WHARTON
MAGAZINE

Hollywood Sequel
It's hard to get a truly original film made these days. But the news isn't all bad for Hollywood.

Retail, Remade
Has the sluggish economy permanently changed the retail sector?

A 'False Choice'
It's time to look anew at the raging debate surrounding network neutrality, says Kevin Werbach.

Elon Musk, W'97, C'97, has already conquered the Internet. Now he wants to revolutionize the auto industry—and space travel, too.

Going Green. Going to Space.

EDITION FOUR | FALL 2010

THE PENN CLUB

NYC Landmarks Preservation Commission names the clubhouse of The Penn Club a NYC historical landmark.

#1 City Club in New York City

Top 10 BEST CITY CLUB IN THE USA

5-Star Platinum Club of America for 3 consecutive terms

2003-05 2006-08 2009-11

THE PENN CLUB

Connect today at www.pennclub.org

Where real movers and Quakers connect.

At MassMutual, "mutual" is more than part of our name. It's the foundation of how we think. That means when you're a participating policyholder, you're also an owner of the company. And your needs come first. Our prudent approach focuses on long term economic value, not short term gains or quarterly profits. And our financial strength ratings are among the highest of any company in any industry.[1] So make a good decision. Find strength and stability in a company owned by its participating policyholders. **To learn more about mutuality and the benefits of being a whole life policyholder, visit MassMutual.com/Mutuality**

MassMutual
FINANCIAL GROUP®

We'll help you get there.®

LIFE INSURANCE + RETIREMENT/401(K) PLAN SERVICES + DISABILITY INCOME INSURANCE + LONG TERM CARE INSURANCE + ANNUITIES

MassMutual Financial Group refers to Massachusetts Mutual Life Insurance Co. (MassMutual), its affiliated companies and sales representatives. Insurance issued by and ratings apply to MassMutual (Springfield, MA 01111) and its subsidiaries, C.M. Life Insurance Co. and MML Bay State Life Insurance Co. (Enfield, CT 06082). [1]Financial strength ratings as of 8/1/10: A.M. Best (A++); Fitch (AA+); Moody's (Aa2); Standard & Poor's (AA+). CRN201201-130184

PHOTO BY MIKE BERTOLINE

WELCOME TO WHARTON: Wharton's newest class of MBAs were welcomed to campus by **Wharton Dean Thomas S. Robertson** during MBA Convocation on August 6 at Irvine Auditorium. To see video highlights from the event, and hear from some of the new students, visit www.whartonmagazine.com.

Fall 2010

Contents

A Message from the Dean

A New Academic Year and a Reaffirmation of Purpose

The academic calendar has a wonderful rhythm. Each year the arrival of fall means that we welcome to campus hundreds of new students, faculty and staff. They are always eager to immerse themselves in the lively Wharton community, and those of us who have been around for a while are eager to engage with their fresh energy and ideas. This year we were particularly fortunate to welcome a brilliant cohort of new standing faculty members who have joined our departments in Accounting, Business and Public Policy, Finance, Insurance and Risk Management, Management, and Statistics. With degrees from world-class institutions and expertise on topics ranging from corporate finance to innovation in emerging markets, they are a truly exceptional group.

As we receive these newest members of our community, we reaffirm our purpose: to engage in a vigorous exchange of ideas, to create and build new knowledge, and to put that knowledge into practice for the benefit of the international business community. Each one of us at Wharton has a role to play in this process, and I look forward to another year of innovation and success.

Thomas S. Robertson
Dean and Reliance Professor of Management and Private Enterprise

ON THE WEB

Join the Conversation
www.wharton.upenn.edu

Wharton's new website allows visitors to jump directly from the homepage to the School's Facebook, Twitter, LinkedIn, YouTube and Flickr pages.

VISIT WHARTON ON ... facebook twitter LinkedIn YouTube flickr

Editor's Letter

ILLUSTRATION BY: KEN FALLIN

Late this summer, I had the opportunity to sit down for a long conversation with **J.J. Cutler, C'93, WG'97**, who since May has served as Wharton's Deputy Vice Dean of MBA Admissions, Financial Aid and Career Management.

Cutler's dual role—he is charged with not only recruiting top young business minds to Wharton, but also helping them move on to rewarding careers after their years here are over—is a unique one among top business schools. According to Cutler, in fact, no other top b-school is using the same model.

Wharton, though, believes in this new model. Cutler does, too.

For one very simple reason: The world of business has changed, and Wharton must change with it.

Thanks in part to the global economic downturn, in part to globalization and in part to the evolution of the MBA degree itself, business education is undergoing fundamental and very likely permanent changes—changes that have brought challenges, of course, but great new opportunities as well.

Those opportunities are most apparent, it seems, in the striking diversity of interests among today's Wharton MBAs—and the amazing variety of ways they are putting their degrees to use.

There's no mistaking it, Cutler says: Not every Wharton graduate wants a career in finance or banking these days; increasingly, these graduates are instead seeking out opportunities in the energy sector, in sports business, in nonprofits, in microfinance.

Quite simply, students and employers today are viewing the MBA as much more than just a just a business degree. It is, instead, a leadership degree—a leadership degree that can be put to use pretty much anywhere.

In this issue of *Wharton Magazine,* we highlight a few alumni who are proof of this new-world concept.

• In our cover story, we catch up with one of Wharton's most successful and most eclectic graduates, Elon Musk. **Musk, C'97, W'97**, first made his name (not to mention his fortune) as the founder of PayPal, the ubiquitous Internet payment system that literally revolutionized the Web. Having conquered cyberspace, Musk is working to revolutionize two other sectors—the auto industry ... and the space travel industry. How does he plan to do so? Check out contributing writer Robert Preer's illuminating interview (page 20) to find out.

• As you'll read in Chris Krewson's feature story, "Tinseltown In Transition," Wharton graduates are also proving themselves to be powerful players in a rapidly evolving, topsy-turvy Hollywood. With the rise of home entertainment, the dawn of much-improved 3D technology and the increasing influence of foreign markets, old Tinseltown business models are being tossed aside. As Wharton entertainment insiders told Krewson, though, there is still significant debate as to whether the changes will ultimately be good or bad for the industry.

• Meanwhile, back here in Philadelphia, **George W. Gephart, WG'79**, a former investment advisor and self-described "amateur natural scientist," took over as the new President of the Academy of Natural Sciences, making him one of an increasing number of MBAs who are taking their business acumen into the nonprofit sector. In "Popular Science" (page 12), he explains what challenges he faces in this new role—and what he hopes to achieve as leader of one of the city's preeminent institutions.

As always, we invite you to share your thoughts—comments, criticisms, raves and more—by sending your letters to letters@whartonmagazine.com. Also, be sure to check out our website, which now features the exciting new Wharton Blog Network (see page 18), and follow us on Twitter (@whartonmagazine).

Thanks again for reading.

Sincerely,
Tim Hyland / Editor

Wharton
UNIVERSITY *of* PENNSYLVANIA

WHARTON MAGAZINE

EDITORIAL STAFF

Director of Communications
Sherrie A. Madia, Ph.D.

Editor
Tim Hyland

Associate Editor
Lauren Anderson

Assistant Editors
Carol Quinn
Stefanie Schultz

Editorial Committee
Karuna Krishna
Jillian McGowan
Ira Rubien
Susan Scerbo

Creative Services
Justin Flax

Business Manager
Stefanie Schultz

Design
Aldrich Design

Advertising Inquiries
magazine@wharton.upenn.edu

ADMINISTRATION
Thomas S. Robertson
Dean and Reliance Professor of Management and Private Enterprise

Sam Lundquist
Associate Dean External Affairs

Wharton Magazine
Vol. 16, Edition 4
Wharton Magazine is published quarterly by the Wharton External Affairs Office, 344 Vance Hall, 3733 Spruce Street, Philadelphia, PA 19104-6360

Change of Address
Online: Visit WhartonConnect.com
Mail: Wharton Magazine, Attn: Alumni Address Update, Wharton External Affairs, 344 Vance Hall, 3733 Spruce Street, Philadelphia, PA 19104-6360
Telephone: +1-215-746-6509
Fax: +1-215-898-2695

The Power of the Network, Indeed

I was enjoying some downtime, reading your Spring 2010 issue on the airplane while traveling home to San Francisco from a business trip. While I was immersed in the article titled "The Power of 'The Network'" (Spring 2010, pg. 30) I was politely interrupted by a woman sitting next to me (in the middle seat, poor thing) asking, "Excuse me, did you go to Wharton?"

Coincidentally, we both had gone to Wharton undergrad, which is a bit rare in the Bay Area (most alums are MBA alumni; additionally, I find many professionals aren't aware that there is an undergraduate program at Wharton, but I digress). She was class of 2005, I was class of 1996 and she just so happened to be looking to leave her retail consulting firm. Believe it or not, I work for a consultancy that has recently started a Retail Practice and I was looking to hire strategists/analysts.

Turns out, she accepted our offer and her first day was June 21. The Power of the Network!

Carol Citkovic, W'96

A Longtime Reader. And We Mean It.

I have been receiving the *Wharton Magazine* for some time now and I just wanted you to know that I greatly appreciate receiving this great publication.

I am an "old fogey" in my 93rd year, yet I am happy to be able to say that I recognize a nice publication when I see one. It sure is very fine to read it.

I don't remember the year I graduated from Wharton, but at least I am happy to be able to tell all my friends that it is certainly a very fine place to get a really good education. I tell them that I am speaking from "experience."

Thank you again very much for sending me the *Wharton Magazine*.

William T. Schwartz, WEV'51

A Question

Thanks to *Wharton Magazine*, I just learned that "there's a trash heap the size of Texas floating in the North Pacific" ["A Battle in the Pacific," Summer 2010, pg. 10]

"Hmm," I thought, "how deep is that trash heap? How deep is Texas? And how does the volume of that plastic 'trash heap' compare with the volume of water in the North Pacific?"

Said another way: "Ho-hum. Isn't 'cleaning it up' just another grasping for something comparatively inconsequential to do with government grants and/or foundation largess?"

Stuart Mahlin, WG'65

Editor's Note: We asked **Doug Woodring, WG'95**, founder of Project Kaisei, to respond to Mr. Mahlin's letter. His response is as follows:

The plastic problem on our planet is a real one, and some say it is worse in some ways than other materials, as many types of plastic last hundreds of years, and will continue to do ecological damage along the way. Unfortunately, the scale and capacity of the world's waste management and recycling capabilities have simply not even come close to keeping pace with our level of consumption growth, and this is exacerbated in developing countries who are beginning to earn more, but whose infrastructure is not keeping pace. Much of their debris can make its way to rivers, streams, and then the ocean. Over 270 species have been shown to be impacted by plastic, but it is impossible to get a body count in the ocean.

I was just at a UNEP meeting working on their 2011 yearbook. Out of over 80 global issues they chose between, they picked three to focus on in the coming year, and one of them is "Plastic in our Oceans and Rivers." I suspect they would not put this at the forefront of their interest level if it was not an issue.

In terms of government funding, we actually have sought none to date, and this project has nothing to do with attracting that money. This problem is a perfect case of "tragedy of the commons," where it is beyond national jurisdictions, and in many cases, governments will not be able to help through normal means because it is not in their mandate to work outside of their 200 mile limits. Instead, this is a global problem that we are all part of, and it will take a collaboration of business, innovation, science, policy change and education to make positive changes. We are looking for collaborators to join us in this effort, but have no intention of relying on government funds to do so. There are companies out there that want to be involved, to be engaged in a good, social, global issue that can make a difference. It is good for their brands, their employees, and their communities and the changes they can make that lead to improvements in their own plastic use, recycling or design, will help us reach the solution we are seeking—that of a greatly improved ocean environment. If our ocean is not healthy, we are not healthy.

Send your letters via email to letters@whartonmagazine.com or via traditional mail to: Letters, Wharton Magazine, Wharton External Affairs, 344 Vance Hall, 3733 Spruce Street, Philadelphia, PA, 19104-6360. Letters may be edited for clarity or brevity.

ON THE WEB
For more letters visit: www.whartonmagazine.com

Doing Both

BY INDER SIDHU, WG'91

A Cisco Executive Explains Why It Makes Sense to Avoid 'Either-Or' Scenarios—Both in Life, and in Business

"Even in the remotest times, long preceding the Christian era, the ancients understood the value of dignifying their harbors with impressive works. The Colossus of Rhodes and the Pharaohs of Alexandria were counted among the seven wonders of the world. ... But the bridge across the Golden Gate would dwarf and overshadow them all."[1]

When James Wilkins wrote these words in an August 1916 editorial for the *San Francisco Call Bulletin,* he was an inspired journalist, an aspiring engineer and a frustrated commuter. The Marin County resident boarded a ferry each day, crossing the increasingly crowded waters of the San Francisco Bay to his office in the city. In an era of automobiles, slow-moving ferries were akin to the horse and buggy. Wilkins knew there had to be a better way.

In the early 1900s, San Francisco was the largest city in the world served primarily by ferries. While other population centers in the United States boomed, San Francisco found its economic growth stymied and its waters clogged with ferry traffic and weary travelers. Ferries simply couldn't keep up with demand or population growth in a city surrounded by water on three sides. Without a sustained link to neighboring communities, the region struggled to grow or connect with outlying communities.

Wilkins' 1916 editorial was a rallying cry. He challenged the beleaguered city, which had only recently rebounded from the brink of collapse after the 1906 earthquake, to build a bridge on the grandest scale. Wilkins envisioned not only a road between San Francisco and Marin County, but a work of art that would rival the world's great achievements in architecture—a monument like no other.

But building a bridge would be a daunting challenge. It would need to span more than 6,700 feet across a strait almost constantly pounded by 60-mile-per-hour winds. A mere 12 miles from the San Andreas Fault, whose tremors nearly decimated San Francisco in 1906, the bridge would certainly need to withstand major seismic activity. It would have to be tall enough to accommodate ships passing underneath its deck. The city's notorious fog would likely slow construction. And the project would need to overcome these obstacles without disturbing the natural beauty of the San Francisco Bay.

Could it be done?

Many had their doubts—but not Chicago native Joseph Strauss, a veteran engineer with hundreds of bridges to his credit.

Strauss initially proposed a combination cantilever and suspension bridge in 1921. Purely utilitarian, his unsightly design was widely derided. "A hybrid monstrosity with little but functionality to recommend," said one critic.[2]

While he spent eight years lobbying for support from governmental officials, local unions, fellow engineers, and eventually the voters who approved a $35 million bond to finance construction, Strauss overhauled the plans. But he was not alone. While he was the chief engineer and the project's most visible champion, Strauss surrounded himself with a team that had expertise in both structural engineering and aesthetic design.[3]

Engineer Leon Moisseiff joined Strauss after gaining a national reputation for his work on the Manhattan Bridge. Moisseiff was especially well known for his pioneering efforts in deflection theory, which stated that a bridge must flex and bend in the wind to withstand strong gusts. Moisseiff and fellow engineer Charles Alton Ellis applied this theory to the Golden Gate Bridge. Working by telegram from their offices in New York and Chicago, respectively, the two men addressed the seemingly endless series of engineering challenges, eventually designing a bridge that was flexible enough to avoid damage during earthquakes or sustained winds by swinging 27 feet.

Meanwhile, architect Irving Morrow envisioned not just a bridge, but a sculpture that would complement—not undermine or overshadow—the natural beauty of the area. He was responsible for the art deco styling, including the wide towers and expansive lighting. But Morrow's most renowned contribution is the structure's famous red hue (officially known as International Orange). With this coloring, the bridge blends with the surrounding hillside, yet is still visible through San Francisco's legendary fog.

