Optimize the Value of Your Business Model for a Digital Era

The Fundamentals of Digital Core Transformation

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Digital transformation, the Internet of Things, and digitization are commonly described as technology-induced drivers of change. Enterprises that successfully digitize their technology core can improve profit levels, reduce time to market, and enhance the value of IT investments. However, many businesses still don't understand the importance of digital transformation or they struggle to benefit from it. In this study, we'll explore the current state of digital transformation and best practices for delivering a digital core.
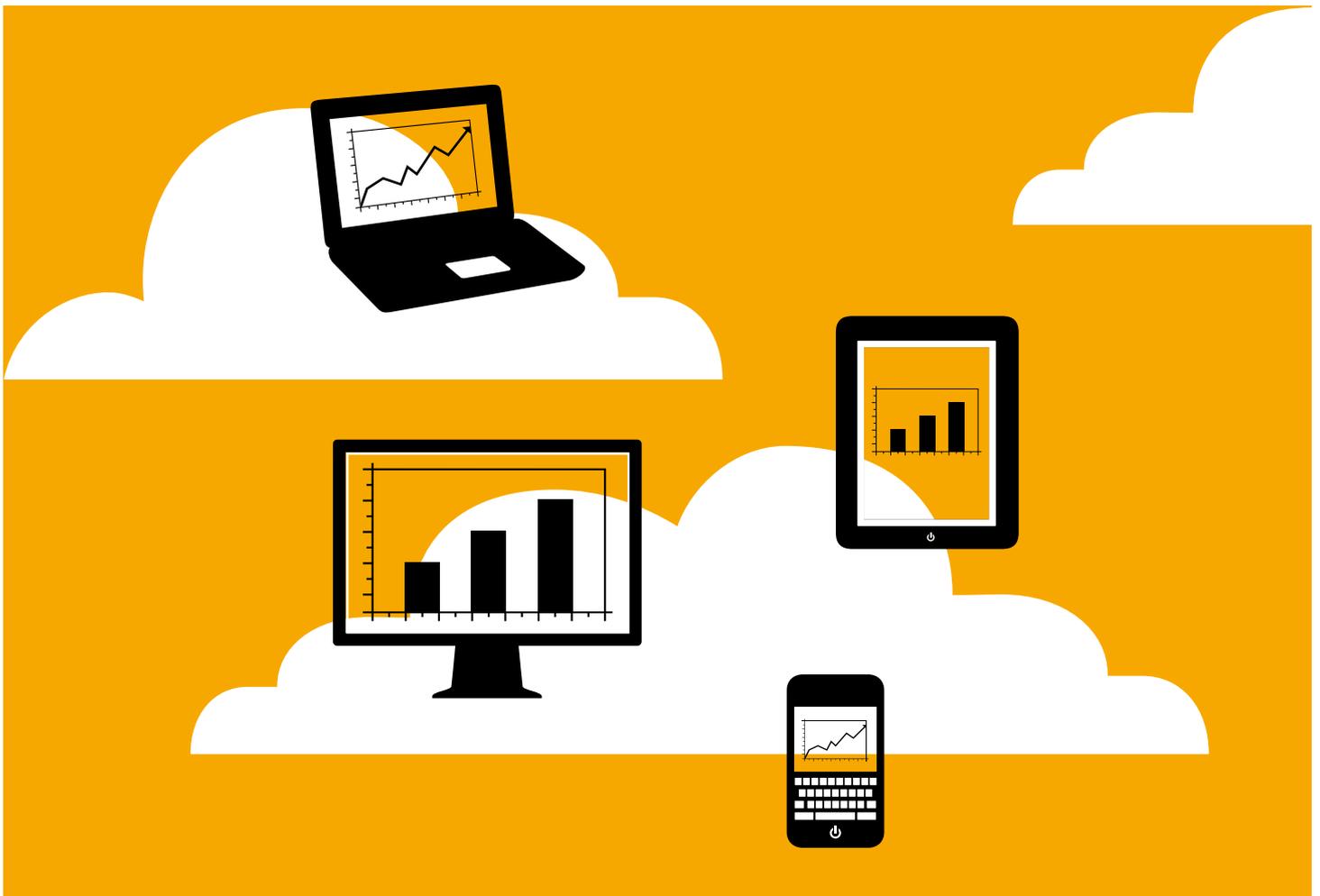
The Modern Drivers of Change

Our environment is evolving at an unprecedented pace. In the past, a change took place over the course of years; now, it happens within months, weeks, or days. And all of this is happening in constant waves that no one can escape.

