SPRING/SUMMER 2005

STERNbusiness

LEADERSHIP

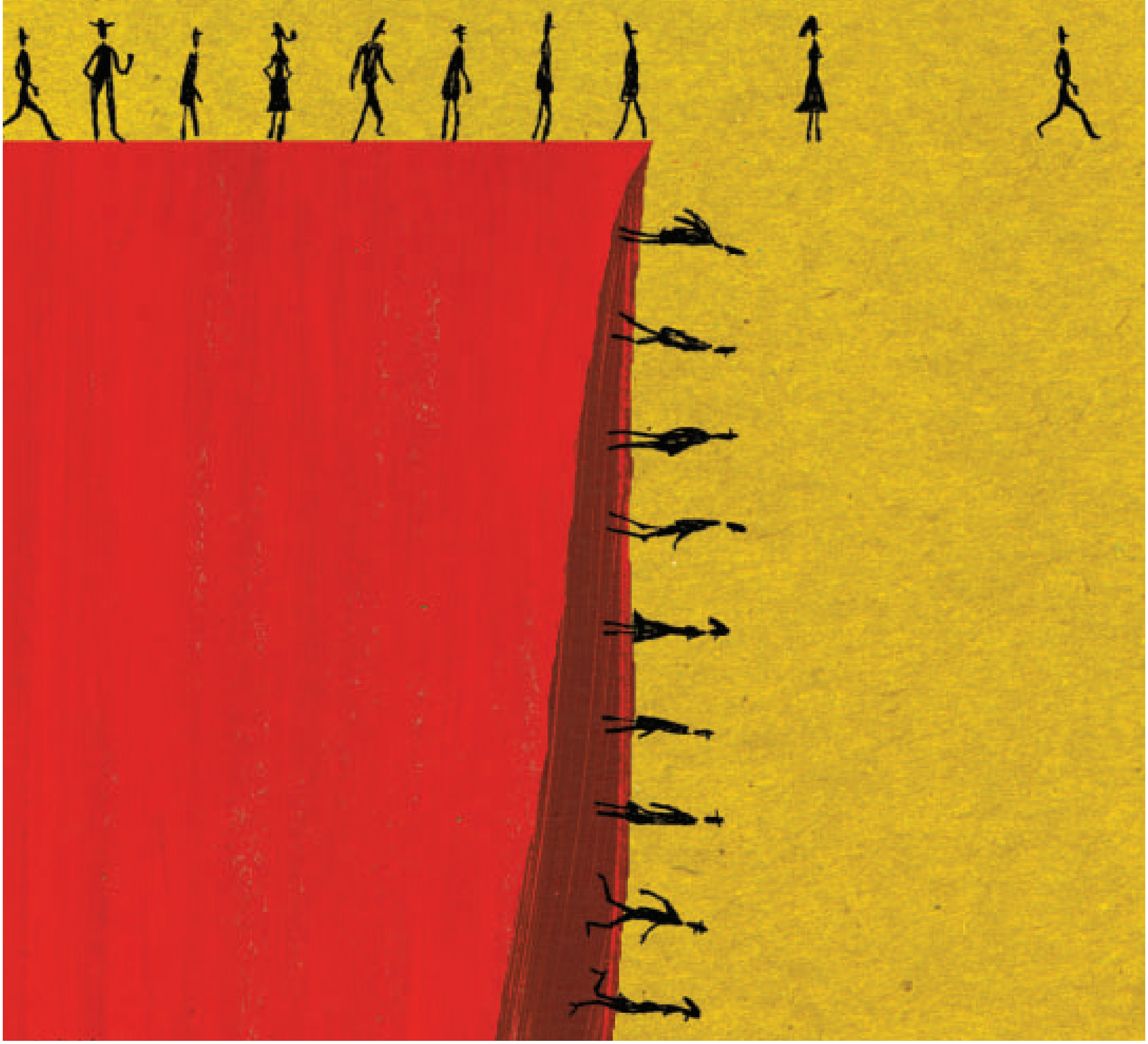
Corporate leaders speak: Larry Bossidy, Robert Rubin, Steven Florio

Bidding for Reputations on EBay

Automation's Next Wave

Why Informal Status Matters

Forget About Command and Control



a letter from the dean

What does it mean to lead? It's a question all executives – Wall Street managing directors, retail store managers, even business school deans – must answer.

To a degree, leadership is a quality that is demonstrated or learned through experience – not taught. And that's part of the reason we bring so many leaders into our campus. Thanks to our location in New York City, our faculty and students have myriad opportunities to interact with a wide range of people who have led large organizations. Former Treasury Secretary Robert Rubin, ex-Allied Signal CEO-turned best-selling author Larry Bossidy, and Steve Florio, the former head of Condé Nast Publications, all of whom are featured in this issue of STERN*business*, are just a few of the many dynamic leaders who visited with us in Washington Square last fall.

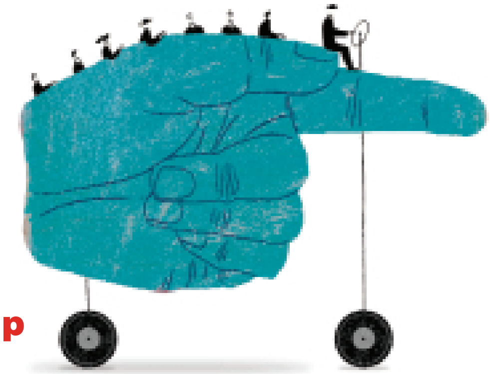
Institutions can lead, too. Management departments lie at the core of every business school. At Stern, our robust management department is distinguished by its particular focus on the behavioral sciences. In two of the articles in this issue, members of our faculty delve into concepts drawn from psychology and sociology to highlight more effective ways of managing and leading companies.

More broadly, business schools lead by carrying out their core mission: sponsoring and conducting innovative research, creating knowledge, and disseminating knowledge to wide audiences. Moreso than those in many other disciplines, scholars of economics, finance, information systems, marketing communications, and management expect their research to do work in the world. Stern faculty lead by pushing knowledge beyond the confines of our buildings. They offer expert opinion, consult to businesses, testify before Congress, appear in the media, and publish far and wide – all as part of an overarching effort to place the insights they've gleaned into the hands of others.

Part of our mission involves helping to develop the next generation of business leaders – our students. Ultimately, of course, business leaders are forged in the workplace. But an excellent business education that inculcates a grasp of the fundamentals, an appreciation of the complexities and challenges presented by the global workplace, and a capacity for critical thinking is the *sine qua non* for any leader.

These efforts lie at the core of what we do at Stern. And I think you'll find that they are embodied in this issue of STERN*business*.

Thomas F. Cooley
Dean



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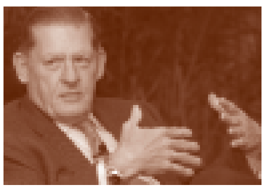

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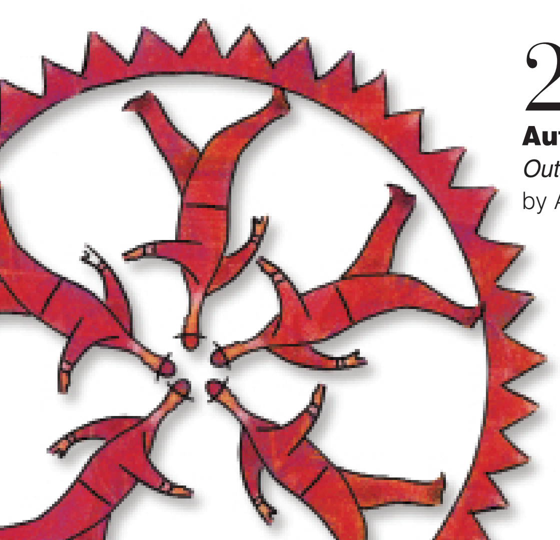


Larry Bossidy

former chairman and ceo

Honeywell International and AlliedSignal

and former vice chairman and executive officer

General Electric Company

Larry Bossidy has led three *Fortune 100* companies. After graduating from Colgate University in 1957 with a B.A. in Economics, he joined General Electric. In a 34-year career at GE, he served in a number of executive and financial positions, and was named vice chairman and executive officer of General Electric Company in 1984. In 1991, he became CEO of manufacturer AlliedSignal and engineered a transformation. After AlliedSignal and Honeywell merged in 1999, he became chairman of Honeywell International. He retired in April 2000 but returned in July 2001 as chairman and CEO to stabilize the company following General Electric's unsuccessful attempt to acquire Honeywell. Since stepping down from both positions in June 2002, he has spent time consulting and writing. Both his books, *Execution: The Discipline of Getting Things Done* (Crown Business, 2002) and *Confronting Reality: Doing What Matters to Get Things Right* (Crown Business, 2004), co-written with consultant Ram Sharan, have been best-sellers. He serves on the Boards of J.P. Morgan Chase, Merck & Co. and Berkshire Hills Bancorp.

GC: *Larry, your book is called* Confronting Reality*. Great idea, but it's always been a great idea, right? So what is the reason for writing a book like this now?*

LB: We've always been asked to confront reality. But the price for not confronting reality is a lot higher now because of three mega-events. First, because globalization has brought a lot of excess capacity in some industries, pricing has become more difficult. Margins have been compressed and the commoditization of products occurs much faster now. That has made business more competitive. The second is that there's been an enormous over-extension of credit. Usually, companies fail and go out of business and it restores the supply-demand balance. Now companies go bankrupt but they don't go out of business, so the balance never gets restored. And third, the arrival of mega-retailers like Wal-Mart and Lowe's creates a lot of disruption. So the point of *Confronting Reality* is that you've got to know where you are, and if you wait too long, it might be too late.

GC: *This notion would seem to apply equally to people who are managing their careers. Aren't most people's jobs threatened by globalization today?*

LB: Jobs will go to low-cost locations, to the extent that's the most efficient way to get them done. People have to think about how they can make a competitive difference. Can you, for example, do something in information technology or in science? And the way you keep jobs in the United States is to continue to pioneer things that

Mr. Bossidy was interviewed by Stern alumnus **Geoffrey Colvin**, who is Senior Editor-at-Large of *Fortune* and co-anchor of "Wall Street Week with *Fortune*" on PBS.

are new to the world. We've generated more jobs in this country than anybody in the history of the world, and we'll continue to. But they'll be different jobs.

