



REFLECTING ON 50 YEARS OF MIT CISR— AND WHAT WE’VE LEARNED

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MIT Center for Information Systems Research (CISR)

This briefing celebrates the 50th anniversary of the MIT Center for Information Systems Research (CISR). MIT CISR was founded in 1974 by faculty in the MIT Sloan School’s Management Information Systems group who saw both a need for objective, applied research on “significant managerial problems in the utilization of computer-based information systems” and an opportunity to create a consortium of private and public sector sponsors.¹ For 50 years MIT CISR has been a trusted partner of senior IT executives—both learning from them and helping them to create more value in their companies; in 2024 MIT CISR led a list of six IT leadership organizations CIOs should consider joining.² In the past decade MIT CISR has broadened its engagement to top management teams, digital and data leaders, and boards of directors.

MIT CISR was founded in 1974 to fulfill the need for objective, applied research on significant managerial problems in the utilization of computer-based information systems, enabled by a consortium of private and public sector sponsors.

Recently we reached out to long-time colleagues, asking them to identify what makes MIT CISR special. And in a pursuit true to MIT CISR’s roots in studying technology, we recruited the latest hot technology—generative AI—to query ChatGPT 3.5 on “How good is MIT CISR?” Our colleagues’ responses aligned with those from ChatGPT; the ChatGPT results are in italics.³

1 “Statement of Purpose and Structure,” MIT CISR Working Paper No. 1, Summer 1980, https://c isr.mit.edu/sites/default/files/2024-05/MIT_CISR_WP1_StatementofPurposeandStructure.PDF.

2 John Edwards, “6 IT leadership organizations CIOs should consider joining,” *CIO*, August 1, 2024, <https://www.cio.com/article/3478759/6-it-leadership-organizations-cios-should-consider-joining.html>.

3 Italicized text was generated by ChatGPT 3.5, OpenAI, September 3, 2024, <https://chat.openai.com/chat>.

MIT CISR REPUTATION

MIT CISR is highly regarded as one of the leading research centers in the world focused on digital innovation, IT governance, and the intersection of technology and business strategy.

Chris Perretta,⁴ a former C-level executive and current board member, observed, “CISR has been influential in putting ‘digital’ expertise in the C-suites and Boards and defining ever-increasing executive roles. . . . Not a board meeting goes by that I don’t consider what insight CISR might have on a new emerging issue.”

Reputational Pillars

ChatGPT identified the key pillars of MIT CISR’s reputation.

Influential Research: *MIT CISR is known for its rigorous, data-driven research that addresses critical issues faced by businesses in the digital age. Its research has covered topics like digital business models, enterprise architecture, IT governance, and digital transformation, offering practical frameworks and actionable insights that have been adopted by organizations worldwide.*

An early influential MIT CISR finding was the importance of critical success factors, which Jack Rockart,⁵ founder of MIT CISR, described in an article in *Harvard Business Review*.⁶ The discussion of critical success factors, the key areas an organization must focus on to achieve its goals, shifted the emphasis of the information CEOs needed toward the strategic insights required to run the business. More recent influential findings showed how to help organizational leaders have better strategic conversations about monetizing data, which Barb Wixom, a current principal research

4 Chris Perretta was formerly the chief information officer at State Street, chief information and operations officer at MUFG Americas, and a former board member at Deutsche Bank Trust Company, National Association. He is currently a board member at NETSCOUT and Pathward.

5 John F. “Jack” Rockart was appointed Director of MIT CISR in 1976.

6 John F. Rockart, “Chief Executives Define Their Own Data Needs,” *Harvard Business Review*, March 1979.

scientist with MIT CISR, detailed in an article in *MIT Sloan Management Review*.⁷

Gail Evans, executive vice president and chief digital and technology officer for Disney Experiences, described how MIT CISR research impacts companies: “[The Future Ready book] vividly shows how building digital capabilities, co-creating new experiences, and learning how to create digital value have become strategic imperatives for growth.”⁸

Thought Leadership: *CISR faculty and researchers are recognized thought leaders in the fields of IT management and digital business. They frequently publish in leading academic journals, author influential books, and speak at major conferences.*

MIT CISR researchers anticipate trends by talking to executives at cutting-edge companies around the world about the issues the company and its people are facing—and then study those issues, develop frameworks to guide strategy and action, and publish the results.

