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Driving Digital Strategy

A Guide to Reimagining Your Business

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Chapter 10

Managing Digital Transition

Driving change in a large, established organization is never easy, but it is even harder in the face of rapidly evolving technology and emerging business models that create huge uncertainties for the future. Unlike startups, legacy companies have assets they can't ignore and shareholders who demand profits. Incumbents have to strengthen their core and build for the future at the same time—a much harder task than starting from scratch. In this chapter we will discuss key elements that are necessary for a successful digital transition.

Creating a Vision and a Road Map for the Future

It is almost a cliché to say that a CEO must have a vision to drive change. But a vision and a sense of direction for the future are even more important when a company faces unprecedented challenges due to technology disruption and when employees and shareholders are uncertain about what the future holds for the company.

Sometimes the future direction becomes clear when conditions limit options for current business practices, as the *New York Times*

(NYT) realized. Faced with a significant decline in revenue from classified advertising, revenue the newspaper could not make up for with online advertising due to low online ad rates and the dominance of Google and Facebook in online ads, NYT realized that its century-old business model of relying heavily on advertising revenue was not tenable anymore. Cost cutting could help it survive in the short run, but it needed a vision and a path for the future. So the company decided to focus on its other source of revenue, subscriptions, and plunged headlong into creating a paywall, whereby readers had to pay for online news—something that no general-purpose newspaper had successfully implemented at the time and something that all experts claimed was doomed to fail since "information wants to be free" in the digital era. But NYT persisted in its vision and proved the naysayers wrong. In the fourth quarter of 2017, NYT added 157,000 net new digital subscribers, a 41.8 percent increase compared with the end of the fourth quarter of 2016, ending the year 2017 with over 2.6 million digital subscribers. The company's total subscription revenue (print and digital) was almost double its advertising revenue—a significant shift in its business model that historically relied heavily on advertising.[1]

The future path also becomes clear if you broaden your lens, as Shantanu Narayen, CEO of Adobe, did to steer his company from a tough situation in 2008 to a dominant position in 2017. Narayen's appointment as CEO in November 2007 was quickly followed by a time of great challenges for Adobe. The company was hit hard by the 2008 financial crisis, and its video-editing software, Flash, long the standard for making both web and desktop videos, came under fire from Steve Jobs, who refused to make it available on the iPhone. In 2009, Adobe's revenue dropped by 20 percent, its income by 50 percent, and its stock price by 60 percent.[2] Most leaders would perhaps start playing defensively at such a time, but Narayen decided to make the bold move of acquiring Omniture, a digital-marketing company, for $1.8 billion. Adobe's share fell 4 percent in after-hours trading on the day the Omniture acquisition was announced, and a *Wall Street Journal* article titled "Adobe Buys Omniture: What Were They Thinking?" captured the market sentiment.[3]

To understand what Adobe was thinking, I talked to Narayen, and this is how he explained his decision-making process:

> If you believe that growth is a fundamental imperative, and if your business is not growing, and you are the market leader in a lot of spaces, you need to broaden the lens by which you look at opportunities—more extensions and adjacencies become obvious.[4]

Three observations guided Narayen to broaden his lens. First, he noted that in the digital era content was exploding as people were creating more content than ever before, yet Adobe, the market leader in content creation, was not growing. Narayen believed that this was due to the fact that Adobe was not mission critical to a client's business. Second, Narayen recognized that data was becoming important, so it was critical for Adobe to play a role in that space. Third, marketing provided a unique opportunity for Adobe. IBM and Oracle were the go-to companies for CIOs, and Salesforce had cornered the market for sales executives, but there was a white space for CMOs. Adobe's acquisition of Omniture turned out to be a remarkable success, and by the end of FY2016, the company had generated almost $1.7 billion from digital marketing, which represented about 30 percent of the company's total revenue.

