

# RADY BUSINESS JOURNAL

A PUBLICATION OF THE RADY SCHOOL OF MANAGEMENT

SUMMER 2009 VOL. 2, ISSUE 1

## Business & Psychology

BY CRAIG R.M. MCKENZIE

### In Response

BY HARRY MARKOWITZ

**Medical Tourism**  
A Solution to the Healthcare Crisis?

BY MATTHEW DUNPHY

**Is the U.S. Following  
in Japan's Footsteps?**

BY TETSUO MIZUNUMA

**Big Shoes to Fill**  
How CEO Transitions Benefit from  
Internal-External Candidates

BY BRENT APPELGATE

**The Future of Sony**  
A Conversation with Stan Glasgow

BY JULI IACUANIello

**The Business Plan**  
What It Really Boils Down To

BY MARCOS RIVERA



# 2010

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# TABLE OF CONTENTS

**02**  
FROM THE EDITOR

**03**  
RADY STUDENT-LED INITIATIVES

**04**  
CONTRIBUTORS

**06**  
DEAN'S CORNER

**08**  
**Medical Tourism:**  
A Solution to the Healthcare Crisis?  
*By Matthew Dunphy*

**12**  
**Is the U.S. Following**  
**in Japan's Footsteps?**  
*By Tetsuo Mizunuma*

**16**  
**Business & Psychology**  
*By Craig R.M. McKenzie*

**23**  
**In Response**  
Harry Markowitz comments  
on "Business & Psychology"

**25**  
**Big Shoes to Fill**  
How CEO Transitions Benefit from  
Internal-External Candidates  
*By Brent Applegate*

**29**  
**The Future of Sony**  
A Conversation with Stan Glasgow  
*By Juli Iacuanillo*

**32**  
**The Business Plan**  
What It Really Boils Down To  
*By Marcos Rivera*



# FROM THE EDITOR»

America is in the midst of a transition. Though at press time, it is difficult to articulate exactly what we're transitioning into. From this June vantage point, America's economic, political and global evolutions are difficult to forecast. The Rady Business Journal seeks to be a source of relevant and insightful business ideas regardless of where we've been, where we are or where we're going.

In this issue, Professor Craig R.M. McKenzie explores how the field of judgment and decision making impacts all aspects of business. His article, "Business & Psychology," investigates how people seek, interpret and combine information, as well as mistakes they make in doing so. Nobel Laureate Harry Markowitz responds in a commentary about the intersection of psychology, portfolio theory and the economic crisis.

Matthew Dunphy, a medical tourism business owner, examines the next frontier of healthcare – receiving it abroad. "Medical Tourism: A Solution to the Healthcare Crisis?" addresses the traditional arguments against outsourcing healthcare and argues that this remains a viable way to cut consumer costs.

An official at Japan's Ministry of Finance, Tetsuo Mizunuma takes an intriguing journey through Japan's own financial crisis. In "Is the U.S. Following in Japan's Footsteps?" he compares Japan's "lost decade" to

the U.S.'s recent and current experiences, prescribing lessons to the U.S. based upon those learned by Japan.

In "Big Shoes to Fill," Brent Applegate investigates internal-external succession planning. He draws upon the recent CEO transition at San Diego's Gen-Probe, wading through the challenges in making a successful transition to discover the new wave of candidate selection.

Juli Iacuniello chronicles her conversation with Stan Glasgow, president and COO of Sony Electronics Inc., in "The Future of Sony," gaining insight into how Sony is positioning itself, increasing internal collaboration and embracing continued changes in the electronics industry.

Marcos Rivera's "The Business Plan: What It Really Boils Down To" provides smart tips for writing a business plan that will get attention. Not just another generic article on how to put the pieces together, his instructional piece will help you determine whether you and your idea really have what it takes to succeed.

In this, our second issue, the Rady Business Journal wants to not only navigate the choppy waters of this time of transition, but to provide guidance and insight to help us all safely reach the other side.

Bon voyage. ■



*Casey Frandrup*

**Casey Frandrup**  
Editor-in-Chief

# » RADY STUDENT-LED INITIATIVES

## RADY VENTURE FUND

What do you need to build a successful technology startup? Surprisingly, the state of the economy does not matter much. In fact, the list of successful technology companies created during difficult economic times includes Microsoft, Hewlett-Packard, Oracle and Cisco. However, three things are still needed – great people, the right idea and money.

To help entrepreneurial students understand venture investments, the Rady School is planning a new educational initiative in venture investing linked to the **Rady Venture Fund**, a student-assisted venture capital fund to be created through philanthropic donations.

Rady MBA and UC San Diego graduate students will gain hands-on experience in all phases of venture investing while enrolled in a rigorous, three-course series in venture finance, investment analysis and venture capital fund management. They will raise investment capital, generate and screen investment leads, perform due diligence and recommend investments to a committee of experienced venture capitalists, angel investors, entrepreneurs and Rady faculty, as well as track portfolio companies through liquidity events.

The fund will make one to two investments per year in seed and early-stage local ventures in life sciences, biotech, high-tech and cleantech industries. It will provide both equity and debt financing, including convertible debt. Investments will range from \$75,000 to \$150,000, and the fund will not invest without at least one direct external investor. Proceeds from the fund will be reinvested in the fund or used to build the Rady School endowment.

Students will learn by doing—gaining the skills, perspective and competitive edge necessary to succeed in today's global, knowledge-driven marketplace.

Individuals interested in contributing to the Rady Venture Fund should contact Lada Rasochova at 858.534.0918, [lrasochova@ucsd.edu](mailto:lrasochova@ucsd.edu) or Graig Eastin at 858.822.4230, [geastin@ucsd.edu](mailto:geastin@ucsd.edu).

## MBA INVESTMENT ASSOCIATES

**MBA Investment Associates (MBAIA)** was founded by the Rady School class of 2009 to create and manage an independent investment fund. Unlike other MBA-managed portfolios, MBAIA utilizes a novel investment philosophy centered on risk management and transparency and a strong focus on ethics and responsible investing. Fund managers will also leverage the core technical, scientific and innovative strengths of Rady MBAs. MBAIA is an ideal platform for MBAs with strong academic backgrounds in finance to enhance their career skills through hands-on investing and portfolio management.

Working with renowned UC San Diego faculty, credible industry experts and investment professionals, students will be trained in risk management, active portfolio management and responsible investing. The fund is being developed in conjunction with a new graduate-level investments curriculum focused on risk management.

MBAIA is designed to provide students with real-world experience by allowing outstanding Rady MBAs to manage assets from private investors. Selected through a rigorous application and interview process, students will manage the fund with close supervision by the advisory and oversight committees. These independent bodies are charged with providing frequent guidance to MBAIA portfolio managers. Members of the advisory and oversight committees include globally renowned finance professors and prominent industry professionals.

Amid the growing tide of financial distress, a new class of investment professional will emerge. MBAIA will provide the industry with a fresh and innovative look at investing, along with a balanced view of risk management and ethical investing that complements a commitment to education and the community overall.

For investment information, please contact MBAIA at [Invest@MBAInvestmentAssociates.com](mailto:Invest@MBAInvestmentAssociates.com). Students interested in applying should email [Applications@MBAInvestmentAssociates.com](mailto:Applications@MBAInvestmentAssociates.com).

# CONTRIBUTORS»

pg 16

**Craig R.M. McKenzie** is a professor of management & strategy and psychology. His research and teaching revolve around how people make decisions in the face of uncertainty and how to help people make better decisions. McKenzie has won awards from the National Science Foundation, the Operations Research Society of America and the Society for Judgment and Decision Making. He received his Ph.D. in psychology from the University of Chicago.



pg 23

**Harry Markowitz** is an adjunct professor of finance at the Rady School. He is best known for winning the Nobel Prize in Economic Sciences for his work on portfolio choice. Markowitz has served in various academic posts at universities around the world and is a board member and former president of the American Finance Association.



pg 08

**Matthew Dunphy (FT '09)** is a Rady School MBA student and co-founder of Medical Tourism Solutions LLC ([www.medicaltourismsolutions.com](http://www.medicaltourismsolutions.com)), an intermediary assisting clients with the acquisition of affordable overseas surgical care in Colombia. The company focuses on dental services, outpatient surgery, weight-loss procedures and fertility treatment and has begun expansion efforts in Latin America. Dunphy also offers marketing consultation services for medical tourism ventures.



pg 12

**Tetsuo Mizunuma (FT '09)** is a Rady School MBA student on a full scholarship from the Japanese government. He is an official at Japan's Ministry of Finance working in trade policy and tax inspection. Mizunuma served as a guest lecturer at Gakushuin University from 2003-2005 and in 2008 won the Excellent Research Award from the Global Business Research Institute, a leading think tank in Japan.



pg 25

**Brent Applegate (FT '09)** is a Rady School MBA student. At Rady, Applegate served as president of the Life Tech club and completed a summer internship in marketing at Gen-Probe. Prior to business school, he worked for six years in the computer industry and is transitioning into healthcare to pursue the growing trend of personalized medicine.



pg 29

**Juli Iacuniello (Flex '09)** is a Rady School MBA student and works as manager of strategic marketing at SKF, a multi-billion-dollar industrial manufacturer, where she is responsible for market research, strategic planning and competitive intelligence. Previously, Iacuniello worked as a financial journalist on the editorial staff of Morningstar Italy, where she interviewed fund managers and authored articles on the financial markets.



pg 32

**Marcos Rivera (Flex '07)** is a 2007 Rady School graduate. He has successfully launched several Internet software solutions for Mitchell International, HSBC and BMW. Rivera is the founder of Saint Rivera Group, a consultancy specializing in launching Internet-based startups. He is a Qualcomm Scholar of the Year and holds a bachelor's degree in management science and an MBA, both from the University of California, San Diego.





# DEAN'S CORNER »



**What a year!** The world is experiencing the worst economic crisis since the 1930s. The Dow Jones is hovering around 50 percent of its highs, and the price of oil has dropped 40 percent. We live in uncertain times, where the quality and integrity of leaders and managers of major corporations are called into question. “Wall Street versus Main Street” has become the mantra of the politically correct – a divisive slogan at best during a very disconcerting year.