Since 2000, MIT CISR researchers have published ten books, thirty-one *MIT Sloan Management Review* and five *Harvard Business Review* articles, and their work has appeared in publications such as *The Wall Street Journal*, *The New York Times*, *Forbes*, and *The European Business Review*.

Regarding MIT CISR’s approach, Patrick O’Rourke, director of Analyst Relations at Microsoft, shared, “MIT CISR was ahead of its time laying the groundwork to help IT leaders within Microsoft understand the data economy, the next frontier of digital, and pathways to be future ready. MIT CISR research helped our leaders chart a course to enable Microsoft’s mobile-first and cloud-first strategy.”

Close Collaboration with Industry: *CISR maintains strong relationships with over 100 global organizations,⁹ including many Fortune 500 companies. This collaboration ensures that the research is grounded in real-world challenges and relevant to practitioners.*

Often MIT CISR member organizations are what we fondly call “big, old companies.”¹⁰ Many members share a history

of success—success that has often relied on complex legacy systems we describe as “silos and spaghetti.”¹¹ Many MIT CISR research projects have framed a compelling vision of what IT, digital, and data systems should look like in a modern global organization.

MIT CISR interacts with members in several ways. We hold in-person and online events to report research findings, building a vibrant, sharing community of company leaders. We develop and deliver many custom workshops with member organizations that combine the deep expertise of the organization’s leadership team with current MIT CISR research on top performers. Barb Wixom leads the MIT CISR Data Research Advisory Board, a forum founded in 2015, that brings together data and analytics leaders from MIT CISR member companies to engage in research, directly shaping insights.¹²

Kalev Ruberg, formerly the CIO and chief innovation officer at Teck Resources, explained what distinguishes MIT CISR: “MIT CISR doesn’t just report conversations, but instead proposes hypotheses and tests the support of those hypotheses with industry data. In their events they include presentations from leaders in digital transformation efforts across business and industry, and Sloan School and MIT lecturers are only part of a unique learning experience. The cadre of professionals in the room sharing their experiences and knowledge illuminates the discussion and creates lasting friendships.”

Christina Soh, former dean of the College of Business at Nanyang Business School, described the influence of MIT

11 “Silos and spaghetti” describes the state when an organization has a complex landscape of product silos and fragmented business processes, systems, and data. See an early reference in P. Weill and J. W. Ross, “IT Savvy: Making IT a Strategic Asset and Outperforming Competitors,” MIT CISR Research Briefing, Vol. IX, No. 9a, September 2009, https://cizr.mit.edu/publication/2009_0901_ITsavvy_WeillRoss.

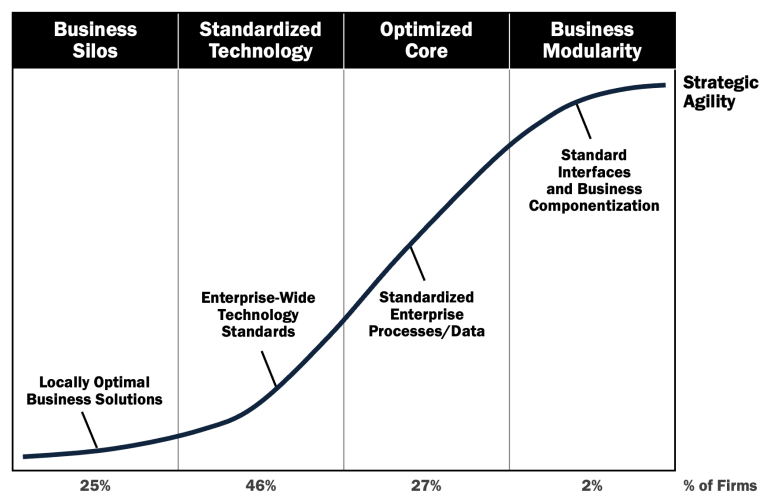
12 See Data Research Advisory Board, MIT CISR, <https://cizr.mit.edu/content/data-board>.