A good understanding of consumers' pain points and of shifts in their behavior is also helpful for setting the future direction of a company. Amazon has been a master of this strategy. Jeff Bezos's customer-centric philosophy led Amazon to get into video streaming, ebooks, and ebook readers as consumers shifted from buying books and DVDs to consuming media on their devices. While retailers are struggling to find a way to compete with Amazon, Bezos is teaching them a lesson with his experimental store concept, Amazon Go, where customers walk in, pick up an item, and leave the store without ever stopping to pay a cashier. Instead of installing beacons and focusing on technology to try to define customer movement and current behavior, retailers may be better off focusing on solving consumers' pain points in the store.

Often there is a tendency to get seduced by the latest technology or the new business model of a hot startup. While incumbents should always learn from others, they should stay true to their core DNA and leverage the assets they have. Jeff Immelt realized that the large installed base of GE machines provided the company a huge advantage in creating a platform for the internet of things, something that a startup would have a hard time mimicking. Walmart cannot become Amazon, because it has thousands of stores that add to its fixed costs. But it is exactly these thousands of stores that can be extremely valuable for reducing Walmart's shipping costs for its online customers. In April 2017, Walmart announced a "pickup discount" for online customers who came and picked up online orders in stores.

Creating a road map for the future does not mean that the CEO has all the answers or knows exactly how the future will unfold. Instead, the goal is to provide broad direction, recognizing that the journey will never be linear and that the company will have to continuously evolve and shape its strategy within the broad guidelines of its vision.

Navigating a Turbulent Transition Period

Digital transition involves managing existing business and building for the future at the same time. It is like changing the engine of a plane while in flight. The plane is going to go down first before it goes up again—and that is a scary and uncertain time, when everyone in the organization starts questioning the company's strategy. Even though existing businesses may be under threat and in need of change, they are usually still profitable in the short run, and it is hard to give up all those profits for an uncertain future.

To understand this challenge and how to navigate through it, let's revisit NYT and Adobe. As mentioned earlier, NYT had no choice but to transition to a digital newspaper and tilt its model toward subscription even though, at the time, print subscriptions and advertising still generated far more revenue than their digital counterparts. Imagine a scenario where in the long run NYT transforms itself from a print company to a fully digital company with no print version. Given declining print circulation and the high cost of printing and distribution, this is not a purely hypothetical scenario—in recent years several publications have decided to shift entirely to digital: *Newsweek* in 2012, *InformationWeek* in 2013, and *Computerworld* in 2014.

If NYT moves to an all-digital future, its digital subscription and advertising revenues may be less than its current print subscription and ad revenues, due to the higher prices of the latter. However, going all digital would also significantly reduce its production and distribution costs, which typically account for almost 50 percent of the total cost of a newspaper. In the end, the overall profit for NYT could be comparable to its current profit. But what would happen during the transition, which could take several years? Figure 10-1 shows a potential path of the newspaper's profitability during this period. While the future, all-digital profitability may be good due to lower costs of production and distribution, during the transition period the newspaper would be operating both the print *and* the digital businesses, which would increase rather than reduce its costs. In other words, the plane would go down before going back up.

Adobe faced this situation during its digital transition. In addition to acquiring Omniture to get into digital marketing, Shantanu Narayen decided, in 2013, that instead of selling Adobe's software, Creative Suite, as a package or perpetual license for $2,500, it would move to a software-as-a-service model, with a subscription plan that would cost users as low as $50 per month. The goal was to shift from a one-time sale to a recurring source of revenue that would be more stable and predictable and that would attract new users because of its lower entry price. However, this shift had a major impact on Adobe's revenue and income in the next few years, as consumers paid $50 per month over time instead of $2,500 up front. Adobe hoped that as new subscribers joined, the recurring revenue, over the long run, would surpass the revenue it would have generated under the old model, but the short-term hit on revenue and income was certain. Figure 10-2 shows the fall and rise of Adobe's net income during this period of transition.