GC: *You mentioned a lot of companies go bankrupt nowadays, but they don't go away. And one can't help thinking about the airline industry. You've got some very pointed things to say about the airline industry, as well as a few other industries.*
LB: There's a number of industries we say in the book that are structurally defective: airlines, steel, rubber and commodity chemicals. If you're a big airline – United, American, Delta – it isn't clear how you're going to compete with Northwest, or Jet Blue. Delta got an enormous wage concession from their pilots just the other day, 32 percent. They still are way over JetBlue in terms of cost. You look at the amounts General Motors pays in health care and pensions – that's three thousand dollars a car. The point is, you've got to stand up to these issues sooner, when you have options. The longer you wait, the fewer options you have.

GC: *We can say they should face reality, but it's still hard to imagine what General Motors can actually do?*
LB: It isn't clear to me. We say in the book that at some point in time the government might decide that it's in the nation's best interests to have at least one automotive manufacturer, or maybe two. And they might be able to help create a securities offering that will take General Motors over the hump. These legacy costs do subside over time. It seems to me that in the absence of that, these companies are going to be in further disrepair.

GC: *You know, a big part of what you did at AlliedSignal, and at General Electric, was evaluating people. You must have formed some opinions about what characterizes the winners above all else?*
LB: You learn to be humble because you make mistakes. I can remember promoting people to a certain level, and being concerned about the promotion, and then seeing them blossom. And I can also remember placing people in higher responsibilities with a sure fire conviction that they would succeed and they didn't. Executives at every level have to continue to grow. I always say that CEOs either grow or they swell. You want to stay away from the ones who swell. I've got to continue to be interested in education. I've got to have a broader set of interests than just my job, because I become a significant dullard if that's all I do. And I've got to expand my intellect in a way that makes me valuable. At the end of the day, the most difficult decision you reach in terms of who to select is not their intellect or integrity, but how much more will they grow?

"I always say that CEOs either grow or they swell. You want to stay away from the ones who swell."

GC: *When people get evaluations that aren't good, and they have to face that reality, what should they do?*
LB: When you get an appraisal that you disagree with, the question is, who's right, you or the person giving you the appraisal? We started what we call a 360 review about 10 years ago, and they're quite prevalent now. You've got to make sure you're considering the evaluation in a way that allows you to grow. And you have to get past your disagreement. You've got to do something about it. You just can't accept it. You can say I would like to have people do a 360 on me, and see what the viewpoints are. Or that I'd like to be assigned to another manager to see what that manager's view of me would be.

GC: *Now what about the job of the manager in this situation?*
LB: When somebody came to me and said others weren't doing the job, I'd ask what have you done to help this person do the job? A manager's responsibility is not just to hire but it's to coach, it's to develop, it's to try to make people better.

GC: *When you came to AlliedSignal, in 1991, it was a company that needed a lot of help. When you got in the door, what needed to be done first?*
LB: There was no self confidence. People were disappointed in their careers. Because when you don't do well, the place doesn't expand, and new jobs don't open up. I asked a lot of questions; what do you think we should do? As a consequence of those discussions, we put together a plan, and I said I'm going to take this plan to Wall Street now. Everybody who finds that their knees are a little bit weak, stand up, because after tomorrow, we're going to do this. And it got people excited. We told the Street what we were going to do, and we delivered on it, and it was great to see people's self confidence improve.

GC: *Many managers say they want to hear the straight unfiltered view from the people working for them. But the people might believe, perhaps because of a corporate culture, that there is nothing to be gained and much to be lost by putting their hands up in the meeting and speaking honestly.*
LB: Well, I think that's one of the things that a 360 can help. If people don't trust you, or they think you have an ulterior motive, then obviously people are going to be careful. So it's your job to make yourself trustworthy so you can get at some of these issues.

GC: *And now let's take the point of view of the employee, who wants to give his straight unfiltered views to the manager, but in fact believes, with good reason, that that is not a career enhancing thing to do.*
LB: That's a harder question. This employee can perhaps express this viewpoint to an HR person. But I think over time, if that condition persists, you ought to get another job. You can't waste your time in an environment that you know isn't the way it should be, and where there's no interest in changing it. If you're not being allowed to grow and flourish, go to an environment where you can.

GC: *When you look back on your years as a CEO, is there anything you wish somebody had told you back when you started?*

LB: This question of evaluation is an important one. When I consult, I go to CEOs and I ask to see the appraisals of their direct reports – the ones I'm consulting with. And invariably, I see pages of circumlocution. In other words, lots of words trying hard not to say anything. It's hard for people to think that appraisals can be a constructive process. It's supposed to identify the things you do well, and it's supposed to identify the things you should be doing better. And it takes a long time to get that through an organization. At AlliedSignal people thought that if they appraised people accurately, it somehow will get in a file and cause that person everlasting harm. I said, no, this is not an appraisal. This is the beginning of a debate. It took a series of years before it got down in the organization where people would finally be honest enough to put down what they believed, and then gave that person a chance both to improve and recover and go on. It's terrible to find a person at mid-career with a series of deficiencies that have never been pointed out.

Now as far as myself is concerned, I come from a small town. I never knew anything about corporate life. I was very frank to the point of probably being caustic. So somebody finally took me aside, and I was probably 28, and said, you know, it isn't what you say but how you say it, which was a wonderful comment. And I thought about it. And I tried to not be withholding of viewpoints, but to express them in a way that was more positive and constructive. And some people still, after having said all that, still say I'm blunt.

"A manager's responsibility is not just to hire but it's to coach, it's to develop, it's to try to make people better."

GC: *An issue for everybody who works is balancing work and family. Now, you had a long career where you managed these things, it would appear, incredibly well. A, you've been married to the same person for a very long time. B, you have nine children. How did you think about these issues as you went through your career?*
LB: While I picked a remarkable, talented woman to marry, the fact is you have to make time too. I used to come into work sometimes at 4:30 in the morning, because I wanted to be home for dinner. When you have nine children, you don't just interface with them, you manage them. I used to post a board as to who was supposed to do what. I coached the Little League baseball team. I ruined more suits because I didn't have time to go home before I went to some ball game and was in the dust pit. I'm not trying to impress you about what I did. It made me think in a broader dimension than I otherwise would have. I saw what was going on in young people's lives, and you know, I always say to them, you're the best thing that happened to me. I still feel that way; I just feel like I got so much more from them than I gave.

GC: *The company you were in most of that time, General Electric, is famously demanding. And for 11 years your good friend Welch was the CEO, and he was about as demanding as they come. How did it all work out with your employer?*
LB: I didn't ask for special dispensations. With Welch, if you

got done what you had to get done, if it takes you four hours a day, you didn't have to stay for the sake of staying. And he was helpful and responsive. At AlliedSignal among the first things I did was put in a day care center. We couldn't keep women who wanted to have children. Well, we put a 90-person day care facility on site, and we didn't lose a woman from our employ for the next three years.

GC: *What was your attitude towards people who had been to business school?*
LB: Well, first of all, not many people who graduated in my class went to business school. GE had vaunted training programs, and you were told that this was the same thing as business school, but you get paid. I thought it was a reasonable proposition. If you look at our educational system, you can make the case that in grades one through 12, there are systems that might be better than ours, including the one in Japan. But there is no system that compares with the graduate education that we have in the States. I also think business schools have worked harder to try to stay contemporary. Ten years ago business schools always taught yesterday's war, instead of trying to fight tomorrow's war. Today, they're better in terms of preparing people for what they might face.

When I went to Allied, we had a shortage of talent, and we hired a lot of MBAs and they saved my life. We were able to give them more challenging positions relatively early in their career, and it was a major assist to build the management team that I was able to build.

GC: *CEO pay is an issue that was big in the headlines when you got the job, and it's still big in the headlines today and it seems that nothing ever changes despite all the talk that goes on. What's going on?*
LB: If your company does well and your share price does well, no one begrudges you to earn a piece of that progress. On the other hand, if your company doesn't do well, or you get fired and you leave and you still get a lot of money, that is going to be an ever growing concern and I think it should be. So, I think it's improved as a consequence of this uprising. You'll still see cases where it gets abused, but by and large it's better.

Audience Questions:
Q: *Could you talk a little bit about the challenges CEOs face these days in terms of meeting Wall Street's expectations in the short-term, versus taking a long-term management approach?*
LB: You've got to deliver for the current share owners, and you've got to plant seeds for the long-term. If you have people who are unbalanced, who just drive for the short-term, there's a day of consequence. And if you have a person who does the opposite and doesn't plant seeds, they run out of steam as well. But you can't get caught up in what Wall Street thinks. I mean, somebody comes out and looks at your company for 20 minutes and tells you what you've got to do, and people listen to them. I mean, come on. I always felt that if I got fired, I want to get fired on my own mistakes, not on what somebody told me to do.

"You can't waste your time in an environment that you know isn't the way it should be, and where there's no interest in changing it."

Q: *You're on the Board of Merck. It must be very hard for people without your stature to be telling CEOs who are leading companies what to do from a Board perspective. Are Boards really strong enough to have an effect on management?*
LB: That's a great question. You know, Sarbanes-Oxley has done some good things, and it has done some bad things too. But it did call a lot more attention to the quality of Boards. And it has made Boards more introspective and increased the Board's involvement with the company. But a Director's role is not to tell the CEO what to do. Directors are there to listen to various strategies and comment on them in terms of their own personal experience. So on the Merck Board, for example, there are a number of scientists who speak very knowledgeably about the science involved. I probably speak more knowledgeably about the business aspects. I'm not trying to tell the CEO what to do, but to make sure that there's a good dialogue that's inclusive. And I don't think you have to be a CEO to be a very good Board member.

Q: *A lot of the problems on Boards seem to arise from what some people have called the Boardroom culture, and the idea of not speaking up if it's contrary to the prevailing view. Even Warren Buffett has said that he has failed to speak up sometimes in a Boardroom because it was just sort of socially or culturally too difficult. Have you observed this?*
LB: I have, but I think one of the corrections with Sarbanes-Oxley is that there are now mandatory Executive Sessions of the Board, where the Board convenes in the absence of the CEO. A lot more gets said that might not have been said. And then somebody is appointed to relate this to the CEO. I think it's happening a lot less now, in the presence of these Executive Sessions. ■

L E A D I N G

In a way, leadership is a lot like hitting a 99-mile-per-hour fastball. It's comparatively easy to describe the mechanics and tactics relating to the act. But when it comes time for wood to hit leather, all the books and practice don't really matter. Instinct and natural ability matter more than preparation. A few people can just hit a little white ball with red seams, and the vast majority of us can't. It's tempting to conclude the same about leading an organization, a company, a country, or a group of baseball players. The best leaders frequently seem to be born and not made, and many of them followed unorthodox, inimitable paths to leadership.

