The Nine Elements of Digital Transformation

Opinion & Analysis • January 07, 2014 • Reading Time: 10 min

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In-depth research with executives at a wide range of companies shows how managers can use technology to redefine their businesses.

Digital transformation — the use of technology to radically improve performance or reach of enterprises — is a hot topic for companies across the globe. Executives in all industries are using digital advances such as analytics, mobility, social media and smart embedded devices as well as improving their use of traditional technologies such as ERP to change customer relationships, internal processes and value propositions. Other executives, seeing how fast digital technology disrupted media industries in the past decade, know they need to pay attention to changes in their industries now.

Where can you look for digital transformation opportunities? We interviewed 157 executives in 50 companies to find out. These companies are large — typically $1 billion or more in annual sales — and spanned 15 countries. To provide balanced
perspectives, approximately half of the interviewees were business leaders such as CEOs, line of business managers, marketing heads or COOs, while the other half were IT and technology leaders.

The companies we interviewed are moving forward with digital transformation at varying paces and experiencing varying levels of success. Some are transforming many parts of their organizations while others are still doing only the basics. Others are encountering organizational issues or other challenges that prevent them from transforming successfully.

But one thing we found was clear. The best companies — those we call Digirati — combine digital activity with strong leadership to turn technology into transformation. This is what we call Digital Maturity. Companies vary in their digital maturity (http://sloanreview.mit.edu/article/the-advantages-of-digital-maturity/), and those that are more mature outperform those that are not.

Leading digital change requires managers to have a vision of how to transform their company for a digital world. So, where can you look? What digital activities represent good opportunities for your business?

Analysis of the interviews shows clear patterns. Executives are digitally transforming three key areas of their enterprises: customer experience, operational processes and business models. And each of these three pillars has three different elements that are changing. These nine elements form a set of building blocks for digital transformation.

Currently, no company in our sample has fully transformed all nine elements. Rather, executives are selecting among these building blocks to move forward in the manner that they believe is right for their organizations. In this article, we highlight some of the ways that companies we studied are changing these nine areas.

### Transforming Customer Experience

The three major building blocks with which companies are digitally transforming customer experience are customer understanding, top-line growth and customer touch points.

#### Customer Understanding

Companies are starting to take advantage of previous investments in systems to gain an in-depth understanding of specific geographies and market segments. Some are exploring social media to understand what makes customers happy — and what leads to customer dissatisfaction.
In addition, companies are learning to promote their brands more effectively through digital media. Companies are also building new online communities to advise and build loyalty with clients in medical, real estate or financial services products. Others are building products that improve branding in lifestyle communities.

Many organizations are building analytics capability to understand customers in more detail. Some insurance companies, for example, are improving their portfolios and cost structures through analytics-based underwriting and pricing. Other companies are conducting analytics-based experiments to drive customer behavior. In one case, a restaurant company is actively conducting experiments in pricing and promotion across a set of franchised stores. The experiment dynamically adjusts product prices in response to demand, weather, inventory levels and proximity to closing time.

**Top-Line Growth**

Companies are using technology to enhance in-person sales conversations. For example, financial services companies are using tablet-based presentations instead of paper-based slide decks to make sales pitches. Insurance firms are introducing mobile tools to help sales people and customers engage in analytics-based planning. A medical device sales force is replacing in-person interactions with digital interactions. When visiting a doctor’s office, a salesperson leaves an iPad with video and other information on new products. The aim is to get the doctor’s attention — without inconveniencing the physician or impacting busy office schedules — in order to obtain a 10-minute conversation when the salesperson returns to retrieve the iPad.

Better understanding helps businesses to transform the sales experience. Companies are integrating customer purchasing data to provide more personalized sales and customer service or even to offer customized product packages. A hospitality company engaged in location-based marketing uses analytics to send personalized mobile coupons to customers as they near a facility; the company can then track uptake in real time. A mortgage company is setting up a CRM strategy to link customers to local real estate references. This system proposes new offers in real time via the Internet.

Other businesses are using concept stores as flagships for their digital selling innovations. For instance, a mortgage company offers investors an integrated process combining real estate and bank services with external services — and showcases the overall process in a concept megastore.

Some companies try to make life easier for the customer, simplifying their processes through a digital plug-in. One retailer automatically loads a customer’s last online shopping list into its e-commerce site. This streamlines the shopping process, allowing customers extra time to look at other products. Customers can
then decide whether to use home delivery or a drive-through service with a specific pick-up time.

**Customer Touch Points**

Customer service can be enhanced significantly by digital initiatives. For example, a bank established a Twitter account to answer client complaints quickly, helping customers avoid going physically to a branch. This digital initiative also leveraged an expert community, allowing crowdsourcing with several employees and other customers.

Companies with multiple channels to the customer are experiencing pressure to provide an integrated experience. Multichannel services require envisioning and implementing change across customer experience and internal operational processes. Many retailers now offer home shopping with the option to receive products by mail or in a store. However, one retail executive described customers being angry that customer service representatives in a store could not access online order history.

