Accelerating Decision Making Without Breaking the Business

MIT CISR research has shown that companies are able to make better and faster decisions by devolving decision making to teams that are closer to customers or end users. These teams are not just held *accountable* by managers; they have the *authority* to decide for themselves WHAT they will accomplish and HOW to get things done. Company leaders, in turn, need to guide these decisions by setting four decision rights guardrails that serve as enabling constraints that align teams with enterprise-wide interests. The guardrails revolve around a company's purpose, data, corporate policies, and resource allocation processes.

In this research project, we will more closely examine these guardrails, with an emphasis on best practices that effectively and efficiently accelerate decision making and action in companies. We will survey executives and conduct case studies to answer the following research questions:

- What are successful practices and key mechanisms for each of the decision rights guardrails?
- What are the integration and standardization requirements for each guardrail? How should the decision rights for these practices and mechanisms be distributed among key organizational stakeholders (e.g., teams, units/lines of business, centers of excellence, leadership)?
- How do the four guardrails compare in terms of their contributions to key organizational performance indicators (e.g., organizational agility, time to market, cost of operations)?

Seeking: Survey respondents, and interviews with digital leaders, enterprise architects, IT governance officers, data experts, product/solutions owners, and other practitioners that are working to effectively and efficiently accelerate decision making and action in their companies

Research team: Nick van der Meulen and Cynthia M. Beath; contact Nick at nmeulen@mit.edu

Becoming a Serial Innovator of Digital Offerings

To defend, increase, and diversify how they make money, traditional companies have to engage in multiple fast-paced experiments in digital offerings: revenue-generating solutions that leverage digital technologies to address customer needs. Yet most struggle to do so.

In 2020, our research, based on in-depth qualitative data, found that to continuously generate solid returns from multiple digital offering initiatives, companies are changing three resources—funding, expertise, and technological capabilities—to enable them to generate insights within and across the initiatives. Within initiatives, the resources help teams generate a sequence of insights into what it takes to develop a digital offering that is desirable, feasible, and profitable, and to adapt the teams' efforts accordingly. Across initiatives, the resources help others in the company to learn about common challenges and what it takes for initiatives to thrive, and based on those insights, develop shared resources that give initiatives competitive advantages.

In 2021, we continue this research by collecting two types of data to expand the range of sectors and companies that either strive to be or have become serial innovators of digital offerings:

- Qualitative data from interviews with executives at companies that have succeeded in launching multiple digital offerings. What changes have they made to be able to systematically launch successful digital offerings?

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- Quantitative data from a survey of companies that have developed several digital offerings to identify statistically significant relations between key mechanisms and practices (for example, changes to funding, expertise, and technological capabilities) and the ability to launch digital offerings systematically.

Seeking: Teams of executives with experience in systematizing the development of new offerings and scaling digital offerings, especially product owners and heads of innovation

Research team: Nils O. Fonstad and Martin Mocker; contact Nils at nilsfonstad@mit.edu

Creating Competitive Advantage Using Digital Data Assets

A Digital Strategic Initiative (DSI) is a competitive move that relies on digital resources to create and capture sustainable economic value. DSIs are specific projects that rely on a core of digital resources, and they are executed to achieve competitive advantage. A key DSI digital resource is the digital data asset, which we define as *data that is modularized, governed, and shared in a highly scalable manner*. In this study, we explore how companies identify, design, deploy, and exploit digital data assets and what contributes to their competitive impact. Research questions include:

- What are the key technologies and processes necessary to develop and manage the data asset component of a DSI?
- How is data governance handled? What is the nature of the data at play?
- In what ways is the data asset distinct from the data assets of competitors? Does it contribute to sustainable competitive advantage? If so, how?

Seeking: This study will draw on interviews with members of the MIT CISR Data Advisory Board as well as select other data leaders who are actively engaged in building and managing digital data assets. The team will also conduct at least one case study on a company that is creating or managing digital data assets in novel ways.

Research Team: Barbara H. Wixom and Gabriele Piccoli; contact Barb at bwixom@mit.edu

Doing Organizational Surgery with Fewer Complications

In MIT CISR research on becoming future ready, we identified four "explosions"—significant organizational changes—that enterprises must manage for successful digitally enabled business transformation: decision rights, new ways of working, platform mindset, and organizational surgery. Also known as restructuring, organizational surgery is most effective when it improves both the customer experience and operational efficiency in a company not designed for the digital era. Organizational surgery is disruptive and often requires more than one intervention. In this research, we will use survey and interview data to study:

- What are the different types of organizational surgery? What are the goals and outcomes for the different types of surgery?
- How long does organizational surgery typically take? What preparation is needed beforehand and what rehab afterward?
- What practices help companies undergo organizational surgery without complications?
- How do company leaders best manage organizational surgery?

Seeking: Interviews with companies that have effectively managed organizational surgery and survey respondents in the latter half of the year.

