

MIT SLOAN



EVOLUTION OF THE HACK

TRANSFORMING MIT'S
SPIRIT OF THE HACK INTO
INNOVATION IN ACTION

PEAT



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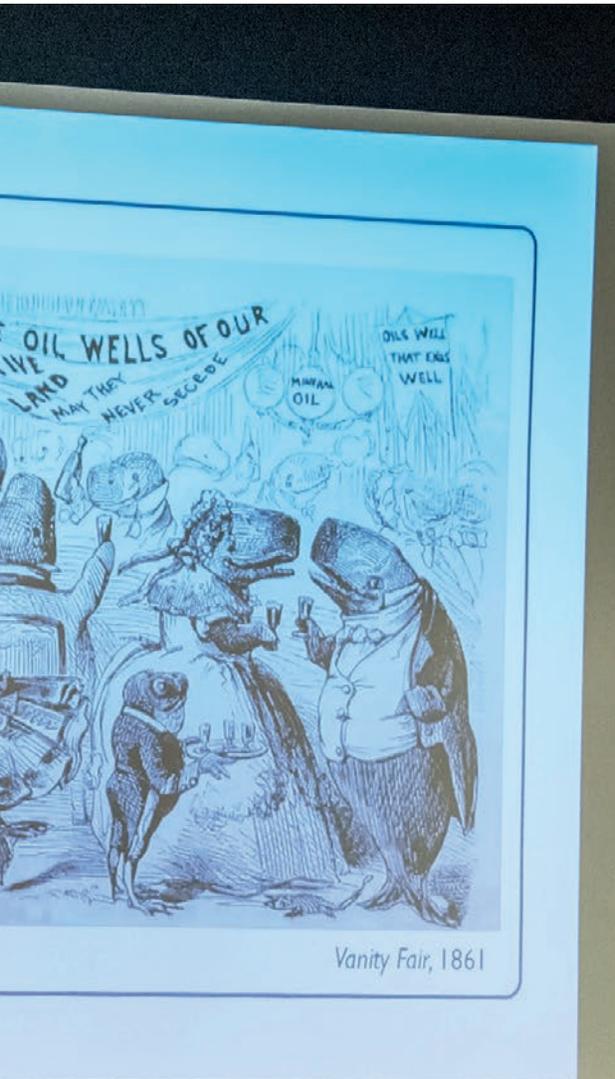
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Over 1,600 alumni and friends from 38 countries returned to campus for Reunion Weekend, June 8–11, 2017. Throughout the weekend, alumni attended faculty lectures, class events, tours of campus and Boston, and a C-function.

At left, alumni hear from Professor Christopher Knittel in his faculty session "Solving the Energy Conundrum." Knittel discussed what is unique about climate change relative to other environmental issues of our time, and why that creates difficulties with solving climate change.



Vanity Fair, 1861



MIT SLOAN

News and insights for the MIT Sloan community
Vol. 12, No. 1

Dean

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John C Head III Dean

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MIT Sloan Alumni



DEAR FRIENDS,



In a world of uncertainty, I am reassured by the work of the MIT Sloan community. The international nature of MIT Sloan creates thoughtful and engaged activity around the globe.

I am enthusiastic about the more than 1,500 of you who have participated in MIT Sloan's new alumni online programming—and about the MIT Regional Entrepreneurship Acceleration Program's fifth cohort of global participants from six countries who come together for a two-year learning engagement focused on accelerating innovation and entrepreneurship in their regions. You will read more about both inspiring groups in the following pages.

"Evolution of the Hack" is a compelling read on how MIT plays a key role in solving some of the greatest challenges that the global population must address. Hackathons create environments

that enable our students to tackle issues in the arts, medicine, sustainable business growth, and more. What makes hackathons so impactful is far more than what happens on campus over a two- or three-day period.

Ultimately, hackathons—and the learning that comes from both the process and the results—transform the world by empowering our students to approach their work with ingenuity and confidence. Using innovative approaches to solve complex problems is how MIT and MIT Sloan can change the world for the better. And for me, this creates hope—for a future that is fueled by inventiveness and a rigorous approach to challenges that ensures we will make a difference.

I hope that you will find these articles encouraging. Perhaps they will remind you of your own experiences putting the skills and knowledge that you gained at MIT Sloan to use in the world. As a part of the MIT Sloan community, you, too, create the positive change that benefits us all.

Best,

A handwritten signature in black ink that reads "David Schmittlein". The signature is fluid and cursive, with a prominent initial "D".

David Schmittlein
 John C Head III Dean
 MIT Sloan School of Management

MIT SLOANSCAPE



AT MBA CONVOCATION, A CALL TO DO THE TOUGH WORK

The more than 400 members of the MIT Sloan MBA/LGO Class of 2017 celebrated June 8 at a convocation ceremony where speakers discussed the responsibility graduates have of saying “It’s me” to the hard work in life.

“I need you, your friends and colleagues need you, and our companies and communities need you to say ‘It’s me’ to the hard jobs, to the ones that scare us the most,” student speaker Leslie Tillquist Martin told her classmates. “We need to say ‘It’s me’ to daunting systemic challenges faced in energy, waste, healthcare, education, agriculture, politics, and more. We need to say ‘It’s me’ to the daily slow chug of improving on the status quo in how we treat each other, the workplaces we create, the companies we fund.”

The ceremony, held at the Wang Theatre in Boston, also featured remarks from Gustavo Pierini, SM ’87, the president and founder of Gradus Management Consultants. Pierini, the distinguished alumni speaker, was honored with the Dean’s Award for Excellence and Leadership.

“Sometimes in the daily challenges that life gives us, we miss what is really important,” Pierini told graduates. “We may fail to say hello, please, or thank you; congratulate someone on something wonderful that has happened to them; give a compliment; or just do something nice for no reason.”

Dean David Schmittlein urged graduates to recognize that MIT Sloan alumni have a unique privilege and responsibility.

“I am confident that you will achieve professional success,” Schmittlein said. “But the world will need more than that from you. Many of you have heard me talk about our MIT Sloan alumni as people who can, and do, have the courage of well-founded convictions. The world needs those people.”

EXECUTIVE EDUCATION EXPANDS REACH WITH NEW PROGRAM

As big data, digitalization, and technology have created a global disruption in the fashion and luxury industries, it's become essential for companies and executives to develop new strategies and innovate in order to succeed in the market. Enter MIT Sloan Executive Education, which has partnered with leading fashion magazine *ELLE* and Universidad Complutense Madrid to create the International Fashion and Luxury Management Program.



With an estimated \$3 trillion spent globally each year on fashion and luxury brands, the opportunity was ripe for MIT Sloan Executive Education to expand its course offerings into this field. The course

begins in January of 2018 and will run through May. Each participant will meet an extensive network of industry leaders, professors, and peers and will receive a certificate at the completion of the program.

"It's not what we're traditionally known for," says Duncan Simester, NTU Professor of Marketing, and faculty director of the newly created program. "But it's the same set of problems and a new set of markets and applications," he says, explaining that leaders in all sectors have similar challenges and business needs, albeit with industry-specific understandings and operations.

Once the program comes to Cambridge in the spring of 2018, program participants will be focusing primarily on supply, accounting, and innovation, says Simester. They will examine global markets, accounting, and financing and how the industry's supply chains have been radically redesigned thanks to technology. Students will learn how it's become increasingly easier for independent brands to enter the market while the pace at which styles are launched is increasing. Customers' experiences are also changing rapidly with increasing numbers browsing and shopping online.

The program will include four week-long modules in Madrid, Paris, New York, and Cambridge at MIT. Students will be exposed to industry leaders, mentors, and an in-depth exploration of multiple aspects of the business. In Madrid, students will focus on fast fashion;

in Paris on haute couture; in New York on premium brands; and at MIT on innovation.

"It's really exciting, and it's helping us reach a whole new audience," says Kristin Viera Zecca, program director for the MIT Sloan/*ELLE* week and a director of the executive education program. Zecca says the content of the program is reaching a new industry with thousands of potential students. She expects approximately 100 participants in the first year and possibly double that going forward.