7 Barbara H. Wixom, Cynthia M. Beath, and Leslie Owens, “How to Have Better Strategy Conversations About Monetizing Data,” *MIT Sloan Management Review*, September 27, 2023, <https://sloanreview.mit.edu/article/how-to-have-better-strategy-conversations-about-monetizing-data/>.

8 Stephanie L Woerner, Peter Weill, and Ina M. Sebastian, *Future Ready: The Four Pathways to Capturing Digital Value* (Harvard Business Review Press, 2022, <https://cizr.mit.edu/publication/future-ready-four-pathways-capturing-digital-value>).

9 In 2024, MIT CISR is supported by 70 member organizations and maintains research relationships with several additional organizations.

10 For a current list of MIT CISR member organizations, see Our Consortium, MIT CISR, <https://cizr.mit.edu/content/mit-cizr-members>.



CISR: “We learned much from our interactions with the CISR team about engaging with industry partners, and were also their Asian partner for a number of large-scale international projects.”

Educational Impact: MIT CISR contributes to education by developing teaching materials, case studies, and executive education programs.

Jack Rockart began the MIT CISR tradition of teaching in MIT Sloan degreed and executive education programs. Peter Weill and Jeanne Ross, the former MIT CISR director and principal research scientist, continued this tradition, both teaching very popular MBA classes and developing executive education programs. The relationship with MIT Sloan Executive Education is deep, and many MIT CISR researchers work on executive programs for top management teams such as past custom programs for Commonwealth Bank of Australia, ANZ, and Standard Bank.

Michael Harte, a former C-level executive at Commonwealth Bank of Australia (CBA), Citi, PNC, Barclays, and Santander, described the influence of MIT CISR executive education: “In the early stages of a multiyear and multibillion-dollar replatforming [at CBA], we experienced the usual reticence and reluctance to change. By the sixth year [of the project] we had a very excited CBA board visit MIT to see exactly what the top team had experienced there. They all learned the importance of governance—not just leadership, [but] the criticality of business model choices and disciplined execution, and the vital importance of architecture decisions to successful execution, to underpin delivery and quantifiable risk and return in capturing value. An example that incorporated all of this was the completion of a full replatforming to support customer satisfaction and operational leverage. After the program and the replatforming, CBA was number one in customer satisfaction—measured by Roy Morgan Australia—and had the lowest cost-to-income ratio (approximately 30 percent) in the global commercial banking sector.”

Architecture Maturity Stages (p 2)

There are four stages of enterprise architecture through which organizations progress to realize greater strategic value from technology.

Source: Jeanne W. Ross, Peter Weill, and David S. Robertson, *Enterprise Architecture as Strategy: Creating a Foundation for Business Execution* (Harvard Business School Press, 2006).

Pathways to Future Ready (right)

There are four different pathways organizations can take to achieve transformation.

Source: Stephanie L. Woerner, Peter Weill, and Ina M. Sebastian, *Future Ready: The Four Pathways to Capturing Digital Value* (Harvard Business Review Press, 2022).

Global Reach and Influence: The center’s insights are disseminated globally through reports, briefings, webinars, and its website, making its research accessible to a wide audience. CISR’s research has influenced not only academic thinking but also the strategic decisions of organizations around the world.

