

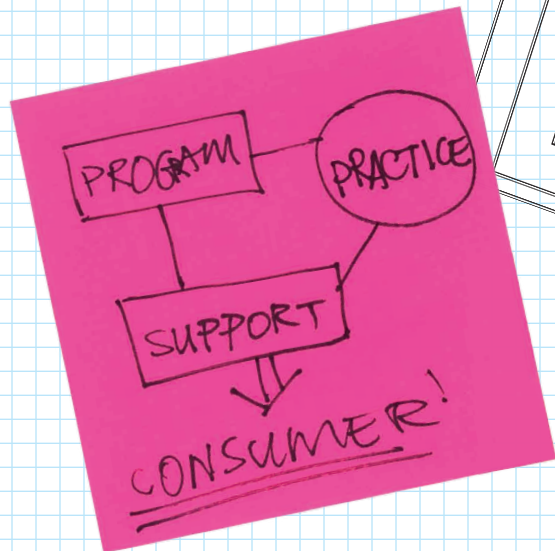
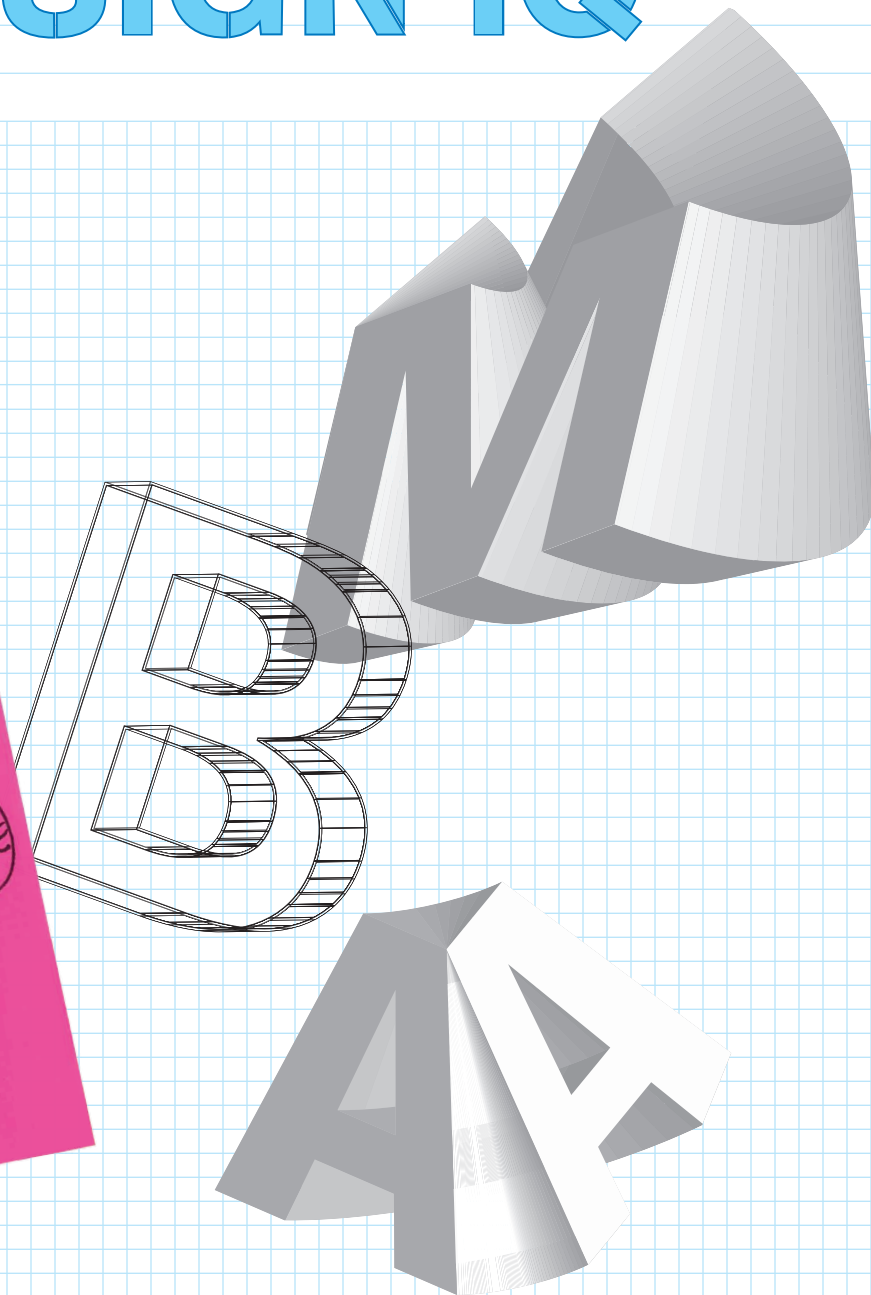
MBA STUDENTS SHARPEN THEIR DESIGN IQ