FIGURE 10-1

Potential profit path of NYT during its digital transformation

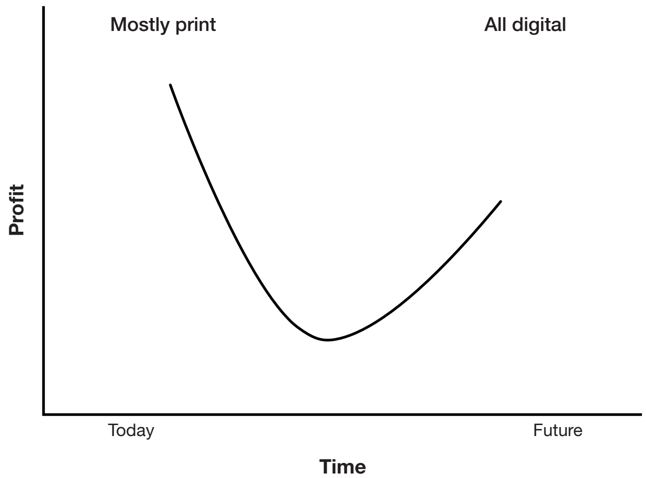
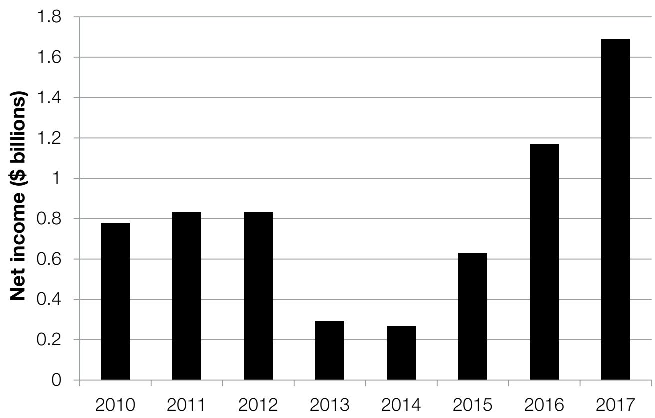


FIGURE 10-2

Fall and rise of Adobe's net income during its digital transition



Source: Compiled from Adobe's financial statements.

In spite of a steep decline in income during 2013 and 2014, and levels that remained below those of the pretransition period through 2015, Adobe's stock price climbed steadily. How did Narayen manage this change successfully? He described a process of managing change both internally and externally:

> Internally we used as a galvanizing function the fact that revenue was not growing as fast as we needed to. We were not attracting new customers to the platform, because the up-front cost may have been too expensive, and piracy continued to be an issue. You have to find some internally galvanizing functions to show why change is needed. Externally, the challenge was to convince people that if they stuck with us through this transition, there would be benefits that would accrue—growth would increase dramatically, revenue predictability would increase, and we would get more recurring revenue. What was needed was our ability to paint [a] picture [of] how this transition would happen in the next three years so the financial community could make a good assessment. We were very transparent with the analysts.[5]

To support his vision and to drive this change, Narayen and his senior management team communicated to the entire company that there was no Plan B. When I visited Adobe to write a case about its digital reinvention, the phrase that kept coming up in conversation was "burn the boats," so people don't have the urge to go back to the old way of doing business. Courage, conviction, and clear communication, combined with a clear path for the future, led to a dramatic turnaround for Adobe. From May 8, 2013, when Adobe announced this transition, to April 1, 2018, Adobe's stock increased by 400 percent, more than Apple's or Google's during the same period.

Speed of Transition

Given the uncertainty about the future and the U-curve of profits during the transition period, how fast should this shift be? When I ask this question to a roomful of executives I typically get two extreme responses. Some argue that it should be quick, since there is no reason to prolong the pain. These executives also point out that the longer the transition period, the greater the cumulative loss or decline in profits over time (i.e., the wider the low part of the U-curve). Those who favor slow transition argue that the future is uncertain, and it would be foolish to jump in quickly. It may be better to pilot and test things before committing resources to a new direction. If the current business model is more profitable than the future business model might be (as shown, for example, in figure 10-1), they wonder why one would want to rush to a lower profit point instead of delaying the process and milking the current model.

There are reasonable arguments on both sides of this discussion. In the end, the speed of transition depends on three key factors:

- **Consumers.** The first and most critical factor is the trend in consumers' behavior. It is clear that media-consumption habits are shifting dramatically. Newspapers and cable companies cannot afford to ignore this trend. In many cases, a company may want to encourage consumers to change their behavior even if consumers are reluctant to do so at first. When Adobe moved its creative software to the cloud and shifted to a subscription service, many consumers complained that they were being forced to "rent" the software, an arrangement that could cost them more in the long run and that came with the risk that they might lose their work if their subscriptions lapsed. Within a few days of Adobe's announcement of its new subscription model, more than a thousand consumers filed a petition against Adobe on Change.org. However, Adobe executives decided that instead of reversing course, the company would move ahead and address the concerns of these unhappy consumers.