When Strauss combined Morrow's design with Ellis and Moisseiff's engineering, the result was a flexible, single-span, suspension bridge—one that was longer, narrower, lighter and more graceful than anything the world had ever seen.

This feat of engineering, the Golden Gate Bridge, has now survived for more than 70 years. Upwards of 100,000 cars traverse it each day—more than 40 million per year. But the bridge is a monument renowned not only for transportation capabilities, but also for magnificence. The American Institute of Architects ranked it fifth on its America's Favorite Architecture list in 2007.[4]

The American Society of Civil Engineers named the Golden Gate Bridge one of the Wonders of the Modern World in 1994, stating "[It] combines engineering strength and beauty."

The confluence of two seemingly opposing ideals—beauty and strength—is at the heart of the bridge's iconic status. Could the city of San Francisco have endangered lives with mediocre engineering? Of course not. Would Strauss's original, no-frills design have been sufficient in carrying cars to and from San Francisco? Perhaps. But would it today be a monument, a tourist attraction and one of the most photographed sites in the world? Unlikely.

When it opened to traffic, the Golden Gate Bridge was the longest single-span suspension bridge in the world, a position it retained for more than 25 years. Seven decades later, it still has the second longest main span of any suspension bridge in the United States.

Impressive. But a nearby bridge is physically bigger, more heavily trafficked and a greater marvel of engineering. That is the Bay Bridge. Just five miles east of the Golden Gate, it shuttles more than 270,000 cars each day between Oakland and San Francisco.

Opening just six months before the Golden Gate Bridge, the Bay Bridge is the longest high-level, steel bridge in the world. "Its construction required the greatest expenditure of funds ever used for a single structure in the history of man. Its foundations extend to the greatest depth below water of any bridge built by man; one pier was sunk at 242 feet below water, and another at 200 feet. The deeper pier is bigger than the largest of the Pyramids and required more concrete than the Empire State Building in New York," says

University of San Francisco history professor John Bernard McGloin.[5]

Despite this feat of engineering, the prominence of the Bay Bridge is dwarfed by that of its famous neighbor. Just open the photo album of any family that has visited San Francisco. You'll likely find pictures of children smiling back at you from the deck of the Golden Gate Bridge, but not posed in the shadows of the Bay Bridge.

Why the difference?

Rather than focusing on form or function, the Golden Gate Bridge does both. Strauss and his team did not settle for strength or beauty, but instead recognized that each could complement and enhance the other. They bestowed on the bridge both strength and beauty. They did both.

Of course, this concept doesn't just apply to bridges. It holds true in sports, in nature and in business—in fact, in most aspects of life. Gymnasts need strength and flexibility. Sports teams win with offense and defense. Ecosystems depend on both prey and predators. Car makers focus on safety and performance. Parents give their children roots and wings.

And a successful business prioritizes growth and profitability. Innovation and operational excellence.

In 1984, nearly half a century after the Golden Gate Bridge opened to traffic, one such business opened its doors, mere miles from the famous structure. When its founders needed a name and logo for the fledgling enterprise, they thought of the bridge that represented their city: San Francisco. Shortening the city's name led the founders to their new moniker: Cisco. And the shape of the Golden Gate Bridge—formed by its towers and suspension cables—inspired the Cisco logo. It was certainly appropriate. Much as bridges connect people across a body of water, Cisco's technology connects people and information across a network.

But Cisco took more from the Golden Gate Bridge than a name, a logo or even the goal of bringing people together. Cisco also transformed itself by leveraging the same principle that has made the Golden Gate Bridge an icon for more than seven decades: Doing Both.

By doing both, Cisco approaches every decision as an opportunity to seize, rather than a sacrifice to endure. This allows the company to avoid a basic trap that ensnarls a lot of companies: The belief that when confronted with two divergent options, an organization must make a difficult trade-off in order to pursue its objectives. I believe such thinking leads to false choices more often than it produces breakthrough insights. Instead of desired outcomes, it inevitably leads to reduced expectations.

But you can aspire for more. Instead of choosing one thing to the exclusion of the other, what if you could do both, each for the benefit of the other? Not a balanced compromise between two objectives, but a mutually reinforcing multiplier in which each side makes the other better.

Jim Collins and Jerry Porras explored this idea in their 1994 book, *Built to Last*. "A highly visionary company doesn't want to blend yin and yang into a gray, indistinguishable circle that is neither highly yin nor highly yang; it aims to be distinctly yin and distinctly yang—both at the same time, all the time. Irrational? Perhaps. Rare? Yes. Difficult? Absolutely."[6]

Cisco recognizes the wisdom of these words. And it has benefited as a result. Over the past seven years, the company has doubled its revenue, tripled its profits and quadrupled its earnings per share. Cisco has more than $40 billion cash on hand and generated more than $10 billion of annual cash flow in 2009, global recession notwithstanding. It routinely ranks among the most admired companies and best places to work. Cisco is one of the few in technology that caters to customers of all sizes, from individual consumers to the world's largest institutions. Its brand is estimated to be worth $22 billion—the fourteenth most valuable in the world, according to Interbrand.[7] And in 2009, the company became one of the 30 that comprise the Dow Jones Industrial Average.

> "Instead of choosing one thing to the exclusion of the other, what if you could do both, each for the benefit of the other?"

Cisco's ability—its willingness, really—to "do both" has enabled it to enter new markets, introduce breakthrough technologies, scale its operations, engage with more customers and better harness the potential of its people. While I am obviously biased, I believe there is a lesson to be learned in the company's success.

Perhaps you are facing challenges in your life, either at home or at the office. Perhaps you are struggling to choose between two alternatives, believing you can only choose one. Perhaps your indecision is preventing you, or your organization, from reaching its full potential.

If so, you just might find a bridge to a whole new world of opportunity by considering an alternate path.

I invite you to consider this the next time you face a difficult choice or are vexed by an uncomfortable compromise. The best answer may surprise you. Maybe, you just need to do both.

This piece is adapted from Doing Both: How Cisco Captures Today's Profit and Drives Tomorrow's Growth, *by Inder Sidhu, WG'91. Sidhu is Senior Vice President, Strategy and Planning, Worldwide Operations, at Cisco.*

---

1. James Wilkins, Editorial, San Francisco Call Bulletin (August 1916); in Kevin Star, Endangered Dreams: The Great Depression in California (New York, NY: Oxford University Press, 1997), 329.
2. Henry Petroski, "Art and Iron and Steel," American Scientist (July/August 2002), http://www.americanscientist.org/issues/feature/art-and-iron-and-steel/5 (accessed January 20, 2010).
3. "American Experience: Golden Gate Bridge," PBS Online (KQED) (April 16, 2004), http://www.pbs.org/wgbh/amex/goldengate/peopleevents/ (accessed November 13, 2009).
4. American Institute of Architects, "America's Favorite Architecture," Favorite Architecture, http://favoritearchitecture.org/afa150.php (accessed November 13, 2009).
5. John B. McGloin, "Symphonies in Steel: Bay Bridge and the Golden Gate," Virtual Museum of the City of San Francisco, http://www.sfmuseum.net/hist9/ mcgloin.html.
6. Jim Collins and Jerry I. Porras, Built to Last: Successful Habits of Visionary Companies, 1994, 45: HarperCollins Publishers, New York, NY. Copyright © 1994 by Jim Collins and Jerry I. Porras. Reprinted with permission from Jim Collins.
7. "Interbrand Best Global Brands List 2009," Interbrand Corporation, http:// www.interbrand.com/best_global_brands.aspx (accessed November 12, 2009).


"I Support The Wharton Fund.
Make *Your* Impact Today."
"The Wharton community is one that gives back. I support The Wharton Fund so that future generations of Wharton students can continue to benefit from the same world-class education and unparalleled opportunities that I have."
Monique Bell, WG'10
Donate Now!
WEB: www.wharton.upenn.edu/giving.html or CALL: +1.215.898.7868
Wharton
UNIVERSITY *of* PENNSYLVANIA

Debrie

Popular Science

The Academy of Natural Sciences in Philadelphia has a big anniversary coming up, ambitious plans for the future and a new president, **George Gephart, WG'79**, leading the way.

ef

Stay Connected ... More Easily Than Before

Wharton in September launched a new-and-improved version of Wharton***Connect*** (www.whartonconnect.com), the School's online alumni community. The new alumni portal makes it easier than ever to find and connect with your fellow alumni.

USE THE NEW WHARTON***CONNECT*** TO:

Update your My Page: Let fellow alumni know what you're up to by updating your profile, choosing your interests and hobbies or even uploading your resume.

Find alumni in fresh ways: Search for recently updated profiles, people who share career goals or alumni who live nearby.

Use the all-new directory search: The directory is robust, fast and easy to use, capable of filtering by multiple industries, companies, job titles, and more.

Integrate your social networking pages: Connect your Facebook, Twitter and LinkedIn pages to your Wharton***Connect*** profile.

If you don't know much—or anything—about Philadelphia's Academy of Natural Sciences, be advised that **George W. Gephart, Jr., WG'79,** has made it his priority to change that.

Announced as the Academy's new president in May, Gephart finally took the reins of the institution on August 9. He admits his first days on the job have been a blur, but even as he gets settled in, he says his overarching goal is clear: To make the Academy a preeminent science museum, research institution and tourist destination. With the Academy's bicentennial coming up in 2012, Gephart, a business and nonprofit mover and shaker, is laying the groundwork with staff and supporters to increase the spotlight on the institution, and keep it there well into the future.

"It's an organization that deserves to have as much visibility in the region as we can raise," says Gephart.

The oldest natural science institution in the Western Hemisphere, the Academy was founded in 1812, a time when scientists could only speculate about natural wonders beyond their reach. The Academy organized expeditions around the continent—the entire world, actually—to collect and bring back to Philadelphia then-unknown species of plants and animals. Today, the Academy houses more than 17 million specimens. It opened its doors to the public in 1828 and is one of the Top 20 tourist attractions in Philadelphia.

Gephart, a Baltimore native who has lived in the Delaware Valley since 1983, recalls bringing his three daughters to the museum when they were young. He says he still gets a kick out of seeing wide-eyed kids walking through the museum today. "What I enjoy most," he says, "is observing the wonder of kids as they look at an exhibit like the dinosaurs."

Gephart is the first non-scientist in recent memory to lead the institution. And while he calls himself an "amateur natural scientist," with a keen interest in outdoor pursuits, it's not his naturalist leanings that got him the job. It's his financial background.

With the economy mired in recession, Gephart's financial and nonprofit management experience—among other positions, Gephart worked for 20 years at 1838 Investment Advisors of Philadelphia, where he oversaw the company's equity investment process and managed the portfolios of major nonprofit organizations—proved very attractive. He continues in his role as chairman of the board for the Main Line Health System and has served on the boards at the Curtis Institute of Music, The Nature Conservancy, Natural Lands Trust, The Chamber Orchestra of Philadelphia and the White-Williams Scholars.

"I think what the board saw in me that was unique is somebody that has a business and finance background, who lives in this region and, while I'm not a native, who embraces all that Philadelphia has to offer," says Gephart, who first came to Philadelphia when he enrolled at Wharton. "The board wanted to move away from the traditional approach—a Ph.D. scientist CEO."

"I was impressed with George's passion for what the Academy could be," notes Cindy Heckscher, a member of the board and the search committee. "A few of us wondered if he knew more about the Academy than we did."

Adds Academy Chairman R. James Macaleer: "He's the right guy at the right time for the Academy."

Gephart says he will focus on fundraising, strengthening the board with corporate, ethnic and cultural diversity and, of course, promoting the Academy, its programs and, maybe most importantly, its upcoming bicentennial celebration. "We need to make a big splash," he says.

A key long-term goal is to spotlight the Academy's research and focus the public's attention on the institution's scientific achievements, in addition to its museum exhibits and programs. The fact is, Gephart says, that even many regular visitors are unaware of the Academy's dual role. "To most Philadelphians, we're the dinosaur museum—and we're very successful at that," he says. "Now we want to push our science forward. The Academy's collections are celebrated and are at the very top of collections, nationally and internationally. It's a real destination for scientists."

Academy researchers focus on biodiversity, ecology, evolution, molecular systematics and paleontology; Gephart says he hopes to make their work more relevant and accessible to the public. Fortunately, there is no shortage of opportunities to make science come alive.

As an example, he cites the Academy's collection of mollusks, the oldest such collection in the country. The mollusks were recently loaned out to help determine the impact of the Gulf of Mexico oil spill on marine life, Gephart explains. Scientists used the Academy's mollusk shells, gathered from each decade of the 20th century, for a baseline comparison to Gulf mollusks in order to measure the extent of contamination from the oil spill.

The opportunities for growth are there. Gephart believes they are opportunities that can be seized. But he also says he does not underestimate the challenges that await him.

"It's as difficult a time, from an economic perspective, to come into an assignment like this as I can imagine," Gephart says. "[But] if we can articulate our relevance and if we can show some bold initiative, I think people in the region and nation will realize the Academy is important to sustain and help grow."

—*Samantha Drake*

CHRIS SEMBROT

The Art of Private Equity

John Hess says he had a very good reason for taking up painting: He was driving his wife crazy.

"I had very bad arthritis in the hips, and it reached a point about 17 years ago where I just couldn't do much of anything," says **Hess, WG'75**. "I needed something to do because I was driving my wife and pretty much everybody else nuts."

The 2011 Altius Art Exhibition is scheduled for June 9. For more information, contact art-exhibition@altius-associates.com

One day, fate intervened. Hess was rummaging around the house when he came across one of his father's old learn-to-draw instructional books. He picked it up and decided, basically on a whim, that he'd give it try. Four months later, having worked his way through the entire manual, he picked up another—this one about watercolors.

He was hooked.

Which is why, even after he finally got his hips replaced, and even though he never had given painting more than a second's thought for most of his life, he kept at it. Nearly two decades later, Hess is still painting—and now, he's putting his newfound talent to use.

In 2004, Hess and three private equity colleagues founded the Altius Art Exhibition, a charity art auction that features works—paintings, drawings, photographs, sculptures and more—only from professionals working in the private equity business. The auction's motto? "The Art of an Asset Class."

"We had the original idea some time ago—about 2000—when three of us at the firm realized we all liked to paint," he recalls. "We started to think about organizing some kind of charity event for people in PE who also painted. The idea was that they would donate their work. At the time we didn't know how we would do, because it had to be work they did, not work they collected. Paintings are easy to collect, but a lot harder to do."

The first Altius event, held in 2004, raised £25,000. The second, in 2008, raised £40,000. The next is scheduled for June, in London, and Hess is hopeful for even better results this year. If nothing else, he says, the exhibition has become something of a semi-annual reunion for the private equity world—and a decent excuse to show off one's work.

"It's just a good bit of fun," Hess says. "Some of the artists are actually fairly well known in the PE business. That makes it more fun, even if the work is not of the highest quality. It's really quite amazing how many people have come out and done stuff for us. Even those [who don't paint] were good sports about it." —*T.H.*

News Briefs

Ulrich Named Vice Dean for Innovation

Karl T. Ulrich, the CIBC Professor of Entrepreneurship and e-Commerce, was named Wharton's Vice Dean for Innovation by **Dean Thomas S. Robertson** in late August.

In this newly created role, Ulrich will work to identify and implement new research and teaching opportunities for the School. In a letter to the community announcing Ulrich's appointment, Robertson and **Deputy Dean Michael Gibbons** wrote: "The Wharton community generates countless ideas for enriching our research and teaching missions. Because we recognize that many of these ideas are never adequately explored, we have established this new office to help us identify and implement the very best."

