MIT CISR Mission

Founded in 1974 and grounded in the MIT tradition of rigorous field-based research, MIT CISR helps executives meet the challenge of leading dynamic, global, and information-intensive organizations. We provide the CIO and other digital leaders with insights on topics such as business complexity, data monetization, and the digital workplace. Through research, teaching, and events, the center stimulates interaction among scholars, students, and practitioners. More than ninety firms sponsor our work and participate in our consortium.

Our 2019 research agenda includes the projects listed below within three themes:

**Digital Agenda**
- Moving from Value Chains to Ecosystems: Building and Leveraging Partnering Strength
- Coordinating Innovations: How Firms Realize Greater Business Value from Their Innovation Portfolio
- Developing Data Monetization Portfolios That Pay Off

**Digital Enterprise**
- Operating Models for Your Digital Business
- Investing in the Employee Experience to Create Better Customer Experience
- Decision Rights in the Digital Era

**Digital Leadership**
- The Executive Committee and Board Relationship in Digital Transformation
- Guiding Your Enterprise to Future Ready (and Beyond)
- What’s Next for the IT Unit

Peter Weill, chairman of MIT CISR, is focused on globalizing MIT CISR research and delivery and maintaining patron relationships. Leslie Owens is MIT CISR’s executive director and Drs. Kristine Dery, Nils Fonstad, Joe Peppard, Jeanne W. Ross, Ina Sebastian, Nick van der Meulen, Barbara Wixom, and Stephanie Woerner are full-time MIT CISR research scientists. MIT CISR is funded by Research Patrons and Sponsors.
Digital Agenda

Moving from Value Chains to Ecosystems: Building and Leveraging Partnering Strength

MIT CISR 2018 research findings showed that companies with higher growth had larger ecosystems and greater partnering strength. Partnering strength builds on a company’s distinctiveness and requires transformations in its ecosystem readiness, digital capabilities, and organizational capabilities to API-enable and share crown jewels. We identified three partnering models for the digital economy—bespoke partnering, digital connecting, and digital partnering, which have increasing partnering strength and impact on growth.

In 2019, we will conduct a survey and in-depth case studies on how to build and leverage partnering strength. Our research questions include:

- How do companies build partnering strength to move from value chain to ecosystem business models (omni-channel to ecosystem driver, supplier to modular producer)?
- What are good examples of digital partnering models across industries and across the globe?
- What critical capabilities are needed for successful digital partnering, and how do companies build them and measure progress?
- What is the role of the board and the executive committee in successful digital partnering?

Seeking: Interviews at companies that develop partnering models such as digital marketplaces, and at companies that are moving from a value chain business model to an ecosystem business model.

Research team: Ina Sebastian (lead), Stephanie Woerner, Peter Weill
Contact: Ina Sebastian (isebasti@mit.edu)

Coordinating Innovations: How Firms Realize Greater Business Value from their Innovation Portfolio

In reaction to traditional approaches to innovation that proved to be too restricting, many organizations have gone to the other extreme, focusing on empowering teams to innovate autonomously, only to realize those teams were insufficiently coordinated. Without a framework in place to facilitate learning from and across innovation efforts, teams are struggling to be selective, in terms of which innovations to prioritize, which to stop, which to integrate for complementarities, and which to prepare for scaling. Organizations that have learned about the costs and benefits of too much and too little coordination are now pursuing a more balanced approach to innovation. We are seeking an understanding of minimal coordination efforts. Our research questions include:

- How do firms coordinate teams empowered to innovate? How do firms help teams get better at identifying experiments, leveraging the successful ones, and stopping the least promising ones (while encouraging teams to pursue risky innovations)?
- What is the minimal framework necessary to coordinate interdependencies across innovations and realize synergies from them? How do firms find the points of intersection between different innovations?

Seeking: Interviews with executives responsible for managing an organization’s portfolio of innovation efforts.

Research team: Nils Fonstad (lead), Joe Peppard
Contact: Nils Fonstad (nilsfonstad@mit.edu)
Developing Data Monetization Portfolios That Pay Off

Data monetization—the conversion of data and analytics into direct or indirect financial returns—represents a key source of economic value for organizations in the digital economy. Yet, it is unclear how organizations create and then deliver on an optimized data monetization portfolio. This year, we will investigate portfolios of data monetization returns and identify influential factors and/or contingencies. The research will consider organizational characteristics, performance outcomes, and capabilities required for data monetization, such as acceptable data use and data science.

In 2019, we will analyze data from the CISR data monetization survey and conduct interviews with leaders responsible for data monetization strategy. Our research questions include:

- How can a digital leader develop an optimized data monetization portfolio for his/her organization?
- What will it take for the organization to maximize returns from that portfolio?

Seeking: Interviews with leaders responsible for data monetization strategy and who have completed (or are willing to complete) the CISR data monetization survey.

Researcher: Barb Wixom (bwixom@mit.edu)
Digital Enterprise

Operating Models for Your Digital Business
One key requirement for established companies introducing digital offerings is development of a digital platform. A digital platform stores the reusable business, data, and infrastructure components allowing the company to address customer needs through rapid innovation. However, as large, complex companies start to develop digital offerings, they quickly encounter challenges in designing and managing the rapidly expanding set of components on their digital platforms.

Specifically, they must decide how many digital platforms they will need and how they will manage component design and reuse. Research questions will include:

- How do companies decide on the number and scope of their digital platforms?
- How do they scope individual components and decide what’s reusable?
- How do they manage components as they proliferate?
- How do they decide what components to expose to external developers?

This project will explore how companies can best resolve these issues. Specifically, we seek to identify alternative operating model options for digital businesses and their implications for the design of a company’s digital platform(s). Our focus is on operating models for large, established companies as they increasingly deliver digital offerings, along with traditional products and services.