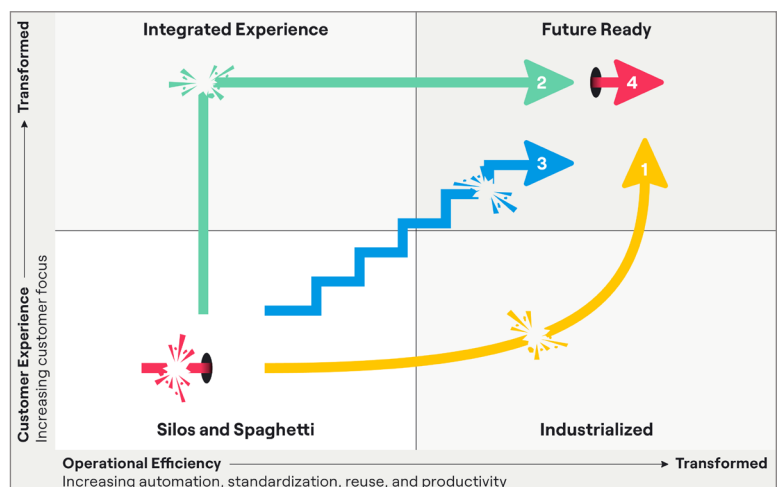
In the early 2000’s, MIT CISR had a goal to globalize its consortium and went from a very US-centric membership model to having about 50 percent of member organizations headquartered outside of the US.

On what he has learned from MIT CISR, Sim Tshabalala, CEO of Standard Bank, the largest bank in Africa, remembered, “One of my strongest recollections is of taking what seemed like an audacious ‘bet’ in May 2018: bringing my entire senior team to MIT Sloan for a week for a crash course on what a future-ready business would be like, and how we might start becoming future ready ourselves. [It was] a tall order for a bank that was 156 years old at the time... . We returned to Africa with a powerful new sense of direction and a very useful conceptual vocabulary for thinking about what we needed to do. More than six years later, . . . my colleagues and I still think and talk about being future ready in precisely the terms suggested by CISR.”

LESSONS LEARNED OVER 50 YEARS

Although in the last 50 years technology has evolved from green screens to generative AI, there are some enduring takeaways.

1. Identify your critical success factors. Focus on what’s important and use technology to help achieve your goals (i.e., technology alone is not the goal).
2. In a digital world, enterprise architecture *becomes* strategy, both enabling and limiting your business strategy options. Top performers move their systems from “silos and spaghetti” to reusable platforms.



Data Monetization

There are three viable ways to monetize data—improving work, wrapping products, and selling information offerings.

Source: Barbara H. Wixom, Cynthia M. Beath, and Leslie Owens, *Data is Everybody's Business: The Fundamentals of Data Monetization* (The MIT Press, 2023).

IMPROVING



WRAPPING



SELLING



3. Data monetization includes improving—doing things better, cheaper, and faster; wrapping—distinguishing offerings with features and experiences (based on analytics); and selling—deploying new information solutions (like aggregated data or insights). Data really is everybody’s business.¹³
4. Companies with more digitally savvy boards and top leadership teams outperform companies without them, but the bar of what digitally savvy means continues to rise. And it takes at least three digitally savvy directors to digitally tango.
5. Invest in your people. The rate of tech-enabled change is forever increasing, and top-performing companies bring their people along with continuous learning opportunities and by employing a coach-and-communicate leadership style.
6. Future-ready companies simultaneously improve operational efficiency and customer experience—every day—and effectively manage the organizational changes, such

as changing decision rights and adopting new ways of working, that are part of digital business transformations.

