

The Talent Hunt

Desperate to innovate, companies are turning to design schools for nimble, creative thinkers

Tech geeks love Mozilla's Firefox browser, which is impervious to most viruses, but mainstream America has yet to embrace it. How does Mozilla move beyond invention (cool browser, neat functions) to an innovation that translates into market success (a Net tool so hot it upends Microsoft's Corp.'s ([MSFT](#)) Explorer)? It's a perfect problem for a classroom case study. So last spring, Mozilla's business development team turned to Stanford University. But instead of going to the business school, they headed for the double-wide trailer that housed Stanford's Hasso Plattner Institute of Design, dubbed the "D-school" on campus. The course was team-taught by Stanford profs and industry professionals. Each student worked in a team that included a B-schooler, a computer science major, and a product designer. And each team used design thinking to shape a business plan for Mozilla.

It made a big difference. A B-school class would have started with a focus on market size and used financial analysis to understand it. This D-school class began with consumers and used ethnography, the latest management tool, to learn about them. Business school students would have developed a single new product to sell. The D-schoolers aimed at creating a prototype with possible features that might appeal to consumers. B-school students would have stopped when they completed the first good product idea. The D-schoolers went back again and again to come up with a panoply of possible winners.

TROUNCING TRADITION

One idea was Firefoxies.com, a social networking site where users submit photographs and vote on the quality of friends' photos. The catch: You have to download Firefox to vote. So far, 30% of the site's visitors have done so. Among marketers, that's huge.

The power of this new approach, called design thinking, to promote innovation and open up business opportunities is attracting the attention of corporations around the globe. Design has evolved from a narrow discipline dealing with the form and function of products into a major new approach to developing business models.

As business increasingly turns to India and China to provide low-cost, high-quality goods and services, companies have to focus on innovation to be competitive. That driving need makes design thinking the hottest trend in business culture today. If engineering, control, and technology were once the central tenets of business culture, then anthropology, creativity, and an obsession with consumers' unmet needs will inform the future.



This change in focus is leading to a huge corporate talent hunt. To make their business culture more innovative, managers are hiring thousands of new people who can think and act more creatively. More and more, recruiters ask if people with a degree in "administration" are up to the task.

That's why such corporations such as Nike ([NKE](#)), General Electric, ([GE](#)) McDonald's ([MCD](#)), Intel ([INTC](#)), and many others are looking beyond traditional sources of leadership to a new set of schools and programs to find innovative managers. And that's why Stanford's D-school has earned a place on our inaugural list of Top D-schools, the first-ever survey of design schools and design programs in the U.S., Europe, and Asia that are graduating the innovators companies hunger for. These are the schools that "move away from analyzing existing options and look to the creation of new options that have not yet been considered," explains Roger Martin. He's dean of the Rotman School of Management at the University of Toronto, a leading school in design thinking.

We are also presenting individual stories of success in this talent hunt. These include a graduate of the Illinois Institute of Technology's (IIT) Institute of Design in Chicago who is working as senior director of innovation advanced concepts at McDonald's Corp. A graduate from Carnegie Mellon University is a design researcher at the Mayo Clinic's SPARC Innovation Program. A graduate of INSEAD's product development course with Art Center College of Design students is a member of GE's Experienced Commercial Leadership Program. Northwestern and Germany's Zollverein School of Management & Design grads are leading marketing teams at Johnson & Johnson ([JNJ](#)) and H.P. Pelzer Group. A grad from Massachusetts College of Art is the director of global design resources for the Gillette Co. ([PG](#)) worldwide.

HYBRID GRADS

What characterizes the best D-schools and design programs? First, they are multidisciplinary. They combine engineering, business, design, and social sciences. They team-teach using groups of professors and outside professionals. And they teach students who are organized in groups to operate as teams.

Second, they can be found in both D-schools and B-schools, plus the growing number of joint ventures between the two. B-schools are adding design course tracks. Engineering schools are opening innovation centers. Classical design schools are adding business components.

Third, D-school grads are special. Call them hybrids or polymaths, they are people with both extraordinary depth in a field and the breadth of knowledge to apply it. "A lot of companies have multidisciplinary teams -- marketing people, engineers, designers, strategists. But having all those parts embedded in one person's brain -- that really puts you over the edge in terms of being able to innovate," says Colleen Murray, an IIT Institute of Design graduate at innovation strategy firm Jump Associates.

