MIT Industrial Liaison Program Faculty Knowledgebase Report

Digital Transformation @MIT

March 16, 2021 10:00 am - 12:00 pm

Welcome and Introduction David Zhu Program Director, MIT Corporate Relations



David Zhu Program Director, MIT Corporate Relations

David Zhu has extensive experience in the technology and energy industries ranging from research and development, operations management, M&As and investments.

As a Program Director, Zhu manages the interactions and collaborations between MIT and companies worldwide to address challenges in technological innovations and business practices.

Previously, Zhu was a Managing Director at Maxis Capital. At Maxis, he worked with a number of Chinese and US companies and managed private equity investment opportunities in the technology, telecom, semiconductor and clean energy industries.

Before he was at Maxis Capital, Zhu was an Technology banker at Key Bank where he focused on mergers and acquisitions transactions in the software and financial technology areas. He has also held positions at Virtual Back Office Software Inc. and Kana Inc. in the Boston area where he managed software development and client engagements, and provided solutions to global companies.

Marie-Teresa Vander Sande Program Director, MIT Corporate Relations



Marie-Teresa Vander Sande Program Director, MIT Corporate Relations

Marie-Teresa manages the relationship between companies and other organizations headquartered in the US, UK and Iceland, and the senior administration and faculty of MIT. As Program Director for Corporate Relations, Marie-Teresa convenes teams of researchers and faculty members to provide ongoing emerging technology intelligence and strategic advice to the companies and government groups in her portfolio. She is noted for organizing networking activities across portfolios of ILP member companies.

Marie-Teresa has also worked at GE, Arthur D. Little, Millipore and as an independent consultant and writer. She earned two degrees in Materials Science & Engineering- a BS from Cornell University and an MS from Northwestern University.

View full bio
José Ramos
Program Director, MIT Corporate Relations



José Ramos Program Director MIT Corporate Relations

José Ramos comes to CR from OSRAM (R&D), where he was Head of Engineering and Business Development at Innovation Americas. In his role at OSRAM, Ramos was a strong proponent of the ILP, attended many of our events, and experienced first-hand the OSRAM-ILP relationship. Before OSRAM, Ramos was Project Developer at NORESCO/United Technologies in Westborough, MA, where he managed engineering, sales, marketing, financial and legal teams to implement sustainability projects for industrial, commercial, and institutional customers in the US and the Caribbean. Before that. Ramos was an

Vision for Enterprise Transformation Leslie Ann Owens Senior Lecturer, Information Technology Executive Director, Center for Information Systems Research (CISR)



Leslie Ann Owens Senior Lecturer, Information Technology Executive Director, Center for Information Systems Research (CISR)

Leslie Owens is a Senior Lecturer in the Information Technology group and is also the Executive Director of the MIT Center for Information Systems Research (CISR).

We will explore highlights from two recent books by researchers at MIT CISR. Learn the 6 key questions to ask to define your digital business model, and review the 5 building blocks to digital transformation.

Decision Rights Guardrails for Empowerment Beyond Digital Nick van der Meulen

Research Scientist, Sloan Center for Information Systems Research



Nick van der Meulen Research Scientist, Sloan Center for Information Systems Research

Dr. Nick van der Meulen is a Research Scientist at the MIT Sloan Center for Information Systems Research (MIT CISR). He conducts academic research that targets the challenges of senior level executives at MIT CISR's member companies, with a specific interest in how companies need to organize themselves differently in the face of continuous technological change. His work on digital workplaces and the employee experience resulted in a range of academic and industry publications, in outlets such as the Journal of Information Technology, MIS Quarterly Executive, and the European Business Review. Currently, he examines how organizations are developing a skilled workforce with the decision rights to rapidly adapt to changes in both innovative and cost-effective ways.

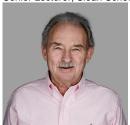
Nick earned his PhD in Business and Management from the Rotterdam School of Management, Erasmus University. Prior to joining MIT CISR, he was a faculty member at the University of Amsterdam.