> **"The best leaders frequently seem to be born and not made, and many of them followed unorthodox, inimitable paths to leadership."**

Larry Bossidy is the rare person who can write about and describe corporate leadership nearly as well as he actually does it. In his highly active retirement, Bossidy, who served as CEO of not one but three different *Fortune 500* companies, has written two best-selling books on leading businesses – *Execution: The Discipline of Getting Things Done* (Crown Business, 2002) and *Confronting Reality: Doing What Matters to Get Things Right* (Crown Business, 2004).

Last fall, Bossidy visited NYU Stern as part of our long-running CEO Series to discuss the art and science of running large organizations (p. 2). And as he sees it, leadership is about more than a title, and hiring and firing. "When somebody came to me and said others weren't doing the job, I'd ask what have you done to help this person do the job?" he said. "A manager's responsibility is not just to hire but it's to coach, it's to develop, it's to try to make people better."

Bossidy's point is backed up in large measure by the conclusions of a study by Sandra E. Spataro and Cameron Anderson ("R-E-S-P-E-C-T," p. 14). They conclude that there's a lot more to leadership than a title, which represents formal status within organizations. Formal status matters. But *informal* status – how much respect and prestige a person enjoys by virtue of position, personality, demonstrated skills, and his or her ability to connect with others – is a crucial component of leadership.

One person who certainly enjoys both formal and informal status is Robert Rubin, former Treasury Secretary, former co-chairman of Goldman Sachs, and now chairman of the executive committee at Citigroup. And while we expect leaders to project certainty about their decisions and strategies, Rubin, who has worked with some of the most storied leaders of recent decades, from Sandy Weill to President Clinton, takes the view that multi-dimensional leaders must also embrace *uncertainty*. ("Uncertain Hours," p. 8) In a conversation with students, Rubin offered some typically Rubin-esque thoughts on the burgeoning fiscal and trade deficits – it's likely that "at some point, the markets will begin to look forward at the immense projected deficits, and the markets will begin to react by demanding sharply higher interest rates for providing long-term debt," he said. We just don't know when.

In a course he taught at Stern last fall, "Leadership in the Communications Industry" Steven Florio, the former chief executive officer of Condé Nast Publications, showed students a scene from the movie "Patton," in which the actor George C. Scott rattles his saber at the Soviet Union. "That scene from Patton was about identifying who your competitors

are," Florio said in an interview ("Media Messages," p. 12) in which he distilled the lessons he taught to – and learned from – his class.

Patton represents a distinctive and old-fashioned mode of leadership, which relies on managing by commanding and using a series of carrots and sticks (in Patton's case, mostly sticks) to motivate team members. But in today's less hierarchical and more complicated workplaces, such an approach may seem both outmoded and ineffective. In their article, ("Command and Control," p. 32) Steven L. Blader and Tom R. Tyler argue that there's a better way: Appeal to employees' intrinsic desire to follow rules by convincing them of the organization's legitimacy. "We predict that employees will be intrinsically motivated to follow their organization's rules if they feel that those rules develop from a system that is consistent with their own set of moral values," they write.

Today, leading a company – especially a publicly held one – means dealing with the media. Whether it's appearing on *CNBC* to discuss earnings or granting interviews to newspaper reporters, executives must be media savvy – especially in times of crisis. In an article excerpted from his book, *Guide to Media Relations* (Prentice Hall), Irv Schenkler says that while playing defense is important, there is a way to feed the beast without getting bitten ("Hot Off the Press," p. 38). "Whenever a company can position its response as a meaningful effort to acknowledge and correct the phenomenon that led to the crisis, media coverage will become more favorable and stakeholder impressions will in the long run not impugn the company's reputation," he writes.

A great deal of press in the past year focused on the danger of offshore outsourcing – the practice of corporations moving jobs from America to distant locations where wages are generally lower. Alex Tuzhilin argues that for all the hype surrounding the information-technology inspired productivity revolution in the last two decades, we ain't seen nothing yet ("Automation's Next Wave," p. 26). The next wave of automation will affect not only routine production workers, but also the better-paid and heretofore more secure group – engineers, office and knowledge workers, managers, educators, and other groups of "mind workers." Tasks that are "high on repetitiveness, stability and structuredness – constitute the primary candidates for automation," he writes.

There's one group of mind workers whose jobs are quite secure for the moment: the executives at eBay. The giant auction website has been one of the great corporate success stories of the past decade. Millions of buyers and sellers of everything from old baseball cards to used iPods have come to appreciate eBay. And so too have a growing number of economists, who see the site not as a place to trade souvenirs but as a vast datamine. One of eBay's unique features is the ability of buyers to rate sellers, and thus potential bidders a highly public and transparent assessment. Luís Cabral and Ali Hortaçsu have examined these feedback systems to determine how a seller's reputation affects sales in a theoretically anonymous marketplace ("Live Auction Heroes," p. 20). And it turns out that in the newfangled marketplace of eBay, the old-fashioned virtue of customer service still matters.

At STERN*business*, we've long been the beneficiaries of some other old-fashioned virtues: innovative scholarship that challenges conventional wisdom, intelligently crafted writing, and attention-grabbing design. Leaders – and those who aspire to lead – will surely find plenty of useful ideas in this issue.

DANIEL GROSS *is editor of* STERN*business*.

Uncertain

Hours

For three decades, Robert Rubin has been at the center of high finance and public policy. A graduate of Harvard University and Yale Law School, Rubin spent 26 years at Goldman Sachs, where he ultimately rose to co-chairman. In 1993, he went to Washington to serve in the Clinton administration, first as director of the White House National Economic Council and then as U.S. Treasury Secretary from 1995 to 1999. During his tenure, Rubin was a key player in the debates over deficit-reduction and in managing international financial crises that cropped up in Mexico, Russia, and Asia. Upon leaving Washington, he joined Citigroup, where he is a director and chairman of the Executive Committee. On October 14, 2004, Rubin appeared at NYU Stern's Alumni Author Lecture Series to discuss the economy, the upcoming elections, and his approach to decision-making.

JW: *In the 1996 and 2000 elections people thought we had a very strong economy. This time, you have a candidate arguing that it's quite strong and another candidate arguing that it's weaker in some ways. What do you think about both the health of the economy now, and the prospects for the American economy and the world economy going forward?*

RR: It's been a complicated four years. On the one hand you've had enormous stimulus, and on the other hand you've had job loss. It's the first net job loss under any administration since 1932. You've had declining price-adjusted median incomes in the United States. A couple of months ago, I was out in the Midwest and I had dinner with the chief executive officer of one of America's largest companies. And he said the company was doing well but noted that people are being very cautious. Companies have an abundance of cash but they're not spending it on investment or hiring. The reason is that there is a real uncertainty due to an overhanging set of issues.

I've been involved with economic issues for a long time, and I think this may be the most critical juncture for our economy in my lifetime. And while the outlook is always complex and uncertain, I think this is the most complex and the most uncertain in some number of decades. That poses enormous difficulties and challenges for policy

Mr Rubin was interviewed by **Jacob Weisberg**, editor of *Slate*, and the co-author of Rubin's best-selling memoir, *In An Uncertain World: Tough Choices from Wall Street to Washington* (Random House).

makers. But it also makes for a very difficult environment for investors. On the one hand, we have a country with an enormous comparative advantage in the global economy – our historical embrace of change, flexible labor markets, and willingness to take risk. On the other hand, we face hugely consequential and enormously complex challenges and risks. And if we're going to realize our potential, we have to deal with these challenges effectively. And if we don't deal with them effectively, and in my judgment we are for the most part on the wrong track right now, there is a real chance that we could have a lot of trouble ahead some place.

Three years ago we had enormous projected surpluses. We now have enormous projected deficits. We have very large current account and trade deficits. Consumer debt as a percentage of GDP is at historically high levels. We have an historic challenge, at least in my judgment, with respect to our competitive position from China and India, and the very large numbers of now well-educated workers in low-wage environments connected to us by real-time communications. These are challenges we can meet, but to do so we have to act in a whole host of ways that we are not now acting, with respect to policy.

JW: *Let's start with the risk with which you are the most closely identified, and most focused on: the deficit. I thought in 1992 Bill Clinton successfully made a political issue out of the deficit. And it seems to me that this time around, John Kerry for some reason is not making an especially big deal out of it. Am I wrong?*

RR: Well, just in terms of the numbers, in January 2001, the Congressional Budget Office projected a $5.6 trillion 10-year surplus. Goldman Sachs and most independent analysts are now projecting about a $5.5 trillion deficit. So that's actually a deterioration of about $11 trillion, or $9 trillion after methodological adjustments. Even President Clinton, with all of his enormous skills, had difficulty communicating about fiscal matters to the American people. It worked in the 1992 campaign because you had Paul Tsongas and Ross Perot talking about it. And the American people associated the tough economic times in some measure with the fiscal conditions of the 1980s that led to a roughly quadrupling of the public debt. In that context, the deficit had some traction politically.

But once President Clinton got elected, and he had to turn the concept into reality, we proposed a program that passed by two votes in the House. It was a tie in the Senate, which Vice President Gore broke. In 1998, we were beginning to see these large projected surpluses. President Clinton's view was that they should go largely to paying down the debt. The political people in the White House said in a debate between paying down deficits versus tax cuts, tax cuts will win all the time because tax cuts are something tangible, and the public simply doesn't understand the enormously dangerous long-term impacts that our deficits can have. The way Clinton framed it was in terms of protecting Social Security; that's something that resonates politically. I just don't think in this campaign there's a way to make this resonate in a public that is so underinformed on the issues that are so critical to their future.

