

Dean, MIT Sloan School of Management

Academic year 2006–2007 was a period of continuing innovation throughout MIT Sloan. It also marked the last year the School was under the leadership of Richard Schmalensee, who stepped down on June 30 after nine years as dean.

Curriculum Innovation

Sustainability Lab (S-Lab)

Using a collaborative, interdisciplinary approach to sustainability challenges, S-Lab was jointly taught in the spring by seven of the School's top faculty and featured opportunities to work with a variety of companies confronting environmental and social business challenges.

One of the key principles of S-Lab is the idea that people need to understand the business aspects of a problem in order to properly address a solution. To effectively approach the issue of global warming, students need first to comprehend how the climate works and what role carbon and greenhouse gases play in that. Pairing lessons in science and social dynamics with practical simulation, S-Lab gives students the tools to both assess the big picture and work with companies toward positive solutions.

S-Lab students represented a diverse mix of students from MIT Sloan, the Engineering Systems Division, the Departments of Urban Studies and Planning and Architecture, other programs at MIT, and the Kennedy School of Government at Harvard. In addition to simulations, case studies, guest speakers, and presentations, student teams worked on semester-long projects with clients ranging from large corporations to startups and small firms, nongovernmental organizations, and MIT itself.

Entrepreneurship and Innovation

A new option on entrepreneurship and innovation (E&I) was offered to class of 2008 applicants. Thirty-five percent (114) of incoming MBAs submitted applications for the E&I option, far surpassing expectations, as the program was limited to 50 students. Students in the E&I option had more required classes and developed a business plan for MIT's \$100K Entrepreneurship Competition. Participants met regularly to discuss their ideas for businesses and had special access to on-campus speakers.

Other Initiatives

Marketing

Audio podcasts were launched in February 2007 in the context of an overall plan to adapt the MIT Sloan website to new technologies, including Web 2.0 features. Podcasts allow us to showcase prominent speakers, communicate lively first-person narrative, and provide greater depth to written material. Since their introduction, podcasts have proven to be extremely popular, with each episode downloaded thousands of times.

Alumni Enhancements

To keep alumni better informed and connected to the School and each other, a new alumni e-newsletter, developed jointly by the Office of Marketing and Communication and the Office of External Relations, was launched in April 2007. Most of the emails (88 percent) went through successfully to a list of over 15,000 alumni. The e-newsletter had a strong open rate of 26 percent after only three days, and only eight alumni elected to unsubscribe.

Building Project

A groundbreaking ceremony was held on May 15, 2007 for Building E62, marking the culmination of nearly a decade of fundraising, planning, and design efforts. MIT president Susan Hockfield and Dean Schmalensee cohosted the ceremony, which kicked off the first phase of construction on the landmark 209,000 square-foot multipurpose management center, slated for completion in 2010.

Schmalensee wielded the ceremonial shovel and was joined by the building's lead donors, E*Trade and International Securities Exchange founder William A. Porter and his wife Joan, who presented MIT with a gift of \$25 million, the project's largest. Once completed, the new building will house the William and Joan Porter Center for Management Education in honor of the entrepreneur, a 1967 graduate of the MIT Sloan Fellows program.

Education

MIT Sloan MBA Program

The MBA program portfolio includes the Admissions, Student Affairs, and Career Development Offices, spanning the students' experience before and during their time at the Sloan School of Management. There remains a tremendous energy toward renewed and increased integration among these teams and throughout the School. High-touch relationship building permeates all facets of planning, advising, and service delivery throughout the MBA program. The sense of community and School pride among the student body continues to grow, as does the focus on encouraging lifelong commitment and involvement. MBA program teams, in collaboration with the Alumni Office and Corporate Relations, have endeavored to markedly enhance alumni, recruiter, and corporate relationship management and satisfaction.

In recent years, the MBA program has worked to reinforce themes of professional behavior and ethical conduct in the MBA community via renewed efforts within the Professional Standards Committee. This has included creation of an orientation module, a well-developed communications plan for students and faculty, standardized syllabi language, and a focus on providing tools for giving constructive feedback, including within our course evaluation process. In addition, initiatives such as the E&I option, the Sloan Innovation Period (SIP), and the proliferation of student trips and treks, keep our staff extensively engaged in all aspects of student life, both academic and extracurricular.

Admissions

AY2007 was a success for the MBA Admissions team. Highlights include the following:

- Applications increased slightly from 2,943 in AY2006 to 3,030 in AY2007. This change is consistent with increases in applications at our peer institutions.
- Hosted 112 pre- and postadmissions events. Included in this figure are 57 MIT Sloan-on-the-Road presentations and receptions worldwide, 16 events focused on diversity, eight company presentations to analysts, 23 college and MBA fairs, and nine admit events.
- Helped launch and promote the E&I option during its inaugural year to admitted applicants in the class of 2008. We invited 328 admitted MBA candidates to submit applications for the E&I option, and 114 (or 34.7 percent) responded. During AY2007, 808 out of 2,898 MBA candidates (or 27.8 percent) applied for the E&I option.
- Collaborated successfully with the Sloan Fellows program to cross-market the programs. In addition, we held a joint women's panel and a reception for prospective applicants for the MBA and Sloan Fellows programs and invited the Sloan Fellows program to participate in the Forte MBA Fair.
- Expanded our efforts to increase diversity by working with groups, such as Forte Foundation, StartingBloc, and the Liberal Arts Consortium, and continued to conduct college campus sessions and attend diversity forums to reach out to applicants who do not traditionally apply to MBA programs or to Sloan.
- Created new MBA Careers into Action brochures to help prospective applicants understand the many academic and extracurricular options available to them as students.
- Launched the e-brochure, a fully customized brochure delivered electronically. In the first 30 days of our launch, the e-brochure was requested by 1,329 prospective applicants. This represents 50 percent more requests than for copies of the viewbook during the same period last year.
- Printed the MBA viewbook using 11,860 pounds of paper, which was 100 percent postconsumer recycled. The paper selection preserved 113.86 trees for the future, saved 48,363 gallons of wastewater flow, prevented 10,536 pounds of net greenhouse gases, and conserved 80,648,000 BTUs of energy.

Goals and New Initiatives

For FY2008, the MBA Admissions Office will continue to work to:

- Increase the enrollment of early career applicants and young professionals in the class. In April 2007, we reached out via email to 1,800 "early career" applicants and provided them with a link to the e-brochure. These 1,800 prospective applicants were drawn from the GMAT Search Service. We are considering holding a career counselors day to reach out to college advisers who might influence students to apply to business school. Once determined, a separate budget request will be made.

- Collaborated with the Biomedical Enterprise Program to increase awareness of the program and align marketing and branding with the MBA campaign.
- Market the E&I option through the MBA Admissions website, linking to the Entrepreneurship Center and highlighting the program in MIT Sloan-on-the-Road presentations.
- Collaborate and cross-market the Sloan Fellows program. This collaboration will include joint travel by the directors of MBA Admissions and the Sloan Fellows program.
- Update and refresh our leadership and MIT Sloan-on-the-Road videos used for AdMIT Weekends, Orientation, resource development, and the like.

MBA Student Affairs

The MBA Student Affairs Office (SAO) manages academic services and community-building programs for MBA students and faculty. As part of these services and programs, the SAO facilitates students' practice of management skills outside the classroom, and provides support to students in academic or personal difficulty. This was a year of successes and challenges for the SAO team. We continued to successfully deliver programs and services to the MBA population. At the same time, we faced challenges associated with a continued increase in the volume and complexity of student initiatives, combined with insufficient staffing. We will need to closely examine our priorities and staffing model in the coming year in order for our success to be sustainable.

Highlights of the Year

- Improved surveys: We achieved a number of goals with respect to enhancing our two large-scale surveys, the First Semester Experience Survey and the Dean's Survey. We reduced the number of questions on the First Semester survey by 30 percent, and we rewrote questions on both surveys to generate better data to guide our strategic decisions. In addition, we increased the response rate on the First Semester Experience Survey from 45 percent to 81 percent.
- Orientation themes and peer mentoring: We introduced a number of Orientation themes related to the Practicing Management model of Prepare-Act-Reflect, and we placed a greater emphasis on linking the themes of the various Orientation modules. We also continued to enhance Pilot (peer mentor) training and recognition. Once again, Orientation was successful by several measures. Almost 90 percent of first-year students have given positive ratings to the Orientation program in the past two years.
- Advising on student initiatives: Our MBA students continue to organize an ever-proliferating number of activities. These include major Sloan Activities Board community events, senate events, and myriad club initiatives ranging from speakers to major international conferences. This year, we sought to enhance our advising and coaching role with respect to these initiatives. In particular, we emphasized the applicability of the Prepare-Act-Reflect experiential learning model introduced in Orientation. We will seek to further strengthen our advising role and align with curricular experiments in the next year.

- SIP: We coordinated with faculty and guests to deliver 34 research workshops. In addition, we worked with students, faculty, and guests to design and deliver two experimental workshops on topics of corporate social responsibility and two new workshops for Pilots.
- Entrepreneurship and innovation: SAO played various roles in support and delivery of the launch of the E&I option within the MBA curriculum. Most notably, we made a preliminary assessment of program management tasks, and we partnered with the Entrepreneurship Center on the Silicon Valley study tour. We also advised numerous E&I students on course selection and degree requirements.
- International trips: Two of the three international trips we sponsored followed the traditional model, in which students managed the trip design and delivery, with guidance from our team. We also piloted a highly successful variation on this theme in Professor Yasheng Huang's trip to Yunnan province in China. The content of this trip represented a departure from the traditional model in that it focused on management issues outside of major cities in the host country.