Robertson and Gibbons added that "there is no one better suited" to taking on the new role than Ulrich, who during his time at Penn has co-founded both the Weiss Tech House and the Integrated Product Design Program. He is also the co-author of *Product Design and Development* and *Innovation Tournaments: Creating and Selecting Exceptional Opportunities.* Ulrich also holds more than 20 patents.

"As Vice Dean, Karl will be a steward for innovation opportunities, providing a vital channel to the Dean's Office for ideas originating from across all divisions of the School, thereby helping us to become more efficient and effective in fulfilling our academic mission," Robertson and Gibbons wrote. "We are confident that if we identify and implement two or three additional ideas each year, this could be transformational for the Wharton School."

Wharton | *San Francisco* Welcomes New Executive Director

Bernie Birt took over as the new Executive Director of Wharton | *San Francisco* on September 2.

Birt arrived at Wharton from the Kellogg School of Management at Northwestern University, where she also served as executive director. At Kellogg, Birt was responsible for the end-to-end direction and administration of admissions, marketing, budgeting and operations, serving over 400 students.

At Wharton, she will work directly with **Vice Dean Doug Collom** and the Wharton | *San Francisco* team, as well as with the MBA Program for Executives team in Philadelphia. Birt will also play a significant role in the growth of Wharton's West Coast campus, which will celebrate its 10th anniversary in 2011.

Debrief

Exploring the Crisis, Explaining Dodd-Frank

Why does the nation need the Dodd-Frank Act? During an August appearance at Wharton, a top Obama administration official tried to answer that very question.

Exploring roots of the global financial crisis before a crowd in Wharton's Dhirubhai Ambani Auditorium late this summer, Deputy Treasury Secretary Neal S. Wolin found no shortage of causes. Powerful firms took on more risks than they could manage, without fully understanding what they were getting into. Government regulators were too passive in exercising their authority. Large loopholes in the nation's regular laws allowed too much to slip through. Policymakers were hesitant to make changes to an increasingly untenable system. And many Americans—often encouraged by firms not exercising the proper restraint—took on more debt than they could afford, for far too long.

In other words, Wolin said, we all played a part in the financial collapse.

Moving forward, then, we all must take on new role—one of responsibility.

As of late August, the Obama administration had taken the bold and controversial step of signing into law the Dodd-Frank Wall Street Reform and Consumer Protection Act, a piece of legislation that Wolin described as the most "significant and far-reaching" U.S. financial reform since the Great Depression.

Wolin likened Dodd-Frank to the successful financial reforms enacted after the Great Depression, noting that, despite some concerns at the time—many of which sounded remarkably similar to those voiced today—those initial reforms set the stage for the country's dynamic, unparalleled economic growth over the following decades.

During a spirited audience participation segment—featuring questions on government incentives for private sector growth; measures to prevent conflicts of interest; and the troubled finances of state and local governments—Wolin repeatedly pointed not only to the bill's actions, but also to its restraint. Legislators, he said, have no "crystal ball," and the Dodd-Frank Act is not "a magic elixir." Nor is it intended to be the sole solution to the factors behind the recent crisis.

Rather, the Act is designed to create a legislative framework that can also be easily changed to suit the lightning-speed financial services world. The Act not only gives the government tools to regulate the market as it is today, but also the ability to adjust its approach over time, as markets innovate and risk evolves. In this way, Wolin said, the government will have a better ability to deal with stress in the financial system than it has had in recent years.

Will the Dodd-Frank Act, in fact, set the stage for a "stronger, safer financial system?" Only time will tell.

But as Wolin concluded and the Ambani Auditorium broke into applause, one hope remained clear: the U.S. and world economy will emerge from the recent crisis—but only if we all learn to exercise a bit of restraint.

For a complete video of Wolin's speech and subsequent question-and-answer session with Wharton students, faculty and staff, please visit the School's YouTube channel.

—Carol Quinn

Wharton Folly

Illustration by Brian Ajhar
Concept by the Wharton Folly Committee
(Joel Serebransky, WG'85, Matthew Sinacori, WG'03, Ram Rajagopal, WG'02, Steve Margolis, WG'86, and Andy Stack, WG'01)

The Evolution of Legislation

Wharton Q&A

A New B-School Model, for a New Economic Reality

J.J. Cutler directs not only Wharton's MBA admissions office, but its career management office as well. The dual role is unique among top business schools, but could prove hugely beneficial to the School.

Yes, **J.J. Cutler** is a Philadelphia guy. Raised just outside of Philadelphia, Cutler did his undergrad work at Penn, got his MBA from Wharton and spent much of his early career working in the region, enjoying stints at ARAMARK, Johnson & Johnson and a local startup called Lindi Skin. His wife is from Philadelphia, and he currently serves on the board of the Independence Visitor Center Corp.

"We have a fairly deep commitment to Philadelphia," says Cutler, C'93, WG'97.

Which is a good thing, because as Wharton's Director of MBA Admissions and Financial Aid, a role he's held since early 2009, a big part of Cutler's job is selling top-notch young business minds from around the world on living in Philadelphia—and committing themselves to Wharton. But that's not all Cutler has on his plate.

Since May, Cutler has also overseen Wharton's MBA Career Management Office, a strategic move that the School believes could create a more seamless experience for Wharton students and create better opportunities for them when it comes time to begin their careers.

Cutler, now the Deputy Vice Dean for MBA Admissions, Financial Aid and Career Management, recently sat down with *Wharton Magazine* to discuss the challenges and opportunities of his new role, the School's recent admissions achievements, the challenges of the job market and more.

You came on board with the admissions office in January of 2009, right in the middle of a recruiting year. How was that transition?

We didn't miss a beat. The admissions committee that was in place was a pretty strong, stable group. I also met peers at other schools, and then got out on the road very quickly. Within six weeks of the transition, I had been to Tokyo, Dubai and Bangkok, among other places. The following September I was in India, Taiwan, Vietnam, Paris and Madrid. And that was just in my first not-quite 18 months. I wanted to get out and meet with the alumni, find out what they were looking for, go to board meetings, talk to faculty. Admissions has a lot of stakeholders.

On the admissions side, are there any accomplishments thus far that you're particularly happy about?

Yes—getting to 40 percent women [for the MBA Classes of 2011 and 2012] was probably the biggest numeric 'stake in the ground' for us. We were competing with the other schools toward that, and I felt like all of us were getting close. We saw that over the past few years everyone had moved from the 30s up through the mid-30s. But there's a big difference between 39 and 40 percent. That being said, I think we need to get to 50, and the way you make that happen really isn't through admissions. It's about getting the most talented women to actually apply, because once the applications come in, the die is pretty much cast. We can only admit those students who apply. But if you're a business school, you're competing against law schools, with family commitments, with medical school.

Why is it still difficult to attract top female students to MBA programs?

Again, part of it is the fact that most of these young people would be good at almost anything they do. Some women are very passionate about business, and some of them are just very, very smart and have other interests. They feel maybe that they can get law school done earlier, or medical school done earlier [because they don't need work experience]. All of those questions about work-life balance I think are even more of a concern for women. I also think, historically, women haven't seen as many mentors in business schools. Maybe they haven't seen business school as being an available option.

Are there any other challenges that you face right now on the admissions front?

The strong legacy we have in finance is both a positive and a negative. I think the financial crisis has probably been a little bit harder on us than on our peers. I also think Philadelphia is a hurdle. It seems that most people who come here [to visit] have never been here before, and that we still suffer sometimes from the old reputation of Philadelphia. When people do come here, though, they see Huntsman Hall and our campus and the city and they realize that it's really world-class. The good news is that the Wharton brand, in some ways, sells itself. The faculty sells itself. So do things like WIMI [the Wharton Interactive Media Initiative] and the Baker Retailing Initiative—all the research centers, really. The alumni help sell the program in some ways, too. We in admissions don't really sell much of anything. We just help people gather information about the program.

Your dual role heading up both admissions and career management seems rather unique. Are any other major business schools using this same model?

From what we gather it does appear to be pretty unique. From a student life-cycle management perspective and from a student services perspective, though, we think this was a good idea. Typically in admissions, you build the class and then you turn it over [to the School] and then you start recruiting the next class. A lot of times, people in admissions would say that part of what they wanted to sell in admissions was how well our career services work. In the past, maybe admissions tended to blame career services when things didn't go well for them, and vice versa, but now, everyone can only blame me [laughs].

In the end, I think it just makes the School more accountable. It pushes the decision-making down a level. In admissions you tend to see things earlier—you see the horizon a little bit. So maybe we can now help prepare career management a bit. For example, there's a lot more people coming in to Wharton now with private equity experience. We needed to be ready for that. The profile is just different.

Not to dwell on the unpleasant past, but from a career services perspective, can you give us a sense of just how bad things were a year or so ago?

It was a crisis. Between Bear Stearns and Lehman Brothers in 2008, especially for

Wharton, it was a crisis. I think the crisis has passed, but I also think we're in a new era of sorts. By that, I mean that the mix of large employers and traditional industries and new industries is probably more balanced today than it's been. More employers are coming in and hiring only one student, which didn't happen 10 or 20 years ago. A lot of employers are coming in from the energy industry, from the technology sector, from media. We're seeing other niche industries, too. More entrepreneurs. More sports business. We're also seeing students go to development banks, to the IFC, going into microfinance.

What are some of your major goals and initiatives going forward?

We want to aim for continued diversity in our classes. And we define diversity very broadly. I think there will obviously be continued emphasis on our core priorities, but also on new industries. We have great diversity in terms of international students and the number of countries that are represented, but we want that number to go up. We believe the best learning takes place in the most diverse environments.

On the career management side, we want to continue to attract diverse employers and new industries. We want to aim for not only our traditional hiring areas but new ones as well. The demand for Wharton talent is incredibly strong, but we need to be able to help those organizations and connect them with our students while they're here.

Obviously the crisis was a challenge. But this shift toward more diverse careers seems like it could be a good thing, right?

I think it's good for everyone involved. It's good for the School, for the world, for society. I think it's making people view the MBA as a much broader degree—a leadership and management degree—that allows you to develop skill sets applicable in all kinds of organizations.

In the short term, it probably puts more pressure on admissions and career management, because the old model doesn't work anymore. We just had to reinvent the process for a new world. In past recessions the old world bounced back, but I don't think that's going to happen this time. But having the brand we have makes us better suited [to handle this] than a lot of schools. The challenge for us is to be very innovative, to work with students—this first batch of Millennials—and help them create a new economic reality. —*T.H.*

The Lessons of Deepwater

The Gulf oil leak has been plugged. But have we learned anything?

In the wake of the Gulf oil spill, we asked **Howard Kunreuther**, Cecilia Yen Koo Professor of Decision Sciences and Business and Public Policy and **Robert Meyer**, Gayfryd Steinberg Professor of Marketing, co-directors of the Wharton Risk Management and Decision Processes Center, to offer thoughts on why the spill happened, how it was handled and what we, as a nation, should learn from it.

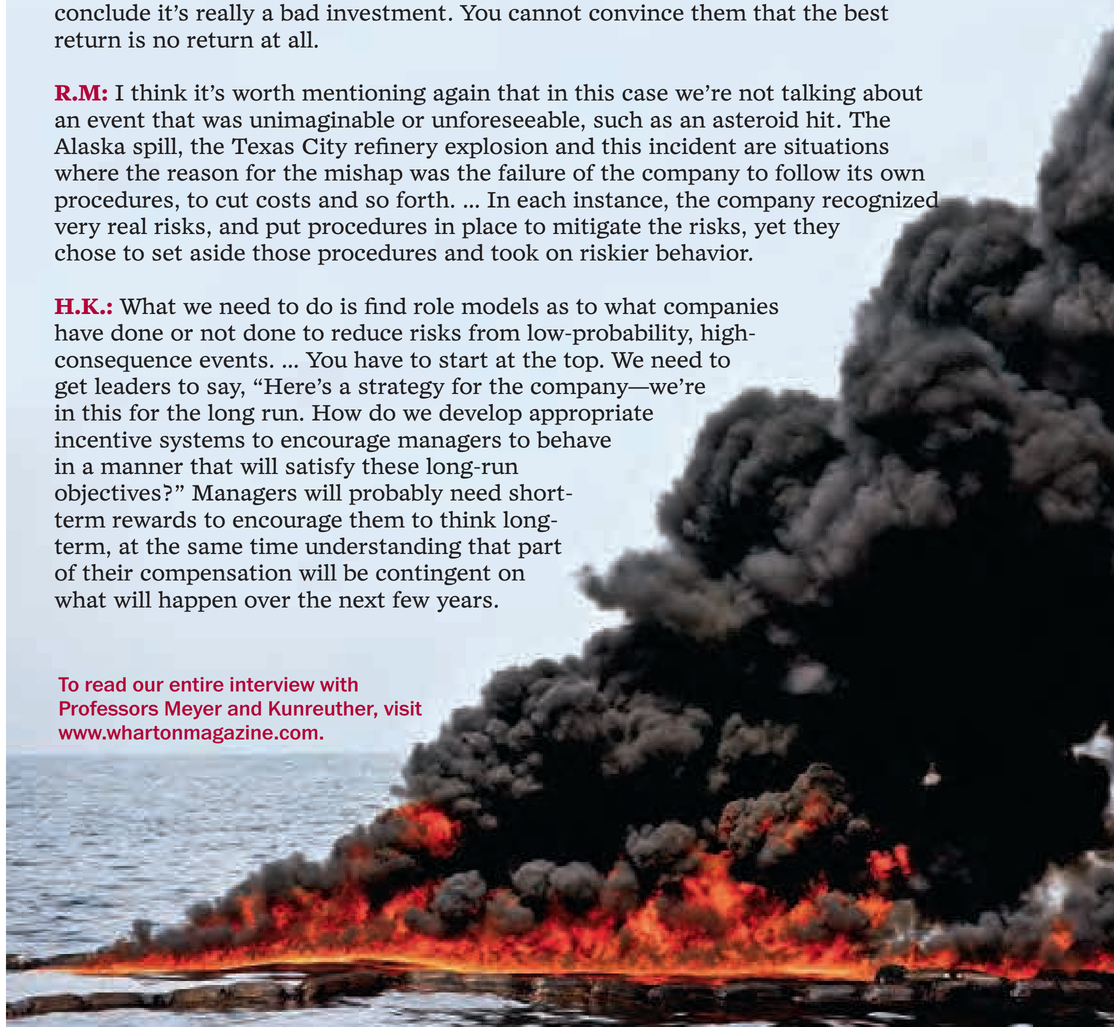
R.M: The key critique of BP in this case is not that the spill occurred, but *why* it occurred—that it was a foreseeable consequence of a culture that tolerated the tradeoff of safety for expedience in many of its operations. BP would not have been blamed nearly as much if the spill was caused by external factors that could not have reasonably been anticipated, such as a novel terrorist attack. But this was not the case here. ... One hopes it [the Gulf spill] will underscore the need for improved enterprise risk-management processes. If nothing else, we hope it teaches that seemingly small decisions to accept slightly elevated levels of risk can produce catastrophic outcomes that could threaten the viability of an entire company.

H.K.: This Gulf Coast oil spill is much more severe than previous spills, so I would certainly agree that BP and other companies are likely to take some steps to reduce risks in the future. But I think the question is: How long will their cautionary behavior last? ... Firms and individuals tend to think, "We're putting in all this money on safety and we're not getting anything back—we've invested a lot, and it looks like we are safer than we need to be." ... People often purchase insurance after a disaster—not before the event. Then they frequently cancel their policies three or four years later when they haven't filed a claim, because they conclude it's really a bad investment. You cannot convince them that the best return is no return at all.