Fast innovators are disrupting established markets. While their success is not necessarily fueled by better products, they can execute better customer-service strategies. Smart companies know how to leapfrog industry borders to sell their goods and services into existing markets and to surpass established market leaders that are left perplexed.

Without a doubt, all established companies are truly entrepreneurs with tremendous achievements in their respective markets. They performed phenomenally when entering their market and had great advantages over the competition. However, achieving such success inevitably brings competitors that are looking to catch up and surpass them. Without anything to lose and streamlined to attack, competitors will gather together to beat the market leader, improving and often imitating to become better than the market's established brands.

To maintain their hard-won position, market leaders shift their focus from creating the next "big thing" to conserving existing markets. Although this approach maximizes ROI, their creativity and zeal that previously propelled them to success are lost.

Even the most innovative companies become conservative the moment they succeed – signaling the end of their innovation leadership.

TRANSFORM WHILE THE BUSINESS IS IN SHAPE
Digital transformation, the Internet of Things, and digitization are catalysts for the entire industry to undergo a significant transformation. (See Figure 1.) For example, some technologies are slowly undermining existing standards – similar to how the Internet challenged traditional media operations and the ability of businesses to evolve and scale a product concept quickly without the constraints of asset-intensive operations.

Established players that are not prepared to embrace these changes will struggle – or worse, disappear.

Figure 1: Drivers of Change
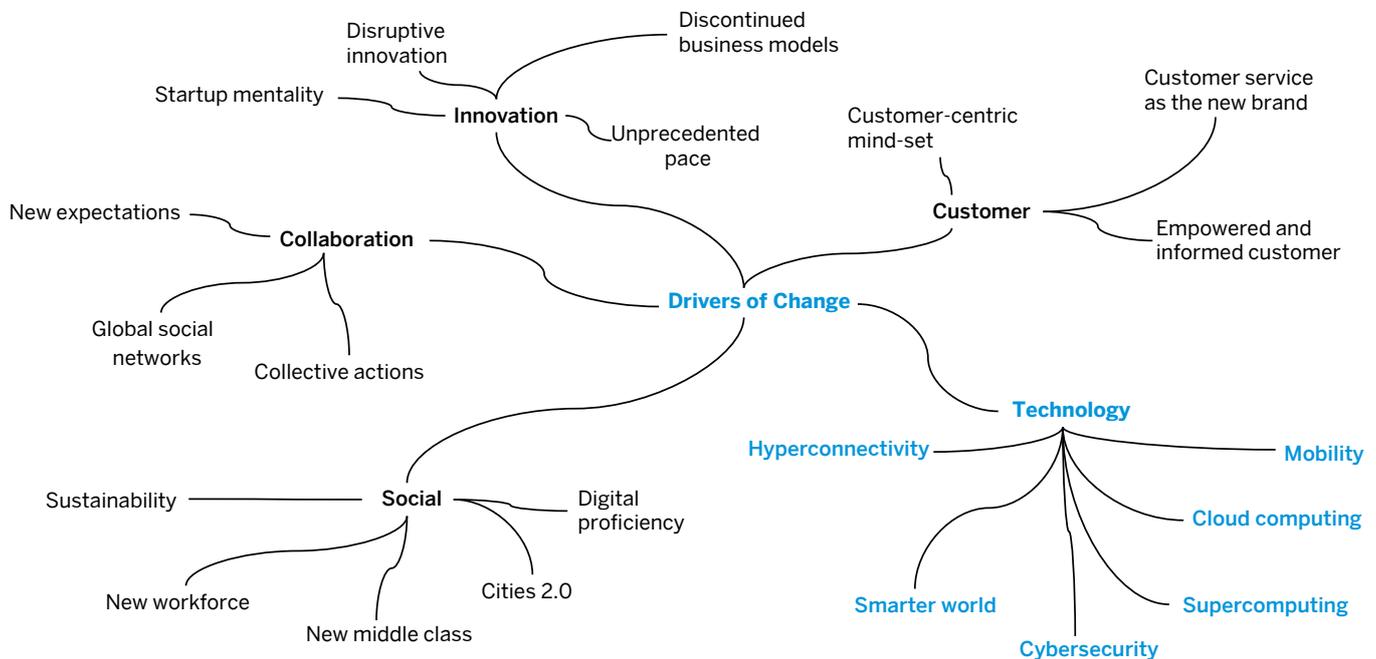
The ultimate goal for most companies is now the unit of one. (See Figure 2.) This new strategy is changing entire markets. More important, it is revolutionizing shopping behavior because customers expect a seamless experience focused on their needs in the form of fully individualized services.