Several companies in our study are offering self-service via digital tools. These tools allow the customer to save time, while saving the company money. Many companies are now offering customer apps to enhance customer touch points. In one hospitality company, smartphone apps are linked to the customer's profile, enabling integration across SMS, apps and social media efforts. A media company offers apps with geo-localization and augmented reality to help customers find interesting places to visit and provide special offers via vouchers and e-couponing.

**Transforming Operational Processes**

Although transformed customer experiences are the most visible — and arguably the most exciting — aspects of transformation, companies are also realizing very strong benefits from transforming internal processes through process digitization, worker enablement and performance management.

**Process Digitization**

Automation can enable companies to refocus their people on more strategic tasks. A manufacturer has begun to centralize the HR function, allowing economies of scale through self-service while freeing HR people to “focus on enlarging manager skills, rather than counting days off.” A specialty materials company has automated many R&D processes. Automation allows researchers to focus on innovation and creativity rather than repetitive efforts. It also creates streams of data that can be useful in later data mining efforts.

One paint manufacturer has created fully automated plants that significantly reduce labor requirements, improve product quality and enhance environmental, health and safety performance. An apparel company has moved to digital design processes when collaborating with manufacturing partners. Going digital eliminates most need to ship physical prototypes back and forth, reducing the product development lifecycle by 30%.

**Worker Enablement**
Individual-level work has, in essence, been virtualized — separating the work process from the location of the work. A financial services business rearranged its headquarters so that nobody had an assigned desk, even the CEO. Employees now work from home one or two days per week and, when they are in the office, sit near people with whom they are temporarily collaborating. Meanwhile, the company’s collaboration and networking tools allow employees to talk with anyone in the organization from wherever they are sitting. This is setting the stage for further changes related to globalization.

The tools that virtualize individual work, while implemented for cost reasons, have become powerful enablers for knowledge sharing. Salespeople and frontline employees, for example, are beginning to benefit from collaborative tools in which they can identify experts and get questions answered in real time. They are also increasingly gaining access to a single, global view of the company’s interactions with a customer.

Performance Management

Transactional systems give executives deeper insights into products, regions and customers, allowing decisions to be made on real data and not on assumptions. This is happening in both internal processes and customer-facing processes. The level of detail is also increasing, allowing managers to compare status across sites or reallocate product manufacturing capacity in ways they could not do before.

Beyond being better informed, digital transformation is actually changing the process of strategic decision-making. Top executives in a medical device manufacturer used the company’s existing collaboration tools to extend strategic planning sessions from 12 people to more than 300 of the business’s top managers. This enabled better input into the process and better uptake of the vision after decisions were made.

Transforming Business Models

Companies are not only changing how their functions work, but also redefining how functions interact and even evolving the boundaries and activities of the firm.

The three building blocks of this transformation are digital modifications to the business, the creation of new digital businesses, and digital globalization.

Digitally Modified Businesses

One media executive said: “We’ve realized that if we don’t transform the way we do business, we’re going to die. It’s not about changing the way we do technology but changing the way we do business.” The company is finding ways to augment physical with digital offerings and to use digital to share content across organizational silos.

A grocery company is staying true to its traditional business but using digital to transform a new growth business. As one executive reported, “After two years, our e-commerce platform is bringing us 20% of our new clients and our traditional clients are consuming 13% more on average.”
Other businesses are building digital or service wrappers around traditional products. A national post office is creating a free digital mailbox attached to each physical mail address that companies can use as a substitute for a person’s physical mailbox. A business credit company is developing a digital business for some credit products that requires less involvement than their traditional high-touch offerings.

**New Digital Businesses**

Companies are also introducing digital products that complement traditional products. For example, a sports apparel manufacturer started selling GPS and other digital devices that can track and report on a customer’s workout. Other companies are changing business models by reshaping their boundaries through digital. A mortgage company is moving from being a link in the value chain to being a global assembler of investment products. An airport authority is aiming to become the owner of a traveler’s end-to-end process by providing an integrated multichannel experience, including information on airplane traffic and reservations, duty-free shopping promotions and other benefits.

**Digital Globalization**

Companies are increasingly transforming from multinational to truly global operations. Digital technology coupled with integrated information is allowing businesses to gain global synergies while remaining locally responsive. These companies benefit from global shared services for finance, HR and even core capabilities like manufacturing and design. Global shared services promote efficiency and reduce risk. They even promote global flexibility. One manufacturer can shift production around the globe with only a few days’ notice in response to interruptions or excess demand.

**The Take-Away**

Digital transformation requires strong leadership to drive change. But it also requires a vision for what parts of the company you want to transform. Companies in all industries and regions are experimenting with — and benefiting from — digital transformation. Whether it is in the way individuals work and collaborate, the way business processes are executed within and across organizational boundaries, or in the way a company understands and serves customers, digital technology provides a wealth of opportunity.

Focus is important; no company we studied is transforming all nine areas at once. But the best-managed firms are constantly identifying new ways to redefine the way they work in the new digital era.

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