

Industrial Performance Center

The [Industrial Performance Center \(IPC\)](#) is dedicated to the study of innovation, productivity, and competitiveness in the United States and around the world. The center specializes in bringing together multidisciplinary teams of researchers in engineering, science, management, and the social sciences to carry out innovative applied research on industrial growth and transformation, national and regional economic growth and competitiveness, and innovation performance. IPC seeks to help leaders in business, government, education, and other sectors better understand global industrial developments and create practical new approaches for strengthening public policies, business strategies, technical practices, and educational programs. Our interdisciplinary teams observe, analyze, debate, and report on strategic, technological, and organizational developments in a broad range of industries and examine the implications for society and the global economy. IPC often convenes key actors from the public, private, and nonprofit sectors to discuss the challenges and opportunities facing firms, industries, regions, and countries in an increasingly dynamic, competitive, and global economy.

Research Highlights

The center's research is organized around four major themes: systems of innovation, energy innovation, production in the innovation economy, and globalization. Research highlights from July 1, 2016, to June 30, 2017, are outlined below.

Systems of Innovation

IPC continued in its third year of the [Accelerating Innovation in Brazil](#) research project, focused on building innovation capacity in Brazil as it relates to the new SENAI Institutes for Innovation network. The research team includes IPC executive director Elisabeth Reynolds; Professors Richard Lester, Michael Piore, and Ben Ross Schneider; several PhD students; and postdoc Ezequiel Zylberberg (Oxford Saïd School of Business). Initial research focused on building foundational knowledge of the economic, political, and institutional contexts in which innovation does and does not occur in Brazil. In the last year, IPC furthered its research into the role of research and technology organizations and universities and conducted a review of Brazil's political system and obstacles to supporting a long-term strategy for building innovation capacity. Seven new [working papers](#) were published in June 2017, and IPC has developed what it calls the "Innovation Narrative," a framework for incorporating the main findings of the research.

Production in the Innovation Economy

IPC continued its interest in advanced manufacturing and new systems of production through several roundtable discussions and engagement with the advanced manufacturing ecosystem in the Boston area. The center hosted a roundtable in September to discuss what Industry 4.0 means for small and medium-sized companies. In June, IPC [hosted a tour](#) of Boston's emerging hub for innovation in advanced manufacturing in the Seaport District. This included visits to the new nonprofit MassRobotics, Autodesk's BUILD Space, and Flex's Innovation Center.

As part of the development of new research in this area, IPC began exploring additional studies that would address technological and other changes in systems of production and how they are affecting the nature of work. Several roundtable discussions led to a conceptual paper, “Production Systems, the Future of Work and How We Educate for the Digital Workplace: A Holistic Approach to Harnessing Technology on Behalf of Society,” developed by Liz Reynolds and Bill Bonvillian, MIT’s former head of the Washington, DC, office. The paper was presented at the meeting of the Academic Council in June 2017 for discussion regarding a potential new area of collaborative research at MIT in the future.

Globalization

Through the leadership of Senior Researcher Tim Sturgeon, IPC continued its research on globalization and global value chains across several projects. In addition to his analysis conducted for Brazil, Tim published (with former IPC researcher Eric Thun, now a professor at the Oxford Saïd Business School) the working paper “When Global Technology Meets Local Standards: Reassessing the China’s Mobile Telecom Policy in the Age of Platform Innovation.” He and postdoc Ezequiel Zylberberg contributed research, conceptualization, and writing to a World Bank book titled *Vietnam at a Crossroads: Engaging in the Next Generation of Global Value Chains*.

Visiting Researchers, Affiliates, and Postdoctoral Associates

IPC hosted Fernanda de Negri, an economist and director at IPEA (Brazilian Institute of Applied Economic Research), beginning in the spring of 2017; de Negri is working on research related to the role of universities in Brazil in fostering translational research through engagement of industry partners and greater commercialization.

Inez von Weiterhausen joined IPC as a postdoc in May 2017. She is working on a project related to MIT’s partnership with the Masdar Institute that looks at the social and economic development roles of the university.

Elisabeth Reynolds
Executive Director