Research Team: Peter Weill, Stephanie L. Woerner, and Nick van der Meulen; contact Stephanie at woerner@mit.edu

MIT CISR Research Projects 2021

Domains 2.0

For decades, companies have thought of themselves as operating in industries, such as banking, retail, education, shipping, automotive, insurance, and energy. But most customers don't think about industries; instead, they think about the need to address a specific problem or opportunity. For the individual, this involves situations such as finding a home, getting from place to place, and getting an education; at the business level, it could involve managing a company's energy needs or conducting international trade. We call these different problems or opportunities customer *domains*. The mismatch between the company's industry-based mindset and the customer domain-based need often results in fragmented customer experience, with the company typically solving only parts of the domain need and relying on the customer to integrate the fragmented pieces.

Building on analyses we performed in 2017 and 2020, in this project we will research how enterprises are transforming themselves to deliver on customer domain expectations. Our first step, in Q1 2021, will be to conduct one to three virtual roundtable workshops with invited representatives from MIT CISR patron and sponsor organizations and other researchers to discuss current research and how to identify and measure domains. We will then use interviews and survey data for further analysis. Research questions include:

- What is the mindset change needed to move from industry to domains?
- What parts of a company need to transform to successfully operate in a domain orientation?
- What key practices are the most significant in moving toward a domain orientation?
- Which business models are most suitable for a domain orientation?
- In how many domains can an enterprise effectively operate?

Seeking: Interviews with companies that have started moving toward a domain orientation and survey respondents in the latter half of the year

Research Team: Peter Weil and Stephanie L. Woerner; contact Stephanie at woerner@mit.edu

How Can You Make Your Workforce Future Ready?

The focus of this research in 2020 was to gain insights into what it takes for large organizations to build a workforce that is equipped to deliver success in a digital world. Our findings resulted in a framework that brings together two key dimensions—digital fitness and digitization of work—that are critical to building a future-ready workforce that can solve complex problems. We also found that firms with a future-ready workforce outperformed their competitors on both revenue growth and gross margin.

While the framework, which identifies five states of readiness, is helpful for organizations to ascertain their current positions, the next challenge is to understand more about what it takes for companies to keep growing and moving toward the goal of having a future-ready workforce across the entire organization. In 2021 we will draw on existing and new quantitative data to understand more about leadership and costs. In addition, we will dig deeper into the framework and use case studies to better understand the activities and practices that are enabling firms to advance toward a future-ready workforce.

We will focus on the following key research questions:

- What are leaders' roles in developing a future-ready workforce?
- What metrics help to track the progress of employees to becoming future ready?
- What is required for employees to develop the digital fitness necessary to be empowered problem solvers?
- What does it take to provide employees with access to the technology components required to actively engage in the designing of work?

MIT CISR Research Projects 2021

Seeking:

- Executives involved in leading the efforts of large companies to build the workforce of the future, employee experience, learning and development, and/or the digital workplace
- Leaders of companies who believe that they either have an existing future-ready workforce or are well advanced in their efforts to reach that goal
- Leaders with a passion for enabling their people to be successful in the world of digital

Research team: Kristine Dery, Cynthia M. Beath, and Stephanie L. Woerner; contact Kristine at kdery@mit.edu

Maximizing Value Capture from Digital Business Ecosystems

The focus of this research in 2020 was to understand how firms create value from digital business and how much of this value they capture via greater firm performance. We learned that firms create and capture three types: value from customers, value from ecosystems, and value from operations. Understanding how to capture value from ecosystems is increasingly important for firms. A 10 percent increase in value from ecosystems yields 4.2 percentage points higher growth and 2.1 percentage points higher profitability compared to industry average.

In 2021, we will study how firms capture the most value from their digital business ecosystems. We will focus on multi-firm case studies with the following research questions:

- How do ecosystem drivers and modular producers increase their value capture while building fair digital partnerships?
- What kinds of value do these firms get from ecosystems today?
- How do these firms characterize valuable ecosystems and partners?
- What are the most important practices for effective digital partners?
- Which other value drivers (e.g., a digitally savvy top management team) have the most impact on value capture?

The case studies will inform questions we will develop for our 2021 global MIT CISR survey, which we will field in the second half of the year.

Seeking:

- Interview participants from firms that capture revenue growth and/or increased profitability from digital business, or pursue successful ecosystem business models or digital initiatives including partners
- Survey participants for a global MIT CISR survey (in the latter half of the year)

Research Team: Ina M. Sebastian, Peter Weill, Stephanie L. Woerner, and Tomaz Sedej; contact Ina at isebasti@mit.edu

Successfully Scaling AI Solutions

For most companies, AI investments are on the rise while returns remain flat. Our research has identified that a root cause of lagging success is the need for new managerial practices that help AI solutions scale and thrive over time. This research will explore how companies can maximize value from AI with a focus on key practices that enable trusted, safe AI deployment and diffusion. Ultimately, we intend to help executives maximize their desired payback from AI investments. Research questions include:

- What practices improve the chances of achieving AI trust and acceptance by organizational and other key stakeholders?
- What activities and strategies help companies institutionalize AI-based solutions in ways that deliver desired value in desired ways over time?

MIT CISR Research Projects 2021

Seeking: This project will draw mainly on data collected in 2019–2020 from fifty-two AI projects. We may gather additional data on some of these projects. Additionally, we would welcome in this study involvement by a company with an AI project that has achieved significant deployment success.

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