

Revamping Your Business Through Digital Transformation

To gain the most business benefits from today's digital technology, it pays to question key managerial assumptions.

George Westerman
Didier Bonnet

[DIGITAL BUSINESS]

Revamping Your Business Through Digital Transformation

To gain the most business benefits from today's digital technology, it pays to question key managerial assumptions.

BY GEORGE WESTERMAN AND DIDIER BONNET

There is no shortage of stories about companies that create amazing innovations with digital technology. By using mobile devices, social media, analytics and the cloud, savvy companies are transforming the way they do business. Most of the stories feature companies that are small and young or that operate in industries such as music or high tech, where digital technology has already radically shifted the business landscape. For larger companies in more traditional industries, it's easy to think that digital transformation can wait and that a follower strategy is a safer route than trying to be a pioneer. That kind of thinking, while tempting, is wrong.

Although the software, media and technology industries get a disproportionate share of the attention, those industries account for less than 10% of the U.S. economy. What about the other 90%? We studied more than 400 large companies around the world, in industries including manufacturing, hospitality and mining. We found that, in every industry we studied, companies are doing exciting things with digital technology and getting impressive business benefits. What's more, any organization can adopt their methods.

Companies that lead in using digital technology — we call them “digital masters” — differ not only in their capability but also in the clarity of their vision. They see digital not as a technology challenge but as a transformation opportunity. Rather than incrementally adjusting current practices, they search for ways to use



When Volvo Car Corp. introduced direct services to consumers through apps and in-car electronics, the company opted to keep dealers involved.

today's fast-moving technologies to transform the way they do business.

For managers in traditional industries, this can be a tall order. Many assumptions about what is possible and impossible, based on experience with last century's technologies, are no longer valid in the digital world. How do you move beyond your current mind-set to find opportunities that digital technology can enable?

Start by rethinking four traditional assumptions that affect how you relate to your customers, how you run your operations, how you organize and even how you think about your business model. This assumption-busting exercise will help you to think differently about what is possible.

ASSUMPTION 1: Our customers really value the human touch. Humans have their place in customer interactions. But not all interactions with humans are actually valuable to customers. At points where people simply serve as a customer interface or a vehicle for customizing services, customers may find it more convenient to interact with machines.

Many organizations have already found ways to weave digital technologies into a smooth and personalized “no-touch” or “limited-touch” customer experience. Companies in industries ranging from lodging to government have demonstrated that digital innovation can combine no-touch (or limited-touch) service with high customer satisfaction.

In fact, some customers today favor self-service over personal interaction. For example, many young adults in their 20s and early 30s prefer to buy insurance online or use mobile banking rather than visiting an insurance agent or a physical bank branch. For them, interacting with a human service representative represents an inconvenience or an extra cost that is eliminated in self-service interactions.

Yet transitioning to a direct-to-consumer model can be difficult in industries such as insurance and automobiles, where agents or dealers can rebel against what they perceive as a threat to their commissions. That's why, when Volvo Car Corp. introduced direct services to consumers through apps and in-car electronics, the company opted to keep dealers involved by sharing customer data with the dealers and assisting customers in scheduling service appointments with local dealers.

Some digital self-service environments can enhance the customer experience. For example, the Cleveland Museum of Art in Cleveland, Ohio, encourages visitors to use an iPad app when they visit. The app is more than just a map; it acts as a multimedia tour guide personalized to each customer. Meanwhile, it also gathers a rich stream of behavioral data that can help the museum boost customer satisfaction and revenues.

ASSUMPTION 2: We've reached the limit of how far we can automate our operational processes. In the past, automation worked best for standardized repetitive tasks. You needed people for tasks that involved manual dexterity, verbal comprehension, advanced visual discrimination or unstructured conditions. But innovations such as IBM Watson, the Google self-driving car, and new flexible robots are redrawing the boundaries about what kinds of work can be automated. For instance, computers can now write corporate earnings previews and sports stories. Pharmacy automation has moved from identifying

dangerous drug interactions to actually filling pill bottles, improving safety and freeing employees for other tasks.

However, technology doesn't just do away with routine work. It also allows you to radically redesign the way your company operates. For example, some doctors conduct patient visits remotely, and remote surgery technology is maturing rapidly. Self-driving vehicles, once the stuff of science fiction, have the potential to transform numerous industries. Using technologies such as driverless trucks, Codelco, a copper mining giant based in Santiago, Chile, is in the process of rethinking the very nature of mining — designing

How do you move beyond your current mind-set to find opportunities that digital technology can enable? Start by rethinking four traditional assumptions.

mines where no person will ever need to work in dangerous underground environments again. There will still be plenty of jobs for miners to do above ground. But human-free mines cost far less to build, and they open up huge caches of ore that previously were not economically feasible to reach.