We will conduct two in-depth case studies with companies that have been building digital platforms for a few years. We will also conduct follow-up interviews at companies where we have already completed in-depth case studies. We hope to engage with a few CISR sponsors in leadership roundtables to debate alternative operating models for digital business. This is a new methodology where we will visit (or schedule a virtual meeting) for purposes of facilitating a discussion with multiple members of your leadership team to explore alternative approaches to the design and implementation of your digital platform.

Research team: Jeanne Ross (lead), Cynthia Beath, Martin Mocker
Contact: Jeanne Ross (jross@MIT.edu)
Investing in Employee Experience (EX) to Create Better Customer Experience

Agile ways of working require companies to be customer-centric, or even customer-obsessed. Our research shows that top performing companies on EX rating deliver twice the level of customer satisfaction (CX) than those in the bottom 25% of our study. Yet most companies find it challenging to sustain the levels of focus and resource allocation required to deliver great EX. As we scale Agile ways of working we need to focus on both EX and CX to deliver value. This project will focus on the following key research questions:

- How do companies link their EX investments with CX outcomes (i.e., workspaces, system integrations, Agile ways of working, social networks, AI, bots, digital twins)?
- How do companies understand the impact that their investments in EX are having on CX (i.e., new metrics, performance management systems, journey mapping)?
- Who is taking responsibility for EX, and how do roles accountable for CX and EX work together (i.e., ExCo, Boards, CEO, CXO, EXO or other)?

Seeking: Companies that are proactively seeking to improve EX to drive positive CX outcomes.

Researcher: Kristine Dery (kdery@mit.edu)

Decision Rights in the Digital Era

MIT CISR research has shown that four significant, disruptive changes (i.e., “organizational explosions”) are required to achieve breakthrough performance via digitally enabled business transformation. First among these explosions are Decision Rights: changes to the status quo of who makes and is accountable for key decisions, such as when a process is formally changed, which projects receive funding, and which products are discontinued and launched. This year, we will do a series of in-depth case studies and a survey of senior executives to answer the following questions:

- How are decision rights (i.e., decision roles, bodies, and frameworks) changing in the context of digital transformation?
- How do companies balance their transformational (digital) imperatives with their operational imperatives? Who should be involved in a digital transformation, and to what extent?
- How do companies balance pressures for autonomous decision making (by individuals and project teams) with the need for organizational alignment and synergy?

Seeking: Companies that have made changes to decision roles, bodies, and/or frameworks as part of their digital (or scaled Agile) transformation efforts.

Research team: Nick van der Meulen (lead), Peter Weill, Stephanie Woerner
Contact: Nick van der Meulen (nmeulen@mit.edu)
Digital Leadership

The Executive Committee and Board Relationship in Digital Transformation
Last year we found that digitally savvy boards have a large impact on firm performance, especially market cap and growth. In this year’s study, we will look at how boards and executive committees work together to keep an enterprise’s digital business transformation moving forward. We will explore whether we can replicate the digitally savvy board machine learning methodology to code executive bios and we will administer a survey as well as do interviews. Questions include:

• What characteristics of an executive committee propel a successful digitally-enabled business transformation?
• How do the Board and CEO build an effective executive team in this area?
• How do executive committees effectively leverage their boards as they go through the transformation?
• What methods work best for executive committees and boards to measure progress?

Seeking: We are interested in interviewing executive committee and board members who are in the midst of a digital transformation or who have completed a digital transformation.

Research team: Peter Weill (lead), Stephanie Woerner
Contact: Stephanie Woerner (woerner@mit.edu)

Guiding Your Enterprise to Future Ready (and Beyond)
What does the Future Ready enterprise look like? Two years ago, we began a project on the pathways to becoming Future Ready via digital transformation and last year we looked at becoming digitally savvy. This year, we will explore what it means to be a Future Ready enterprise including attributes like being ambidextrous (simultaneously achieving cost reductions and best customer experience), ecosystem ready, digitally savvy, agile, and making data a strategic asset. We will do a series of interviews and a survey of senior executives. Research questions include:

• What does Future Ready look like?
• How does digital savviness contribute to being future ready? What else is needed?
• What are the stages of achieving future readiness and the most useful metrics associated with each stage?

Seeking: Companies that have made progress on developing ambidexterity and that are moving toward Future Ready. The ideal company will be over 50% complete on their transformation journey.

Research team: Stephanie Woerner (lead), Peter Weill, Ina Sebastian, Aman Shah
Contact: Stephanie Woerner (woerner@mit.edu)
What’s Next for the IT Unit?
MIT CISR research reveals that in reimagining their IT unit, organizations must shift their focus from designing to better manage IT to an emphasis on leveraging opportunities from technology. This latter quest demands that they reorient their attention away from the “IT organization” to “organizing for IT.” That is, as digital becomes part of the fabric of an enterprise, the challenge for leadership teams is not to build a more digitally savvy IT unit, but to establish the basis for coordinating and integrating the knowledge required for success with technology. This is particularly difficult as this knowhow is dispersed across the organization and increasingly out to customers and ecosystem partners.

We have already encountered companies that are looking towards a future with no IT unit yet are fundamentally dependent on technology. Others are reimagining how they position technology and shaping new organizing blueprints. Research questions include:

- What are the fundamental organizing principles for success with technology?
- Are particular organizing archetypes emerging?
- What transition paths are “big old companies” following as they move to accommodate the demands of technology and towards a future where core assumptions about their IT unit are being questioned?

Seeking: Interviews with CIOs/CXOs looking to shape the future of IT and the IT unit in their organization.

Researcher: Joe Peppard (jpeppard@mit.edu)