Goals and New Initiatives

- Orientation: In summer 2007 we will incorporate sustainability themes into Orientation as an extension of previous years' focus on ethics and practicing management, all under the umbrella theme of the Sloan mission.
- Further enhancement of peer mentor roles: We have placed a strong emphasis in recent years on enhancing Pilot training. This year, we will also define the Pilot role more clearly and extend it beyond Orientation. We are strengthening the role of a lead Pilot (or Captain) for each team and further formalizing the links between Pilots/Captains and the SAO cohort advisers.
- Raising the bar on advising and coaching: The most potentially powerful opportunity both to align with new curriculum initiatives and to enhance our services relates to further coordination with the practicing management and coaching initiatives. Our goal is to help students maximize the benefit of their out-of-the-classroom learning and to help them better understand the connections between theory and practice.
- Student initiative guidelines review: SAO is currently reviewing policies and guidelines related to student activities as part of a larger departmental initiative to reduce pressure in the core as well as to encourage students to emphasize quality over quantity in their initiatives.
- Enhanced support in the core: We are partnering with rising second-year students to incorporate a variety of new support elements into our advising and programming initiatives.

MBA Career Development

The Career Development Office (CDO) manages the career education and corporate recruiting services for MBA students. As part of this effort, the CDO partners with Organizational Processes, Communications faculty, and the MIT Leadership Center to develop and deliver topical sessions related to the career development of our students, as well as developing and delivering standalone career education workshops. In addition, the office manages all aspects of the corporate recruiting process, including company presentations, the campus recruiting program, the student job board, three annual career fairs, and the strategic and logistical support of student club treks for employment purposes. The CDO team was highly successful again this year in providing this support to MBA students.

The CDO focused on the following initiatives to reach our 2006–2007 goals:

- Continue efforts to educate students appropriately, focusing on lifelong career development, including self/career assessment and skill-building experiences (for example, dining and/or reception etiquette)
 - o Continue to provide students with structured opportunities to learn about MBA job roles, industries, and employer recruiting strategies and expectations (to enhance current offerings, we will increase the number of alumni and recruiters involved in the career education offerings)
- Identify and implement new technologies to support career education offerings (such as interview software and online assessment tools) and enhance Career Core classroom materials and presentations
 - o In addition, review and revise CDO student website to be more user-friendly in terms of access and vocabulary
- Identify and implement new services for recruiters (including electronic newsletters and the continuation of Recruiter Roundtables)
- Continue to build on existing partnerships with multiple Sloan constituencies to enhance services for students and recruiters (for example, cross-Sloan marketing efforts via Recruiter Roundtables, supporting changes to 15.280 Communication for Managers curriculum, and supporting strategic change initiatives)
- Continue our efforts to ensure the CDO staff have the deepest levels of knowledge regarding MBA careers and career paths and that our presentation/teaching skills are as polished as possible
- Become fully staffed

Goals and New Initiatives

The CDO's goals for 2007–2008 build on previous years' goals and support our ongoing efforts to create the best possible services for students and recruiters:

- Develop the CDO team to ensure that new and existing staff members remain competitive in their knowledge (in the coming year, we will continue focusing on teambuilding and training)

- Continue to educate students appropriately, focusing on lifelong career development themes and skill-building exercises, including evaluating and redesigning Career Core based on student and recruiter feedback
 - o Continue to provide students with multiple structured opportunities to learn about MBA jobs, industries, and employer recruiting strategies and expectations
- Identify and implement new technologies to support the career education offerings and to enhance Career Core classroom materials and presentations (in the event SloanSpace is replaced, work with the Program in Science, Technology, and Society to successfully transition the career resources website to the new technical platform)
- Identify and implement new services for recruiters: create an office-like enclave with two computer terminals and a printer for recruiter use while on campus
 - o Hold the biannual Recruiter Day in spring 2008
- Continue to build on existing cross-Sloan partnerships to enhance services for students and recruiters (such as cohort advising/coaching, Recruiter Roundtables, the Big Idea media project, and curricular innovations)
- Identify and implement a new survey and reporting instrument to support the annual Employment Survey and Reporting project

International Programs

For nearly 50 years, since MIT Sloan faculty helped create the Indian Institute of Management in Calcutta, the School has pioneered the extension of Western-style management education around the world. During the last decade, this has included programs in China, Korea, Mexico, and Ghana.

2006 marked the 10th anniversary of the MIT-China Management Education Project, established in 1996 with Fudan University in Shanghai and Tsinghua University in Beijing to help those universities develop English-language international MBA (IMBA) programs. (From the beginning, our Advisory Board of Chinese educators, Chinese-based entrepreneurs, and multinational corporations doing business in China urged that the IMBA programs be presented in English to better prepare students for careers in international business. The board offered this advice years before teaching in English became fashionable in China.) Tenth-anniversary celebrations in Beijing and Shanghai included symposia and festive gatherings attended by our dean, Richard Schmalensee (now dean emeritus).

Lingnan (University) College, Sun Yat-sen University in Guangzhou joined the project in 1999, and Yunnan University in Kunming has participated with internationally oriented (IOMBA) classes since 2002. Yunnan graduated its first IOMBAs in January 2007. To date, there are 2210 IMBA and IOMBA graduates. Most are from mainland China, but as interest in doing business in China grows, so does international enrollment.

The MIT-China Management Education Project brings Chinese faculty to MIT Sloan for training in course development and Western-style teaching. Since 1996, 160 faculty have come, including 19 in 2005–2006. The project has worked so well that its initial time frame of five years has been extended to 15.

2006 was the third year of our eight-year agreement with Sungkyunkwan University Graduate School of Business (SKK GSB) in Seoul, Korea, to help SKK GSB develop a Western-style, English-language MBA program. To date, eight SKK GSB faculty have spent time at MIT Sloan developing courses and pursuing research. During 2004 and 2005, 11 faculty from Instituto Tecnológico y de Estudios Superiores de Monterrey in Mexico and three from the Ghana Institute of Management and Public Administration spent terms at MIT Sloan working to enhance their MBA programs and their own performance in those programs.

MIT Sloan faculty, students, and staff are participating in our international programs in increasing numbers. Faculty teach on the Chinese and Seoul campuses and host Chinese and SKK GSB faculty in Cambridge. Teams of MBA students visit the Chinese schools to help students learn about workplace issues not usually taught in their classrooms—for example, resumé writing, interviewing, team-building, leadership, and networking. Next year, eight IMBA students may team with eight MBAs in working visits to each other's campuses, and one or two may exchange enrollments. Many second-year SKK GSB MBA students spend their final semester in Cambridge; 14 came in spring 2007. Next year the MIT Sloan director of admissions will hold workshops in China to help admissions officers there and from SKK GSB deal with such matters as application reading, interviewing, and marketing. Sloan-on-the-Road visited Seoul, Shanghai, and Beijing in October 2007.

The courses of study and research, the visits, and the exchanges described here offer meaningful international experiences to participants in all of our graduate management education programs.

MIT Sloan Executive Education FY07

MIT Sloan Executive Education offers open enrollment and custom programs to high-potential managers and senior executives from throughout the world. We deliver more than 300 program days to over 4,700 executives from 75 countries each year. This year we expanded our offerings in both our open enrollment and custom programs.

Open Enrollment

We offered an array of 20 programs ranging from two days to five weeks. Longer programs generally took place once during the year, while shorter programs ran up to four times.

Our newest open-enrollment program, Managing the Extended Supply Chain, was offered in partnership with IMD, a business school in Switzerland. This unique program features innovative strategies and new directions in supply chain management. It runs twice yearly, once at IMD and once at MIT.

Business Dynamics, our week-long program on systems thinking, remains one of our most popular programs. The demand for this uniquely MIT program well exceeds the capacity, and we typically generate significant wait lists.

Our new Executive Certificate offering generated tremendous interest this year. Executive Certificates are offered in three areas of concentration and are awarded to participants who complete four or more open-enrollment programs within a four-year period. To date, approximately 200 executives have earned MIT Sloan Executive Certificates, and thousands more have enrolled in a certificate track.

Custom Programs

Our roster of custom programs continues to grow. This year we welcomed several new clients to the portfolio while maintaining and expanding relationships with existing clients. We delivered 30 custom programs to over 1,000 executives.

Oil field services leader Schlumberger approached us this year about developing a customized version of our popular open-enrollment program, Driving Strategic Innovation. Schlumberger was interested in developing a shared language around innovation that encourages product development as an integrated chain, from field to lab to business operations. The MIT Sloan program convened Schlumberger managers from around the world to spend five days on intensive study of value chains, supply chains, marketing, and causal loops in the context of Schlumberger-based case studies. The program created an invigorating climate for brainstorming and allowed executives to build a powerful interdisciplinary network that helps them to keep the company anticipating rather than reacting to the demands of their industry.