R.M: I think it's worth mentioning again that in this case we're not talking about an event that was unimaginable or unforeseeable, such as an asteroid hit. The Alaska spill, the Texas City refinery explosion and this incident are situations where the reason for the mishap was the failure of the company to follow its own procedures, to cut costs and so forth. ... In each instance, the company recognized very real risks, and put procedures in place to mitigate the risks, yet they chose to set aside those procedures and took on riskier behavior.

H.K.: What we need to do is find role models as to what companies have done or not done to reduce risks from low-probability, high-consequence events. ... You have to start at the top. We need to get leaders to say, "Here's a strategy for the company—we're in this for the long run. How do we develop appropriate incentive systems to encourage managers to behave in a manner that will satisfy these long-run objectives?" Managers will probably need short-term rewards to encourage them to think long-term, at the same time understanding that part of their compensation will be contingent on what will happen over the next few years.

To read our entire interview with Professors Meyer and Kunreuther, visit www.whartonmagazine.com.



From The Network

By Kevin Werbach, Associate Professor of Legal Studies and Business Ethics

Network Neutrality and the False Choice Between Competition and Regulation

The hottest topic in Internet and communications policy these days is network neutrality. An intense battle rages over whether the Federal Communications Commission (FCC) should prohibit broadband providers such as Verizon, AT&T and Comcast from discriminating in their treatment of Internet content and services. A recent compromise proposal from Google and Verizon sparked howls of protest from those who felt it didn't go far enough. Both sides, however, agreed on one thing: the challenge is to choose the lesser evil between market power and regulation.

That's an increasingly false choice.

For roughly 20 years, there has been a consensus in the U.S. and many other countries that competition and regulation are two sides of the same coin. When one operates properly, the other is unnecessary. And given the choice, competition is the superior alternative. In practice, this has meant legal reforms to kick-start competition, coupled with a move away from traditional regulation.

The idea has great intuitive appeal. Regulation is inefficient. Market forces can discipline the behavior of firms, obviating the need for government to do so. Unfortunately, the practice never quite conformed to the theory. Experiments in deregulation of energy, telecommunications and the financial sector during the 1990s and 2000s all produced catastrophic market collapses. Moreover, while there has been substantial innovation and investment, these markets in some ways are more concentrated than ever.

> There's a fundamental problem: network markets naturally tend toward concentration.

This brings us to back network neutrality. When the debate about broadband regulation began 12 years ago, it focused on whether incumbent access providers should offer "open access" to independent competitors. Most of the world has since adopted a variant of this approach, but the U.S. chose not to. So today, when most Americans have only two residential broadband choices (the incumbent cable or telephone company), and some have only one, advocates argue for direct restrictions on how those providers manage their networks—to prevent discrimination. Limited competition justifies renewed regulation.

Or so the argument goes. Put aside for a moment the legitimate questions about just how competitive the broadband market really is. There's a more fundamental problem: network markets naturally tend toward concentration. Networks generate positive externalities, known as network effects: if most of my friends are on Facebook, I'm likely to choose Facebook when joining a social networking service, even if others may have objectively better functionality. This reinforces what venture capitalists call "the 10x rule:" A new service must be 10 times better than the old one, or users won't switch.

Moreover, unlike markets for physical goods, where large firms are dragged down by coordination costs, there are often increasing returns to scale in the digital era of cloud computing. The more searches on an Internet search engine, the more data to improve search algorithms, and the more value for advertisers. Thus, Google has maintained a market share of over 60 percent in the extremely lucrative Internet search market, despite well-funded competition from a bevy of startups and behemoths such has Yahoo! and Microsoft. And that's a market with low-entry barriers. Broadband infrastructure, by contrast, involves massive fixed costs, making competitive entry even tougher.

Seeking competition as a justification to eliminate regulation may therefore be a false hope in these markets. However, the flip side is also true: sometimes regulation is unnecessary even where competition is limited. Despite its dominant market share, Google has a strong incentive to operate its search advertising business in the most customer-friendly way, because it only makes money when customers click through those ads. And Google's

In late August, *Wharton Magazine* launched the Wharton Blog Network, an open forum of ideas about business, entrepreneurship, leadership and more. Contributors to the Network include Wharton faculty, administrators, alumni and students. To learn more about the Network, visit www.whartonmagazine.com/blog.

Bottom Line

From exclusive alumni groups, to faculty knowledge-sharing, to direct interaction between the School and prospective students, interested observers and members of the Wharton community, Wharton's online and social media initiatives serve a broad array of functions—and generate quite a bit of buzz. So rest assured, whether you're engaging with the School on YouTube, Twitter, Facebook, LinkedIn, Flickr, the Wharton Blog Network or the newly revamped Alumni Directory, you're in good company.

7,999 followers of the Wharton School's Twitter feed (@wharton)

51 posts on the Wharton School's Facebook wall during the month of August

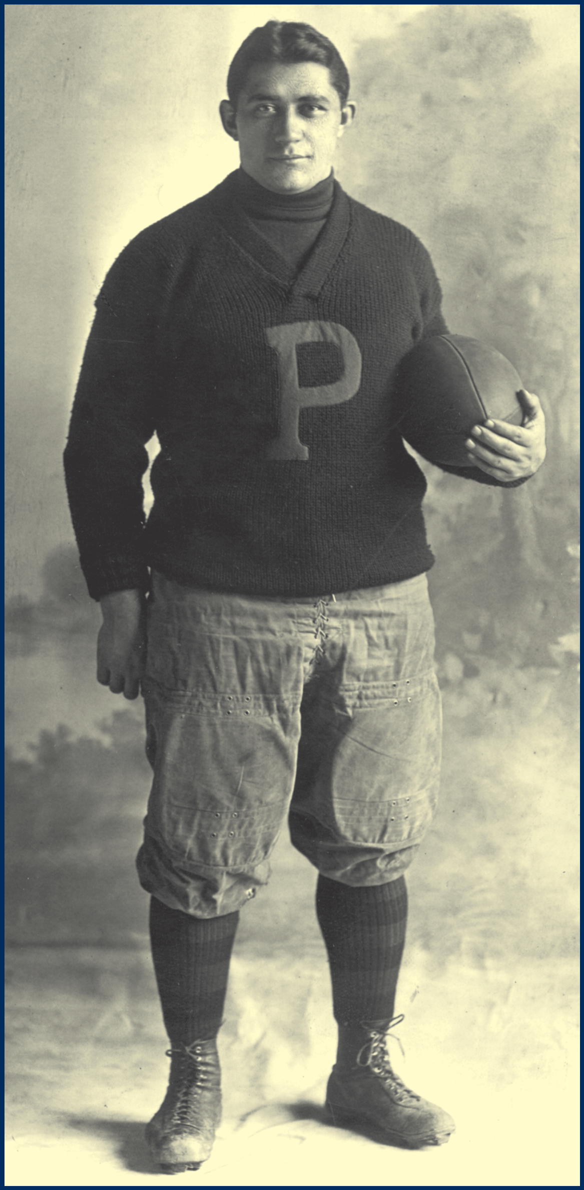
13,217 members of the official Wharton School Alumni LinkedIn group much-mocked "Don't Be Evil" motto represents a real element of its corporate culture, which guides its behavior. Antitrust action or other regulation of Google's business practices may at some point be justified, but the level of competition won't be the gating factor.

How, then, should government respond? By changing the way it thinks about regulation. Rather than try to mimic market-driven prices in situations where they believe that market forces won't operate, regulators should emphasize other tools for influencing market performance and structure. Promoting interconnection, open standards, data availability and non-traditional options such as municipal and unlicensed wireless networks may achieve more significant results in the long run.

The reason this approach may work is that competition does develop in digitally networked markets, but it's usually through the creation of new market segments. Google didn't beat Yahoo! in the portal market, nor did Facebook beat Google in the search market, nor did Twitter beat Facebook in the social networking market. The major broadband providers similarly must worry about market-redefining competition, such as "over the top" Internet video cannibalizing cable TV revenues and mobile phone subscriptions cutting into voice telephone revenues, even if they enjoy a cozy oligopoly in broadband access. That creates incentives that can be harnessed.

Reasonable network neutrality rules should be part of this package, because it's clear that the open Internet environment promotes significant economic activity, technological innovation and social benefits. That's true regardless of the level of competition in the access market. By accepting that competition, regulation and deregulation are all means to the same ends, rather than ends in themselves, we can craft a viable policy regime for the Network Age.

From The Vault



During his time as a Penn student, Michail M. Dorizas established himself as one of the finest athletes the University had ever seen. During his time as a Wharton professor, he built a reputation as one of the School's most beloved teachers, too.

The Turkey native (1890-1957) had already served in World War I and earned Olympic glory (he won the silver medal in the javelin throw at the 1908 London Olympics) by the time he arrived at Penn in 1913 to begin his post-graduate studies. Not surprisingly, he proved to be a dominant athlete in the college ranks, too, winning three straight national wrestling championships between 1914 and 1916 while also starring on the Quakers' track-and-field and football teams. He began teaching at Wharton in 1919 and remained for the next 44 years. His classes in economic and political geography were among the most popular at the School, and he was voted Wharton's most popular professor several times. He died on October 28, 1957. He was 67.

2,059 photos on the School's Flickr stream

27 faculty, staff and alumni contributors, as of press time, to the all-new Wharton Blog Network.

9,367 people who "like" the Wharton School on Facebook

657,566 views of *Knowledge@Wharton* YouTube videos through mid-September

HE WON'T BACK DOWN

BY ROBERT PREER

College students often have big dreams. They want to stop wars. Solve global warming. Find a cure for cancer. Then life happens: careers, families, mortgage payments. Dreams of changing the world fade like an old college sweatshirt.

But not for Elon Musk.

Not 15 years after he left Penn, the 39-year-old engineer and entrepreneur is tantalizingly close to realizing the most daring dreams of his youth. While studying at Wharton in the mid 1990s, **Musk, W'97, C'97**, decided that he would focus his energies on three major challenges: Developing the Internet into an economic powerhouse, making the fundamental change to clean energy and exploring space more deeply than it had ever been before. And it didn't take him long to do so.

Shortly after leaving Wharton, Musk co-founded two companies, software maker Zip2 and PayPal, and helped both become giants of the early Internet. After reaping millions from those companies' sale—eBay paid $1.5 billion for PayPal in 2002—the South African native turned his attention to energy and space, launching the space transport business Space Exploration Technologies, or SpaceX, in 2002 and the electric car company Tesla Motors in 2003. Both companies have been making news of late.

This year, Tesla became first car company to go public in the United States in more than half a century. The company is readying production of a five-person, $50,000 sedan at a formerly closed General Motors-Toyota plant in Fremont, CA, is drawing up plans for a mass-market electric vehicle that would sell for around $30,000, and recently signed hugely important strategic partnerships with both Daimler and Toyota.

Meanwhile, SpaceX—which in 2008 became the first private firm to successfully launch a liquid-fueled rocket—saw its groundbreaking Falcon 9 rocket reach orbit this summer. The company is also moving forward with development of Dragon, a new spacecraft designed to carry humans. SpaceX has a multibillion-dollar contract with NASA, which is looking to the company to deliver supplies and astronauts to the International Space Station, and recently won a $492 million contract with Iridium Communications to launch the company's satellites.

MANUELLO PAGANELLI

As a college student, Elon Musk pledged that he would make an impact on the Internet, on the environment and in space. Fifteen years later, he remains as committed as ever to those same goals.

Musk is the driving force behind both firms, serving as CEO for both Tesla and Space X, and chief engineer for SpaceX. Remarkably, he also finds time to serve as chairman of the board for SolarCity, a Foster City, CA clean energy company.

Given his enormous success—and his ambitious vision—it's hardly a surprise that the Los Angeles resident has become something of a pop icon. Earlier this year, while a guest on "The Colbert Report," Musk was asked by host Stephen Colbert if he was, in fact, Batman. And director John Favreau, maker of the super-successful *Iron Man* movies, says that Musk served as the model for superhero Tony Stark. As Favreau told *Time* magazine: "Elon is a paragon of enthusiasm, good humor and curiosity—a Renaissance man in an era that needs them."

During an expansive interview with *Wharton Magazine* late this summer, Musk hit on all of these subjects and more. He explained why he believes Americans are ready for the electric car and why President Obama's space program will get us closer to the stars. He talked about the value of a business degree and the perils and rewards of fame. He also discussed a memorable breakfast with the great Akio Toyoda, and explained why he named Tesla after a brilliant inventor who, as it turns out, died penniless.

WHARTON: With all that's happening with Tesla and SpaceX lately, your involvement with PayPal sometimes is overlooked. From your point of view, how important has PayPal been to the development of the Internet economy?

MUSK: PayPal has been really helpful in allowing transactions between non-merchants. If someone is just selling a few things from time to time, it's difficult to get a merchant's account with MasterCard or Visa or the banks. PayPal smoothed out that process and provided an instant means of getting payment. It was a huge difference from the old way of mailing a check or sending money orders. So, yes, I think it made a significant difference in the development of the Internet. I don't know if I would say it was critical. It was certainly one of the pillars of the Internet, if you will.

WHARTON: After Zip2 and PayPal were sold, you became very wealthy. You could have done anything. You could have retired. So why did you decide to start new ventures that would put your fortune at risk?

MUSK: My interest in space and in electric vehicles goes back quite awhile, to when I was in college, at Wharton.

From the standpoint of living a life that would really matter, there were three areas I thought I'd like to work in if I could because I thought they would really change the future of humanity—the Internet, sustainable energy, both production and consumption, and space exploration, in particular the extension of life to multiple planets.

I did a couple of Internet companies. That gave me the capital to really try to do something in electric vehicles, solar power and space.

WHARTON: Tesla was founded in 2003, with the Roadster as its signature product. How many have you sold? And what are they like to drive? I am guessing some 'car people' might be skeptical about the performance of a fully electric car.

MUSK: We now have produced almost 1,400 of the Roadsters, and they're in, I think, 29 or 30 countries.

They're incredibly fun to drive. It's really difficult to appreciate without a test drive, and I would encourage people who think they might have an interest in buying a Roadster to just take a test drive. It's the most fun car to drive that I've ever owned, and I've owned some pretty great cars. People would really enjoy feeling the acceleration and handling of the vehicle.

WHARTON: How does the Roadster fit in with your business plan for Tesla Motors?

MUSK: In starting Tesla, we didn't have the capital to do anything that required economies of scale. So even if we wanted to make a low-cost vehicle, it just wasn't possible. We didn't have the billion-dollar factory needed to do that, and we really didn't have the level of refinement in the technology.

Those are really the two things that are critical in mass market adoption of new technologies—getting to economies of scale and iterating on the design, and optimizing the design for cost and capability.

Usually with new technologies, I think you need about three major iterations, and that's why our approach has been based on that premise. You start off with a low volume, high-priced car in the Roadster, and we've got a mid-priced, mid-volume car with the Model S, and then we go to the low-priced, high-volume car with our third generation.

WHARTON: How is the planning going for the Model S? When will production start?

MUSK: We are making great progress with the Model S. We're on track to start production in mid-2012. It's looking pretty good. We've completed the body and chassis design, and the tooling is in fabrication for that now. We've purchased the stamping equipment—the big stamping machines that are needed to create the body. We're bringing our paint shop online. We're getting everything ready to manufacture 20,000 units a year.

WHARTON: And they'll be produced at the former GM and Toyota facility in Fremont?

MUSK: Correct.

WHARTON: You mentioned the third-generation vehicle. How will it be priced and when do you expect to begin production?

MUSK: The Model S will start around $50,000 and there will be 20,000 units a year. Our high-volume vehicle further down the road would be perhaps on the order of $30,000 and maybe a couple hundred thousand vehicles a year. I'm hopeful we'll be in production in five years.