These troubling economic times provide many lessons for schools of business. They, of course, involve issues of ethics, transparency and social responsibility; and the capacity for innovation and competitiveness. Business schools have an immense opportunity to effectively reverse the economic meltdown. Indeed, they have an important role in redefining a new foundation for economic prosperity. Business schools can seize the moment to aggressively and proactively participate in recovery. More than ever, they can inspire and educate a new breed of leaders and managers.

Politicians and the press are adept at finger pointing and generalizing. A few very bad apples and bad decisions, along with poor implementation

**Robert S. Sullivan** joined the Rady School of Management as founding dean in 2003. Dr. Sullivan is an expert on entrepreneurship, knowledge management and operations management. Prior to his role at UC San Diego, Dr. Sullivan was dean of the Kenan-Flagler Business School of the University of North Carolina, Chapel Hill, and dean of the School of Industrial Administration at Carnegie Mellon University. Dr. Sullivan holds a doctoral degree in operations management from Pennsylvania State University, a master's degree in production management and quantitative methods from Cornell University and a bachelor's degree in mathematics from Boston College.



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“Today’s economic crisis again surfaces the question – does business school education appropriately instill and inspire social responsibility and integrity?”

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of existing federal and state oversight responsibilities, have readily translated into headlines of corporate greed and corruption. For business schools, this should be a particularly sensitive topic. Many of these corporate leaders have received some education at our schools. Yet business schools, unlike most other professional schools, do not require an overt commitment or an oath that defines personal conduct and responsibility. Business leaders and managers do not take the equivalent of the Hippocratic Oath. While issues of integrity and social responsibility are routinely imbedded in MBA curricula, such courses are not necessarily consistent and central. Consequently, our schools and our graduates become easy targets for criticism.

The current economic environment has tossed fuel on the fiery debate about business schools. As noted, many of the leaders of the most significant private sector organizations in the U.S. and abroad have roots back to our schools. Many have business school degrees, while others have participated in executive education courses. Today’s economic crisis again surfaces the question – does business school education appropriately instill and inspire social responsibility and integrity? Or as some have insinuated, do business schools, with their focus on a profitable bottom line, instill a sense of greed? Today, the politicians and pundits have given their (uninformed) answer – profits rule! Where in the public eye or in the press have business schools responded?

Another important question inspired by the economic meltdown involves the role of innovation and the ability of organizations to regain their competitive edge. As has been noted by many, the new industries of the 21st century will be defined by discovery and innovation. Science, technology, engineering and mathematics are fundamental for novel, path-breaking discoveries. The new breed of leaders and managers who can identify, understand, interpret and assess these discoveries will be those who create and grow tomorrow’s new industries. They will be entrepreneurial, and they will have the ability to anticipate new markets and opportunities. These new leaders and managers will create and grow the companies that stimulate and sustain economic growth and prosperity. And, these new leaders likely will be educated and inspired at schools of business!

The new leaders and managers will be essential for translating basic research and discovery into market opportunities – an engine for economic prosperity. Given the challenges of ethics and social responsibility, and the opportunities associated with innovation and competitiveness, business schools must participate in defining a path for economic recovery. They should be viewed as central to the solution, not part of the problem. They have a role to play, and they must aggressively and visibly pursue this role.

President Obama’s administration has laser focus on the economy. The President’s Council on Innovation and Competitiveness is in direct response to the well-articulated perils of the U.S. lagging in science and technology. Yet, while basic science and engineering are repeatedly highlighted, nowhere is there mention of the essential need for 21st century managers and leaders – those highly talented individuals who can help to translate discovery into market value and impact. This new cadre of leaders and managers more than likely will have received education and inspiration at business schools. They will lead the organizations that define new economic growth and prosperity.

As we reflect on the past year, it is easy to be anxious, if not downright frightened. We have never experienced a global downturn like this. However, there will be a turnaround, and there will be immense opportunities. These lessons of accountability, social responsibility and integrity must now be blazed on every aspect of business education. MBAs must be innovators and entrepreneurs. They must have the ability to understand and translate new scientific discoveries for the benefit of individuals and communities. These new leaders and managers are essential for defining, creating and growing new global competitive economies.

Business schools must assume the responsibility and seize the moment. They must be proactive and visible players in any forthcoming economic recovery. Business schools can help instill hope and confidence in an extraordinary economic future – somewhere on the horizon! ■



*Hospital Angeles Lomas in Mexico City, Mexico. Photo courtesy of Hospitales Angeles, Mexico.*

# MEDICAL TOURISM

## A SOLUTION TO THE HEALTHCARE CRISIS?

BY MATTHEW DUNPHY

**With President Obama coming to power amidst promises of change, much of life in America may face a transition, including its healthcare.** The debate on the rising cost of healthcare is decades long, and the problem is only getting worse. What better time, then, to evaluate and consider some legitimate options?

While not a panacea, medical tourism is a potential solution. Outsourcing in any field often gets a bad rap. People worry about the quality of care received in overseas hospitals and question whether this actually saves money. But, as an owner of a medical tourism company since 2006, I argue there is no better time to reevaluate medical tourism, both for consumer savings and to reduce the strain on our exhausted national healthcare budget.

### THE HEALTHCARE CRISIS

The United States faces a healthcare crisis. According to the National Coalition on Healthcare, in 2007 healthcare spending reached \$2.4 trillion, representing 17 percent of GDP. This breaks down to around \$7,900 per person.

The Organization for Economic Cooperation and Development meanwhile reports that only a few other countries spend more than 10 percent of GDP on healthcare, with

U.S. to benefit from our technology and advanced medical techniques. However, in the last decade, Americans and people from other industrialized countries, such as

having entered the market. Last fall, I was one of over 850 attendees at the Medical Tourism Association's trade show. This fall, more than 2,000 are expected at the same event.

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“The debate on the rising cost of healthcare is decades long, and the problem is only getting worse.”

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the closest being Switzerland at 11.3 percent of GDP in 2006. At the current rate of growth, the National Health Statistics Group projects the U.S. will reach \$4.3 trillion in healthcare spending by 2016.

Driving this huge expense, nearly 46 million Americans, or 18 percent of the population under age 65, were without health insurance in 2007, according to U.S. Census Bureau data, and 120 million Americans have no dental insurance. Even worse, the cost of health insurance premiums is rising faster (6.1 percent from 2006-2007) than wage rate growth (3.7 percent) or inflation (2.6 percent), according to the Kaiser Family Foundation's 2008 Employer Health Benefits Survey.

Suggestions to address this problem vary. Coverage must increase and costs must decrease for a solution to be politically feasible. Considering these aims, medical tourism looks helpful in two ways: 1) lowering costs on non-emergency procedures by performing them abroad and 2) reducing overall costs so that medical coverage can be extended to more people.

### THE HISTORY OF MEDICAL TOURISM

For centuries, people have traveled to faraway places in search of better-quality healthcare. More recently, people have come to the

Canada and the U.K., have started going elsewhere to avoid skyrocketing medical costs and long waits for procedures at home. The ease and efficiency of international travel in addition to the increasing numbers of U.S.-trained doctors abroad have further boosted medical tourism.

Currently India, Thailand and Mexico are some of the more popular destinations for Americans. Seeing the potential for increased tourism spending and local job creation, governments in medical tourism destinations are investing millions of dollars in promoting their countries as preferred locations. International hospitals meanwhile are filing for international accreditation and marketing themselves directly to the new global healthcare shoppers.

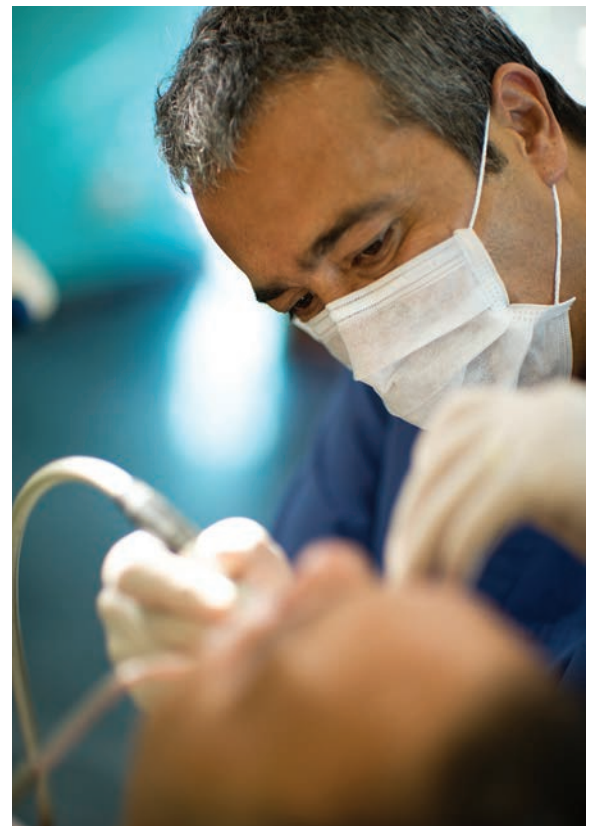
When I first began researching the medical tourism market in 2005, only a handful of U.S.-based companies existed and media coverage was minimal. Fast-forward four years and over 50 countries are marketing themselves as medical tourism destinations, with countless intermediaries

### CUTTING THROUGH THE HYPE IN MEDICAL TOURISM

Data shows that medical tourism is growing. But is this a salve for America's healthcare crisis?

The cost savings suggest that it could be a viable remedy. Prices for procedures abroad can be as low as 10 percent of what they cost in the U.S., and generally average 25-40 percent of U.S. costs. Emergency care is not well-suited for medical tourism due to the immediacy of the need. But routine non-emergency or elective procedures can feasibly be offered internationally.

For example, a gastric bypass procedure can cost up to \$30,000 in the U.S. This same procedure in





## Medical Tourism: A Solution to the Healthcare Crisis?



Patient room in Hospital Angeles in Ciudad Juárez, Mexico. Photo courtesy of Hospitales Angeles, Mexico.

Monterey, Mexico, costs \$9,000. Even when you factor in \$2,000 for travel, lodging and logistical costs, this still represents a savings of over 60 percent. Whether one is excited about this industry or not, margins this large are notable.

The Deloitte Center for Health Solutions' 2008 report on medical tourism puts the market at \$60 billion annually, with 1.5 million Americans estimated to have gone abroad for surgical care in 2008 alone. Between 10 million and 23 million outbound American medical tourists are expected by 2017.