BP Projects Academy, a multiterm, multiyear initiative in conjunction with the School of Engineering, continues in its fifth year. Projects Academy graduated 80 major project leaders in the past 12 months. Another 60 will enter the program in 2007–2008. We debuted the first Projects Academy Continuing Education program (bringing back graduates of first four cadres) in spring 2007.

The BP Operations Academy—a companion program to Projects Academy—was developed this year. This program will put British Petroleum’s global operational leaders through six weeks of classroom and applied learning at their sites over a 12-month period. Four groups (approximately 140 individuals) will begin the program in 2007 and in 2008.

The IT Leadership program for News Corporation graduated its first cadre of 30 global managers and welcomed its second cadre. Information technology executives representing all of the News Corporation companies (including 20th Century Fox, HarperCollins Publishers, and MySpace) come to MIT to “raise their game” and better align News Corporation’s myriad IT activities with its businesses. The program capitalizes on the research and expertise at MIT Sloan’s Center for Information Systems Research (CISR).

The transformational leadership program for CVRD, a Brazilian-based global mining company, is now in its third year. The fifth cadre (an additional 90 executives) recently completed the program, which prepares senior managers to realize the company's goal of becoming one of the leading firms in the mining industry worldwide.

We welcomed the top executives from UBS Wealth Management, a global financial firm, to MIT for a highly customized program designed to help UBS enhance their relationships with clients. The program featured advances in marketing science and focused on utilizing client data.

Programs focusing on key management issues in information technology were delivered to General Electric, Standard and Poor's, PepsiCo, and IBM Mexico. For the fourth year, we delivered a two-week executive program in the management of technology for Japanese managers from an array of Japanese manufacturing companies.

Supporting our relationships with universities in Asia, we continued our short programs for MBAs from Tsinghua and Fudan Universities. Additionally, we welcomed the ninth class of Nanyang Fellows from Nanyang Technological University in Singapore. We also worked with the Higher Colleges of Technology's Center for Excellence in Applied Research in Dubai to deliver two programs on managing innovation and change to senior-level managers from leading organizations in the Gulf Cooperation Council.

The five-day biennial visit from Epoch Foundation companies brought 41 participants to campus. The week's activities focused on presentations by faculty from a range of MIT departments and areas of expertise. In addition, attendees toured lab and research groups and heard from student innovation teams.

Visiting Fellows

Twenty-seven students enrolled in the MIT Sloan Visiting Fellows program this year. The spring term included 12 students from the Master of Technology Management degree program at the Norwegian Institute of Science and Technology (NTNU) in Trondheim, Norway. The participation of NTNU students is now in its tenth year and the program continues to be well received. In addition to having access to a wide range of academic, cultural, and social opportunities across MIT, the NTNU students were also invited to participate in a number of Sloan Fellows courses, seminars, and events.

The Visiting Fellows program also included 14 MBA students from Sungkyunkwon.

System Design and Management (SDM)

Created in 1996 in response to industry's need to develop the next generation of leaders, the System Design and Management (SDM) program is at the forefront of graduate education at MIT. Not an MBA, SDM combines cutting-edge courses from the MIT Sloan School of Management and MIT's School of Engineering, enriching the experience with innovative distance learning, flexible matriculation options, and an interdisciplinary perspective. SDM prepares graduates to think outside the box, lead across organizational boundaries, and inspire others to collaborate and innovate in both technical and nontechnical arenas.

The centerpiece of SDM's portfolio is its rigorous 13- to 24-month graduate program. Built on a foundation of core courses in system architecture, systems engineering, and system and project management—and integrated with classes in engineering and specially designed courses in management—this program leads to a master of science degree granted jointly by MIT Sloan and the School of Engineering.

Targeted to professional engineers with three or more years of experience, SDM centers on a 15-course curriculum in systems, engineering, and management, including a project-based thesis. It offers three curriculum options: a 13-month in-residence format; a 24-month distance education for company-sponsored students (requiring one academic semester in residence at MIT); and a 24-month commuter program for local students. The mission of the SDM program is to educate future technical leaders in the architecture, engineering, and design of complex products and systems, preparing them for careers as the technically grounded senior managers of their enterprises.

Distance Education Delivery

As MIT's premier degree program offered at a distance, SDM has recognized its leadership role at the Institute regarding the practice of distance education. SDM continues to evaluate its delivery with the goal of increasing the quality of the remote-learning experience while reducing costs, both for MIT and for sponsoring companies. An innovation in the past year includes streaming all classes on the web so that students who cannot attend a session can view the video of it almost immediately, without having to wait for a videotape to be mailed to them. This has increased student satisfaction, as many SDM students continue to work at their companies and must occasionally travel and miss a class.

Pat Hale continues as SDM director for his third year. This past year Pat was elected and served as president-elect of the International Council on Systems Engineering and will assume the role of president next year. This role has provided the program a high level of visibility in an organization of industry and educational institutions highly aligned with the SDM academic mission. Codirectors for the program are David Simchi-Levi from the School of Engineering and Tom Allen from MIT Sloan School of Management. Warren Seering will take over as the Engineering codirector beginning July 1, 2008, while David Simchi-Levi is on sabbatical. John Grace is the industry codirector.

Student Statistics

In January 2007, SDM admitted its eleventh class, enrolling 61 students. As was done in FY2006, SDM put on information evenings in July, September, October, April, May, and June for local MIT alumni and others interested in SDM as a way to recruit prospective students for SDM '07. These successful events brought more than 100 prospective students to campus or suburban locations, where they heard presentations from several faculty, students, and alumni about the program.

System Design and Management Admissions Statistics

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Admitted	35	58	47	50	37	27	36	37	62	58	61
On-campus	8	16	6	14	8	7	18	27	44	44	47
Self-supported	3	1	2	5	2	1	6	25	42	34	40
Research assistant	3	12	2	4	3	1	10	0	0	2	1
Distance education	27	42	41	36	29	18	17	10	18	14	14
Company-sponsored	29	45	43	41	32	25	20	12	20	24	21

This past year John Grace, SDM industry codirector, developed a new partnership structure for companies interested in engaging in a lifelong, systems-based approach to leadership and innovation. With this partnership structure, SDM also goes beyond traditional master's programs by addressing not just the need of individuals, but the entire system of which they are a part. There are many ways that companies can participate in SDM to develop a systems thinking capability for the entire organization. For example, SDM's one-year, primarily-at-a-distance certificate program in systems engineering is designed for individuals who are interested in acquiring or deepening systems thinking skills and for companies that want to extend this capability among their staff. There is also a weeklong organizational leaders program, intended for those to whom students in SDM's degree and certificate programs report, that helps managers understand how to apply these new concepts, develop their SDM employees, and deploy systems thinking throughout their organizations.

Sponsoring Theses of Self-Funded SDM Fellows

In the past few years, companies have also engaged the program through self-funded fellows in research internships that then develop into SDM theses. Support typically involves identifying a thesis topic and naming a company mentor to work with a student and MIT faculty member on a topic of pressing concern. Thesis sponsorship allows a company to expand its presence within SDM at a modest cost, work with an SDM fellow and MIT expert on a relevant project, and favorably position the company for a broader relationship with SDM and MIT.

MIT-Industry Partners System Engineering Program

This past year, SDM continued with a sixth year of the MIT-Industry Partners Systems Engineering Program. This year, program involvement included United Technologies Corporation (UTC), Boeing, and John Deere. To build a systems engineering core competency, this unique program targets three key populations: experts enrolled in the SDM program, experts enrolled in the Systems Engineering Certificate Program, and the organizational leaders of those experts. The program has been very successful, with 116 students completing the Certificate Program and more than 100 organizational leaders completing the six days of content in the Organizational Leaders Workshop. With its

active participation in all levels of the program, UTC now has over 220 employees touched by SDM. The next cohort of certificate students for FY2007 is expected to number 24, with students from UTC, Boeing, John Deere, Wachovia, and Tata Interactive.

Career Development for SDM Self-Sponsored Students

Led by Helen Trimble, career development director, SDM has provided career services to its self-funded students for the past three years. These services include individual career consultation and coaching in presentation skills; resume writing; networking and negotiating; company, career, and opportunity research; and government regulations for foreign nationals. SDM graduates have achieved 100 percent employment during this same time period in industries and organizations as diverse as nonprofits, aerospace, financial services, and technology consulting, and leadership roles in product development, business strategy, and operations.

**Tom Allen, Codirector,
Howard W. Johnson Professor of Management and Professor of Engineering Systems**

**David Simchi-Levi, Codirector,
Professor of Civil and Environmental Engineering and Engineering Systems**

**Warren Seering, Codirector,
Weber-Shaughness Professor of Mechanical Engineering and Engineering Systems**

Jack Grace, Industry Codirector

Pat Hale, Director, SDM Fellows Program

More information about the System Design and Management Program can be found at <http://sdm.mit.edu/>.

Leaders for Manufacturing (LFM)

An active partnership between the MIT School of Engineering, MIT Sloan School of Management, and more than 25 corporations, the MIT Leaders for Manufacturing (LFM) program produces world-class leaders for manufacturing and operations. This innovative two-year graduate program, created in 1988, was launched with significant industry funding and includes an integrated engineering and management curriculum, a six-and-a-half month internship at a partner company, and a single integrative research project carried out onsite in partner firms. Students earn an MBA or master of science in management as well as a master of science in one of eight participating engineering programs. LFM focuses on theory and global practice from concept development through product delivery, including challenges faced on factory floors and in global supply chains. Corporate partners provide generous fellowships for all students.

