BizEd

WHERE
TECHNOLOGY
MEETS
BUSINESS

Business educators adjust to the impact of new tech trends

Also: B-Schools in Emerging Economies

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NOVEMBER/DECEMBER 2012 • VOLUME XI, ISSUE 6

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In Step with Technology

I'm an avid exerciser, but that doesn't mean I *like* to exercise. Like many people, I find that forcing myself to take that jog often requires an act of will. But recently I purchased technology that has inspired me, if not to enjoy exercise, then perhaps to dislike it less. The small pocket-sized device records the number of steps I take, flights of stairs I climb, and calories I burn. At intervals, it wirelessly syncs up with my laptop, iPad, and an online dashboard to give me an update on my fitness progress. It flashes messages such as "Move It," "I Like U!" and "Good Job!" When I reach certain goals, such as 10,000 steps taken or a pound lost, it sends me congratulatory e-mail messages. Online, I earn badges for each milestone and see how my progress compares to that of other users.

I'm now more motivated to exercise than I've ever been, just to see those numbers climb. In short, my fitness regimen has been "gamified."

After I spoke with the University of Pennsylvania's Kevin Werbach and Temple University's Steven Johnson for "Gamifying the Classroom," I realized that such technology isn't just great for my health—it also could transform the classroom. Both professors are using gamification to encourage their students to go beyond course requirements. Students are motivated to see their point totals rise for performing certain tasks, and they're excited when they receive e-mails cheering them for surpassing a new goal. In the article "Game On," we also learn how Duke University's Fuqua School of Business is using gamification in a different way: to motivate its stakeholders to engage with the school.

Business schools are exploring the possibilities of not just gamification, but also social media, Big Data, and other innovations. In "The Intersection of Business and Technology," we hear from IT experts at several universities, who discuss how quickly technology is driving change. In "Social Media: How Tweet It Is," MBA graduate Sterling Morris explores how business schools are using—or, in some cases, not using—social media to their advantage. And in our Technology department, we discuss the phenomenon of massive open online courses, or MOOCs, which enroll tens of thousands of students in a single class.

Business educators have their hands full adapting and adopting new technologies. When the "next big thing" comes, they'll have to adapt and adopt all over again. As they accomplish each technological goal, most will receive no badges, no extra points, no encouraging e-mails. But they'll be taking part in one of the most exciting and experimental periods that higher education has ever seen—how motivating is that? **Z**

Tricia Bisoux

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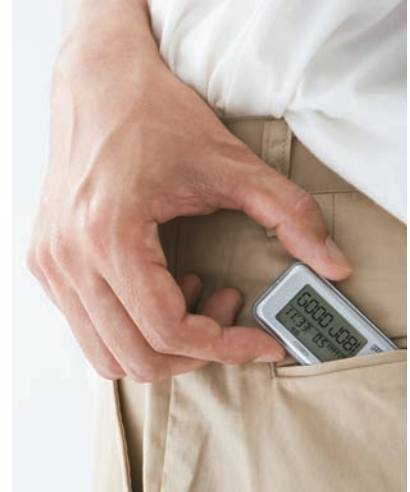
Pearson Launches a College

AN ARTICLE IN the September issue of *BizEd* predicted that, in the near future, corporations would begin offering their own MBA programs to the public—and that future has already arrived. This summer, publishing company Pearson announced that it is launching a higher education college in the U.K. Pearson owns Penguin and the *Financial Times*.

The Pearson Business and Enterprise degree program has been developed in conjunction with companies such as BT, Cisco, Peter Jones Foundation, Atos, Sony Pictures, Lloyds of London, Nationwide, and L'Oreal. Students will graduate with a BSc degree validated by Royal Holloway and Bedford New College, part of the University of London.

Students will study in a corporate environment at Pearson's offices in London or Manchester; they also will participate in a residential requirement at Royal Holloway's campus. The Pearson Business degree, as the company calls it, includes a guaranteed internship and a company-based mentor for every student. Annual tuition fees for the three-year program are £6,500 (about US$10,400). Students can earn their degrees in a three-year option that follows the traditional university mode; in a two-year accelerated format that includes summer classes; and in a four-year work-study program.

David Bach, senior associate dean for executive MBA and global programs at the Yale School of Management, authored "We Need to Rethink…Everything" in *BizEd*'s September/October 2012 issue. He thinks the Pearson degree highlights how the boundaries are blurring between for-profit and nonprofit degree-granting institutions.

"A company like Pearson will instinctively approach the delivery of management education pragmatically, aiming for global reach and relying naturally on digital technologies that have already transformed its core business," Bach notes. "This poses a challenge for brick-and-mortar universities. But leading universities and business schools have valuable assets that Pearson—so far—lacks, such as renowned faculties, trusted brands, broad recruiter networks, and vast extracurricular offerings that constitute a key part of any educational experience. So I wouldn't count out conventional universities and business schools. What is clear, though, is that competition is intensifying, and this will inevitably spur innovation. That's a good thing."

Awards for *BizEd*

BizEd recently has been honored with awards in three competitions designed for trade and association publications.

The magazine took home six prizes in the 2012 Charlie Awards competition sponsored by the Florida Magazine Association. All awards were in the association division of the competition, which recognizes excellence among Florida-based publications. The honors include four Charlie awards, which are equivalent to gold medals: one for best theme issue for the January/February 2012 edition on diversity; one for best service feature, "Coping With Millennials on Campus," which was written by the University of Arkansas' Steve Williams, Jim Beard, and Margaret Tanner and appeared in July/August 2011; one for best editorial, "Business with Passion," written by co-editor

Improving Accounting

TWO PROMINENT accounting organizations believe it's time to overhaul the way the discipline is taught. This summer, the American Accounting Association (AAA) and the American Institute of Certified Public Accountants (AICPA) jointly released a report created by the Pathways Commission on Accounting Higher Education, which they created to study the future of accounting education. The report, which was two years in the making, offers seven recommendations for how to improve accounting education and the profession as a whole:

■ Build the profession for the future by fully integrating accounting research, education, and practice. This will require integrating professionally oriented faculty more fully into the school's program, as well as bringing relevant academic research into the classroom.

■ Plan for future demand by making doctoral education in existing programs more flexible and by exploring alternative paths to terminal degrees.

■ Reform accounting education so that teaching is more respected as a critical component. The commission recommends that schools increase reward, recognition, and support for high-quality teaching and that they better connect tenure with teaching excellence.

■ Develop curriculum models, learning resources, and faculty development initiatives to support a curriculum that reflects today's global and tech-savvy business world. This requires reaching out to the accounting community for input on developing relevant curricula.

■ Improve the ability to attract high-potential, diverse entrants into the profession by emphasizing the value of accounting to the broader business community and finding ways to enhance the reputation of the profession. Schools might consider transforming the first course in accounting to give top students a clearer vision of what an accounting career can encompass.

■ Create mechanisms for collecting and disseminating information about the markets for accounting professionals and accounting faculty. This includes projecting future supply and demand for both students and professors of accounting.

■ Establish an implementation process to address these recommendations and sustain future efforts.

The full report can be found at commons.aaahq.org/files/0b14318188/Pathways_Commission_Final_Report_Complete.pdf.

Sharon Shinn for the May/June 2011 issue; and one for best regular department, Technology, written by co-editor Tricia Bisoux.

Bisoux also won a silver for the feature "Collaborative Efforts," which was published in March/April 2012, and a bronze for her March/April editorial "What's Your Superpower?"

In addition, *BizEd* received three honorable mentions in the Tabbie Awards competition sponsored by Trade, Association and Business Publications International (TABPI). Two were for feature articles: "Coping with Millennials on Campus" was recognized as a top how-to article; "Lives, Not Just Livelihoods,"

which was written by former Notre Dame dean Carolyn Woo and published in the May/June 2011 issue, was listed among the top-25 features. The magazine also received an honorable mention in the special focus category for the September/October 2011 issue, which was devoted to curriculum reform. The

Tabbies are open to English-language business-to-business print and online publications worldwide.

Finally, Shinn's "Business with Passion" won a silver award in the 2012 EXCEL Awards competition sponsored by Association Media & Publishing. The competition honors excellence in association media.

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Focus on Freshmen

MORE SCHOOLS are starting earlier when it comes to preparing students for the jobs they might take upon graduation—and that means designing programs aimed at underclassmen. Two recent examples:

■ The Indiana University Kelley School of Business in Bloomington has introduced Kelley Compass, a personal and professional development initiative designed to help students begin navigating their career paths while they're still freshmen.

During the three years of the Compass program, students are assigned career and academic advisors who collaborate with course instructors to provide support. The freshman course focuses on the individual and helps students develop self-awareness, analyze their cultural influences, and prepare résumés. The sophomore course covers teamwork and teaches students to manage first impressions, balance conflicting ethics, lead meetings, and create products. In the junior year of the Compass program, students practice making decisions, setting goals, and forming action plans.

Kelley Compass is accompanied by changes to the undergraduate academic program, which now will include a global concentration in the sophomore year and an integrated core of functional disciplines in the junior year. The revamped curriculum also includes case studies, projects, and applied business ethics courses.

■ The Office of Career Development and Placement Assistance at the University of Pittsburgh in Pennsylvania is unveiling an initiative that guarantees every undergraduate the opportunity of an internship. Starting this fall, any registered undergraduate on the Pittsburgh campus is eligible to participate in the Internship Preparation Program (IPP), which consists of six sessions that address topics such as writing a résumé, preparing for an interview, and developing networking skills.

Once students complete the IPP, they meet individually with career development staff for personal résumé reviews, mock interviews, and support in identifying strong matching opportunities for internships. The guaranteed internship opportunities will begin for students in the spring and summer semesters of 2013.

SHORT TAKES

NEW APPOINTMENTS

■ **Paul Jarley** has been named dean of the College of Business Administration at the University of Central Florida in Orlando. He was previously dean of the Lee Business School at the University of Nevada, Las Vegas.

■ **Catherine Usoff** is the new dean of the Graduate School of Management at Clark University in Worcester, Massachusetts. She assumed her new role in June, replacing Edward Ottensmeyer. Usoff came to GSOM from Bentley University.

■ **Clifton Jones** has begun his tenure as dean of the School of Business Administration at the University of South Carolina Aiken. He was previously chair of the department of economics and finance and a professor of economics for the Rusche College of Business at Stephen F. Austin State University. He takes over from interim dean David Harrison.

■ Louisiana State University in Baton Rouge has announced that **Richard White** will serve as interim dean of the E.J. Ourso College of Business. White is the college's Marjory B. Ourso Professor and associate dean.

■ Real estate professor **Mark Eppli** has been named interim James H. Keyes Dean of Business Administration at Marquette University College of Business Administration in Milwaukee, Wisconsin. He succeeds **Linda M. Salchenberger**, who moves to the newly created job of associate provost for academic planning and budgeting.

■ **Louis Dawkins,** a former Henderson State University faculty member and former dean of Nevada University's School of Business, has returned to serve as the School of Business' interim dean.

■ **Bernie Jaworski** has taken the position of interim dean of the Peter F. Drucker and Masatoshi Ito Graduate School of Management at Claremont Graduate School in California. Jaworski has served as the Peter F. Drucker Chair in Management and Liberal Arts since 2010.

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SHORT TAKES

■ **Idalene Kesner** has been named interim dean of the Kelley School of Business at Indiana University in Bloomington. Kesner, the associate dean of faculty and research and the Frank P. Popoff Chair of Strategic Management at the Kelley School, will take the role after current dean Dan Smith begins his role as president of the IU Foundation.

■ **Marshall Geiger,** a professor of accounting at the University of Richmond's Robins School of Business in Virginia, has been appointed an academic fellow of the Securities and Exchange Commission's Office of the Chief Accountant in Washington, D.C., from August 2012 through August 2013.

■ Finance professor **Larry Lockwood** (top) has been named the Stan Block Endowed Chair in Finance at Texas Christian University's Neeley School of Business in Fort Worth. Also at Neeley, **Keith Hmieleski** has been named the Robert and Edith Schumacher Faculty Fellow in Entrepreneurship and Innovation.

■ **Jay Barney** has joined the faculty at the David Eccles School of Business at the University of Utah in Salt Lake City. He has been named Presidential Professor of Strategic Management and Lassonde Chair of Social Entrepreneurship.

■ **Robert Forsythe,** former dean of the University of South Florida's College of Business in Tampa, has been named a Franklin Fellow. Franklin Fellows work with the Department of State and the U.S. Agency for International Development, providing consulting

on how best to address issues of national security and foreign policy worldwide.

■ **Quinetta Roberson,** professor of management at the Villanova School of Business in Pennsylvania, will hold a one-year appointment as the

program director for the Science of Organizations at the National Science Foundation.

STEPPING DOWN

■ **Jim Burton,** dean of the Jennings A. Jones College of Business at Middle Tennessee State University in Murfreesboro, will step down at the end of the 2012-2013 academic year. Burton spent 14 years as dean of the college.

■ **Hildy Teegen** has announced that she will step down as dean of the Darla Moore School of Business at the University of South Carolina in Columbia. Teegen, who has been dean since 2007, will remain in her post until her successor is named; she will take a one-year sabbatical before returning to teach and conduct research.

HONORS AND AWARDS

■ Two honors have recently been bestowed upon **Ronald**

P. Hill, the Richard J. and Barbara Naclerio Endowed Chair in Business at Villanova School of Business in Pennsylvania. He was the 2012 recipient of the Williams-Qualls-Spratlen Multicultural Mentoring Award of Excellence given by the American Marketing Association; and he was recognized by the PhD Project for his outstanding service, leadership, and commitment to the marketing profession.

■ Also receiving recognition from the American Marketing Association is **William Cron,** associate dean of graduate programs and research and the J. Vaughn & Evelyne H. Wilson Professor of Marketing at the Neeley School of Business at Texas Christian University in Fort Worth. Cron was awarded the Selling and Sales Management Lifetime Achievement Award by the sales special interest group of the association.

■ **Larry Gianchetta** received the Outstanding Dean Award at the Beta Alpha Psi Annual Meeting last summer. He has served as dean of the University of Montana in Missoula for 25 years.

NEW PROGRAMS

■ The **Chinese University of Hong Kong** has announced a new double degree undergraduate program offered by CUHK's Business School and School of Journalism and Communication.

■ Beginning in January, **Utah State University** in Logan will offer an MBA degree on-site at **Brigham Young University-Idaho** in Rexburg. Faculty members from USU's Jon M. Huntsman School of Business will teach the MBA courses on campus at BYU-Idaho.

■ The Haas School of Business at the **University of California, Berkeley,** has launched a new MBA for Executives, which will enroll its first class in May 2013. Tailored to seasoned executives with about 12 years of experience, the 19-month program is anchored in a general management curriculum.
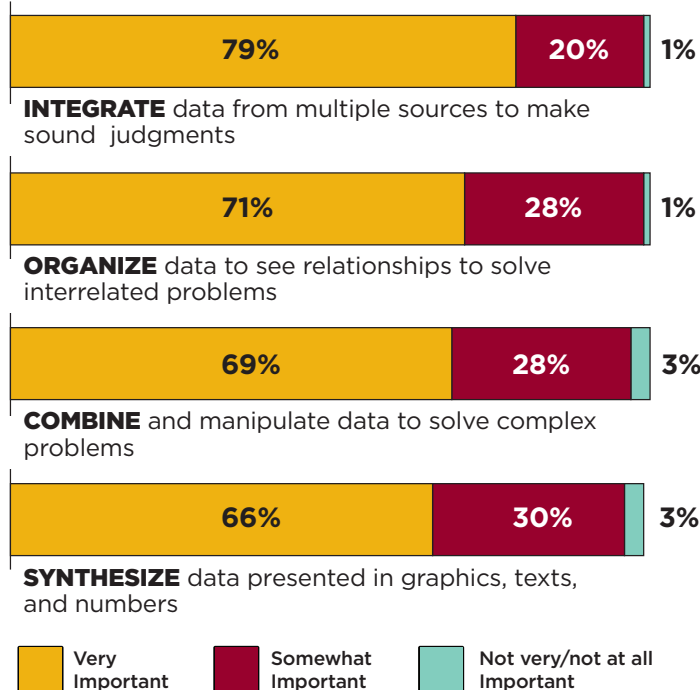
■ **Ashridge Business School** in the U.K. is launching a new course on business model innovation. The course will focus on five activities: changing operations, automating technology, choosing outsourcing partners, reorganizing the team, and securing revenue.