Not only is this concept appealing to business-to-consumer companies but also those in business-to-business-to-consumer markets. Businesses realize that direct customer engagement is the first logical step while keeping inventory as low as possible. Mobile apps are built, an Internet presence is established, online stores are open, new

services are offered, and cool gamification is winning customers' attention. With this digital storefront, the buying journey is more intuitive and user-friendly.

Too often, the infrastructure under the surface cannot deliver the promises of the digital storefront. As the number of incoming orders increases, the size of each lot and the average value of each transaction shrink as a direct consequence of the unit-of-one concept. Workload spikes, and the whole organizational infrastructure is strained. And for many businesses, they fail because the infrastructure cannot adapt to infinite scale.

**Figure 2: The Emergence of the Unit of One**
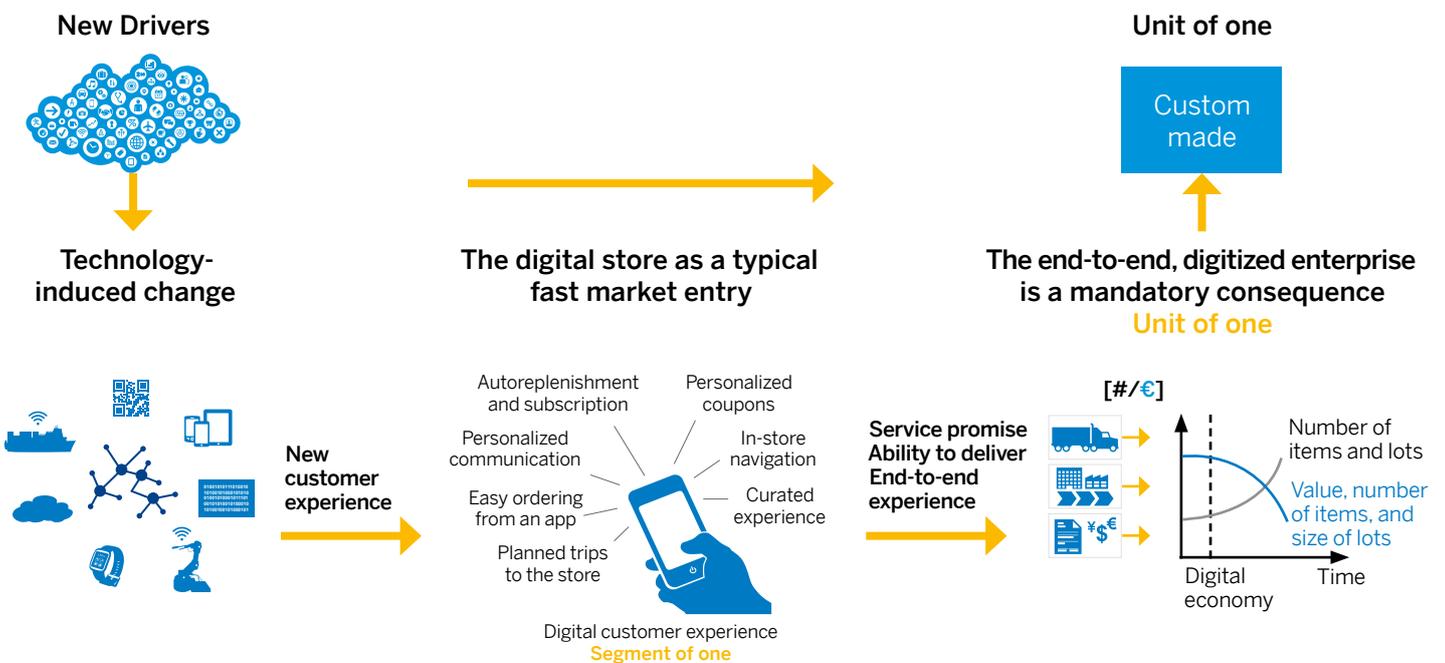
Consolidating data into one source and creating a single version of the truth simplifies decision making, which bring good ideas to market quickly and profitably and scales operations to customer demand at a moment's notice. However, even though most of us have at least heard of Big Data, very few workplaces have used it to their advantage. Instead, many organizations are spending an exorbitant amount of time, money, and energy on non-value-added activities, sucking up time and energy from solving real business problems.