JW: *In 1993, after Clinton was elected, when he decided to focus on the deficit to the harm of some of the other things he had run on, including a middle class tax cut and a health care plan, it was a very good illustration of the way that you think probabilistically about problems. As head of the National Economic Council, your role really was to set up this decision for Clinton. Explain a little bit to us how that decision was made.*

RR: One of the problems we have today is that we face these hugely complex issues, but they're not being approached with the recognition of that complexity. I know very little about Iraq. And I don't know whether we should have gone in or not. But I read a book prior to the invasion of Iraq, about Gertrude Bell, a British Arabist who is responsible for the current borders of Iraq. It talked about the Shiites, the Sunnis, the Kurds, the hundreds of years of friction amongst all these people. When I saw that we were going in, it seemed to me that there would be a plan that probabilistically took into account the issues that we might face. Instead you had this very, with all due respect, simplistic view that we would be welcomed. Well, I think the same approach is true for all these things, because the issues are conceptually the same, even though the circumstances are different. There is an effort in this book to focus on decision making. Larry Summers, who was my deputy at the time and is now President of Harvard, at one point said, "Look, everybody knows that issues are fundamentally about probabilities. But, the difference is, when we were there, we had an internalized sense of this. So when we got to actually making decisions, it informed all of our decisions."

In the case of the deficit reduction, on January 7th, 1993, during the transition, we met with President-elect Clinton. We said if we don't make a dramatic change with respect to these deficits, in

From left to right: Jacob Weisberg, Dean Thomas Cooley, and Robert Rubin.

our judgment, the probability is very high that any time the economy begins to do well it will get choked off by higher interest rates. On the other hand, if we do make a dramatic change in fiscal policy, while we think the probability is high that that will create an interest rate regime low enough, it is also possible that the fiscal contraction will be the dominant effect, and there'll never be the confidence you need to have lower interest rates. There are no guarantees, but probabilistically we think this is the right way to go. And he related to that.

"While the outlook is always complex and uncertain, I think this is the most complex and the most uncertain in some number of decades."

And you'll see this underlying phenomenon on all the policy decisions that we discussed in the book, but also investments. If you thought with discipline, probabilistically, about markets and about valuation in 1999, that was not an investment environment in which one would have participated.

JW: *The International Monetary Fund has now issued two different reports suggesting that the deficit in particular could be a problem that plays into a global economic crisis of some kind, or at least an economic crisis in America. What kind of crisis are we talking about?*

RR: Jacob always wanted me to use the word "crisis" in the book, and we never did. The two most important challenges are geopolitical issues and also these immense fiscal imbalances. I think it's impossible to predict when it will come. And I think one reason markets don't reflect that is simply because there's no way to quantify it, there's no way to fit it into models. It could be six months off, and it could be six years off. What I think at least is that the probability of serious economic difficulty is very high. If you have large fiscal deficits that absorb part of the savings pool, you have less savings available for private investment, and therefore low rates of productivity and low rates of growth. That is a long-run problem. But I actually think there's a much more serious risk. At some point, the markets will begin to look forward at the immense projected deficits, and the markets will begin to react by demanding sharply higher interest rates for providing long-term debt. On the other hand, none of this may happen. We may muddle through one way or the other. It's also possible that our political system may rise to the challenge.

JW: *When I was watching the second presidential debate, the line that almost knocked me out of the chair was when President Bush said that "Bob Rubin says that Kerry's anti-outsourcing plan won't work." I was under the impression that you had been one of the people who had helped in some sense put that plan together. So what was the deal with that?*

RR: What I said is that if you look at outsourcing, it is a part of a larger phenomenon of trade liberalization. I think trade liberalization contributed substantially to our well-being in the 1990s, and I think it's the right path going forward. But trade liberalization has to be intertwined with programs that will deal with those that are dislocated by trade. And we must have a much more effective program to promote competitiveness in our economy. We have got to have a world-class public education system. We've got to invest far more substantially and effectively in basic research.

Audience Questions:

Q: *You mentioned the need for more investment in our schools and the need for more fiscal discipline. Is there a theoretical place at which taxation reaches a tipping point, where we have so much that we're taking care of in that regard that we collapse the economy from the other end?*

RR: I think the answer is probably yes. But I don't think we're anywhere remotely near that today. My recollection is that federal revenues are something like 16 percent of GDP and that's the lowest percentage of GDP since the 1950s.

Q: *When you look at the numbers you cited, they're astounding. And I wonder if you have an opinion on why you don't hear more from Federal Reserve Board Chairman Alan Greenspan or why some other prominent economic business leaders aren't out there talking about potential crises?*

RR: Greenspan at various times has expressed great concern about fiscal matters, even when he was supporting the 2001 tax cut. Why business leaders don't speak out more is a very interesting question. Back in the mid 1990s, the Business Roundtable was taking the very strong position on deficits. John Snow, today's Treasury Secretary, was at that time chairman of the Business Roundtable and in favor of fiscal discipline. I meet with a lot of business people, and almost always they talk about this as a very serious problem. But it's longer term, it's out there, it's intangible, it's not quantifiable, and it's laden with politics.

Q: *There's been a lot of talk and pressure about China and having them float their currency. And I know eventually that day is coming, and it could be soon. What do you think the net impact of that would be on our economy?*

RR: I was in China three weeks ago, and met with Premier Wen, and he talked about the currency. I think China would benefit from being on a floating exchange rate system, and I think that's ultimately where they will wind up. But they have always had great concern about trying to minimize the risk of instability in a country of 1.3 billion people. My instinct is that they will continue to very heavily weight stability and until their financial system is in materially better shape than it is today, I suspect they're going to lag on moving ahead with such matters as exchange rate liberalization. ■

MEDIA MESSAGES

A graduate of NYU Stern, Steven T. Florio has spent more than three decades in New York's publishing world. After starting out as an advertising executive at *Esquire*, he served as publisher of Condé Nast's *GQ*, and as president and chief executive officer of *The New Yorker* in the 1980s. When *The New Yorker* was acquired by Advance Publications, he rejoined Condé Nast. In 1994, he was named president of Condé Nast Publications, Inc., the largest privately held U.S. magazine company, which includes such titles as *Vogue, Vanity Fair, Glamour,* and *GQ*. Two years later, he was named CEO. In early 2004, after suffering health setbacks, Mr. Florio stepped down from this position, and was named vice chairman of Advance Magazine Group. Last fall, he returned to his alma mater to teach an MBA course entitled "Leadership in the Communications Industry." The course featured guest appearances by CEOs including Donald Trump and William Lauder of Estée Lauder.

In an interview with *Sternbusiness*, Mr. Florio discussed his experiences teaching the course, and the lessons it taught him about leadership.

SB: *What does it mean to lead a company?*
SF: The *only* way you can really drive a company in any industry is through effective leadership, not just being the boss. And, that starts with top-line revenue. You can have brilliant financial people, but unless you have someone who understands how to build the top-line, it won't go anywhere. In the case of Condé Nast, it was putting the magazines editorial up front. Look at the quality of *Vogue*. It's about [editor] Anna Wintour and her staff. At the end of the day, she is a demanding, tough boss. She will not compromise the quality of the magazine that she was charged with. That's leadership. Then the publisher takes the product and sells it to advertisers and readers.

SB: *Demanding bosses often get tagged in the media with certain labels.*
SF: When I did it as CEO I was, "a street tough Italian guy from Queens who rose to the top, an effective charismatic leader." When a woman does it, people write novels about her, like *The Devil Wears Prada*. Martha Stewart, who is a good friend of mine, is another example of that. She's no less tough on driving her business than I was. They label her with unflattering labels too.

SB: *You showed a clip from the film "Patton" in one session on leadership. What did that illustrate?*
SF: The reason I showed that clip is to show that sometimes you need different leaders for different types of companies. I don't know if you'd want Patton in the White House after the war was over. He was determined to march into Russia, for God's sakes. But for his time and his assignment, he was the perfect leader. In the clip, he's saying that the object is not to die for your country, the object is to have the other poor guy die for his country. That scene from Patton was about identifying who your competitors are, and then to have laser focus.

SB: *William Lauder, the CEO of Estée Lauder, was one of your guest speakers. What did he bring to the discussion?*
SF: We were trying to talk about the difference between being a boss and being a true leader. From the time he could breathe, William Lauder knew his challenge would be to develop into an effective leader. He had to fill the shoes of his grandmother, Estée Lauder, and his Dad, Leonard Lauder, and keep the company moving forward. We talked about family-run companies, and how some of them essentially die with the third generation, which too frequently operates with a sense of entitlement. I wanted William in there because he didn't have a sense of entitlement. He once said that he works twice as hard for half the credit. He's a good human being. People like working for him because he's a leader. He never felt that because his family had started the company he was entitled to respect. He earned it.

SB: *Does leadership have a different meaning when it comes to running a public and a private company?*

SF: The answer is yes. If you work for a privately held company, you're held to the same standard, but you're not so quick to burn the furniture on a quarterly basis. S.I. Newhouse was my boss for 25 years, and the lesson I learned from him was to build for the long-term. Was he interested in profit? You bet! But he wasn't willing to make short-term, quick decisions based on monthly earnings. Unfortunately, Wall Street has put the pressure on modern-day CEOs of public companies to hit earnings figures on a short-term basis. I've often said to people, look at the great job that Michael Eisner did at Disney. If you had invested $1,000 the day he took the job, you'd have $50,000 now. And yet he had eight, nine, 10 quarters in a row that weren't particularly good, and they're trying to paint him as a terrible CEO. He did a brilliant job. He always took the long-term view.

SB: *Donald Trump was another guest lecturer. What did he bring to the class?*

SF: I told everybody there were three Donald Trumps: (1) the personality, the character you see on television; (2) the real estate developer, who is brilliant; and (3) Donald Trump the guy, the friend. When you're really his friend, he'll take a bullet for you. When I got really sick and was in the hospital, he was there. But I asked him to be Donald Trump, the MBA from Wharton. And he gave them a rousing lecture about building a business and a brand.

SB: *Who were some of the others?*

SF: Michael Wolf, the head of McKinsey's media and entertainment practice, came and talked about what you look for as you examine the CEO for leadership. I had Michelle James, who runs the executive search firm James & Co., who talked about what you look for in trying to match an executive with the culture of the company.

SB: *It sounds like you had a bunch of living case studies.*

SF: You can read case studies anywhere. Someone once asked me why I went to NYU. I said if I wanted to learn how to ski, I would have gone to Aspen. I wanted a career in business, so I came to New York. The benefit of going to school at NYU is going to a classroom and learning from a guy that ran a $3 billion business, listening to a woman who hires seven-figure executives, talking to the president of McKinsey, and shooting your hand up and asking a question. That's the great benefit of NYU — it's not just the quality of the teaching, but the universe that it operates in.