On the administrative level, LFM and System Design and Management (SDM) are managed by a common staff, enabling conservation of resources.

Academic Program

Forty-six students in the class of 2007 completed the LFM Fellows Program. Each of these graduates completed an internship at a partner company during summer and fall 2006. Internships are focused projects of concern to the partners, accomplished by interns with company support and MIT faculty guidance. Representative projects this past year included process improvement design, supply chain management, and various lean manufacturing initiatives and implementation.

Another 47 students (class of 2008) completed their first year of oncampus studies and started their six-month internships. Applications were down from 200 to 191, but were up significantly from 2005; 48 new students (class of 2009) were admitted and began an intensive summer session in June 2007. The class of 2009 has an average of five years of work experience.

Don Rosenfield continues to serve as the director of the LFM Fellows Program. Codirectors for the LFM and SDM programs are David Simchi-Levi from the School of Engineering and Tom Allen from the MIT Sloan School of Management. On July 1, 2007, Warren Seering replaced David-Simchi-Levi, who will be on sabbatical. Ron Slahetka continues as industry codirector.

Marketing Efforts

As of 2005, LFM applications had been decreasing for a number of years. LFM increased its marketing efforts and secured and implemented a significant marketing budget. New marketing efforts for the classes of 2008 and 2009 included information nights; rewriting the LFM website; improvements in both the Sloan and Engineering websites; improved admit packets; new self-mailing postcards; an interview fest, in which all finalists come to MIT for interviews; virtual visits; and the year-round purchase of names from Graduate Management Admission Search Service. LFM had 191 applications this year, higher than our low in 2005, although still short of our goal.

China LFM

Major studies on competitiveness in China indicate a critical imperative—the need for manufacturing enterprises to recruit, develop, and retain mid- and top-level leaders over the short- and long-term. The China Leaders for Manufacturing Program (CLFM) was developed to address this issue.

The CLFM program is an educational and research partnership among global firms and Shanghai Jiaotong University's (SJTU) Antai College of Economics and Management, School of Mechanical Engineering, and School of Electronics and Electric Engineering. Its mission is to educate the upcoming generation of manufacturing and operations leaders in China.

Modeled after MIT's Leaders for Manufacturing Program and created with MIT's authorization and educational support, CLFM is the country's first-ever dual-degree graduate program focused on educating China's next generation of manufacturing and operations leaders. A partnership of SJTU and industry, CLFM offers a 24-month, dual master's degree program combining the disciplines of engineering and management. Students will also work an additional six months at a partner company site during the required internship experience. Each graduate will receive an MS in engineering from SJTU's School of Mechanical Engineering or School of Electronics and Electrical Engineering as well as an MBA from SJTU's Antai College of Economics and Management.

MIT and SJTU signed a memorandum of understanding on August 29, 2006, in Shanghai. We now have 12 companies signed up for CLFM with a goal of 14 or 15 by May 2008. CLFM industry partners include Caterpillar, China Longgong, Dell, Flextronics, GITI Tire, Honeywell, Intel, Novartis, Schlumberger, The Timken Company, and United Technologies Corporation.

LFM Alumni

The LFM alumni council is in its fifth year. It gathers regularly each month in a virtual meeting to improve the LFM network and the LFM program, and to enrich the lives of the alumni. All alumni are welcome. Jay Burkholder, LFM '98, remains as the official voice of the alumni at the LFM operating committee. The LFM 2006 conference took place in Morristown, New Jersey, where alumni gathered to see presentations by Honeywell, Cisco, and Booz Allen Hamilton executives, and participated in breakout sessions that focused on various topics associated with the conference theme, "Competing in a Shrinking World."

As part of LFM's and SDM's commitment to lifelong learning, an initiative begun in FY2002 was continued to encourage LFM and SDM alumni to stay connected with MIT by sharing relevant information. LFM and SDM continued to schedule monthly webcasts presented by MIT faculty and various LFM and SDM alumni. The content of each webcast provides valuable information on the latest trends, cutting-edge developments, and innovative strategies, all of which pertain to manufacturing and/or systems design. The presentations are given in real time, via the Internet and telephone, which allows participants to follow along visually and audibly as well as to ask questions. Alumni continue to express a high degree of interest in these virtual knowledge-sharing events, and webinars have evolved into a key tool for alumni engagement.

The alumni have also been instrumental in setting up an infrastructure to support LFM. Through an organized fundraising effort, the alumni have established three different funds to support the program.

- William C. Hanson and Don W. Davis Leadership Fund
- Alumni Annual Fund
- Endowed Discretionary Fund

This year the funds distributed \$5,000 to support the students on the International Plant Trek and \$25,000 for first-year scholarships.

Pro Seminar Speakers

On campus, LFM students attend weekly seminars with faculty and industry experts, enriching their formal education with learning about current manufacturing leadership and business issues that are local, national, or international in scope. Speakers in fall 2006 and spring 2007 included Steve Cook, director, TN Manufacturing, Dell; Jean Francois Baril, senior vice president, Nokia; Tim Lee, vice president of manufacturing and labor relations, GM North American Operations; Scott Gilfoil, Duco Pasmooij, and Aaron Raphel of Apple; Tim Cawley, senior vice president, Motorola; Roland Sargeant, manager, Future Plane Production, Boeing; Mary Puma, CEO, Axcelis; Mario van Vliet, senior vice president, CapGemini; Professor John Deutch of MIT; Camilla Denison, CEO, Champion Labs; Don Allen, vice president, ABB; Rick Dauch, executive vice president, American Axle and Manufacturing; Matthew Bromberg, vice president and general manager, Pratt and Whitney; and Edmond Hardin, senior manager, Bearing Point.

Plant Tours

The LFM plant tours expand students' understanding of manufacturing complexity by introducing them to LFM partner companies' diverse operations, plant floor workers, executives, and LFM alumni. In the summer term and during the academic year, students see an average of 15 companies during local visits and a two-week national plant tour. This past year, local plant tours were held at Intel, Hudson, MA; Genzyme, Cambridge, MA; Axcelis, Peabody, MA; Novartis, Cambridge, MA; and Raytheon, Andover, MA. Students also participated in the annual two-week plant trek that included visits to American Axle and Manufacturing, Ford, and General Motors in Detroit; the Boeing Company and Amazon in Seattle, WA; Honeywell in Phoenix, AZ; Dell, Solectron, and Cisco in Austin, TX; and UTC in Ponce, Puerto Rico.

The international plant tour went to Singapore, Malaysia, and Thailand. While in Singapore, the group attended a panel discussion with the Economic Development Board, toured the Port of Singapore Authority (the world's largest container transshipment hub), and visited BD Medical, a leading manufacturer of medical devices. The group toured these facilities, along with students in the Singapore-MIT Alliance (SMA). In Malaysia, LFM students spent a morning at Flextronics International in Johor Bahru. Later in the trek, in Kuala Lumpur, Malaysia, the group visited the operations center at General Electric Engine Services Malaysia (a major provider of engine overhaul services to various commercial airline customers), and Freescale Semiconductor Malaysia (a modern semiconductor facility for assembly and testing of integrated circuits). The final portion of the trip in Thailand included a tour of the General Motors Thailand assembly center.

Career Development

LFM students, sponsored and nonsponsored, continue to be highly sought once they have completed the program. Partner companies as well as other organizations take a special interest in LFM students, as proven by their commitment to speak to the class

on various issues during the Pro Seminar session. Fifty-two percent of the class of 2007 accepted positions with manufacturing and operations companies, and 37 percent accepted positions with partner companies.

Internships and Research

The matching of students to partner internships and faculty advisers is a complex process that the program has managed from inception. This year LFM made two major changes. First, a two-way matching process that explicitly captures company preferences was implemented. The method requires significantly less lead time and led to higher satisfaction from the different constituents. We also linked 12 internships for the LFM 2008 class to company-faculty-student research groups. These groups allow for cross-internship learning and the development of common themes. The groups are:

- Call Center Operations
- Rationalizing the Supply Base
- Lean in Product Development
- Lean Enterprise

Student Awards

Sabrina Chang and John Heiney each received a best thesis award, given for the second year by the program. Award winners were given laptop computers generously donated by Dell. C.Y. Lee received the Harrison Smith Award, a leadership award given annually to honor a first-year LFM who exemplifies Harrison Smith's most remembered qualities while at LFM: living life to the fullest, bringing the class together, and making happy and lasting memories of the LFM experience for the entire cohort. Smith died tragically in a car accident shortly after his graduation in 1999 en route to a position at Dell.

Governance

LFM is run by a governing board consisting of the partner companies' senior officers, program codirectors, and MIT deans. It is cochaired by Dick Johnston of Raytheon and Larry Loftis of Boeing. The operating committee handles ongoing management of the program and includes company representatives, faculty, and directors. The operating committee is chaired by Ron Slahetka. The committee's focus is a series of standing committees including companies, faculty, and students.

Faculty Publications

Several LFM-affiliated faculty published books this past year, including Don Rosenfield, whose book *Operations Strategy, Competing in the 21st Century*, was coauthored by Sara Beckman.