To gather our list, we created a 24-person advisory board. They include people from corporations such as Whirlpool, ([WHR](#)) Siemens ([SI](#)), and BMW who hire the new design thinking talent; faculty at both D-schools and B-schools such as Art Center, IIT, Northwestern, and Stanford; recruiters such as RitaSue Siegel; and design and innovation consultants such as Yves Béhar at fuseproject and Tamara Giltsoff at London-based Live/Work. They recommended programs from which they hire and where they referred

students. We then conducted 200-plus interviews to narrow our picks to the best 60 global programs.

Our list is eclectic. It includes IIT's Institute of Design, a pioneer in fusing design and business. Its graduates have gone on to jobs in strategy and marketing in Microsoft, Condé Nast Publications, Google, ([PG](#)) and Motorola ([MOT](#)). IIT began awarding dual MBA and master of design degrees in 2006.

JOINT EFFORTS

Forward-thinking business schools on the list, such as Rotman and the McDonough School of Business at Georgetown University, have coursework championed by leading design thinkers such as Roger Martin and Jeneanne Rae. In fact, Martin, IIT's Patrick Whitney, and David Kelley, co-founder of IDEO and Stanford's D-school, have joined together on a project with Claudia Kotchka, the innovation champion for Procter & Gamble Co. ([PG](#)) The four created a three-day program teaching design thinking's three components to the hairstyling products group: deep consumer understanding, the ability to test product variations rapidly, and business strategy formulation. This research laid the groundwork for executive workshops, a summer academy, and a new design elective at Rotman this fall.

Partnerships between D-schools and B-schools are becoming increasingly common. In 2006, for example, France's INSEAD and Art Center in Pasadena, Calif., embarked on a partnership that brings design students to Fontaine-bleau, just south of Paris, for a product development class. Students worked in teams to pitch and develop business ideas. The class is oversubscribed, and INSEAD will soon launch the partnership in Singapore.

Much of the impetus to work across disciplines comes directly from businesses. GE Healthcare is currently sponsoring a class at Art Center to develop inexpensive mobile diagnostic imaging devices for India, Africa, and China. Eastman Kodak Co. ([EK](#)) has gone to Georgia Tech to match industrial designers with students of management and human-computer interaction for projects that focus on photography. Why? Because that's how corporate teams innovate. Sponsoring such a project lets the company motivate students to think in this way and gives it a head start in snapping up tomorrow's superstars.

TRANSLATORS NEEDED

Intel Corp. ([INTC](#)) IS spending \$30,000 on student teams at Arizona State's InnovationSpace program, uniting undergraduates from B-school, engineering, and industrial and visual communication design programs to work on new products for aging baby boomers' future homes. The students will spend time hanging out with elderly folks as they cook, sink into living room lounge chairs, and brush their teeth. They'll develop prototypes for new products and related services. And they'll have their subjects try them out, fixing and adjusting quickly to hit a perfect formula. By year's end, each team will develop a proposal for a new business venture. Professors from all four disciplines will teach the class, which is led by noted design professor Prasad Boradkar.

Intel is making big financial bets that design school programs like those at ASU, Carnegie Mellon, and Georgia Tech will provide fresh ideas. Intel made its name as an engineering company in high tech, says Jay Lundell, Intel's director of user experience design in health research innovations. But, he adds, "there's an increasing realization that to be successful as a technology company, you need the people who can do that translation from engineering to users' needs and back again."

BusinessWeek's Top D-schools include European and Asian programs as well. British corporations are leaders in using design thinking, and they hire graduates from the Royal College of Art and Northumbria University Design School. The new Zollverein School of Management & Design in Essen, which opened its doors to executive students in 2005 and full-time students in 2006, is the buzz of the Continent. Meanwhile, the Chinese government has listed innovation as a national five-year priority and is putting up \$15 billion to promote it. There are some 400 design schools in China graduating thousands of students. Most focus on traditional industrial and graphic design, but a few, such as Tsinghua University in Beijing, are starting to teach design thinking. And in Korea, D-school students are partnering with their U.S. counterparts.

D-schools are racing to meet the demand for new innovative talent. Some are doing a good job. Others are not. We ask corporate recruiters, students, and others to report back to us.