Figure 3: Consequence of Avoiding Digital Transformation

The end-to-end, digitized enterprise is a mandatory consequence of the unit of one.
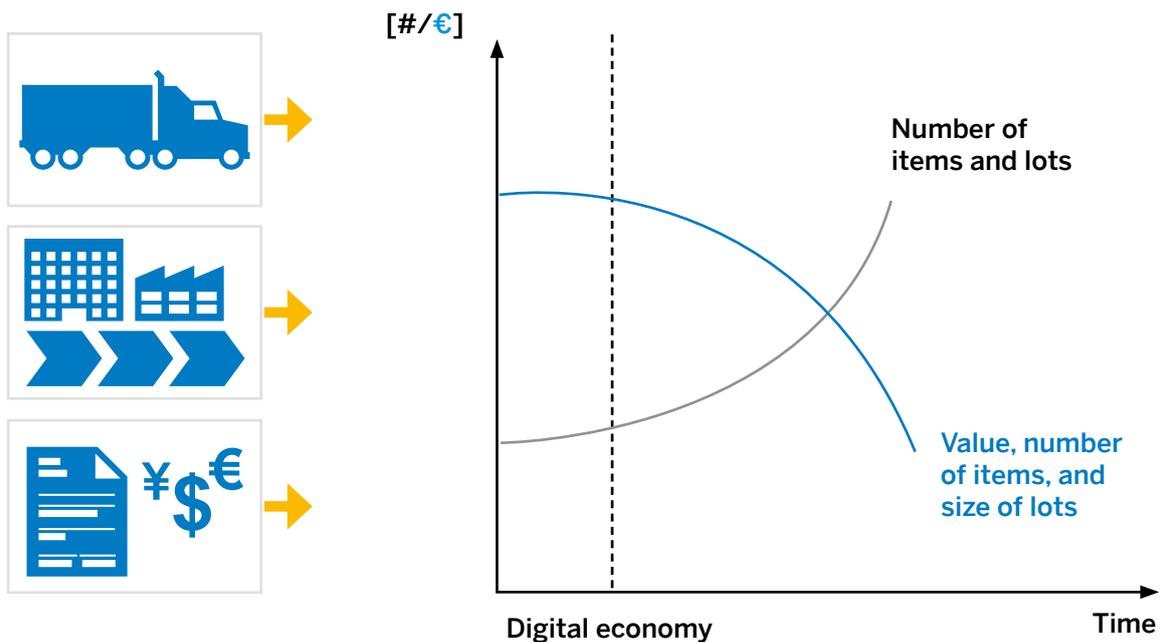
The Value of a Digital Core

The term "value" is commonly used to describe a positive impact on a business outcome. From that perspective, the real value of the digital core is its ability to impact performance.

Performance is traditionally derived in two ways:
1. **Efficiency:** In any business process, costs are reduced and productivity improves.
2. **Effectiveness:** The business focuses on achieving objectives that lead to an advantage over its peers.

