

STAIRWAY TO DIGITAL TRANSFORMATION

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Abstract

Many executives today struggle when they hear the term “digital transformation.” Some of them think: Will my company be capable of going digital or will it just succumb to new competitors? Will my career be derailed if I don’t update my digital skillset? Others are more optimistic, but most managers today understand the importance of the new digital trends and their impact on the sustainability of their businesses.

It’s a colossal challenge for incumbent firms. However, most of the literature does not offer a comprehensive framework on how to land digital transformation in business. What are the steps to take and the missteps to avoid? How does one get started and how should the journey be designed and planned?

The authors, after conversations with more than 20 top executives currently working on the digital transformation of their businesses, provide a simple framework consisting of three steps: understanding the forces of change, getting to digital commitment, and executing the digital transformation roadmap.

Keywords: digital transformation; digital; innovation; digital change.

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STAIRWAY TO DIGITAL TRANSFORMATION

The term “digital transformation” is an increasingly hot topic among executives in almost any sector. It often stirs feelings of anxiety or fear... Is my company capable of going digital or will it just succumb to new competitors? Will my career be derailed if I don't update my digital skillset? Many people choose to elude responsibility, blaming factors such as their organization's slowness, fear of cannibalization, lack of resources, and missing talent. Yet nearly everyone feels a personal need to transform his or her company.

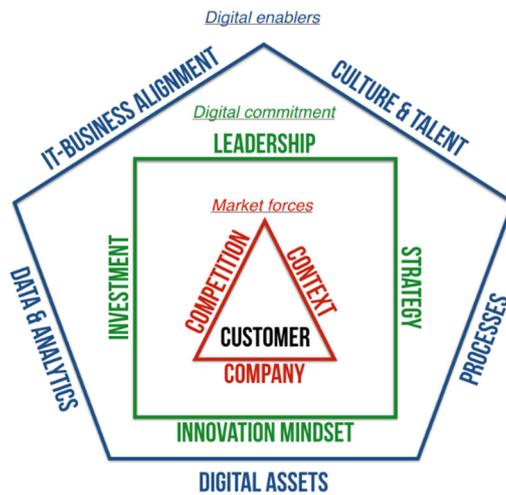
It's a colossal challenge. Entire industries are impacted by this unstoppable phenomenon of digitization as executives seek guidance on where and how to get started. What steps have the most successful companies taken in their digitization process? Can we learn from the missteps of those that have come up short? Are there best practices that can show the best way forward? In short, how do we get the ball rolling on digitization?

To answer these questions, we have developed a model called “stairway to digitization,” which aims to provide an ordered structure to something that often gets muddled, perhaps due to information overload and the rapid rate of change. The model is designed to set out the elements and key phases of digitization each step of the way, and identify what stage your company is currently in and what factors might be stalling your digital transformation.

To that end, we identified three steps that the company must get past. The first step involves gaining a deep understanding of how the market is changing and how this change will impact the firm. The second step is getting senior management to fully commit to the transformation. And the third step calls for executing the digital transformation roadmap—understanding the five essential levers for doing it the right way: culture and talent; digital assets; processes; data and analytics; and IT-business alignment.

Figure 1

A model for digital transformation



The Market Forces of Change

Today, we are undoubtedly facing a paradigm shift. We are knee-deep in another industrial revolution (this time it's digital)—a historic change that forces us to adapt in order to rise to the occasion. This revolution affects our everyday habits and has implications on how we relate to others, how we work, how we participate as citizens in society, and how we do business.