■ The Simon School of Business at the **University of Rochester** in New York is introducing three new programs: an MBA with a concentration in business analytics; a master's degree with a concentration in

THE GMAT® REPORT

Corporations Want Big Data Skills

The GMAT® exam's new Integrated Reasoning section measures skills identified by management program faculty as important for today's incoming students to have. These skills are also important to employers, who rank these IR skills as *somewhat or very important* for their 2012 new graduate business hires to have:

Skill	Very Important	Somewhat Important	Not very/not at all Important
INTEGRATE data from multiple sources to make sound judgments	79%	20%	1%
ORGANIZE data to see relationships to solve interrelated problems	71%	28%	1%
COMBINE and manipulate data to solve complex problems	69%	28%	3%
SYNTHESIZE data presented in graphics, texts, and numbers	66%	30%	3%

**Source:** Data based on responses from 636 global employers that plan to hire recent MBA or master's business graduates in 2012, GMAC Corporate Recruiters Survey.

For nearly 60 years, the GMAT exam has been designed by business schools for business and management programs. Find out more about the GMAT exam with Integrated Reasoning at **gmac.com/nextgen**

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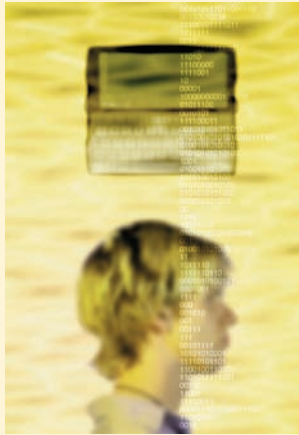
pricing; and a one-year MBA aimed at working professionals.

■ **INSEAD** has launched an "Abu Dhabi MBA Module" to provide students on its France and Singapore campuses an immersive MBA learning experience in the United Arab Emirates. The program was designed in collaboration with the Abu Dhabi Education Council and senior partners in Abu Dhabi's government and business sectors.

■ **Pace University's** Lubin School of Business in New York City has launched an undergraduate arts and entertainment management (AEM) concentration. It's designed to attract business students looking for careers with theater companies, museums, dance companies, art galleries, television production firms, and talent representation and management companies.

■ **Arizona State University** in Tempe has introduced the Business and Engineering Scholars Program, which allows students to earn degrees from the W.P. Carey School of Business and the Ira A. Fulton Schools of Engineering at the same time. In addition, the Carey School is offering new concentrations in its BBA program for students interested in technology, statistics, and global leadership, and is planning new concentrations in human resources and media studies for 2013.

COLLABORATIONS

■ With the goal of improving financial literacy for teens, the Wharton School at the **University of Pennsylvania** in Philadelphia teamed with PricewaterhouseCoopers in September to support a financial literacy conference for 150 high school educators. Knowledge@Wharton High School (KWHS) and PwC paid all expenses for the PwC-KWHS Seminar for High School Educators on Business and Financial Responsibility. The seminar was designed to help teachers, principals, and superintendents deepen their knowledge in areas such as stocks and investing, marketing/branding, leadership, entrepreneurship, negotiation, sustainability, and career planning.

■ The College of Business at **Washington State University** in Pullman has partnered with Switzerland's César Ritz Colleges to offer a program on hospitality and business management (HBM). Students will study and live in Switzerland while completing the program; they will earn bachelor's degrees in international business from César Ritz Colleges and bachelor's degrees in HBM from Washington State.

■ **IESE Business School** of Barcelona, Spain, and **New York University's** Stern School of Business have launched the "Global Finance and Strategy for Senior Execu- tives" program designed to help senior executives cope with today's volatile business environment. Modules will be held in Barcelona, New York, and Shanghai.

GIFTS AND DONATIONS

■ The College of Business Administration at **Northeastern University** in Boston, Massachusetts, has received the largest philanthropic investment in its history from alumni Richard D'Amore and Alan McKim. As a result of their US$60 million gift, the school has been renamed the D'Amore-McKim School of Business. D'Amore is a general partner at venture capital firm North Bridge Venture Partners, and McKim is founder and CEO of Clean Harbors.

■ An anonymous donor has pledged a gift of US$25 million to **Columbia Business School** in New York City. The school plans to use $23.25 million of the gift to support construction of the school's new home on the university's Manhattanville campus. The remaining money will bolster the school's Social Enterprise Program.
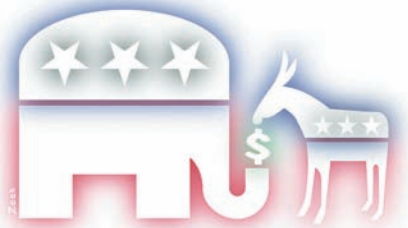
■ The Wharton School of the **University of Pennsylvania** in Philadelphia has received lead contributions totaling US$11 million to establish the Wharton Public Policy Ini-

tiative. The initiative, which will have locations in Philadelphia and Washington, D.C., will offer nonpartisan research and resources to government policy makers and decision makers. Alumni Marc J. Rowan, Marc A. Spilker, and Diane Isaacs Spilker contributed to the founding gifts.

■ **Oklahoma State University's** capital campaign to raise US$1 billion has now topped $900 million with several recent gifts made to the Stillwater school. One gift includes cash, pledges, and an estate commitment from Chuck and Kim Watson that, when combined with matching gifts, will have a total impact of $36 million. The money will help build the new home for the Spears School of Business and create the Watson Graduate School of Management in honor of the OSU alumni. In addition, Malone and Amy Mitchell recently committed $7.5 million to create the new home for the Riata Center for Entrepreneurship, and

Norman and Suzanne Myers committed $1 million to name the dean's suite in the new building.

■ The **University of Missouri-Kansas City** and the UMKC Foundation have received a US$3 million gift from the Regnier Family Foundations to endow the Regnier Institute for Entrepreneurship and Innovation, housed in the Henry W. Bloch School of Management.

■ The Berkeley Center for Green Chemistry at the **University of California in Berkeley** has been awarded a US$3.4 million training grant by the National Science Foun-

dation. The grant will train five to six PhD students annually for five years in the principles of green chemistry and the design of clean energy technologies. Students will be recruited from the Haas School of Business as well as

Berkeley's School of Public Health, College of Chemistry, and College of Natural Sciences.

OTHER NEWS

■ The Albers School of Business and Economics at **Seattle University** in Washington has established the Howard J.

Bosanko Endowed Professorship in International Economics and Finance. Funded by the estate of Helen L. Bosanko, the three-year-term professorship was created in honor of her late husband, an alum.

■ The Tuck School of Business at **Dartmouth College** in Hanover, New Hampshire, is increasing its commitment to Latin America by creating a Latin American Advisory

Board composed of alumni living or working in the region.

■ In September, the **University of Toronto's** Rotman School of Management opened its new expansion building, designed by Kuwabara Payne McKenna Blumberg Architects. The nine-story-high expansion, which is integrated with the school's existing property and is targeting LEED silver certification, doubles the school's teaching, research, study, presentation, and special event space.

■ The Leeds School of Business at the **University of Colorado Boulder** is introducing a new daylong freshman orientation program called "CoLab: Essentials of Collaboration and Innovation." During the orientation, approximately 750 students will compete in teams under the guidance of faculty, alumni, and corporate sponsors that include IBM, ConocoPhillips, and Western Union. The activities are designed to help incoming freshmen learn business essentials such as teamwork, interpersonal communication, strategy, and innovation. The event will culminate in a final competition in which teams will develop a product, strategize its place in the market, build it, price it, and test it. **Z**

The Intersection of BUSINESS &TECHNOLOGY

Tech-savvy businesses use data to streamline operations, improve efficiency, and enhance the customer service experience. Which means business schools need to produce graduates with a broad understanding of how technology can permeate every aspect of the organization.

BY SHARON SHINN

Bordeaux, France, is going digital. In recent years, it has introduced the "digital city" initiative, which papers the town with QR codes that people can scan with their smartphones to learn about everything from flora in the parks to schedules for public transportation. It has also launched a sort of city credit card, which residents can use to pay for public services that range from museums to pools to school lunches. And which farsighted city official was the driving force behind both initiatives? Pascale Avarguès, the city's chief information officer.

"People used to dismiss CIOs as nerds who make sure everyone in the company gets their e-mails and can access the Internet," says Nils Olaya Fonstad, associate director of INSEAD eLab, based in Fontainebleau, France. But today's CIOs play a far more central role than merely running the tech, he says. They understand the company's overarching goals. They know how to use technology, and the data produced by technology, to improve the organization's operations. In short, they know how to turn technology into a competitive advantage.

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But as technology becomes more critical to running any kind of business, it becomes necessary for all top managers—not just CIOs—to have an understanding of how it works and what it can do. "I wouldn't say they need to learn how to connect the Internet switches," says Marc Hoit, vice chancellor for IT at the Office of Information Technology at North Carolina State University in Raleigh. "But they need to understand the merger of business and technology."

IT in the Business World

The technology that runs today's businesses is so pervasive and so interdependent that "things like standardization and integration are no longer just nice things to have—they're essential to competitiveness and innovation," says Fonstad. When top managers have a broad understanding of digital data, they can "identify the synergies that enable the company to develop new products and services," he adds. They can use IT to fine-tune business processes, improve customer service, and innovate and operate more efficiently.

For instance, Fonstad describes MAPFRE, a Madrid-based insurance company that was able to standardize key customer data to determine why certain customers were leaving—and create a new policy that would retain them.

Because CIOs are the ones managing the complex, interdependent data systems, says Fonstad, "they're the ones with the most holistic view of their organizations. If CIOs are spending all their time on managing technology, I would argue that their organizations are wasting money."

He'll hear no dissent from Martin Frick, director of the Executive Education Programme and HR Workgroup at the European CIO Association (EuroCIO), based in Brussels, Belgium. "In most businesses, even nontechnical ones, IT has become core to the business model," Frick says. "Only if the CIO acts as a business manager can you get the full potential of IT in the organization. It should be possible for the CIO to become the CEO of the company. But that means the CIO must develop the right skill set."

Fonstad agrees. "Businesses increasingly want employees who have T-shaped portfolio skills," he says. "The vertical dimension represents deep expertise in a specific area, whether that's in business processes or products. The horizontal dimension represents an ability to manage IT interdependencies. People with these skills know how to take the data generated by one business unit and use it within a different business unit to help develop new products."

The trouble is, individuals with those skills are in short supply—and growing more scarce. "As more organizations recognize the importance of hiring graduates with these skills, the demand has increased, while the supply is shrinking," says Fonstad.

That's also been the conclusion at EuroCIO, which has forecast a shortage of chief information officers in the future. The solution? Encourage business schools to develop programs that will give graduates a balanced grounding in both management and technology.

Planning the Programs

Hoit asks the obvious question: "How do you prepare students for business careers that encompass scientific and technical knowledge? For instance, logistics is a hugely mathematical problem, one that civil engineers have been solving for years. Is the answer to make sure every student earns an engineering degree before going to business school?"

Maybe not, but experts believe business students need to learn the technology alongside the functional disciplines to understand how the two relate. One approach is to develop special classes and full programs that integrate business and technology (see "Education at the Intersection," facing page). But there are other ways that schools can make sure business students understand technology's vital importance to the organization:

■ *Expose students to real-world expertise.* INSEAD's Fonstad recommends three strategies: inviting practitioners into the classroom, sending students out to conduct projects for actual organizations, and launching research centers on campus. All three approaches enable students to interact with executives and see how academic theory can be applied to practical challenges.

■ *Encourage business students to acquire specialized skills.* Hoit advises his students to develop expertise in a functional business discipline—and a technical skill to back it up. He suggests they acquire this specialized knowledge through

Education at the Intersection

A few schools have begun offering courses and programs that specifically focus on what IT professionals need to know about business or how business managers can utilize IT. Here are two examples:

■ Henley Business School at the University of Reading in the U.K. has positioned itself to bring together business managers and IT professionals, says Sharm Manwani, executive professor of IT leadership and corporate program director at Henley. About five years ago, the school created a customized master's program in enterprise information management for high-potential IT executives from Deutsche-Telekom. Not only did the program cover topics like strategy, execution, and personal development, it also introduced participants to a concept Manwani describes as "smart pushback."

He explains, "Too often, IT professionals are seen as order takers. Business leaders tell the CIO they need a solution, and the CIO creates one, but it might not be what the organization needs. If the CIO responds with smart pushback, he'll ask, 'What do you really need here? How does that fit in with our strategy and our other initiatives?'"

Henley's Deutsche-Telekom program was designed to provide an "end-to-end view" of the organization to participants, who included systems analysts, program managers, enterprise architects, and service managers. "We started by discussing what business strategy is and what it means in terms of enterprise architecture, capabilities, and sourcing," says Manwani. "Then we returned to areas they were more familiar with, such as systems requirements and project management, but now they could consider these areas through a strategic lens."

Henley will bring some of the elements of its Deutsche-Telekom program to the modules it will teach in the joint business/IT program sponsored by EuroCIO.

The 18-month master's equivalent, which launched in September, is aimed at business and enterprise architects, particularly in companies that are facing major restructuring and similar challenges. The program will be delivered in nine modules at four European business schools; Henley will deliver three of the nine.

Henley's program will open with discussions of strategy, innovation, and new business models, and will continue with personal development sessions that explore different personality types and communication styles. Manwani considers these personal development classes absolutely critical. "We want participants to develop the confidence to sit down with top managers and have challenging debates about how their proposals could transform the organization."

Managers and professionals who understand the entire business are invaluable employees, Manwani believes. "What can hold IT people back is a narrow focus on the technology. People coming from the functional setting must be able to see the whole business if they're to become leaders."

■ At NCSU, modules on "data-driven decision making" are designed to help students use various high-tech data tools to understand the business environment in which they'll be operating. But the real goal is to teach them how to use the technology to ask better questions, says Michael Kowolenko, principal research scholar at the Center for Innovation Management Studies at NCSU's Poole College of Management.

The modules are presented in an action-based learning format where students have to determine if there's a market for a specific product and then identify obstacles and opportunities. "It's a typical SWOT analysis, but the technology tools allow them to do more in-depth analysis in four domains: economic, social, regulatory, and technical," says Kowolenko.

For instance, if students are researching new technology designed to aid victims of heat stroke, they can access the EDGAR Filings, a database of company information filed with the SEC. Students might first use the search tool to find every filing that includes the words "heat stroke," then narrow their searches down by asking more specific questions. They can sort for other kinds of information on other databases—such as PubMed, a government database dedicated to research activities within the medical field.

"They're able to go through millions of documents very quickly to get a holistic view of that particular market," says Kowolenko. "The tools have the flexibility to allow them to ask all sorts of questions. But what's more important is that students learn to ask the right questions. If they don't understand what they're going to do with the information, then the ability to sift data on a large scale only produces more data of little value on a large scale. The idea is to take data and turn it into knowledge."

While NCSU's data-driven decision making classes currently exist as mandatory modules within the undergraduate entrepreneurship program and electives within the MBA program, the school will launch a full course on the topic in January. Kowolenko believes that data-driven analytical skills have broad application in a wide range of professions, including entrepreneurship, business development, accounting, auditing, and fraud detection. Ultimately, says Kowolenko, "we want to turn out tech people who also have a good understanding of business."

minors, dual master's degree programs, or second degrees.

