Speaker 1: Welcome to the MIT CISR Research Briefing series. The center for information systems research is based at the Sloan School of Management at MIT. We study digital transformation.

Stephanie Woerner: Hi, I’m Stephanie Woerner, principal research scientist and director of MIT CISR. Today I’m pleased to share with you a research briefing from the archives—the September 2017 research briefing that I co-authored with Peter Weill:

Future Ready? Pick Your Pathway for Digital Business Transformation

Just about every big old company is on a digital transformation journey, often without a playbook. In this briefing, we provide a digital transformation playbook—at least the first chapter. We answer the questions: what is digital business transformation, what percentage of firms have transformed, and how do they perform? We also share the four viable pathways for transformation and their pros and cons. The goal is not digital transformation, but rather business transformation using digital capabilities. We call these transformed companies “Future Ready.” We found that Future Ready companies perform better, with 16 percentage points higher margin than their industry average—a huge premium.

A Roadmap to Digital Business Transformation

To become Future Ready, a company must transform on two dimensions: customer experience and operational efficiency. There are “traditional” and “transformed” states, and four pathways for the journey. Moving up the vertical axis of the 2x2 increases the customer experience, measured by NPS or similar metrics. Moving right along the horizontal axis of the 2x2 improves the efficiency of the company, measured by cost-to-income ratio, net margin, or similar metrics.

Silos and Spaghetti

Most large companies have traditional customer experience and operations and start in the bottom left quadrant. These companies have built up products and services for many years, resulting in product silos and a complex landscape of business processes, systems, and data that produce a fragmented and frustrating customer experience. Good company performance typically results from heroics by employees who manage to deliver decent customer experience despite overwhelming odds. For example, we watched the teller in a bank branch work with an elderly customer who wanted to change her address on her six different products. The number of keystrokes was dizzying, and it was astounding that the process took only twenty minutes. Yet throughout this horrendous process the teller chatted engagingly with the customer about the local sports team. Amazing heroics—but not scalable. In our survey, 51% of companies were in the “Silos and Spaghetti” quadrant. These companies had the worst performance, averaging 5 percentage points of margin below their industry average.

Integrated Experience

In the top left quadrant of the 2x2, the customer gets an integrated experience despite complex operations. For example, companies have tried to emulate the industry-leading USAA life events go-to-market model by building a website with life event options. The website looks great, offering customers all the products they will need for each life event, and it may even have a rich mobile counterpart—but often that’s where the integration ends. If a customer chooses a set of products for their particular life event, the experience may suffer as responsibility for product delivery reverts to siloed business units. For some companies, creating a simulated integration may be a viable short-term option that allows the company to keep up with customer expectations, though it requires strong design and user experience capabilities. In our survey, 15% of companies were in the Integrated Experience quadrant, averaging 3.6 percentage points of margin below their industry average.

Industrialized

In the bottom right quadrant of the 2x2, companies become increasingly industrialized, applying the best practices of automation to their operations. They take what makes them great as a company—the company’s crown jewels—and turn those assets into digitized services. They design these services as modules that are plug and play and customizable to meet particular customer requirements quickly and inexpensively. These companies pick one best way to do each key task—for example, process an insurance claim, onboard a customer, or assess risk—and standardize on it. The data created from operations and customer interactions becomes a single source of truth for the company that anyone appropriate can access. Over time, more and more of these processes and decisions get automated. In our survey, 11% of companies were in the Industrialized quadrant, averaging 4.6 percentage points of margin above their industry average.

Future Ready

The destination is a Future Ready organization—the top right quadrant of the 2x2—that is ambidextrous: innovating to engage and delight customers while simultaneously reducing costs by means of readily available technologies. Customers get a great experience no matter which of the company’s channels they choose, and the company strives to meet customers’ needs rather than push products. On the operations side, the company’s capabilities are agile, with significant reuse of modular, optimized business services. Data is a strategic asset of the company, a single source of truth accessible to all who need it. The company is ecosystem ready and able to work with a wide variety of partners through digital services and exposed APIs. 23% of firms in our survey were in the Future Ready quadrant, with firm performance averaging 16 percentage points of margin above their industry average.