Other LFM-affiliated faculty who published books this year include:

Thomas J. Allen, who coauthored *The Organization and Architecture of Innovation: Managing the Flow of Technology* with award-winning German architect Gunter Henn. Dr. Allen is a Margaret MacVicar faculty fellow, Howard W. Johnson professor of management, professor of engineering systems, and codirector of LFM and SDM.

James M. Utterback authored *Design-Inspired Innovation*. He is the David J. McGrath, Jr. (1959) professor of management and innovation and professor of engineering systems.

New Partners

An active student, staff, and company committee has been very successful at bringing new partners to LFM. New partner companies that have joined in the past 18 months include Pepsi Cola Bottling, General Dynamics, PerkinElmer, and Amgen. Companies who joined last year and who are continuing include American Axle and Manufacturing, Cisco Systems, and Flextronics International. New internship sponsors include iRobot and Schlumberger.

Tom Allen, Codirector,
Howard W. Johnson Professor of Management and Professor of Engineering Systems

David Simchi-Levi, Codirector,
Professor of Civil and Environmental Engineering and Engineering Systems

Ron Slahetka, Industry Codirector

Don Rosenfield, Director, LFM Fellows Program

More information about the Leaders for Manufacturing Program can be found at <http://lfm.mit.edu/>.

Undergraduate Programs

SB Degree Program in Management Science

The MIT Sloan undergraduate program ranked second this year in *U.S. News & World Report's* ranking of American undergraduate business programs (maintaining our position for seven years running). The program ranked first in management information systems, production/operations management, and quantitative analysis.

Over the past decade, Course 15 has become one of the largest undergraduate majors at MIT. After peaking at 350 students in 2002–2003, our enrollment began to decline. Total enrollment in the major has now leveled off at 265. The number of graduating seniors, however, increased from 80 in 2005–2006 to 95 in 2006–2007.

Of the 95 SB degrees in management science awarded this year, the most popular concentration was finance (59), followed by operations research (16), marketing science (11), and information technologies (7). Two of our graduates completed the requirements for both the finance and marketing science concentrations.

Thirty-eight percent of our graduates also received SB degrees from the following MIT departments: Electrical Engineering and Computer Science (12), Mechanical Engineering

(6), Mathematics (5), Brain and Cognitive Sciences (3), Economics (3), Biology (2), Chemical Engineering (2), Aeronautics and Astronautics (1), Architecture (1), and Comparative Media Studies (1).

Minor in Management

This was the second year of Sloan's new minor in management, and the first year in which a cohort of juniors completed the minor over its intended two-year time frame. Of the 80 juniors who began the program in fall 2005, only 33 completed it and received the minor this year. A student survey conducted at the end of the program's first year indicated that scheduling conflicts with subjects in students' majors have presented serious obstacles for many students. In an effort to reduce some of these conflicts, the number of elective subjects available for the minor will be substantially increased beginning this coming fall.

To get the program started, the MIT Committee on the Undergraduate Program approved an experimental enrollment cap of 100 for the first four years of the minor, with enrollment to be determined by a random lottery whenever annual applications exceed the cap. We received precisely 100 applications for the first year of the minor, 60 applications for the second year, and 85 applications for the third year beginning this coming fall. Consequently, we have not yet had to resort to a lottery. From 2009 onward, Sloan will approve applications from all interested MIT undergraduates, in the same manner as other MIT departments with minors.

MIT Sloan Undergraduate Advising and Committee Assignments

Faculty serving as undergraduate advisors included Thomas Allen, Paul Asquith, John Carroll, Kristin Forbes, Stephen Graves, Benjamin Grosf, Leigh Hafrey, Neal Hartman, S. P. Kothari, John Little, Stuart Madnick, Thomas Malone, Stewart Myers, James Orlin, Paul Osterman, Jun Pan, Robert Pindyck, Nelson Repenning, John Van Maanen, Joseph Weber, and Roy Welsch, along with Jeffrey Meldman, director of undergraduate programs and Mary Camerlengo and Stephanie Karkut, assistant directors of undergraduate programs.

The Undergraduate Programs Committee was cochaired by John Little and Eleanor Westney. The subcommittee on the major was chaired by John Little and included John Carroll, Stephen Graves, Leonid Kogan, Jeffrey Meldman, James Orlin, Roy Welsch, and Eleanor Westney. The subcommittee on the minor was chaired by Eleanor Westney and included Stephen Graves, John Little, Jeffrey Meldman, Eric von Hippel, and Jiang Wang. Dean Steven Eppinger, Mary Camerlengo, and Stephanie Karkut served as *ex officio* members on both subcommittees. Susan Cass served as an *ex officio* member on the subcommittee on the minor.

Research Centers and Groups

MIT Center for Digital Business

Founded in 1999, the Center for Digital Business is the largest research center in the history of the Sloan School. The center is supported entirely by corporate sponsors with whom we work very closely in directed research projects. The center has funded more than 45 faculty and performed more than 60 research projects. Our mission is to join leading companies, visionary educators, and some of the best students in the world together in inventing and understanding the business value made possible by digital technologies. Our interactions are a dynamic interchange of ideas, analysis, and reflection intended to solve real problems.

Examples of current focused research projects:

- Research and development for services
- Measuring productivity of individual information workers
- Dynamic social network analysis for coolhunting and coolfarming
- Benchmarking digital organizations
- Security and the extended enterprise
- Developing a radio frequency identification dashboard
- Improving health care through systems dynamics
- Measuring the return on investment of enterprise resource planning implementations
- Using trust and consumer advocacy online as a marketing strategy

The Center for Digital Business is focused on understanding the impact of technology on business value, and developing tools and frameworks for our sponsors to use for competitive advantage. Our goal, in part, is to reduce that timeline through basic and applied research, engagement with industry sponsors, the sharing of best practice, and MIT's credo of combining rigor with relevance.

We are colocated with MIT Sloan's Center for Information Systems Research and the Center for Collective Intelligence to facilitate collaboration. Our crosscampus collaborations include work with the Media Lab, W3C, the Computer Science and Artificial Intelligence Laboratory (CSAIL), and Communications Futures Program.

Research is organized into four areas of expertise, or special interest groups: digital productivity; digital marketing; digital services; and digital health

The Center for Digital Business gratefully acknowledges the support and contributions of our current sponsors. Founding sponsors include British Telecommunications, Cisco Systems, CSK Corporation, France Telecom, General Motors, SAP, Suruga Bank, and UPS. Research sponsors include Hitachi, Liberty Mutual, and the eBMS University of Salento. Member sponsors include Intel, Institute for Innovation and Information Productivity, and SAS.

MIT Leadership Center

The MIT Leadership Center (MLC) is dedicated to defining leadership and developing principled, innovative leaders who improve the world. The center is distinguished by its commitment to a distributed model of leadership, nurturing the development of leaders at all levels of an organization. MLC focuses on three key activities: research, tools, and education. More details on the center and its initiatives can be found on the website at <http://mitleadership.mit.edu/>.

During 2006–2007, the center focused on:

- publishing and promoting ongoing research and tools
- building leadership curriculum offerings, particularly for MBAs and executives
- establishing a base of supporters and leaders engaged with the MLC to facilitate future growth
- increasing the visibility of MLC and its work around the world

Faculty Research

A highlight of the year was the publication of *X-Teams: How to Build Teams That Lead, Innovate, and Succeed* (Harvard Business School Press) by MLC faculty director Deborah Ancona. Her work has been translated into practical tools, including process checklists, to guide teams of MBA students and executives to improve performance. The book was promoted globally, and also received a review in the *Financial Times*.

The *Harvard Business Review* published an article on “The Incomplete Leader,” generating a good deal of media coverage. The piece is an evolution of the work done on distributed leadership by Ancona and other MIT Sloan faculty Peter Senge, Tom Malone, and Wanda Orlikowski.

Curriculum

The MIT Leadership Center sponsors more than 15 MBA courses, and offers a wide range of leadership workshops during its popular Sloan Innovation Period (SIP). This year, the MLC offered more leadership workshops than ever before—46 (up from 28)—during SIP, a week midsemester where classes are suspended and leadership workshops are offered. More than half the spring classes were new, including a leadership scavenger hunt (covered in *Tech Talk*, <http://web.mit.edu/newsoffice/2007/scavenger-hunt.html>) and a session on business disaster preparedness. SIP serves as an excellent innovation lab for curriculum and tool development for the MBA and other academic programs. SIP sessions are also open to alumni, enabling them to return to campus.

Five skill-building seminars were added to support the MIT Sloan School’s efforts to incorporate more leadership development and experiential learning into management education. More than 200 participants (staff and students) attended the sessions, which centered on such skills as influencing others, charismatic visioning, and coaching.

The MLC brought more than 35 leaders from industry, government, and nonprofits to campus to teach MIT Sloan students this year. Among the highlights was a course on strategic planning for nonprofits taught by Michael Kaiser, president of the Kennedy Center for the Performing Arts.

Support for the Center

The MLC is making significant progress toward its goal of becoming self-supporting. Productivity improved dramatically this year with the center involved in more than double the number of activities despite zero growth in staff.

MIT Sloan Center for Information Systems Research

MIT Sloan Center for Information Systems Research (CISR) continues to maintain its strong track record of practice-based research on the management of information technology, which began in 1974. CISR's mission is to perform practical empirical research on how firms generate business value from information technology and to disseminate the work as broadly as possible via electronic research briefings, working papers, research workshops, and executive education.