WHARTON: In May of this year, Toyota and Tesla announced a strategic alliance in which the two companies will share expertise. Toyota also invested in Tesla and will help with the purchase of the plant in Fremont, which will produce some Toyota vehicles. How did the relationship with Toyota come about?

MUSK: One day in March of this year, I got a call from the office of Akio Toyoda [Toyota's CEO and grandson of the company's founder] saying that he'd like to meet with me, with no particular agenda. I said, "Well, great, let's meet at my house for breakfast. It's more of a private setting."

We had a great meeting. We really hit it off at a personal level. He loved the Tesla Roadster. He thought our car was great. He wanted to figure out a way to have a closer relationship with Tesla. We came up with three obvious things: investment, helping us purchasing the plant and technology development.

WHARTON: How important are the alliances Tesla has with Toyota and also with Daimler, which has invested in Tesla? Are they critical to the success of Tesla? Is it likely that Tesla eventually is going to be sold to a larger car company?

MUSK: [The partnerships] are definitely helpful. I think we probably could have made it without either Daimler or Toyota, but of course it would have increased the risk and the cost. Starting up a car company requires quite a bit of resources.

I don't anticipate any sale in the short-to medium-term. In the long-term, it's hard to say. We are not steering the company towards an acquisition. We're building the company to be one of the major car companies of the 21st century. That's how we're operating. It's possible there could be an acquisition sometime in the future, as there is for any company.

WHARTON: The major established car companies are starting to come out with all-electric vehicles. Do you see them as competition, and are you concerned about these new vehicles posing a threat to Tesla?

MUSK: I'm very glad to see that the major car companies are entering the electric vehicle field. It was certainly my hope and my expectation. The fundamental good that I wanted to achieve with Tesla was to accelerate the advent of electric vehicles faster than it might otherwise occur.

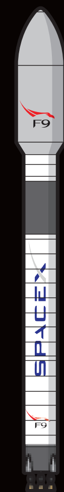
Transitioning to a sustainable mode of transport has always been inevitable. If you've got an unsustainable mode of transport, you had better deal with it sooner or later. But what we've been able to do with

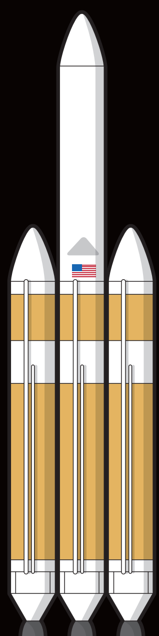
"We are not steering the company towards an acquisition. We're building the company to be one of the major car companies of the 21st century."

Onward and Upward

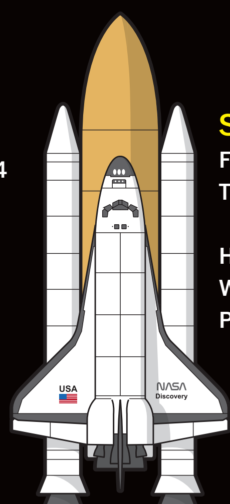
Elon Musk's SpaceX is at the cutting edge of modern rocket technology. After successfully launching the Falcon 1 rocket in 2008, the company made history again by sending the Falcon 9—the first privately developed space vehicle designed for human space travel—into orbit this past June. Here's how the Falcon 9 stacks up against other American-developed rocket systems, past and present.

Space X Falcon 9 (normal)
First flight: June 4, 2010
Thrust: 1,100,000 pounds-force
Height: 178 ft
Weight: 333,400 lbs
Payload: 43,000 lbs

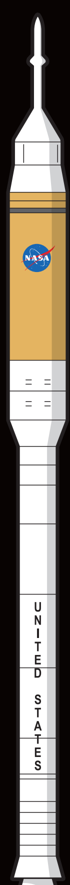




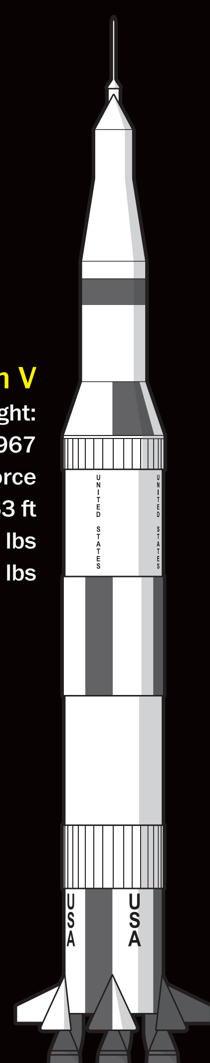
Delta VI Heavy
First flight: December 21, 2004
Thrust: 7,648,000 pounds-force
Height: 235 ft
Weight: 1,616,800 lbs
Payload: 49,740 lbs



Space Shuttle
First flight: April 12, 1981
Thrust: 1,225,704 pounds-force
Height: 184 ft
Weight: 4,470,000 lbs
Payload: 55,000 lbs



Ares 1
Still in development
Thrust: TBD
Height: 308 ft
Weight: TBD
Payload: 55,000 lbs



Saturn V
First flight: November 9, 1967
Thrust: 7,648,000 pounds-force
Height: 363 ft
Weight: 6,699,000 lbs
Payload: 259,600 lbs

Tesla is serve as an example, to show that you can make the technology work.

WHARTON: We've been hearing about electric cars for years, even decades, but there still aren't many on the road. Do you think the public is finally ready for electric vehicles?

MUSK: I think it is, yes. We're certainly seeing good demand for our Roadster. We are seeing a lot of advanced orders for our Model S sedan. From what I'm hearing, there's a lot of interest in the Nissan Leaf. We are at a huge inflexion point in the whole automotive industry, the transport industry itself. It's an exciting moment because I think we're at a time that is comparable to the transition from horses to cars. This is the biggest thing to happen to the automotive industry since the moving production line.

WHARTON: What have been the most difficult challenges you've encountered in starting and growing Tesla?

MUSK: We've faced a number of different challenges. We had a lot of management challenges for some time. We had to do kind of a reset on the company and replace most of the management team. Associated with that, we also made some wrong decisions in sourcing critical components for the vehicle to companies that were either unable to do the job or were incredibly expensive.

So we had to essentially restart the company in 2007. Getting through that was a big challenge and, of course, getting through the terrible economic situation, which caused the bankruptcies of General Motors and Chrysler. We were trying to survive—despite being a small company selling only a high-end sports car. It was a very arduous period.

WHARTON: Turning now to SpaceX, what was the significance of the launch of the Falcon 9 this June?

MUSK: It was very significant. We're at a big inflection point also in the space arena. This is the first time that NASA has decided to outsource to the commercial sector the design and operation of rockets. Obviously I think it was the right move. It's the only thing that's going to allow us to make huge progress in space exploration. The government-run programs have been incredibly expensive and slow.

The success of Falcon 9 is obviously a huge milestone, as was the prior success of

Falcon 1. Falcon 1 was the first privately developed quick-fueled rocket to achieve orbit, which is significant in itself. And Falcon 9 was the first privately developed orbit class system that is capable of carrying people. So, thank goodness, it worked.

WHARTON: How important in a business sense is the contract with Iridium to launch communications satellites?

MUSK: It is a great validation of SpaceX because this was a decision by a private company. The contract could have gone to the Russians or the Europeans, the Chinese, the Indians, anyone. But they concluded that SpaceX was the right choice. We had the most competitive vehicle even though those other systems received considerable government subsidies. It's also the biggest commercial launch contract ever. It shows it's not just NASA that is supportive of SpaceX.

WHARTON: What do you think of President Obama's plan to end the space shuttle program and to rely more on commercial enterprises in space exploration? It would appear to fit right in with your business plan.

MUSK: Yes, going to commercial extraterrestrial transport is absolutely the right move. I think it really says something that the Obama Administration is pushing for this. If it were a Republican administration, there might be skeptics. But as it's a Democratic administration in favor of the commercial route, you'd have to know that it is the obvious choice.

WHARTON: Space travel has traditionally been a function of government. Now there are private firms are involved. How do you see the balance between government and business in space exploration?

MUSK: Well, our experience has been that it has worked well having NASA essentially as an anchor customer. It allows us to have a level of production volume. It provides us with revenue we can count on, and it gives us increased scale.

Certainly NASA has been helpful in an advisory capacity. I think it has been a great public-private partnership.

WHARTON: There are other private companies trying to break into commercial space travel, including start-ups founded by Internet entrepreneurs, as well as big defense contractors. How do you assess the competition?

"Falcon 1 was the first privately developed quick-fueled rocket to achieve orbit."

MUSK: I tend not to focus too much on the competition. My advice for any company is just to focus on making a great product and executing as best you can. One does have to attempt to ward off potential bad behavior by competitors if they try to tilt the playing field. We certainly have seen that in the space business.

When you are fighting big defense contractors, and they don't think they can win in a fair contest, they will attempt to make the contest unfair by exerting huge amounts of influence on key politicians.

WHARTON: How is SolarCity faring now?

MUSK: SolarCity provides photovoltaic solar power to homes and businesses. It's actually the biggest full-service solar provider in the country right now. They don't make the panels themselves, but they do everything else. It's kind of like what Dell or Hewlett-Packard is to PCs. They don't make the CPU or the hard drive but they design the overall system and they put it together and implement it and handle the customer interface. SolarCity is about enabling low-cost solar power.

WHARTON: What is your role in the company?

MUSK: I'm the chairman and the largest shareholder in the company.

WHARTON: You're not involved in the day-to-day operation?

MUSK: Correct.

WHARTON: How do you find the time and energy to be the CEO of two large companies and help to oversee a third?

MUSK: This is my biggest challenge. I am incredibly time constrained. I have taken great pains with SpaceX, Tesla and SolarCity to get more help. I continue to add more people to the management team to help address this issue and make life a little less about work.

WHARTON: In a recent interview you said you preferred hiring people with technical backgrounds to those with business backgrounds. When you were at Penn you studied both. How do you assess the importance of each?

MUSK: I think it really depends on what somebody wants to do. In my case, since I knew I wanted to be involved in technology development, it was important to have a technical background in addition to a business background. I already knew quite a bit about computer programming. So I decided I needed to understand the fundamentals of the physical world, which was physics. I studied business to learn how you put together a company to go about solving technology problems.

WHARTON: You seem to have become something of a celebrity, appearing on network television. Some gossip columns and blogs have written about your divorce. How do you feel about your celebrity, and has it been a good thing for your companies?

MUSK: It is a strange situation I find myself in, which I didn't expect. It definitely has its pluses and minuses. It is somewhat distracting in that the press will write about my personal affairs even though in many cases they don't have any bearing on the business. But it can affect, in a weird way, how people perceive the business.

So, I don't know. I have mixed feelings about the whole thing. I do feel it's important to promote the ideas of space exploration, electric vehicles and solar power. In order to do that I have to go out and talk to a lot of people. I guess the fallout from that is you start to become known for things that are not related to those topics.

WHARTON: Could you tell us why you named your company after Nikola Tesla, the inventor of alternating current systems?

MUSK: Tesla was a great scientist and engineer who deserves much more public awareness. The motor in our car is an AC induction motor, which is something Tesla invented.

WHARTON: I read that even after all of his accomplishments, Nikola Tesla died penniless in a New York City hotel room.

MUSK: [Laughter] Well, naming it Tesla was really about granting recognition to a great scientist and engineer. I thought it would be better than naming it Musk Motors. I've never named any company after me.

Tinseltown in Transition

By Chris Krewson

The rise of foreign markets and popularity of 3D are offering Hollywood much-needed signs of hope. But insiders admit the good old days of filmmaking are very likely gone forever.

Hollywood studios simply don't green-light movies based on original ideas anymore.

Which makes Josh Heald's story all the more remarkable.

"The idea for *Hot Tub Time Machine,*" says **Heald, W'00**, "was just about the weirdest thing I could have walked into a studio with."

Indeed, Heald's over-the-top, offbeat, downright ridiculous script for *Hot Tub Time Machine*—the hit comedy, released last year, that tells the story of how a dip in the hot tub at a decrepit lodge brings four old friends back to their 1980s' adolescence—probably wouldn't have swayed many studios. Especially these days. It was, however, the perfect fit (at the perfect time) for venerable old Metro Goldwyn-Mayer.

See, as it turned out, Heald delivered his pitch to MGM at precisely the moment that the studio was trying to prove its very viability in the film market.

MGM needed scripts. Heald had one.

And that's why the film got made.

"We caught MGM on the right day," Heald says. "They were trying to aggressively tell the industry 'We're here, we're still trying to make movies. So the response was 'How fast could you get us a script?'"

Heald knows he's unlikely to strike film gold twice, though, and the reason is simple: The old Hollywood is gone, and the new Hollywood is still sorting itself out.

Corporate ownership of Hollywood's major studios means that fewer and fewer films are being released every year. Film executives are turning to the so-called 'tentpole' strategy, wherein big, blockbuster movies are made specifically with the idea of generating enough money to prop up the entire film division. It's a popular, safe approach—and according to the industry's leading trade group, it's working—but one that leaves little money left for fewer introspective ideas or scripts based on original ideas.

Studios have adopted the tentpole strategy in order to maximize the dollars they get back, but according to Hollywood insiders, even that's a moving target in 2010. Financial models built a decade ago have already been thrown out the window, thanks to technology that's changed the home video market, the exponential growth of foreign audiences and new dollars from 3D.

In short, it's a time of great change in Hollywood.

And, for Heald, that means that easy greenlight experience from his first film won't easily repeat itself. His next project,


HOLLYWOOD

currently in development, is a remake of the 1979 Bill Murray screwball comedy *Meatballs*. It's yet to be purchased.

"We were in production [for *Hot Tub*] quickly—the movie came out less than two years after I sold it," he says. "It was crazy, crazy fast. I shouldn't expect the stars to align again anytime soon."

The struggle to get original ideas on film is nothing new to Wendy Finerman, an accomplished producer with numerous box office successes and Academy Awards under her belt. She's the producer behind *Forrest Gump* and *The Devil Wears Prada*, and is currently working on *One For The Money,* due out next summer.

"Years ago if you got bankable talent, [studios would] be open to stories that were outside of the box," says **Finerman, W'82**. "Studios have become more risk-averse, and therefore want to make movies that really are very 'within the box.' Today, studios are more concerned about servicing the mass market than individual markets."

Why?

According to Finerman and others, it's all about the desire among studios to maximize their return on investment—or, at the very least, making back the millions they pour into a film's production and marketing budgets. Studios need and want safe bets—films that figure to draw big on their opening weekend and keep drawing until profits are turned.

"What studios are doing is making the art side subject to the commercial side," says **Kent Smetters**, the Boettner Professor of Insurance and Risk Management at Wharton. "It's sheer economics."

The box office cash a film earns on its opening weekend—an opening weekend that follows weeks if not months of a marketing blitz (trailers, TV commercials, newspaper and magazine ads, billboards, public transit ads, appearances on late-night comedy shows,

> "Studios have become more risk-averse, and therefore want to make movies that really are very 'within the box.' Today, studios are more concerned about servicing the mass market than individual markets."

etc.)—is absolutely crucial for studio success. The biggest film of 2010, *Toy Story 3*, earned $109 million in the U.S. during its mid-June opening weekend.

Fast forward to mid-August, two months after its release, and the film had earned $400 million. The math is simple: More than a quarter of the film's earnings came from its first three days in the theater.