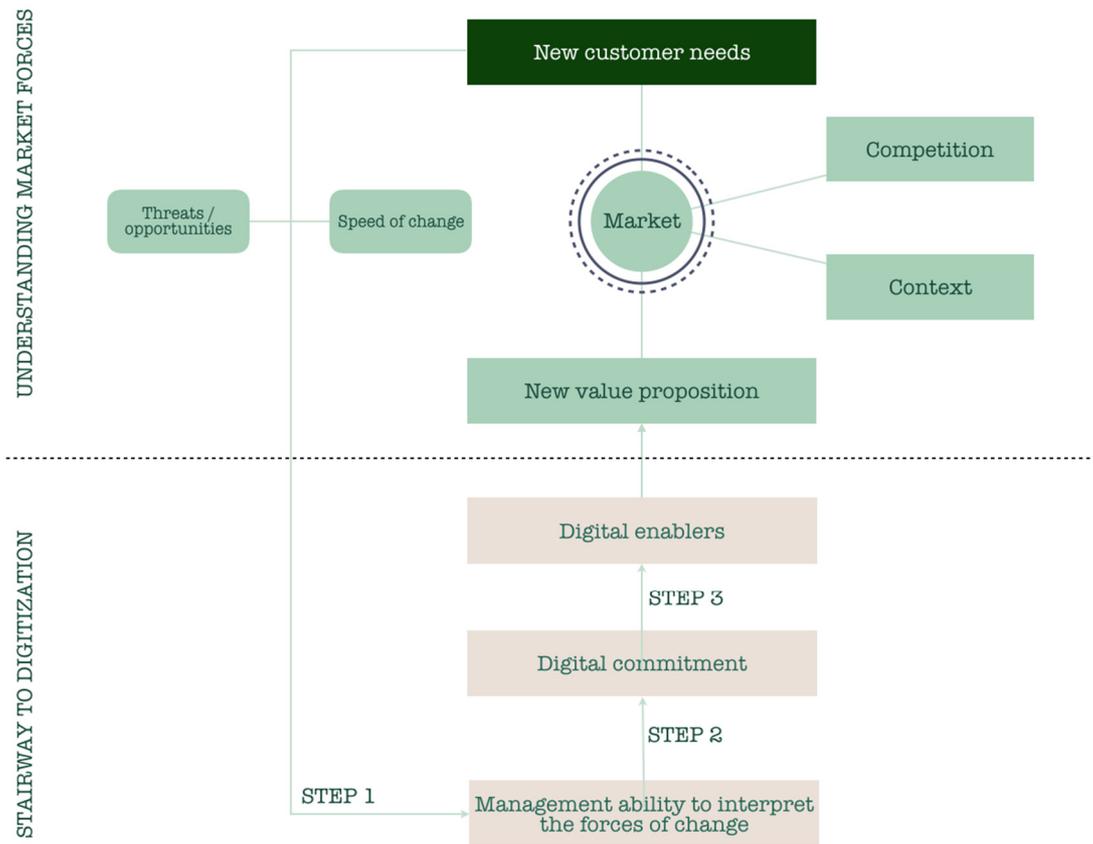
Pressure from shareholders, the market, or even the board of directors can force companies to focus on maximizing value for shareholders in the short term and lead them to forget that generating that same value in the medium to long term is impossible without being in tune with the demands of our customers.

This fixation on customers is a byproduct of the digital transformation. Since the transformation revolves around customers, unless we have a clear understanding of this first principle, it is difficult to make the change that the times demand of us as leaders.

Hence, the need for transformation comes from customers. We are embarking on a new “customer journey” that affects all businesses. Customers expect that those operating in the market will adapt to the new situation, to their emerging needs and behaviors. So, while some incumbents may try not to adapt, others inevitably will, and there will be newcomers, new competitors and partners, in a context where changes happen exponentially (e.g., new technological innovations, legislative frameworks, cyber security issues, and economic environment). There is no doubt that all of these changes will impact a company's bottom line. It is the market forces of change in action: a new context, generated by new competitors, with new partners, who adapt to the demands of the new users/customers and compel us to change our company's value proposition.

Figure 2

Three steps to digitization



Consider the travel sector, where new players have appeared in recent years: metasearch engines such as TripAdvisor; online travel agencies (OTA) like Booking.com. But also new competitors like Airbnb and new ways of selling, such as bidding for a room, negotiating with the hotel, or re-selling an existing reservation to a new guest.

In other sectors, these changes are still slowly emerging. Education is one such example. Although top Universities worldwide now offer free courses on sites like edX and Coursera, have invested in new online learning platforms, and are adopting a plethora of tools from online polls to wikis and blogs, the digitization of education is still in its infancy. Since the 13th century, when Universities were first established, books, chalkboards, and faculty in the flesh have been and continue to be the most important instruments in education. Degrees from the most prestigious schools still hold their value, and tuition costs continue to rise. However, some experts foresee an imminent change as profound as that of the travel and leisure sector.