The key to the range in this projection is the degree to which medical tourism is integrated into health insurance plans or governmental coverage. This is where the true potential of medical tourism lies: developing "in-network" options for insurance plans to incorporate international facilities. The future could entail global policies which specify that certain non-emergency procedures would be performed abroad, in return for a drastic reduction in the premiums paid. Not only would this save the consumer money, but also the businesses offering employee coverage.

### OBSTACLES TO IMPLEMENTATION

Despite the obvious benefits of medical tourism, there are critics. Domestic hospitals and surgical associations have vocally opposed medical tourism, citing patient safety concerns. While not endorsing medical tourism, the American Medical Association did issue guidelines for best practices in the industry in 2008, representing a shift in previous attitudes. Given the positive

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“According to the National Coalition on Healthcare, in 2007, healthcare spending reached \$2.4 trillion, representing 17 percent of GDP.”

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feedback received from customers receiving procedures ranging from dental surgery to a gastric bypass procedure, I contend that when properly planned and implemented through reputable organizations, concerns about the quality of healthcare are generally unfounded. In fact, outcomes are often superior in international hospitals where there are more nurses and therefore more attention for the recovering patient. Renee-Marie Stephano, the COO of

the Medical Tourism Association, a trade group tracking this industry, echoes this. She says that, generally, in private American hospitals, the nurse-to-patient ratio is one to 10 compared to a ratio of one to three in the private hospitals catering to medical tourists. “Most patients also get the cell phone (number) of the doctor, which is virtually unheard of in the States,” she says.

I believe the real obstacle for achieving widespread medical tourism is skepticism and resistance among politicians and CEOs. Even when presented with the benefits of reduced medical costs, government and business leaders fear the loss of American jobs. In light of the current economy, this is probably medical tourism's biggest hurdle to overcome.

### MEDICAL TOURISM AND THE BORDER SOLUTION

One rebuttal to these objections involves phased implementation. Certain ethnic groups are some of the most willing medical tourists, with the Deloitte study citing 51.4 percent of Hispanics and

56.8 percent of Asians saying they would consider medical tourism. Caucasians and African-Americans were both reported to have a willingness of below 40 percent. With the heavy concentration of Hispanics in the American Southwest and its proximity to Mexico, this is a natural place to focus on the medical tourism solution in the short term. Once medical tourism becomes more mainstream, it could then be rolled out to a larger population and geographic base.



The first step is forming alliances between Mexican hospitals and U.S. insurance companies or self-insured employer groups. To assuage quality concerns, only those Mexican hospitals that have achieved Joint Commission International accreditation would be selected. The Joint Commission is the same group that accredits hospitals in the U.S., thus assuring the same level of quality found at home. These organizations could then offer new types of insurance plans that feature drastically reduced premiums and stipends to cover travel expenses to international in-network facilities. The recently unveiled Blue Shield Access Baja Plan illustrates this. In fact, a recent survey

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“Prices for procedures abroad can be as low as 10 percent of what they cost in the U.S., and generally average 25 to 40 percent of U.S. costs.”

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by the International Foundation for Employee Benefit Plans reported that 11 percent of their surveyed companies are now covering medical tourism as part of their plans.

New insurance plans like this not only appeal to companies with a large Hispanic makeup, but could also target small- to medium-sized business. The Kaiser Foundation reports that in 2008, only 62 percent of small firms (3-199 employees) offered health insurance benefits, down from 68 percent in 2001. How many of these firms wanted to continue offering benefits, but couldn't afford it? How many jobs could be saved in companies in this region by cutting healthcare costs?

In my view, medical tourism does represent an opportunity for those with healthcare connections, especially in the insurance industry. The supply is there for those who can create the demand. In a contracting economy, the most successful ideas are ones that are disruptive, yet solve a problem.

Medical tourism is not a cure-all for the ailments of the U.S. healthcare system, but it is a viable alternative that could and should be included in a greater package of general reforms to the healthcare system. The global recession forces people to make sacrifices and consider options that aren't comfortable and probably would be rejected, had they more money. Given this difficult climate, now is not the time to ignore what could well benefit those in need. ■

### MEDICAL TOURISM RECOMMENDATIONS

Do your research. Ask for surgeon credentials and hospital or clinic accreditation.

Speak to your surgeon of choice before departure. Surgery is a personal process, and your relationship with your surgeon is an important element in ensuring a successful outcome.

Stay at a quality hotel to ensure a safe and sanitary recovery. You can save money here, but it is generally not worth it.

Stay in the country long after the procedure for a safe return trip home. Your surgeon should make this decision, not the medical tourism facilitator.

Ensure you will have access to your medical records upon departure. Make sure to bring a copy with you so you have records of your medical history.

Remember this is your health. Get input and support from intermediaries, but make sure that all final decisions are made by you. You have to live with the results.

Ask about legal recourse and liability. Is insurance available? Make sure to study waiver of liability agreements and other contracts before departure.

Ask for recommendations from friends or family. Ask to speak to a former patient if using a company you are unfamiliar with.



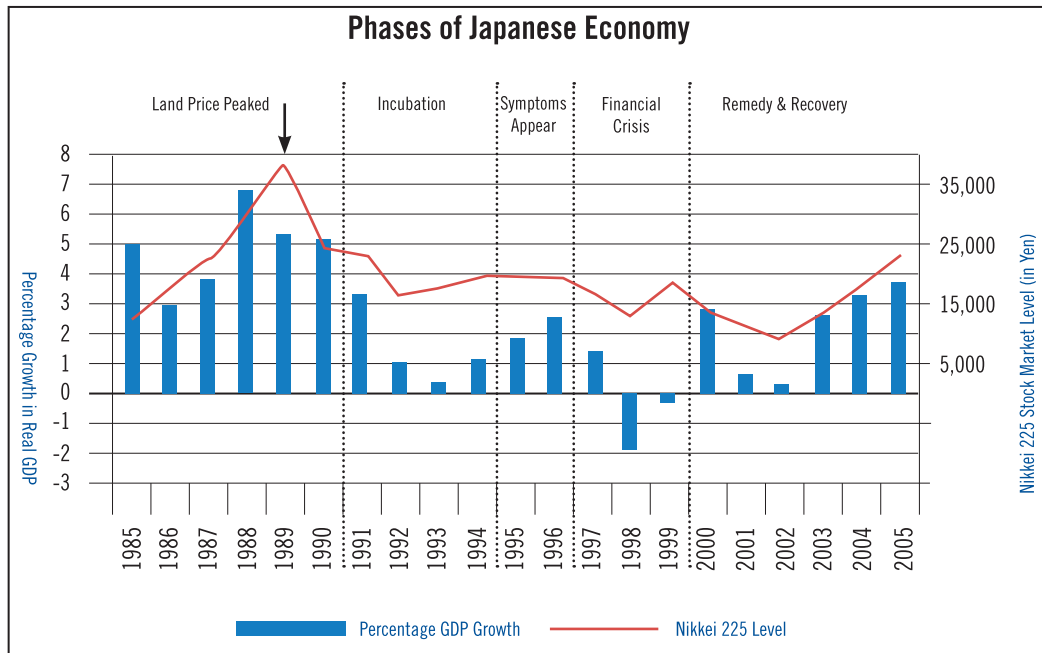
# IS THE U.S. FOLLOWING IN JAPAN'S FOOTSTEPS?

BY TETSUO MIZUNUMA

ENGLISH EDITED BY SAM ALTER, FT '10

## IS HISTORY REPEATING ITSELF?

When U.S. land prices started falling in summer 2006, most Americans remained optimistic and thought this would only impact the housing industry. However, as buzz words like subprime lending and securities fraud appeared in the media, Americans began realizing how grave the condition of the economy really was. As the recession deepened, researchers recalled Japan's bitter "lost decade" of the 1990s and discovered striking similarities. Takafumi Sato, commissioner of the Financial Services Agency of Japan, summarized the similarities at a global symposium held in Tokyo last October, saying that irresponsible lending was widespread previous to both crises. He noted that everyone assumed that real estate prices would continue rising, but, in both



Source: Economic Survey of Japan

cases, the financial market turmoil was triggered by declining real estate prices, and this market turmoil spilled over to the real economy. In both countries, Sato said, this resulted in a system-wide financial crisis, which necessitated public intervention by governments and central banks.

Breaking down the timeline of Japan's crisis may help the U.S. understand its own crisis – what has happened thus far and what may be expected for the future.

**PHASE 1 (1991-1994): INCUBATION**

With the exception of 1974, post-war Japan historically saw continually increasing land prices. It was this phenomenon which led many to believe in the myth of an ever-higher land price. Indeed, in the late 1980s, land prices increased sharply due to loose monetary policy, deregulation and speculative investment. But the myth was not true; land prices peaked in fall 1990. As

the euphoria ended and reality set in, banks found many questionable loans on their balance sheets. However, although the property bubble did burst, the economy still showed decent GDP growth. Most thought the recession was merely cyclical, that land prices would jump back up in a few years and that the problem would simply go away.

Change the years in the above paragraph, and the story has eerie similarities to that of the U.S. After World War II, U.S. land prices steadily rose, excepting some temporary recession periods. Around 2002, prices increased rapidly, then peaked in summer 2006. The U.S. recession, which had a much shorter incubation period than Japan's, officially started in December 2007.