The success of *Toy Story 3* is hardly a surprise to Finerman. Indeed, it follows a longstanding tradition of sequel success in Hollywood. That's why those films, with their built-in name recognition and audience awareness, are such a staple of the summer release schedule. Studios are also constantly looking for projects based on a hit in another medium, or a 'reboot' of franchises they already own. Many of Finerman's projects, in fact, come from books—including *Gump*, *Prada* and the forthcoming *One for the Money*—and that's helped in getting studios to sign on the bottom line.

"With a bestselling series of books by Janet Evanovich, you can at least say you've got a viewership that's built in," she says. "You have to look for what else can be done, things that aren't superhero franchises but make a studio feel that there's some value added. There's a process, a method to the madness."

In other words, it's hard to sell an original idea these days. So Jon Hurwitz's advice is simple: Don't try.

Hurwitz, W'00, made his name in Hollywood as one of the co-writers of the *Harold and Kumar* film franchise. But Hurwitz says he encourages young writers to avoid doing what he did—writing and pitching an original script. Instead, he says, they should be leveraging new technologies to their advantage.

"I wouldn't be trying to write a screenplay. That's not the way you're going to get attention," Hurwitz says. "I would make two-minute short videos on the Internet. That's something that's going to stand out. Move to L.A. Get involved in the (improvisational comedy scene). You can film that stuff, and it's a low cost of entry. The Internet has blown up. ... The opportunity to get your content out there has never been so easy."

Even if getting a film made has never been more difficult.

The studios' increased interest in "safe" films is derived in part from the fact that some of their other revenue streams are drying up.

For years, studios reaped profits from so-called "pay cablers" HBO and Showtime. At their launch, those networks provided some of the only access customers had to films outside theaters. They were a hit. But the days of HBO and Showtime as "movie networks" are long gone.

"This was really the only in-home distribution of uncut Hollywood movies after release, so our business began in a very different feature film environment," says **Matt Blank, W'72**, chairman and CEO of Showtime Networks. "But there's no way we're going to be the primary exhibitor of those films on the video screen now and in the future."

The primary exhibitor today? Home theater, of course. First through VHS tapes, then through DVDs, the home theater experience proved to be a financial boon for studios. But even that market is starting to dry up. Three years ago, *Variety* reported that sales of DVDs had peaked, at $16.6 billion. That number dropped by 5.5 percent a year later, and 13 percent last year.

In an effort to stem the tide, studios started agitating to shorten the "release windows"—the time that elapses between when a movie is introduced into theaters, and then makes its way into the home.

In February, Disney shocked movie theater owners by announcing it would release Tim Burton's *Alice in Wonderland 3D* on DVD just three months after its theatrical release, instead of the usual four. Why? From Disney's perspective, it seemed to make more sense to piggyback on the expensive marketing for the film's theatrical release—which included a takeover advertisement on the front page of the *Los Angeles Times* that reportedly cost the studio $750,000—and release the disc as soon as possible.

Theater chains, particularly those in the United Kingdom, rattled sabers and threatened to keep the film out of their multiplexes. But ultimately, the stakes—and the $3-4 3D surcharge theaters stood to

reap—proved too tempting, and another milestone fell.

Thanks to Disney's bold move, the new industry standard has been set: Ninety days after movies are in theaters, they're available at home.

Of course, *how* those get into the home is another prickly matter—one that's yet to be sorted out. Satellite, cable and telephone companies are all having success with Video On Demand services. Of course, then there's Apple's iTunes, the enormously popular store that sells films for the iPhone, iPod and the fast-growing iPad. And yet at the same time, the DVD market is in free fall. Former rock-solid studio partner Blockbuster Inc. filed for bankruptcy late this summer amid stiff competition from Netflix and Redbox.

The home theater market is, essentially, a big muddled mess. Hollywood doesn't know where the money will come from—or if there's even money to be made at all.

"What people thought about sequential distribution 10 years ago may just not be the case in this environment," says Blank. "There's a good deal of uncertainty about how much revenue is coming from that world and in what schedule. So I think it's hard to figure out where it's all going."

All of that uncertainty is why Blank's Showtime has shifted its business model markedly, from post-theatrical-release movies to original television series. "Weeds," starring Mary Louise Parker, is the most popular of eight new series underway at the network.

"We had been an output purchaser (of films) for decades, and then we reached consensus that we needed to be more in control of our own destiny," Blank says.

"You want strong content and you want strong brands. Whether you're a premium network, a movie studio or a broadcast network, you'd better have content that people want," Blank says. "At Showtime, we are selling a brand. Somebody's buying us month-in and month-out. People may be watching 'Weeds' but they're buying Showtime. Our marketing task is to connect those things."

The financial alchemy that makes up a total box office gross has also been impacted of late by two other factors: An upswing in foreign box office receipts and the revival of 3D.

In June, the major Hollywood studios estimated their take from the international box office jumped a whopping 64 percent during the first five months of the year. In years past, the international market had typically contributed 60 to 65 percent of each film's total box office figure, but that percentage is likely to increase this year.

Some experts have attributed the growth in foreign to improved theaters, 3D installations and a growing middle class. China's box office, for example, is up 189 percent over the same period from last year, while Russia saw a 70-percent jump.

The impact of the foreign box offices are reflected in *Toy Story 3's* totals, as well. The film earned more than $500 million overseas. In total, the film grossed $920 million, making it the highest-grossing cartoon in movie history.

Movies presented in 3D are proving alluring to studios and movie exhibitors for reasons beyond the cool factor: Those who chose to watch the film in an extra dimension pay another $3-4 per ticket—and those surcharges really add up. James Cameron's *Avatar*, the most popular 3D movie of all time, is the also highest-grossing film ever made, earning $736.9 million domestically and $1.94 billion overseas through March 21. Experts estimated that as much as a third of the film's earnings came from the 3D surcharge.

Audiences are showing a willingness to pay that price. The Motion Picture Association of America estimates that 3D ticket sales accounted for 11 percent of the total North American box office take this year, compared to just 2 percent in 2008.

"It's been such an interesting year, when you see how quickly 3D got a foothold and how tough it's been for other movies this year," Blank says. "There are a lot of challenges out there. The rate of change is so quick, it's not easy for people to adjust and have the answers."

Of course, history shows that exhibitors banking on 3D dollars may not enjoy that banquet indefinitely. Throughout history, theaters have charged customers more to watch movies with sound, and then those with color. Once all movies had those elements, the surcharges disappeared, Smetters notes.

"Once technology evolves and engineers figure out how to bring 3D into the home, I'd expect that surcharge to drop down to $.50 per ticket," Smetters said. "The difference in cost will become smaller."

Here's a quick, pithy snapshot of the state of Hollywood in 2010: According to the MPAA, North American box office receipts were *up* more than 10 percent last year, but the number of films actually released into theaters *shrank* 11.8 percent from 2008.

From a bottom-line point of view, it's hard to argue with the results.

How do studios keep growing that box-office number—and also creating more revenues elsewhere?

Some studios are looking to an academic approach, exploring the idea of applying an actual scientific formula to help them assess the viability of films in the theatrical pipeline. And according to two Wharton professors, such a formula may actually exist. **Jehoshua Eliashberg,** the Sebastian S. Kresge Professor of Marketing, and **Z. John Zhang**, the Murrel J. Ades Professor of Marketing, recently studied 200 films released between 1995 to 2006 with the ultimate aim of figuring out how and why some films prove to be successful. Their paper, "Green-lighting Movie Scripts: Revenue Forecasting and Risk Management," was published in May.

"We are establishing a fundamental way of comparing a script to other scripts that have been made into movies," Eliashberg says. "There is a certain type of story structure associated with movies that have been released in the past and performed well in the box office."

What did they find?

Well, for those who have followed the success of *Toy Story 3,* their conclusions were anything but a surprise.

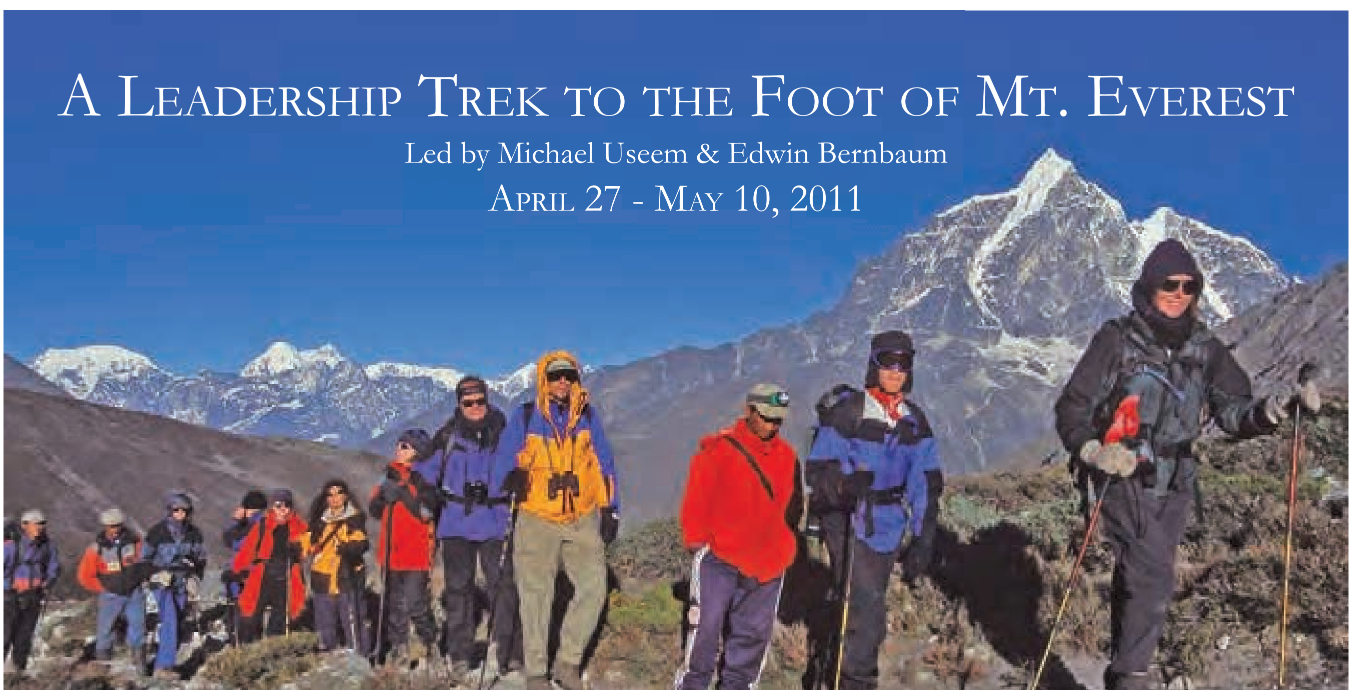
"Family movies did the best," Eliashberg says. "Hollywood makes a lot of R-rated movies, but family movies earn more at the box office than the horror and dramas that tend to be R-rated. The bottom line, based on the data we have, is that Hollywood should make more PG- and G-rated movies—at least from an economic standpoint."

Another plan, however, currently under consideration at Time Warner Cable, involves making movies available via Video on Demand just 30 days after the movie premieres in theaters—but starting at the premium price of $20 per view. Some executives at other studios have questioned the intelligence of Time Warner's idea, with most saying a 60-day home viewing experience would be much more palatable to the movie exhibitors.

But clearly, others say, the day of reduced windows is coming.

"There used to be heavy barriers of entry," says Showtime's Blank. "But now consumers don't *care* how that picture gets to the screen. It's about convenience, content and control."

Chris Krewson is Editor-In-Chief at Variety.com. *This is his first piece for* Wharton Magazine.



Visit *www.geoex.com/leadership* or call 800-777-8183.

Join **Michael Useem**, Professor of Management and Director of the Center for Leadership and Change, Wharton School, University of Pennsylvania, and **Edwin Bernbaum**, Ph.D., mountaineer, scholar and authority on the inspirational value of mountains, for a life-changing opportunity to hone your leadership skills in a unique seminar while trekking in the Himalayas of Nepal.

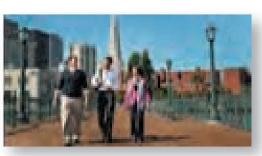
GEOGRAPHIC EXPEDITIONS

Wharton
UNIVERSITY of PENNSYLVANIA

PHILADELPHIA | SAN FRANCISCO

10th Anniversary
WHARTON | *San Francisco*

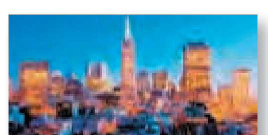
Engage with Wharton | *San Francisco*



SPREAD THE WORD
THE MBA PROGRAM FOR EXECUTIVES—ENROLLING ITS 11TH CLASS IN MAY 2011

ATTEND
WHARTON ALUMNI EVENTS AT OUR SAN FRANCISCO CAMPUS

EXPLORE
EXECUTIVE EDUCATION PROGRAMS



CELEBRATE
THE 2011 GLOBAL ALUMNI FORUM IN SAN FRANCISCO

sf.wharton.upenn.edu

BY STEVEN KURUTZ

The retail sector has been changed dramatically by the economic downturn. But are those changes permanent? Experts and industry insiders say they aren't yet sure.

If you want to get a picture of the current retail landscape, to see how retailers have held on and re-positioned themselves and worked feverishly to stay profitable during what some economists have referred to with grim humor as the recession that never ends, take a stroll along Fifth Avenue in Manhattan and peer into the windows of Lord & Taylor's flagship store.

In the months leading up to the fall 2008 crash, the East Coast department store chain had been undergoing a makeover. The company's new owner, real estate magnate Richard Baker, wanted to shed dowdy, down-market brands and, following the lead of millions of American shoppers, go more upscale. Baker signed deals with young designers like Peter Som, began sitting front row at runway shows and hired a new CEO, **Brendan Hoffman, C'90, WG'97**, a Neiman Marcus veteran, to carry out the plan. Then the economy collapsed. "It was a great strategy for about two days, until the world started to melt," says Hoffman, whose first week on the job in October 2008 was the worst week for the stock market in 75 years. "We immediately knew that trading up wasn't going to work in the new world."

In the months that followed, Lord & Taylor shed employees, reduced costs by 25 percent and brought back some of the mass brands they'd pulled from stores, like Jockey underwear, Nautica sportswear and Nine West shoes. The new strategy focused on creating what Hoffman calls a "kinder, gentler, more upscale version of a traditional department store." The shift is evidenced in the Fifth Avenue store's window displays, where a mannequin wears a slinky Tahari dress priced at $199.99. Written alongside it is the slogan "Shop more, Guilt less."

The stock market crash two years ago has resulted in perhaps the biggest shake-up to the retail sector since the Great Depression. Like a violent, upending storm, the recession has been marked by how long it has lasted and how quickly it came, preceded by what seemed like a never-ending upward trend. "For the most part, you had a 20-year run of a growing consumer culture," says **Erin Armendinger, WG'03**, managing director of the Wharton School's Jay H. Baker Retailing Initiative, which studies retail data and works with students considering a career in the industry. "There was very little to tell people that one day this could all come to a stop—very quickly."

Then, of course, it did. We all know the story: the fall of Lehman Brothers; the erosion of the Dow; double-digit unemployment for the first time in a generation. Caught off-guard, many retailers were left with too much inventory, and too few Americans willing or able to spend. "Demand dramatically and rapidly declined," Armendinger says. "Many of these products [have] a shelf life. No one wants last season's winter coat." Big chains like Circuit City and Linens N' Things didn't survive the downturn. Shopping centers built in outlying exurbs during the housing boom became ghost malls. Even as most retailers have shorn up their bottom line and soldiered through the lows of 2009, uneasiness persists.

So where is the retail sector today?