In addition to those two dimensions, businesses are beginning to realize that agility is just as important to business performance. (See Figure 4.)

Research has been divided on whether implementing an enterprise system (or digital core) improves or worsens organizational agility. Some argue that enterprise systems generate a new layer of complexity by connecting different processes and areas of the business. The other side of the argument advocates the use of enterprise-wide IT systems to enable quick reaction and adaptation to change while impacting agility favorably. Meanwhile, other studies reveal that organizational agility is positively influenced by the assimilation of the system. Therefore, it is important for the digital core to enhance agility or, at a minimum, maintain it.

**Figure 4: The Three Drivers of Business Performance**
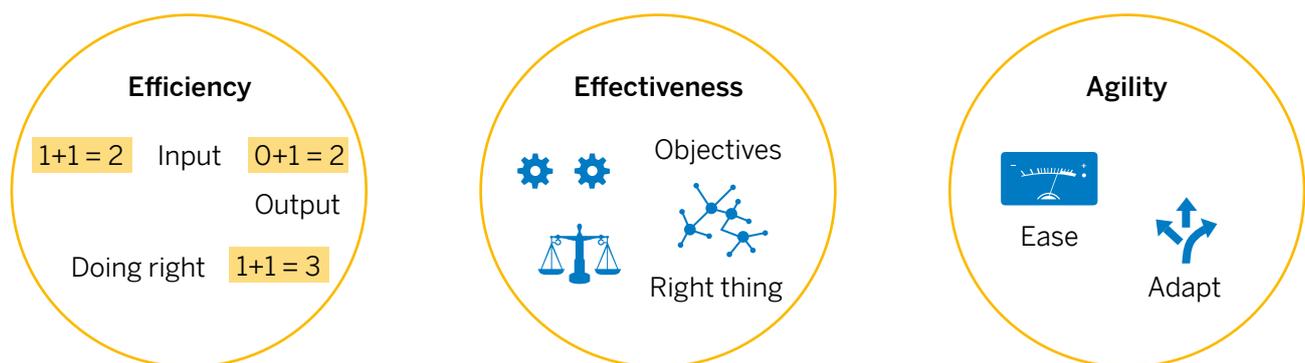
From Changing Processes to Changing Business Models

Because complexity hinders the ease and speed of digital transformation, core business processes need to be reimagined and brought up-to-date. It is the only way for companies to simplify work and processes and deliver corporate expectations.

Unfortunately, redesigning processes and leading the company into the digital age does not come for free. The more, yet appropriate, effort put into it, the more companies can capitalize on it.

See Figure 5. On the very left, efforts are tactical and opportunistic, where punctual adaption of new technologies often eases IT processes only. When the strategy moves further to the right, entire process chains are replaced with a digital equivalent and influence all levels of the organization. By going all the way to the right of the spectrum, businesses becomes more strategic, impacting business value and innovating new business models that can disrupt the market and leave the competition behind as additional market shares and new segments are acquired.