Simester says he'd like to see program participants who have spent some years in a functional role—such as in marketing or channel management or branding—who are now looking to make a transition. "An

//

...it's the same set of problems and a new set of markets and applications."

DUNCAN SIMESTER

ideal participant would be someone getting ready for a senior management role, thinking strategically," says Simester. "It's a seat at the strategy table," and a table he believes will give many participants a boost up into a whole new level of business and fashion industry understanding.

Simester says the program is a unique opportunity to bring MIT Sloan's management thinking to a new industry—one that is focused on the consumer demand side of the business. "It's really exciting," he says.

—By Bridget Samburg

MIT SLOAN ANNUAL FUND REACHES NEW RECORD

The MIT Sloan Annual Fund broke records again in FY17, raising \$5.56 million and celebrating another year of tremendous growth. Alumni and friends provided flexible funding for critical areas such as fellowship support for students, faculty research, and research initiatives.

Members of the Dean's Circle, the annual fund's leadership giving society, contributed to last year's fundraising success with over 690 members raising \$4,602,233—an increase of 7 percent from the previous fiscal year.

Highlights from the year included MIT Sloan participating in MIT's first 24-hour giving challenge held on March 14, 2017, in celebration of Pi Day; 1,142 alumni, students, and friends contributed \$215,015 to the MIT Sloan Annual Fund. Participation milestones were also met throughout the day, unlocking gifts totaling \$125,000 from generous challengers Judy Lewent, SM '72, and her husband, Mark Shapiro, and Bassim Halaby, MCP '88, MBA '02.

Student Class Gift campaigns contributed \$368,605 in gifts and pledges to the MIT Sloan Annual Fund. Leading the charge, the EMBA Class of 2017 achieved 100 percent participation for the fifth year in a row and reached a total of \$219,940 in gifts and pledges.



These gifts ... ensure that future generations will have access to our faculty research initiatives and our innovative teaching and learning models."

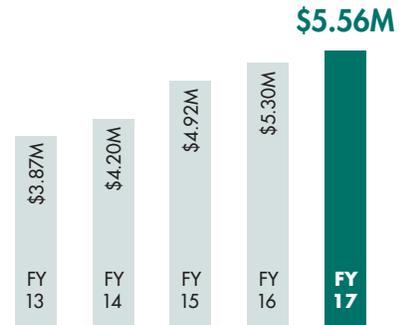
DAVID SCHMITTLEIN, JOHN C HEAD III DEAN

Reflecting on the impact of the class gift, Dean Schmittlein remarked, "The newest generation of alumni will begin to establish their individual legacies at MIT Sloan through their support of the MIT Sloan Annual Fund Class Gift. Collectively, these gifts not only create a sense of the importance of giving back and of community, but also ensure that future generations will have access to our faculty research initiatives and our innovative teaching and learning models. That access, for these recent graduates and for future students, broadens the ways in which MIT Sloan creates positive change in the world."

To learn more about the MIT Sloan Annual Fund and its impact, visit: mitsloan.mit.edu/alumni/give or to donate, text "MITSloan" to 414-44.

—By Taylor Whitaker

ANNUAL FUND GROWTH



DEAN'S CIRCLE LEADERSHIP GIVING

7%
INCREASE TO
\$4,602,233

STUDENT CLASS GIFTS AND PLEDGES

\$368,605

PI DAY

1,142
PARTICIPANTS

32%
1st TIME DONORS

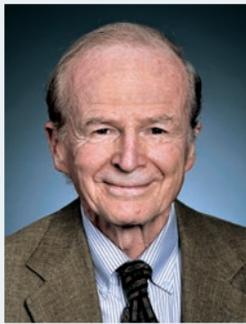
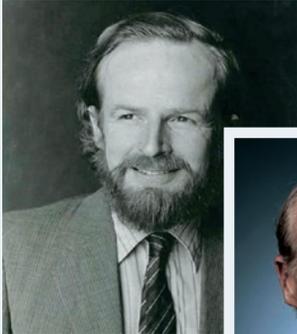
\$215,015
RAISED

+
\$125,000
IN CHALLENGER GIFTS

\$340,015
TOTAL

FACULTY RETIREMENTS

The 2016–17 academic year saw the retirement of three long-time MIT Sloan faculty members. We celebrate their contributions and gratefully acknowledge their impact on the generations of students they taught, and their legacy of impact in the world.



JOHN LITTLE
Institute Professor
Professor of Marketing

Served on the faculty
1962–2017

THOMAS M. STOKER
Gordon Y Billard Professor in
Management and Economics
Professor of Applied Economics

Served on the faculty
1979–2017



JAMES UTTERBACK
David J. McGrath jr. (1959)
Professor of Management
and Innovation
Professor of Technological
Innovation, Entrepreneurship,
and Strategic Management

Served on the faculty
1979–2017



VOLUNTEER SPOTLIGHT

NAME: Aliza Blachman O'Keeffe
PROGRAM & YEAR: SM '90
VOLUNTEER POSITION: Chair,
MIT Sloan Alumni Board

FAVORITE MIT SLOAN MEMORY:

On a personal level, a favorite MIT Sloan memory is the People Express case, which we did during orientation, because that is when I met the classmate who would become my husband, Graham O'Keeffe. Also, I will never forget Professor Stew Myers teaching our corporate finance class in his trademark bright red sneakers!

WHY I VOLUNTEER: My motivation to serve as a volunteer partly stems from a life philosophy of giving back to organizations that have been meaningful to me. I am grateful to MIT Sloan for the experience and the education I received, and I continue to believe strongly in the mission of the school. So it is important to me to help give others the same opportunities. Volunteering is a way of demonstrating my commitment to these priorities, while providing me with an intrinsic benefit, as I continue to learn and meet new people along the way.

FAVORITE VOLUNTEER MEMORY:

Speaking on a panel at an "MIT Sloan on the Road" event in London was so much fun this year. I was proud to help represent the school, complementing the Admissions team's formal presentation with examples from my own experience. Talking with prospective students and fellow alumni was another way to offer my support to MIT Sloan and to remind myself about all the incredible work taking place there every day.

FACULTY RESEARCH PROFILE

MEASURING THE IMMIGRANT WORKFORCE

New report from MIT Sloan professor shows immigrants are a crucial part of Boston's economic engine.

All political issues have a moment of attention. After September 11, terrorism rose to the fore of national consciousness. In the wake of the Sandy Hook Elementary School shooting, conversations turned to gun control, and then to policing after the deaths of Eric Garner and Michael Brown. Today, immigration is arguably the most prominent flashpoint—whether to build a wall, enact a travel ban, or deport residents in good standing.

Paul Osterman, the Nanyang Technological University (NTU) Professor of Human Resources and Management at MIT Sloan, has studied employment patterns and practices for decades. Last month, he and two PhD candidates entered the debate with an examination of immigrants in the Boston area.

“Our goal was to see the extent to which firms in Boston are dependent on an immigrant workforce,” Osterman says. He was aware before the project that immigrants make up a considerable portion of the overall workforce, but the numbers still surprised him.

Immigrants constitute 27 percent of all employees aged 25 to 64 in the Boston area. In those industries often associated with immigrants—hospitality and home health—they make up more than half of all employees. “These sectors are extraordinarily dependent on immigrant workers,” he notes. But a similar dependence exists in other sectors, like hospitals and manufacturing, where immigrants make up 29 percent and 35 percent of employees, respectively. “The fact is,” says Osterman, “there is a heavy dependence up and down what you call the occupational prestige hierarchy.”