"We're basically just grasping along with the economy," says **Stephen J. Hoch**, Wharton's Patty and Jay H. Baker Professor of Marketing at the Wharton School and director of the Baker Retailing Initiative. Hoch says that most retailers are in "leaner and meaner" mode, trying to carry less inventory but maintain sales. "It's a consolidating time right now in retail. Just like it is for consumers."

According to SpendingPulse, a report by MasterCard Advisers that tracks national retail data, July showed a 1 percent year-over-year increase in sales. As slight as it is, that figure is actually down

Changed FOREVER?


NIGEL BUCHANAN

from June's 1.1 percent increase (retail growth rates of five and six percent were common during the boom years). "There was a healthy uptick in the first quarter" of 2010, says Kamalesh Rao, director of economic research at SpendingPulse. "But from recent data, we've bottomed out. We're hovering at growth rates that are pretty weak."

Michael Niemira, chief economist for the International Council of Shopping Centers, paints a similar picture. "During the first three months of 2010, there was a improvement in the 'broad middle,'" says Niemira, "but since then it has narrowed again with some stores doing very well, but the broad array struggling."

Even the small year-over-year gains can't be viewed as a positive sign; the comparisons are against 2009 figures, a period that many economists now regard as the market bottom. Rao says that consumer spending has essentially been reset to 2007 levels, but adds that "a one or two percent growth from retail is about as good as you can expect from the macro-economic picture with a labor market that's moving sideways."

> "In the past, if the recession was over on a Tuesday, people were out spending on Wednesday."

While unemployment remains near 10 percent, it's the prospect of joblessness that looms larger and is perhaps at the root of the ongoing consumer malaise. "Even if you have a job, if others don't then you worry about your own and there's a damper on everybody," Hoch says. Consider the June savings rate: 6.4 percent, a number that has ticked up each month since February and stands at three times the pre-recession average. It's a reminder that this recession is very different from others of recent memory in which easy access to credit allowed us to buy our way out. Or, as **Richard Galanti, W'78**, CFO of Costco, puts it: "In the past, if the recession was over on a Tuesday, people were out spending on Wednesday."

Americans are still spending, of course. It's what we do. But there's been a major pullback, especially in the luxury sector. "I think before the recession there was tremendous movement upmarket and a lot of us got sucked into buying logos we couldn't afford," says Hoffman. The fear of not being able to feed one's family tends to quell any desire for Gucci loafers. In the months after the recession hit, the luxury sector posted 10-15 percent drops, and the stock prices of high-end department stores like Saks got hammered. While luxury spending showed strong signs of a comeback earlier this year, that growth has moderated and both jewelry and apparel sales were down 1 percent in July, according to SpendingPulse.

What money is being spent is instead largely going to purchase durables. Shoppers are in bargain mode. "It's a time for value," says Hoch. Discount retailers like Walmart and Costco, he says, "are selling tons of stuff. You go in there and you know it's the lowest price you're going to get anywhere." Galanti says the chain's reputation as an "extreme-value" proposition has served the company well during the downturn. "I think there's a sense among people that there isn't another big shoe to drop, but things also aren't going to change for some time, so people are being judicious and cautious in their spending," he says. "Since late 2008, into 2009 and even through 2010, there's been a switch away from bigger ticket items. All the basics—food, toiletries—have done very well for us."

The shoppers walking through retailers' doors today are a different breed than those of even three years ago. They look first for value, consume less conspicuously, shop online more often (e-commerce sales are growing by 10 percent yearly) and buy items closer to when they need them, a trend known in the apparel industry as "buy now, wear now." The question remains whether these are permanent behavioral changes or temporary adaptive strategies. "Is there a fundamental shift in car consumption? Yes. People aren't interested in buying big gas-guzzling cars anymore," says Hoch. "And that's permanent. With the shopping stuff—I don't know." For his part, Niemira, a contrarian in many ways when it comes to this recession (he doesn't believe the current downturn is intrinsically different than previous severe downturns, for instance) is of the mind that the recession will not have lasting changes to consumer behavior. "My view is that consumers in time will return to their typical buying habits," the economist says. But, echoing Galanti's point, Niemira agrees that one troubling difference of today is "the slowness of that return to the typical buying habits."

As for Armendinger, she used to believe Americans would return to their big-spending ways as soon as the economy rebounded, blocking out the Great Recession as if by collective amnesia. But as the downturn drags on, she says the likelihood becomes greater for lasting, generational changes in spending, especially among young people. "We're approaching two years now," says Armendinger, "and two years in somebody's life when you're 20 and just graduating college is a long period."

Long enough for people to examine whether they need 10 pairs of shoes, or if it's worth paying triple for an item because of its brand logo. A recent *New York Times* story profiled one couple who donated most of their belongings to charity and downsized to a studio apartment. The same article analyzed the new buying habits and found that many people are choosing to spend on experiences—a long-desired trip, art classes, even a backyard barbecue—rather than material items. "We've been surprised at the strength in the last few months of patio furniture," says Galanti, noting how Costco is selling more home and garden supplies this summer because people are turning hanging around the house into an experience. "For many years, we thought, 'If I work hard, I deserve nice things, and those things signal something—wealth, or that I'm a hard worker,'" says Armendinger. "With Gen Y, I think they're questioning that notion."

In response, retailers and communities are adopting new strategies to lure consumers. In August, several states held sales tax holidays to boost sluggish back-to-school spending. At Lord & Taylor, the chain has renovated its stores to focus on the shopping experience, not luxury brands. The idea is that recession-strapped women can find value at Lord & Taylor without feeling like they're rummaging through the bins at a discount outlet. "If you come through the Fifth Avenue store, you'll see a major renovation in a store that hadn't changed in 30 years," says Hoffman. "It's about reinvesting in ourselves and maintaining that during the downturn."

Robert Trone, W'81, L'91, co-founder of the spirits superstore Total Wine & More, says that for the first time he's stressing in marketing efforts that the spirits chain is a price value leader. "Wine is considered a luxury good in many respects," Trone says. "So we're shifting the emphasis on low-price goods."

At Costco, the challenge has been to drive sales of the bigger ticket items with greater profit margins to go along with the value-oriented durables—and, as at retailers across the board, to get skittish consumers excited about buying again. One way the chain has done this is through its "treasure hunt" merchandising strategy—luxury items like Coach bags or Cartier watches appear in stores for brief, random periods at heavily-discounted prices. "Even if you don't buy the item, you're impressed," says Galanti. "It's the excitement of seeing something you didn't expect." This summer's hot item was stand-up paddleboards—priced at a reduced $299.

Michael Dart, WG'87, head of private equity and strategy at Kurt Salmon Associates, says that to be successful in the future, retailers must adopt tactics like Costco's "treasure hunt" to attract an increasingly demanding and empowered shopper. "The consumer has tremendous access to almost any goods they want," says Dart, who, along with Robin Lewis, has co-authored a new book, *The New Rules of Retail,* to map the new consumer-centric world. Like nearly everyone interviewed for this article, Dart praised Apple as a retailer pointing the way ahead. "People have gone from wanting stuff to wanting experiences," says Dart. "The iPhone has done a phenomenal job of creating a platform of experiences for the consumer. The way I use it—the music, movies—is custom to me."

Apple is a universally recognized bright spot in this gloomy economy—"a positive contagion," says Hoch. Sales of iPhones continue at a brisk pace, and in a stroke of retailing genius that will be studied in business schools for years, Apple launched its iPad tablet this spring—during the third year of the worst recession in recent memory—and has sold over three million units so far. Why are cash-strapped consumers ponying up to $800 or more for an electronic gadget? Because the iPad isn't marketed or perceived as a gadget. "It replaces other things and simplifies life," says Armendinger. She said her husband got an iPad with some reluctance but soon found he was able to ditch his cumbersome laptop on business trips, not to mention listen to music, read periodicals, download books, watch movies, surf the Web and perform dozens of other time-saving and time-wasting activities. "It's part of your entertainment budget, your intellectual curiosity budget—it fulfills several needs."

Of course, the retail world cannot live on iPad sales alone. At the moment this article is being written, there are negative reports on housing, retail sales and jobs numbers, and talk of a "double-dip" recession continues to loom. Both retailers and consumers are in extended wait-and-see mode. According to Hoch and others, what will jumpstart the retail sector again is declining unemployment. But the consumers that re-emerge will likely be more discerning and less easily parted with a dollar, making the job of retailers that much harder. "They'll just have to find new ways of interacting with consumers," says Armendinger. "Giving them more special things or a better value proposition."

Still, she says, "Let's be real. We will come back to spending."

LOCATION LOCATION LOCATION
ROBERT A.M. STERN ARCHITECTURE
ISMAEL LEYVA FLOORPLAN DESIGN
PHENOMENAL FINISHES
UNCOMPROMISING CONCIERGE
CHAUFFEURED LUXURY SEDAN SERVICE
INDOOR SWIMMING POOL
STATE OF THE ART FITNESS CENTER
PRIVATE TERRACES
VALET PARKING GARAGE

Contact Laurie Phillips
Phone 215.825.7710
www.10rittenhouse.com

Prudential
Fox & Roach REALTORS®

10
Rittenhouse Square

Peter Fader, Frances and Pei-Yuan Chia Professor of Marketing and Co-Director of the Wharton Interactive Media Initiative (WIMI), giving a presentation on the future of interactive media research at the Global Alumni Forum in Seoul.

Wharton
UNIVERSITY *of* PENNSYLVANIA

The Campaign for Wharton

Students, alumni, faculty and friends illustrate
Wharton's impact on their lives and the world at:

WWW.THECAMPAIGNFORWHARTON.COM

Coming soon: ***2010 Annual Report to Investors***

Shooting the Messenger: Quarterly Earnings and Short-term Pressure to Perform

As the quarterly earnings season for the second quarter of 2010 got underway, investors, analysts and the media were watching to see how well public companies are emerging from the economic downturn, and what that might mean for the stock market. With unemployment rates still high and federal measures of economic growth shaky, observers were hoping for earnings numbers that reaffirm signs of a recovery.

"Last year, every earnings announcement was a record loss. People understood that because it was a really bad time. Companies wouldn't necessarily want to come out with a record loss this year because people are expecting to see some improvement and expectations will be ratcheting up somewhat," says Wharton accounting professor **Brian Bushee**. "But earnings are always about the target; it's not as much what did you do in the same quarter last year, as what are analysts and investors expecting this quarter and did you meet that number."

While most experts agree that a single-minded focus on the short term can cause negative consequences for companies, they also suggest that blaming the earnings reports themselves is like shooting the messenger. Although the system of quarterly earnings might be broken, fixing it is no easy matter and might create even more pressure to produce immediate results.

"Providing less information to the investors makes managers unaccountable. By the time investors realize that something [problematic] is happening in a firm, it's probably too late," notes Wharton accounting professor **Karthik Balakrishnan**. "In that sense, more information is always better.... This is assuming, however, that the information can be perfectly given to investors. In the world of imprecise information where we live, [however,] it's a little different. You then have to think about the trade-off between providing frequent imprecise information and [producing] infrequent precise information."

'An Outcome, Not A Strategy'

Former General Electric CEO Jack Welch generated plenty of talk and Internet traffic in March when he was quoted in the *Financial Times* describing the business world's emphasis on shareholder value as "misplaced."

In a follow-up interview published in *Businessweek*, Welch called shareholder value "an outcome—not a strategy," and noted that a focus only on the short term doesn't energize or motivate employees to deliver tangible results. "Any fool can deliver in the short term by squeezing, squeezing, squeezing. Similarly, just about anyone can lie back and dream, saying 'Come see me in several years; I'm working on our long-term strategy.' Neither one of these approaches will deliver sustained shareholder value. You have to do both."

One contributor to the pressure to deliver in the short term is quarterly earnings reports—and real and perceived consequences that come from failure to meet targets and surpass estimates. In recent years, companies like Coca-Cola, McDonald's and AT&T ended their practice of providing earnings guidance, stating that they detract from creating a sustainable company for the long term.

The recession, and worries about the continued weakness of the economy, have caused company earnings to be scrutinized more closely, and made it harder for firms to hide their inadequacies, notes Wharton finance professor **Alex Edmans**. "If there's a boom, and every firm in your industry is going up by 10 percent and you're going up by 8 percent, you're underperforming, but the investors are still quite happy because you're still delivering a return. In a recession, if everyone is going down by 3 percent and you're going down by 5 percent it's different. It's still a difference, but it means more in a down time because investors are actually losing money and the company has more to cover up."

Investors also tend to seek more information from companies during down times because they want reassurance that the firm isn't going to go under, states Wharton management professor **Michael Useem**. Last year, Useem conducted interviews with a group of sitting or recently retired CEOs to see how they altered their managerial style as a result of the recession. Most of the managers said they spent more time talking with investors, analysts and their boards of directors, and provided a greater amount of information about the company's health in an effort to show they were "taking the right steps to get through the crisis."

During times of "relatively steady growth or relatively steady decline, quarterly results are more predictable and less informative," he adds. "When change is afoot—and at the moment, many people are hopeful that positive change is indeed coming—then quarter-by-quarter comparisons do become more significant. The job of equity analysts and investors is to track, and then predict, where a company is going to be a year out. A two- or three-quarter trend line can be very significant in making that forecast."

Accounting Tricks vs. Real Cuts

Earnings reports provide a level of transparency to the public, but observers note that, as a true picture of how a company is doing, they should be taken with a grain of salt. Managers can make operating decisions, such as offering a discount on their products or services, to increase sales as a quarter draws to a close. A company can cut back on staffing or delay a R&D development project to minimize expenses.

Accounting changes or tricks can be used to manipulate the numbers. Or businesses

ON THE WEB Visit Knowledge@Wharton at: http://knowledge.wharton.upenn.edu/

can attempt to change their earnings target, walking analysts' expectations down to a number they can meet or beat. Managers also carefully construct the reports themselves, often burying any information that paints a less than rosy picture of the company's health.

If a company cuts back on R&D while a competitor invests heavily in that area, the short-term reward could be swallowed by a lack of innovative new products in the long term. Furthermore, when investors begin to feel that they can't trust earnings numbers, "you see a discount in the stock price," says Shivaram Rajgopal, an accounting professor at Emory University who has authored several studies on financial reporting. Managers know investors will react negatively if there is too much manipulation of earnings numbers, so they have incentives not to let the tinkering get out of hand. "That's why we observe that managers don't manage earnings as much through [accounting] as through real actions, meaning cutting R&D or cutting maintenance," Rajgopal adds. Real cuts, rather than manipulations of the numbers, are less likely to attract the attention of auditors, but they are also more likely to significantly impact the business.

Most companies either just meet analysts' earnings targets or fall far short, Edmans points out. "It's of prime importance for managers to meet their earnings, and they have all these ways of cutting investments or changing accounting policies to enable them to meet the target. If you miss the target, even though you had all these tools available to meet it, it means [the company] must have huge problems. That's why you get a huge whammy if you miss it. Missing it doesn't just mean things are bad; it means things must be really bad."

The pressure to meet earnings expectations comes from internal and external forces. CFOs and other managers have to meet the often contradictory demands of different types of investors, satisfy analysts and ensure a positive portrayal from the media. "Hedge funds have become actively involved in the management of firms, and hedge funds are concerned about short terms…. They want a company to meet its earning target because if it doesn't, the stock price is going to go down. If you're a long-term investor, like a university endowment, you don't mind if the stock price misses its target because it's going to go up later," Edmans notes. "The emphasis on disclosure has also become greater, in light of corporate scandals. Maybe previously, if someone delivered low earnings, you might think twice about investing. Now you think the [manager is] a crook, [that he or she is] stealing."