SB: *What did you learn from this course?*

SF: It really forced me to think about what kind of a leader I am. Preparing three-hour lectures makes you do that. And it forced me to think now about what kind of leader I will be in the future. I have to tell you very selfishly that a big part of my healing from heart surgery took place in that classroom. ■

ILLUSTRATIONS BY GORDON STUDER

RE

In the modern corporation, positions confer power. But informal status — the prestige a worker or executive can build up among co-workers — can depend on much more than a job title.

SPECT

By **Sandra E. Spataro** and **Cameron Anderson**

Anyone who has ever worked in a corporation knows that titles and positions can give employees leverage over one another. But researchers have also concluded that individuals with higher informal status – the level of respect and prestige they enjoy among coworkers – can be at a distinct advantage. They are given better opportunities, get more support when needed, and are awarded more credit when they succeed. Indeed, individuals sometimes strive harder for informal status than they do for formal promotions or higher financial compensation. And as informal collaboration and teamwork have become more important in the 21st century corporation, it's likely that informal status is growing even more significant.

In an effort to understand and quantify how informal status emerges, we set out to develop and test a theoretical model of informal status in organizations. We did so by putting forth several hypotheses and then testing them against data gathered from three different types of organizations. And the results – some of them quite unexpected – shed some interesting light.

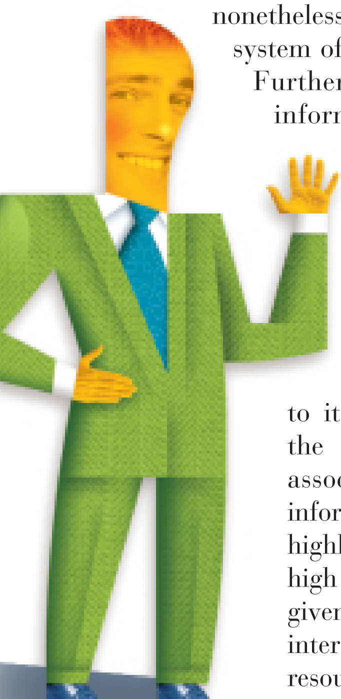
"Individuals with higher informal status – the level of respect and prestige they enjoy among coworkers – can be at a distinct advantage. They are given better opportunities, get more support when needed, and are awarded more credit when they succeed."

Power can be defined as the ability to influence others. But people with power are not always respected and held in high regard. In other words, they don't always have status commensurate with their rung in the organizational ladder. In any group, members assess others' personal attributes and behaviors and assign greater value – and ultimately informal status – to those they deem more likely to make greater contributions to shared objectives. And when individuals behave in ways that contradict shared objectives, they can be punished with social neglect, or even ridicule.

Informal status emerges naturally from social interactions and can be distinguished from a person's formal position or rank. And while informal status might be correlated with social connectedness, one can easily imagine individuals who have high informal status but do not hold advantaged positions in social networks – such as highly esteemed yet reclusive academics.

Status Perceptions

Achieving high consensus on the informal status order is likely a complex and difficult task in organizations. People in organizations work on multiple tasks, value different types of work differently, and may have little contact with one another. But such social interaction is nonetheless set within a social system of agreed-upon ideals. Further, the richness of information coworkers have about one another – gleaned through working with them directly or hearing about them via second-hand sources – should contribute to its reliability. Finally, the advantages that are associated with high informal status tend to be highly visible. People with high informal status are given more control over interaction patterns and resources, more opportunities, and more social and material support. We therefore start by predicting (*Hypothesis 1*) that: *Individuals in organizations will consensually perceive informal status differences among their coworkers.*



The characteristics and behaviors that lead to high status in any given group are derived from the group's specific goals. A research group will value behaviors that contribute to the group's success, such as new discoveries. But being an effective researcher might not lead to status in a group of salespeople. What's more, organizations prioritize not only the completion of any single task, but also the success and future vitality of the organization itself. As a result, (*Hypothesis 2*) holds that: *Informal status will likely be accorded to those who both represent and reinforce the organization's distinctive values.*

Since values are prioritized differently across organizations, it follows that the characteristics that lead to high informal status should also differ across organizations. But there should also be some characteristics and behaviors that uniformly lead to higher informal status across organizations. These include an individual's skills and experiences that contribute to the organization's core technologies, which rise with a person's familiarity with the organization's history. We therefore suppose (*Hypothesis 3*) that: *Individuals' tenure in the organization will be positively related to their informal status.* Similarly, across organizations, individuals' contributions to the shared technical objectives will likely be assessed, in part, by their ability to facilitate the completion of important tasks. Therefore we posit (*Hypothesis 4*) that: *Individuals' job performance will be positively related to their informal status.*

"Once individuals attain high levels of respect and esteem among peers, they become more central in the flow of communication."

Individuals with high formal rank typically have responsibilities more important to the organization's success. And fulfilling more important duties is generally construed by peers as making a stronger contribution to the group. So we also propose (*Hypothesis 5*) that: *Individuals' rank in an organization's formal hierarchy will be positively related to their informal status.* Finally, once individuals attain high levels of respect and esteem among peers, they become more central in the flow of communication. People seek them out for information or advice, to pass along ideas, or simply to seek their companionship. And so we speculated (*Hypothesis 6*) that: *The amount individuals interact with others will be positively related to their informal status.*

Organizational Behavior

To test these hypotheses, we examined three organizations: (1) an engineering department within a telecommunications firm. Comprising primarily engineers and technicians, it included some general managers and administrative support individuals; (2) a family medicine department of a research hospital, comprising four separate health clinics, each managed by medical doctors and populated by medical and administrative staff, as well as a centralized staff of administrators and faculty; and (3) a consulting firm that specialized in brand and image development, comprising employees in three different regional offices. The staff includes artistic designers, computer programmers, business professionals, and administrative and general management support.

We collected data in informal interviews, from human resource departments, and through surveys of all members of each department involved. The surveys allowed us to obtain peer-ratings of informal status and social connectedness, self-reports of tenure with the company, stable behavioral patterns, race, socioeconomic status, education level, and ratings of the organization's values. The total sample included 427 participants, divided roughly between the three organizations.

We used peer-ratings to measure informal status. Each participant was asked to rate 10 randomly selected coworkers on how much status he or she had, from 1 = ("low") to 7 = ("high"), where status was defined as the amount of "prestige or social standing" each member had. Participants' jobs were assigned the formal rank their occupation held relative to the other jobs in their organization. In the engineering firm, support staff received a "1," while managers received a "4." Similar gradations were made in the hospital department and consulting firm.

We assessed social connectedness using peer-ratings. Participants rated the same 10 coworkers on how much they interacted with each of them, on a scale from 1 = ("Never") to 7 = ("All the time"). We were able to obtain job performance data in the consulting firm in the form of manager evaluations of performance. Ratings were on a scale of 1 ("Rarely or never meets expectations/Red flag") to 5 ("Consistently exceeds expectations/Top performer/Leader"). In the surveys, participants reported tenure in their organization, coded in number of months.

To measure the extent to which individuals behaved in ways valued by their organization, we assessed the values of each organization through informal interviews and then assessed individuals' stable patterns of behavior through self-report measures of personality. We observed differences between the three organizations in how much they emphasized tangible results, or the "bottom line," and in their focus on teamwork and collaboration. These dimensions closely mirrored what researchers Charles O'Reilly, Jennifer Chatman, and David Caldwell in 1991 labeled "outcome-orientation" and "team-orientation."

To measure their firm's outcome-orientation, participants rated the extent to which each of six dimensions characterized their organization: result or outcome-oriented, detail-oriented, reward-oriented, decisive, aggressive, and competitive. For team-orientation, participants rated the extent to which each of five dimensions characterized their organization: team-oriented, group-oriented, people-oriented, supportive, and cooperative. Each dimension was rated on a scale from 1 ("Extremely uncharacteristic") to 7 ("Extremely characteristic"). The engineering department was rated as valuing outcome-oriented dimensions of culture more than the hospital department, which was in turn followed by the consulting firm. The consulting firm was rated as highest on team-orientation, followed by the hospital department, followed by the engineering department.

Based on these assessments, we focused on two personality dimensions that provided the best content matches to the organizational value-dimensions of outcome- and team-orientation. First, Conscientiousness, which is a personality dimension that "facilitates task- and goal-directed behavior;" conscientious individuals are dutiful, hard-working, and organized. Second, we focused on Extraversion, which is a personality trait that involves an "energetic approach to the social and material world and includes traits such as sociability, activity, assertiveness, and positive emotionality." In the workplace, Conscientiousness has been linked with diligence in tasks, whereas Extraversion has been shown to predict job performance in occupations that require interpersonal skills, such as in sales positions.

"Understanding the political landscape in an organization requires knowing the individuals that are respected and admired in addition to understanding the formal organizational chart."

A rich literature on status characteristics has shown that demographic characteristics such as sex, race, or socioeconomic status can become salient status characteristics. As a result, we assessed and controlled for sex, ethnicity, socio-economic status, and education in our analyses of origins of informal status.

Results

What did our results find? *Hypothesis 1* predicted that organizational members would reliably perceive informal status differences among the coworkers in their department. And indeed, we found that in all three organizations, a consensus had emerged among coworkers as to who had high and who had low informal status.

Based on our assessments of the three organization's values, we conducted two tests of *Hypothesis 2*, which held that informal status will likely be accorded to those who both represent and reinforce the organization's distinctive values. First, we hypothesized Conscientiousness would most strongly relate to informal status in the engineering department, followed by the hospital department, then by the consulting firm. Second, we hypothesized Extraversion would most strongly relate to informal status in the consulting firm, followed by the hospital department, then by the engineering department.

As shown in **Table 1**, the strength of the relation between Conscientiousness and informal status was highest in the engineering department, followed by the hospital department, followed by the consulting firm. This provides support for *Hypothesis 2*. **Figure 1a** illustrates graphically the difference between the engineering department and the consulting firm.