CISR is supported by 57 international organizations, representing a broad range of industries and including several not-for-profits—up from 14 corporate sponsors in 2001. By encouraging member participation at our research workshops (held at least two times per year) and our annual conference (the CISR summer session), we have increased our impact—over 285 people from member organizations attended our events during this year. The opportunity for debate on the research topics and peer-to-peer interaction continues to build a strong and growing CISR community.

2002–2007 Research Portfolio

Topic 1: Enhancing Information Technology Leadership:

- Building effective relationships between IT and business leaders
- What the CEO wants from IT

Topic 2: Developing Information Technology Capabilities:

- Achieving reusability for business agility
- Emerging technologies and practices for distributed collaboration

Topic 3: Defining and Communicating Information Technology Value:

- Tracking the value of IT projects
- Building an environment for innovation
- Maturing your IT governance

In addition, researchers will continue to update the following:

Active Classic Research Projects

- Effective IT governance
- Enterprise architecture as strategy
- IT portfolio investment benchmarks and links to firm performance
- Business models
- IT-related risk
- IT engagement models and business performance
- IT-enabled business change

Recent Accomplishments

Based on CISR research, research scientist George Westerman, with Richard Hunter of Gartner, has coauthored *IT Risk: Turning Business Threats into Competitive Advantage* (Harvard Business School Press, August 2007).

CISR's working paper series currently contains 371 papers, also distributed as Sloan working papers through the Social Science Research Network.

CISR has distributed 77 different electronic research briefings (short, sharp summaries of ongoing CISR research) to over 1,000 people (per volume of briefings) at patron and sponsor organizations since their inception in 2001 – 14 in the past year.

CISR is supported by seven research patrons: the Boston Consulting Group; BT Group plc; Diamond Management and Technology Consultants; Gartner; IBM; Microsoft; and Tata Consultancy Services. CISR is also supported by 50 sponsors: Aetna; Allstate Insurance; American Express Corp.; AstraZeneca Pharmaceuticals LP; Banco ABN Amro Real SA (Brazil); Biogen Idec; Campbell Soup Co.; CareFirst BlueCross BlueShield; Care USA; Caterpillar, Inc.; Celanese; Chevron Corp.; Commonwealth Bank of Australia; Det Norske Veritas (Norway); Direct Energy; EFD; EMC Corp.; Family Dollar Stores; Guardian Life Insurance; Information Services International; ING Group (Netherlands); Intel; International Finance Corp.; Liberty Mutual Group; Merrill Lynch and Company; MetLife; Mohegan Sun; News Corp.; Nissan North America; Nomura Research Institute (Japan); Northrop Grumman; PepsiAmericas; PepsiCo International; Pfizer; PFPC; Procter and Gamble; Quest Diagnostics; Raytheon; Renault (France); Standard and Poor's; State Street Corp.; TD Banknorth, NA; Telenor ASA (Norway); Time Warner Cable; Trinity Health; TRW Automotive; Unibanco S.A. (Brazil); United Nations-DESA; and the Walt Disney Company.

MIT Sloan CISR researchers made presentations during several MIT Sloan executive programs, including the public programs "IT for the Non-IT Executive" and "Corporate Strategy," and custom programs for General Electric, NewsCorp, and Novartis.

MIT Entrepreneurship Center

The mission of the MIT Entrepreneurship Center is to educate and nurture leaders who will make high-tech ventures successful. These high-tech ventures may be startup companies or new ventures within well-established firms.

When the MIT Entrepreneurship Center was launched as an Institute-wide initiative in 1996, then-President Vest set a high standard, saying, "We must not only be the best. We must also serve as a model for others and ensure that, together, we all make a significant global impact in this vital field." We continue to live up to this challenge by promulgating cross-disciplinary, high impact, high-tech entrepreneurship with the strong support of President Susan Hockfield and our chairman, Professor Edward B. Roberts.

We achieve our mission through a growing number of programs and activities generally categorized within the following four areas:

- Supporting the entrepreneurship curriculum and research within MIT
- Advising, supporting, and mentoring the numerous student organizations enabling cross-campus entrepreneurial activities here at MIT and around the world
- Engaging the entrepreneurial ecosystem in the greater Kendall Square area, along Route 128, and worldwide
- Cultivating and strengthening relationships in various countries and enhancing their entrepreneurial infrastructure

Supporting the curriculum, we offer educational programs to inspire, educate, and coach new generations of entrepreneurs and intrapreneurs from all parts of MIT and internationally. MIT's entrepreneurship professors, practitioners, and staff teach nearly 25 courses and conduct basic research to enhance our fundamental understanding of the dynamic process of high-tech venture development in the United States and around the world. In FY2007, we had 14 professors and 18 practitioners teaching entrepreneurship-related courses. Our ability to coach and mentor entrepreneurs and their teams was significantly enhanced as Bill Aulet joined us full time as entrepreneur-in-residence. Student enrollment has steadily increased to over 1600 students, or almost one-fourth of Park, San Francisco, Shanghai, Tokyo, and Nagoya. The events drew over 3,000 members of our network, including MIT graduates and friends engaged in entrepreneurial activity. Over 180 students participated in international internships through 15.389 Global Entrepreneurship Lab, 15.360 Introduction to Technical Entrepreneurship, 15.362 Entrepreneurship Study Tour of Silicon Valley, or individual opportunities facilitated through the center.

Our collaboration with the Cambridge-MIT Institute came to a successful close, and we continue to keep in contact with the entrepreneurial organizations in the United Kingdom that we helped to spawn.

We anticipate another growth year in FY2008 with strong stated interest from students, alumni, and potential donors. Particularly noteworthy is the extraordinary interest from

the MBA class of 2009 (over 90 applicants, or nearly 25 percent of the incoming MBA class) in the second year of our newly launched Entrepreneurship and Innovation course of study.

Our courses offered in fiscal year 2007 included the following:

- 15.223 Global Markets, National Policies, and the Competitive Advantages of Firms
- 15.350 Managing Technological Innovation and Entrepreneurship
- 15.351 Managing Innovation and Entrepreneurship
- 15.356 How to Develop “Breakthrough” Products and Services
- 15.358 The Software Business
- 15.360 Introduction to Technological Entrepreneurship
- 15.362 Entrepreneurship Study Tour of Silicon Valley
- 15.363 Strategic Decision Making in the Biomedical Business
- 15.369 Corporate Entrepreneurship: Strategies for Technology-Based New Business Development
- 15.371 Innovation Teams: Commercializing Emerging Technologies
- 15.380 Special Studies in Entrepreneurship
- 15.387 Technology Sales and Sales Management
- 15.389 Global Entrepreneurship Lab: Emerging Markets
- 15.390 New Enterprises
- 15.391 Early Stage Capital
- 15.392 Business Plans that Raise Money
- 15.393 Technology and Entrepreneurial Strategy
- 15.394 Designing and Leading the Entrepreneurial Organization
- 15.395 Entrepreneurship/Venture Capital without Borders
- 15.398 Corporations at the Crossroads: The CEO Perspective
- 15.399 Entrepreneurship Lab
- 15.431 Entrepreneurial Finance
- 15.615 Law for the Entrepreneur and Manager
- 15.616 Basic Business Law, Tilted Toward Innovation and Strategy
- 15.841 Special Seminar in Marketing: Entrepreneurial Marketing
- 15.963 Social Entrepreneurship
- 15.966 Managing in Adversity: the CEO Perspective
- 15.970 Digital Innovations
- 15.971 Developmental Entrepreneurship

15.974 Special Seminar in Management: Preliminary Venture Analysis and Personal Entrepreneurial Strategy

15.975 Seminar in Management: the Nuts and Bolts of Business Plans

15.976 Starting and Building a Successful High-Tech Venture
Entrepreneurial Development Program (EDP 2007)

Kenneth P. Morse
Managing Director

MIT Center for Collective Intelligence

While people have talked about collective intelligence for decades, new communication technologies—especially the Internet—now allow huge numbers of people all over the planet to work together in new ways. The recent successes of systems like Google and Wikipedia suggest that the time is now ripe for many more such systems, and the goal of the MIT Center for Collective Intelligence is to understand how to take advantage of these possibilities. The MIT Center for Collective Intelligence was created in July 2006 and had its official launch in October 2006.

The basic research question of the new center is: How can people and computers be connected so that—collectively—they act more intelligently than any individuals, groups, or computers have ever done before?

With its combination of expertise in computer science, brain sciences, and management, MIT is uniquely suited to address this question. To take advantage of these diverse capabilities, the center has been reorganized to include faculty from many parts of MIT: the Sloan School of Management, CSAIL, Media Laboratory, Brain and Cognitive Sciences Department, McGovern Institute for Brain Research, and Leadership Center.

Accomplishments in the first year of the center's existence have included:

- Recruiting 27 faculty members to be center members
- Forming a steering committee representing the major parts of MIT involved in the center, including Randall Davis (CSAIL), Sandy Pentland (Media Lab), Tomaso Poggio (Brain and Cognitive Sciences), and Thomas Malone (center director, Sloan)
- Forming an advisory board including Jimmy Wales (founder of Wikipedia), Tim Berners-Lee (creator of the World Wide Web), and Alph Bingham (founder of Innocentive)
- Organizing a seminar series with presentations from 20 researchers
- Defining six initial research projects (see <http://cci.mit.edu/research/projects.html>)

- Beginning the fundraising process for overall center and individual projects. Funding has already been secured from one foundation (Argosy Foundation) and one company (Fuji Xerox). Numerous proposals to potential corporate and government sponsors are currently outstanding.
- Articles about CCI work appearing in over 20 publications around the world.