At the other end of the spectrum we can find some B2B companies. Take the example of the meat industry. Although you can buy a *filet mignon* from a supermarket online, or search the Internet for information on meat brands, producers, distributors, retailers and customers do not behave much differently than the way they did before the digital revolution. However, even in this industry new technologies could bring greater efficiency to internal processes such as price setting or logistics, leading to lower costs and higher margins.

These three examples illustrate how the digital revolution impacts each sector in a different way. Those that have already seen increased digitization have yet to reach a stable phase, and those that have remained relatively stable are certainly not immune to these changes. Therefore, any senior executive should feel the need to closely observe the way the market is changing.

However, before setting the urgency and pace of transformation, the board should judge market forces in terms of threats and opportunities, as well as predict the expected speed of market change. Some boards will see more threats than opportunities at a high speed (e.g., the New York Times before the paywall was established). In these cases, there is very little room for failure. Others interpret the changes with similar worry, but at least enjoy a relatively slow change. The banking sector could be one example. Some are more optimistic. For example, a dominant pure digital player may be in a very good position to take advantage of its industry process of digitization, but should act fast to avoid other competitors from gaining market share (e.g., Uber against Lyft and Cabify). Finally, some optimistic managers may expect very slow change. Needless to say, significantly failing to position your firm in this matrix could be lethal for strategy design and survival.

Figure 3

Opportunities/Threats vs. Speed of change



The First Step: Management Ability to Interpret Market Forces

Today, not a single manager from the media industry would deny that the Internet has caused a major disruption to their business model. Most agree that the process of digitization is not over yet. But the dean of a university or the CEO of a meat company may not be so sure of this. The former would probably examine the changes with some concern, perhaps thinking that platforms such as edX, Coursera, or others that do not yet exist could force the university to shut down. The meat company executive might see the changes further out. After all, a cow is not digitizable.

In our opinion, herein lies the first step that many companies stumble on. Market trends are not always clear, nor do they give ample notice. In some cases, such as in the media industry, those trends have been extremely powerful and will likely continue to wreak havoc. In others, they may never be that drastic.

Our discussions with executives from various sectors lead us to conclude that many people think their companies do not fully understand the possible impact that digitization will have on their P&L statement. And they say the reasons are complex, yet blame it on the lack of a customer-centric approach, the complexity and speed of the changes, or the profile of the senior management team, which often lacks knowledge and expertise related to the digital world. It seems clear that if a company's management is unable to understand these changes, then it will be incapable of designing a digital transformation process.

One very useful tool for thinking about the future is scenario planning. Our experience with banking and insurance executives reaffirms that for both sectors, strategic planning can be significantly improved if they imagine plausible scenarios in which digitization impacts the organization in different ways.

The Second Step: Digital Commitment

Having a more or less accurate picture of market trends is a necessary but not sufficient condition for digital transformation to happen. The executive committee and board of directors must be committed to the change. The organization's leaders must be clear and unequivocal in conveying that commitment. In our view, there are four key factors to achieve what we call "digital commitment":

1. **Leadership.** CEOs, with the support of boards of directors, must be capable of communicating their digital vision to their companies. In some organizations, this is particularly difficult given the fear of cannibalizing existing revenues. In others, the difficulty may be that the trends are not pronounced enough yet and many do not see the need for change. According to one executive from a family-owned business: "The members of my board largely feel that the digital world will not impact our business: Why all this need to go digital when we sell industrial furnaces?" Yet this same executive felt that furnaces were also digitizable, perhaps by connecting them to the cloud to measure their efficiency and then start selling solutions instead of products. A good leader, who understands market trends and can imagine the future, will be able to set out the direction and speed of transformation.
2. **Strategy.** There is no digital strategy, but the digital dimension will inevitably affect the new strategy. Each company will have a different way of reading market trends and adapting its strategy. The CEO of a major seed producer explained to us that younger farmers use new technologies to control their crops: they find information online about new varieties of seeds, watch tutorials on YouTube, and even monitor the weather forecast and control irrigation with their smartphones. Although these changes are still nascent, they have led the company to change its distribution strategy, connecting with end consumers rather than relying entirely on an extensive network of small distributors. These changes pose a significant risk of conflict, but in this case emerging customer needs cannot be met without a redesign of the existing distribution channels.