by Vanessa Silberman



Think business school, and Excel spreadsheets, pie charts and an endless stream of case studies probably spring to mind. In this age of sleek hybrid cars and iPhones, however, a small but growing group of business schools are rethinking their curricula and seeking to instill in their students a more design-driven approach to problem solving—one that might leave previous MBA generations scratching their heads.

Yet it is this design-driven approach—which favors ideation, rapid prototyping, user insight and testing—that is increasingly touted as the surest path to the holy grail of business success: profits. Companies from a wide variety of industries increasingly realize they must forge new ground to stand out in this international and highly competitive business landscape (known as “innovate or die” in some circles). These firms are turning to the design thinking process to burnish their products’ functionality, their company’s image, and ultimately, their bottom lines. Business schools, in turn, are responding to industry demand by encouraging and cultivating unconventional approaches to familiar quandaries through courses in design thinking and innovation, both at the MBA and executive education levels. These programs seek to sensitize business leaders to the value of design methodology as a powerful business strategy. As this trend takes hold, let us take a moment to consider a few of the MBA programs that have added design thinking as a component of their curricula.





MBA students at the Rotman School of Management learn how design thinking can create a competitive advantage through its Designworks lab.

RETHINKING THE MBA

The economist Richard Florida has argued that in today's creative economy, the MBA program needs an overhaul. The typical business school model of teaching hasn't changed in decades, even as the business environment around it has become decidedly global and dynamic. Florida suggests that business schools need to evolve if an MBA is to effectively prepare the business leaders of tomorrow.

Design thinking seeks to fill part of the void, by giving students a new arrow in their quivers. Although design thinking contrasts sharply and may sometimes be at odds with the standard methodology taught at business schools, its potential benefits are difficult to ignore. For example, business schools often rely on the case study method, which certainly can be a valuable tool, but has also drawn criticism. Designer Brian Collins has pointed out that the case study method focuses on the past, and "many people in business school treat the past as a weight, rather than as an engine to create something." Designers, on the other hand, tend to look at the past not as a weight, but as a fuel for creating new options.

Similarly, business students traditionally learn decision-making by analyzing the pros and cons of two choices—options A and B. The design approach would have the students analyze the two options, and if they aren't satisfied with either one, invent a third alternative that may not have been on anyone's mind at the outset. According to Claudia Kotchka, vice president of design innovation and strategy at Procter & Gamble, "This is a very powerful and breakthrough idea for those who were trained in analytical modes of problem solving."

Another difference between traditional business school curricula and the design approach is that business schools typically have been organized into silos of knowledge, with marketing, finance and operations as distinct disciplines with little or no overlap. The design thinking approach encourages collaboration across disciplines, cultivating in students the ability to view problems from various angles, and, as Kotchka observed, "to come up with more questions and bigger solutions."

MBA PROGRAMS TAKING THE LEAD

One of the first MBA programs to recognize the value of design thinking is **INSEAD**, a leading European business school based in Fontainebleau, France and Singapore. As featured in DOT 14, INSEAD formed an ongoing partnership with Art Center College of Design in 2005 to bring students from both schools together to develop new product ideas in an MBA course called "Strategies for Product and Service Development," taught by INSEAD Professor Manuel Sosa. According to Art Center's Karen Hofmann, who currently oversees the partnership, this mutual exchange benefits MBA students, who discover the designer's holistic approach to problem solving, while Art Center students gain through exposure to the fundamentals of business management. Art Center students also take additional MBA courses in marketing, entrepreneurship and media management subjects.