He adds, "If I'd wanted to be an orthopedic surgeon, I would have started with a mechanical engineering degree to learn about joints before I learned about medicine. Today, if I want to run a business based on logistics, I'd learn the math behind it before I studied how companies like FedEx and Walmart have optimized that math to run better businesses."

■ *Develop partnerships with other schools and universities.* Teaming is a good strategy for business schools that want to add technological depth to their programs but don't have the resources on hand. In fact, EuroCIO has sponsored this strategy among several European schools that are starting to offer a range of programs in IT and business.

The first EuroCIO MBA for Corporate Information Management was launched by Nyenrode Business School in conjunction with Delft University of Technology, both of the Netherlands. This EMBA in business and IT has been so successful that it is being expanded into additional European universities. EuroCIO's first Professional Programme in Business and Enterprise Architecture, which focuses on business and management elements more than technical design, launched in September 2012 as a collaboration between Henley Business School in the U.K., Ecole Central Paris in France, Technical University of Munich in Germany, and TiasNimbas Business School of the Netherlands.

EuroCIO has focused on executive education and EMBA programs because its administrators believe that candidates are more likely to benefit from such offerings if they've had enough professional experience to "appreciate the problems in the first place," Frick says. "Marrying professional experience with academic experience is what makes these programs relevant."

■ *Target likely candidates for such programs.* Potential students might be older working CIOs who want to become top business leaders or ambitious mid-level managers who want to optimize the role of technology in their organizations.

In fact, the new programs sponsored by EuroCIO so far have drawn three types of people, says Frick. "About 50 percent have a technical background, 25 percent have a business background, and the remaining 25 percent are people from SMEs," he notes. "All of them would like to merge business and IT in order to run their companies better."

Says Hoit, "CIOs used to start out in operations, sometimes as facilities managers. They knew how to keep the technology running and the infrastructure sound." But as they've become strategic business partners within the organization, they've recognized the need for more business skills. He believes that many of them will start out by getting undergraduate degrees in math and science, and then take master's business courses to learn how to apply this knowledge within the organization.

Leading the Way

With business schools already struggling to pack the curriculum with all the necessary pieces—from ethics classes to global consultancy projects—it might be hard to convince administrators to add the technical element. Fonstad thinks the answer is to provide tangible proof of how valuable technology is to the organization. He has worked with CIONET, an association with nine regional offices in Europe, to produce 2011 and 2012 editions of "The IT-Enabled Leadership Report" (www.insead.edu/elab).

To compile the report, Fonstad and his fellow researchers survey more than 100 European CIOs, using a survey tool developed by Peter Weill and Stephanie Woerner at MIT. They also ask regional offices of CIOnet to nominate candidates for the European CIO of the Year award and interview the nominees to learn how they spend their time. Profiles of the top nominees appear in the final report.

"This is a fantastic way to explain to non-IT colleagues that IT professionals today don't simply manage technology," says Fonstad. "They also manage business processes and enhance the customer experience."

As digitization becomes more prevalent, he continues, it becomes even more essential that business schools prepare their graduates to operate in a tech-enabled world. "I believe digitization is following the

Full Tech Ahead

What are some of the major technology trends that tomorrow's business manager will have to understand to manage the IT function? NCSU's Marc Hoit briefly describes four of the most important ones.

■ **Big Data.** This refers to the amount of data that organizations are now filtering to solve their biggest scientific issues. There are new machines capable of creating half a terabyte of data a day, and major research centers have several of these machines. In the past, only large research entities—like the government, laboratories, and major universities—could afford these machines. But now they're available for about US$100,000, and costs will continue to decrease. That means access to them will increase, as will their capabilities.

Big Data can be used by scientists to study everything from genomics to disease patterns; by city officials to improve traffic flows; and even by the fishing industry to track coastal weather patterns. Credit card companies have always used Big Data to detect fraud, but now they can do so from the second someone swipes a card. And Facebook, Google and other groups rely on social media data to help their clients reach customers and make decisions.

Because Big Data will be used by more organizations in the coming years, managers must learn how to tap its potential most effectively. And because many business schools already own the number-crunching machinery that will correlate massive data trends, I believe they will become the natural sites for Big Data research in the future.

■ **The Cloud.** The term has come to mean many things, but this is my current definition: The cloud separates the infrastructure you need from the services and applications you want to run. For instance, when individuals use apps on their smartphones to ask for directions, they don't care what kind of Big Data has to be crunched behind the scenes for them to get their answers. They just want answers. Because so much data and so many software applications are working together in the cloud, those answers can be supplied without any effort from the user.

But the cloud is going to be so much more. It's going to allow people who can't afford Big Data tools to have access to those tools cheaply. Right now, you can rent from Amazon the ability to do things that ten years ago would have cost millions of dollars in infrastructure, hardware, and expertise. The cloud is making a range of complex calculations and searches cheaper, simpler, and more accessible.

■ **Mobility.** We're no longer stuck sitting in offices or research labs. No matter where we are, we expect to use our laptops, our tablets, and our smartphones to retrieve any information we need. Mobile technology encompasses how to access that data, how to keep it secure, and how to make sure we have enough bandwidth to send and receive data. It also considers questions like, "How can we translate research data from 20' x 10' research computer screens to 4" x 3" cell phone screens?"

■ **Online Education.** Online education touches every level of school from kindergarten through the university, and it is affected by diverse forces that range from the growth of for-profit schools to the reduction of state funding for education. While much of the talk is about how online delivery helps schools lower costs and reach a wider student base, I think a more important issue is how it will enable schools to develop more partnerships.

Right now, in the North Carolina State University system, we're working on ways to share foreign language courses. With budget cuts, none of the schools can afford to teach the full complement of languages we would like to offer. But if we decide one school will be responsible for the faculty and resources to deliver one language, and another school will deliver another language, we can share costs and services across boundaries. We're sharing resources within the state, but other institutions can share them across states or across nations. The practice of sharing has been in place for a while, but, in the near future, it's going to explode.

These technology trends tie together and reinforce each other, and they will be among some of the biggest issues that will shape business in the future. Business schools need to prepare their students to deal with them by offering programs that teach functional business disciplines within the context of technology.

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same evolution that outsourcing did," he says. "Initially, businesses outsourced the easy, repeatable, commodity-like services; today they outsource complex business processes. Similarly, businesses originally digitized easy, repeatable processes, but now the most complex areas of businesses are digitized—and must be managed by someone who understands their complexity."

Frick agrees that in today's world, where everyone can buy databases, technology alone isn't a competitive advantage. The advantage rests in how an organization uses it. "Deploying technology requires a true understanding of the business model of your company so you can decide which initiatives will be successful and which ones won't because they do not achieve your fundamental goals," he says.

As businesses bring technology into the boardroom, business schools need to bring it into the classroom. Tomorrow's CEOs won't need to connect the wires and switches—but they *will* need to connect the dots between what the business wants to do and what technology can deliver. ⓩ

GAME ON

BY ELIZABETH HOGAN AND ANDREA MOHAMED

You know you should drive the speed limit, right? It's the law. Yet every day in the United States, approximately 100,000 drivers are cited for speeding.

The question of how to reduce speeding on city streets appealed to a San Francisco man who came up with a creative idea for how to change that behavior: the Speed Camera Lottery. Kevin Richardson entered his idea in The Fun Theory Campaign, sponsored by Volkswagen Sweden, which encourages individuals to submit innovative solutions to social challenges. In the Speed Camera Lottery, a custom street sign is outfitted with cameras and speed sensors that broadcast the speed of approaching motorists. Cars traveling faster than the limit are photographed, cited, and assessed fines. Those proceeds go into a pot.

But cameras also snap pictures of drivers who obey the speed limit. The law abiders automatically are entered into a lottery to receive some of the money from the speeders. As drivers approach the Speed Camera Lottery zone, they face a choice—keep the pedal to the metal and risk a citation, or slow down and potentially win some cash.

When city officials tested the concept on a busy Stockholm street, it was clear that "the fun theory" had powerful effects. Before the lottery, average speed in the zone was 32 kilometers per hour, or about 20 miles per hour. Nearly 25,000 cars passed by the speed cameras during the three days of the experiment. Analysis showed that, during this time, traffic speed in the designated zone dropped by more than 20 percent—just because officials tapped into people's desire for play. (For more details on this and other ideas, go to www.thefuntheory.com.)

The Speed Camera Lottery is an entertaining example of the way a city can improve public safety by engaging its residents in an enjoyable activity. Similarly, we in the management education community can achieve specific goals among our constituents if we think deeply about fun as a motivator. One approach is to gamify the programs we develop for stakeholders.

A Winning Theory

Gamification recently has gained attention as an important trend in technology, but despite the name it is not about creating games. Rather, it's a strategy of using game dynamics to engage audiences and accomplish goals. According to a Google trend chart, there were no searches for the term "gamification" in 2010. Yet by the end of 2011, Gartner Research predicted the following:

■ Fifty percent of organizations that manage innovation processes will gamify them by 2015.

■ Seventy percent of Forbes' Global 2000 organizations will have at least one gamified application by 2014.

■ Organizations will allocate US$2.8 billion in direct spending to gamification by 2015.

The year 2011 saw two other milestones: The Bill & Melinda Gates Foundation invested US$20 million to develop game-based learning tools for kids, and The Wharton School at the University of Pennsylvania offered the first MBA course in gamification. Silicon Valley was enthusiastic, with Bing Gordon of venture capital firm Kleiner Perkins noting that "gamification is as important as social and mobile" applications. But why does it work?

In a 2011 Harvard Business School study, Teresa Amabile and Steve Kramer analyzed thousands of daily diary entries of employees across a set of firms. They determined that tapping into an individual's sense of progress—what the authors called "meaningful forward momentum"—could be used to motivate and engage employees, customers, and stakeholders. Such momentum could be achieved through game mechanics such as conferring points for doing certain tasks or awarding badges to mark levels of accomplishment. This approach has the potential for turning work into play.

Serious Fun

It's clear that gamification could have significant implications outside the b-school classroom. As marketers at Duke University's Fuqua School of Business, we wondered if gamification could be used to achieve marketing goals in a nontraditional way.

Business schools are engaged in constant dialogues with the students we hope to enroll, the alumni we want to engage, and the business

practitioners we wish to expose to our faculty's expertise. Traditionally, those of us in the marketing function have used *push* tactics to get information to our stakeholders. We publish magazines, produce newsletters, send tweets, and host training sessions for brand ambassadors who are about to graduate. We encourage our faculty to attend conferences or log onto Skype to engage with alumni groups and the media.

How might our tactics change if we started to think more creatively about what motivates our stakeholders' behavior? Human beings seek rewards, status, achievement, opportunities for self-expression, chances to compete, and situations where they can display altruism. What if we designed programs that deliver the rewards and social interaction that our audiences crave while achieving the marketing outcomes that we need? What if we tried gamification?

Duke Rolls the Dice

In July 2011 at Fuqua, we launched our first attempt at gamification with a student and alumni outreach campaign. We ran the campaign over a custom Web site and across social media outlets for 25 days. Our concept was

anchored on a long-honored student tradition called Campout.

By way of background, Duke University has a well-known men's basketball team whose home court, Cameron Indoor Stadium, has such limited seating that tickets are extremely difficult to get. Cameron Crazies, as fans are known, show their passion each fall by camping out for 36 hours in a campus parking lot, trying to win the right to purchase tickets via a lottery system. Throughout that weekend, campers respond to a series of "check-ins," signaling participants to run to a central tent to have their attendance recorded. If campers miss more than one check-in, they are out of contention for the ticket lottery.

Out of a typical Campout team of eight students, odds are that about three team members will win the lottery for tickets, which are often shared among the group. Every year, some of the Crazies are

students from Fuqua's Master of Management Studies (MMS) and MBA classes.

We decided to use the playfulness of the Campout experience to increase alumni and student participation in the life of the Fuqua School. From an institutional perspective, we wanted to encourage actions such as fund raising, volunteerism, mentorship, business development, and leadership. We also hoped to educate our alumni, especially the older ones, about the school's current strategies and programs. Finally, we wanted to provide an opportunity for alumni and students from different backgrounds and generations to interact around a shared passion: Duke basketball.

Our virtual Campout was delivered on a Web-based "parking lot" that offered campers ways to earn participation points for a limited number of days. The more participation points campers earned, the

more entries they received in the prize lottery.

The grand prize winner and a friend would receive an all-expenses-paid trip to China with the men's basketball team. We had no trouble securing two seats on the Duke plane carrying the team, staff, alumni, and VIPs, because a key reason the team made the trip was so Duke could highlight Fuqua's global expansion. Two other lottery prizes included tickets to four home basketball games and tuition to an executive education course.

Campers could win additional prizes in two more ways. Individuals who were among the Elite Eight, or the highest point-earners by the end of the game, received a signed basketball from coach Mike Krzyzewski. In addition, we organized players by their class cohort as long as they had at least five members playing, and we determined class scores by averaging the point totals among the players. The Final Four classes with the most points received prizes—such as faculty books, jump drives, and Fuqua decals—for all their players.

The Rules of the Game
We intended that the experience be sticky—that is, we wanted visitors to the Web site to linger a while and return often. However, we were afraid of penalizing individuals who didn't have hours to spend accumulating points online. We therefore required campers to complete four critical tasks to qualify for our lottery prizes, but we offered them chances to earn additional entries through other tasks.

In the four required check-ins, players had to update their personal information, share research

Crowd-sourced Content

in their networks, provide feedback to help us improve the game, and take a quiz on Fuqua programs. Quizzes were designed so that campers would have to find some information on the school's Web site or read through a piece of faculty research to answer certain questions correctly.

By finishing these tasks, they earned one lottery entry and a certain number of points, depending on how well they performed on the quiz. Once they had completed the tasks and earned 150 points, they could earn another lottery entry for every additional 50 points they accumulated.

They accrued more points by sharing contacts at an organization, donating corporate space for Fuqua activities, posting jobs for students or alumni, referring colleagues to Fuqua programs, providing testimonials for Fuqua to use in program marketing, and donating to the Annual Fund. They also could earn points by volunteering for Fuqua as mentors, alumni interviewers, class communications chairs, alumni leaders, and so on. One camper earned a total of 28 lottery entries by the end of July!

We knew the importance of keeping campers engaged, so we built incentives for campers to recruit their classmates. For instance, we awarded points if they invited ten classmates to Campout via e-mail or Facebook. We incorporated a Twitter feed within the application, awarding points to campers for using our hashtag (#FuquaCampout). The hashtag was pulled into the Campout interface and enabled campers to razz each other about the game.

We were improvising as we went, so throughout the month we added other opportunities to earn points. For instance, we invited campers to come to the school's Facebook page and post which of their classmates they would take on the grand prize trip. This generated conversation within the Fuqua community and led to many inside jokes between classmates and across cohorts. It also showcased a slice of the alumni network in a public space—a substantial win for us, since prospective students appreciate a powerful alumni network.

A leader board showed the relative positions of the Elite Eight individuals and Final Four classes. Seeing their rankings spurred classmates to reach out to their friends and encourage them to join the game. A few die-hard campers constantly monitored the leader board to make sure they stayed ahead of the pack. Not only could campers watch the leader board, they could wander through the virtual parking lot to

view the profiles of all the players, check their point totals, read their comments, and send them emails.

We also offered special events that didn't require participants to take action. For instance, we presented guest stars in the parking lot by featuring communications from the dean and members of our global staff. In this way, we could make sure the wider alumni network was aware of Fuqua activities in those regions.

As the organizers of the game, we chose to identify ourselves as a "Campout Committee" rather than the school's marketing team. This created a wonderful casual dynamic with campers throughout the duration of the game.

The Finish Line

By all measures, our first experiment with gamification was successful.