More information about the Center for Collective Intelligence can be found at <http://cci.mit.edu/>.

Administration and Services

Office of Media Relations

The Office of Media Relations is responsible for developing and implementing media outreach campaigns; identifying and crafting news angles; preparing Sloan School of Management spokespeople for press interviews; disseminating press material to local, national, and international media organizations; and securing print, broadcast, and online coverage of faculty research and areas of expertise, student and institutional initiatives, special events, and other newsworthy developments. Media Relations supports institutional branding and marketing initiatives.

During the 2006–2007 academic year, Media Relations and the Career Development Office teamed up again to shape the annual “Big Idea” campaign, a branding effort to bolster Sloan’s image as a global business school. The theme this year was “Practicing Management,” encompassing Sloan’s wide-ranging experimentation with new experiential courses to pave the way for fundamental change in MBA curriculum. Several of the new classes were pitched to the media: the Entrepreneurship and Innovation Certificate program; Conversations with Jack Welch, the leadership course taught by the former GE CEO; Sustainability Lab (S-Lab), which offers hands-on experience working with firms or organizations developing new business models (or reforming existing ones) in line with sustainable development; and Practicing Management, which allows students to put theory into action in startup ventures across the globe that are facing business challenges. Media Relations made a concerted effort to place stories in major media outlets about these curriculum experiments. Over 15 stories highlighting the new classes appeared in publications including *BusinessWeek*, the *Wall Street Journal*, *Fortune*, the *Boston Globe*, the *Boston Herald*, the *Financial Times*, the *Los Angeles Times*, the *San Jose Mercury News*, *CNN.com*, the *Chronicle of Higher Education*, and *Associated Press*. Packets of these clips were mailed to deans of other business schools and recruiters to get the word out about these programs and how they are integrated into our mission of developing principled, innovative leaders who improve the world.

Media Relations published the 2007 version of the MIT Sloan Expertise Guide, which provides media organizations with an overview of Sloan along with faculty members’ biographical sketches and areas of expertise organized by geographical area, industry, and topic.

Media Relations's proposal was accepted by the New York Stock Exchange, allowing representatives from this year's winning \$100K Entrepreneurship Competition teams to ring the opening bell on May 17, the day of the competition. The bell ringing received national news coverage.

A media audit was conducted on Sloan coverage for the year 2005–2006. The articles reviewed for this audit demonstrate that Sloan is regarded as:

- A top tier, globally recognized business school
- A school that employs some of the most knowledgeable and talented faculty in the world
- A school that is regularly recognized for its successful alumni who move on and create their mark in society with a strong entrepreneurial spirit

Approximately 90 percent of Sloan's coverage was neutral or favorable; six audit categories did not have any negative coverage. The *Boston Globe* covered Sloan more than any other news outlet, producing close to two general articles per month that included Sloan in some fashion. Sloan had good representation in notable national business outlets, including *Financial Times* (14 articles), *BusinessWeek* (8), and the *Wall Street Journal* (8).

Share of Coverage

Publication	Articles	Share of Total
<i>Boston Globe</i>	22	27%
<i>Financial Times</i>	14	17%
<i>BusinessWeek</i>	8	10%
<i>Wall Street Journal</i>	8	10%
<i>Bloomberg</i>	6	7%

Summary of Findings

- Ninety-two articles were found that included comment from a member of the Sloan faculty, resulting in a significant increase in Sloan's visibility.
- Most faculty comments were rated as neutral (90 percent of the total) since they primarily focused on an area of expertise and did not affect Sloan's image.
- The issues addressed most often by Sloan faculty in 2006 were macroeconomics (25 percent), labor (18 percent), and information technology (16 percent).
- Kristin Forbes was the most quoted faculty member (13 articles), followed by Eric Brynjolfsson and Eric Von Hippel.
- Top-tier publications call on Sloan's faculty on a regular basis; the *New York Times* and the *Boston Globe* average more than one article per month that includes comments from Sloan faculty.

Overall the audit was very positive about Sloan's press coverage. However, it indicated a need to engage more faculty from other disciplines with the mainstream media to better illustrate the breadth of Sloan's programs.

Goals for the upcoming academic year include conducting a worldwide media tour with the new dean, continued effort with deans to encourage an increase in faculty participation in the media, offering professional media training to faculty, increasing the diversity of academic disciplines in media stories, increasing the publication of opinion pieces by faculty, placing announcements about the Sustainability Center and other new centers/programs, increased media outreach to India and increased interaction with Asian and Latin American media, the continuation of the annual "Big Idea" campaign for 2008, and publication of the 2008 edition of the MIT Sloan Expertise Guide.

Sloan Technology Services

The Sloan Technology Services (STS) mission is to provide the highest quality and most cost-effective information services, support, and technology, consistent with resources and needs of the Sloan School of Management community. In collaboration with MIT's central IT organization (IS&T) and other IT service groups, our department provides a local, premium IT service to the Sloan community by supplementing and enhancing the technology and services supplied by IS&T that appropriately enable administration and the mission-critical teaching, learning, and research activities at Sloan.

Highlights of This Past Year

- *Microsoft Office upgrades*: Preparations for a school-wide upgrade of the core Microsoft Office application suite began over a year ago. Sloan is farther along than most DLCs in upgrading existing systems to the new version. We expect to complete the upgrade within weeks.
- *Voice over IP (VoIP)*: In collaboration with IS&T, we participated in the piloting of VoIP technology at MIT. We assisted with technology troubleshooting as well as service definition and delivery challenges. All of STS and many others at Sloan are currently using VoIP technology.
- *Technology training*: We began formally offering a technology training service to Sloan that complements IS&T's offerings. We act as facilitator, scheduler, and trainer if necessary. All Microsoft Office application training sessions have been extremely well received. Taught by IS&T trainers, these classes are hosted in our training room in E52.
- *Executive education customer relationship management*: Launched marketing, program management, and registrar modules of ExecEd flatbridge system with online application and brochure requests
- *Web services*: Launched faculty website development service and created templates for student club websites
- *Business intelligence*: Participated in MIT Business Intelligence pilot project evaluating Hyperion toolset and completed our own evaluation of the Microsoft BI tool set.

- *SloanSpace—course management, community, and collaboration*
 - o We began to sunset the use of SloanSpace.
 - o IS&T delivered functionality that enabled the first structured piloting of Sloan courses in Stellar in fall 2006. Additional functionality delivered in December boosted our confidence that we had a winning strategy, and we pushed forward with 41 Sloan courses in Stellar this past spring.
 - o We expect that most Sloan classes will be using Stellar this fall. With the last piece of functionality needed to move all Sloan core courses to deliver in the spring, all Sloan courses will then be supported by Stellar.
- *Server virtualization*: Implemented virtual server technology (VMWare). To reduce administrative overhead, better use available hardware resources, and reduce operating costs, we plan to move a significant portion of our server infrastructure to virtual machines over the next couple of years.
- *Established the STS information technology security advancement team*: Tasked with advancing the state of IT security within STS and at Sloan, the team shares information and best security practices as well as explores the security implications of new technology, new policies and procedures, and new regulations. Coordinating its efforts with IS&T and other computing personnel across campus, the group will promote the awareness of IT security.

New Initiatives—Planned and in Process

- *Disaster recovery*: Produce a comprehensive disaster recovery/emergency preparedness plan.
- *Help desk and asset management*: We have already begun to deploy a combined help desk call tracking and asset management solution. IS&T has licensed the same asset management solution (Altiris), and we have collaborated on design and deployment plans.
- *Research computing*: Engage faculty to determine longer-term research computing needs.
- *SharePoint*: Deploy the Microsoft SharePoint collaboration solution. This will replace the non-course-related functionality currently offered by SloanSpace that is not migrating to Stellar. Remain engaged with various IS&T groups for mutual benefit. Target a January 2008 release.
- *Public display of Sloan events*: Use the MIT Events Calendar as the source of content to be displayed on public flat screens in E51 and E52.
- *Phase II VoIP implementation*: Sloan will remain an early adopter and is prepared to migrate the School early in the general availability deployment phase.
- *Support the MIT Energy Initiative with a focus on green computing*: We will focus on ways we can balance computing needs with energy efficiency. This initiative will likely increase the cost of equipment such as computers and monitors. However, we expect to reduce energy costs.

- *Desktop virtualization technologies:* Already deployed on the server side of our operation, we will begin to focus on virtualization at the desktop level and its implications on support for students, faculty, and staff, both inside and outside the classroom.
- *Sloan data warehouse and Business Intelligence:* Continue work on a business intelligence and management reporting solution. Implement additional data marts. Transition reporting functionality out of our local FileMaker database and into this solution.
- *Scheduling solution:* Seek a technology-assisted scheduling solution for courses and student presentations.
- *Online virtual environments:* Continue to investigate teaching and learning opportunities associated with virtual environments such as Second Life.
- *Microsoft Windows Vista:* Slipstream support for Vista over the course of 2007. Initially we will provide Vista only on newly purchased computers designed for this operating system. We will continue to support Windows XP for at least the next year.