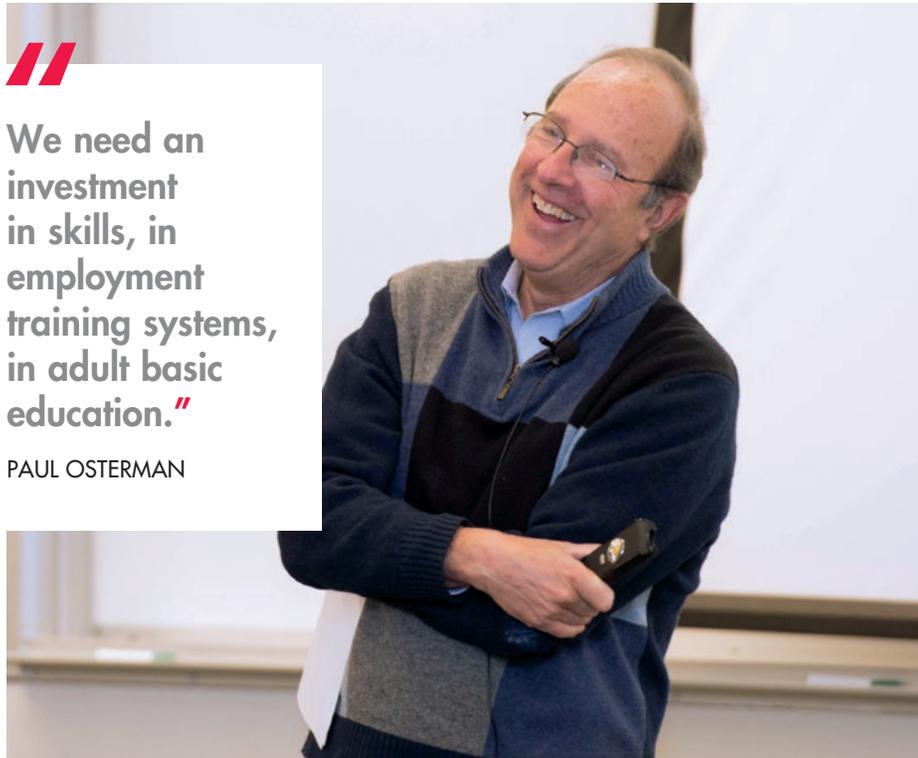
The final report bluntly characterizes the findings: “The Boston region could not succeed economically nor provide goods and services to its citizens without the contribution of the region's immigrant employees.”

This reliance on immigrant workers is not going away. In 2015, 54 percent of all working-age people who moved to Boston were immigrants; two-thirds of them came directly from abroad. “The future growth of the Boston workforce is also dependent on immigrants,” Osterman says.



We need an investment in skills, in employment training systems, in adult basic education.”

PAUL OSTERMAN



While higher than national averages, these numbers, which were pulled from the American Community Survey as well as from interviews with local employers, are representative of most major urban centers. Chicago, Osterman says, would post similar percentages; Los Angeles would likely have a slightly larger immigrant workforce. Regardless of small discrepancies between cities, these findings represent a policy reality that both public and private sectors across the country must confront.

“We need an investment in skills, in employment training systems, in adult basic education,” Osterman says. Though 40 percent of those surveyed have a college degree, another 40 percent have a high school degree or less. Thirty-eight percent of immigrants report that their English-language skills are poor. And the 2014 and 2015 median annual earnings of employed immigrants was roughly \$36,000, compared to \$51,000 for native-born citizens. “We know what to

do” to better integrate this segment of the workforce, he adds. “We have best practice models that work. We don’t have to invent something; we just have to give enough resources.”

The basic solution is to provide training programs for immigrants that help them build and maintain solid foundations. It also would be beneficial to have intermediary programs that support education and relationships with employers. “These programs function essentially like a marriage broker,” Osterman says. “And this is a huge unmet need.” By providing these services, cities

In 2015,
54% percent of all
working-age people
who moved to Boston
were immigrants.

across the country could stabilize the substantial contribution of immigrant workers.

The benefits would flow out from there, too, beyond the workplace. Osterman indicated the relatively narrow perspective of his study. “We did not look at the entrepreneurial contributions of immigrants who found new businesses, or at how they improve cultural richness in a city—something that has real financial implications,” he says. “In that sense, we surely underestimated the economic value of immigration.”

—By Dylan Walsh

INTRODUCING MIT SLOAN ALUMNI ONLINE

The Office of External Relations recently launched *MIT Sloan Alumni Online*, a new virtual series offering alumni across the globe a face-to-face experience with renowned faculty and accomplished alumni who present thought-provoking research and industry insights. Since launching in January 2017, the program has found great success, with more than 1,500 people from around the world joining at least one virtual event in the first year of the program.

Topics have ranged from “The Making of a Turnaround: One Fact-Based Decision at a Time,” featuring alumna Dawn Zier, SM ’87, SM ’90, president and CEO of Nutrisystem, to “Building a Sustainable World: From Climate Change to Personal & Political Change,” a talk by Professor John Sterman that took place the day after the United States pulled out of the Paris Accord. “Attending Professor Sterman’s online session was a great use of one hour of my busy schedule. I feel grateful to have ongoing opportunities to learn as part of the amazing MIT community,” said Rachel Lawson, MBA ’06.

This new online programming offers the unique opportunity to re-create the experience of hearing from professors in an intimate setting. “Just about half of MIT Sloan alumni live in regions where they do not have close access to an MIT Sloan club, and those who do often have limited time to commit to attending an in-person event,” said Donna Russell, senior director, Alumni Relations, Communications, and Events. “*MIT Sloan Alumni Online* has been a great way to provide alumni around the world access to cutting-edge and timely research, data, and ideas from MIT Sloan faculty and alumni. We look forward to connecting more alumni virtually through this program.”

—By Taylor Whitaker

Over 1,500 global participants

11 sessions and counting

FROM ECUADOR TO LEBANON: MIT REAP ANNOUNCES NEW REGIONAL TEAMS



MIT's Regional Entrepreneurship Acceleration Program (REAP) announced in June 2017 the acceptance of its fifth cohort of regional teams from **Algeria, Ghana, Australia, Ecuador, Lebanon, and Saudi Arabia**. The new set of teams, each composed of up to eight team members representing the government, risk capital, academic, corporate, and the entrepreneurial spheres, are entering a two-year learning engagement with MIT to accelerate their innovation and entrepreneurial ecosystems.

"It's very important for all five of these stakeholder groups to be represented throughout the program to create a shared vision for the region's entrepreneurial ecosystem," says MIT REAP Executive Director Sarah Jane Maxted.

Through the program, teams will work with the frameworks developed by MIT to strengthen their region's innovation-driven entrepreneurship (IDE) ecosystem. The teams worked from July to September as part of REAP's Action Phase 0 to formalize the roles of each team member, analyze the local entrepreneurial ecosystem, and determine some of the team's high-level goals for the two-year program. In October 2017, the teams completed REAP's Workshop 1 during which they learned about MIT's framework and approach. Currently, the teams are part of REAP's Action Phase 1—which runs from October through June 2018—

working on building extended stakeholder networks in their regions and conducting full ecosystem assessments.

"Each region has applied to MIT REAP with a particular 'urgency for change' or problem area in their region's overall system that they want to see addressed," says Maxted.

Each team is required to identify a regional challenge that hinders the growth of IDE. The MIT REAP faculty will then work with the teams to identify their region's comparative advantages and the ways that the team can accelerate IDE.

The changes that teams typically choose to implement range in scope from accelerator programs and regional prizes to entrepreneurial education within local technical universities. Each of these mechanisms is intended to leverage the region's unique history and strengths to spur economic growth and social progress.

Past participants have created an online platform connecting entrepreneurs to resources (Team Wales), a program to help early stage businesses scale up (Team



MIT REAP
Regional Entrepreneurship
Acceleration Program

London), and an open entrepreneurship and innovation center for regional university students, faculty, and researchers to engage with one another (Team Tokyo). Many of these interventions contain elements of programs that have proven successful at MIT and in the Greater Boston–Cambridge innovation and entrepreneurial ecosystem.

The overlapping regions from Cohort 4 and Cohort 5 will allow the newer teams to learn from and be mentored by those teams that have already begun to implement some of their strategic interventions. In addition, the Cohort 5 teams will have the opportunity to be mentored by MIT REAP alumni in the Global Innovation Network. These REAP alumni teams are continuing to implement their long-term strategies and can provide deep insight into shared opportunities and challenges.



