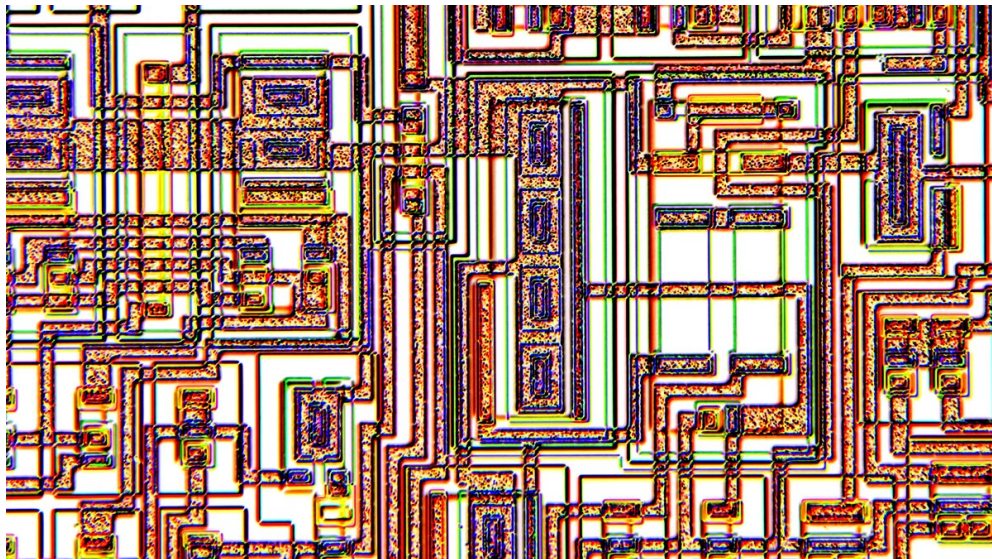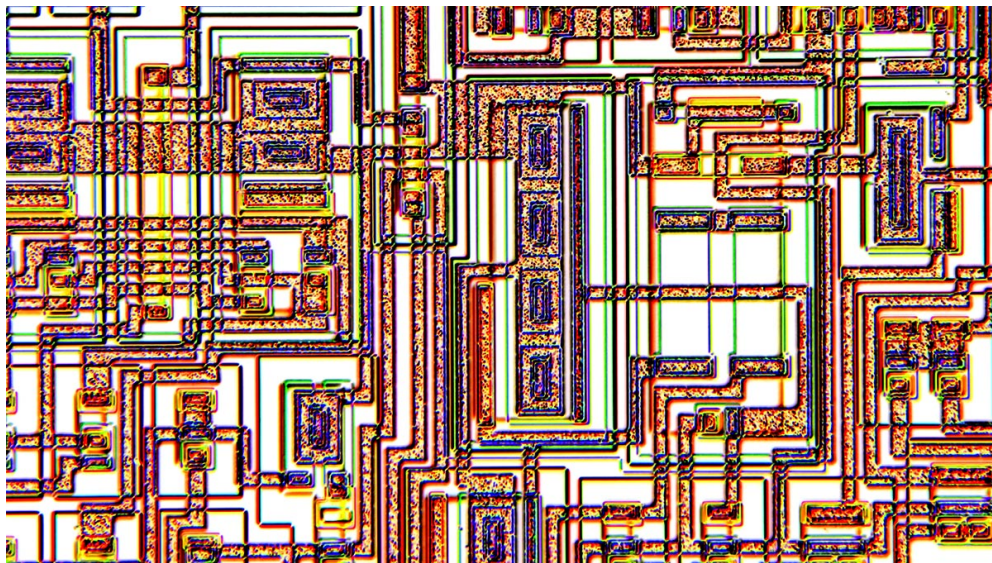Strategy & Execution

How to Map Out Your Digital Transformation

by Benjamin Mueller

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Published on HBR.org / April 27, 2022 / Reprint H0700M

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At the start of the pandemic, businesses around the globe found themselves exposed to an unexpected boost in digitalization. Those who promised to keep the wheels turning were given carte blanche to do whatever it took to keep a company running. But as many now return to the office, they also realize that the digitalization lodestar is beginning to fade. Where investment priorities were clear early in the pandemic, companies now face the same uncertainties regarding digitalization as they faced before it.

At the heart of this uncertainty is a simple question: How do leaders make sure that digitalization makes a purposeful and sustainable impact on the business — and doesn't just follow the next tech hype?

Behind this question stand legions of digitalization leaders who have tried to figure out what the latest trend in tech means for them — from AI and blockchain to quantum computing. But while many of these trends are hyped initially, executives have become all too familiar with the hype cycle's "valley of tears": the sobering phase after the initial hype when impacts and benefits remain vague and many projects are abandoned. Only a few manage to pull through and reach the "plateau of productivity" where digital investments start to make a difference.

If digital transformation is supposed to be meaningful and lasting, companies must think about changes in products and processes more than changes in technology. But many companies struggle to look past the shiny promises that usually accompany new technologies. As a result, they dedicate too many resources and too much attention to the technology side of digital transformation projects.