Office of Marketing and Communication

Highlights

We made noteworthy progress in the areas of marketing strategy and communicating effectively with key audiences, though specific goals were not explicitly identified in the FY07 business plan, due to the director of marketing vacancy.

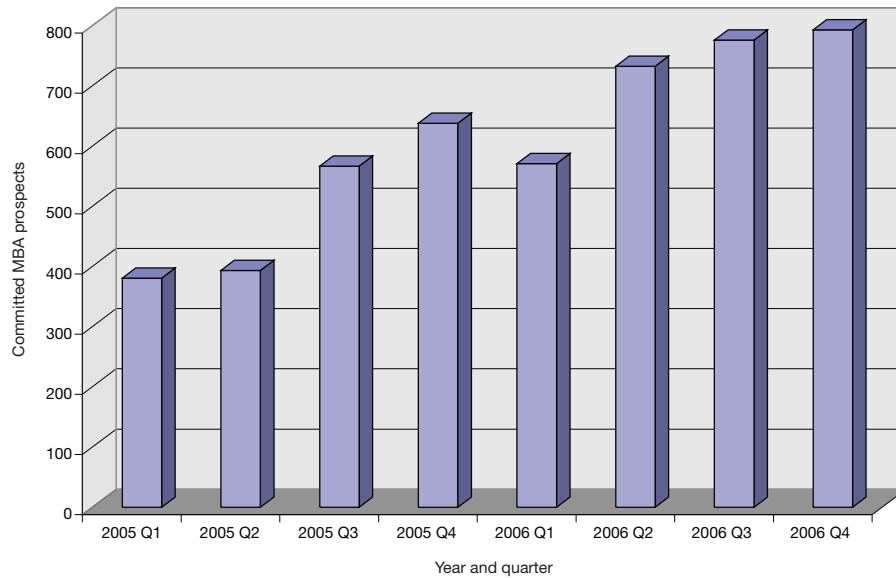
Marketing Strategy

Brand Equity Improvements

To measure how our brand equity changes over time among top MBA prospects, we have been using a quarterly survey that tracks perceptions of MIT Sloan versus competitors on a range of key attributes clarified in the Brand Baseline Study (2004). Prospects are drawn from those who register on our website. Brand commitment is the principal measure we track and it is captured in the question “If all the MBA programs admitted you, which would you be most likely to attend?” Choices include Harvard, Stanford, Pennsylvania (Wharton), Northwestern (Kellogg), MIT (MIT Sloan), Columbia, Chicago, and Other (Please specify).

News is good for the MIT Sloan brand. In 2006–2007 preference for the School continued to grow, with increases in both the total number of prospects and their level of commitment to MIT Sloan, resulting in a growing number of committed prospects, as shown below. This progress, marked by seasonal fluctuations, has been steady since we implemented major changes to both the content and structure of key elements of the MBA marketing program. Messaging changes include special efforts to target women (via print, the web, and events) and to downplay technology.

Committed MBA prospects, by quarter, 2005–2006



Marketing Council

The marketing council continues to be an important forum for sharing information and ideas on key marketing issues affecting our numerous and diverse external audiences. Since the new director of marketing has joined MIT Sloan we have instituted two subgroups that meet regularly to discuss specific topics of mutual concern.

- The editorial content group has established a cross-program calendar and has already achieved better coordination of available content and resources.
- The corporate facing group has nearly completed a systematic program-by-program review to identify areas of overlap in goals, audiences, challenges, and opportunities. We will use this information to develop messaging and programs that can aid achievement of individual program goals while enhancing the overall MIT Sloan brand among corporate audiences.

Sharing and Adopting Best Practices

Exchanging ideas between MIT Sloan marketing/communications and MIT undergraduate admissions has resulted in both current and future changes to our website. Both groups face common misperceptions and challenges, and both have experienced success in overcoming some of these. Since a meeting in January 2007 orchestrated by Bruce Enders, we have expedited the addition of podcasts to our website and will be delivering strategic messages via FAQs, following MIT's successful model. In addition, MIT's success with student blogs has helped us grow internal support for blogs, which we plan to introduce in late FY07 or early FY08. We plan to continue regular communications and idea-sharing with our colleagues at MIT.

Communicating Effectively with Key Audiences

Alumni Communications

Our office played a significant role in the alumni magazine, managing the design and overall project as well as producing most of the major content inhouse, a move that resulted in substantial cost savings versus FY06. In collaboration with Alumni Communications, we also launched our first-ever alumni e-newsletter. This newsletter will take its place within a plan that pulses high-touch vehicles (the annual report and the magazine) with electronic communications in an effort to maintain a steady, balanced program of contact.

Web Enhancements

The website grows ever more vital as a communications vehicle for most audiences, so we continue to improve it, in order to enhance our ability to connect with key constituencies, stay on top of technological change (as befits MIT), and properly communicate the MIT Sloan brand. Key initiatives in 2006–2007 include:

- Conversion of our website to XHTML, which results in faster downloads and an improved user experience.
- RSS feeds, which enable us to deliver updated content regularly to technologically savvy audiences.
- Podcasts, which allow us to showcase prominent speakers, communicate lively first-person narrative, and provide greater depth to written material.

The overall response to these initiatives has been positive and substantial: in the nine weeks since we launched the podcasts on 2/9/07, our 10 podcast episodes have been downloaded 9,764 times, and we have 690 subscribers to the podcast via iTunes. These figures will continue to grow as awareness of our podcasts increases.

Since we've had the capability to track usage of our RSS Feed (12/22/06), there have been 5,109 views of the 37 items we have posted and 426 clicks back to our site.

These initiatives have been undertaken in addition to the everyday work of updating, maintaining and refreshing content for an ever-expanding web site that numbers over 2000 pages. Highlights of this ongoing work include a new, livelier MBA home page treatment and a redesigned Executive Education website. Executive Education results have been encouraging. According to Kate Anderson, in a two month period after the redesign total (versus prior year) page views were up over 20 percent (despite elimination of unnecessary steps/pages previously required), "Request brochures" page views were up over 50 percent, and visits to the sitemap dropped from 153 to 8, indicating easier navigation. To date, over 2,400 customers have signed up for the email list, a feature previously unavailable.

Branding and Messaging System

The branding extranet and branding microsite continue to help streamline development of communications materials (by MIT Sloan staff, student groups, and approved design firms) that reflect a consistent look and feel. This year we have ushered in several new designers who have worked successfully within the guidelines. Adoption of templates in the dean's Innovative Leader series has afforded us a ready way to create a series of posters, invitations, and supporting web homepage images and stories. In addition, continued enforcement of logo guidelines and development of a simple one-page handout for student clubs has helped instill the importance of proper logo use and curb errant, if well-meaning, variations.

E62 Marketing

The new building represents a unique and exciting time for MIT Sloan, but its construction will also bring much disruption to the daily life of students, faculty, and staff for several years. Our office has led development of an overall E62 marketing plan, which aims to generate excitement, engage students, manage expectations, relay progress, and reinforce the guiding vision over the long haul. Initial efforts will be primarily directed at internal audiences, but marketing will be expanded to external audiences as progress and news warrant. Key elements in FY07 include a major groundbreaking event (for donors and the MIT Sloan community) and the introduction of a lively poster campaign in E51 that will trigger student involvement. Additional elements (signage, website, future events, etc.) will be added in FY08 and beyond.

Additional Marketing/Communications Initiatives

Due to a consistently high level of service, our office continued to raise its profile among internal constituents and undertook an increasing number of print and electronic projects in support of departmental needs. Satisfaction with the group's work is reflected in the Communications group receiving a Sloan Appreciation Award this year. We are now positioned as an important resource to meet all of the School's varied communication, web, and marketing needs. Highlights in this area include:

Development of new MBA view book concept: A decisively new look and approach to the MBA view book, based in part on focus group feedback, will further differentiate MIT Sloan from its competitors and reinforce key messages about the School.

Dynamic PDFs: Our office has investigated and plans to adopt an exciting new tool that makes PDF files richer and more interactive. Dynamic PDFs offer a range of significant benefits, including the ability to deliver video and audio content, live links (for email contact, connection with the website), and a professional state-of-the-art presentation, as well as potential cost savings and the ability to measure audience content preferences.

Undergraduate minor: Extensive research (primarily through one-on-one student interviews) has resulted in a revitalized program to market the management minor to MIT undergraduates. Though marketing vehicles remain limited, we have significantly improved the website and postcard used to reach prospective students. Preliminary results are encouraging: the program

received 82 applications by the deadline this year (4/18/07), which Jeff Meldman characterized as a significant upturn (around 40 percent).

Surveys: Our office continued to support an expanding number of surveys and invested considerable time in improving the process and reducing the burden on those who supply us with information. Extra care this year was given to the Aspen Institute's Beyond Grey Pinstripes survey, due to the growing importance (and visibility) of sustainability.

Development publications and appeal letters: We assisted the Office of External Relations in a variety of communications, including the Annual Report, giving flash and appeal letters in FY07. For initiatives with a pure development focus we have recommended that in FY08 OER engage professional freelance writers who specialize in this kind of writing, and we will manage that process for them.

More information about the MIT Sloan School of Management and its programs can be found at <http://mitsloan.mit.edu/>.