Another business school at the vanguard of the trend towards design thinking is the **Rotman School of Management** at the University of Toronto. Through its Business Design initiative, now in its third year, MBA students learn design thinking through elective courses,



D.Light Design, a social venture that sells eco-friendly and affordable LED lighting in developing countries, was conceived by former Stanford MBA students during an entrepreneurial design class at the d. school. The company's goal is to replace every costly and dangerous kerosene lamp used in the developing world with portable LEDs.



workshops and summer fellowships offered in its Designworks lab. "Business is a bit stuck in North America," said Heather Fraser, an adjunct professor of Business Design and director of the Designworks program. "There are many challenges in finding new growth opportunities and breaking out of the rigid way of doing things." She explained that the impetus for Designworks came from a desire to reconsider the fundamental business model to create a competitive advantage. "We view design in terms of strategic business modeling, not just the creation of an object or service. We see how far we can push design thinking to create consumer and enterprise value, and to give more insight, creativity and agility into the way business is done."

Like INSEAD, Rotman partners with a design school in the development of its design thinking courses—in this case, Ontario College of Art & Design. The flagship course, "Design Practicum," pairs MBA students with graduate industrial design students to develop solutions for real-world clients from a range of industries, including technology, health care and packaged goods. The course, led by Fraser, stresses design thinking principles such as research, consumer understanding, concept development, prototyping, role-playing and business model visualization. Moreover, the course emphasizes careful strategic thinking on "how to deliver solutions to the marketplace," according to Fraser.

In healthcare, for example, students have tackled subjects from diabetic insulin pumps and chronic pain management to the redesign of the entire hospital experience. "The whole equation gets revisited, which is why the

design of the model is actually the trump card to the design of the object itself," she said.

Rotman's emphasis on design is the brainchild of Dean Roger Martin, a leading proponent of design thinking in business schools. This approach complements the school's guiding philosophy promoting integrative thinking—a cross-disciplinary approach that considers opposing models during the decision-making process. Rotman's focus on design has become a selling point for the school in general, having attracted about 20 percent of the current MBA class, many of whom might not have otherwise applied to the program. To date, Rotman has completed 22 projects, and trained 100 students and about 700 executives in design thinking.

Rotman's student profile is also shifting. Previously, Rotman students were largely Canadian and came mostly from financial services, investment banking and consulting. Today, half the students are international, and a much smaller percentage are interested in traditional, Canadian-based industries. Instead, more are showing interest in innovation, entrepreneurship and business design. An increasing number of designers are also enrolling in the MBA program to round out their skills and master the business process.

Stanford Business School harnesses the resources of the university's Hasso Plattner Institute of Design (otherwise known as the d. school) to offer MBA students courses in design thinking. The d.school, which opened in 2005, is a multidisciplinary center of innovation where "big problems are solved," to quote IDEO's David Kelley,



Embrace, a nonprofit organization that grew from a d.school class project involving four Stanford graduate students, has developed a low-cost, low-tech incubator designed to save premature and low birthweight babies around the world. The course challenged the team of MBA and engineering students to create an incubator that cost \$25, or less than one percent of a traditional incubator, around \$20,000. Photo credit: Rod Searcey.

who heads the program. Since the d.school is open to graduate students of all disciplines, MBA students may find themselves sitting next to students in the design, medical, engineering, humanities and computer science fields. Courses are taught by an equally diverse assortment of faculty members, reflecting the collaborative philosophy of the program.

Especially popular among MBA students are d.school courses like “Entrepreneurial Design for Extreme Affordability,” in which multidisciplinary teams of students design low-cost products for use in developing countries. The course provides a framework in design thinking, activating a “laser-sharp focus on the essential needs of the user,” according to instructor Jim Patell, a management professor at the business school. Several for-profit and nonprofit social ventures have resulted from these class projects, including the nonprofit Embrace, which produces a cost-effective incubator device for use in rural health-care centers or homes, and D.light Design, which has sold thousands of affordable solar-rechargeable LED lights for use in Africa and Asia.