Beyond just replacing workers, new technologies can augment their activities or free them to do more fulfilling work. For example, when an apparel company that we studied implemented self-service human resources processes, it needed fewer HR workers. Yet, according to the HR chief, those who remained were able to “focus on enlarging manager skills, rather than counting days off.”

ASSUMPTION 3: Working as an integrated company will slow us down and

stifle innovation. Pre-digital wisdom held that centralized companies, while slower to innovate, can be more efficient than decentralized ones. The same thinking argued that decentralized companies can be more responsive to local markets, even if they have a harder time optimizing performance or sharing innovations across units. This kind of mind-set forced managers to choose between two suboptimal structures.

However, one of the paradoxes of digital technology is that standardization can actually lead to increased agility. For example, implementing a centralized enterprise resource planning system involves painful efforts to standardize processes across the company. However, once they create standard core processes, companies gain the option to build local variations on top of the standard platform, while maintaining the efficiency and integrated data that standardization provides. Unfortunately, many companies didn't exercise this option. Instead, they chose the organizationally easier approach of customizing core ERP processes for each unit. This created long-term costs and risks, including high maintenance expenses, messy data and strategic rigidity.

That situation is changing. Smart mobile devices, collaboration platforms and big data analytics are enabling managers to wire their organizations differently. Decentralized companies can have integration where it counts, while centralized systems can also allow companies to be locally responsive. For example, Mumbai-based Asian Paints Ltd., India's largest coatings manufacturer, moved from a decentralized structure of 13 semiautonomous regions to a centralized company powered by ERP and other systems that managed standardized processes. Executives soon realized they could improve both customer experience and sales performance by moving routine order taking from field salespeople to a centralized call

Revamping Your Business Through Digital Transformation)

center. Salespeople were retrained from being order takers to being relationship managers. The new processes improved customer service and satisfaction across all regions, and they provided managers with information and skills to improve the company's processes further.

Integrated systems and centralized processes offer benefits that go beyond efficiency and quality improvement. They can also be useful platforms for innovation. Ongoing streams of performance data open up the possibility of conducting controlled experiments on new ideas. Companies can vary conditions for a set of customers while leaving services unchanged for a control group of similar customers. Amazon.com Inc. and other digital leaders have pursued this kind of A/B testing for years online. Now, other companies are experimenting in physical settings. For instance, a restaurant chain we studied conducts experiments across its many locations. Sellers can adjust product bundling and pricing depending on circumstances such as weather, time of day, inventory on hand or whether a major event is happening nearby. They can readily assess the results of their experiments. Then the company can test the best innovations at other locations, since what works in Miami might not necessarily work in Minneapolis.

Recent advances in technology are also changing the economics of manufacturing and making custom manufacturing more efficient. BMW customers, for instance, can order customized car configurations and pick them up at the factory within a week. The company's centralized systems play a big role by aggregating demand across many locations and incorporating custom-ordered cars into its standard production planning processes. Meanwhile, advances in 3-D printing are changing the way companies

think about the value of holding inventory; some slow-moving parts can be printed when needed instead of sitting on shelves collecting dust.

ASSUMPTION 4: The strategic assets that brought us success in the physical world will also be valuable in the digital environment. Transitioning to the new digital world does not necessarily require you to completely discard the old in favor of the new. The change is more subtle than that. Examining your strategic assets through a digital lens can help you identify which assets will keep their value, which ones won't and which ones you may be able to use in new ways. Look for ways to leverage assets that you have and that fast-moving digital startups do not. Then, use these to establish and grow your digital advantage.

Leaders of PagesJaunes, the French Yellow Pages company, realized a few years ago that selling ads in thick yellow print directories would not remain viable for long in an age of Google and Yelp. The company's CEO saw an opportunity to redirect the business toward digital services. Instead of selling ads in books, the company could sell online advertising. It could also help small businesses build digital capabilities such as Web pages and search engine optimization. Managers saw that the assets related to printing and delivering books would have little use in the new model, but the company's knowledge of local businesses and the relationships its salespeople had with business owners were potentially critical assets going forward. By leveraging existing data and retraining the sales force, the company is attempting to reinvent itself in partnership with former competitor Google Inc. and other born-digital companies. Although the future of the global Yellow Pages industry is still uncertain, PagesJaunes began ramping up digital revenues in France faster than physical revenues were declining.