As shown in **Table 1**, the strength of the relation between Extraversion and informal status was highest in the consulting firm, followed by the hospital department, followed by the engineering department. That means Extraversion was a stronger predictor of informal status in the consulting firm than it was in the engineering

Table 1 Regressions Predicting Informal Status in Each Organization

Independent variable	Equation 1 **Engineering Department**	Equation 2 **Hospital Department**	Equation 3 **Consulting Firm (without performance)**	Equation 4 **Consulting Firm (with performance)**
Organization-specific origins: Embodiment of Org'l Values				
Conscientiousness	.290*	.075	-.177	.073
	(.133)	(.176)	(.262)	(.261)
Extraversion	.069	.063	.569**	.551**
	(.092)	(.128)	(.204)	(.198)
Origins related to the technical core				
Tenure with organization	.001	.002	.015**	.013**
	(.001)	(.002)	(.005)	(.005)
Job performance				.262*
				(.147)
Structural correlates				
Formal rank in organization	.352**	.278**	.381**	.324**
	(.131)	(.080)	(.112)	(.144)
Social connectedness	.592**	.543**	.391**	.382**
	(.071)	(.104)	(.110)	(.107)
Control variables				
Sex (1 = female)	-.004	-.093	-.127	-.021
	(.168)	(.220)	(.308)	(.305)
Caucasian (1 = Caucasian)	.574	-.738	.218	.278
	(.359)	(.674)	(.486)	(.473)
African-American (1 = African-Amer.)	.585	.245	.763	.738
	(.388)	(1.059)	(.777)	(.754)
Asian-American (1 = Asian-American)	.499	-1.332	.391	.507
	(.375)	(.836)	(.600)	(.587)
Hispanic/Latino (1 = Hispanic)	.397		1.541	1.380
	(.385)		(1.027)	(1.001)
Socioeconomic status	.163*	-.195	.254	.218
	(.073)	(.172)	(.179)	(.175)
Education level	-.141	.086	.373	.343
	(.123)	(.181)	(.242)	(.235)
Agreeableness	-.138	.060	.204	-.002
	(.143)	(.210)	(.258)	(.276)
Neuroticism	-.015	-.293	.107	-.149
	(.110)	(.166)	(.269)	(.298)
Openness	-.237	-.129	-.122	-.209
	(.130)	(.195)	(.286)	(.282)
F-statistic	8.90**	3.00**	4.66**	4.83**
Adjusted R-squared	0.53	0.29	0.52	0.55

*p < .05; **p < .01.
Entries are unstandardized beta coefficients. Standard errors are in parentheses.

department and that it was in the hospital department. **Figure 1b** illustrates graphically the difference between the consulting firm and the engineering department.

Hypotheses 3 and 4 predicted that tenure and job performance, respectively, would be related to informal status. But tenure turned out to be a significant contributor to informal status only in the consulting firm. And job performance, which could be gauged only in the consulting firm, proved to be significantly related to informal status.

In *Hypotheses 5 and 6*, we predicted informal status would be related to structural position within the organization's formal hierarchy, and to social connectedness, respectively. In all three organizations, in fact, informal status was significantly related to formal rank. Similarly, informal status was independently and directly related to social connectedness in all three organizations. But in our study, informal status differences were moderately related to, but clearly distinct from, the formal organizational hierarchy and from patterns of social connectedness.

Implications

What are the implications of these

Figure 1A

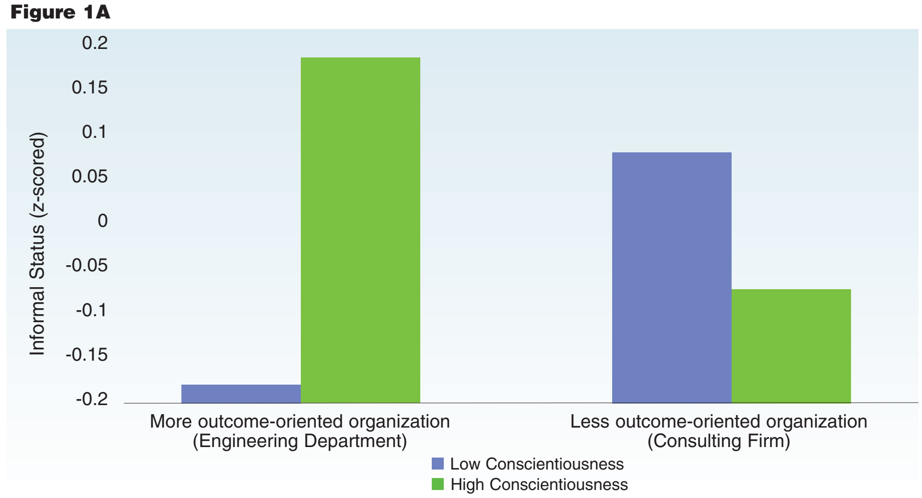
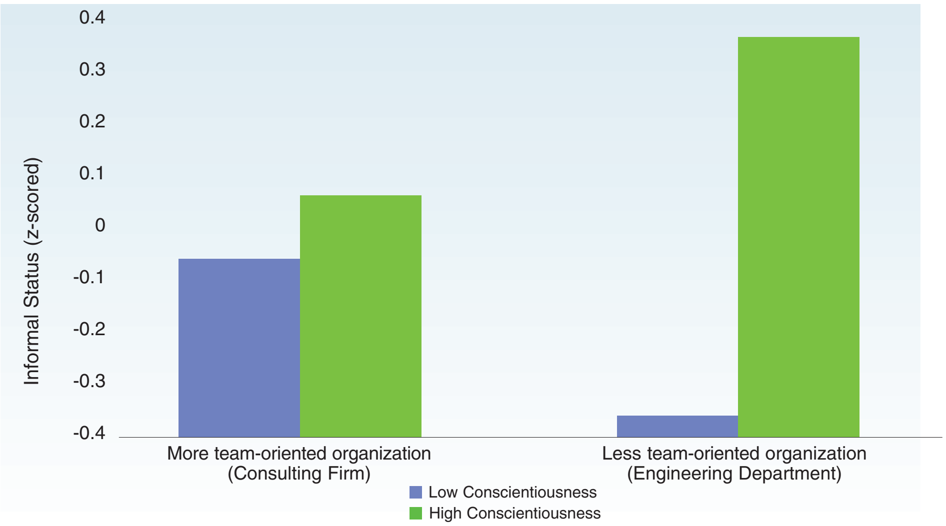


Figure 1B



findings? First, if informal status is largely distinct from formal rank, it suggests that individuals who lack formal authority in the organization can still wield considerable influence over others. Thus, understanding the political landscape in an organization requires knowing the individuals that are respected and admired in addition to understanding the formal organizational chart.

Second, individuals' behavior might be shaped by their strivings for informal status as much or more than by their aspirations for formal promotion or higher financial compensation. On an organizational level, this can become a problem if the behaviors rewarded and punished by the informal status structure differ from those that managers seek to instill in their workers. For example, in their classic 1939 study, *Management and the Worker*, Fritz Julius Roethlisberger and William J. Dickson observed how the informal status structure in a factory punished workers who performed too efficiently.

It is also clear that emergent informal status differences are associated with organizations' unique values. In the engineering department, which valued task-oriented over socially-oriented behavior, being diligent and task-focused led to status but being sociable and talkative did not. In contrast, in the consulting firm, which valued socially-oriented over task-oriented behavior, being talkative and sociable led to status but being diligent and task-oriented did not. Our study showed that the presumed link between task abilities and domain-specific status characteristics is not so tight. Rather, we found that upholding and projecting the values of the organization, independent from experience in the organization or even job performance, was an important source of informal status.

Prior research has documented other benefits individuals enjoy when they possess values that are consistent with their organization: higher satisfaction, lower turnover, and increased organizational commitment. Our research suggests that those who possess such values could also achieve positions of power and influence in organizations through higher informal status. In other words, individuals who attain high levels of respect and esteem among their peers garner influence over their coworkers' attitudes, work habits, performance levels, and satisfaction with the organization. Organizations appear to promote culturally appropriate behavior not only through formal means, such as the allocation of bonuses, bigger offices, and promotions but also through informal means – namely, the allocation of high informal status among peers.

In contrast to a long tradition of research on ad hoc groups, the demographic variables included in our analyses as controls did not emerge as independent contributors to informal status. Sex and ethnicity did not have an effect on informal status in any of the three organizations. This may reflect the "relevancy" principle of Expectation States theory, which holds that diffuse characteristics such as sex and race are less relevant when other more relevant information – such as behavior, expertise, and job performance to gauge their status – is available.

Due to some of the limitations of the current research, a number of questions need further examination. First, given the small number of organizations, we could not statistically test the relation between group values and the traits that lead to status. Future work should focus on the importance of status to individual organizational members and examine the importance of informal status to the dynamics of organizations at the collective level. As a system of social rewards and punishments, informal status hierarchies might provide a robust and powerful way to control employees' behavior. It is therefore crucial to understand whether these social rewards and punishments are shaping employee behavior in ways that managers wish them to.

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LIVE AUCTION HEROES

EBay may seem to be a vast, anonymous electronic marketplace. But the website's mechanisms that allow buyers and sellers to rate one another ensure that reputation matters.

By **Luís Cabral** and **Ali Hortaçsu**

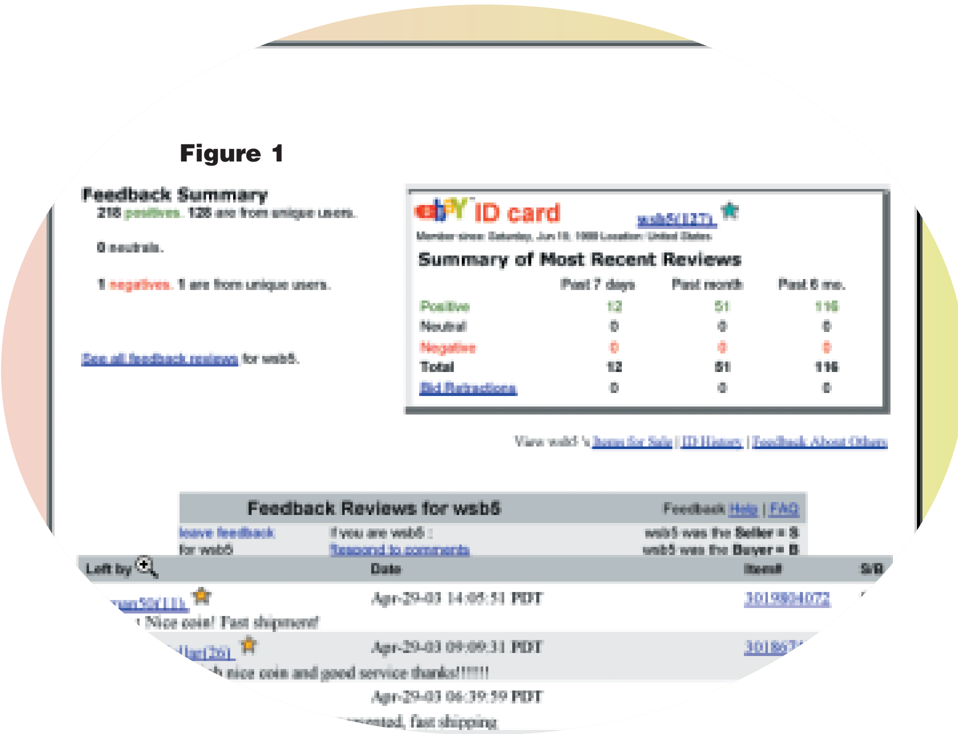
ILLUSTRATION BY JULIETTE BORDA

Markets rely significantly on the trust created by repeated interaction and personal relationships. Is it possible to obtain the same level of trust and efficiency in more anonymous electronic markets? One possibility is to create reputation mechanisms that allow traders to identify and monitor each other. And that's precisely what has happened on eBay.