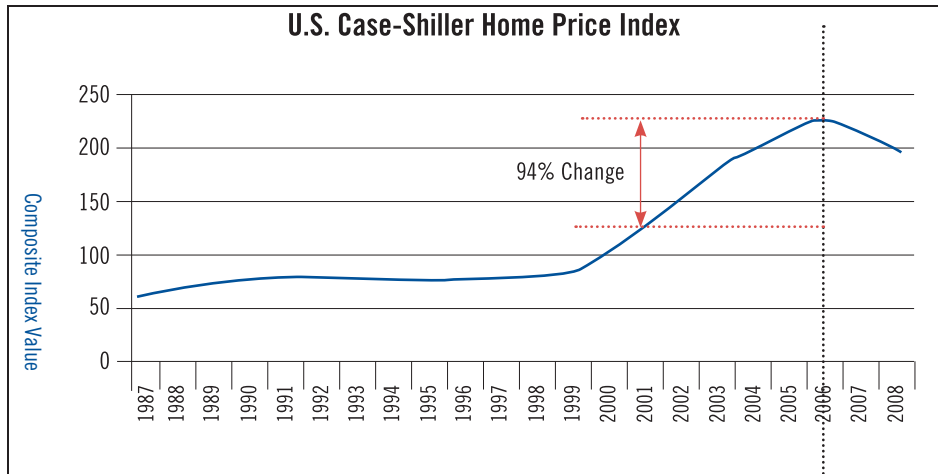
**PHASE 2 (LATE 1994-1996): SYMPTOMS BEGIN TO APPEAR**

Even in the mid-1990s, there were signs of rough times ahead for Japan. Several local banks and mortgage

financing companies began going bankrupt. In April 1992, the Toho Mutual Bank failed, and by the end of 1996, three local banks and 12 credit unions bankrupted as well. In July 1996, Japan's government dedicated ¥685 billion (\$6.3 billion) of taxpayer money to liquidate six major mortgage underwriters. After parliamentary hearings revealed the irresponsible lending practices at these banks, the government's decision created strong dissent among Japanese citizens. Out of the total ¥12.9 trillion (\$118.6 billion) in mortgage loans, a full ¥6.4 trillion (\$58.8 billion), or 49.6 percent, was unrecoverable. The Japanese people recognized the magnitude of negligent lending and feared a crisis.

In the U.S., this phase corresponds to 2007 and early 2008. Following a steep increase in subprime defaults, mortgage lenders started failing. Most prominently, the second biggest subprime lender, New Century Financial Corporation, filed for Chapter 11 in April 2007. More

## Is the U.S. Following in Japan's Footsteps?



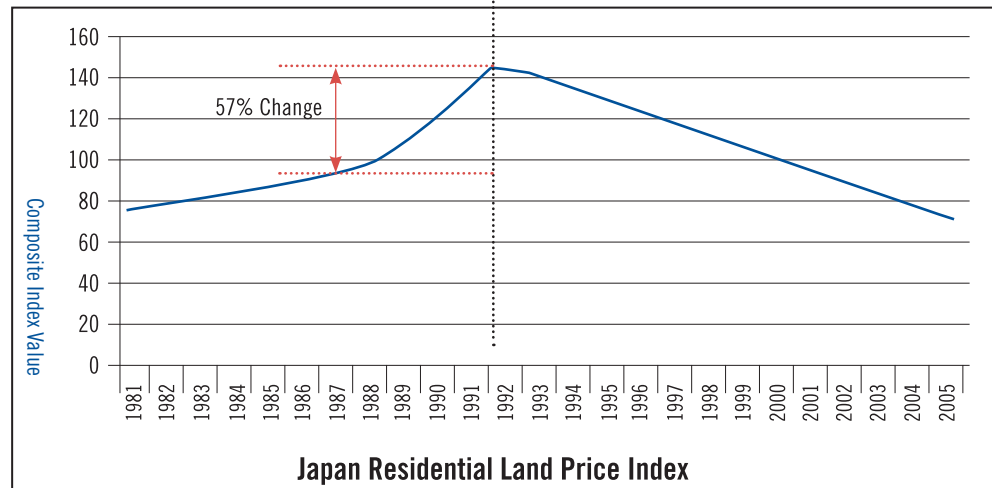
These charts depict the comparison between the peak price and the price five years before the peak. The U.S. experienced a much quicker price escalation than Japan.

*The Case-Shiller Home Price Index represents the real estate price index in the U.S.*

*The Residential Land Price Index is a similar index in Japan, surveyed nationwide by the Japan Real Estate Institute.*

Sources:

Fiserve, Inc. Case-Shiller Home Price Index and Japan's Ministry of Internal Affairs and Communication



than 100 subprime lenders failed, and the Federal Deposit Insurance Corporation reported three community bank failures in 2007. However, the effect on the economy was peripheral, and the financial system still appeared buoyant.

### PHASE 3 (1997-1999): CRISIS AND GOVERNMENT BACKLASH

When Japan's fated financial downfall arrived, it was sudden. On November 3, 1997, Japan's seventh-largest securities company, Sanyo Securities, declared bankruptcy and defaulted. As the first default in the Japanese inter-bank loan market in

post-war Japan, it created domestic and international chaos. Just two weeks later, Hokkaido Takushoku Bank, a major nationwide bank, could no longer borrow money and also was forced to declare bankruptcy. This bank failure set yet another precedent in post-war Japan.

Another week passed, and the fourth-largest securities company, Yamaichi Securities, filed for bankruptcy due to its huge amount of illegal off-balance sheet liabilities. The Japanese financial system was left paralyzed and lost investors' trust. This period was also famous for overseas investment fund managers called "hagetaka," meaning vultures, eying Japan in their voracious hunt for the next cheap buyout. In Japan, this month in 1997 later became known as "Black November."

In late 1997, Japan's government decided to step in and used taxpayer money to prop up its seriously damaged financial system. It passed the Financial Function Stabilization Act in February 1998, allocating a total of ¥30 trillion (\$231.7 billion) toward the purchase of subordinated loans or preferred stock of troubled banks. However, only ¥1.8 trillion (\$13.9 billion), or 6 percent, was successfully injected into 21 major banks. The banks hesitated



to receive the rest because they resisted depending on the government and feared the negative publicity that would inevitably follow.

In October 1998, the Japanese government got bolder and enacted two laws: the Financial Revitalization Act and the Prompt Recapitalization Act. Under this new scheme, the government quickly declared the Long-Term Credit Bank of Japan insolvent and nationalized it the same month. In December, Nippon Credit Bank was nationalized as well. Each bank had a long and glorious history, and consequently their combined downfall sent more shockwaves through Japan.

Finally, in May 1999, the tide of failures started to change. The government made a second injection of ¥7.5 trillion (\$65.5 billion) into 15 major banks, ending the crisis situation. The Japanese government had successfully removed the largely insolvent “zombie” banks from the market, while giving capital support to healthier banks with some hope of recovery.

The U.S. had its first real challenge in March 2008, when the nation's seventh-largest investment bank, Bear Stearns, found itself nearing bankruptcy. The Federal Reserve Bank (FRB) of New York provided an emergency loan to Bear Stearns to avert its sudden collapse, and J.P. Morgan ended up buying the firm at a fire-sale price. Had the U.S. economy staved off the crash at the last instant, or had it just seen the tip of an iceberg of underwater debt?

By the end of September, the gravity of the problem was clear. On September 8, the Treasury Department announced that it would take

over the government-sponsored mortgage behemoths Fannie Mae and Freddie Mac. One week later, the fourth-largest investment bank, Lehman Brothers, filed for Chapter 11 protection. The following day, AIG accepted the FRB's rescue package of \$85 billion to secure credit for default swap trading. Finally on September 22, Goldman Sachs and Morgan Stanley announced they would transform into bank holding companies, meaning that the once-mighty U.S. investment banks had all but vanished for the first time since the Glass-Steagall Act of 1933.

The U.S. government sought an emergency plan as a quick fix. The bailout plan under the name of the Emergency Economic Stabilization Act was approved on October 3. \$250 billion of public money was injected into nine major banks under the act's Troubled Asset Relief Program (TARP) on October 14. Subsequently, the government provided large sums of money to banks, insurance companies, auto financing companies and auto companies.

Although the U.S. government reacted more quickly than Japan's in their respective crises, the U.S. response was viewed as selective and disorganized. Initially, TARP's \$700 billion budget was aimed at buying toxic assets from banks, but instead, capital was injected into troubled and undercapitalized banks. Soon after, TARP's target was expanded to cover non-banking industries.

### **PHASE 4 (LATE 2001-2003): LONG-TERM REMEDY AND GRADUAL RECOVERY**

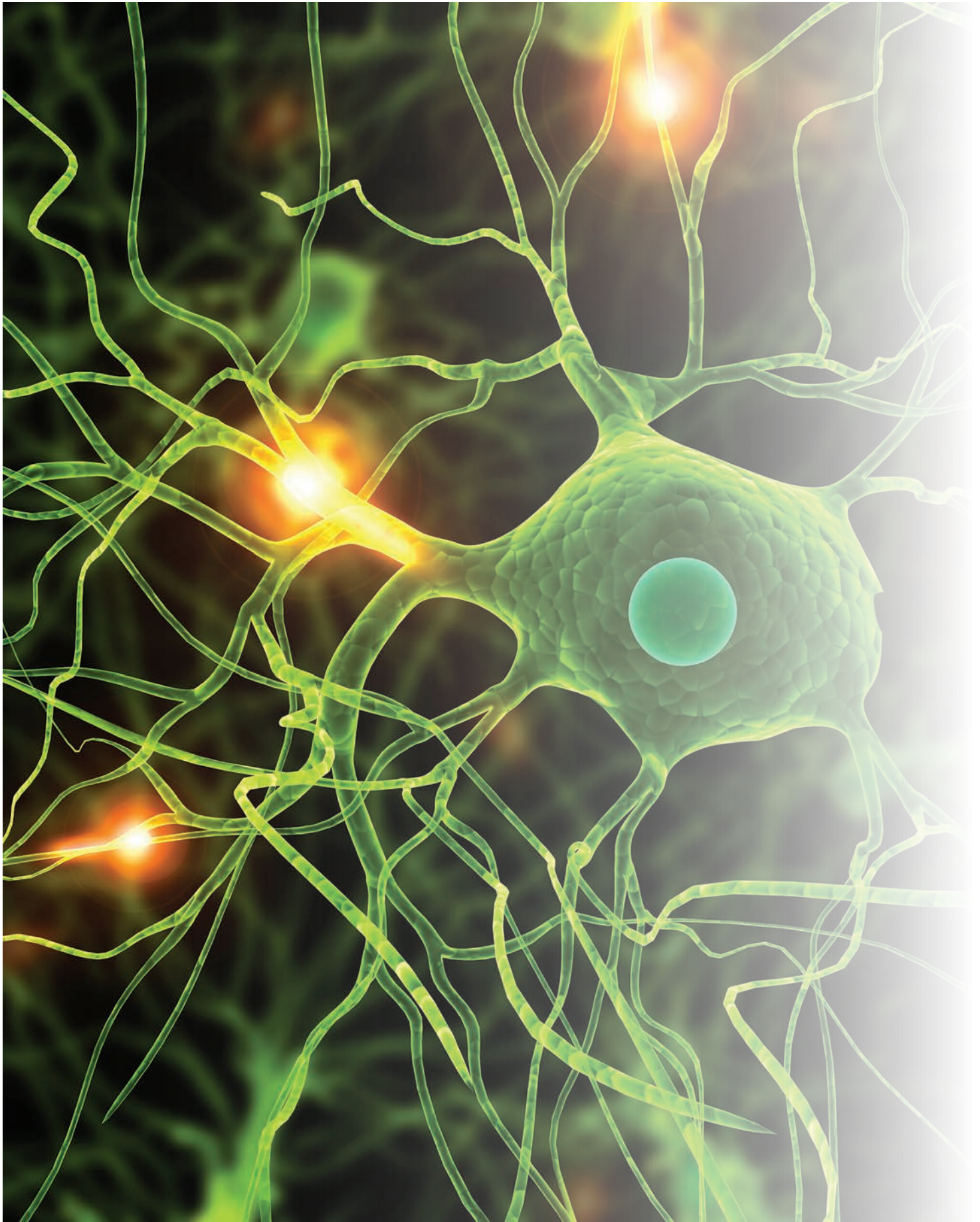
After successfully solving its crisis, Japan finally looked like it had recovered. In October 2002, the Financial Revitalization Program

