INCUMBENT BUSINESSES ARE RIGHT to be paranoid about the expanding impact of technological disruption. Of the top ten global companies by market capitalization a decade ago, only two have maintained their positions; many of the rest were replaced by digital natives. And we expect the list ten years from now to be at least as different from today’s: we know that only one-third of companies faced with industry disruption thrive, while the remaining two-thirds languish or fail. It is not surprising, then, that incumbents in many sectors are engaged in extensive digital transformation efforts in an attempt to inoculate themselves against the threat of disruption.

Our research has shown that three-quarters of large-scale change efforts fail to meet their objectives. Digital transformations are among the riskiest for established businesses because of the depth and breadth of change involved, the capability disadvantage of many incumbents, the pace at which digital disruption can unfold, and the fact that customers’ expectations are typically set by a digital native like Amazon or Netflix rather than a direct competitor. Given the high stakes, it’s important to consider how such efforts are structured and executed in order to avoid a number of common pitfalls.

Delusions
Several traps can derail the effectiveness of a digital transformation:

- **Wait-and-see trap.** The evidence from hundreds of transformation efforts shows that the single biggest factor influencing success is how soon they are initiated. In theory, effort could be wasted by starting too early and better-informed by starting later. In practice, however, companies tend to wait too long and would be better served by preemptively disrupting themselves. This is especially true when it comes to adopting digital business models, which can scale extremely rapidly.
• **Favorite-modality trap.** The managerial literature has focused sequentially on big data, predictive analytics, and artificial intelligence. But overemphasizing any single modality obscures more fundamental competitive and customer considerations. It also undermines the advantage of creating an integrated learning model, which requires ecosystems, sensors, data, analytics, and decision making all to be adopted in a coherent and connected manner.

• **Digitizing-yesterday's-model trap.** Digital technology can create more-efficient processes by improving accuracy and reducing cost. Technological disruption rarely proceeds by competing on process efficiency, however. New customer value is usually created through new offerings and business models, which make existing processes obsolete rather than improve them.

• **Technology centricity trap.** Technology is the predominant driver of change in today’s business world. But new technologies create little value if they don’t address new or existing customer needs, with a superior business model. Digital transformation cannot therefore be driven primarily by the technology function. Furthermore, the current wave of AI is reshaping the relationship between humans and machines. Hierarchy cannot be allowed to become the bottleneck in digitized business models, vested interests cannot be allowed to prevent appropriate technological substitution, human capabilities must be focused on higher-level cognitive tasks, and better human–machine interfaces are needed—challenges that span all aspects of management and organization.

• **Beating-the-competition trap.** As a famous joke goes, if you and another hiker are being chased by a bear, you don’t need to outrun the bear to survive—you just need to outrun the other hiker. Similarly, when assessing their digital transformation efforts, leaders may naturally use their traditional competitors as benchmarks. But as the concept of an industry becomes increasingly tenuous, this mindset is no longer sufficient. Many technological disruptors are invaders from other industries. Furthermore, customers’ expectations of digital interfaces and offerings will more likely be set by their interactions with Amazon or Alibaba than by what the other companies in your industry are doing. The competitive standard should therefore be set by the digital leaders, not industry peers.

• **Customer satisfaction trap.** Existing customers will, almost by definition, be satisfied with your current offering—so traditional customer research is likely to give the impression that there is little risk of disruption. However, your digital competitors are probably aiming to satisfy latent needs that today’s customers may not be aware of. High customer satisfaction scores therefore should not be grounds for complacency.

• **One-and-done trap.** Technology continues to evolve, and many industries have already seen several cycles in which the disruptors have themselves been disrupted. Our recent research on digital ecosystems shows that this is the norm rather than the exception. Transformation thus should not be a one-shot effort—organizations must instead build capabilities for continual change.

**Defenses**

How, then, can incumbents effectively defend their positions and increase their odds of success in digital transformation? We suggest several imperatives for effective digital transformation:

• **Eliminate customer frictions.** Frictions include any unnecessary costs, delays, mistakes, misunderstandings, or dissatisfactions that a customer may experience. Often, they seem to be invisible, because they are longstanding and accepted, and there may be no obvious alternative. But such frictions
are likely to be the place where a disruptor will attack. So an exercise that compares the status quo with a hypothetical frictionless version of your industry, and identifies the most valuable and tractable sources of friction, can be critical in guiding digital transformation

- **Preemptively self-disrupt.** Given the long odds of surviving disruption, companies should not wait for an external challenge to act. Instead, they should preemptively “self-disrupt” to avoid being pushed into a defensive and reactionary stance, from where it might be impossible to catch up.

- **Learn from “mavericks.”** Clues for how to self-disrupt can be found by examining the value propositions and business models of mavericks on the edge of your industry or in neighboring industries and asking, what if they were successful? By getting inside their worldview, you can surface ideas about how your current business model might need to be evolved or whether it should be replaced. Taking the perspective of mavericks forces outside-in competitive thinking in a way that internal speculation cannot.

- **Autonomize.** To leverage the power of AI and compete on learning—the ability to identify new insights and act accordingly—you need to move beyond mere automation of existing processes. Instead, you should create hands-off learning by connecting propriety data, pattern-detecting AI, and automated decision making. This also means getting the hierarchy out of the way by creating a new organizational model based on autonomous learning loops.

- **Beat the best.** Understand who is setting the standards for digital customer experience beyond your industry, and exceed those standards in building your self-disruptive model. Survivors of industry disruption are usually differentiated not by the uniqueness of their approaches, but by their rigor and scale.

- **Destroy your business.** Organizations naturally resist change. This resistance is usually strongest when it comes to defending the power structures and resource pools associated with legacy business models. Leaders thus need to go well beyond asking the neutral question, “How could we do better?” Instead, they can have key stakeholders simulate the destruction of their business model at the hands of potential disruptors, an exercise that is more likely to raise the key underlying issues and possibilities.

- **Leverage your strengths.** The first wave of digital disruption attacked relatively easy B2C targets with predominantly digital models. The next wave, which will include B2B players, will likely follow a very different logic, in which relationships, organizational navigation, specialized knowledge, and capital will be required in order to sell and service complex and expensive physical assets. Consequently, the next battle between incumbents and digital natives may be in some ways more evenly matched. Nevertheless, incumbents have no automatic right to be the orchestrator in an ecosystem, and some digital competitors will master the art of relationship management and selling specialized, capital-intensive assets and services. Incumbents must think about how they can leverage their historical advantages while self-disrupting their business models and building the capabilities to do so.

- **Build perpetual transformation capabilities.** Digital transformation in many cases will not be the one-shot affair it is often assumed to be. Ecosystems coevolve, technology progresses, and competitive standards continually rise. Ongoing transformation skills are therefore necessary. Moreover, change will increasingly be based on data and analysis rather than rules of thumb and uniform recipes—so-called “evidence-based transformation.” Digital transformers must therefore be masters of change management, too.
RESPONSES TO THE threat and opportunity of digital disruption should not confuse means and ends. Technology may be the threat and the medium of change, but in the long run, only applications and organizational models that focus on competitive superiority will win.

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