DEAN'S CIRCLE SPOTLIGHT

CHANUNNETT MANOONPONG (NETT), MFIN '14



THE MIT SLOAN EXPERIENCE THAT HAD THE MOST IMPACT ON ME:

As part of the Proseminar in Capital Markets/Investment Management, I chose to participate in a project with Norges Bank to assess the validity of portfolio management using risk factor base allocation by stimulating a virtual risk factor base optimal portfolio and comparing the results to a portfolio with traditional asset allocation. Coming into MIT Sloan with no full-time work experience, this project was the first time that I, together with my teammates, needed to dive into a business issue, tackle it, come up with results, and present our work to the executives from Norges Bank. It taught me how to think systematically, engage in complex problem solving, and hone my people management skills. That experience helped prepare and shape me for the finance industry after graduation, where I worked as an associate on the capital markets team at Siam Commercial Bank.

HOW I STAY INVOLVED AND WHY:

MIT Sloan gives its students a strong sense of community when you are enrolled there, and this community concept has deep roots among all Thai students. Here in Thailand, we always think of our fellow Thai students and alumni as the MIT Sloan family. We stay involved by meeting at quarterly gatherings and showing our support of several MIT Sloan-related events such as Sloan on the Road, the MIT sendoff day, and MIT family day. We share our new experiences, challenges, and opportunities at each step of our lives, and we continue to motivate one another to attain new milestones and reach our fullest potential.

WHY MY DEAN'S CIRCLE GIFT MATTERS:

At MIT Sloan, we pride ourselves in being a leader in innovation. We have a rich history and reputation among other top-ranked universities in producing entrepreneurs and startup companies, and I am always proud to see MIT Sloan's leadership represented. Although I am not in the position to be an entrepreneur in my current role as deputy director and owner of our fiberglass manufacturing business, my gift allows me to support those with the initiative, the ideas, and the drive to succeed and continue to build our school's legacy.

Help ensure MIT Sloan's most vital legacy: more leaders like you. Membership in the Dean's Circle makes a greater impact by driving deeper inquiry, fueling more profound innovation, and creating groundbreaking ways for students, faculty, and alumni to live our mission of improving the world.

Learn more at mitsloan.mit.edu/alumni/deans-circle/



NEW BOOKS FROM MIT SLOAN

Every day on campus, MIT Sloan faculty seek to answer the world's toughest questions through their research. We're proud to share with you just a few examples of recently published books highlighting our faculty's work on everything from shaping the future of work through a new social contract to strengthening teaching in universities to highlighting the power of conversation in a more polarized world.

DISCIPLINED ENTREPRENEURSHIP WORKBOOK

by Bill Aulet, Professor of the Practice and Managing Director, Martin Trust Center for MIT Entrepreneurship
A companion piece to *Disciplined Entrepreneurship: 24 Steps to a Successful Startup*, the Workbook demonstrates ways to implement practical steps in the entrepreneurship process and includes worksheets, a visual dashboard to track progress, creativity tools, and real-world examples.

STRENGTHENING TEACHING AND LEARNING IN RESEARCH UNIVERSITIES: STRATEGIES AND INITIATIVES FOR INSTITUTIONAL CHANGE

by Lori Breslow, Senior Lecturer in Managerial Communication

This book by Lori Breslow and coauthors Bjorn Stensaker, Grahame T. Bilbow, and Rob van der Vaart offers a range of approaches and specific examples of how a sample of internationally leading research-intensive universities, from a variety of regions around the world, work to improve teaching and learning. It describes and analyzes broad university initiatives and approaches that have the potential of driving institution-wide change processes in teaching and learning, thus providing a link between strategic ambitions and cultural transformation in the universities.

MACHINE, PLATFORM, CROWD: HARNESSING OUR DIGITAL FUTURE

by Erik Brynjolfsson, Schussel Family Professor of Management Science and Professor of Information Technology; and Andrew McAfee, Principal Research Scientist; Codirectors of the MIT Initiative on the Digital Economy

In this latest book about achieving success in our digital-centric world, Erik Brynjolfsson and Andrew McAfee discuss how to deal with the integration of the human mind and machines, products and platforms, and the core and the crowd. The authors analyze how the balance of these three affect how companies are run, and offer tools to succeed in our changing digital world.

BREAKING THROUGH GRIDLOCK: THE POWER OF CONVERSATION IN A POLARIZED WORLD

by Jason Jay, Senior Lecturer and Director of the MIT Sloan Sustainability Initiative

A new book coauthored by Senior Lecturer Jason Jay and Gabriel Grant offers ways to turn difficult confrontations into positive dialogue. Through practical exercises and examples, this book explains how to communicate when you are on opposite sides of political, social, environmental, and personal issues.

SHAPING THE FUTURE OF WORK: A HANDBOOK FOR ACTION AND A NEW SOCIAL CONTRACT

by Thomas A. Kochan, George M. Bunker Professor of Work and Employment Relations and Codirector of the MIT Institute for Work and Employment Research

In this new book based on his free online course, Thomas A. Kochan and coauthor Lee Dyer lay out a blueprint for a new social contract that stresses solid financial returns for businesses, good jobs, and increased social stability and what it would take to create and maintain such a contract. The handbook is built around four points, each of which is followed by the tools needed to take action.

ADAPTIVE MARKETS: FINANCIAL EVOLUTION AT THE SPEED OF THOUGHT

by Andrew W. Lo, Charles E. and Susan T. Harris
Professor and Director of the Laboratory for Financial Engineering

In his newest book, Andrew Lo tackles one of the biggest debates in economics: Are investors and markets rational and efficient, as modern financial theory assumes, or irrational and inefficient, as behavioral economists believe—and as financial bubbles, crashes, and crises suggest? Lo cuts through this debate with a new framework, the Adaptive Markets Hypothesis, in which rationality and irrationality coexist. Lo's new paradigm explains how financial evolution shapes behavior and markets at the speed of thought—a fact revealed by swings between stability and crisis, profit and loss, and innovation and regulation.

WHO WILL CARE FOR US? LONG-TERM CARE AND THE LONG-TERM WORKFORCE

by Paul Osterman, the Nanyang Technological University (NTU) Professor of Human Resources and Management at MIT Sloan

The number of elderly and disabled adults who require assistance with day-to-day activities is expected to double over the next 25 years. As a result, direct care workers such as home care aides and certified nursing assistants (CNAs) will become essential to many more families. Yet these workers tend to be low paid and poorly trained, and receive little respect. Is such a workforce capable of addressing the needs of our aging population? Osterman assesses the challenges facing the long-term care industry and presents a policy agenda that would reconceive direct care workers' roles and would improve both the quality of their jobs and the quality of elder care.

SOCIAL MEDIA MANAGEMENT: PERSUASION IN NETWORKED CULTURE

by Ben Shields, Senior Lecturer

Ben Shields shares strategies, examples, and models that highlight social media successes and challenges. The book addresses topics such as developing a social brand, targeting social audiences, and measuring social media results. It also presents a formula for maximizing the value of social media in a business.



ALUMNAE CONFERENCE





MIT SLOAN GLOBAL WOMEN'S CONFERENCE

Over 200 MIT Sloan alumnae, speakers, and guests gathered in New York City on October 5 and 6 for the first MIT Sloan alumnae conference designed to learn from (and among) the vibrant community of women who are making ideas matter, making an impact through their work, and leading to make a difference for women everywhere.

A pre-conference dinner brought alumnae together for a special networking opportunity with a special presentation highlighting MIT's Cutting Edge Innovation Ecosystem moderated by Fiona Murray, William Porter (1967) Professor of Entrepreneurship, Associate Dean for Innovation, Codirector of the MIT Innovation Initiative, and Faculty Director of the Legatum Center and featuring Georgina Campbell Flatter, SM '11, Executive Director, The Legatum Center, and Senior Lecturer in Technological Innovation, Entrepreneurship, and Strategic Management; Monique Guimond, MBA '17, Associate, The Engine; Donna Levin, EMBA '16, Trust Center Entrepreneur in Residence (EIR) and Senior Lecturer in Technological Innovation, Entrepreneurship, and Strategic Management; and Elizabeth Sikorovsky, MBA '98, Executive Director, Institute for Data, Systems, and Society.