called the Takenaka Plan instituted a toughened audit system for banks, forcing them to write off bad loans and raise sufficient capital to realize the loss on these non-performing loans. It also created the government-supported Industrial Revitalization Corporation of Japan (IRCJ) fund. Over time, IRCJ purchased and financed 41 projects for a total of ¥4 trillion (\$45.8 billion) in book-value loans, resulting in a ¥43 billion (\$492.2 million) profit. The policy was very successful at reducing bad loans and restoring confidence in Japan's financial system.

### **WHAT DOES THIS MEAN FOR THE U.S.?**

In conclusion, the U.S. seems to be experiencing Phase 3, “Crisis and Backlash,” because the financial system remains unstable and investors still lack confidence. In February 2009, the U.S. government nationalized a substantial portion of Citigroup, owning a 36 percent share as of this writing. This is merely the first step to restoring investor confidence. When the U.S. does move into Phase 4, it will still face a tough reality. According to the latest estimations by the International Monetary Fund, potential deterioration of U.S.-originated credit assets is \$2.2 trillion, or 20.5 percent of its GDP.

The U.S. economy and political system have shown their cleverness and resilience before. We in Japan hope the U.S. will learn from our troubles and demonstrate its strength in this challenge as well. ■



# BUSINESS & PSYCHOLOGY

## THE GROWING TREND OF JUDGMENT AND DECISION MAKING

BY CRAIG R.M. MCKENZIE

**I** Psychology is the scientific study of human behavior, so it should come as no surprise that psychology has been employed in business settings for a long time. Experimental psychology began in 1879, and soon after that – in 1911 – Coca-Cola hired psychologist Harry Hollingworth to conduct laboratory experiments to see whether, as alleged by the U.S. government, the caffeine in Coca-Cola syrup was deleterious to human mental and motor performance. It wasn't. Since then, the role of psychology in business has expanded and evolved, but its relevance has increased sharply in the past 30 years, partly because of research on the psychology of judgment and decision making (JDM).



JDM researchers are broadly concerned with how people seek, interpret and combine information when making judgments and choices. Although determining how people ought to make judgments and decisions in real-world settings can be tricky, important situations exist in which people make systematic errors, or at least depart from traditional economic theory. The ubiquity of intuitive judgments and decisions in business, combined with the apparent fallibility of the processes, has led to an explosion of research on business-related topics. What follows is a brief description of some of the myriad ways in which psychology currently influences marketing, management, finance, accounting and operations management.

### MARKETING

Because the marketing subtopic of consumer behavior is concerned with how consumers make choices, JDM research plays a central role. For example, in contrast to what standard economic theory would predict, consumers can be worse off when given more options. Although



studies, in grocery stores and even using retirement plans that varied the number of investment options.

Furthermore, although you might think that carefully considering your options will lead to better choices, this is not always so. For preferences that are difficult to verbalize (e.g., why you like a flavor of jam, a painting or a piece of music), consumers are less likely to make a satisfying choice if they analyze the reasons for selecting each candidate beforehand. In this case, analysis leads the consumer to give more weight to the reasons that are easily verbalized, which, in turn, can affect the quality of the decision and subsequent satisfaction. Relatedly, recent evidence indicates that when consumers make decisions about relatively complex products, such as which car to purchase or which apartment to rent, unconscious deliberation – being distracted before making the choice – leads to better decisions than conscious deliberation.

Market share can also be affected in surprising ways. Imagine that two external hard drives, A and B, are competing for market share. A has a larger storage capacity (500 GB vs. 250 GB) and a higher price (\$120 vs. \$80). A

third external drive, C, is introduced into the market. What will happen to the market share of A and B? No standard economic account would predict that the market share of either A or B will increase. But it can. If C has a storage capacity of 400 GB and costs \$130 – i.e., it is worse than A on both dimensions, but not by B

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“Because external rewards are an obvious and compelling explanation for behavior – even for one’s own behavior – they can overshadow intrinsic motivation for work.”

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consumers are drawn to situations with many options, they are less likely to make a purchase (i.e., more likely to postpone the decision) and less likely to feel satisfied with their choice if they do make a purchase. This has been shown in laboratory

– market share of A will increase. Although C is a hard drive almost nobody wants, its existence provides reasons to purchase A: it’s bigger and cheaper than C, whereas B is only cheaper than C. The result is that the popularity of A increases. Also of interest is that consumers exhibit “extremeness aversion;” that is, they prefer products with dimensions (e.g., price) that fall somewhere in the middle. For example, Williams-Sonoma was able to increase sales of its \$275 breadmaker by introducing a second, slightly larger model at a price of just over \$400.



## MANAGEMENT

Psychology might permeate management more than any other broad topic in business. In the context of decision making, groups are, in theory, ideal because group members provide a rich source of knowledge and ideas that any individual alone does not have. This is especially true when managers select a group to be diverse, such as a cross-functional team. Nevertheless, “groupthink” – the tendency of group members not to challenge the prevailing opinion of the group, resulting in poor decisions – is well known. John F. Kennedy’s decision to invade Cuba is a prime example. However,

“ Investors tend to hold on to losing investments too long and sell winning investments too early.”

poor group decisions occur not only because we are deeply ingrained not to upset the group (or our boss!), but also because our otherwise independent opinions quickly become influenced by others’ opinions. When estimating an uncertain quantity (such as next quarter’s revenues), even numbers known to be random influence people’s estimates. When the provided estimate comes from someone else in the group, the effect is even larger. Because independence of opinions is so important to the quality of group decisions – and is so quickly reduced in group settings – managers must take care to encourage and maintain independence.

For example, brainstorming can be done individually before meeting as a group. Or since senior members of the group are less likely to be influenced by junior members’ opinions than vice versa, junior members could give their opinions first. Also important is that employees feel comfortable, and not be punished by the group, when they express different views. At the individual level, managers need to avoid the natural temptation to surround themselves with people similar to themselves, and they need to ensure that those around them feel comfortable expressing divergent views. Indeed, this describes JFK’s decision making process during the Cuban Missile Crisis, which was handled successfully.

Managers are constantly challenged to motivate employees. There is an important distinction between extrinsic motivation and intrinsic motivation. The former is a desire to do a job well in order to achieve an external (usually monetary) reward, whereas the latter is a desire to do a job well because it feels good to do so. Evidence indicates that external rewards can undermine intrinsic motivation. For ex-

ample, imagine two people who do the same job (perhaps at different companies), but one makes a lot of money and the other makes a little money. If the one who makes a lot of money were asked why she chooses to work at her current job, “because I make a lot of money” – an

external reason – might come to mind. However, the person earning less cannot explain her own behavior in this way and may instead think of an

internal reason such as “I must really like my job.” Because external rewards are an obvious and compelling explanation for behavior – even for one’s own behavior – they can overshadow intrinsic motivation for work. Consequently, many companies try to deemphasize monetary rewards and instead design jobs and a work atmosphere that encourages intrinsic motivation.



FINANCE

The area of behavioral finance has grown rapidly in the past two decades. Stock market research indicates that people trade much more than would be expected by standard economic theory, perhaps due to overconfidence on the part of both buyers and sellers. Additionally, investors tend to hold on to losing investments too long and sell winning investments too early, a pattern that may be due to loss aversion, the notion that people are more sensitive to losses than to gains. They also fall prey to herding behavior, basing their choices on what others have chosen.

U.S. workers' ability to save for retirement has recently become an important issue because of increased reliance on 401(k)-type plans rather than traditional pension plans. Un-



retirement plan is the default. That is, whether employees are automatically enrolled in a plan unless they actively opt out, or are not enrolled in a plan unless they actively opt in, makes a big difference in retirement plan participation because people tend to stick with whatever the default is. Indeed, because so many employees were not participating at all in retirement plans, the Pension Protection Act was passed in 2006 to make it easier, from a legal perspective, for firms to automatically enroll employees.

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“Allocations are driven largely by how the problem is presented and not by considerations of expected risk and return.”

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der 401(k)-type plans, employees must decide how much of their monthly income to save and how to invest their savings. Therefore, most private-sector employees are now responsible for saving for their own retirement. And they do not seem to be saving enough. Some believe that a retirement crisis is the U.S.'s next financial crisis.

Several psychological reasons might cause this, such as procrastination and placing too little value on the future (which has a strong tendency to become the present at some point). However, another important factor is whether participation in a

the case of retirement plan participation, the reasoning goes like this: “if human resources thought it was important to participate, why would they make it difficult (by having to opt-in)?” Another reason why many people do not save enough is that they do not understand how savings grow over time. They believe it grows linearly, rather than exponentially, which leads them to massively underestimate the cost of waiting to save.

And do people invest their savings properly? Portfolio theory prescribes holding a stock portfolio that is diversified across industries and countries. Novice investors – i.e., most workers these days, because of the prevalence of 401(k)-type plans – tend to have a “home bias;” that is, they invest in a disproportionate number of funds from their home country. They also use a 1/N heuristic for diversifying: if three types of investments are available, people often contribute one-third of their savings to each. Indeed, if mainly stock funds are offered, most contributions will go to stocks; and if a majority of interest funds are offered, most contributions will go to interest-bearing securities. Allocations are driven largely by how the problem is presented and not by considerations of expected risk and return.