Since its launch in 1995, eBay has become the dominant online auction site, with millions of items changing hands every day. In 2003, more than $21 billion in sales were transacted on eBay by 69 million users. EBay acts purely as an intermediary, and collects revenue from seller fees upon successfully completed auctions. But the company doesn't just process orders. To enable reputation mechanisms to regulate trade, eBay has developed an innovative feedback system.

After an auction is completed, buyers and sellers can give one another grades of +1 (positive), 0 (neutral), or -1 (negative), and add textual comments. EBay then displays several aggregates of the grades: the overall rating, the sum of positives minus negatives received by a seller; the percent of positives; the date when the seller registered; a summary of recent reviews from the past week, month, and six months; and the entire feedback record, an exhaustive list of reviews left for the seller. With its well-defined rules and mass of available information, eBay thus presents the researcher with a fairly

Figure 1



controlled environment for theory testing. So we decided to use this data to investigate how feedback comments affect reputation, future sales, and the willingness of eBay participants to continue buying and selling goods.

We collected data from eBay's website at monthly intervals between October 24, 2002 and March 16, 2003 on three products. First, we chose **collectible coins**, one of the most active segments on eBay. We examined activity in 1/16 oz. five dollar gold coins of 2002 vintage (gold American Eagle) and 2001 silver proof sets, a set of 10 coins of different denominations. Both items are produced by the U.S. mint. The average sale price for the gold coin in our data set was $50, and the proof sets sold on average for $78. Second, we chose **IBM Thinkpad T23 PIII** notebook computers. Notebook computers, according to the Federal Bureau of Investigation's online fraud unit, give rise to the most customer complaints about auction fraud. The average sale price of the Thinkpad T23's was $580. Finally, we chose the **1998 Holiday Teddy Beanie Babies**, a hugely popular item. With an average sale price of $10.70, the Beanie Babies were the least expensive item we examined.

Along with transaction-level data, we also downloaded each seller's "feedback summary" page, as shown in **Figure 1**. The construction of entire transaction histories for many of the sellers in our sample is not feasible, since users can't access transaction level information that is more than 30 days old, and many of the sellers in our sample have been using eBay for much longer than that. However, assuming that a constant fraction of transactions is rated by bidders, the total number of feedback points is a good proxy for the total number of transactions conducted by the seller. The average seller in our sample has 1,625 total feedback responses (See **Table 1**). The median seller has 397. The largest seller has 52,298 feedback responses, and the smallest has 0. Sellers were largest in the market for Thinkpads, followed by teddies, gold coins and the proof sets.

The average seller in our sample has 4.9 negative feedback points, corresponding to 0.9 percent of all comments. The maximum number of negative feedbacks received by a seller is 819, but this seller took part in 52,298 transactions. The median seller in our sample has only one negative feedback, and more than a quarter of the sellers have none. Our subjective impression, after browsing through eBay community chatboards, is that the information contained by a neutral rating is perceived by users to be much closer to negative feedback than positive. Given this, we decided to

Table 1: Distribution of feedback aggregates across sellers.

	Number of Positives	Number of Negatives	Number of Neutrals	N/(N + P) (entire history)
Mean	1,625	4.9	7.2	0.009
Standard Dev.	3,840	25.1	33.5	0.038
Minimum	0	0	0	0
Maximum	52,298	651	654	1

lump negative and neutral comments together when talking about "negative" comments.

Negative Feedback and Sales

Having assembled the data, we set out to test several assumptions. We assume that generally speaking, the higher the seller's reputation, the more he has to gain from putting an object up for auction, and thus the more often he will do so. Conversely, the worse the reputation of the seller, the less he has to gain from doing so. We thus hypothesized that after the first negative feedback experience, there would be a drop in the rate at which the seller puts objects up for sale and manages to sell them.

In order to test this hypothesis, we constructed a proxy for weekly sales totals by adding the total number of sales-related feedback comments received by a seller in a given week. We then marked the weeks in which a seller received his first, second, and third negatives. We averaged the weekly sales rates over a four-week window before and after the week in which the seller got his first (or second, or third) negative. We also calculated the sellers' "before" and "after" weekly growth rates by averaging growth rates over these two four-week windows. The results, reported in **Table 2**, are striking: For all four object categories, the impact of the first negative is to slow growth by 14 percent a week, and this difference is highly statistically significant. By and large, the second and third negatives did not have statistically significant affects on growth rates.

Table 2: Impact of first negative on sales growth (%).

Average Week Growth Rate	OBJECT			
	Thinkpad	Proof set	G. Eagle	B. Baby
Before	7.12	6.85	9.04	14.19
After	–6.76	–7.51	–3.89	–4.28
Difference	–13.88***	–14.36***	–12.92***	–18.47***
Standard Error	4.88	3.45	3.58	3.69
Number of Observations	66	130	95	136

Frequency of Negative Feedback

We next examined whether the arrival of the first negative rating has an impact on the frequency with which subsequent negative ratings are given. We measured time in two ways: number of sales transactions and calendar time (number of days). For the Thinkpad, it takes on average 129 transactions before a seller receives his first negative, but only 60 additional transactions before the second arrives. Similar results are obtained for the other three objects. When we replicated this analysis with time measured in days, the difference between the interarrival times of the first vs. the second negative is again quite striking. In the Thinkpad market, for example, it takes on average 300 days for the first negative to arrive, but only 66 days for the second one. In all cases we considered, the increase in frequency after the first negative is statistically significant. By contrast, the arrival of the second, third, up to fifth negative seems to have no impact on the frequency of negative feedback.

"With its well defined rules and mass of available information, eBay thus presents the researcher with a fairly controlled environment for theory testing."

At the very least, it appears from these results that there is something special about the first negative that a seller receives: Once the first negative arrives, the second one arrives faster. Given the significance of this result, both in statistical and in economic terms, we set out to find possible explanations.

One explanation is that buyers have a threshold of dissatisfaction above which they give a negative, and that this threshold drops after the first negative. There are several behavioral mechanisms through which this can happen. There could be a decrease in the cost of writing a negative comment. Many negative comments from buyers are followed by a retaliatory negative comment given by the seller; and seller retaliation might impose an economic cost on the complaining buyer, especially if the buyer is also a seller. Such an effect would confound our results if the probability of retaliation by a seller in reaction to her first negative is higher than retaliation to her second negative, an explanation proposed by several eBay users we talked to.

In order to investigate this possibility, we checked whether each particular negative comment by a buyer was accompanied by a retaliatory negative left by the seller. The result was striking: Of the almost 10,000 negative/neutral instances in our data, 2,462 resulted in a retaliatory comment by the seller. However, our data indicates that sellers are not more likely to retaliate upon their first negative, as opposed to subsequent negatives. So it does not appear that "fear of retaliation" is a significant driver of the difference in interarrival times of negative comments.

Next, we considered the possibility that buyers are influenced by other buyers' behavior. In particular, faced with poor performance by a seller with a perfect record, a buyer might be inclined to think that there is no ground for a negative feedback. For example, if there is a communication problem between buyer and seller, the former may attribute this to a problem with him or herself. However, if the seller has already received a negative feedback, especially regarding the same problem that the buyer is now facing, then the buyer may have a greater inclination to attribute this to a problem with the seller.

To consider this possibility, we classified the first and second negative remarks according to their nature. The buyer-influence story should imply an increase in the relative importance of subjective problems in second negatives. However, the results suggest a very similar pattern for first and second negatives. Moreover, "item never sent," arguably the most objective reason for negative feedback, actually increases in relative importance (though by a small amount). At the opposite extreme, "bad communication," arguably the most subjective reason for negative feedback, also increases in importance (though by an even smaller amount).

"For all four object categories, the impact of the first negative is to slow growth by 14 percent a week."

Finally, if the "threshold" story holds true, we would expect the comments accompanying first negatives to be nastier than the comments accompanying the second and subsequent negatives. In order to test this possibility, we created pairs of comments corresponding to each seller's first and second negative. We then asked a third party (a student) to make a subjective evaluation as to which of the two remarks was more negative. (We randomly mixed the order of the comments so that the student could not tell which was the first and which was the second negative). The results show that 51 percent of the second negatives were considered nastier then the corresponding first negative, a split that is not statistically different from 50/50.

In sum, the empirical evidence suggests that the behavioral change from the first to the second negative is not due to changes in buyer behavior, but rather to changes in the seller behavior. Our interpretation is that, once the first negative arrives, a seller's reputation is worth less and the value of protecting such reputation is also lower. Accordingly, the seller makes less effort to guarantee a good transaction and as a result more negative feedback experiences take place.

Reputation and Exit

Next we considered the possibility of a seller "exiting," i.e., secretly changing his identity and starting a new reputation history. Intuitively, we would expect the seller's tendency to do so to be decreasing in the seller's reputation. We supplemented our data set by revisiting our sample of sellers in the first week of January 2004, and checking whether they were still in business. Of the 819 sellers originally sampled, we found that 152 had not conducted any transactions within the last 45 days and 61 sellers had not sold anything within the last 45 days, but had bought an item. We also could not locate the feedback records for 104 sellers in our sample, since eBay's database claimed that these seller IDs were no longer valid.

When we ran regressions on these data, the results implied that a ten-fold increase in the total number of positives (as of May 2003) translates into a decline in exit probability (in January 2004) of between 14 to 21 percent. Also, a 1 percent level increase in the percentage of negatives in a seller's record translates into an increase in exit probability of 1.6 to 2.1 percent. For Beanie Babies, the magnitude of the coefficient estimate implies that an increase from 1 percent to 2 percent of negatives in a seller's record translates into 12.5 percent higher exit probability.