The idea for the conference stemmed from the leadership of the MIT Sloan Women of New York, a group of alumnae who gather to connect professionally. Their goal has been to expand the network and bring together MIT Sloan women from across the globe. Commenting on the success of the two days, conference committee member Maeve Coburn, SM '92, noted that, "This inaugural event was long anticipated and a fantastic first step to building a business community of alumnae befitting a top-notch business school like MIT Sloan."

To see the full program, and to view presentations from the conference, visit: mitsloan.mit.edu/alumni/events/2017-sloan-women-conference/.





CONFERENCE HIGHLIGHTS

Fireside Chat with Martha Samuelson, SF '86; CEO & Chairman, Analysis Group, Inc.

The conference programming began with a fireside chat with Samuelson, moderated by Antoinette Schoar, Michael M. Koemer (1949) Professor of Entrepreneurship and Professor of Finance. The conversation centered on her experience building the culture at Analysis Group. Noting that long term action requires a transactional approach, she urged the audience to fiercely protect the culture they want to see. She reflected on the difficult conversations she had upon joining the company, ones that removed hierarchy and put value on consensus. "Culture isn't something that analysts write about," she noted. "Making investments for the long term, that's what's rewarding."

Panel Discussion: Women on Boards

Moderator Judy Lewent, SM '72, led panelists Rohini Chakravarthy, MBA '99; Suzanne Frey, SF '06; and Sandra Helton, SM '77, in a discussion focused on the challenges and benefits of board membership, noting that getting access to a board can oftentimes be the ultimate glass ceiling for women. Helton encouraged the audience to pick a board that is the right fit, with a compatibility of values and a moral compass that they share. Chakravarthy spoke about being a part of an investor board where the responsibility is more about being a part of the team and building a company. And Frey noted the challenges that come with being interviewed to be the "woman on the board" as more and more companies look to add diversity to the mix.

Faculty Fireside Chat with Renée Gosline, Senior Lecturer & Research Scientist

Renée Gosline presented a fireside chat on cognitive bias, technology, and leadership, beginning with a central question: In a world where evaluation is constant, how can we be deliberate about aligning the way in which people evaluate us with the way we want them to perceive us? Addressing our bias allows us to effectively address them, opening communication and building trust. She also highlighted the impact of storytelling, and encouraged the audience to deliberately think of their own narratives to codify their personal journeys in a way that provides motivation and inspires others.

Closing Keynote: Breaking the Mold with Lotte Bailyn, T. Wilson (1953) Professor of Management, Emerita

Lotte Bailyn began her talk by acknowledging the power of looking around a room full of MIT Sloan alumnae and recognizing how much things have changed since she first came to the school in 1969. Speaking on the importance of embracing creative collaboration for productivity, Bailyn encouraged the audience to address the underlying assumptions still experienced by many in the modern workplace. She left the audience with a call to action, "What are the conditions that make life difficult? Does it have to be that way? Can it change? Shift focus and give a critical eye to the so-called rules and the assumptions on how you have to work."





“There is something very special and inspiring about being in a room with a with range of MIT Sloan alumnae. You see that the school recruits engaged, well-spoken, thoughtful, and smart (very smart!) women who remain as interested in learning today as they were when they were at MIT Sloan.”

MARLA SHAPIRO, MBA '97



“The women’s conference highlighted the incredible leaders in classes of every decade. The consistent theme of ‘lead with integrity’ was notable and inspiring.”

ACEIL HALABY, SM '17



WHAT MAKES A NEW TECHNOLOGY CATCH ON?

New research from MIT Sloan’s Christian Catalini and Catherine Tucker indicates that early adopter access and enthusiasm are key for product launches.

By Rebecca Knight

There are many reasons why certain technologies become popular while others fizzle. The timing has to be right; the price must be reasonable; and the product has to be perfect, or at least free of glitches and bugs.

But according to a new study by MIT Sloan professors Christian Catalini and Catherine Tucker, two other important factors also fuel technology take-up: early adopter access and enthusiasm.

The study, which looked at the use of Bitcoin among college students, found

that, when early adopters are given special access to technology, their subsequent enthusiasm helps it catch on. When those early adopters don’t get special treatment, however, they are more likely to both abandon the technology and wield their power over others to do the same.

“For early adopters, it seems that there’s a lot wrapped up in their reputation and identity as technology leaders within their peer groups,” says Catalini, the Theodore T. Miller Career Development Professor of Entrepreneurship and



Christian Catalini
Theodore T. Miller Career
Development Professor of
Entrepreneurship



Catherine Tucker
Sloan Distinguished
Professor of
Management

assistant professor of technological innovation, entrepreneurship, and strategic management.

“These are people who care about exclusivity—they like access when no one else has it. When that access is denied, the technology somehow loses its luster. They abandon it, and then their friends and acquaintances—who presumably look to them for guidance in this area—do so as well.”

The study, which appeared in the July 2017 issue of *Science*, has broad implications for how and when businesses launch new products. “Companies often limit the supply of a new product for logistical or operational reasons, which is understandable,” says Catalini. “But our research shows there is another key reason to hold back: consumer behavior. Giving early adopters early access increases the chances that the product will capture their attention and interest.”

The study has an unusual backstory: In 2014, two MIT students raised \$500,000 from donors, mostly alumni, to fund the MIT Bitcoin Project. The project involved offering each of the school’s incoming freshmen access to \$100 worth of Bitcoin, which, at the time, was a mysterious and mostly unknown digital currency. The goal was to encourage Bitcoin adoption on campus as well as student development of innovative blockchain applications.

Catalini and Tucker, the Sloan Distinguished Professor of Management and a professor of marketing, viewed the experiment as a unique opportunity to look at how early and late adopters interact with new technology. “There is an extensive literature devoted to understanding the diffusion of new technology and the role early adopters play in it,” says Catalini. “But it had been impossible to pinpoint just how powerful this group really is because we’d never been able to know what would happen if the natural sequence of adoption was subverted, and early adopters weren’t able to use a new technology first. This was our chance to find out.”

At the beginning of the school year, 4,494 freshmen were offered access

to Bitcoin and about 3,100 joined the experiment. Those students had five days to sign up, complete a survey, and create a digital wallet.

Over that period, Catalini and Tucker identified which students exhibited so-called natural early adopter (NEA) traits compared to the other students. NEAs, for instance, signed up for the Bitcoin distribution within the first hours from launch. They were also more likely to be top computer programmers, to have built mobile apps, and to already have used

Maybe it is because they need to feel part of that group of early users that explores and learns about a new technology first, or because adopting early is part of their identity and reputation as technology leaders among their peers. When that’s absent, they refuse to adopt.”

Interestingly, this behavior was only present in dorms, and was especially pronounced in smaller dorms where the delayed or non-delayed status of students would likely be more visible. Off campus, however, there was no measurable

“GIVING EARLY ADOPTERS EARLY ACCESS INCREASES THE CHANCES THAT THE PRODUCT WILL CAPTURE THEIR ATTENTION AND INTEREST.”
—Christian Catalini

peer-to-peer payment apps, such as PayPal or Square Cash. The researchers referred to the rest of the students as natural late adopters (NLAs).

During the rollout, Catalini and Tucker randomly delayed the distribution of Bitcoin to 50 percent of the students by two weeks. They then tracked all Bitcoin transactions through the students’ digital wallets and the Bitcoin public ledger, the blockchain.

What happened next was “surprising and somewhat counterintuitive,” says Catalini. Students who were identified as NEAs, but who received delayed access, cashed out their balance and stopped using the technology at almost twice the rate of early adopters who obtained their payment earlier. Both groups of late adopters, delayed or not, showed cash-out rates of about 10 percent, suggesting these people were indifferent to the postponement.