3. **Innovation mindset.** A digital transformation will involve the need for innovation in products and services, pricing models, distribution channels, communication strategies, processes, or the supply chain. In some cases, innovation may lead to the cannibalization of existing revenues. In sectors where stability is the norm, innovating at a fast pace will be especially hard for an organization. For example, in an academic institution, innovation may lead to a new way of teaching, giving feedback to students, training faculty, or designing programs. Perhaps that same institution should also rethink the profile of its faculty. Is senior management capable of setting the pace for this innovation?
4. **Investment.** Leadership, strategy and innovation are not sustainable without the necessary monetary investments. Many companies have executives who are capable of understanding market trends and are good at designing a roadmap to digital transformation, but then invest timidly, perhaps because their board is too cautious and reactive. Transformation cannot happen if the emergency brake is left on. Other times, the investment needed cannot be easily justified. For example, how can a mid-sized hotel chain compete in capturing leads for its locations against a company like The Priceline Group, which invests a disproportionately higher amount in SEM, SEO, and user experience for its websites?

Getting digital engagement in an organization is not a trivial matter. A company can stumble on this step for several reasons, including: the inability to transform knowledge into a solid strategy, excessive focus on the short term, substantial cannibalization of the core business, and an unreasonable gap between the desired and the available funds.

Third Step: Ability to Execute (Digital Enablers)

As if the first two steps were not complicated enough, there is still one more: execution. At the end of the day, execution is almost everything. We may aptly detect new market forces and have a management team that is fully committed to the transformation, but if we don't properly execute we will miss the mark with our targets. When it comes to execution, we differentiate five elements—five levers of execution. These are interrelated and must be synchronized to keep things from getting off balance:

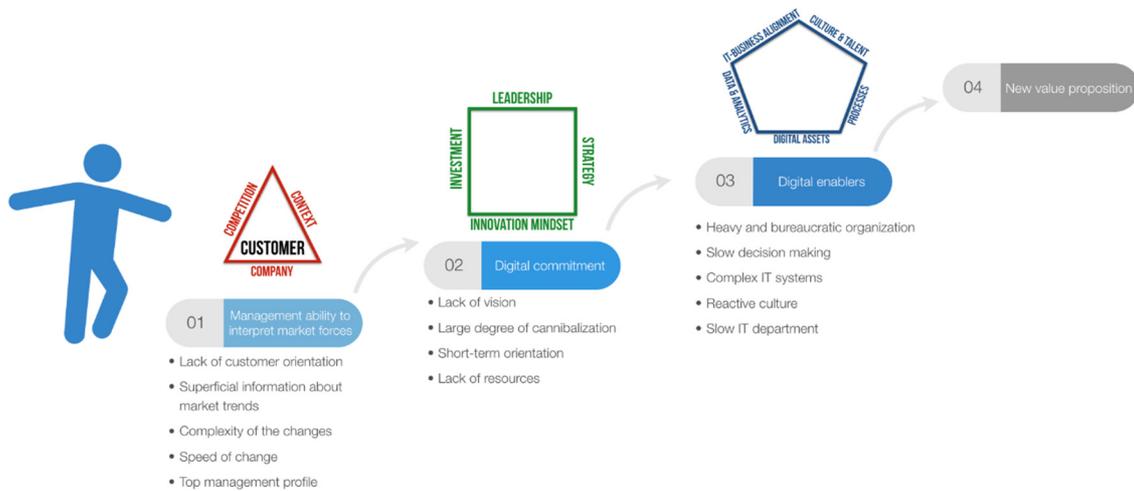
1. **Culture and talent.** Let's go back to the university example. Getting faculty and staff to adapt to the appropriate pace of transformation can only happen if there is a cultural change and the right talent is in place. What does it take to get faculty to change? What does it take to get staff to change? It involves more than just breaking down the silos that predominate in many organizations, or hiring a few technology experts. It's about having the key people in the organization be the protagonists of this change. For that to happen, they must be humble and recognize their shortcomings, and be able to work as a team, learn, try, make mistakes and make corrections. They must break the inertia and have the desire to innovate, while being able to adapt to a new reality that exposes us to an exponential series of changes.
2. **Processes.** A meat company may not be able to digitize its cows, but it can take numerous processes digital. For example, by rolling out a good CRM solution for its sales force and a GPS system in its trucks, it could leverage that data to establish new delivery routes. Rather than leaving it up to an area manager to decide which customers to serve first, an