Four Pathways to Transformation

We observed four distinct pathways to Future Ready. All the pathways begin in the lower left Silos and Spaghetti quadrant and involve some substantial organizational disruption—which we show as explosions! The explosions represent significant or radical changes, typically in decision rights (for example, which customer onboarding process to use, who can launch a new offering) or company structure (for instance, from a product to services focus).

Pathway 1 moves the company right from the Silos and Spaghetti quadrant to the lower right Industrialized quadrant. This pathway relies on building API-enabled business services for delivery across the company and externally. The advantages include discarding some legacy processes and systems and starting afresh. But ask anyone who’s been through an ERP, CRM, or core banking implementation: it is a multiyear, expensive, all-consuming process to rip out and replace the core of the company. And meanwhile, many other important projects stop or stall. Cloud computing, APIs, microservices, and better solution architectures are making this industrialization process quicker and less risky and disruptive. As they move right along the horizontal axis and improve operational efficiency, companies on pathway 1 see a welcome lift in customer experience—but only after completing the long, flat, and arduous initial stages, and as more reusable services that improve customer experience are made available. Danske Bank, Nielsen, CBA, and Tetra Pak are among those that have adopted this approach.

Pathway 2 moves vertically up from Silos and Spaghetti to Integrated Experience in the upper left quadrant. mBank, a fast-growing bank based in Poland that took this approach, focused on adding features and channels and growing the customer base rapidly—but then customer experience at the bank started to suffer. Companies on this pathway find that after initial investments, the marginal benefits from spending more on customer experience decrease. The complexity of underlying systems, processes, and data constrains further proportional improvement in customer experience. An explosion occurs on this pathway when power and decision rights are passed from product owners to executives who are focused on a multiproduct, multichannel customer experience.

Eventually, companies on pathway 2 have to transform their operations. mBank refocused its efforts, and over fifteen months implemented a new customer-at-the-center banking platform, moving the company right on the framework. Pathway 2 produces an intense customer experience focus, with clear market impact. But fulfilling the new customer experience puts pressure on the complex landscape of processes, systems, and data to do things it wasn’t designed to do—with heroics still required—at a high cost.

Pathway 3 takes small steps in each direction—alternating improving the customer experience and then operations—over several iterations. The first move to improve the customer experience might be to implement an omnichannel capability or a mobile app. Then the company’s focus switches to improving operations, perhaps by replacing a few legacy processes and systems or creating an API layer. The next effort might be to improve the customer experience by better using the company’s data and providing a more tailored set of offerings. And so on. A key difference between success and failure with this approach is having an overall transformation roadmap that informs each of these individual efforts. BBVA and Schneider Electric are examples of companies that have effectively taken Pathway 3. The advantage is that the company can take smaller steps in each direction, reducing risk. A disadvantage is that continually shifting the company’s internal focus can take a toll on employees.

Leaders on Pathway 4 have decided that it’s going to be very difficult to transform their current company. Instead, they start a new future-ready company with all the advantages built in. Many companies have used this approach. More than a decade ago, ING launched ING Direct, first in Canada and then in multiple countries, to create a very successful new bank. The hardest part of this pathway occurs when you later try to merge the parent company and the new company—the cultures and everything else about the two organizations are completely different. ING recently announced a company reorganization with a loss of 7,000 jobs.

Pick Your Pathway

Leadership’s role is to determine which of the four pathways the company (or business unit) will take and how aggressively to transform. Start by determining where you are today using metrics like NPS and net margin compared to your industry. Then choose:

Pathway 1 if your customer experience is around industry average

Pathway 2 if your customer experience is significantly below average and you can’t wait to improve or there are new scary new competitors

Pathway 3 if customer experience is a problem but you can identify a few limited initiatives that will make a big difference. Start with those and then focus on operations and repeat in small steps

Pathway 4 to build a new company if you can’t see a way to change the culture, customer experience, and operations fast enough to survive.

Speaker 1: Thanks for listening to this reading of MIT CISR research, and thanks to the sponsors and patrons who support our work. Get free access to more research on our website at cisr.mit.edu.