“We expected NEAs to wholeheartedly embrace Bitcoin,” says Catalini. “But by delaying the distribution by two weeks, it seems we unraveled the diffusion process. What the data suggests is that NEAs derive utility from early, exclusive access.

difference in cash-out rates among early and late adopters, delayed or not.

This behavior had long-run repercussions: NLAs were more likely to discontinue using Bitcoin if the NEAs living around them did. This spillover effect is likely attributable to the fact that late adopters rely on early adopters to make decisions about which new technologies to use. “In highly socialized environments, where the consumption of technology is visible to others, the decision to adopt becomes a social one,” says Tucker, who studies electronic privacy. “So when the early adopters abandoned the technology, the technology failed to diffuse.”

The study’s results provide insights for technology companies planning to launch new products, according to Catalini. “My best advice for companies—from startups to established blue chips—is to clearly identify the early adopters who are likely to accelerate your technology and give them early access to it,” he says. “This fulfills their need to adopt first and capitalizes on their potential to encourage wider adoption.” ● ● ●

EVOLUTION OF



HACK THE

By Kara Baskin

MIT'S ICONIC DOME, TRANSFORMED INTO A LIKENESS OF R2-D2 FROM STAR WARS OR TOPPED WITH A PROPELLER BEANIE. AN ENORMOUS WEATHER BALLOON LABELED "MIT" BOUNCING ONTO THE 50-YARD LINE DURING THE TRADITIONAL HARVARD-YALE FOOTBALL GAME.

YES, MIT HAS A PROUD, STORIED HISTORY OF INFORMAL HACKING—BENIGN PRANKS THAT SHOWCASE STUDENT INGENUITY, GENTLE LAWLESSNESS, AND BOUNDARY PUSHING.

TRACING MIT'S UPSTART HISTORY

And MIT's creative culture stretches beyond hacking events—it's baked into the very DNA of MIT Sloan, says Bill Aulet, managing director of the Martin Trust Center for MIT Entrepreneurship and one of the faculty advisors for Hacking Medicine.

MIT, he says, has a long history of educating disruptors, outsiders, and upstarts. To understand today's hacking culture, it's important to consider the past.

"MIT essentially came about as a vocational school, and it drew from a totally different pool of people than at other institutions. These are the upstarts, people taking on the established order, because it's who they are," Aulet says.

Recently, hacking has risen to new, formalized prominence with the launch of Hacking Arts and Hacking Medicine, and the spread of hackathons to numerous MIT Sloan student and faculty-led conferences. Think of these hackathons as brainstorming on steroids: The competitive weekend-long sessions unite students, faculty, community members, and outside leaders to collaborate on disruptive ideas, sprinting toward solutions and forming partnerships that often lead to successful companies. Hackers compete for prize money; they also vie for visibility and validation.

AT THE INTERSECTION OF INNOVATION AND ART

At Hacking Arts, an annual event launched in 2013, engineering meets creativity. It unites MIT-style innovation with artistic vision, from design and fashion to gaming and music. Participants apply from across the country to design or create a prototype that enhances an artistic discipline or somehow incorporates the arts. Teams get 24 hours to design, build, and pitch an idea to a panel of industry leaders.

Hacking Arts was founded by Kathleen Stetson and Catherine Halaby, both MBA '14, with the support of the Martin Trust Center for MIT Entrepreneurship. Center founder Edward Roberts, SB '57, SM '57, SM '60, PhD '62, David Sarnoff Professor of Management of Technology, connected the duo with MIT alumnus Jean-Jacques Degroof, SF '93, PhD '02. Degroof provided funding for operating costs to keep the hackathon from becoming a one-off event, says Stetson.

"MIT is student driven. Here, you'll find the support to do what you want to do," Halaby says.

The event—which also includes a conference and a tech expo—is organized by the MIT Sloan Entertainment, Media, and Sports Club in partnership with MIT's Center for Art, Science,



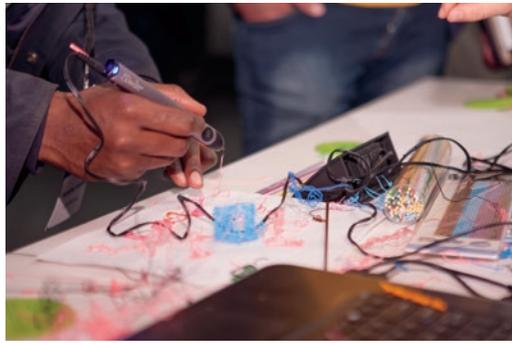


IT'S NOT EXPECTED THAT TEAMS WILL HAVE A FULLY FORMED BUSINESS IDEA AT THE CONCLUSION OF THE HACKATHON. INSTEAD, THE EVENTS ARE ABOUT TEAM BUILDING, VISIBILITY, AND CONFIDENCE.

& Technology and the Martin Trust Center for MIT Entrepreneurship.

One of the most anticipated MIT events of the year, Hacking Arts has grown from 300 attendees in its first year to roughly 1,000 this year, says Stetson, with approximately 200 hackathon participants.

"It's total brain food," says Max Harper, a recent Hacking Arts codirector who won the 2016 competition. His idea, Harmony Space, is an augmented reality app that spatializes musical



frequencies, allowing users to visualize harmony by moving left to right, up and down, and front to back.

The 2016 second-place winner, Team Revive, concocted a virtual reality experience to guide users through tai chi moves, providing feedback on movements and concentration.

Winners receive monetary and in-kind awards (Harmony Space received a \$2,500 cash prize and two weeks to use venue space at the Calderwood Pavilion at the Boston Center for the Arts), but Harper says that prizes are just icing on the cake. Equally important are the recognition that comes from winning an MIT hackathon and the networking opportunities therein.

"It's valuable to be recognized for crazy ideas," Harper says with a laugh. "There's a competitive aspect, but there's also a spirit of community building. If a technologist likes your pitch, you can collaborate. It's a great opportunity for entrepreneurs to encounter technologists."

Importantly, anyone with a promising idea is allowed to apply for Hacking Arts—attendance isn't restricted to MIT students. Harper attended Colorado College and now works at Boston-based virtual reality startup Simmetri.com.

Does this sound a bit nebulous and overwhelming? That's natural, says 2016 Hacking Arts cochair Helen Smith MBA '17.

"I'd never even heard the word 'hackathon' [when I came to MIT]. I almost didn't go, because I was feeling scared. It's an intimidating thing," says Smith.

At its worst, after all, a hackathon could resemble a series of speed-dates—just substitute



“What’s your idea?” for “Come here often?” Couple that with the terror of public speaking when presentation time rolls around, and it’s easy to be overwhelmed.

But the MIT events are built on a spirit of approachable inclusivity. As cochair, Smith upheld the founders’ vision and reached out to partner schools like Emerson College and the Rhode Island School of Design during the application process. She also recruited women and minorities to apply.

“We wanted a balance of undergraduates, graduate students, and young professionals. Last year’s event had 15 percent black or Latino participants, and it was 60 percent women,” Smith says.

Mentors are on hand to guide participants throughout the weekend. These are influential people in their respective fields, like MIT music professors or arts programmers from Duke University. Meanwhile, high-profile judges like former Time Warner executive director Sally Wolf and Artsy CTO Daniel Doubrovkine offer business insights.

There are also company-sponsored competitions. Last year, Adobe challenged participants to use Adobe XD Experience Design CC to create a unique app or website.

It’s not expected that teams will have a fully formed business idea at the conclusion of the

hackathon. Instead, the events are about team building, visibility, and confidence.

“We want people to feel really inspired, to feel less afraid of getting their hands dirty and working with different people, from an engineer to a business person to a designer. That diversity of perspective and background creates more connections across MIT. Relationships go beyond Hacking Arts. We create an ecosystem of building connections and entrepreneurial ideas to shake up the arts,” says Smith. “The money helps, but it’s really about meeting new people.”