- **Competitors.** Newspapers have long been dabbling with the idea of online paywalls, but the concept picked up steam after NYT successfully launched its version. Soon, every newspaper was building its own paywall. While a change by a competitor may indicate a shift in the market, two factors should be carefully considered when thinking about competitors. First, what may work for NYT may not work, for example, for the *Boston Globe*. In other words, blindly following another player in the industry without recognizing your specific strengths and market position is likely to result in failure. Second, as discussed in chapter 1, industry boundaries are getting blurred, and it would be myopic to define your competitors narrowly. Consumers tend to use benchmarks from a wide variety of players across industries to judge the quality of your product or service. Whether you are a bank, a retailer, or a brand, consumers expect your web page to load as quickly as Google's, your delivery to be as fast as Amazon's, your products to be as flawless as Apple's, and your service to be as smooth as Uber's.

- **Company.** Perhaps the most significant bottleneck in any digital transition is the company itself—its skills, capabilities, and organizational structure. GE prides itself on making the best and most-sophisticated machines, such things as jet engines and gas turbines. Not surprisingly the company has some of the best engineers. However, as part of its transition to becoming a digital player with a strong emphasis on the internet of things, GE had to build digital capabilities. By 2017, GE Digital had more than thirty thousand employees who were experts in software, data analytics, and cloud computing. The movement toward autonomous cars has all the automobile companies scrambling to hire engineers with skills in software and artificial intelligence. Hiring new talent and developing new skills, and integrating them both into the old system, can be tricky and time consuming, and it is this aspect that often determines the speed of transition.

During my research, I also noted that many companies go through digital transition in three stages. The first stage usually involves using technology to reduce cost and improve efficiency in existing business operations. This requires breaking silos across different business units—a nontrivial task. As discussed in chapter 3, GE's digital journey started with the goal of making the company's own machines more efficient, by doing predictive maintenance. After the 2008 financial crisis, Goldman Sachs also decided to leverage technology to improve internal efficiency and reduce costs. Ezra Nahum, the global head of Goldman's FICC (fixed income, currency, and commodity) strategies in the securities division, explained this:

> FICC is comprised of seven different businesses—interest rates, foreign exchange, emerging markets, mortgages, flow credit, structured credit, and commodities. We used to operate in silos, where each of those businesses was run as a unit. We began to ask ourselves "Is there a common denominator that's reasonably large and can benefit all seven businesses?" We still need product experts in each business, but maybe they can work from a common technological platform. So instead of having seven separate and distinct teams, we have seven smaller teams focused on what is unique to each business and one bigger team underneath.[6]

Focusing on internal efficiencies in the first stage provides a tangible benefit for digital transition and may be more palatable within the organization. It also allows a firm to learn before opening up to a broader marketplace.

In the second stage, companies open up their technology platform to clients. Both GE and Goldman Sachs gave their customers access to their technology platforms. R. Martin Chavez, chief financial officer and former chief information officer of Goldman Sachs, built Goldman's technology platform with the explicit intent that it would be used for both internal business units and external clients. The firm developed a suite of applications that clients could use to do risk analysis or build and analyze a custom investment strategy.

In the third stage, companies tend to move toward a platform strategy by opening up their system to third-party players, sometimes even competitors. Amazon became a marketplace by inviting third parties to sell on its platform. GE encouraged developers to build on its Predix platform. Goldman Sachs created a platform for structured notes where it initially sold only its own products, but the company later invited third-party sellers to join, including competitors such as Wells Fargo, TD Bank, and CIBC. Spanish bank BBVA made its application programming interface commercially available to third parties, which could use BBVA's own customer data to build new products of their own.