One approach to counter this imbalance is to think of digitalization as business model innovation rather than technology-related change. Over the past three years, I've been working with dozens of teams who made that shift. They were faced with digitalization challenges across a wide range of industries (e.g., consumer goods, health care, education, construction, finance) and firm sizes (from small and medium enterprises to larger, international organizations).

While their motivations and goals differed, the teams shared the experience that envisioning business model change — whether in response to digital disruption or to innovate digitally themselves — helped them see technology in context and better understand what
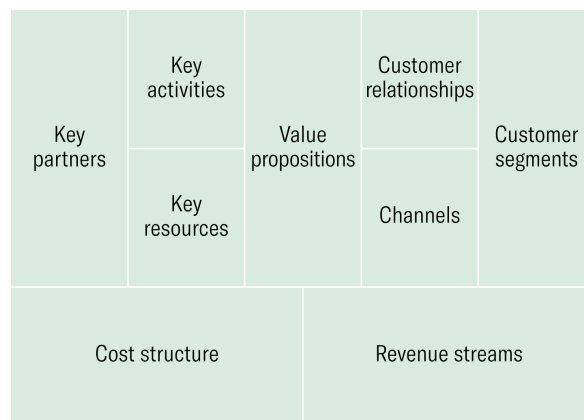
measurable changes to expect. Across the teams, one simple, well-known tool turned out to facilitate the necessary shift in perspective: the business model canvas.

The Business Model Canvas

The business model canvas, developed by Alexander Osterwalder and Yves Pigneur, has helped organizations sketch out and transform their business models since the late 2000s. It's intuitive to use and consists of nine key elements that each business usually relies on. At the heart is the *value proposition,* usually understood as a combination of pains addressed and gains delivered from a customer's perspective. Toward the right, an understanding of who a business's customers are leads to the capturing of *customer segments*. Between the two, *customer relationships* and *channels* sketch out how to relate to customers, stay open to their input, and deliver the value to them. On the more operational left side of the canvas, businesses are encouraged to think about the *key activities* and *key resources* needed to create that value. This side of the canvas also takes a look at *key partners*, such as through strategic alliances or complementary offerings, that help create value or further add to it. The canvas is then underpinned by an understanding of a business's *cost structure* and insights into its anticipated *revenue streams*.

The Business Model Canvas

Nine key elements comprise the basic building blocks of a business; their positions on the canvas illuminate how they affect one another.

Key partners	Key activities	Value propositions	Customer relationships	Customer segments
	Key resources		Channels	
Cost structure			Revenue streams	

Source: Strategyzer.com; canvas concept developed by Alexander Osterwalder and Yves Pigneur

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There are two aspects of the canvas that make it particularly suited to the digitally oriented conversations in focus here. First, while it serves as a sort of checklist to ensure that none of the nine key elements is overlooked, it also pulls all of the elements together, allowing for an understanding of the crucial interplay between them. Changes to one element usually have ripple effects across the entire canvas. For instance, changes in how an innovation is monetized will alter cash flows, which then in turn requires key activities to be restructured. This focus on interplay is key in digital transformation projects, too, because their success depends not only on investing in the right technologies, but also on the complementary changes in organizations that ensure that the technologies are used efficiently and effectively.

Second, the business model canvas is strongly rooted in the thinking that a perfect business plan rarely emerges in its final form overnight.

Generating one is a process of iterative refinement driven by intense customer testing (e.g., through minimum viable prototypes or focus groups). In this way, smaller aspects of the canvas are subjected to feedback from key stakeholders to see how much sense they make and whether any changes are needed to improve the business model. This spirit is expressed well by the idea of lean startups. Changes that result from such testing can be evolutionary, gradually refining the business model, or even revolutionary, pivoting the whole idea. The same logic can also be applied to digitalization projects because many parts — both technological and organizational — need to be aligned iteratively to make them work.

How to Use the Business Model Canvas for Digital Transformation

Like generating innovative business models, managing digital transformation is one of the key challenges many organizations face today. This is especially true for small and medium enterprises that don't have the luxury of large transformation budgets, the talent pool that comes with them, or the ability to just spin off their more digital ventures. But luckily, innovating in your business model and transforming your business digitally can use more than one page from each other's playbook. Like business model innovation, genuinely engaging with digital transformation is not just about paradigm deepening or doing what you've always done but with fancier tech. Especially as organizations around the globe are now facing the question of what to make of their recent tech investments, there's an opportunity to turn the often continuity-focused tech investments of recent years into foundations for a more genuine transformation of the enterprise.

1. Map out the current business model
In order to know where you're going and how to get there, you first need to understand where you are. Start mapping out your current

business model. Going through the nine elements of the canvas for your business — especially if your current business model has grown rather than having been carefully engineered — will add an important baseline to your transformation efforts.

In this process, it is paramount that you do not simply fill in the nine boxes, but that you also pay close attention to the interplay between them. This exercise reveals the fault lines in your current business model.