Grand prize winner Jennifer Hills was not one of the obsessive players—she only had a few lottery entries and spent about five hours playing. But she had a great experience on the trip and networked with many graduates, and she has returned to campus several times to speak to student groups, so she's proven to be a model winner.

The experiment also was successful because we had participation from students in every program the school has ever run, including those we no longer offer, and representation from 31 of the 41 classes we've graduated. We gathered hundreds of testimonials, HR contacts,

alumni record updates, and candidate referrals.

Most interesting, the campaign also generated multiple thank-you notes from participants. They expressed their appreciation for having the school reconnect them in such an innovative way, described the number of hours they had spent in Campout, challenged us on nuances of faculty research, and reminisced about how much they enjoyed spending time with Team Fuqua. They also offered suggestions and ideas for future iterations.

We held our second campout in March 2012, and we're planning to make the experience an annual event. We've already made some adjustments. For one thing, we couldn't provide a trip to China as the 2012 grand prize, but we did offer an all-expenses-paid trip to Durham to see the basketball game between Duke and the University of North Carolina. The other lottery prizes were, again, basketball tickets and tuition for an executive education course.

For another, we realized we needed to keep campers constantly engaged. In our second year, we added a daily check-in that focused on basketball and Fuqua; this encouraged people to return every day to score additional points.

We've also experimented with the perfect time to hold Campout. In 2011, we ran the event in July, but we thought players might be distracted by vacations and holidays, so in 2012 we moved it to spring to leverage the excitement of March Madness. However, we had 200 fewer participants in 2012. That could be because people were spending their limited free time following the NCAA games rather than visiting the Campout site. Or it might have been because Duke was eliminated early in the 2012 tournament, so some passionate fans might have been "over" basketball just as we were running our event. We will probably launch the 2013 version in February, when people are still excited about the upcoming tournament.

Something that worked unexpectedly well was classmate evangelism. We would see interesting pockets of participation from one group, such as the Daytime MBA class of 1995 or the Cross Continent class of 2011, and discover that one person had encouraged everyone else in the cohort to play.

Since the first two iterations of Campout both occurred in the 2011-2012 fiscal year, we analyzed the results together. Over the two events, we engaged a total of 1,278 participants, 138 of them repeats. Together they took a total of 19,932 actions to learn about, volunteer for, or otherwise support Fuqua. This translated into more than 100 spreadsheets of volunteers, leads, and other actionable information we could deliver to key departments in the school.

Playdates Elsewhere

Duke's Campout was a structured monthlong campaign, but other organizations in the business school industry are using game mechanics in different contexts to create a sense of community. For instance, Beat the GMAT, a social networking site for MBA applicants, awards badges to members who are the first to respond to a question or who have made a school visit. An Honor Roll on each school's profile shows which site members were accepted into that school. A leader board tracks how much the most popular members are engaging with other participants, and progress bars measure how far members have expanded their presence in the community.

Other universities are using gamification techniques to design programs for new students. For instance, a significant number of colleges are supporting their orientation efforts with a technology platform called SCVNGR. While the experience differs at each school, typically students are grouped into teams of diverse membership to interact with classmates across their cohort. One person is assigned to act as the team pilot. Organizers launch the orientation experience by texting clues to the pilot, who leads the team on a scavenger hunt across campus; students earn credit for checking in at each location.

A YouTube video of one such experience, the University of Louisville's "Cardinal Challenge," captures the energy of engaged students shrieking as the newest text clue comes in and working together to find their way to the next location. Teams earn points for taking on challenges at each location—for example, answering a trivia question about a facility—and are rewarded as they progress to new levels of mastery. Winners receive priority access to course registration. (See www.youtube.com/watch?v=mm6dMLe5f-w.)

How to Score with Gamification

For other schools thinking about employing gamification, here are a few simple rules to follow:

1. Be clear about what constitutes a win. Articulate a core set of

business objectives before you even begin. If you can't answer how a specific game dynamic would help you reach an important goal for your school, it's probably better not to play.

2. Understand your players and their motivations. Traditional gaming identifies four distinct types of players who respond to different stimuli. *Killers* focus on winning and attaining high rank. *Achievers* are motivated by attaining status or reaching goals. *Socializers* need others to play, but they can be engaged by newsfeeds, friend lists, and online chat. *Explorers* are driven to discover the unknown; they delight in obscure achievements. If you know your audience, you will be able to devise the game strategy that's most likely to engage the players. (For a chart that shows the characteristics of different types of players in gamification models, visit www.bizedmagazine.com/features/why-people-play-games/.)

3. Focus on the human. Create an experience for the emotional, playful aspects of your stakeholders, not their rational sides. Luckily, you and your team are humans, so you can quickly test what does or doesn't work. Try this exercise as an initial brainstorm: In what scenario would you happily spend hours reading your own school's Web site?

4. Do the reward math. Create scalable, meaningful rewards. Many audiences will be motivated by prizes or other material gifts, but the most popular tasks work because they provide customers with powerful intrinsic motivation. A school is in the enviable position of having customers who were transformed by their stays at the institution, and most of them still remember their experiences fondly. We can tap into this goodwill with game mechanics that draw on their happy memories.

5. Make it fun. Create an enjoyable experience for your stakehold-

ers, but—probably most important—have fun with it yourself. For example, taking on an organizing persona like the Campout Committee can enable you to be a whole lot cheekier than school representatives usually are with stakeholders. Inhabiting such a persona also will allow you to learn from your mistakes without incurring penalties.

So what's preventing you from introducing a gamification project at your school? Surely your key stakeholders would like to have a good time and show their human side while engaging with your brand. And it wouldn't hurt if you and your colleagues could have some fun with a project while achieving your objectives. We dare you … double dare you … **Z**

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Social Media:

HOW TWEET IT IS

Social media is completely changing how business schools communicate with their students—but only some schools have gotten the message.

BY STERLING MORRIS

It's a typical Tuesday at Utah State University in Logan, where I attend the Huntsman School of Business. It's typical, at least, for an MBA student studying during the era of social media. My study routine is a clear example of how social media is transforming the act of communication.

After my first class, I spend the morning in the library reading from a digital textbook and working on homework projects on my laptop. I take a quick study break—I check my e-mail, but I know I'll find the real news on my social media feeds. First, I pull up my Twitter account on my smartphone—I check for Utah State University news by checking the #AggieLife hashtag. I see a tweet from a USU student that piques my interest: "#USU JCOM professor Matt LaPlante speaking NOW (1 p.m. at the TSC auditorium!) 'Out of Iraq,' event about effects of war #aggielife #utah."

After gathering our data, we aggregated our individual measurements of each business school's social media performance. We then created the ranking below of the U.S. AACSB-member business schools that are making the most of social media channels:

1. Harvard Business School, Harvard University
2. The Wharton School, University of Pennsylvania
3. Haas School of Business, University of California, Berkeley
4. Darden School of Business, University of Virginia
5. Columbia Business School, Columbia University
6. Fuqua School of Business, Duke University
7. Thunderbird School of Global Management, Thunderbird
8. College of Business Administration, Florida International University
9. Graduate School of Business, Stanford University
10. Jon M. Huntsman School of Business, Utah State University
11. Booth School of Business, University of Chicago
12. McCombs School of Business, University of Texas at Austin
13. Mays Business School, Texas A&M
14. W.P. Carey School of Business, Arizona State University
15. Marshall School of Business, University of Southern California
16. Tuck School of Business at Dartmouth, Dartmouth College
17. Fox School of Business, Temple University
18. Robert H. Smith School of Business, University of Maryland
19. School of Management, Boston University
20. Michael G. Foster school of Business, University of Washington
21. Ross School of Business, University of Michigan
22. Kellogg School of Management, Northwestern University
23. MIT Sloan School of Management, Massachusetts Institute of Technology
24. S.C. Johnson Graduate School of Management, Cornell University
25. Tepper School of Business, Carnegie Mellon University

Suddenly, my plans have changed. I head over to hear the presentation sponsored by the department of journalism and communication.

Ten minutes later, I'm checking my e-mail in the auditorium while I listen to a panel of war vets and journalists talk about their time in Iraq. I find this experience satisfying, so I tweet back to the USU student who tweeted about the event: "Thanks for the heads-up. This is interesting stuff."

As a business student in the social media age, I am fascinated by the immediacy—the real-time nature—of social media. The technology has sped up communication between individuals and organizations, and it has given students enhanced access to information about—and from—their schools. Social media has quickly become one of the most common methods students use to stay connected with their peers, their schools, and the world. In fact, in their 2012 study, Nicholas Capano, Johanna Deris, and Eric Desjardins of the University of New Hampshire in Durham found that nearly all UNH students use at least one social media platform, with 96 percent of students using Facebook and 84 percent of students using YouTube. Although this study focused only on UNH, it is likely that other universities would see similar rates of social media usage among their student bodies.

As part of my work as the student social media manager for the Huntsman School, I was responsible for benchmarking its social media efforts against those of other U.S. business schools. In March 2012, a colleague and I gathered social media data for 371 AACSB-accredited business schools in the U.S. Our goal: to learn what the Huntsman School was doing well in the social media sphere and where it could improve.

However, our data don't just provide the Huntsman School with an idea of where it stands among its peers. The data show which social media practices are most common among top-performing schools, as well as where many schools fall short. They also offer a picture of how—and how well—the community of business schools is using social media to market, to communicate, and to teach.

Anatomy of a Social Media Profile

To benchmark each business school's social media performance, we considered the following questions:

■ Does the school have official profiles on Google Places, LinkedIn, and Google+?

■ How many Facebook fans does the school have?

■ What is the school's number of "people talking about this" on Facebook? Relatively new, the "talking about this" feature counts the number of Facebook fans who take actions such as liking the page, commenting on or sharing a post, or sending an RSVP to a posted event.

■ How many Twitter followers does the school have?

■ How many YouTube channel video views has the school generated?

■ Does the school have an entry on Wikipedia?

■ Does the school provide links from its Web sites to its social media feeds?

For instance, we found that only 139 of the 371 schools in our survey—or 37.5 percent—have articles about their institutions posted on Wikipedia. On the other hand, a majority of schools have fan pages on Facebook.

But the most successful schools don't just establish accounts on major social media sites. They also integrate those accounts with each other and with their home Web sites. Given that, we were surprised by how many business schools did *not* make such integration a priority. Business school Web sites have become hubs of information for business students, so it makes sense for schools to connect their Web sites to their social media feeds. But of the 371 business schools in our survey, nearly 36 percent—133 of them—did not provide links to their feeds on Facebook, Twitter, YouTube, or LinkedIn from their Web sites.

Why is this a problem? Just consider the following statistics:

■ Business schools that have official Facebook pages *and* include links to those Facebook pages on their Web sites have an average of 1,654 fans.

■ Business schools that have official Facebook pages, but that don't link to those pages from their Web sites, have an average of only 439 fans.

■ Business schools with official Twitter handles and links on their Web sites to their handles have an average of 1,744 Twitter followers.

■ Business schools that have official Twitter handles but that don't link to those handles from their Web sites have an average of only 509 followers.

Adding links to social media feeds is as easy as loading each social media service's plug-in to a Web site. Plug-ins can be found on Facebook, LinkedIn, and other social media outlets on their Web site developer pages. Schools that haven't taken this step could be reducing the impact of their social media content by up to 70 percent.

By the Numbers

How well business schools conduct their social media strategies depends solely on how well they manage and deploy communications on each individual network. That's why we explored what individual schools are doing on each major social media site. Here's what we found:

Facebook

Facebook remains the most popular social media outlet for business schools. Currently, 64 percent of the AACSB business schools in our sample have established official business school Facebook fan pages and have, on average, 1,297 fans. At the time we took the sample, these schools also had an average of 31 individuals "talking about this."

To get an idea of how those results compare to some of the top schools in the market, we considered these numbers:

Business schools that have both an official Facebook page and links to their Facebook page have 1,654 fans on average.

1,654

439

Business schools that have an official Facebook page but don't have a link to that page from their Web sites have 439 fans on average.
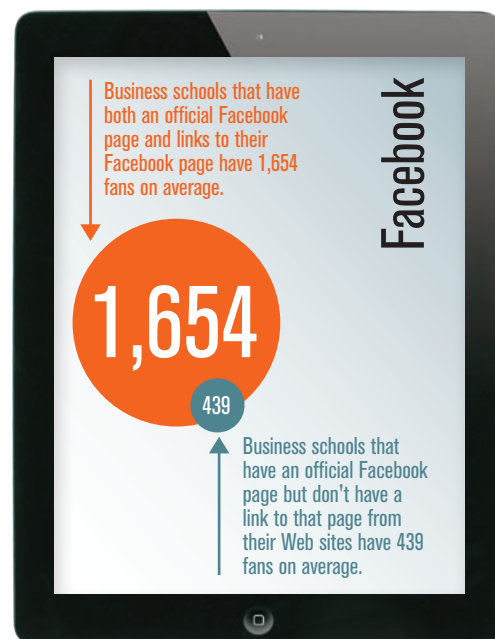
■ All of the top-25 business schools in *U.S. News & World Report*'s 2012 rankings have Facebook fan pages.

■ Those top-25 business schools have an average of 6,194 Facebook fans each.

■ Schools that ranked from 26 to 50 have an average of 1,796 Facebook fans.

■ Harvard Business School has the most Facebook fans with 29,559.

■ Harvard also has the most individuals "talking about this" at 672.

LinkedIn

The second most popular social media platform for business schools, LinkedIn helps alumni locate career opportunities and maintain their networks. More than 48 percent of business schools have established official LinkedIn groups. That compares to 84 percent of top-50 business schools ranked by *U.S. News & World Report*.

Of all social media outlets, LinkedIn is perhaps the one that business schools actively manage the least. Business schools typically spend much more time developing their presences on YouTube, Facebook, and Twitter. That makes sense, given that business students and alumni are really using LinkedIn, not to support their lives at school, but to develop and digitize the professional networks they developed during their business school programs.

Twitter
One of the most rapidly growing social media outlets, Twitter is unique in that business schools can tweet messages several times per day without breaking the social outlet's norms. If they made the same number of Facebook posts per day, many followers might consider it too much information and unsubscribe. As a result, more schools are using Twitter as a central tool for communicating with students regarding daily events and announcements.

Because of Twitter's easy access and quick response time, it also has become more common for students and potential students to address business-related questions to a business school's Twitter handle, instead of using traditional outlets such as e-mail and phone.

Here's what we found:

■ 42 percent of business schools in our sample have a Twitter handle.

■ 100 percent of top-25 business schools have a Twitter handle.

■ A number of business school

Business schools that have both an official Twitter handle and a link to their Twitter presence from their Web sites have an average 1,744 Twitter followers

1,744

509

Business schools that have an official Twitter handle but don't have a link to that handle from their Web sites have an average of 509 followers.

Twitter

deans are on Twitter, including Judy Olian of UCLA Anderson, Garth Saloner of the Stanford Graduate School of Business, Rich Lyons of the Haas School of Business at UC-Berkeley, Nitin Nohria of Harvard Business School, James Dean of the Kenan-Flagler Business School at the University of North Carolina, David Thomas of the McDonough School of Business at Georgetown University, and Robert Bruner of the Darden School of Business at the University of Virginia.

■ As of April, the Wharton School of the University of Pennsylvania had the most Twitter followers of any business school with 22,641. Harvard Business School came in second with 17,503, and MIT Sloan came in a close third at 16,022.

YouTube
YouTube is now the second most popular search engine in the world

behind Google, according to a July 2011 article in *Search Engine Journal*. Many current and future business school students use YouTube as a resource in their learning activities. Business schools have established channels where lectures, school video ads, and video interviews are uploaded.

As useful and informational as YouTube videos can be, only 31 percent of business schools have a YouTube channel, compared to 96 percent of top-25 business schools.

However, we found that when a school makes a commitment to online video, it can reap big rewards in increased visibility:

■ Videos on the YouTube channel for Stanford University's Graduate School of Business had a total of 2,341,127 views at the time we took our sample.