With the INSEAD, Rotman and Stanford programs, the interaction between MBA and design students can occasionally produce some tensions and initial resistance, as to be expected when opposite ways of thinking come together. Developing right-brain thinking in traditionally left-brained students is certainly challenging, and vice versa. For the most part, however, MBA and design students from these programs come out of the experience feeling “transformed.” The MBA students in particular realize that they don’t have to actually be designing

products or graphics to be creative, but can apply that same creativity to a business or enterprise, where there is tremendous room for expression. As Fraser explained, “The basic skills MBA students learn suddenly come to life in a whole new way that can be more broadly applied to designing the enterprise.”

Unlike the above programs, which partner with design schools, **Northwestern University’s MMM program** is a joint MBA/Master’s in Engineering Management (MEM) program between the Kellogg School of Management and the McCormick School of Engineering. MMM added a design track to its program in 2007 in recognition of design’s role in business and operations. According to Assistant Adjunct Professor Steve Fischer, the program’s associate director, the intersection between design and operations is one that few managers have a good appreciation for, and yet there is recognition that a manager who understands and can work in both environments is tremendously valuable to organizations. “We took this leap of faith—based on polling from our advisory board and industry,” he explained. “Most product introductions fail. So anything you can do to improve your success rate is enormously worthwhile.”

MMM students now major in both Design and Operations, and they are required to take “The Design of Services and Products” taught by MMM Co-Director Don Norman, who heads the design side of the program. Students choose from electives like “Sustainable Design,” “Innovation Management” and “Interaction and User Experience Design” taught by leaders in the field of innovation, like Doblin’s Larry Keeley. According to Fischer, the curriculum



Student Julian Portway developed a prototype for a 3M computer mouse/calculator during one of his courses in Northwestern University’s MMM program. Photo credit: Richard Foreman.



changes have proven so popular that MBA students who are not part of the joint program have shown a strong interest in taking the design courses as well. (The Kellogg MBA program itself offers an integrated design course, and, according to Fischer, design is very much a part of the marketing curricula.)

In many ways, MMM’s new emphasis on design represents a logical evolution. In the early 1990s, the program focused on total quality management, and slowly evolved to become more about the entire business organization. The idea of adding design thinking to the curriculum was “a natural next step,” said Fischer, especially in light of the growing number of companies recognizing its value. “We’re finding that some businesses that do this do very well, while those who ignore it do so at their peril.”

In addition to full-time MBA programs, design thinking has made its presence felt on the executive education circuit. The business schools at Rotman and Stanford both offer executive education workshops on design thinking, and the nonprofit **Design Management Institute** began offering professional-level seminars for small groups of CEOs and senior-level executives back in 2000 on myriad topics, such as design research, branding and the management of creative staff. This spring, a partnership between Art Center and **ESADE**, a leading international business school based in Barcelona, will launch executive modules on design thinking for senior-level executives. ESADE’s Colin McElwee explained the genesis of the program: “ESADE has always prided itself on being at the vanguard of change, and we wanted to work in an area that would drive more value, such as innovation.”

The five-day workshops will be led by Art Center faculty Nik Hafermaas, Karen Hofmann and Fridolin Beisert and will provide participants with a primer on how design can drive returns on innovation. Hafermaas, who developed the partnership with ESADE, said, “We have been especially impressed with ESADE’s interest in creating a partnership between design and business education at all levels—from undergraduate courses through executive education.” The program is a pilot for Art Center as well, which plans to develop executive education workshops for designers.

If the above examples are any indication, it appears that the number of business schools adding design thinking to their curricula will continue to grow in the coming years, as companies increasingly recognize the importance of design as a strategic tool. Its value in this regard can only be heightened in the current economic climate. As of now, these MBA courses are offered as electives, but perhaps the day will come when design thinking becomes a core requirement for any MBA student. ●