A company developing and manufacturing medical prosthetics delivers a good case in point. When forced to sketch out their current business model, they realized that their relationship with their end customer (i.e., patients) was fully mediated by the doctors who interact with the patients directly. Not only did this limit the company's ability to get important direct feedback on products and quality from their end customers, but it also limited their ability to inform patients about further customization options that could be added beyond insurance coverage.

In mapping out their business model, the company realized that they needed to augment their sales and order process to directly involve the end consumer early on. To do that, they brought in a digitally integrated sales management system that would allow them to collaborate with customers and made investments in a manufacturing process that relied on 3D models that could easily be shared online.

2. Engage with the transformation opportunities

Look for ways to engage with the transformation opportunities the previous step revealed. A ranking exercise will allow you to identify the key elements you want to focus on, then you can begin to gradually develop the necessary changes.

In my work with digital transformation teams, an important part of these conversations has been to let go of the status quo to be able to envision not the process of transformation, but its goal. Many of the teams also employed strategic foresight approaches to help with this step. As I mentioned earlier, this second step is not a singular, Eureka-like effort. Carefully experimenting with the key changes and their ripple effects proved to be essential if teams wanted to a) break down the overall transformation effort into manageable chunks and b) make sure that a coherent vision for the transformation resulted.

An international manufacturer of specialized construction machinery had to face the fact that its traditional products were coming under increasing pressure because competitors managed to provide smarter and more networked machines. Working with the business model canvas, the company realized that the challenge they were facing wasn't a primarily tech-driven one. By carefully reflecting on the impact that smarter and connected products would have on their business model, the company realized that it needed to focus its transformative efforts on developing and communicating an updated value proposition first. Consequently, the focus of the project shifted from being about embedding smart and connected components into their products to understanding the need for an updated value proposition.

Going back to the business model canvas, this step starts introducing changes and updates into your canvas.

3. Derive the necessary changes

Once you've sketched out the goal in the second step, the third step is all about deriving the necessary changes to get from the status quo to the digital target. Successful digital transformations have been compared to conducting an orchestra rather than just buying the latest instrument. Beyond identifying the key changes that the transformation relies on,

it's also important to keep an eye on the ripple effects throughout the canvas and be sensitive toward the complementary efforts that will be needed. In this way, training and upskilling can prove to be at least as essential to a successful digitalization as picking the right tool for the task and understanding its business implications.

Continuing the example of the construction equipment manufacturer, the team's discussions that followed focused strongly on the subsequent adaptations needed in the other parts of the business model canvas and how to design the transformation path to orchestrate the changes. Applying a canvas-based analysis to related cases, such as John Deere's shift toward smart farming or Caterpillar's emphasis on monetizing their customers' need for a reliable service level, provided complimentary insights on how to design the transformation beyond its digital spark.

Work in this step will result in a roadmap that links the transformation goals defined in the previous step to a coherent set of change initiatives. Clearly, technology will remain key in these initiatives. But from the perspective instilled by the business model canvas, providing the actual tool is only a minor change in terms of your business's key resources. What matters more is a clear understanding and vision of what you can now do differently. Most teams experienced that purposeful changes to their key activities were needed to ensure that technology investments were used effectively and led to lasting transformations in how value was created and delivered.

4. Make sure you've hit your target

Finally, a fourth and complementary step is all about making sure that you've hit your target. Digital transformations often rely on breaking down the overall transformation efforts into smaller steps and might even prove to be an ongoing effort. Keeping an eye on the business

model is essential to keeping iterative efforts on track and helps businesses not to fall into some kind of post-transformation stasis that conveys a false sense of stability. Especially when digitalization of one aspect of the business leads you to realize that other parts of the business need to follow suit, this continued engagement with digital transformation is crucial to staying ahead of the competition.

For example, a chain of convenience stores mostly located at transportation hubs initially faced challenges because of restrictions regarding the numbers of customers in their stores during the pandemic. While this could have been viewed as a temporary issue — requiring a temporary solution — the team's business model focus encouraged them to think more comprehensively about their value propositions to people "on the move" and pressed for time.

In the process, the team realized that an app they rolled out soon after the first lockdown that allowed their customers to preorder items to pick them up in-store could lead to a more permanent transformation of their business and operating model, including aspects like store layout and supply chain optimizations. For them, focusing on the business model and their key value proposition shifted the key question from "what can we do with this technology?" to "how can technology help us achieve this goal?" and unlocked a cascade of changes far beyond the initial digitalization of the sales channel.

The fourth step is forward looking and emphasizes an important capability-focused approach to digitalization. In other words, rather than focusing on technology, the focus should be on what you can do now that you could not do before. Many organizations around the globe — from businesses to universities and nonprofits — have realized that there is more than one way of doing the things that they do. This has been the real driver and threat behind digital disruption for a long time.

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If your business is facing the challenge of how to maintain its digitalization momentum, drawing on the business model canvas might make for a welcome change in perspective that helps you stay focused on business priorities and impacts instead of just technological trends. If digitalization is supposed to be truly transformative, impacts of corresponding changes are bound to show up in the canvas and its elements.

[Editor's Note 5/2/22: This piece has been updated to credit Alexander Osterwalder and Yves Pigneur, who developed the business model canvas.]

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