Figure 5: The Influence of Digital Transformation Strategies on Company Value
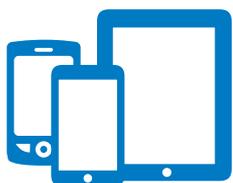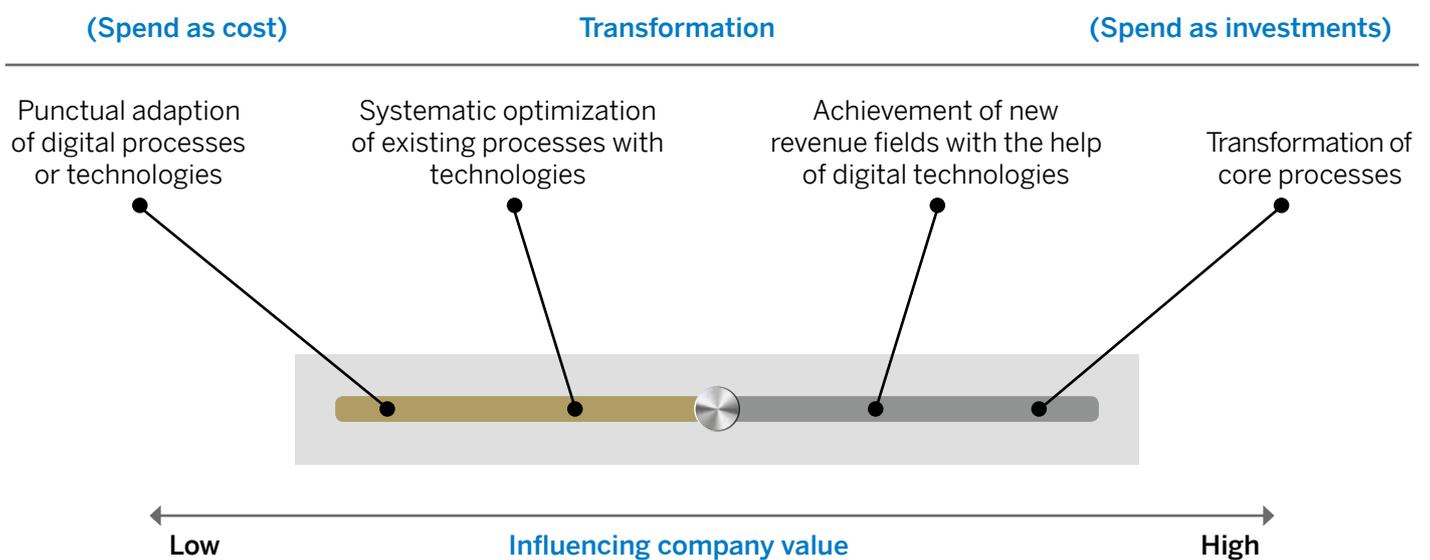
With a digital core and environment, companies can choose how much they want to impact their enterprise – from digitizing one process to reinventing business models.

Realizing the full potential of digital transformation means viewing digital spend as investments – not costs. Plus, success is measured differently, new revenue streams are enabled, and existing cash flow is optimized.

To measure the business impact of a digital core and justify its benefits for future use, companies need to establish a framework that reflects success, compares use cases, and considers applications. By welcoming back the tried-and-true balanced scorecard, each dimension of the digital core's value is represented by three main value dimensions: efficiency, effectiveness, and agility. This helps businesses measure the impact on business outcome and organizational impact. (See Figure 6.) Let's take a closer look at these dimensions.
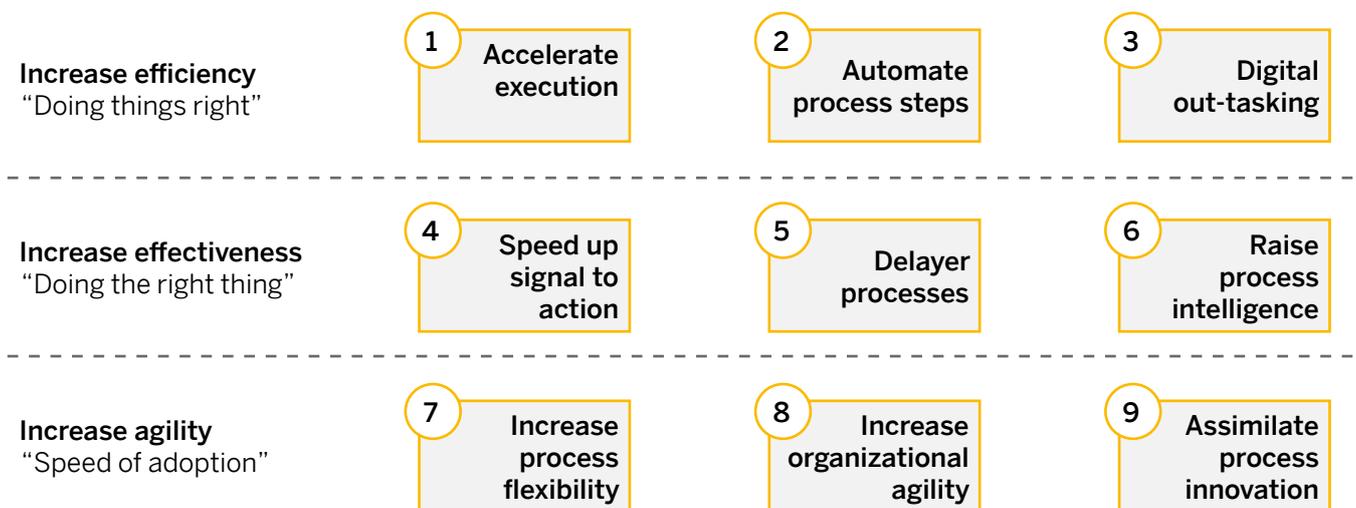
INCREASE EFFICIENCY