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To deal with the accelerated pace of digital business, companies are increasingly designed around empowered teams. But leaders are finding that it can be challenging to ensure coordination and end-to-end integration of offerings in empowered environments. Some have noted the urge to occasionally "take control" in ways that are contrary to the concept of empowerment. How can leaders facilitate autonomy while ensuring strategic alignment and effective collaboration? In this session, Nick will present four guardrails that can help companies to effectively (re)design their decision rights for success in the digital era.

10:20am

Business-Model Innovation for Organizational Transformation William Fischer Senior Lecturer, Sloan School of Management



William Fischer Senior Lecturer, Sloan School of Management

Bill Fischer is a Visiting Professor of Operations Management at the MIT Sloan School of Management.

This presentation describes both an ongoing topic of research, and a newly-launched executive education program at the Sloan School of Management. A well-developed and coherent business-model should be the start to any discussion of organizational transformation, and any business-model change requires a review of the suitability of an existing organizational culture to best support the aspirational business-model. After suggesting the Business-Model Canvas as a practical tool for addressing such activities, I then reviewed the "strategic" context in which such changes would unfold, using industry Scurves, and, in the process, noted that these curves were growing increasingly shorter in their expected life-cycles as they came to address customer experiences rather than technologies. One very important result of this phenomena is the increase of time the decision-maker will be spending in the "unknown" rather than the "uncertain." An case example of how sustaining organizational relevance in a competitive industry can be explained by business-model redesign, coupled with cultural reinvention was provided. The presentation also called attention to the correct framing of value-propositions as being of critical importance to understanding both the business-model and cultural changes that are necessary for successful transformation.

Persuading Your Way Toward a Data Culture Ben Shields Senior Lecturer, Sloan School of Management Ben Shields Senior Lecturer, Sloan School of Management

Ben Shields is a Senior Lecturer in Managerial Communication at the MIT Sloan School of Management. He studies the multibillion-dollar sports industry to identify broadly transferable management lessons in areas such as leadership communication, data-driven decision making, and innovation.

He is the author or coauthor of three books, *Social Media Management: Persuasion in Networked Culture* (Oxford University Press, 2016), *The Sports Strategist: Developing Leaders for a High Performance Industry* (Oxford University Press, 2015), and *The Elusive Fan: Reinventing Sports in a Crowded Marketplace* (McGraw-Hill, 2006).

He teaches a number of courses in the graduate programs at MIT Sloan, including Communication for Leaders, Social Media Management, Sloan Fellows Seminar on Leadership, and a new course on sports management and analytics that will be offered in spring 2020.

Shields also teaches in the MIT Sloan Executive Education program. He is the Faculty Director of two programs: the Formula 1 Extreme Innovation Series and the Global Executive Academy. He also serves as the CoFaculty Director of the LEAD20@MIT program with the Ruderman Family Foundation. In addition, he created and teaches the open enrollment program Analytics Management: Business Lessons from the Sports Data Revolution. Shields also teaches in two other open enrollment programs: Communication and Persuasion in the Digital Age and Maximizing Your Personal Productivity.

His other sports work at MIT includes co-hosting "Counterpoints," the sports analytics podcast from the MIT Sloan Management Review, and teaching in the MIT Sports Entrepreneurship Bootcamp program, which is offered through MIT's Office of Open Learning.

Prior to MIT, Shields served as the Director of Social Media and Marketing at ESPN. He oversaw social media strategy for the ESPN brand and collaborated across the enterprise to develop and implement company-wide social strategy. He also worked on marketing strategy for several ESPN brands and sub-brands, including the SportsCenter "DaDaDa" campaign and the Emmy Award-winning "It's Not Crazy, It's Sports" brand campaign.

Shields holds a BS and MA in communication studies and a PhD in media, technology, and society, all from Northwestern University.