HOW HACKING LEADS TO BETTER HEALTHCARE

Hacking Medicine, founded in 2010, applies similar principles to a different sector. This hackathon focuses on using technology and entrepreneurship to design and launch new healthcare solutions.

“We always had a philosophy that interesting things happen when you put people together in the right ways: How do we create a community where people can interact to discuss how the healthcare system works and how it might work better? This isn’t about forming companies. It’s about getting diverse people in a room in a new environment to talk about ideas with people they generally wouldn’t come into contact with,” says Hacking Medicine cofounder Elliot Cohen, MBA ’13.

Cohen cofounded PillPack, an online pharmacy where customers can fill prescriptions online to arrive in pre-sorted packaging. For overwhelmed patients, the service eliminates the stress of sorting and refilling medications.

The idea was conceived in part at Hacking Medicine. In 2012, Cohen and partner TJ Parker won the top prize at Massachusetts General Hospital's first healthcare innovation hackathon.

"MIT has this incredible culture of hacking, which is all about trying to solve really complex problems in the fastest, most efficient way possible. Why can't we bring this hacking mindset to medicine and healthcare—a very gnarly, bureaucratic system in huge need of new, reimagined approaches?" asks 2012 cochair Andrea Ippolito, SDM '12.

The seeds of Ippolito's company, Smart Scheduling, were also formed at Hacking Medicine. Smart Scheduling uses machine learning to help clinics schedule patients and predict no-shows; it was later acquired by athenahealth. Podimetrics, a mat monitoring system that helps diabetic patients detect foot ulcers before they form, also sprang from the event.

Hacking Medicine unites diverse stakeholders like students, clinicians, patients, engineers, and designers in a "short sprint," as Ippolito calls it, to pitch problems, create diverse teams around the most resonant ones, navigate the complexities of healthcare business models, and demo solutions.

First, the pitching: Applicants are urged to present healthcare problems—not solutions to problems—ranging from combating loneliness in nursing homes to bridging the communication gap between patients and providers. After a pitching session, teams form organically, based on shared interests, with various stakeholders wearing colored stickers to foster easy mingling. Engineers might sport blue; designers might wear green. Teams with different expert stakeholders connect and get to work brainstorming and developing prototypes.

WHEN IT'S SAFE TO FAIL,
IT'S ALSO EASIER TO
CHANNEL THE BRAND
OF BOUNDARY-FREE
THINKING THAT SPURS
ONGOING SUCCESS.



HOW TO HACK YOUR COMPANY

WANT TO BRING HACKING'S SPIRIT OF INVENTION AND INNOVATION TO YOUR OWN COMPANY? HERE'S ADVICE FROM HACKING MEDICINE FACULTY DIRECTOR ZEN CHU.

COLLECT COGNITIVE DIVERSITY—THEN PITCH, PITCH, PITCH

"[Our] MIT hackathons deliberately collect diverse sets of stakeholders and skills: users, patients, designers, engineers, specialists, and experts from various scientific domains," says Hacking Medicine cofounder and MIT Sloan Senior Lecturer Chu. "Thirty-second elevator pitches form the key medium to communicate rapidly and concisely. Pitches rapidly evolve with each iteration and learning cycle." So think in terms of concise sound bites, not elaborate business plans.

STAY ON THE PROBLEM AND INVESTIGATE DEEPLY

"Hackers are encouraged to go deep on problems and not jump too early to solutions," Chu says. "Ideas grow and change over the course of an event, maximizing the feedback from a diverse set of stakeholders." It's OK if you don't come up with a solution right away.

ENCOURAGE AND AMPLIFY OUTRAGEOUS IDEAS

"Big companies are conservative and risk averse, just like healthcare," Chu says. "But it's important to explore, question, and encourage crazy, edgy, and silly ideas." This is true regardless of the sector. "Often, the winning ideas start from these wild tangents and from the cognitive diversity of teams. Keeping the event fun and expectations low can liberate novel ideas," he says. Remember: No idea is too outrageous. Sometimes, brilliant solutions spring from unexpected places.

Mentors, sponsors, and consumers commit to blocks of time to appear on-site to test the design and check assumptions. (For example, Hacking Medicine might recruit the head of a diabetes service line at a Boston hospital to serve as a sounding board.) At the end of the weekend, teams present for three minutes before a panel of judges.

As with Hacking Arts, the organizers recruit participants from beyond the MIT community. Good ideas can come from anywhere, Ippolito says.

"We've created a playground of peers, and it's an open community," says Hacking Medicine cofounder and faculty director Zen Chu, an early stage digital health investor and MIT Senior Lecturer in Healthcare Innovation who teaches Healthcare Ventures at MIT Sloan.

"Hacking Medicine's process lowers the barriers to pressure-testing solutions. You can stand up, pitch, and try it out. Re-inventing healthcare still suffers from conservatism, perfectionism, complexity, and regulation. The process that Hacking Medicine has honed helps to overcome those challenges and compresses the iterations into a few hours," Chu says.

HACKING IN ACTION

Anyone with a glimmer of an idea can apply to attend a hackathon and bat around solutions. But what turns an enterprising hacker into a force for ongoing change? How does an idea become a company? Through a thoughtfully established infrastructure and an environment that champions creativity.

MIT has built systems to bring ideas born out of hackathons and on-campus collaborations into the world for sustained impact. In just one example, consider the MIT Legatum Center for Development and Entrepreneurship, a kind of academic incubator for purpose-driven innovation. The Center awards monetary fellowships to promising entrepreneurs aiming to launch innovative companies in emerging and frontier markets. The program is coveted: This year, the Center received 87 applications and awarded 22 fellowships, totaling \$800,000 in grant money. And ideas are just the beginning.

At Legatum, the hacking mentality is put into practice to build and sustain companies in geographic regions that have been traditionally overlooked.

“Entrepreneurship and for-profit ventures can have such an impact in emerging markets,” says Georgina Campbell Flatter, executive director of the Legatum Center. “They may solve [a problem] via technology, but it’s the innovative business model and strong ethical leadership that lead to sustained impact—affecting more than just one person, one town, one country; impacting communities of people across countries and continents.”

Of course, this is a daunting prospect. As she notes, many students might find it safer to take a traditional internship rather than to strike out on their own. MIT counters that thinking by providing safe places to innovate.

“This kind of thinking involves a lot of risk. We celebrate risk-takers. It’s OK to fail,” Campbell Flatter says. “When it’s safe to fail, it’s also easier to channel the brand of boundary-free thinking that spurs ongoing success.”

And there is a growing track record of success. “Of the ventures we can track, over \$200 million in professional investment capital has been invested in ventures that originated at MIT Hacking Medicine events,” Chu says. “More important, the process has now been taught to thousands of attendees in 15 countries, tailored to the local health problems and capabilities on the ground.” Hacking Medicine has staged more than 90 events worldwide by partnering with local health systems.

And it’s this alchemy—the combination of creativity and problem solving, invention and application—that sets MIT’s culture apart from the rest of the world, says Aulet of the Martin Trust Center for MIT Entrepreneurship. “I don’t want to sound like I’m [being overly promotional], but there’s no other place where the president of the university will urge students at graduation to go out and ‘hack the world,’ to rewire society’s circuits. There’s a strong institutional pride—a pride in being willing to be a little bit geeky. To be different.” ● ● ●



MIT HAS BUILT SYSTEMS TO BRING IDEAS BORN OUT OF HACKATHONS AND ON-CAMPUS COLLABORATIONS INTO THE WORLD FOR SUSTAINED IMPACT.





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IN MEMORIAM

WITH DEEP SADNESS, THE MIT SLOAN SCHOOL OF MANAGEMENT REPORTS THE PASSING OF THE FOLLOWING ALUMNI.