An important concept underlying investments is the equity (or risk) premium: due to risk aversion, the expected return on a risky prospect is greater than that of a riskless prospect. Students of finance should take note that how people perceive risk, not necessarily the objective statistics regarding variance, is key. Recently, for example, it has been proposed that decisions involving risk are driven by emotion, or how the decision maker feels at the time of decision, and that this emotion can override rational considerations of the severity and likelihood of outcomes. Some people refuse to board an airplane, not because they do not understand the relevant statistics, but because of how they feel at the time of the decision. Consider again the typical investor who is not diversified enough due to home bias. Although investing some savings in a foreign, unfamiliar index fund might reduce risk, it undoubtedly feels more risky.

### ACCOUNTING

When determining the fairness of a firm's financial statements, auditors sample information from the firm's records and make probability assessments and probabilistic inferences. For example, auditors might provide a confidence interval regarding the firm's true account balance based on sample data, or they might estimate the probability (risk) that the true balance exceeds a specified criterion. When people, including auditors, report high confidence (e.g., 90 percent) intervals, their intervals tend to be much too narrow. That is, the in-

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“Because many of the areas of business discussed here have only begun to be mined for interesting and important behavioral phenomena, it's likely that the impact of JDM on business will only continue to grow.”

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tervals contain the true account value much less often than 90 percent of the time, indicating overconfidence. Compared to novices, experts (e.g., auditors in an auditing situation) report intervals that are better centered on the true value, but are also narrower, and the net effect is similar levels of overconfidence regardless of expertise.

Auditors also appear to be influenced by irrelevant information when they report intervals. In a laboratory experiment, senior auditors were asked to provide an interval for a current-year item after being presented with previous years' verified amounts and the current year's unverified amount. The intervals were influenced by the current year's unverified amount, although they should not have been. As mentioned in the discussion of management, such anchoring effects are common; even random numbers influence judgments.

Moreover, although auditors frequently rely on sample evidence, evidence indicates that they are not as sensitive to sample size as they ought to be. Again, this phenomenon is easily demonstrated outside of auditing situa-

tions. Auditors also tend to overestimate conjunctive probabilities (how likely is X and Y?) and underestimate disjunctive probabilities (how likely is X or Y?), just as most people do. One explanation for this is that a conjunctive probability is usually smaller than the probability of each of X and Y separately, and these probabilities serve as an anchor, resulting in estimates that are too high. For disjunctive probabilities, the separate probabilities are usually lower, leading to estimates that are too low.

### OPERATIONS MANAGEMENT

Here, the focus is on ensuring that customer needs are fulfilled and that company activities are completed in a timely manner while minimizing waste. Although there has been some application of psychology to the management of queues, operations management has historically been concerned with optimization and has paid relatively little attention to behavioral issues. However, because of the increasing number of technology-intensive companies in which knowledge workers make decisions and judgments about products, processes and projects, behavioral operations is gaining ground.

Imagine that your company has invested \$10 million in developing a new product that looks like it may be inferior to a competitor's newly released product. You need to spend only about \$1 million more in order to complete the product. Should you invest the additional money? Decisions about whether to continue investing in projects should be based on future costs and benefits, not on how much has already been spent. That is, the issue is whether you will profit more than the \$1 million that finishing the project will cost. Any



arguments based on the \$10 million already spent – the sunk costs – should be ignored. However, people have a tendency to honor sunk costs when making such decisions, perhaps due to a deeply felt (and in this case, over-generalized) need not to waste money.

People also chronically underestimate how long projects will take to complete. A product delay announcement decreases the market value of a firm by 5 percent, which may be in excess of \$100 million for some industries. A recent explanation of this underestimation phenomenon is that people base their estimates on their memories of how long similar past events took, but these memories are systematically biased in the direction of underestimation. This, in turn, leads to underestimating how long future projects will take. One way to alleviate this problem is to record how long projects take rather than to rely on memory when making estimations.

A behavioral perspective is also being used to study other operations phenomena. For example, the “bull-whip” effect is a classic problem confronting supply chains. As demand for a product moves up the chain from the consumer toward the manufacturer, the demand becomes more and more erratic. Some researchers have argued that cognitive limitations and an inability to coordinate are causes of the effect, which results in significant supply chain waste and associated environmental costs.

In conclusion, psychology is having an ever-increasing impact on business, and for good reason: informal judgments and decisions are ubiquitous in business, and understanding

and improving them is important. And formal processes (e.g., decision analysis) are not immune, either. Judgments often have to be made about which data to include in an analysis, and the severity and probabilities of future outcomes sometimes need to be estimated. Moreover, business is not the only area feeling the effects: JDM research is also influencing other applied areas such as medicine, law and public policy, and it continues to influence all the social sciences. Because many of the areas of business discussed here have only begun to be mined for interesting and important behavioral phenomena, it’s likely that the impact of JDM on business will only continue to grow. ■

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# IN RESPONSE

## HARRY MARKOWITZ COMMENTS ON *BUSINESS & PSYCHOLOGY*

QUESTIONS DEVELOPED BY DANY KITISHIAN, FT '09  
IN COLLABORATION WITH CRAIG R.M. MCKENZIE

**Q.** Are psychological factors currently important in explaining investors' unwillingness to hold stocks? We know that many professional investors are sitting on piles of cash and are hesitant to dive into stocks at the moment. Are professional investors, like private equity or hedge funds, as affected by psychology as small investors are?

**A.** Clearly investors are worried about the stock market, as is reasonable considering its recent declines and volatility, as well as the daily dose of bad news. This concern is translated into selling pressures which have accentuated the market declines. Whether these worries are called psychological factors is a matter of definition.

Some professional investors fly by the seats of their pants; others follow a more formal discipline. By definition, the latter are less affected by psychological factors than the former.

**Q.** Is psychology relevant to the prospects that the government's policies toward resolving the current financial crisis will work? For example, how important is re-creating confidence compared with putting dollars in consumers' pockets?

**A.** Good old economic theory says that if everybody tries to save more, the outcome will be lower GDP. Similarly, modern financial economics says that if everybody becomes more risk averse, the effect will be lower market prices. Or, as President Roosevelt said, "The only thing we have to fear is fear itself."

**Q.** Do you see an intersection between psychology, portfolio theory and the recent financial crisis?

**A.** Portfolio theory (and in particular the capital asset pricing model, CAPM) can connect increases and decreases in risk aversion to falls or rises in the stock market. See the answer to question one regarding whether these shifts in risk aversion should be called psychological or objective.

Portfolio theory, discussed in my 1959 book, "Portfolio Selection: Efficient Diversification of Assets," never speaks of proper diversification. It speaks of the tradeoff between risk and return on the portfolio as a whole. Those who held diversified portfolios mostly in equities have clearly suffered more during the recent crisis than those who held mostly government bonds. Portfolio theory never promised high return with low risk. You place your money, and you take your choice. That is the way it worked out.

**Q.** Portfolio theory prescribes how people ought to diversify. How good is the average investor at diversifying? What are some common mistakes?

**A.** If the investor selects a good financial advisor who usually puts the investor into diversified investment companies or ETFs (exchange traded funds), then the investor is well-diversified. If the investor trades on his or her own, then the investor might be quite undiversified.

## In Response

The most common errors of the individual investor are to invest when the market is high and he or she believes it will move higher, and to get out of the market when the market is low, and he or she thinks it will go lower.

**Q.** Has the federal government done a good job analyzing the risk profile of its constituents and making the appropriate investments? How would you have advised the government in moving forward with its bailouts? Should the bailouts ever have been invested in institutions that made very risky investment decisions?

**A.** Except for nations such as China or the oil countries, who have accumulated large reserves, nations should not be in the investment business. As to our own federal government, the following line of questions, I believe, will illustrate my position on your many-faceted question.

Suppose our government had let Citigroup go into bankruptcy. Presumably the bond holders would have followed the current management's plan until they could find management that they preferred. Probably parts of Citigroup would have been sold off. Generally, the result would probably have been very much like what has actually occurred, except that (a) the government would have saved us all a lot of money, and (b) the government would have stayed out of the banking business.

**Q.** Since the market has declined, does the average investor perceive that he fell victim to systematic risk, or is he more prone to blame his portfolio advisers? If so, how can an adviser regain the trust of his clients?

**A.** Good financial advisers – and I know many, including 401(k) advisory services and other financial advisers – emphasize that there is a tradeoff between risk and return. You do not get high returns, on the average, with no risk. Many advisers use Monte Carlo methods to illustrate – and help their client understand – the riskiness of the efficient portfolio the client chooses. The clients of those advisers who were warned in advance of the volatility may not be happy about 2008, but they are thankful that they were given the opportunity to choose their level of risk advisedly. To my knowledge, such advisers have kept almost all of their clients through these trying times.

**Q.** In light of the Madoff scandal, should large institutional investors be smarter about diversifying their funds amongst fund managers? Should they limit the percentage of their investment that gets invested by each financial professional or firm?

**A.** Large institutional investors typically have their funds held by large, well-established custodial organizations even when these funds are invested under the direction of professional money managers. It is difficult for me to see how anybody who got burned very badly by the Madoff scheme had done due diligence in any professional manner.

**Q.** Portfolio managers' first steps are to assess the risk profile of their clients. Should portfolio management theory be used to train managers about the psychology of investors so they can properly assess their clients' risk profile?

**A.** It is of crucial importance for the client – or the client's adviser on his or her behalf – to pick the right portfolio off the efficient frontier (risk-return tradeoff curve). My preference is not for psychological questionnaires, but rather to make sure that the client understands the nature of the risk he or she is taking for a given portfolio choice, and that higher return comes with higher risk. In other words, my emphasis is to show (for example, with results from Monte Carlo analysis) what may happen to the client's chosen portfolio over the next few years or until the client's retirement. ■





# BIG SHOES TO FILL

## HOW CEO TRANSITIONS BENEFIT FROM INTERNAL-EXTERNAL CANDIDATES

### BY BRENT APPEGATE

**S** stroll down the halls of the San Diego headquarters of Gen-Probe, a developer of medical diagnostic tests, and you'll find huge photo collages, handmade and framed, lining its walls. They chronicle the company's history through scenes of company parties and events. Hairstyles and fashions change over time, but one constant through it all is the tall and distinguished long-time CEO, Hank Nordhoff. But in 2006 when Mr. Nordhoff began to discuss retiring, Gen-Probe's board of directors faced the challenge of selecting his successor.