■ Many of Stanford's most popular YouTube videos are presentations given by its guest lecturers, who range from Pixar president Ed Catmull to rapper-turned-entrepreneur MC Hammer. Some of its videos have received well over 100,000 views.

■ The average business school channel has 57,145 video views, with a median view total of 5,252.

Google Places
Google Places is a free service that invites organizations to create customized profiles that include their locations, information about their offerings, photos, and other details. Google

ROMAN PONOMARETS/ISTOCK PHOTO

Places also offers statistical data that lets organizations track how many people are searching for them, where those people are located, what search terms they're using, and what information on Google Places they access the most. Users also can leave reviews about their experiences with an organization.

We found that schools on Google Places seem to benefit from excellent search engine results. Prospective students also turn to the user reviews—generated mainly by the school's students and alumni—as a unique way to learn about a business school's program.

Even so, only about 10 percent of business schools in our sample had a profile on Google Places. Two business schools tied for the most Google Places reviews at 35. These were the NYU Stern School of Business and the Haas School of Business at the University of California, Berkeley.

Exceptional Exceptions

Perhaps not surprisingly, there is a high correlation between schools that are ranked in the top 50 by *U.S. News and World Report* and schools that are highly established on social media outlets. Also not surprisingly, there is a correlation between schools with large student populations that use social media outlets and those with high numbers of followers, fans, and video views.

But there are exceptions to these correlations. I believe the schools that stand out as exceptions have the most valuable stories to tell.

For instance, Baylor University's Hankamer School of Business in Texas and Utah State's Huntsman School had 5,426 and 9,031 Twitter followers, respectively. Neither

of these schools is ranked among the top 50 business schools by *U.S. News and World Report*. Both schools have a relatively average population of 3,000 students.

The Terry College of Business at the University of Georgia has 126,580 channel video views on YouTube. That places it ahead of top-25 schools such as Georgetown's McDonough School of Business and the S.C. Johnson Graduate School of Management at Cornell University.

These examples prove that a business school doesn't need a high profile in the rankings to develop a high-profile approach to social media. These data provide all business schools with opportunities to compare their social media progress to their peers and learn valuable lessons about what social media can do for their programs and reputations.
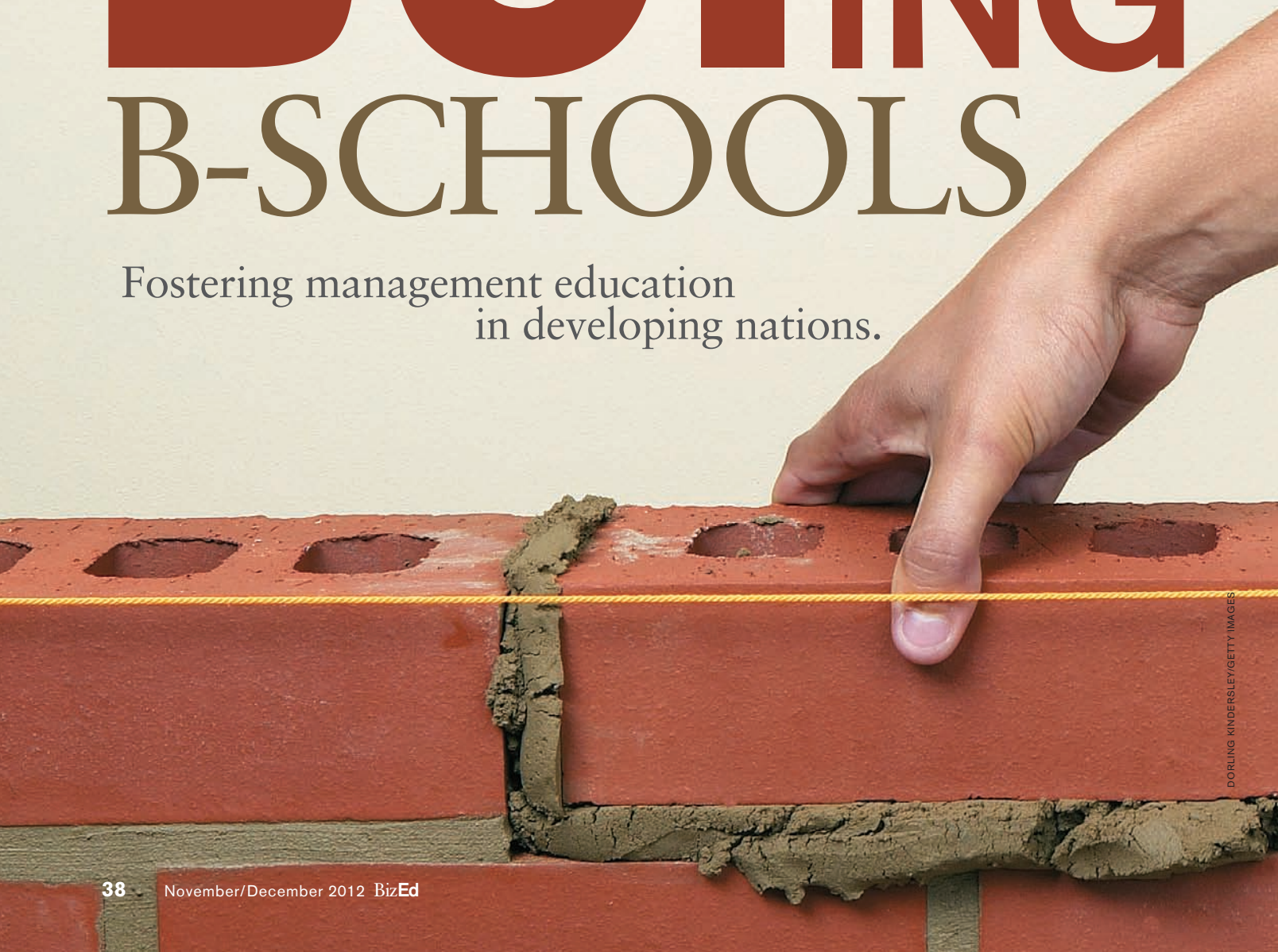
As I mentioned, this is a fascinating time to be a business student, but it's just as great a time to be a business school. With today's social

media tools, business schools can enhance their visibility in the market, connect with constituents at greater speed, and take only seconds to provide their students with new opportunities to learn. Simply put, social media is how today's students communicate. Whether by tweet, like, or status update, it's time for business schools to get that message. ⓩ

Sterling Morris is a May 2012 graduate of the MS MIS program at Utah State University's Jon M. Huntsman School of Business in Logan. The article "Social Networking Usage and Grades Among College Students," written by Nicholas Capano, Johanna Deris, and Eric Desjardins, is available at www.unh.edu/news/docs/UNHsocialmedia.pdf. The article in *Search Engine Journal* referenced in this article is available at www.searchenginejournal.com/youtube-video-optimization-from-a-to-z/31278/. For an infographic on how business schools use social media, see www.bizedmagazine.com/features/how-tweet/.

BUILD ING
B-SCHOOLS

Fostering management education
in developing nations.

BY SHARON SHINN

The changing face of global business is reflected in the changing state of global management education. Students around the world have an increasing number of options for where and how to attend school, whether they participate in online programs or enroll at the campus just down the street.

Choices often have been narrower for students in emerging nations, but that is beginning to change. Today, more Westernized universities are setting up satellite programs in BRIC countries, as well as Africa, Indonesia, and Latin America. But another trend could have an even more profound effect on global management education: the founding of self-sustaining degree-granting programs in countries ranging from China to Mexico to Kenya.

These programs are tailored to the economic realities of the region in terms of both content and structure. They are also, many times, created through partnerships between three interested entities: local governments, local businesses, and Western universities. Two international schools—IESE Business School of the University of Navarra in Barcelona, Spain, and Georgia State University in Atlanta in the U.S.—have spent more than a decade helping bring management education to emerging economies and those programs are still going strong today.

In other parts of the world, local universities are responding to the critical needs of their regions. That's what happened when The American University of Cairo launched the right program at the right time. Like IESE and Georgia State, AUC is using business education to make a difference.

Developing Schools in Developing Nations

BY BIJAN FAZLOLLAHI

I've been interested in bringing business education to developing economies since I first visited Azerbaijan in 1992. During the 1990s and 2000s, I spearheaded initiatives developed by Georgia State University's Robinson College of Business to launch degree-granting business programs at three universities in two countries: Khazar University and the Azerbaijan State Oil Academy in Baku, Azerbaijan; and Caucasus University in Tbilisi, Georgia. (See "The Dimensions of Peace," *BizEd*, May/June 2006, page 24.)

Within the past few years, with the strong support of dean Fenwick Huss, the school has added three more collaborations: Azerbaijan University in Baku, and Alexandria University and Cairo University in Egypt. With each new school we've had to learn new cultures, new customs, new students, and new bureaucratic regulations. But even though the institutions themselves have been very different, the objectives have been the same: to help the schools develop capacity in their business programs so that they would become academically and financially sustainable. The role of GSU/RCB has been to provide technical advice and training that would develop the faculty, the administration, and the curriculum at the partner school.

Much to Learn

Launching a business school in a developing nation is a significantly different enterprise from developing a curriculum at a Westernized school, and we have learned some crucial lessons over the years.

The most critical lesson is that we must teach classroom content that is tailored to the unique level of economic development found in each country. For instance, both Azerbaijan and Georgia were part of the former USSR, but they're not only different from the U.S., they're different from each other. While they're both small countries, Azerbaijan is more focused on the oil industry, and that's where we assume most students will end up working; it also features many related large conglomerates. On the other hand, Georgia supports small and medium-sized businesses; it fosters many entrepreneurs and offers a friendlier climate for doing business. It's essential that professors teaching classes in these countries use cases that reflect issues that are important to the local economies.

A marketing professor from Georgia, who has also taught in Atlanta, has determined that his students become more engaged when he presents cases featuring well-established brands, because students are familiar with the companies and consider their issues relevant to the realities of Georgia. American faculty teaching Georgian students about international business have used a case about Chilean companies entering emerging markets. They adapt the case to feature Georgian companies, which allows the students to visualize how exports from their country might fare in growing markets.

By contrast, when business professors are teaching in Egypt, they must always be aware of the fact that the society is highly Islamic. They must be cognizant of cultural taboos when conducting classroom discussions, they must understand how the culture and the media differ from their Western counterparts.

For instance, Egyptians generally have a lower level of risk tolerance than Americans. Therefore, a course on portfolio management would cover risk in a different fashion than it would be covered in a U.S. classroom. The class would also take into account the degree to which wealthy Egyptian investors feel constrained by the realities of Islamic finance.

In both Egypt and Georgia, marketing classes must be substantially different than they are in America. For instance, most U.S. classes on marketing assume that advertising affects consumer behavior. But in these countries, word of mouth is more influential, so advertising is not emphasized as much.

When teaching any of these courses, American professors

The first students graduate from the BBA program at Azerbaijan University in spring 2012.

should use local cases or cases that can be adapted to local realities. They also must make sure cases are presented simply and clearly—particularly if they're teaching undergraduates, who typically have little work experience.

Sometimes professors can write new cases based on businesses in developing countries, but I think it's unrealistic to expect visiting American professors to understand the culture well enough to produce many of these. Some local faculty are enthusiastic about putting their knowledge to work by developing cases of their own, and GSU has provided classes that train them on researching, writing, and publishing cases.

However, to date there has not been a voluminous production of cases. Many professors in emerging economies must teach at several universities in order to earn adequate salaries, so they have little time left over to do academic research. In addition, it's rare for them to receive incentives such as reduced courseloads that would enable them to devote time to scholarly pursuits. Therefore, producing and teaching local cases remains an ongoing challenge.

More Lessons

When American professors are teaching in developing countries, not only do they need to modify their classroom content, they need to modify their teaching styles. For one thing, not all students are fluent in English, so professors must be careful not to use colloquialisms or ethnocentric examples. They also must be aware that the students with the best command of the language are likely to participate most actively in class discussion, so teachers have to seek ways to engage the rest of the students in the class as well.

Because it's almost impossible for a visiting professor to wholly assimilate into the new culture, I believe American faculty should always be accompanied by teachers from the host country. Local faculty can explain cultural differences to visiting professors, and they can find ways to get key points across to students in ways the students will understand.

While many American faculty are keen to bring change to the educational systems in developing nations, the entrenched bureaucracy in some of the public universities makes true reform very dif-

ficult. Egypt's educational system is long overdue for a change, and I've seen signs that the old top-down approach is giving way to a new student-centered system. However, the old system is currently in place and we must follow its norms. We must pay close attention to the differences in societies to make certain the processes we want to put in place will suit the cultural framework of the country we're in.

A Multitude of Benefits

Even though there are plenty of challenges, I believe it's important for Western schools to help establish business programs in emerging economies, because such programs spur the development of these societies. The schools help train a competent managerial workforce that can function in the global economy, and in turn this leads to jobs, economic growth, and a higher standard of living.

To find evidence of the impact we've had by training this generation of managers, I look at the work positions that some of these schools' graduates have secured. For instance, in 2008 we celebrated the tenth anniversary of the Azerbaijan State Oil Academy's MBA program, which has produced more than 500 MBAs. Many of the alumni hold positions in the oil industry; many have become entrepreneurs. One graduate is now the head of the board of directors of a multimillion dollar holding company engaged in international finance and real estate.

These are tangible benefits, but I believe our collaborations result in even more benefits that extend beyond the countries where the schools are located. For instance,

Students prepare to attend classes at the Cairo University Faculty of Commerce.

in the broadest sense, when U.S. schools facilitate business education in developing countries, they contribute to America's goals of promoting the market economy and democracy throughout the world.

On a more micro level, when the Robinson College partners with schools in developing nations, it helps Georgia State reach its objectives of globalizing the university. First, these partnerships give GSU faculty the chance to teach in other countries. Second, the partnerships result in students from developing nations coming to our Atlanta campus, and their presence promotes the internationalization of American students. Third, when visiting faculty from these partner schools teach at GSU, our students are exposed to worldviews that are dramatically different from their own.

Because of our relationship with two schools in Egypt, members of our faculty who had never worked in an Islamic environment have had a chance to develop a deeper understanding of Islamic culture. They have also made their classrooms richer by incorporating their greater knowledge of countries in the Middle East and North Africa.

Our partnerships have also led us to develop joint programs with some of these schools, including student exchange programs. In addition, we have worked with Caucasus University to establish a 2+2 BBA program in which students study two years in their home country; they then have the option to study for two years at GSU and obtain a U.S. degree as well as one from their home university.

Objectives Achieved

Many schools from Westernized countries are interested in pursuing educational ventures in emerging economies, which sometimes leads them to set up satellite campuses of their own universities in parts of the developing world. However, only a small percentage of the rich members of a local population can afford the tuition to attend a branch of a U.S. university.

If a school wants to build sustainable institutions that help the people of other countries over the long term, I believe it should build local capacity to deliver quality education at an affordable price. That's been our goal at GSU, and I believe we've achieved our objectives with these six universities. All of the programs we helped establish are still in place, and we continue working with them even through their own growth and major changes.

For instance, when we launched the first three programs, economic development was slow in those regions, but today the situation in Azerbaijan has drastically improved due to a newly exploited wealth. We have also seen the privatization of Caucasus Univer-

sity, which previously was owned by Tbilisi State University and Georgia Technical University. In our ongoing partnership with that school, we have helped establish BBA and MBA programs there, and this year we will finalize a PhD program—which we believe will be the only American-style business PhD in the former Soviet Union.

We also remain involved with Khazar University, which is still following the format of the programs we started there. Whenever asked, we provide assistance regarding curriculum updates and other issues, and I visit the president and faculty of the school whenever I'm in Baku.