In fast-changing markets and environments in the digital economy, new competitors are perfectly ready to disrupt existing markets. And for that reason, efficiency is a mandate, not just a nice-to-have option.

Efficiency is the ability to do things right by achieving more outcomes with the same input or less effort. This can be achieved, for example, by giving people the right information in the right context. With faster, embedded analytics through a digital core, they can make decisions more precisely and efficiently.

Increase Effectiveness

In contrast to efficiency, effectiveness can be described as doing the right thing. Simplification enables businesses to focus on fundamentals and scale them infinitely. They can now spend time on value-adding tasks (the right things) because many processes are highly automated.

Figure 6: Balanced Scorecard Approach to Measuring the Impact of a Digital Core

Increase efficiency "Doing things right"	**1** Accelerate execution	**2** Automate process steps	**3** Digital out-tasking
Increase effectiveness "Doing the right thing"	**4** Speed up signal to action	**5** Delayer processes	**6** Raise process intelligence
Increase agility "Speed of adoption"	**7** Increase process flexibility	**8** Increase organizational agility	**9** Assimilate process innovation

Consider orders that require low to zero touch. This approach is a consequence of the new promise of a digital storefront. It is no longer an option to improve existing order processes incrementally; it is about fundamentally redesigning the order process to manage new customer expectations.

Increase Agility
The last dimension, agility, is a mix of flexibility and speed. The pace of adoption defines company success, and, in the context of an organization, agility drives fast response to those changes.

Agility is only possible with a digital core and the flexible extension of a modern platform. Business processes are flexible enough to adapt to change quickly, improve service levels, and strengthen many other aspects of the business. Products and services can then be adapted and enhanced for greater flexibility to address customer needs and demands.

Optimizing the Value of the Digital Core

EFFICIENCY LEVERS
By building a framework, individual levers can be identified for each dimension to measure effort and outcome. (See Figure 6.) Let's further investigate the value levers behind efficiency, effectiveness, and agility.

Efficiency Lever 1: Accelerate Execution
This value lever emphasizes the unrealized speed of the digital core, which undermines every process created. In the past, arduous, time-consuming batch processes or transactions were used – even for simple requests or analysis. Simple tasks took as little as 30 seconds, but more-complex reports required days to complete. Although 30 seconds doesn't sound like a long time, research proves that users move on to different tasks if something takes more than 30 seconds to load or transact. Even if something is faster than 30 seconds, yet still takes longer than 10 seconds, the user loses context and gets distracted. Ultimately, this means that people have several unfinished or inaccurate workflows opened and can't focus on one before they move on.

When the digital core is powered by in-memory technology, companies can reduce processing time to either a few seconds or just minutes for simple and complex tasks, respectively. A processing speed of under three seconds allows the completion of more transactions that are accurate and meaningful to the user. Users can rely on a single source of truth and work with real-time data.

Efficiency Lever 2: Automate Process Steps
Routine tasks that do not require careful, manual attention can be automated with the help of the digital core. Based on set criteria and algorithms, the system can decide whether a request needs manual interaction. The data is captured only at the source, which then addresses a single truth.

No matter how involved in the project, users work with the same data and improve human interactions with automated process steps. For the business, this increases the possibility of more zero-touch processes – freeing employees to work on more strategic work.