## Big Shoes to Fill

Gen-Probe's dilemma is becoming a fixture among corporate boards. The impending wave of baby boomer retirements creates more frequent executive transitions, especially among CEOs. With the U.S. economy in turmoil and worker confidence in executive leadership waning, corporate boards have never been more challenged to ensure effective CEO successions.

The successful CEO often defines the company's vision, culture and character; yet with his or her departure, employees can lose motivation and focus. Often, no existing staff member is immediately qualified to step up, but employees may balk at bringing in an outsider.

To address these concerns, corporate boards are turning to internal-external candidates. This means that the CEO's successor is recruited from outside the company, but is brought into the organization to serve temporarily in another executive role, such as CFO or COO. Drawing from experiences gained externally and credibility earned internally, internal-external candidates can make the complex CEO transition process less traumatic and more effective.

### TRENDS IN EXECUTIVE TRANSITIONS

As the baby boom generation enters retirement, demographic trends mean more executives will leave or be asked to leave their jobs. RHR International, an executive development consulting group, found in their 2004 multi-industry survey that half of the companies questioned expected to lose at least half of their senior management by 2010. With fewer employees follow-



Gen-Probe Genetic Center. Photo courtesy of Gen-Probe.

ing the baby boom generation, finding a capable and qualified replacement becomes more difficult.

Despite the quickening pace of executive transitions, many business leaders distrust how their successors are identified and recruited. Research conducted in 2003 by the Corporate Leadership Council showed that nearly three-fourths of surveyed senior executive members rated their succession systems as "less than moderately successful."

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“Annual turnover of CEOs across the globe increased 59 percent between 1995 and 2006.”

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The office of CEO is especially affected by the trends in executive transitions. Annual turnover of CEOs across the globe increased 59 percent between 1995 and 2006, according to Lucier, Wheeler and Habel in the 2007 paper "The Era of the Inclusive Leader." Although there are some recent indications that the CEO turnover rate has decreased slightly from its high point in 2005, it remains significantly higher than the levels of the late 1990s and early 2000s.

Worse is the fact that many new CEOs, once hired, fall short of expectations. A 2005 study in the *Harvard Business Review* reported that 40 percent of new CEOs fail in the first 18 months, which leads to reduced focus, lowered morale and diminished worker performance. A revolving door to the CEO's office is a sign that traditional approaches to CEO succession must change.

“What is needed is a way to allow the external successor to ease into the new company and to develop a unique leadership personality.”

### CHALLENGES IN MAKING SUCCESSFUL CEO TRANSITIONS

The highly-respected CEO often seems to be a natural for the job, with strong presence, unflappable calm, a witty sense of humor and larger-than-life persona and charisma. Yet most agree that these traits can't be taught and may even intimidate many talented subordinates.

Herb Kelleher, president and CEO of Southwest Airlines from 1981 to 2001, was one such natural. Under his leadership, Southwest grew from a small intrastate carrier to a national leader, largely by outmaneuvering the older, bigger carriers with lower costs and managerial agility. Yet Kelleher is also credited with fostering Southwest's unique culture through his antics, which included dressing up as Elvis for magazine covers, jumping out of overhead bins and riding a motorcycle given to him by his pilots.

Who can follow such a naturally gifted CEO? The challenge is especially great in small- to medium-sized companies in which few employees have previously managed a business unit or held profit-loss responsibility. When no obvious internal successor exists, companies must hire externally. What is needed is a way to allow the external successor to ease into the new company and to develop a unique leadership personality.

For the smoothest transition, boards must also avoid allowing the company to slip into a time of excessive competition and petty infighting. When multiple candidates vie for the top spot, employees align themselves with the candidate they expect to win and play politics by withholding crucial information from one another.

Competition for the selection of a new CEO can also signal uncertainty in the company's direction. When Jerry Yang announced in November 2008 that he would step down as Yahoo's CEO, the board's informal search panel considered both internal and external candidates. Susan Decker, Yahoo's former CFO and current president, was the initial front-runner. But after a two-month search, Carol Bartz, former CEO of software company Autodesk, was named the successor. Ms. Decker immediately resigned from her post as president. Overlooking an internal candidate can imply a lack of confidence in the company's current strategy and leadership.

### TRANSITION TIPS

After successfully completing an internal-external CEO transition, Gen-Probe's Hank Nordhoff and Carl Hull offer the following suggestions:

#### FIND A PERSONAL FIT

Seek a high degree of personal compatibility between the incoming candidate and the outgoing CEO. Closely examine how they interact. If they aren't likely to get along well, an internal external transition is probably not the best option.

#### EXPECT SMALL TENSIONS TO FLARE

The outgoing CEO will likely be more willing to make decisions based on gut feel, company experience and confidence in people. This may cause friction between the two individuals.

#### SEND A CLEAR SIGNAL

Identify the incoming candidate as the heir apparent from the start, especially at employee events.

#### DON'T COMMIT TOO EARLY

Avoid the temptation to consider the incoming candidate to be the automatic successor. Objectively assess how he or she performs in areas with clearly defined metrics, such as operations, sales, marketing and research and development.



## Big Shoes to Fill

For strong companies, internal-external transitions have emerged as an excellent way to make seamless CEO successions.

### **GEN-PROBE PROVIDES AN OUTSTANDING EXAMPLE OF INTERNAL-EXTERNAL CEO SUCCESSION PLANNING**

Hank Nordhoff joined Gen-Probe in 1994 as the president and CEO. Under his leadership, Gen-Probe surpassed larger competitors to become the market leader in certain molecular diagnostic fields. Gen-Probe's technology now tests more than 80 percent of the U.S. blood supply and 60 percent of the STD market.

But when Mr. Nordhoff first contemplated retirement, no obvious internal successor existed. John Brown, a Gen-Probe director and former CEO of medical technology developer Stryker, suggested an internal-external transition process. Mr. Brown knew this process well – this was how he had brought on his own successor at Stryker.

The board identified Carl Hull, previously a vice president of Applied Biosystems (now Life Technologies), as the COO and heir apparent. “We wanted Carl to adjust to the culture here, rather than forcing the culture to immediately adjust to Carl,” Mr. Nordhoff said.

Mr. Hull joined Gen-Probe in February 2007. He and Mr. Nordhoff agreed on a three-year transition timeline. “The first year was for the incumbent. The second year was shared. And the third year, the new guy took over,” Mr. Nordhoff described.

True to their agreement, Mr. Nordhoff retired on May 17, 2009, after 15 years in the job, and Mr. Hull officially took the reins of Gen-Probe. Both agreed that the transition went very smoothly.

“You get the best of both worlds,” Mr. Hull said. “You first had the clear leadership of the existing CEO, then you had a transition phase where people were getting ready for the change, and finally at the end of it all you had me, hopefully prepared for the job,” he laughed. ■

## **TRANSITION TIPS**

### **EMBRACE DIFFERENCES**

Each individual must recognize where they are good and where the other is better. As the incumbent, look for someone with whom you can communicate, even if he or she is not exactly like you.

### **SEEK BOARD INVOLVEMENT**

The board must take an active role in the process. This means offering full support and working through all issues, whether strategic, operational or personal.

### **SPEAK WITH ONE VOICE**

Alignment between the two top people in the company is crucial. Smoothly integrate the incoming candidate into the existing operating reviews and business planning activities. Don't create artificial organizational boundaries or separate levels of management.

### **AVOID ROCKING THE BOAT**

The incoming candidate should resist the urge to make changes for the sake of change, especially in areas that are working well.

### **HAVE CLEAR EXPECTATIONS**

Establish precise agreements up front on both the timing of the transition and the way the roles will evolve. Stick to the agreed-upon schedule in order to build trust, which is the most important element in this type of transition.

### **MAKE A CLEAN BREAK ONCE COMPLETE**

The outgoing CEO should defer to the incoming CEO on the desired level of future involvement as a non-executive board member.



*Webbie HD™ camera. Photo courtesy of Sony Electronics.*

# THE FUTURE OF SONY

## A CONVERSATION WITH STAN GLASGOW

### BY JULI IACUANIELLO

**S**ony has been a strong supporter of and key business partner to the Rady School since its inception. We thought it fitting, then, to interview Stan Glasgow, president and COO of Sony Electronics, not only for his commitment to the Rady School, but also because the innovation and entrepreneurial spirit at Sony complements the values espoused by the Rady School. In our interview, Stan discussed the industry, future innovations and how Sony is changing its strategy in response to the current economic situation. Stan's perspective reflects his 30 years of experience working globally in a range of consumer electronics positions. Currently, he oversees the Japanese electronics giant's sales of TVs, music players, high-definition film-making equipment, Vaio computers and other gear.

## The Future of Sony

**Q.** Sony recently announced its first annual loss since 1995 for fiscal year 2008. How are the current market conditions and slowdown in consumer spending changing Sony's strategy?

**A.** There are a lot of issues involved, but above all, we have seen a drop in global demand. Many of Sony's products are Yen-denominated, and currency fluctuations have been a big issue for us. However, we also see the need to restructure, create a lower cost structure, reduce investments and prioritize investments. We will develop a new way of operating by being more selective of the investments we make; when times are tough, it forces you to reconsider and prioritize. We recognize that we cannot create demand – consumers are simply not spending right now because they are scared of losing their jobs. We cannot influence this, but we plan to be more selective in what we promote given the current market conditions.

**Q.** Sony CEO, Howard Stringer, recently spoke about transitioning into a service-oriented company. What does this mean exactly?

**A.** Sony makes a lot of products and, over the past years, has bought a lot of content companies, including Sony Pictures and BMG. The key is going to be getting content seamlessly through all the products and delivering it to the consumer. Sony is well positioned to do this because we have the content and the products, an advantage that few other companies have. Howard was talking about the service layer that ties everything together; our vision is for every music device, cell phone, camera and PC to be networked and

to recognize one other in order to transmit information. For example, when you walk into a room with your camera, the pictures are automatically uploaded to your television. We see every product being able to talk to any other product.