Design schools seek "new opportunities that have not yet been considered.

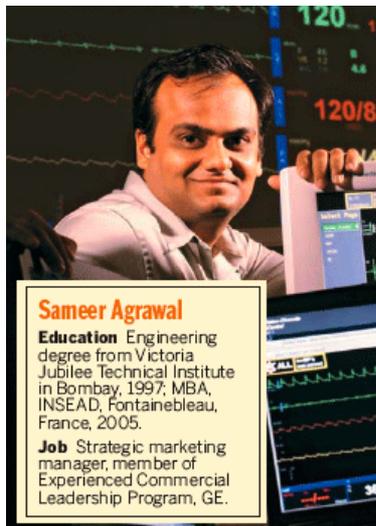
When MBA Meets Designer

A GE manager learns to think creatively: INSEAD graduate Sameer Agrawal shares his story

I took Manuel Sosa's class at INSEAD in the spring of 2005. It was called Strategy for Product and Service Development. An interesting aspect was bringing in design students from the Art Center in Pasadena -- it was a new experiment. I was interested in finding out about team dynamics when you put a creative person in the midst of things.

My perception about designers was, "Here's my product, make it look sexy. Put in the round holes and the right colors and make it look like an iPod ([APPL](#))." To me, designers came a bit later in the product development cycle.

At the start of the class we had to decide what to work on. Each of us had a minute to pitch an idea to develop. You could see the difference. MBA pitches dwelt on the market: how big it was, how little it had been served. Most designers said: "Here is how I use the product today. Here is why it sucks and how it can be better. Here's how I want to do it."



Now I'm part of the Experienced Commercial Leadership Program, a two-year program of six-month assignments. I'm on my third assignment. Has the course helped me? Definitely, from a group dynamics perspective. It helped me also with the "whole product concept." There is the product you are contractually obligated to deliver, but there are also the elements that go beyond the product to help the customer. What you do with the product is as important as what it does. To me, that was the upshot of the experience. You can apply it anywhere.

At GE ([GE](#)), I've seen that what the user does with your product is as important as, if not more important than, what the product does itself. Aviation sells different products for an airplane.

One thing we sell is an engine. There's a multibillion-dollar business for private jets. [As part of my second six-month stint,] we were designing the service option of an engine. We said, how do people use this product? One thing became clear: The person receiving the plane as a gift [for personal use] is out there having fun with it, and he doesn't care as long as it meets FAA regulations and it's available when he wants it. The guy who is using it for revenue-generating options, say, an air taxi, will have much different needs, like making sure costs are under control. We can design new services, like the managing of airline logs, vs. doing just the traditional services of managing the engine for the managing-the-engine guy. If we didn't understand those different needs, we'd be leaving money on the table. I see design as a philosophy that people learn in order to understand how products are used...all those aspects of the customer experience.



The Top European & Asian Design Programs

NAME	PLACE
Bocconi University	Milan
Central Saint Martins College of Art & Design	London
Delft University of Technology Design Institute	Delft, The Netherlands
Design Academy Eindhoven	Eindhoven, The Netherlands
Domus Academy	Milan
FH Joanneum University of Applied Sciences	Graz, Austria
HKU Utrecht School of the Arts	Utrecht, The Netherlands
Hongik University School of Design	Seoul
Hong Kong Polytechnic	Hong Kong
Hunan University School of Design	Changsha, Hunan Province, China
Indian Institute of Technology Industrial Design Center	Bombay
International Design Business Mgmt. Program (IDBM)	Helsinki
Köln International School of Design	Cologne, Germany
Korea Advanced Inst. of Science & Technology (KAIST)	Daejeon, Korea
Kyoto Institute of Technology	Kyoto, Japan
National Institute of Design	Ahmedabad, India
Northumbria University Design School	Newcastle, England
Polytechnic University of Milan Design School	Milan
Royal College of Art	London
Tama Art University	Tokyo
Tongji University School of Design	Shanghai
Tsinghua University Academy of Arts & Design	Beijing
UMEA Institute of Design	Umea, Sweden
University of Art & Design Lausanne	Lausanne, Switzerland
University of Oxford Said School of Business	Oxford, England
Zollverein School of Management & Design	Essen, Germany