Earnings can have an effect on stock price, and both numbers not only provide a window into a company's health but also affect executives' compensation and job security. "When you think about it, it's not the fact that you have to give the information, it's more the fact that [managers] are under pressure to keep the stock price high because that's linked with their compensation," Balakrishnan says. "Incentives have a definite impact on the quality of the reports. There is a ton of research that has shown that CEO incentives play a key role in firms' reporting quality, the mode of information and the way that they disclose."

A 2005 study co-authored by Emory's Rajgopal, which included a survey of 401 financial executives and in-depth interviews with an additional 20, found that most CFOs believe earnings are the key metric that outsiders use to judge a company's health. Three-fourths of the managers said that they would make sacrifices in economic value in exchange for smooth earnings. The majority would delay a positive long-term project if it meant falling short on a quarterly earnings target. "These classic labor models assume that managers have a long horizon, that if they indulge in value-destroying actions, the market finds out eventually and their future wages get cut," Rajgopal states. "That's just sort of baloney. These guys don't have a long horizon; they're just thinking about maybe

ZAK PULLEN

the next two or three quarters."

He compared managers' focus on earnings to students who are primarily motivated by grades. "If I were to publish your grades so that everybody knew how well you did on this exam or quiz, you would be even more grade obsessed than you already are. [Managers] perceive [earnings] to be a scorecard of their performance. [The report is] published every quarter, it's very visible, the press spends a lot of time worrying about did they meet or beat this expectation, and there's lots of chatter on the Internet about the stock. If they consistently fail to deliver expectations, they are just seen as incompetent managers. That has real consequences for their pocketbooks."

Even without compensation or stock price as motivation, human beings naturally tend to work harder when they are very close to meeting a goal, notes Wharton operations and information management professor **Maurice Schweitzer**. "They work harder in both constructive and unethical ways. They begin to feel as if, because I'm almost there, the benefit of squeezing out higher productivity one way or another is higher." What managers think is important filters down into a company's culture as a whole; Schweitzer warns that leaders must make sure they are motivated by the right objectives, "which very often are the long-term objectives.

"You hear stories about the Enron culture and how it was very competitive, very cut-throat and very short-sided, and rewarded individuals for being very productive in the short run. I think that's a recipe for disaster," he adds. "One of the key managerial challenges is making sure you're rewarding and measuring the complete set of objectives that you have. Managers need to be constantly mindful of putting too much emphasis on one dimension of a multi-faceted outcome."

Schweitzer suggests that Coca-Cola and other companies that stopped or scaled back earnings guidance "sent a message throughout the organization that they're not focused on the short term profit.... There are many companies that have gone private to avoid that short-term pressure and focus on long-term objectives, although that's a more extreme and expensive approach."

But Rajgopal argues that firms that have stopped issuing guidance might be motivated by other concerns. According to a 2010 study he co-authored, firms were more likely to commit to a policy of non-disclosure if managers were more certain that they would have bad news to report in the future. Those firms also tended to have a larger percentage of long-term investors. "[Managers] say earnings guidance is bad and it makes us myopic, but if you look closely at those companies, the big message there is just performance; they're not doing well so it's hard for them to forecast anything," Rajgopal says. "The rationale for them is not to forecast anything.... If you're not able to meet the target, you're seen as a bad manager or a bad forecaster."

If Not Earnings Reports, What?

In the end, the short-term demand to produce is not necessarily a bad thing, Bushee adds. "All managers would tell you it would be great if we had long-term, stable investors who just left us alone to run the company,

which sounds nice if you trust that management is going to maximize shareholder value in the long run," he says. "Having short-term pressure is a good thing because it forces managers to focus on the company. They're facing constant pressure to perform. If you didn't have constant pressure, you could invest for the long-term, but you could also slack off without as much short-term penalty."

If earnings reports were jettisoned, the question becomes what system would take their place. One option is to change the frequency by which companies provide information—either by asking executives to provide more frequent, or less frequent, updates. Both options are potentially problematic, Bushee suggests.

Technology makes it possible for CFOs to aggregate earnings and other performance numbers on a daily or weekly basis, but "that would be too much information for investors and analysts to process and too much for managers to try to explain if there's an odd day," Bushee notes, adding that less information might also create more unpredictability in the market. "Think about if General Motors only announced financial results once a year. That would mean the rest of the year, there is the potential for more volatility in the stock price because it's all based on rumors, speculation and inside gossip. Nobody would have any facts to use in valuation models until we got to the end of the year. So the quarter is a nice balance between giving us timely information about how the company is doing, and not giving us too much information to process."

Although some have suggested that a switch to the European model of corporate governance, which focuses on a broader set of stakeholders, would end such practices as cuts to staff or R&D for the sake of earnings and stock price, Rajgopal emphasizes that this approach is not necessarily better. "The stakeholder business has its own problems because, who are you really trying to work for?" he says. "At least here you have one goal and that is to maximize stock price. If you're trying to maximize the welfare of employees, communities and other stakeholders, many of those things are contradictory."

In the end, every firm has to decide on its own what the optimal level of communication is and whether that includes giving earnings guidance, Balakrishnan states. "We have to take a step back and see mandatory reporting, which requires managers to file information about the past quarter, as separate from earnings guidance numbers, which is a manager's view about what they will make in the next quarter. In one case—the earnings report—the information is precise, and so there should be no reason why we should try to put any blame on that report. With earnings guidance, it's a voluntary disclosure by a manager, and managers have to make that call based on the information they have, what they want to convey, how much they want to convey and when they want to convey it."

Any policy intervention related to earnings would have to "look at all of the interlocking jigsaw pieces," including managers, investors and analysts, Edmans says. "The earnings targets in and of themselves are not bad things, but if people rely on them too much and think, 'Oh, we can just observe the earnings announcement and we don't need to actually monitor the company,' then that's when it becomes bad." What observers should do instead, Edmans adds, is take a page out of the playbook of a sports team manager. "If you want to assess a baseball player or a soccer player, you could only look at a player's stats ... but that's not what you would do in reality. In reality, you send scouts to watch the person actually playing and to capture some of the elements of play [that] are not captured in stats."

Wharton Alumni Working in
Public and Non-Profit Sectors

The John M. Bendheim
Loan Forgiveness Fund for Public Service

Wharton alumni working in public and non-profit sectors may apply for this unique funding opportunity

The John M. Bendheim Loan Forgiveness Fund for Public Service is designed to encourage Wharton MBA graduates to pursue careers in the public and non-profit sectors. Awards are based on commitment to the public and/or non-profit sectors, long-term career goals and financial need. This unique fund was created in 2005 by John M. Bendheim, W'40, and his son Thomas L. Bendheim, WG/Lauder'90, and the Leon Lowenstein Foundation.

This program is available to any eligible student beginning with the Class of 2006. Applications must be submitted to Wharton's Financial Aid Office by November 1, 2010. Applications received after this date will not be considered.

Applications must include the following:
- Completed Application
- Essay (1,000-word maximum)*
- Current resume
- Letter from employer describing its mission and activities
- Most recent tax return of applicant and spouse, if applicable
- Verification of outstanding loan debt from lenders or servicers

Completed applications may be sent to:
MBA Admissions Office
420 Jon M. Huntsman Hall
3730 Walnut Street
Philadelphia, PA 19104

Applicants applying for renewed funding must submit a new essay.

For more information, please visit the website at:
www.wharton.upenn.edu/mba/admissions/loan-forgiveness-program.cfm

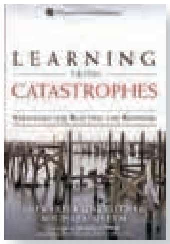
Wharton
University of Pennsylvania

What's New At . . .

Wharton School Publishing

The Best in Business Books

The most popular recent titles from Wharton School Publishing



Learning from Catastrophes: Strategies for Reaction and Response

By Howard Kunreuther and Michael Useem

Sept. 11. Hurricane Katrina. The 2004 tsunami. The Great Recession. This decade has yielded some of the most dramatic and deadly disasters in recent history.

While tragic, these cataclysmic events have also provided some benefit: They have prompted leaders, both in government and in business, to start thinking more seriously about how they can prepare for—and, hopefully, mitigate—the next major disaster. It's a promising trend.

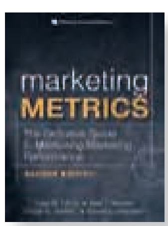
But Wharton professors **Michael Useem** and **Howard Kunreuther** believe still deeper thinking about disasters, and more intense planning for them, is desperately needed. In *Learning from Catastrophes: Strategies for Reaction and Response,* the authors draw on the expertise of leading thinkers from the world of risk management to teach executives and other leaders how to systematically prepare their organizations for disasters, man-made or otherwise.

Financing the Future: Market-Based Innovations for Growth

By Franklin Allen and Glenn Yago

In *Financing the Future: Market-Based Innovations for Growth*, two leading experts—**Franklin Allen**, a Wharton professor of finance and economics, and Glenn Yago, Director of Capital Studies at the Milken Institute—explain how sophisticated capital structures can enable companies and individuals to raise funding in larger amounts for longer terms and at lower cost, thereby accomplishing tasks that would otherwise be impossible. The authors recount the history and basic principles of financial innovation, showing how new instruments have evolved—as well as how they have been both used and misused. In this important and highly readable book, Allen and Yago thoroughly demystify complex capital structures, offering a practical toolbox for entrepreneurs, corporate executives and policymakers.

Financing the Future presents clear, thorough discussions of the current role of financial innovation in capitalizing businesses, industries, breakthrough technologies, housing solutions, medical treatments and environmental projects. It also presents a full chapter of lessons learned: essential insights for stabilizing the economy and avoiding pitfall.

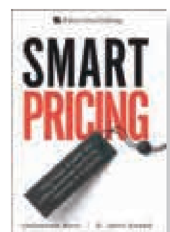


Marketing Metrics: The Definitive Guide to Measuring Marketing Performance, 2nd Edition

By Paul W. Farris, Neil T. Bendle, Phillip E. Pfeifer and David J. Reibstein

Marketing Metrics, Second Edition, is the definitive guide to today's most valuable marketing metrics.

In this thoroughly updated and significantly expanded book, four leading marketing researchers show exactly how to choose the right metrics for every challenge. The authors show how to use marketing dashboards to view market dynamics from multiple perspectives, maximize accuracy and "triangulate" to optimal solutions. Readers will discover high-value metrics for virtually every facet of marketing: promotional strategy, advertising and distribution; customer perceptions; market share; competitors' power; margins and pricing; products and portfolios; customer profitability; sales forces and channels; and more. This edition introduces essential new metrics ranging from Net Promoter to social media and brand equity measurement. Last, but not least, it shows how to build comprehensive models to support planning—and optimize every marketing decision you make.



Smart Pricing: How Google, Priceline, and Leading Businesses Use Pricing Innovation for Profitability

By Jagmohan Raju and Z. John Zhang

Price wars are inherently destructive. At least, that's been the assumption of many in the business world for decades now.

But according to Wharton experts **Jagmohan Raju** and **Z. John Zhang**, it's time to throw that pricing assumption—and many others—right out the window. In *Smart Pricing: How Google, Priceline, and Leading Businesses Use Pricing Innovation for Profitability*, Raju and Zhang explore innovative pricing that are helping companies create and capture more value and more new customers. In so doing, they offer a powerful alternative to traditional pricing models.

EMAIL: classnotes@wharton.upenn.edu
FAX: +1-215-898-2695

Wharton
UNIVERSITY of PENNSYLVANIA
PHILADELPHIA | SAN FRANCISCO

The Wharton Global Alumni Forum
June 23-24, 2011
San Francisco

Creative Solutions for
Global Challenges

10th Anniversary
WHARTON
San Francisco

Wharton will hold its 40th Global Alumni Forum
on June 23-24, 2011, in San Francisco. Engage with top academics, business and civic leaders, and Wharton alumni from around the world – and celebrate the 10th anniversary of the establishment of Wharton | *San Francisco*, the School's West Coast campus and home to a thriving MBA Program for Executives.

www.whartonsanfrancisco11.com

Final Exam

Think you could still ace your way through Wharton? Well, here's your chance to prove it.

In each issue of *Wharton Magazine*, we'll test your knowledge with a question taken straight from an actual Wharton course exam. Submit the correct answer and you might just walk off with a great prize—a Wharton Executive Education program.

This issue's Final Exam question comes from **T. Tony Cai**, Wharton's Dorothy Silberberg Professor of Statistics. This particular question looked downright frightening to the math-challenged staff here at the magazine, but Professor Cai assured us that the problem would be "easily understandable" for a Wharton alum. To us, dear readers, that sounds like a challenge. Good luck.

The Basics

Two envelopes, each containing a check, are placed in front of you. You are to choose one of the envelopes, open it, and see the amount of the check. At this point you can either accept that amount or you can exchange it for the check in the unopened envelope. Let A and B, A < B, denote the (unknown) amount of the checks, and note that the strategy that randomly selects an envelope and always accepts its check has an expected return of (A + B) / 2. Can you do better?

Question:

Let X be a continuous non-negative random variable, and consider the following strategy: Generate the value X, accept the first check if its value is greater than X and exchange it otherwise. Find the expected return of this strategy. Now take a specific example. Calculate the expected return of the above strategy when A = 4, B = 10 and X is exponentially distributed with mean 7.

ON THE WEB

Think you know the answer? Submit your response at *www.whartonmagazine.com* by January 4. Professor Cai will post the correct answer on January 5. One winner will be selected to attend, tuition-free, one Executive Education, 3- to 5-day open enrollment program.

Does not include travel, expenses or personal costs incurred; subject to availability and admissions criteria; excludes the Advanced Management Program, Executive Development Program, Essentials of Management, Health Care, Industry-Specific and Global Programs.

CORPORATE GOVERNANCE
Best Practices *for* Directors

Wharton
UNIVERSITY *of* PENNSYLVANIA
Aresty Institute of Executive Education

SpencerStuart

As a corporate board member, you shoulder enormous responsibilities. You safeguard the organization's reputation and capital. You help to ensure that the company stays ahead of competitive threats and other dangers. And you monitor and counsel management, deal with investors, and have accountability for the organization's performance.

The Wharton School at the University of Pennsylvania—the most comprehensive source of business knowledge in the world—and **Spencer Stuart**—the leading firm for board counsel and recruitment have joined forces to bring you a program that prepares you for these and other responsibilities of board membership. Join your peers from around the world to gain firsthand perspectives and in-depth analysis on what is happening in corporate governance today from general counsel and governance experts, along with current and former directors and CEOs.

In this program you will:

- Examine best practices regarding the role of the board in strategy development, succession planning, board and executive compensation, and company evolution.
- Recognize institutional investors as a new audience looking to boards for answers and learn successful ways to communicate with them.
- Understand the essential questions that board members should be asking management and outside experts.
- Discover the new reality of corporate governance and benchmark against the practices of some of today's most successful companies.

Corporate Governance: Best Practices for Directors

March 14–17, 2011 • Philadelphia, PA

Optional Finance Immersion Day: March 14, 2011

For more information or to enroll in this program, please contact us:

1.800.255.3932 *(U.S. or Canada)*
+1.215.898.1776 *(worldwide)*
execed@wharton.upenn.edu *(e-mail)*

www.WhartonCorporateGovernance.com

Wharton
UNIVERSITY *of* PENNSYLVANIA

The Wharton School
University of Pennsylvania
344 Vance Hall
3733 Spruce Street
Philadelphia, PA 19104

Change Service Requested

Non-Profit Org.
U.S. Postage
PAID
Minneapolis, MN
Permit #3723

Wharton Sustainability Program

Mixed Sources
Product group from well-managed forests and other controlled sources
www.fsc.org Cert no. SW-COC-002059
© 1996 Forest Stewardship Council
FSC