The newest schools in our partnership are also thriving: Azerbaijan University has established BBA and MBA programs, Cairo University has instituted a three-track BBA program, and Alexandria University has established an EMBA program. In these three programs, the first cohorts have reached the graduation stage, and the first graduation ceremonies were held in 2012.

The success of these programs truly illustrates the power of management education. At GSU, we want to show business leaders around the world how to build businesses that operate in a market economy, because we believe this promotes global trade and investment and contributes to peace among nations.

Bijan Fazlollahi is a professor at Georgia State University's Robinson College of Business in Atlanta. He is also the director of the school's Center for Business Development in Transitional Economics. More information about GSU's partnerships with other schools can be found at robinson.gsu.edu/cbdte/.

Success by Association

BY FRANZ H. HEUKAMP

IESE Business School opened its doors in 1958 with the help of Harvard Business School faculty; we understand firsthand that well-established business schools can provide a unique and valuable service in getting new business schools off the ground. Therefore, it's hardly surprising that, as IESE has grown to be a global business school with multiple international campuses, it has simultaneously sought to help launch independent business schools in many countries around the world.

These Associated Business Schools, as we call them, typically seek to carry out the same mission as IESE: to develop business leaders who aspire to have a deep impact on people, firms, and society through their professionalism, integrity, and spirit of service. But all of these associated schools achieve this mission within their own frameworks and cultural settings.

IESE's first Associated Business School startup was IPADE in Mexico City. Since its founding in 1967, it has graduated more than 30,000 students, who have brought their knowledge and skills to both private companies and public administrations. IESE also collaborated with other business schools in Europe to help launch the China Europe International Business School (CEIBS), which was opened in Shanghai in 1994. Today its EMBA is one of the biggest MBA programs in mainland China.

IESE has been involved in the founding of 15 other business schools on four continents, mostly in emerging nations. We believe that all of our Associated Business Schools now play or eventually will play significant roles in aiding their home countries to take their places on the global business stage. We also believe that by helping these business schools take off, we are helping their nations, their people, and even the global community become prosperous and stable—thus creating more opportunities for people and local development. In some ways, for IESE, this is about "paying it forward" and continuing a virtuous cycle.

Laying the Groundwork

Generally speaking, we help new schools get off the ground by offering assistance in three main areas:

Advice. At the beginning of the process, we simply act in an advisory role. All of these startups were developed through partnerships with outside organizations, including businesspeople, academics, and governmental agencies. While IESE typically serves as the main academic partner, we never simply decide to start a school from scratch.

More commonly, we are approached by businesspeople from another country who want to launch a business school to improve the level of management in their region. When they reach out to IESE for help, it is usually because they have a personal connection with our school—they have taken courses at IESE or they're acquainted with some of our professors. We always collaborate with these business leaders, and sometimes we also collaborate with other universities, as we offer our support in founding new schools.

One of our first recommendations is usually that the startup group drum up additional interest from the community by gathering 50 to 100 business leaders. We emphasize that without local support, the school is unlikely to succeed. And while IESE will offer advice on raising money, and we might suggest projects the new school can undertake that will win support, IESE doesn't get involved in raising the funds or setting the salaries of the professors at the new school.

We do consult on other topics relevant to starting a business school, such as what the facilities should look like. If the founders are considering buying a new building, one of our professors might visit the proposed sites and raise questions or concerns. For instance, the faculty advisor might suggest the new school locate in a specific part of the city so that it develops more urban appeal. Or he or she might recommend building a landscaped garden so students have a place to gather.

During early stages, we also address a host of other critical questions. Which should the school launch first, an executive education program or a degree program? What should the curriculum encompass? What kind of technology should the school implement? Answers to these questions will help the school's administrators determine how its programs will develop.

Training. The core of our assistance revolves around training the faculty at the new school. Every

IESE's newest Associated Business School is MDE on the Ivory Coast of Africa.

year for more than 20 years we have run the International Faculty Program, a three-week program that equips faculty and administrators with the basic information they need to run a new business school. The IFP annually attracts between 30 and 40 participants from approximately 20 countries. IFP training includes modules on course design, faculty development, institutional management, operations management, and leadership. Other sessions cover writing and teaching case studies, and coaching and mentoring students and faculty.

For instance, the module on course design helps faculty construct courses in their own areas of specialization. They learn how to create semesterlong classes, distance learning programs, and seminars, whether these courses are aimed at undergraduates, graduates, or executives. As an example, a course such as Analysis of Business Problems is almost entirely case-based and includes written assignments; it helps new faculty focus on critical and analytical thinking.

The IFP also covers topics related to running a business school. The institutional management module is aimed at school administrators who need guidance in school management, program management, and development. One session deals with organizing faculty, ensuring cooperation between the various players at the university, and developing a mid-to-long-term strategic plan. Addi-

tional sessions cover logistics—the director's perspective on how to run a business school—and other back-office topics. These are all important factors in the success of a program.

Teaching. In addition to training the new school's faculty, we send professors from IESE to teach at the startup, particularly during the early years. A good number of our faculty have a deep interest in participating in a startup—not just because they're personally interested in the work, but because they believe that these projects are natural extensions of the mission of our school.

At the same time, we can't have too many faculty gone at one time teaching at other institutions! So we assist new administrators as they assemble their own faculty. As we help new business schools develop, it is important that we strike the right balance between providing enough support and encouraging the new school to become independent.

We might teach half of the sessions in the first year, then reduce our involvement little by little in the following years as the new school's faculty members gain more experience. We also encourage at least some of the new faculty to gain more academic expertise by enrolling in PhD programs at IESE or elsewhere. The more academically qualified faculty these schools have on staff, the better they'll be able to compete in the global education market.

Stay Connected

Once we've helped a school launch, we expect it to become self-sustaining within five or six years. But we stay connected with all our Associated Business Schools to some degree. With a few schools we have a deeper connection and a more formalized way of meeting.

For instance, every other year we have a joint committee meeting between IPADE and IESE. The groups are made up of the deans of both schools and members of the executive committees. We report what each school has been doing over the past two years, we exchange our views of the economic situation, and we discuss trends in business education.

We also have very strong connections with CEIBS. Our faculty members have held visiting professorships at CEIBS, and the two schools conduct a number of joint programs, including a PhD program that launched this fall. We also have MBA student exchanges with three of our Associated Business Schools—IPADE, CEIBS, and IAE in Buenos Aires, Argentina.

More often, the ongoing connection between IESE and an Associated Business School is more informal and personal. Faculty members might travel to one of the other schools to teach a course, give a graduation speech, or work with local companies.

Over the years, IESE has benefited a great deal from our partnerships with our Associated Business Schools. Primarily, we gain a deep understanding of the countries where they are located, including the societies that form them and

the business issues they struggle to resolve. Any time we want to work in another country, it's natural for us to team up with one of these schools. For instance, when we want to do research in Brazil, we're likely to go to São Paulo and collaborate with ISE Business School, which we helped launch in 1996. We have helped start schools in places as diverse as China, Africa, South America, and Portugal, and we have learned so much in each place. IESE's faculty, staff, and students are deeply grateful for and enriched by this knowledge and international experience.

A few years ago, we were involved in the founding of MDE in Abidjan, located in the Ivory Coast of West Africa. Shortly after the school opened in late 2010—with its first Advanced Management Program due to start early the next year—the nation was torn by civil war. MDE and IESE decided not to cancel the program, but to go ahead as scheduled.

When our professors arrived at MDE, they witnessed a great deal of anger and distress, but at the same time, they witnessed the optimism of the local businesspeople who were determined to start the new school. These leaders were saying, "Instead of fighting, let's build something positive. Let's start a common project that will benefit the entire country." Our faculty were struck by the courage and strength of these people—and their experiences helped underscore their own sense of mission about why they are part of a business school.

Honoring the Mission

While it requires a tremendous investment of time and resources to get another business school off the ground, the administration at IESE feels it is part of our mission to continue these collaborations with schools in developing nations. We ask ourselves: Why do we have a business school in the first place? The answer is: We want to serve the business community and society as a whole by providing a top business education. Helping launch new schools enables us to do just that, in a very tangible way.

Not every school from Westernized countries will want to help found business schools in emerging economies. But if schools believe such work aligns with their missions, they will find that building an institution from scratch is demanding, empowering, and ultimately rewarding work that ensures management education is a force for good. **Z**

Franz H. Heukamp is a professor of managerial decision sciences and Secretary General of IESE Business School at the University of Navarra in Barcelona, Spain. He is also a member of IESE's executive committee.

Entrepreneurial Uprising

BY SHERIF KAMEL

Sometimes a business school can choose just the right strategy at just the right time. That was the case for the American University of Cairo's School of Business when it decided to launch its Entrepreneurship and Innovation Program (EIP)—just three months before the Egyptian Uprising, one of the most pivotal political, social, and economic events in our country's history.

Since the Egyptian Uprising of January 2011, there has been a growing sentiment across Egypt that it is time to focus on the private sector—that entrepreneurship will change the lives of Egyptians. This is a huge shift in mindset. Egyptians are traditionally risk averse, preferring to "wait and see" over taking action. Now people want to learn how they can make a difference. EIP, as it turned out, was the right program at the right time.

Where Do We Want to Be?

The origins of EIP began in 2009, when we were conducting a survey of our market. There had been a proliferation of new business schools and programs in the Middle East, and we knew that the only way to stay ahead of this pack was through continuous improvement. We began looking ahead to the university's 2019 centennial and asking ourselves one question: Where do we want to be by that year?

We looked at the fact that Egypt's population is increasing by 1.9 percent, or 2 million people, each year. Of Egypt's 85 million citizens, 7.1 million work for the government. That leaves a huge population ready for a more robust private sector. It would be a catastrophe for Egypt not to utilize its most precious resource—its human capital. We also noted that Egypt is not home to many large corporations—it has more small and medium-sized enterprises.

We asked, "How can we produce innovative leaders who will develop more of these startups that will transform our economy?" To stay competitive and relevant, the School of Business needed to graduate entrepreneurs who did not just start companies, but who also introduced change to Egyptian society.

All Citizens Welcome

To accomplish this ambitious goal, we launched EIP in October 2010. Through EIP, we offer seminars, workshops, networking events, a mentorship program, business boot camps, and business plan competitions. We help entrepreneurs generate ideas for businesses; then, we connect the most viable startups to incubators and help them find venture capitalists, angel investors, and other sources of seed funding. We hold a number of mentoring events, such as "Speed Mentoring," in which mentees have a series of 30-minute networking sessions with a range of startup veterans.

We realize that great ideas come not only from our big cities, but also from the 4,000 villages across Egypt. For that reason, EIP's events and services are open to students at all Egyptian universities and to all citizens in Egypt's 26 provinces. Most of them come to our Cairo campus to attend workshops and mentorship sessions, as well as interact with other students and future entrepreneurs. Some of them access information and services online, because our program is offered in a blended mode.

EIP also sponsors a series of business plan competitions, which are supported by 32 partner organizations. These include regional companies such as Arabnet, an online hub for Arab digital professionals, and Egypreneur, a networking hub for Egyptian entrepreneurs. Our partners also include international organizations such as Intel, the Global Entrepreneurship Program, and USAID. In June 2011, EIP partnered with Science Age Society to hold Startup Summer Camp, where 60 mentors and ten investors evaluated startups, and then EIP helped the winners further develop their ideas.

EIP also partners with Cairo-based venture capital firm Sawari Ventures to run Flat6Labs, an incubator and accelerator that invites prospective entrepreneurs to submit ideas via its website at www.flat6labs.com. The program then accepts the best applicants into a three-month program at our incubator, where they have access to the faculty, facilities, and mentors they need to commercialize their products and become independent companies. In exchange, Flat6Labs takes a 10 percent to 15 percent stake in their operations.

The EIP is further complemented by our student-governed club, the Entrepreneurs Society. Active since 2003, the club organizes its own training workshops and conference. The society has produced more than 50 companies in areas ranging from the food industry to Web development to tourism. Club members also write their own publication called "The Lead," which includes mini-case studies and lists of market opportunities.

Since the Egyptian Uprising of January 2011, there has been a growing sentiment that entrepreneurship will change the lives of Egyptians.

The Entrepreneur Society's most recent endeavor is the Hit Project 2012, a reality show competition that they produced jointly with AUC's Kamal Adham Center for Television and Digital Journalism. "The Hit," which is filmed and edited by students and faculty from the Adham Center, follows 16 teams of AUC student entrepreneurs through all the phases of their startups. The winning team will sell its product on Souq.com, an Arab e-commerce site and sponsor of the show. Live episodes of "The Hit" are available at www.thehit2012.com.

In Sync with History

When we decided to build our strategy around the EIP, we knew that entrepreneurship would be important to the country's future. But we truthfully had no idea just *how* timely the EIP would be. The uprising resulted in the overthrow of the regime in Egypt—and introduced major transformations in the Egyptian mindset. After that, we knew EIP had an even bigger role to play than we had thought—and we had to update our curriculum to address those developments.

For instance, our case-writing center had not been very active since it opened in 2007, but in just the last two years, it has produced more than 100 cases. Egyptian companies, unlike those in other parts of the world, are traditionally reluctant to share the details of their businesses,

including their financials, their successes, and their failures. But the uprising has changed attitudes. More companies are willing to share their experiences with us. They used to think their power rested in withholding information; now they see more power in sharing it.

We launched three different series of leadership panels, including one called "Transforming Egypt." We brought in students, researchers, faculty, and industry experts to discuss how our economy can be brought back on track. Several research papers resulted from that meeting, which we have shared with government officials to aid their decision-making processes.

We partnered with TechWadi, a Silicon Valley nonprofit that promotes Middle Eastern entrepreneurship, to hold "Egypt Rising." The event brought together thought leaders in education, business, technology, and healthcare, as well as successful Arab expatriates, to outline a plan to develop Egypt's economy through entrepreneurship.

Exciting Times

Before the uprising, we changed our curriculum based on traditional competitive trends. Now, our position has become more profound. People younger than 25 years old make up 58 percent of the Egyptian population, and that number is growing. Egypt's youth are passionate, fresh, and experiencing exceptional moments not only in their lives, but in the history of their country. That combination is building positive momentum in this country, inspiring our youth to think in brand new directions.

We are in a country that is more than 7,000 years old, but it is still the land of opportunity. So much of it remains untapped—but we plan to change that. Ⓩ

Sherif Kamel is dean of the American University of Cairo's School of Business in Egypt.

research

Study Is 'Call to Action' for U.S. Research Schools

EARLIER THIS YEAR, the Research Universities Futures Consortium, a group of 25 U.S. public and private research universities, released "The Current Health and Future Well-Being of the American University." Funded by Elsevier, a global provider of science and health information, the report argues that U.S. research universities must adopt greater collaboration, communication, and productivity if they are to remain globally competitive.

Brad Fenwick, professor and former vice chancellor for research and engagement at the University of Tennessee, Knoxville, led the study, which is based on interviews with research directors at 25 leading research universities.

The report cited several challenges to U.S. scholarship, including declining funding, increasing competition for resources, intensifying compliance requirements, and a loss of political and public confidence in the value of academic research. At the same time, the public's expectations for research to produce solutions to today's global challenges have never been higher.

The report cited the need for stronger metrics to quantify the quality and impact of research. As one administrator noted, "For the future of research universities and their faculty, we must … place greater emphasis on quality rather than quantity and realign our rewards systems.

But first, we need to do the hard work of agreeing on discipline-specific definitions of quality."

Research universities, the report continues, also need to better communicate their value to society when it comes to solving social problems, contributing to the economy, and promoting national innovation and security.

"There is a growing recognition of the need for research intelligence and well-established performance and risk management systems," the authors write. "Yet, there is considerable dissatisfaction with current systems and a lack of coordination within and between institutions as each [implements its] own solution to what are often common needs."

The report calls for the development of a shared national research and innovation agenda, which its authors believe would better position schools to strengthen the development and administration of their research programs and stay competitive in a global market for scholarship.