algorithm could be created to determine a logical route using information such as traffic, the customer's historical margin, and preferred visiting hours. Additionally, prices could be set based on market information and a historical analysis of internal data.

3. **Digital assets.** In a transformation, building digital assets has become an imperative to virtually any company. We should take a broader definition for the term “digital asset” that some marketers are making. In our view, a digital asset could be a website, an app, a proprietary optimization algorithm to optimize your SEM, a facial recognition system, or a GPS connected to your trucks that tells you where your drivers are. Customers expect a different kind of relationship, and the digital assets you have will allow you to either delight them or frustrate them. Digital assets are not an end in themselves; they are tools to change processes and improve customer relationships. Some are customer-facing (e.g., a website, mobile website, or app) while others are not directly observable (e.g., an algorithm), but they are all equally important. Yet many companies seem to always lag behind. For example, it is surprising to see how some retailers spend millions of dollars to establish a single physical store, a “flagship” in a specific geographical area, but later skimp on expenses when designing their website, which in some cases may be their most important store.
4. **Data and analytics.** Many companies that still have trouble with “small data” are braving the unknown world of big data. However, it is true that the amount of data available to companies has grown exponentially and, with it, the analysis process has been simplified. Today, many tools—some in the cloud or sold as SaaS—allow relatively small companies to venture into a new world of business analytics. Some sectors including banking, supermarkets, and telecommunications have such a wealth of data that the application possibilities seem almost endless. However, thus far not many are capable of locating talent at the analytical and business level who know how to live among the abundance of information, let alone integrate its use into the strategy.
5. **IT-business alignment.** And given that when something fails in the company there seems to be a need to find culprits, the inquisitive eye often focuses on the IT department. The business areas blame the IT department for slowness or subpar execution, causing the so-called CIO derailment. But IT also has its version of the facts, complaining about the ambiguous objectives established, or not being given the necessary budget. In short, when IT and business speak two different languages, it is impossible to achieve digitization in due time and form. In this respect, discussing two speeds of technological development is usually a good start. Changing an organization's technological systems implies not only investing money and resources, but also committing to a culture change. Thus, there needs to be alignment of business and IT on the plan to effectively combine the technological infrastructure that supports the current business with a new, more dynamic, and flexible IT structure that conforms to the new business requirements.

Figure 4

Some possible missteps in the digital transformation journey



Conclusions

All things considered, successfully executing a digital transformation is a tough task. Companies that are able to accurately read market trends, and commit to the change from senior management down, can still run into significant obstacles in the path to execution. One good example is that many banks, despite having a clear digital commitment, must move large bureaucratic structures, leading them to make decisions slowly. Cultivating digital talent while keeping the team engaged in traditional channels is extremely complex. Meanwhile, larger banks have a myriad of processes, some supported by information systems based on code written decades ago. At the same time, some have such an abundance of information about their customers that it is hard for them to prioritize and implement, especially when it is the product lines that determine sales and marketing activities. IT departments, with hundreds of employees and legions of consultants, must service the traditional operational functions. But meanwhile they are asked to provide advances in the development of digital assets that can be very complex to develop and integrate with key systems.

Many incumbents observe how new competitors, while initially very small, have more agile structures, entirely digital cultures, and simpler processes. Some of these newcomers take advantage of legal loopholes or compete in a situation of questionable legality, and allow even more lax security protocols. Despite their small size, they can deliver greater value to certain customer segments, gain traction, and, eventually, dominate entire markets.

But incumbents have many advantages: they have customers, brands, and money. If they can climb the three steps of the stairway to digitization, they will transform and adapt their organizations to a new era.