from people at all levels of the organization, from senior

management to operational managers and employees, is an essential concern and constitutes an important internal uncertainty factor. Will people understand the strategy, own it, and make it happen, or will they feel the intent is unrealistic or even wrong? This may be enforced by lopsided information processing, where diverse insights are ignored or essential constituents are excluded from discussions. This can create opposition, reflected in an unwillingness to engage in proposed changes, or an inability to accept the underlying rationales.

These uncertainties can be partially eliminated by engaging in a more inclusive iterative process where the strategic analyses at the corporate centre consider the ongoing experiences gained from the operational tasks as the strategy is executed. People-related uncertainties regarding the ability to execute then extend into process-related uncertainties. Can we run the quality process required to pull off the strategy, for example running a change management process or fulfilling some regulatory requirement? And finally, there is also a technical component here: are our IT systems able to support what we are trying to do, e.g. by providing timely, relevant and accurate data to support the ongoing decision-making?

Uncertainties regarding technical feasibility

Depending on the strategy initiative, novel technological capabilities will be at the heart of what you are trying to exploit. This is particularly true if the strategy has elements of technology leadership – say operationalising artificial intelligence in a meaningful way in your business, or using blockchain. As every engineer will happily tell you, research and development results are notoriously hard to predict, and even harder to bring to a successful conclusion. Technical feasibility also has a cost and time component: While you can be virtually certain that you will get a technology to work at some point and at some cost, this is usually not good enough. The successful technology-dependent strategies we observed were very good at matching technology readiness levels with time horizons, cost budgets, and expectations. But, this requires a willingness to iterate, exchange honest critique, and learn among the involved stakeholders.

Uncertainties regarding market needs

The third category of uncertainty sources in strategy is no less important than the first two: It basically asks the question if the strategy makes any business sense. And while we enjoy pretending that we checked and double-checked that it does, it is not always that simple in an uncertain environment. And the bigger you go with your strategy initiative, the worse it usually gets: You may decide to compete against non-consumption, or disrupt an existing market with a new product – but how sure are you that your customers are going to buy the story (and subsequently the product or service)?

So, acknowledge the size and type of residual uncertainty around your key market assumptions and adapt your strategy accordingly. This gets more important – and harder – as your strategy covers longer time horizons. Again, the question is not so much what exactly the market looks like in 5 years, but rather what can we really know today about the market in five years? In view of this, we should consider the fastest and cheapest way to learn what we can along the way.

Three sources of uncertainties: impact of external factors

In our discussion so far, we have emphasised elements internal to the organization. Obviously, external market factors shape the uncertainty landscape at least as much, and they affect each of the three categories. The actions of competitors and customers are

beyond your control, as are new unknown innovation activities you do not execute yourself. Even your ability to execute may be impacted by these external factors, e.g. by affecting the ability to retain or attract key people to the organisation.

Successful strategy risk management = successful learning

We are working to distill the key practices from our current round of field observations. One candidate for the top spot is the realisation that good risk management in strategy work really is about reconciling your 'predict and plan' mindset with one that 'monitors and adapts' (the research on 'deep uncertainty' focuses exclusively on applications of the latter approach). In practical terms, it is about asking the question "What is it that we don't know?" and then "What can we know within a reasonable time frame?", and then "How do we go about exploring it without incurring excessive costs?"

We argue that the ability to construe an effective adaptive strategy-making process relies on the ability to manage the interplay between these external and internal uncertainties that will affect the strategic outcomes. This can be achieved by engaging in interactive information exchanges between the slow analytical forward-looking reasoning where the external conditions update the strategic direction and the fast experiential insights about what works and what doesn't as the operating entities respond to the changing business conditions.

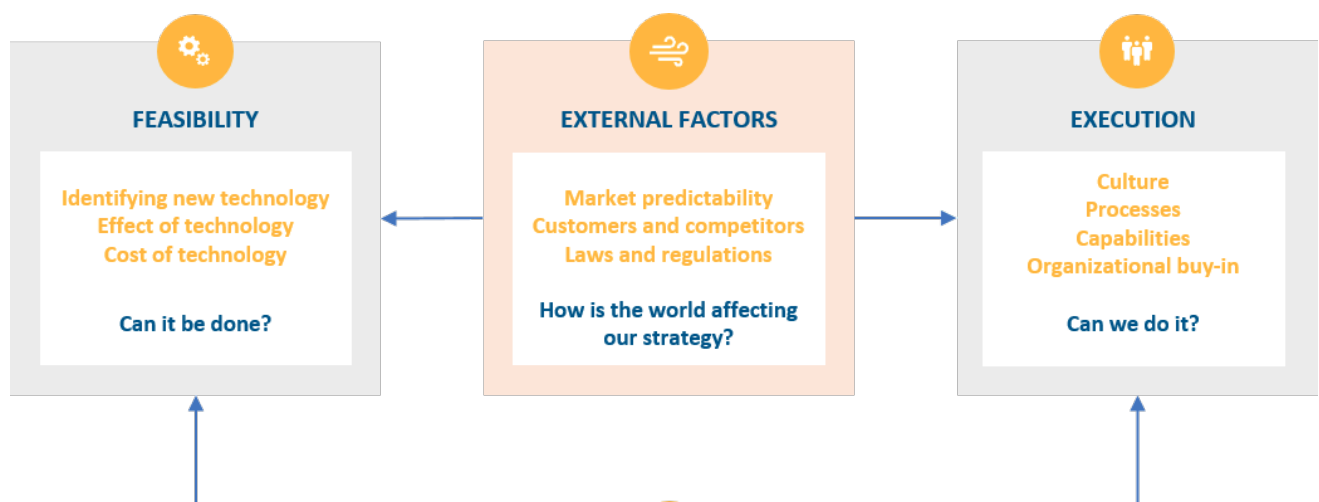
Our empirical findings suggest that organizations with a 'monitor and adapt' culture of strategy execution are successful because they impose a harmonious updating process that combines both current operational learning as well as the organization's need for coordinated actions.

Another key point is this, that in our opinion, there are no 'good risks' or 'bad risks' per se. Or put differently: a 'good risk' is a risk that the organisation recognises and has a shared mental model of. A 'bad risk' is a risk that remains undiscovered, or is ignored due to traits of the organisation's culture.

As we briefly discussed in our [article on resilience](#), in the perfect world, we know everything and can thus eliminate risk and uncertainty. Or we are chronically lucky, and do not need to worry.

In the real world, we are stuck with managing risks and uncertainties the best we can.

Figure 1. Sources of uncertainty in strategy implementation





Notes:

- This is the third in a **series** of five articles based on research carried out at the engineering systems division of the **Technical University of Denmark (DTU)** and supported by **Brightline Initiative**.
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