The report is available at www.researchuniversitiesfutures.org/RIM_Report_Research%20Future's%20Consortium%20.pdf.

The Habits of Extraordinary CIOs

THE HAAS SCHOOL of Business at the University of California, Berkeley, has completed a multiyear research project through its Fisher CIO Leadership Program. The study examined the most important factors for success in the careers of chief information officers.

The 21-page report was initiated by the late Max Hopper, who pioneered the use of the SABRE Global Distribution System, a reservation system first used by American Airlines and now used by airlines and travel agents worldwide.

Concerned that many companies were failing to benefit from their expensive IT infrastructures, Hopper led a committee at Haas to identify 14 of the world's more successful CIOs—those who have had a major, enduring, and positive impact on their companies and industries. It chose CIOs from American Airlines, Charles Schwab, FritoLay, Cisco, WalMart, FedEx, Marriott, Levi Strauss, and six other companies. A Fisher Program team then asked them 12 questions about their backgrounds, successes, and missteps, as

An Informed Public Can Prevent Crashes

MARKET BUBBLES like the one that preceded the recent housing collapse could be mitigated or even prevented if governments and regulatory bodies shared information with the public about factors that determine an asset's value. This is the finding of research by Timothy Burch and Sandro Andrade of the University of Miami School of Business Administration in Florida, and Jiangze Bian of the University of International Business and Economics in Beijing, China.

The group examined China's stock market during a six-month period in 2007 when stock prices nearly tripled and trading activity nearly quadrupled. They found that stocks with the most analyst coverage had significantly smaller bubbles than those with no analyst coverage. For example, stocks with 20 analysts reporting on them had bubbles that were more than 60 percent smaller than stocks with no analyst coverage.

Timothy Burch

Sandro Andrade

"Our research shows that making relevant information about an asset readily available reduces disagreement, which in turn makes bubbles less severe," says Burch.

The researchers suggest that to limit bubbles in the stock market, government agencies could collect and disseminate information and even subsidize analyst research where needed. To reduce the odds and severity of real estate market bubbles, governments and regulatory agencies could disseminate information about transactions, appraisals, rental yields, vacancies, demographic/migration trends, prospective changes in zoning laws, and real-property borrowing statistics.

"This could be achieved by creating a 'Kelley Blue Book' for real estate—a centralized, well-promoted Web site where everyone could go before making real estate decisions," says Andrade.

"Analyst Coverage, Information, and Bubbles" is forthcoming in the *Journal of Financial and Qualitative Analysis*.

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well as what they valued most in their personal and professional lives.

The report found that one predictor of success for CIOs was their level of engagement with their leadership teams. The more CIOs are seen as equals to other C-suite executives, the better they can sell the leadership on expensive, but often necessary, investments in technology.

The report also found that these CIOs were all self-described lifelong learners and displayed high emotional intelligence. They each possessed an "integrative mind," which led them to connect the dots of a problem; they built cross-functional teams and drew on the "collective intelligence of the enterprise." And they all recommended strategies that focused on the needs of their organizations' customers.

"The Renaissance CIO Project: The Invisible Factors of Extraordinary Success" by James Spitze and Judith Lee was published in the Winter 2012 issue of the *California Management Review*. Purchase it online at www.ucpressjournals.com/journal.php?j=cmr.

Biotechs Must Learn To 'Swim with Sharks'

RAMPANT MISTRUST between biotech and pharmaceutical firms may hinder innovation in the biotech industry, say Nandini Rajagopalan of the University of Southern California Marshall School of Business in Los Angeles and Luis Diestre of Instituto de Empresa Business School in Madrid, Spain. More new drugs could come to market if firms collaborated, but fear of idea theft leaves many medical discoveries undeveloped, the authors say.

In the industry, biotech firms refer to R&D collaborations with big pharmaceuticals as "swimming with sharks." Patents and contracts can help prevent idea appropriation, but small biotechs have little chance to win infringement suits against wealthy pharmaceutical companies, the authors note.

Rajagopolan and Diestre advise new biotech firms to partner with pharmaceutical firms involved in the fewest areas of medicine, which decreases the pharmaceutical firm's incentive to steal new ideas. In addition, they note that biotech firms should realize that the more applicable the active ingredient of a drug is, the more money a partner could make from it—for that reason, working with an active ingredient with a narrow range of uses gives a partner less incentive to break the trust of the agreement. Finally, biotechs should seek the guidance of venture capitalists familiar with the industry.

Even with the risks, cultivating trusting relationships is necessary for innovation, the authors emphasize. In the 1990s, they note, 70 percent of blockbuster drugs were the result of collaborations between the biotech firms that made the discoveries and the pharmaceutical firms with the funds to move those ideas forward.

"Are All Sharks Dangerous? New Biotechnology Ventures and Partner Selection in R&D Alliances" was published in the October 2012 issue of the *Strategic Management Journal*.

Luis Diestre

Nandini Rajagopalan

UPCOMING & ONGOING

■ POINT-OF-SALE CRIME

Researchers at the University of Arkansas' Walton College of Business in Fayetteville will work with the Retail Industry Leaders Association to address the potential for criminals to exploit retail technologies such as mobile coupons and touchless payment. The goal is to create strategies to curtail potential crime before such emerging point-of-sale technologies become more widely used.

■ BOOST FOR AFRICAN REAL ESTATE

Henley Business School in South Africa, which is affiliated with the University of Reading's Henley Business School in the U.K., has opened its Centre for Advanced Studies in Real Estate in Africa (CASREA). CASREA's programs, initiatives, and events will be dedicated to promoting effective and socially responsible practices in government and commercial real estate, as well as urban and rural properties. Dineo Molomo will direct the center.

■ FIGHTING ALZHEIMER'S

The University of Western Ontario's Ivey School of Business in London, Ontario, has received funding from the Canadian government to create the Centre of Innovation Excellence for Alzheimer's Care, marking a new partnership between the federal government, the Ivey International Centre for Health Innovation, and B'nai Brith Canada. The center will act as a lab where industry, academia, government, medical providers, and patients will work together to develop, test, and commercialize innovations related to the care and prevention of Alzheimer's disease.

The **Center for Positive Organizational Scholarship** at the University of Michigan's Ross School of Business in Ann Arbor has received the Academy of Management's inaugural AOM Practice Theme Committee's Research Center Impact Award. The center was recognized for its work to promote positive work environments and create purpose-driven organizations.

The Organization of the Petroleum Exporting Countries (OPEC) has recognized **Øystein Noreng** of BI Norwegian Business School in Oslo, Norway, with the OPEC Award for Research. The award recognizes his lifetime of research related to the field of energy economics and petroleum.

Doctoral student **Ikechukwu Kelikume** and faculty member **Adedoyin Salami** of Lagos Business School in Nigeria have won the Institute for Business and Finance Research's 2012 Outstanding Research Award for their paper "Is Inflation Always and Everywhere a Monetary Phenomenon? The Case of Nigeria." In it, the authors question the use of some monetary policy tools to achieve price stability in the country.

Researchers Set Out to Measure 'The Emotional Oracle' Effect

SHOULD BUSINESS leaders make decisions based on logic? Or should they trust their guts? Those who trust their feelings make more accurate predictions than those who don't, according to Michel Tuan Pham, professor of business at Columbia Business School in New York City; Leonard Lee, associate professor of marketing at Columbia; and Andrew Stephen, assistant professor of business administration at the University of Pittsburgh's Katz Graduate School of Business in Pennsylvania. The trio has written a new study on the predictive power of emotion—what they call "the emotional oracle effect."

In a series of experiments, the researchers asked participants to predict the outcome of future events, including the 2008 Democratic presidential primary race, the winner of the talent show "American Idol," the success of upcoming films, the movement of the stock market, and the weather. They placed some participants in a "high-trust-in-feelings" condition by asking them to remember two moments when they trusted their feelings to make a decision that turned out to be right. In the "low-trust-in-feelings" condition, they asked participants to remember ten such situations, which was much more difficult.

In the high-trust group, for example, 71.9 percent of participants predicted that Barack Obama would win the 2008 Democratic primary over Hillary Clinton; in the low-trust condition, only 63.9 percent made that prediction.

The authors speculate that this phenomenon could arise for one of two reasons. One, those with high trust in their emotions could be better tuned into the emotions and behaviors of others. Or, two, they could be more open to the details of their external environments, according to what's called the "privileged-window hypothesis."

"It appears that it is mostly high trust in feelings that improves prediction accuracy rather than low trust in feelings that impairs it," the authors write. They conclude that "although most theorists would suggest that we ought to rely on logic and reason to make such predictions, it appears that more intuitive, feeling-based processes may in fact lead to more accurate predictions."

"Feeling the Future: The Emotional Oracle Effect" was scheduled to be published in the October issue of the *Journal of Consumer Research*. It is available at www.columbia.edu/~tdp4/Pham-Lee-Stephen-JCR2012.pdf. ⓩ

Michel Tuan Pham

Leonard Lee

Andrew Stephen

tech**nology**

Gamifying The Classroom

THE ARTICLE "Game On," on page 24 of this issue, highlights how Duke University used gamification to encourage excitement about its programs and brand. But business professors also are using the concept to get students excited about learning—and to get them to learn *better*.

This fall, Kevin Werbach, associate professor of legal studies and business ethics at the Wharton School of the University of Pennsylvania in Philadelphia, is teaching an undergraduate course on how to apply gamification to business areas such as marketing, human resources, sustainability, customer engagement, and innovation. For the first time, he's also using the concept as a teaching and learning tool.

There are myriad ways to use gamification in class, explains Werbach. Educators can create a narrative which sends students on a "quest" to collect tokens when a goal is achieved, build classes around popular board games like Monopoly, or set up a system in which students earn badges or points. Werbach uses a badge system in his classroom. To administer the game, he has partnered with Badgeville: The Behavior Platform, a company that helps organizations such as Deloitte, Samsung, and NBC apply social gaming to their marketing and educational goals.

"I'm sure my first effort will involve mistakes," Werbach says, "but I'm excited to see how students respond to what I've put together for the course and learn from there."

One educator who served as a model for Werbach as he designed his approach to gamification is Steven Johnson, an assistant professor of management information systems at Temple University's Fox School of Business in Philadelphia. Johnson has used gamification in his social media innovation course for three semesters.

Johnson presents his gamification system to students as a "Social Media Innovation Quest." Students earn points for different activities and receive badges at certain levels, which include "rookie," "ace," "magnificent," and "virtuoso." Although quest points don't count toward students' final grades, some assigned activities can help students earn quest points.

Johnson uses the blog platform WordPress and its Achievements plug-in, which awards badges and points

B-Schools Consolidate Their Approaches to IT

A GROWING INTEREST in technology-based business education is leading to a gradual consolidation and integration of IT topics in business school programs. That's what data indicate in the Business School Questionnaire (BSQ), AACSB International's annual survey of its members.

From 2007–2008 to 2011–2012, the BSQ shows that the number of b-school IT directors has stayed relatively steady. However, the number of dedicated faculty specializing in computer information science and management information science (CIS/MIS) has shown a small but significant decline. This year, schools reported 166 fewer IT faculty—their numbers decreased from 9.8 percent of total faculty to 8.7 percent. The number of dedicated CIS/MIS programs also declined.

What's causing this trend? It could be that business schools now view tech-oriented topics such as business analytics, Web development, and social media as important to all business graduates, not just those who specialize in IT, according to AACSB's Research and Knowledge Services staff.

Skills usually taught in CIS/MIS courses are now

to users for their blogging activities. The plug-in automatically calculates students' points for some activities—such as commenting on a blog or adding a Twitter "follow-me" button. Johnson must check other activities manually, such as when students set up their own blogs. In these cases, students fill out online "Activity Submission Forms," which Johnson tallies each week.

When students reach an achievement, the system automatically sends them e-mails that congratulate them and show them the badges they've earned. Johnson also posts a "Top 10 Leader Board" online that displays the top performers in the quest to give those students public recognition. To motivate the rest of the class, each week Johnson recognizes students who have moved up a level.

At the last class meeting, Johnson recognizes the top three or four students on the final leader board with school memorabilia, such as T-shirts and hats. He also gives a "judge's choice" award to a student who did something unique. For example, one such winner had taken a photograph for each of his blog entries. "I want to show a distinction between quality and quantity," says Johnson. "Some students care a great deal about each blog post, not just about their number of posts."

So, does gamification help students learn? It depends, says Johnson. "You will always have your top performers, and you'll always have students who struggle, no matter how many incentives you throw at them," he says. "A well-designed gamification system has the most impact on the middle 40 percent to 60 percent of students. It motivates these students to do more."

How to Gamify Smart

Kevin Werbach and Steven Johnson offer this advice to educators interested in "gamifying" their courses:

Be clear to students about which rewards contribute to grades and which do not. Although some rewards can be tied to graded work, the goal of the game should be to encourage students to engage with their learning experiences, says Werbach. "One of the powerful aspects of gamification is that it promotes meaning and motivation beyond just chasing a grade."

Reinforce the fact that the game is meant to be fun. "You'll always have students who'll try to 'game the game,'" Johnson notes. "Reinforcing its purpose will help you make sure that attitude doesn't become the culture of the class."

Don't force students to play the game. The game is an incentive for students to take control of their learning, but they should have a choice about how—and how much—they play.

Choose incentives carefully. "The behavior you incentivize is exactly the behavior you'll get," says Johnson. He adds that some of the best activities to use as incentives are those that might otherwise be opportunities to earn extra credit.

Learn as much as possible about gamification. "Gamification is not some magic pixie dust that you sprinkle on top of something. You have to understand how to deploy a system that's appropriate to the task at hand and the motivations of the people involved," Werbach says.

He suggests that educators start by reading the book *The Multiplayer Classroom: Designing Coursework as a Game* by Lee Sheldon of Rensselaer Polytechnic Institute in New York. The annual Games, Learning, and Society Conference also provides valuable ideas for educators. Visit www.glsconference. org to find a link to video recordings of workshops from its June conference at the University of Wisconsin-Madison.

	CIS/MIS Faculty		IT Directors		Schools with MBA CIS/MIS Programs		Specialized Masters CIS/MIS Programs	
	# of faculty	% of total faculty	# of faculty	% of total faculty	# of faculty	% of total schools	# of faculty	% of total schools
2007–2008	2,320	9.8	120	2.5	101	22.1	101	31.4
2011–2012	2,154	8.7	117	2.5	82	17.4	91	26.7

expected throughout most programs, they add, decreasing the need to have courses and programs specific only to CIS/MIS. In this regard, technology has followed the same path as e-business and business ethics, which were

first addressed with standalone courses before gradually being integrated into the core curriculum.

For information about the BSQ, visit www.aacsb.edu/dataandresearch/surveys/default.asp.

technology

Make Way for MOOCs

DOES THE EMERGING trend of massive open online courses, or MOOCs, have staying power? Or are they just a passing fad? Although answers to those questions are still up for grabs, business educators already are experimenting with MOOCs, to explore the potential that the format represents.

In the last two years, a number of open-source, free models of higher education have entered the market. The University of the People, which bills itself as the first tuition-free online university, launched in 2009. This year, Harvard and MIT announced their joint creation of edX, a nonprofit initiative in which the institutions will offer free online courses. In July, the University of California, Berkeley, joined the edX partnership. In September, Stanford University announced its addition to the market—Class2Go, which will start with 16 free online courses.

Coursera has become one of the most prominent MOOC platforms. Founded by Daphne Koller and Andrew Ng, computer science professors from Stanford University in California, Coursera now offers 119 MOOCs. At least 12 cover business topics.

The University of Virginia's Darden School of Business in Charlottesville recently announced that "Grow to Greatness," a course on the challenges facing private

> As of August, Coursera had enrolled its **one millionth student**, and Udacity had enrolled more than **739,000**.

business, will be offered through Coursera in January 2013. The course will be taught by Edward Hess, professor of business administration and executive-in-residence at Darden's Batten Institute. By mid-July, more than 15,700 already had signed on to take his course.

