

The four types of strategy work you need for the digital revolution



Strategy work is always hard, but particularly so when senior executives know less about emerging trends than the 19-year-old intern that just brought them coffee. Blockchain-based bank accounts, Artificial Intelligence lawyers, smart cities, collaborative robots, autonomous cars and online dating – wherever you look, pervasive digitalisation is turning businesses upside down. “I have been doing this for 50 years” is no longer an asset, but a liability for a CEO.

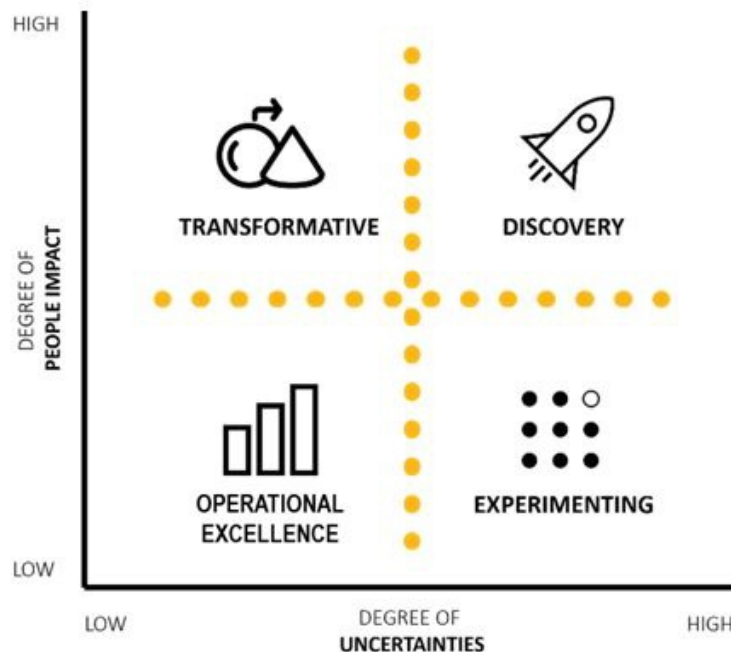
So what do you do as the founder of a consultancy with a few hundred employees: do you wait for an algorithm to put you out of business? As the manager of a large pension company, do you hope that tomorrow’s pensioners will use the same technology as yesterday’s? As the CEO of a big production company, do you wait for your entire supply chain to embrace digital production techniques? The answer to these questions is obviously a resounding “no”. No, but what next?

We have interviewed and observed these and other senior executives, for a total of 40 companies with leading positions in the production, engineering, consulting and financial services sectors in Denmark. On the backdrop of this uncertainty regarding their capabilities and of the shifting market demands created by new technologies, we asked them all a simple question: “How do you implement a strategy?”.

Unsurprisingly, we saw that strategy work comes in all shapes and sizes. But as we continued our interviews, four major fields of strategy work emerged (see Figure 1): Discovery, Experimentation, Transformation and Operational Excellence.

Two major dimensions proved useful to group the types of strategy work:

- **Degree of people impact:** The primary concern of the executives typically was how to handle the people-related challenges of implementing strategy. This had several elements: number of people affected (for example, does this concern a small circle of experts or a wider group of employees), scope of the impact (for example, can we reasonably expect this to be executed on top of “business as usual”, or does this require full dedication), and the “dread factor”, or degree of emotional impact (for example, are people losing their jobs, or is the impact understood and controllable).
- **Degree of uncertainty the task addresses:** Senior executives were dealing with three major types of uncertainty: technology uncertainty (for example, technology readiness levels, or degree of performance that can be expected from a certain solution); market uncertainty (for example, reaction of the market to introduction of a new service, or choosing between various novel value propositions); and capability-related uncertainty (for example, deciding what skill set was needed to operationalize a new technology)

Figure 1: 4 Types of Strategy Work

Discovery-focused strategy work

Discovery-focused strategy work often has a scary component: We think that there is something out there that will significantly change our business model, our product portfolio, or the way we do our job. This is amplified by the large degree of uncertainty inherent in this work – even if I think we can hire the people to make blockchain work for us, is there really a market? Is it worth doing, and if yes, how much am I prepared to lose? The discovery and evaluation of these trends is strategy work.

Some companies, like IBM in our study, have realised that it is part of their job to support the discovery process at their clients in order to create a market for novel IoT and AI-based products they offer. This is different from selling a finished product – it is more akin to sharing a vision, backed up by plenty of examples. Other executives have formed a national association (MADE – The Manufacturing Academy of Denmark) to jointly drive the discovery process around advanced cyber-physical production systems. This not only reduces the cost to each company, but systemically builds capabilities in an industry where each player depends on their up- and downstream supply chain. This is very hands on – from workshops for subject matter experts to executive level round tables and show-and-tell events.

Experimentation-focused strategy work

The discovery stage, if performed effectively, often leads to an interesting problem: what are we to do with ideas that are currently impossible to evaluate as a classic business case? We don't know yet what their market may be, how much they would cost, if the technology can be developed to suit our needs (and what these needs are), nor if our organisation is equipped to carry them to completion.

The selection process often involves the use of decision-making heuristics, such as Simple Rules. For example, executives selected ideas based on four rules: 1) If we lose all the money we invest, it must not be a problem. 2) We need to be able to at least verbalise a possible benefit scenario for current or future customers. 3) We have to be able to clearly articulate what it is that we want to learn about market, technology and/or our capabilities. 4) We must have internal champions who are excited about doing this.

The experiments that were devised took many forms: one company co-created product use scenarios with possible clients in a number of workshops; groups of companies teamed up to sponsor research and proof-of-concept implementations; new processes and technologies were tried internally for 100 days in parts of the company; and companies formed internal start-ups to operationalise novel technology solutions and champion them on client projects.

Some senior executives highlighted an interesting tension here: in a traditional leadership model, junior employees would look to the executives for clear direction on what the future will hold. Here, instead, they help them ask the right questions.

Transformation-focused strategy work

After targeted experimenting and prototyping sufficiently mitigated the risks of a business project, we find that the classical activities of organizational transformation, change management and portfolio management are put to good use. While the uncertainty is now relatively low, the scope of people affected increases dramatically, presenting significant people-based challenges.

The success stories we saw made effective use of program and portfolio management techniques that paid particular attention to accounting for the hard and soft factors of transformation on the affected employees. We also saw examples where companies started collaboration networks around a newly developed platform concept. There are also examples of organisations running experimentation and transformation activities at the same time, under an agile framework: as part of a transformation program, various implementation prototypes are run in parallel to develop specific best practices and technology solutions.

Operational Excellence focused strategy work focused

The final category of strategy work is oriented towards enhancing day-to-day practice one step at the time. The organisation first needs to develop a thorough understanding of the skills and requirements needed for the introduction of a new technology. Activities in this space involved joint sense-making exercises with operational management and experts, with the aim of developing a prioritisation framework. They considered questions such as: “What technology for what product or market? What is our implementation roadmap? What are our criteria to prioritise activities, as well as exclude ideas?” These were implemented as standard operating procedures, building step-by-step on capabilities that already existed.

An important aspect to highlight is that an organisation does not “move” through these four types of strategy work. Instead, they are four categories that structure the portfolio of strategy work underway in the companies we observed. Our impression was that the most successful companies had learned to execute activities in all four quadrants, all the time, and had robust processes for managing the transition of an activity from one quadrant to the other.



Notes:

- This is the first 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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