1921	Dr. Williston Wirt, BO	October 12, 1987	1952	Mr. Harry W. Chambers, BO Mr. Oscar W. Kaalstad, SB Mr. Harry S. Kradjian, SB Mr. Bernard Werthan, SB	January 24, 2017 October 11, 2013 January 27, 2017 May 5, 2017
1923	Mr. William M. Bigger Jr., SB	February 1, 1970	1954	Mr. Robert L. Adam, SB Mr. Armando Garza Sada, SB Mr. Robert W. Stewart Jr., SB	January 10, 2017 March 15, 2017 May 1, 2017
1927	Mr. Richard P. Dixon, BO	August 1, 1982	1955	Mr. Norry B. Hersey, SB Mr. James J. Inman, SB Mr. Addison H. Kermath, SM Mr. Jack C. Schwab, SB Mr. David D. Snider, SB	January 6, 2017 April 4, 2017 February 1, 2017 July 19, 2016 November 13, 2016
1938	Mr. Paul R. Des Jardins, SB Mr. Robert S. Gordon, SB	January 12, 2013 September 14, 2016	1956	Mr. Howard W. Blauvelt, SE Mr. Patrick J. Coletta, SF Mr. Richard A. Jacobs, SB	May 22, 2017 March 13, 2017 December 18, 2016
1940	Mr. Charles Forbes DeMaily, SB Mr. Robert A. Parent, SB Mr. Leo Shufirin, BO	April 10, 2017 August 17, 2014 September 28, 1998	1957	Dr. Theodore F. Gautschi, SF Mr. Ronald W. Keefe, SB Mr. John R. Morris, SM Dr. Albert E. Sherwood, SB Mr. Robert S. Williams, SF	September 4, 2015 January 23, 2017 February 7, 2017 May 5, 2017 June 27, 2011
1942	Mr. Christian A. Kampmann, SB	August 4, 1962	1958	Mr. Israel Feldman, SM Dr. Gary Fromm, SM Dr. Donald E. Hammer, SM Mr. Donald I. Klotz, SE Virgal L. Schad, Jr., SF	June 2, 2017 March 23, 2017 February 29, 2016 October 22, 1993 May 18, 2017
1944	Mr. Robert A. D. Schwartz, SB	February 18, 2017	1959	Mr. John I. Cumberland Jr., SF	June 15, 2017
1947	Mr. John M. Cart, SB Mr. William W. Evans, BO Mr. Alvin A. Markus, SB	January 2, 2017 May 18, 2017 March 25, 2017	1960	Col. James R. Cumberpatch, SF Mr. William R. De Long, SF Mr. Walter P. Rozett, SF	April 28, 2017 March 26, 2017 January 29, 2017
1948	Mr. John W. Juechter Jr., SB Mr. William A. Lockwood, SB Mr. William M. Oard, SB Mr. Donald Spanier, SB Mr. John B. Sproul, SB Mr. Thomas P. Waldron, SB Mr. John D. Winninghoff, SB	August 28, 2016 November 29, 2012 January 21, 2017 March 18, 2014 May 24, 2017 December 29, 2016 March 8, 2017	1961	Mr. Theodore J. Lakoski Sr., SF Mr. Robert C. Pemberton, SM	January 25, 2017 February 15, 2017
1949	Mr. J. Thomas Toohy, SB Mr. James Veras, SB	January 1, 2017 April 30, 2017	1962	Mr. A. Bruce Burns, SF Mr. Abe Feinberg, SM Mr. Joseph V. Iemolo, SM Dr. Kenneth R. Taylor, SB	September 27, 2016 January 20, 2017 September 29, 2016 September 9, 1993
1950	Mr. Robert A. Fissette, SB Mr. Robert V. Garvin, SB Mr. John V. Hedberg, SM Mr. John Jacoby, SB Mr. Robert E. Scifres, SF Mr. Dirk de Vries, SB Mr. Floyd L. Wideman Jr., SB	June 9, 2017 June 27, 2017 December 12, 2013 June 28, 2017 May 26, 2017 February 11, 2017 July 19, 2015	1963	Dr. William E. Bonnet, SE Mr. Arnold H. Singal, SM	November 29, 2013 January 22, 2017
1951	Mr. James H. Banister Jr., SB Mr. Edward P. Gruca, SF Mr. Arnold J. Rothstein, SM	January 30, 2015 December 21, 2016 January 30, 2017			

1964	Mr. Ernest Eltis, SE Mr. Clarendon G. Richert, SE	January 3, 2017 February 28, 2017	1976	Mr. Bedford F. Foster Jr., SE Mr. Stephen E. Mermelstein, Esq., SM	March 6, 2017 February 12, 2017
1965	Dr. Richard H. Boehm, SF Col. Archie L. Wood, SM	March 30, 2017 May 16, 2016	1977	Mr. Alfred H. Savage, SB	January 24, 2015
1966	Mr. Walter L. Connolly, SE Mr. Donald K. Conover, SF Mr. Norman W. Kneissler, SM	October 26, 2016 March 28, 2017 June 21, 2017	1979	Maj. John C. McDugald, SM	February 10, 2017
1967	Mr. John R. Atkinson, SE Mr. William A. Davis Jr., SF Dr. Michael D. Hawkins, SB Mr. John Radomsky, SF Mr. Herbert W. Shea, SE	November 29, 2011 May 4, 2017 August 28, 2009 December 17, 2016 May 4, 2011	1980	Mr. Richard A. Darling, SE Mr. Richard L. Lang, SE Mr. William J. Mates, SM Mr. Howard W. Seidler, SB	March 6, 2017 December 20, 2002 January 11, 2017 June 22, 2017
1968	Mr. Robert C. Biss, SE Mr. Kenneth C. Browning, SM Mr. William M. Munroe, SF	June 24, 2010 April 17, 2017 February 2, 2017	1982	Mr. Gary L. Burkart, SF	June 5, 2017
1969	Mr. Richard Dulude, SE Mr. Stanley C. Rose, SE Mr. John F. Walters, BO	January 1, 2017 February 24, 2017 June 18, 2016	1983	Dr. William C. McCorkle Jr., SE	September 19, 2016
1970	Mr. Gerhard W. Goetze, SE Dr. David W. McDonald, SE Dr. S. Eggert Peterson, PhD Mr. Raymond F. Pettit, SE	January 17, 2007 January 25, 2017 December 23, 2016 June 6, 2017	1984	Mr. Charles W. Murphy, SM	March 27, 2017
1971	Mr. Stephen P. Baxter, SB Mr. Joseph P. Bergin Jr., SF Mr. Thomas H. Derby III, SM	May 29, 2017 March 7, 2017 January 5, 2017	1985	Mr. William R. Coffman, SE Mr. Marvin R. Eshelman, SE	February 19, 2015 February 4, 2017
1972	Mr. Fredrik E. Anderson, SF Mr. Rene Dionne, MO Mr. Robert R. Lynn, SE Mr. James L. Wheeler, SE	June 10, 2017 December 29, 2009 May 27, 2017 November 20, 2012	1986	Mr. Harun bin Din, SE Sister Agnes F. Otting, SE Dr. Kiran J. Randeri, SE	February 26, 2017 April 4, 2003 December 9, 2016
1973	Mr. Jack R. Barrett, SE Ms. Maryann E. Dufresne, SB	May 7, 2017 August 20, 2014	1987	Mr. Alain Wolff, SE	February 13, 2015
1974	Dr. C. L. John Legere, SB Mr. Louis M. Pagones, SB Mr. T. Charles Powell, SF	February 5, 2000 March 26, 2012 April 3, 2017	1988	Mr. Carlos German Crivelli, SF	June 22, 2017
1975	Mr. Frederick A. Rojak, SB Mr. W. Clive Sloan, SE	June 24, 2006 March 28, 2015	1989	Mr. Avit Ouellet, SE	August 4, 2016
			1990	Mr. Arshad Farooq, SE Mr. Stuart I. Grief, SM	April 8, 2014 August 20, 2016
			1992	Mrs. Leslie C. Golemme, SM	April 22, 2017
			1993	Mr. Prijadi Praptosuhardjo, SE	December 5, 2001
			1998	Ms. Fern B. Jones, SM	May 17, 2017
			2004	Patrick D. Fleck, SF	April 12, 2017
					<i>As of June 2017</i>



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