**Q.** Would these products talk to other Sony products or also other companies' products?

**A.** Both. Of course, we would rather customers have all Sony products, but we are designing them to communicate with any manufacturer's products. Almost all companies except Apple, which maintains their proprietary standard, are adopting open standards. Apple has always had a loyal following, and Steve Jobs has done a fantastic job in optimizing the integrated system. Sony, too, pursued this strategy 10 to 15 years ago, but now we have decided that the only way for us to go is to give consumers a choice. They are more educated and are demanding openness. You can see with Blu-Ray that we made a conscious choice to keep it open and get support of other partners. That's the key to how Blu-Ray won against other high-definition formats.

**Q.** Can you talk about how you create revolution in an industry? For example, what were the keys to winning with Blu-Ray, and how did this affect the entire ecosystem?

**A.** It was a natural progression that only one high-definition format would prevail, because it is too costly for the studios to make movies in more than one format. We recognized that the key to succeeding here was getting support of the major studios and retailers. At the time,



*Stan Glasgow*

we had 150 partners, now it's up to 180. The only exceptions were Microsoft and Toshiba – Toshiba didn't have enough partners and tried to do it more on their own. And, we had some technical advantages like storage capacity and speed that we designed with a long life cycle in mind, knowing that this new high-definition format needed to last and be able to play legacy systems in order to get people to adopt it. Finally, PlayStation was key to our strategy for increasing penetration quickly. There were millions of consoles in the market, and the combination of Blu-Ray and PlayStation drove faster adoption.

**Q.** Sony has traditionally struggled in bringing together its multiple divisions. How is Sony transitioning the multiple brands and divisions into a more cohesive, unified company?

**A.** Collaboration has been a key pillar for Howard to unite Sony, and he understands the importance of working across divisions. Some of it happens naturally, for example between Sony Pictures and Sony Elec-



tronics – we have a very close relationship. Other times, organizational changes drive collaboration, like creating a single unified consumer group. Actually, the first success was Blu-Ray, which really forced all areas to work together – Pictures, PlayStation and Electronics.

**Q.** How is the proliferation of new media influencing Sony's strategy?

**A.** Sony is fully embracing it. We have conducted a thorough investigation of possibilities and are using internal and external blogs for communication, and we allow consumers to write reviews directly on the Web site – both good and bad. We are also embracing internal social networking. We find that this brings more creativity into decision making and innovation into product development. The customers help here too – they use our products every day in ways that we don't expect, so we get valuable insights from them. We are also looking to grassroots marketing for some areas. For example, we think that much wider adoption of digital SLR cameras will be driven by a community of non-traditional users, like soccer moms who want to take better action shots. This is not going to be communicated through traditional retail channels, but rather through communication between specific core groups.

**Q.** What areas in the electronics industry excite you? What are the hottest new areas?

**A.** We are really excited about our TV lineup, which ranges from high-end LED-based televisions to affordable televisions at retailers like Wal-Mart. One product that I am really excited about is our EcoTV, which takes advantage of every possible way to save energy, both in the manufacturing process and in usage. One of the largest consumers of energy is standby power, accounting for 3 percent of all energy usage in the U.S. If we could better manage this, we would eliminate the need for new power plants. EcoTV reduces demand for electricity by managing power consumption, for example, sensing when the room is empty and going to sleep. We also see a lot of potential in the professional cinema area, where we are incorporating multiple technologies to create a custom package. We see a huge potential in the Reader, an electronic book that reduces the need to print documents. Our headphone line has some exciting new innovations, like wireless capabilities and a complete inte-

grated package where the MP3 player is integrated into the headphones. We also see huge potential with the Vaio P, which is a lifestyle PC, a product that is easy to carry around, but offers a full operating system.

**Q.** Sony seems to be making a transition to retail, opening several Sony stores. What are some of the new challenges, and how are you addressing them?

**A.** We have 45 stores in the U.S. and some in Europe. These bring us closer to the customer and help to educate our customers. We think it is very important to our strategy to provide an additional channel to market and create new ways to listen to our customers. It takes a different strategy to become a retailer, and we need to learn how to manage this well. Initially, there was some concern over channel conflict, but our retailers recognize that it actually drives more business for them. We've found that where we put in a SonyStyle store, sales at retailers in the vicinity go up dramatically, because we are not discounting at our stores and customers will often go to buy through other retailers. Additionally, our few stores are not much threat to a retailer like Best Buy that operates thousands of locations.

**Q.** Your career in consumer electronics spans 30 years. What do you think lies in store for this industry?

**A.** There are no doubt going to be incredible opportunities as the country and world innovate in technology. It doesn't have to follow Moore's Law. There are interesting advances taking place in all areas and in ways we don't even expect, both on the manufacturing side and on the finished product side. Sony is spending a huge amount on research and development to drive future innovations. There is going to be a totally different range of products, and not just in the U.S. We see a lot of potential in BRIC (Brazil, Russia, India and China), and we started focusing on them several years ago knowing that these markets will explode. There are over 1.3 billion people in China, compared to 300 million in the U.S. This could potentially dwarf U.S. purchasing power, and we are making a lot of effort to be well-positioned when it takes off. ■



# THE BUSINESS PLAN WHAT IT REALLY BOILS DOWN TO

BY MARCOS RIVERA

**I know what you're thinking, and I don't blame you – “not another vague teaser on how to write a business plan.”** But I'll spare you the basics, which you can find on your own by reading sample plans and Web sites.

Through my consulting firm in San Diego, I work with dozens of entrepreneurs every week. And with the economy going south, entrepreneurial pursuits seem even more attractive to out-of-work executives and MBAs. Even now, with exceptional talent flooding the job market, I usually get one of three comments:

- I have great ideas, but struggle to get my thoughts on paper.
- I have no idea what the venture capitalist or investor wants to see.
- I know how to write a business plan, but I just don't have the time.

Now here's a little secret – all business plans are in principle the same. We are all serving the same dish with the same key ingredients. We just dress them up and serve them differently.

In reality, most investors analyze opportunity and risk using the same framework: Is the reward (and path to get there) attractive enough and achievable enough to sacrifice my precious pot of gold? To get to yes, or even maybe, you need to hurdle over these next questions:

- Do you know your market, and is the pain out there so insufferable that people are willing to pay big bucks for your cure?
- How does your thingamajig solve this pain better than competitors' thingamajigs, if some exist, and how will you profit from it?
- Can you run your business and sell this thingamajig in a way that produces a sustainable and lucrative income?
- Is the deal structured in a way that makes you rich on the upside, but prevents you from becoming displaced or homeless if things go awry?

We all know that the investor is a tough customer with no time to squander on measly appetizers – they want the main course, and it must arrive promptly and taste delicious. To deliver, you need to know that a business

plan, for the most part, boils down to the following ingredients:

## 1 | THE MARKET

Are you going where the puck is going, or is your product yesterday's news? Assuming your idea is on the right track, show the investor that you know this space inside and out with some metrics and trends from reliable sources. Dress these up with quotes, articles and charts, and be sure to draw some meaningful insights. You want to elicit an emotional response. Here are a few more questions to keep in mind:

- Is the market growing or shrinking? Why?
- Why hasn't the market need been met yet?
- Who is the target customer, and what makes them tick?
- Who are your competitors, and how can they fight back?
- How is your unfair advantage sustainable?
- Where is your growth coming from?
- Do you have any market validation or proof that all this is true?

## 2 | THE PRODUCT

Is your product or service both innovative and relevant? Show the investor that your thingamajig is not only cool and impressive, but people will spend money on it and only you can give it to them. Show them that your product or service can't be easily replicated, and if it can be, your price must be pretty darn good or you need to have a distribution advantage up your sleeve. Consider the following when exploring this ingredient:

- Precisely how will this product or service fill the market need?
- Can a 10-year-old understand how this thing works?
- Do the customers understand the value they are getting?
- How did you come up with your pricing strategy?
- How flexible is this thing, and can it change with the market?

## 3 | THE BUSINESS

Putting together the whole enchilada, can you make money? Are you structured in a way that allows a quick response to market needs and competitive attacks? Truthfully, you don't know what you don't know, so you must ensure that your business model is well thought-out and flexible. This is where the plate meets the table, so be sure to have a solid plan to mitigate pesky risks. Here are some ideas to keep your proposal appetizing:

- Do you have the right team (well-experienced with meaningful accomplishments) on board? Who will do what?
- Is your sales team paid to do what you want them to do?
- What is your business culture, and why will it help you and not hurt you?
- Are your milestones realistic, or are you dreaming?
- Have you tested the assumptions behind your pro forma financial statements, especially margins and cash flows?
- How much cash do you burn and why?
- Are your costs and supply chain under control?
- Is your exit viable, and will it happen in this lifetime?

You've probably considered most of this already, but perhaps you've never fully crystallized your thoughts and your plan. If you boil it down to the above three ingredients, you should be able to construct an outline that a business consultant can help you refine. If you can't address even half of these questions and aren't motivated to do so, then perhaps being an entrepreneur isn't for you, and you should get out of the kitchen, pronto.

Now if you have what it takes to cut the mustard (I mean the secret sauce that will have investors screaming "ratatouille!") then feel comforted that investors, even in this market, have an insatiable appetite for delicious and substantial ideas. If you can give them something to chew on and smile, then have faith that you will soon have the recipe for success. ■



# big

INNOVATION

CONNECT is proud to support the Rady School of Management and the core values they stand for: innovation, impact, collaboration, integrity and risk taking. We truly believe their goal to educate global leaders for innovation-driven organizations not only complements the CONNECT mission, but is fundamental to ensuring San Diego's future competitiveness.

# San Diego

San Diego is home to the densest clusters in the world of wireless and biomedical companies and has significant clusters in software, clean technology, unmanned systems, cyber technologies and sport innovation. CONNECT, San Diego's technology and life sciences accelerator, offers 26 programs totaling more than 300 events per year to support the region's innovation economy.

“So far, San Diego remains a fertile breeding ground for entrepreneurs, despite the problems in the broader economy. That is due in large part to a non-profit organization, CONNECT, that was created 23 years ago to bring together people knowledgeable about business and investment capital with researchers at the universities and research institutes in San Diego.”

**The New York Times**