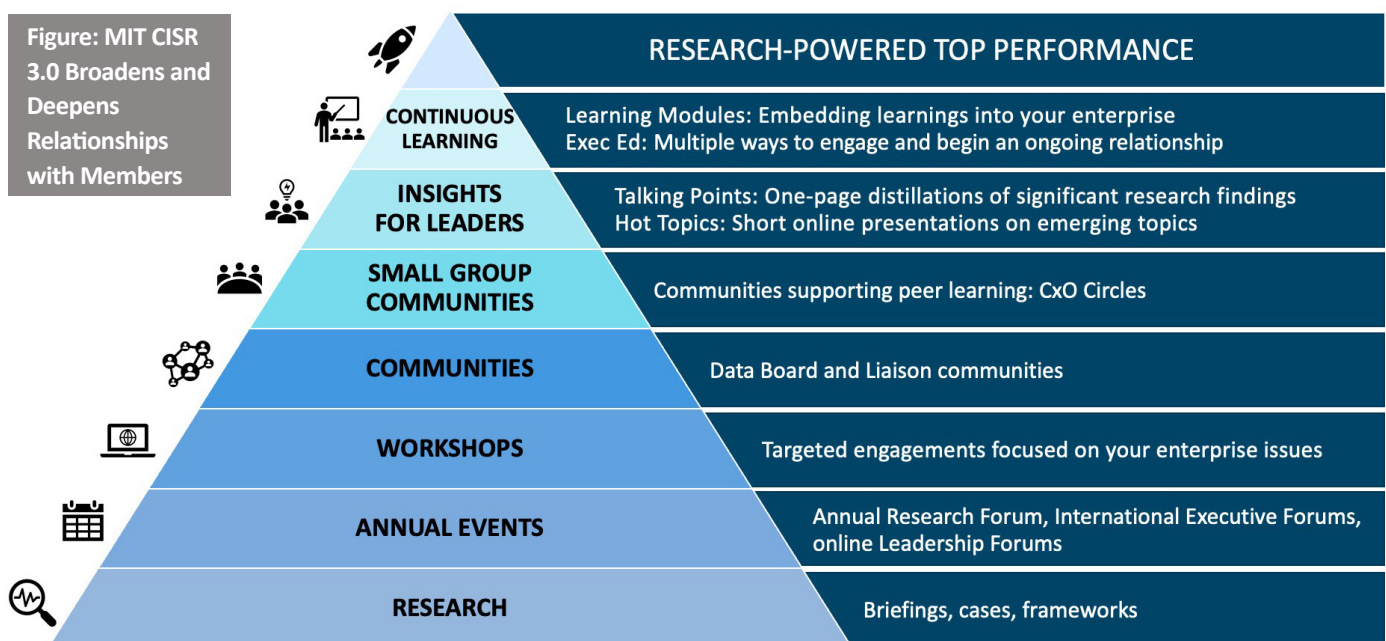
7. Don’t just lead—govern! For speed and agility, your organization should clarify decision rights and accountability. Empower your people with guardrails.

MIT CISR 3.0: INNOVATE, EXCITE, AND SCALE

What’s next for MIT CISR? We are delighted to have launched CISR 3.0: Innovate, Excite, and Scale. As Jack Rockart used to say, “IT is a team sport,” and in the digital era, the IT “team” has expanded to include the entire organization. MIT CISR will continue to do cutting-edge research about top-performing companies that excites and inspires, but we want that research to reach everyone throughout the organization. We are working to modularize and curate our research so companies can more easily embed a common language and nurture digital savviness as they innovate for the future. As part of CISR 3.0, we have developed a suite of offerings to help your company become future ready (see the figure). Please contact us if you’d like to engage around these offerings. MIT CISR and our members form a passionate community of learners; here’s to a great next 50 years!

¹³ Barbara H. Wixom, Cynthia Beath and Leslie Owens, *Data Is Everybody's Business: The Fundamentals of Data Monetization* (The MIT Press, 2023), <https://c isr.mit.edu/publication/data-everybodys-business-book>.

Figure: MIT CISR 3.0 Broadens and Deepens Relationships with Members



MIT CENTER FOR INFORMATION SYSTEMS RESEARCH (CISR)

MIT CISR helps executives meet the challenge of leading increasingly digital and data-driven organizations. We provide insights on how organizations effectively realize value from approaches such as digital business transformation, data monetization, business ecosystems, and the digital workplace. Founded in 1974 and grounded in MIT's tradition of combining academic knowledge and practical purpose, we work directly with digital leaders, executives, and boards to develop our insights. Our consortium forms a global community that comprises more than seventy five organizations.

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MIT CISR wishes to thank all of our associate members for their support and contributions.

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