Efficiency Lever 3: Digital Out-Tasking
With a digital core, digital out-tasking becomes much easier. Compared to outsourcing, out-tasking allows businesses to manage the basic parts of the whole process. However, steps in between can be outsourced to external services.

This approach increases process efficiency and decreases costs. As a perfect fit for supporting a market segment of one, processes (such as deep market analysis or mining of external customer data) are left to the experts, which means extra money is available to invest in core capabilities.

High-volume data is no longer a show stopper for a system – instead, it can be evaluated in real time.

Effectiveness Lever 1: Accelerate Signal to Action
Acceleration of signal to action is a direct result of operating critical processes that still require human evaluation. This lever generates a notification (the signal), alerting the responsible business user to address the request.

In the past, the user received tons of these signals every day and had to evaluate each one manually. With a digital core, the user gets only a few signals but can quickly see the request's importance and fully focus on the task. Take exception handling, for example. The user can now rely on and react to signals from the system triggered by an inventory shortage. In the end, decision making, action, and follow-through are faster – enabling the employee to be more effective.

Effectiveness Lever 2: Remove Layers from Processes
The advancement of automated processes emphasizes the improbable consolidation of multiple workflows. Let's say an agent needed to retrieve information from an analyst. First, a manager must approve the request before the agent can submit a formal request to the analyst. Plus, the requestor must wait until the analyst manually delivers the report. This process is too time-consuming for today's fast-paced world.

By automating interactions with the analyst and manager and seamlessly integrating them into the workflow, the agent can now finish the task in one step – without losing time and focus. This approach supports fraud detection by removing complexity from workflows and increasing transparency.

Effectiveness Lever 3: Raise Process Intelligence
Enriched and embedded into the process, analytics can turn Big Data into smart data and provide predictive insight – allowing users to do the right things. By capturing data such as click patterns, sensors, or geographic changes, you can now make decisions based on real-time, accurate information.

Gone are the days when the business relied on gut instinct and outdated information to make a decision. System simulations and user recommendations can help dramatically improve process intelligence.

Agility Lever 1: Increase Process Flexibility
Process flexibility can be defined as the ability to adapt to change. Suppose a line of business identified a need to update a fixed process to make it easier to use. In the past, initiatives like this were only possible through high-effort IT investments and adoptions. Now with a digital core, users can define their processes or alerts without deep IT knowledge – on the fly and with any device.

A digital core unites multiple, fragmented processes and involved stakeholders onto a single platform, leading to faster data-related decision making.

Agility Lever 2: Increase Organizational Agility
Usually, the representation of an organization's structure within an IT system typically lags behind the actual structure. Organizational changes have an immediate effect, especially when dealing with company mergers. As a result, affected processes and structures need to be adjusted just as quickly.

With today's capabilities and innovations supporting a digital core, the line of business and the IT area can collaborate with greater flexibility. New insights and blurred borders between line-of-business applications enable organizations and employees to understand new processes and adopt them quickly.

Agility Lever 3: Assimilate Process Innovation
The digital economy constantly pushes and forces organizations to change and overthink their processes. However, inflexible and stiff organizational constellations can make this a very complicated effort. Process changes need to be developed and tested by IT, making the road from idea to adoption and use very long.

With a digital core, changes can be made directly by the user or deployed as a whole. User adoption is accelerated by creating an intuitive and flexible design. Plus, new talent from the merged organization can be transferred and developed anytime, anywhere, and without distraction.

Summary

The digital economy – with disruptive technologies and trends such as the segment of one – is pushing forward and forcing organizations to transform. However, complexity prevents a quick, easy road to transformation.

To unburden employees and processes from process intricacy, a digital core is needed to put disruptive technologies to best use and give customers the experience they expect and desperately need. For example, the Internet of Things enables connected manufacturing to deal with customization and a lot size one, which, in turn, gives customers a personalized experience.

The real value of a digital core is performance, not reduced costs and total cost of ownership. With solutions that support enterprises in every process, employees finally have the time and possibility to develop and push their ideas forward and transform the organization both internally and externally.

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