But the fact that tens of thousands of students can enroll in a single course raises questions about how well a professor can convey the material, create a sense of community, and ensure that enrolled students actually complete the work. Free online education providers have taken some steps to address these concerns:

■ In July, Coursera held its first face-to-face event for students near San Francisco. It extended an open invitation to all of its students and faculty to a cookout, where they could meet their classmates and professors. More than 650 students attended, some from out of state.

■ In September, Udacity, another prominent MOOC provider, made news when Colorado State University's Global Campus—the online arm of the CSU system— became the first U.S.-based university to offer academic credit for a Udacity course. To earn three credits for Udacity's "Introduction to Computer Science: Building a Search Engine," students must produce a "certificate of completion" and pass a proficiency exam, which will be proctored by Pearson VUE, the computer-based testing division of global learning company Pearson.

■ In September, edX announced its agreement with Pearson VUE to offer learners the option to take a proctored final exam to demonstrate their proficiency in its free online courses.

Such developments indicate how quickly MOOCs are evolving—and that evolution may be accelerated even further. In September, Google posted a YouTube video announcing its release of Course Builder, an open-source software platform to help educators design online courses. In the video, Google's director of research Peter Norvig explains that in July, the company used the same technology to deliver its online course "Power Searching with Google" to more than 20,000 learners.

Soon after the video was released, Norvig noted in an interview with *The Chronicle of Higher Education* that Google was discussing the possibilities of the software with edX partners and other educational providers.

Still, most educators agree that MOOCs have a long way to go before they're on par with smaller face-to-face and online courses. Even so, the hundreds of thousands of learners enrolled in MOOCs indicate how much potential this mode of delivery has to impact the future of business education.

What's in an App?

LAST SPRING, Baylor University's Hankamer School of Business in Waco, Texas, released the *Baylor Business Review* (BBR), its student and alumni magazine, as an iPad app. Now, with three issues in digital format, the BBR app already has been downloaded by more than 1,000 users from more than 30 countries. In September, the school's app won a 2012 Silver W3 award from the International Academy of Visual Arts. Here, Hankamer's communications department offers seven steps to creating a magazine app:

1. Strategize. Evaluate your magazine content to determine how the functionality and features of an app will enhance that content. In Baylor's case, the first issues delivered through the BBR app include scrolling text, links, videos, podcasts, and extra photos not published in the print version of the magazine. The fall 2012 issue also includes a slideshow, a 360-degree photo, and flip pages.

2. Pick your platform and device. The school chose to make its app available only on the iPad. The school chose not to offer an app for the iPhone because its screen is too small to provide an enriched experience. Eventually, the school would like to offer the BBR app on Android tablets.

3. Keep it concise. Very few people care to watch a ten-minute video of a guest speaker, but the content of many guest lectures could make an entertaining 60-second video. However, some audio or video features could be longer if an interesting topic requires it.

4. Choose a vendor wisely. Conduct extensive research before signing a contract, and understand what features and levels of customer service a vendor offers. The Hankamer School chose to partner with U.K.-based PressRun to complete the technical build of the BBR app, because it offered the app functionality the school wanted. Baylor now pays PressRun a monthly app-hosting fee.

5. Take your time. It took about one year from the time staff began research to the time they released the BBR app in May 2012. In that time, Hankamer staff collaborated with various departments including tech-nology, finance, and legal, as well as with the magazine's designers at Pollei DesignWorks and representatives from PressRun and Apple.

It's important to allow ample time to account for obstacles you can encounter along the way. For example, Apple denied the school's initial app submission because it did not categorize a twice-yearly publication as a magazine app. As a result, the school was unable to offer the app on Apple's Newsstand as it originally planned. Instead, it adjusted the app's iTunes account settings and technical build specs to meet Apple's requirements, and then re-submitted the app for approval.

6. Plan for the workload. So far, the Hankamer School has not had to hire additional employees because its staff has worked out how to manage their time and use available resources. For instance, Pollei DesignWorks designs each magazine issue for print and app formats. A Baylor University photographer shoots video footage. A local freelancer has edited videos, and a graduate student intern has produced several videos. Audio podcasts are pulled from the "Business Review," a radio series of two-minute segments that have aired for seven years on the Waco NPR station.

7. View an app as a work in progress. Once you have an app in place, you can continue to diversify and expand your interactive features to offer a unique experience for readers.

For more information or to find a link to download the BBR app, visit bbr.baylor.edu/app. Ⓩ

An interactive spread in the digital BBR Review.

The icon for the BBR app on iTunes

your turn

by Jacqueline Brito

The Best Hires Make the Best Admits

ALL BUSINESS SCHOOLS would like to recruit and admit motivated students who will become highly marketable graduates as well as excellent brand ambassadors for their programs. But I think it's even more important that schools seek out students who are destined to be great hires for employers. In fact, I call it "socially responsible admissions" when schools consciously commit to enrolling students who will be assets to the job market.

To make sure that they are recruiting and admitting students who will be exceptional hires, I believe school administrators first must ask themselves some searching questions. "How can we ensure that our school's goals are most accurately aligned with those of employers? How can we create a strategic alliance with employers so we can create a pool of qualified candidates?" Those were two of the many questions that I posed a few months ago as I considered my role as assistant dean of admissions for the Rollins College Crummer Graduate School of Business in Florida.

Prior to transitioning to academia, I spent several years in corporate America as an internal consultant who addressed workforce planning and employment needs. My client groups consisted of departments such as operations, advertising, administration, technology, and marketing. During those years I learned firsthand that understanding workforce needs was critical to achieving optimal performance and meeting the company's strategic plan. And understanding was only achieved through research.

What works for corporate America works for MBA admissions professionals. Last January, the Crummer School commissioned a market research firm to help us identify how the Rollins MBA could best serve employers by developing the right professional skill sets among the students in our MBA and executive education programs. We wanted to understand the current and emerging skill sets employers considered most valuable and identify any gaps that existed between their business needs and the skill sets of their current employees.

The research revealed that the biggest gaps were in the areas of written and verbal communications, teamwork, critical thinking, and time management—and that these skills were universally prized in current or potential employees. I knew that, to meet the needs of employers, our admissions office would need to recruit and admit students who could excel in these areas. Therefore, I recommended that our school follow a streamlined, four-part vetting process:

Step 1: Analyze application documents. While the admissions team will always be interested in a candidate's GMAT or GRE score, those don't always reflect whether a candidate truly has the communications and critical thinking skills that employers value. Therefore, I believe it's essential to conduct a holistic review of a student's entire file, including the candidate's application, résumé, recommendations, transcripts, *and* scores. This will help the admissions team determine if the candidate meets enough criteria to advance to the interview stage, and it will also help them identify areas that might need further explanation during an interview.

Step 2: Conduct the interview. Most schools see structured interviews as chances to decide if candidates will be good fits for their MBA programs. But I maintain that it's just as important to use the interview to determine if the students have the potential to be great hires for employers. At Rollins, each MBA candidate must complete a behavioral interview, during which we ask pointed questions about past incidents, actions they took in response, and the resulting outcomes. Although past performance isn't always the best predictor of future on-the-job performance, such

How can we ensure that our school's goals are accurately aligned with those of employers?

to accomplish them. We expect our working professional students to incorporate their plans into their annual performance reviews with their employers.

For instance, one prospective student maintained our attention throughout the structured interview process, but solidified our decision to offer her admission into our MBA program when she presented her carefully executed career plan. She included a table of contents, an executive summary, a page of works cited, and detailed action items with SMART goals (specific, measurable, attainable, realistic, and timely). She even outlined a contingency plan if relocation was no longer a viable option upon graduation.

Because we want to be fair to other current or potential applicants, we ask candidates not to disclose any aspect of this assignment to others; in fact, we require them to include and sign an honor pledge that we provide on this topic.

Step 4: Accept or decline. At the close of each interview, we let candidates know when they might receive admissions decisions from us and when we need to hear back from them. Most applicants apply to several schools, and once we've identified the candidates that we think will make great hires, we don't want to lose them to other schools. So we handle this final stage of the process with great care.
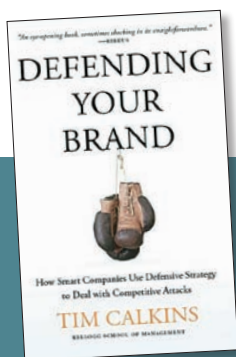
Many Players, Many Roles

At the Rollins MBA, we know that faculty are responsible for increasing the intellectual horsepower of our students by making sure the curriculum fills the gaps that employers have noted in the workforce. But their task can be daunting if the admissions team hasn't admitted the right students in the first place.

We're convinced that following our four-step plan will help us increase the number of qualified applicants, admits, and alumni that go through our system. We're also convinced that when our school's admissions goals are aligned with employers' goals, we will attract talented and ambitious students who will become successful graduates. They will take the Rollins brand far beyond the classroom—and their employers through the next business challenge. ⓩ

Jacqueline Brito, a Senior Professional in Human Resources (SPHR), is assistant dean of the Rollins MBA at the Crummer Graduate School of Management at Rollins College in Winter Park, Florida.

an interview helps provide objective data points to aid in the admissions decision.

We also use a structured interview guide to capture our notes about all candidates, and we make sure none of our questions violate individuals' privacy or other rights. If a question is designed to assess a candidate's employment readiness, it's probably safe to ask.

Step 3: Ask for a career plan. When we have identified viable candidates whom we want to consider for admission, we ask them to submit career plans detailing their aspirations. These can be created in whatever formats suit them best. Candidates generally view the career plans quite favorably, telling us that the process of creating one helped them evaluate their career goals and identify how

bookshelf

DEFENDING YOUR BRAND

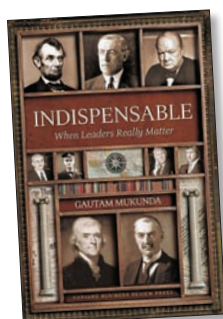**AUTHOR:** Tim Calkins
PUBLISHER: Palgrave Macmillan, US$30

CALKINS DOESN'T pretend that he's written a pretty book. "If you're looking for a cheerful book about the power of innovation and strong brands—well, this isn't it," says the Northwestern professor. "Instead, this book is a practical guide to the dark arts of marketing and the shadowy world of defensive strategy." His premise is simple: Your company exists to be profitable. If a new competitor, even a small-scale one, enters the market, it can eat into your profits. So you have to stop it however you can. Perhaps you publicly indicate that you will cut prices in an effort to destroy the competitor's launch; perhaps you have your sales force buy up all of the newly introduced products so the other company can't gather reliable test-market data. He admits that some tactics are dodgy, maybe even illegal. "Is it okay to spy on your competitor? Is it right to damage someone else's product or brand by planting seeds of doubt?" Dark, yes—but utterly fascinating.

INDISPENSABLE

AUTHOR: Gautam Mukunda
PUBLISHER: Harvard Business Review Press, US$28

HARVARD PROFESSOR Mukunda takes an unconventional approach to determining what makes a great leader. Most candidates for any leadership post, he argues, have been produced by the same system and thoroughly vetted. Thus, these "filtered" candidates tend to be so similar to each other that it scarcely matters which one is selected. By contrast, "unfiltered" candidates— who achieve high office by some shortcut of charisma, fame, or freak circumstance—are likely to make dramatically different choices than filtered ones, frequently leading to breathtaking success or utter failure. According to Mukunda, some of the best and worst U.S. presidents (from Lincoln to Harding) were unfiltered politicians; the middle-of-the-pack ones were all filtered. He follows the analogy into the realms of business and the military, and then poses the question: How can an organization decide when to choose a "Modal" leader, who's been through the filtration process, or an "Extreme," who hasn't? He decides, "Desperation, not discomfort, should be the signal of the need to gamble on an Extreme."

JUDGMENT ON THE FRONT LINE

AUTHORS: Chris DeRose and Noel M. Tichy
PUBLISHER: Portfolio/Penguin US$26.95

MANY COMPANIES claim that their people are their best resource, but few take advantage of the insights of their frontline employees. DeRose and Tichy, both of the University of Michigan, profile companies such as the Ritz-Carlton, Amazon, and Zappos that are famous for engaging frontline employees to help improve the customer experience. The authors make it clear a frontline-focused strategy only works if top leaders develop a framework to enable it; they must create a culture that supports it and guidelines that spell out their expectations. They acknowledge that letting go of command-and-control management can be messy but add, "If leaders don't want employees who act as dumb terminals only capable of carrying out tasks they have been explicitly assigned, then they must have faith that giving employees power carries more reward than risk."
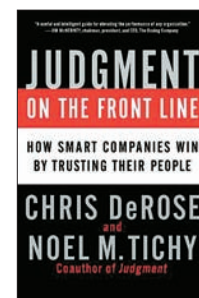
Don't Miss

LESSONS FROM THE GREAT RECESSION is a handy advice book for small business owners. Edited by Fairleigh Dickinson's James Barrood and *The Wall Street Journal's* Brian Moran, the book offers guest essays on topics such as writing business plans, negotiating with creditors, and outsourcing. There are plenty of scary stories, but hopeful ones as well. For instance, Barrood and consultant Stephen Wunker sound an encouraging note about innovation: "During a recession, large companies often focus on cost-cutting and saving existing sales rather than pioneering new markets. This creates open space for innovators." (Insights Media, US$19.95) ⓩ

idea exchange

Spy on the Future

The Idea

Ask students to beta-test intelligence analysis software—typically used by government intelligence agencies—to see how well it might help analysts make accurate market predictions

Location
Grenoble Ecole de Management (GEM) in France

The Module
GEM's beta-testing project is part of a three-week business and technology intelligence module in its 15-month Advanced Masters in Bio-technology Management program. The module is taught by affiliate professor Edward Roche.

The Software
Roche and his students worked with Globalytica, a U.S. software company based in Reston, Virginia, to test its intelligence analysis software program, Te@mACH. Globalytica, a subsidiary of Pherson Analytics, designed the software using techniques developed by the U.S. Central Intelligence Agency.

The Reason
Most students are used to the idea of using business intelligence software to analyze a company's proprietary data. But intelligence analysis software is different because it analyzes internal *and* external data—some of which might seem trivial—to give users a better understanding of whole markets, much like government spies gather intelligence on other countries, explains Roche. With Te@mACH, users can input data relevant to multiple hypotheses, rating each data point's level of importance on a scale of one to five. The software then highlights areas of consensus and flags points of dispute.

Once users have reviewed the findings, discussed their differences, and refined the data, the software offers a matrix that makes market predictions, like a strategic form of crowdsourcing.

Students in Grenoble's biotech program gather data to input into a new software program designed by CIA veterans.

The Projects
Students tested two types of Te@mACH software—single-user and multi-user. Students worked with the single-user software for individual assignments, in which they predicted which companies will be the leaders in personalized medicine. Students formed teams of three to five for a larger project in which they used the multi-user software to analyze takeover targets in the biotech industry. Each group was assigned a biotech company such as Amgen, Celgene, or Human Genome Sciences. Students then generated hypotheses on whether firms would be attractive to acquiring companies and input their hypothesis and data into the software.

The Possibilities
Because students studied existing companies, most of their findings are confidential. However, the software did support their prediction that companies specializing in computational genetics are poised to become biotech leaders in the future, as more healthcare providers tailor treatment to each individual patient. Whether they're right? That will take several years to determine, Roche says. Even so, the software will become only more robust over time—it stores the data collected during each module to form a knowledge base for the next cohort.

Roche believes that intelligence analysis software has great potential for ongoing knowledge creation and analysis. Business leaders might be able to use it to predict market leaders, detect strategic weaknesses, and identify promising technologies five, ten, or even 20 years out—something nearly impossible to do today.

To read more about the software, visit www.pherson.org/tools.html. **Z**