Impact on Internal Operations

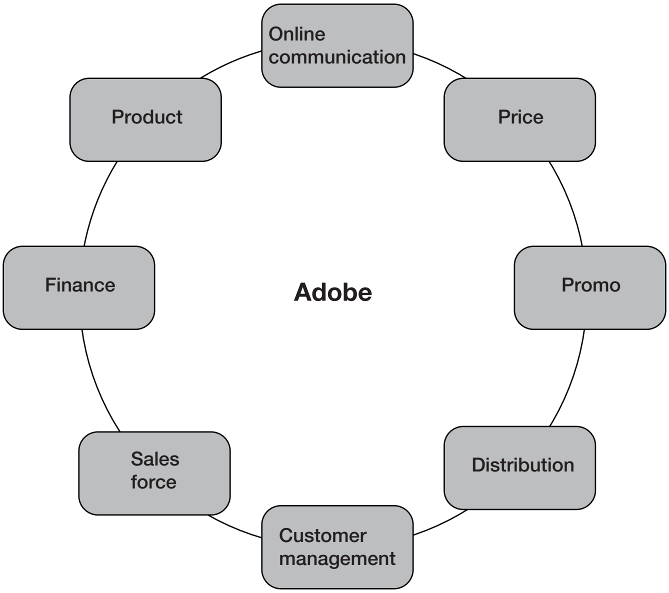
Digitization often leads to significant changes in the internal operations of a company, and every company should be ready for those changes to ensure a successful transition. Goldman Sachs's, for instance, saw a dramatic shift in the number and type of personnel on its US cash-equity desk. In the year 2000, the desk was staffed with 600 traders, but by 2017 it was staffed with two traders and hundreds of computer engineers. As NYT developed its digital strategy, it also had to struggle with the issue of managing its print version. Who should get the privilege of breaking news—print or digital? If the digital group publishes the breaking stories, what should the print group publish the next day?

Shifting from selling packaged software to selling a subscription-based service changed almost every function within Adobe (see figure 10-3).

- **Product Development.** Adobe used to release a new version of its software every eighteen to twenty-four months, and its R&D team had to anticipate customers' needs two years ahead of time to start building new features. However, with the subscription model, the team can continuously innovate and test new features to get quick customer feedback. Instead of relying on their intuition about the future needs of customers, engineers

FIGURE 10-3

Impact of new business model on Adobe's operations



can now get ideas for product innovation from how consumers are actually using the product. Adobe can also allow consumers to create customized products, thereby reducing the company's development costs.

- **Distribution and Sales Force.** In the past Adobe had a large sales force that would call on retailers like Best Buy to sell its software. Moving to the cloud made this task redundant, and Adobe had to manage this shift with its sales force and retail partners.
- **Promotion and Communication.** The promotion of packaged software used to involve large marketing budgets and big events announcing the release of a new version. Adobe now relies on digital marketing tools to acquire and retain customers.

- **Customer Management.** Adobe did not have any visibility into its end users in the past. With the subscription service, it has detailed data on customers' usage and retention, and this allows the company to target consumers with the right products and offers.

- **Pricing.** Instead of charging a single price to all users, Adobe can potentially charge consumers based on their usage behavior. Heavy users get more value out of the product and are therefore potentially willing to pay more for its use.

- **Online Communities.** Adobe now has the ability to create an online community of its users. It could even become a platform on which, say, an amateur photographer who needs help with his son's graduation photos could connect with a Photoshop professional willing to provide that help for a fee.

- **Managing Wall Street.** As discussed earlier, moving from selling a $2,500 software package to a $50-per-month subscription service changes how revenue is recognized. This changed Adobe's accounting and its financials and had a dramatic impact on its revenues and income in the short run. To ensure that this did not affect its stock adversely, Mark Garrett, Adobe's CFO, had the challenging task of educating financial analysts on how they should value Adobe as it shifted to this new model.

What may seem like a small shift—from selling packages to selling a subscription service—created a cascade of changes that affected almost every part of Adobe's operations. Adobe had to execute flawlessly on these internal changes to ensure a successful transition. Of course, all such changes should be supported by an appropriate organizational structure that leverages the assets and synergies of the firm instead of creating conflict between the old and the new—a topic for our next chapter.