The exponential growth of digital information, combined with increasingly sophisticated analytics capabilities, means that data should be considered an asset class in its own right. Analytics are useful for more than just optimizing business processes. Many companies are using analytics, or even gathering new categories of data, to radically change their products and services. For instance, with its Snapshot box, the insurance company Progressive Corp., based in Mayfield Village, Ohio, transformed its business model for auto insurance by gathering data on insured parties' actual driving behavior rather than just relying on their driving history. Similarly, Japanese property and casualty insurer Tokio Marine Holdings Inc. realized that digital channels and location-based monitoring enabled it to offer insurance for very brief one-off needs (such as insuring a car borrowed from a friend or providing accident insurance for a ski vacation).

Companies are also discovering opportunities to combine old and new assets in the customer experience. The London-based apparel and beauty company Burberry Group PLC, for instance, revamped its online assets and built a strong, engaging experience on social media. But it did not stop there. Through strong top-down leadership, the company has transformed so that it can engage its customers and showcase its brand seamlessly across its physical and digital channels.

Equally important is the role of assets in your business model. The rise of startup companies such as Airbnb and Uber shows the potential of new business models that leverage digital platforms in the lodging and transportation industries. Now, traditional companies are taking a fresh look at how they can use the assets they own in new ways to participate in today's "sharing economy." For example, Marriott International Inc. has started a collaboration with digital startup LiquidSpace Inc. to rent out

work spaces in Marriott hotels on demand. Similarly, Daimler AG's car2go and BMW's DriveNow services have followed Zipcar into the car-sharing industry.

As digital technology reaches into every corner of the business world, it is creating a new playing field with new rules. Already, digital has reshaped the expectations of customers, the way that employees collaborate and the business models that are possible. New technologies such as robotics, 3-D printing, augmented reality and the "Internet of Things" will soon lead to major business changes. And other innovations, currently only in labs or the minds of inventors, are just around the corner.

Not everything will be different in the digital world. Our research indicates that large traditional companies can outcompete fast-moving digital startups if they embrace the digital environment and find ways to make it theirs. With all of the uncertainty surrounding the digital future, one thing is clear: Using pre-digital assumptions will not bring success in the digital world. You can start by questioning those assumptions. Then, don't stop questioning your business methods and looking for new digital opportunities. When it comes to digital innovation, "you ain't seen nothin' yet" — either for new technologies or for the ways that great companies can use those technologies to create value.

George Westerman is a research scientist with the MIT Sloan School of Management's Initiative on the Digital Economy.

Didier Bonnet is a senior vice president at Capgemini Consulting and the executive sponsor for Capgemini's digital transformation program. With Andrew McAfee, they are the authors of the book *Leading Digital: Turning Technology Into Business Transformation* (Harvard Business Review Press, 2014). Comment on this article at <http://sloanreview.mit.edu/x/56303>, or contact the authors at smrfeedback@mit.edu.

Reprint 56303. Copyright © Massachusetts Institute of Technology, 2015. All rights reserved.



PDFs ■ Reprints ■ Permission to Copy ■ Back Issues

Articles published in MIT Sloan Management Review are copyrighted by the Massachusetts Institute of Technology unless otherwise specified at the end of an article.

MIT Sloan Management Review articles, permissions, and back issues can be purchased on our Web site: sloanreview.mit.edu or you may order through our Business Service Center (9 a.m.-5 p.m. ET) at the phone numbers listed below. Paper reprints are available in quantities of 250 or more.

To reproduce or transmit one or more MIT Sloan Management Review articles by electronic or mechanical means (including photocopying or archiving in any information storage or retrieval system) **requires written permission.**

To request permission, use our Web site: sloanreview.mit.edu
or

E-mail: smr-help@mit.edu

Call (US and International):617-253-7170 Fax: 617-258-9739

Posting of full-text SMR articles on publicly accessible Internet sites is prohibited. To obtain permission to post articles on secure and/or password-protected intranet sites, e-mail your request to smr-help@mit.edu.

They see digital not as a technology challenge but as a transformation opportunity. Rather than incrementally adjusting current practices, they search for ways to use today's fast-moving technologies to transform the way they do business. For managers in traditional industries, this can be a tall order. Many assumptions about what is possible and impossible, based on experience with last century's technologies, are no longer valid in the digital world. How do you move beyond your current mind-set to find opportunities that digital technology can enable? Start by rethinking four traditional assumptions. Digital Transformation is a concept that varies by industry, vertical, company and the availability of technology, so it's not easily understood nor is there one example of digital transformations. To give you a better understanding of what real 'Digital Transformation' looks like, here are 5 real businesses that leveraged new technologies to digitally transform and evolve their business.

Why are Businesses Going Through Digital Transformations? Chapter 2. Examples of Digital Transformation. Digital Transformation Business Strategy: How to Digitally Transform. Chapter 3. How to Digitally Transform Your Business.