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Leaders and organizations have more data and better technology than ever before, but many still struggle to make the best use of it all. An oft-cited reason is they lack a data culture. This presentation defines data culture and examines the strategic, technical, and managerial competencies of organizations that have become one. It also suggests that the success of data and analytics initiatives rests largely on leaders' ability to persuade others to change. It then reviews three persuasive strategies and associated tactics to convert data skeptics into data believers. It closes with an accessible framework to help leaders design and implement a project to show both skeptics and believers what's possible through data-informed decision making.

Digital Partnering Strategies and Capabilities Ina Sebastian Research Scientist, Center for Information Systems Research



Ina Sebastian Research Scientist, Center for Information Systems Research

Ina studies how large enterprises transform for success in the digital economy. Her current research areas are digital partnering (including strategies to grow with digital partners and partnering strength), and value creation and value capture in digital models. In previous research projects at MIT CISR, Ina focused on ecosystem business models, digital strategies and organizational redesign, and digital workplace and talent. Prior to joining MIT CISR in 2014, Ina completed a Ph.D. with a focus on Information Systems Management at the Shidler College of Business (University of Hawaii). In her dissertation research, she studied how Electronic Health Record Systems enable and constrain relational coordination in multidisciplinary clinician teams. One of her ongoing research interests is the role of digital capabilities for relational and adaptive coordination in health care systems, within and across organizational boundaries.

Our MIT CISR research on digital partnering indicates that high-performing companies pursue digital partnering strategies and develop partnering capabilities for new opportunities to grow. In this session, Ina will give an overview of her ongoing research. She will discuss three digital partnering strategies and two important capabilities – digital readiness and curation – for growth in digital ecosystems.

Digital Transformation in Healthcare Delivery Systems: what have we learned? Anne Quaadgras Senior Lecturer, Sloan School of Management



Anne Quaadgras Senior Lecturer, Sloan School of Management

Anne Quaadgras is the Director of the MIT Sloan Health Systems Initiative and a Senior Lecturer at MIT Sloan.

Her work focuses on health systems transformation, and the role of information technology in supporting that change.

Prior to her doctoral work, Anne was a management consultant for fifteen years, specializing in improving decision-making and investment processes in the chemical, pharmaceutical, and financial services industries.

She holds a Bachelor's and Master's degree in chemical engineering from MIT. Anne earned her doctorate in information systems at Boston University, where her dissertation research explored how globally distributed groups of experts recognize and respond to operational problems.

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In healthcare, there is plenty of hype about the impact of digital transformation. But there is no clear definition digital transformation in healthcare delivery, and plenty of obstacles. Roadmaps and principles from other industries provide insight, but no straightforward recipe. What is needed is 'both/and': algorithms, technology, and automation, as well as integration, people and augmentation.

11:20am

MIT Startup Exchange Lightning Talk

Endor: Predictive analytics on customer data without data scientists

Tomer Srulevich Chief Business Officer Endor

MIT Startup Exchange Lightning Talk

<u>Arundo</u>: Software enabling advanced analytics, ML and IoT to transform industrial data into value

Ray Hall Vice President, Sales & Marketing Arundo EMEA

MIT Startup Exchange Lightning Talk

Profit Isle: Uncover hidden profits that are invisible to company

John Wass CEO Profit Isle

MIT Startup Exchange Lightning Talk

BlockTEST: Optimizing blockchain solutions to enhance the flow of materials, data, and finance

Jennifer Jiang

CEO & Co-Founder, BlockTEST



Jennifer Jiang CEO & Co-Founder BlockTEST

Jennifer is an 18-year Wall Street veteran who has been active in blockchain since 2014 with passion to drive open banking. Before she co-founded BlockTEST with MIT research scientists in 2018, she'd led at global and regional leadership roles at JPMorgan and previously at Merrill Lynch and Citigroup, across investment banking and global capital markets. Currently Jennifer also serves as a senior advisor at Harvard CAM Lab and advisor committee of ID2020, a global alliance committed to digital identity. Jennifer holds an M. Sc in Management of Technology from MIT, an MBA from McGill University and a Bachelor in Statistics from Renmin University of China.