We also investigated whether the "exits" we see in our data set are accompanied by opportunistic profit-taking by sellers, and whether reputational variables can predict such behavior. We collected data on the last 25 sale transactions conducted by exiting sellers, and counted the number of negative comments. Some cases were quite striking: One of the sellers in our sample, who had 22,755 positives, racked up 11 negatives in her last 25 transactions; whereas she had a total of 54 negatives in her previous transactions. On average, the percentage of negatives in the last 25 comments of exiting sellers we examined was 4.38 percent, as opposed to an average 1.61 percent over their entire histories. The results of these regressions indicate that, for the entire sample of sellers, a ten-fold increase in a seller's count of negatives is correlated with a 5 percent increase in "opportunistic" exit as defined above.

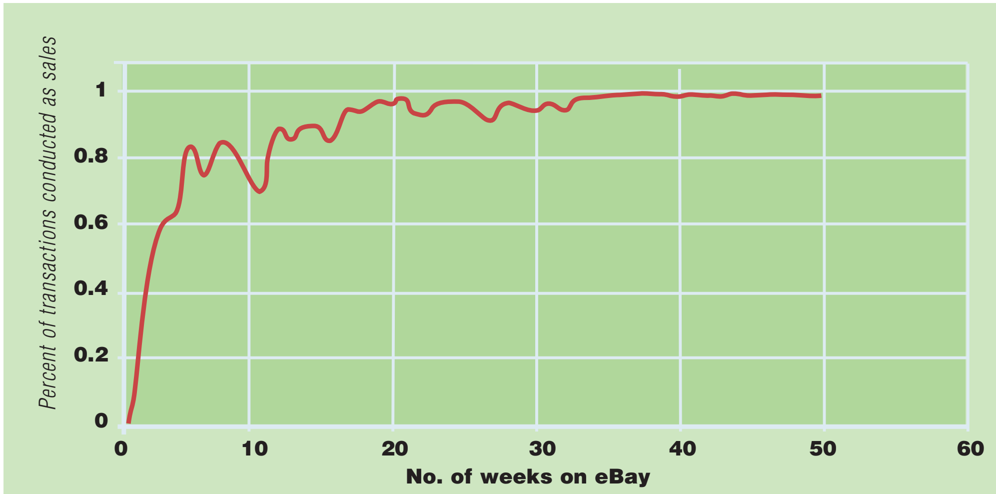
In summary, our data is consistent with the possibility of opportunistic profit-taking and exit behavior by sellers. There are, however, alternative stories consistent with the data. For example, it might be that some unexpected exogenous event leads the seller to offer poor service for a period of time, which results in an increase in negative feedback, which in turn results in the seller's decision to exit (given such a poor record).

"On average, the percentage of negatives in the last 25 comments of exiting sellers we examined was 4.38 percent, as opposed to an average 1.61 percent over their entire histories."

Buying a Reputation

Casual observation of feedback histories suggests that many sellers appear to start out as buyers, completing a string of purchases before attempting their first sale. As can be seen from **Figure 2**, bearsylvania – a Beanie Baby dealer – started out as a buyer first, and quickly changed the pattern of his transactions from purchases to sales.

Figure 2: How "bearsylvania" became a seller



We then defined a seller as having switched from being a buyer to being a seller if more than 50 percent of the first 20 comments referred to purchases, and more than 70 percent of the last 20 comments referred to sales. We found that 38 percent of Beanie Baby sellers, 22 percent of laptop sellers, 31 percent of gold coin sellers, and 31 percent of proof set sellers followed the "buy first, sell later" strategy. We also found that, on average, 81 percent of a seller's last 20 transactions were sales, compared to 46 percent of the first 20 transactions. These results show that "buying first and selling later" is a widespread phenomenon on eBay.

Next, we investigated the correlation of the "buy first, sell later" indicator variable with the percentage of negatives in a seller's record, as well as the length of the seller's record. This regression suggests that a 1 percent level increase from the mean value of 0.7 percent of negatives to 1.7 percent of negatives is correlated with a 6.4 percent decrease in the probability that the seller switched from being a buyer to a seller. So although we do find indisputable evidence for the existence of switching behavior on eBay, our evidence for a clear economic incentive to do so is weak.

Conclusion

The marketplace can be quite efficient in meting out punishment for those who don't adhere to expected norms. On eBay, a vast marketplace itself, the reputation mechanism plays the role of punishing poor performance and behavior. Indeed, it is clear from our research that eBay's reputation system gives way to noticeable strategic responses from both buyers and sellers. That is, the mechanism has "bite." Of course, this does not imply that the current structure of the system is optimal. In fact, we believe an exciting area for future research is precisely the design of an efficient reputation mechanism.

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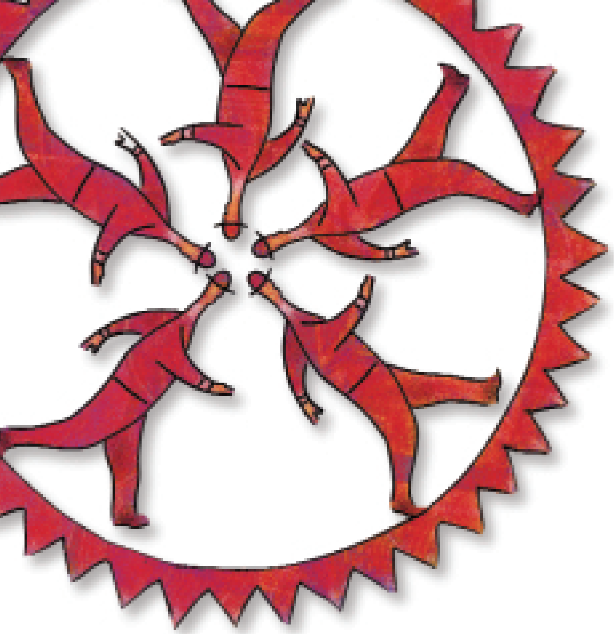

AUTOMATION'S NEXT WAVE

In recent years, productivity-enhancing information technology has wrought significant changes in global labor markets. But the process may just be getting started.

By **Alexander Tuzhilin**

A great deal of journalistic and academic attention has been focused on the strong growth in productivity in the U.S. economy. Between 1996 and 2003, productivity rose at a 3 percent annual rate, double the pace of the first half of the 1990s. Automation, frequently driven by advances in information technology (IT), has been one of the sources of this productivity growth. To take but one recent example, Atmos Energy, a Dallas, TX-based gas company, is automating its gas meter reading capabilities by using wireless technologies, a move that will allow it to reduce its staff by 225 employees over the next five years and thus attain significant increases in productivity.

It is natural to wonder if such automation-driven productivity enhancements can be sustained. After all, it seems like so many tasks and components of jobs are now automated. And yet there's an argument to be made that we are still in the early stages of a new wave of automation, which will profoundly affect the economy and significantly contribute to the productivity growth over the next 10 to 15 years.

Industrial automation goes back to the Industrial Revolution of the 18th century, when machines replaced physical labor on a massive scale. From the advent of the steam engine to the assembly line, work previously done by human hands came to be done by machines that could harness the power of water, steam, and, eventually electricity. In the past 25 years, automation transformed manufacturing as industrial robots replaced manual jobs in industries such as automobiles, computers, and telecommunication

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equipment. More recently, automation has been primarily driven by IT. The toll booth collectors who have lost their jobs to EZ-Pass technologies may be a harbinger of future trends. It is possible, for example, that many cashiers in department stores and supermarkets will soon lose their jobs because of the advancements of the Radio Frequency Identification (RFID) tag technologies.

Most of the jobs lost to automation have been routine production jobs, according to the job classification proposed by former Labor Secretary Robert Reich in his 1991 book *The Work of Nations*. Examples of these jobs, which are characterized by repetitiveness and structuredness, include assembly line workers, foremen, data processors, and toll collectors.

The next wave of automation will affect not only routine production workers, but also the better-paid and heretofore more secure group that Reich called symbolic-analytic workers – engineers, office and knowledge workers, managers, educators, and other groups of mind workers. Although few of these jobs will be eliminated completely, many of the more routine tasks in these jobs will be delegated to smart machines within the next 10-15 years, leading to major restructuring and consolidation.

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Symbolic Analysts

I recently taught a course on Advanced Technologies for Business Applications at NYU Stern. The students, who were predominately part-time MBA students, were asked to describe what parts (if any) of their jobs or the jobs of their closest colleagues, could be automated within the next 10 to 15 years. All the students were symbolic-analytic workers according to Reich's classification, and some of them worked in managerial positions. Based on about 30 student reports, an interesting picture emerged about the types of jobs that can be automated and the extent and scope of this automation.

In general, jobs can be classified along three dimensions. First, repetitiveness – for example, a salesperson repeatedly meeting with clients. Second, stability – a job that does not change over time. For example, a salesperson meeting with the same client, as opposed to meeting different clients. Third, structuredness – a job that can be described with a clear procedure, perhaps even expressed as an algorithm. For example, a salesperson can have a structured interaction with the client asking several standard questions and making several standard offerings of products. Alternatively, the interaction can be unstructured and open-ended.

Many jobs consist of several tasks, with each task characterized by the three dimensions of repetitiveness, stability and structuredness. Graphically, a job can be represented with a set of points in the three-dimensional space shown in **Figure 1**, where each point constitutes a particular task of the job.

The tasks that are closer to the origin in **Figure 1** – i.e., those that are high on repetitiveness, stability, and structuredness – constitute the primary candidates for automation. For example, the task of a salesperson meeting with the same client over and over again and interacting with the client in a structured manner, asking the same set of questions and offering a simple array of services based on the answers, is a good candidate for automation by an intelligent software agent. Moreover, most of the routine production jobs that have been lost to automation rate highly on all of the three dimensions. In contrast, the tasks that are away from the origins on all three dimensions are the hardest to automate. For example, the task of a salesperson meeting with a different and ever-changing clientele and having unstructured open-ended discussions with them is very hard to automate.

If all the tasks of a given job can be automated, then the entire job can be eliminated. However, this is unlikely to occur for most of the symbolic-analytic jobs since most of them have some tasks that are ranked high along at least one dimension in **Figure 1**. Therefore, most of the symbolic-analytic jobs can be automated only partially (if at all) within the next 10-15 years.

Extent and Scope

One of the surprising outcomes of the student projects was the extent and scope of possible automations they identified for different types of jobs in diverse industries, including accounting, finance, healthcare, human resources, IT, marketing and sales.

For example, one type of a job a student described as already auto-

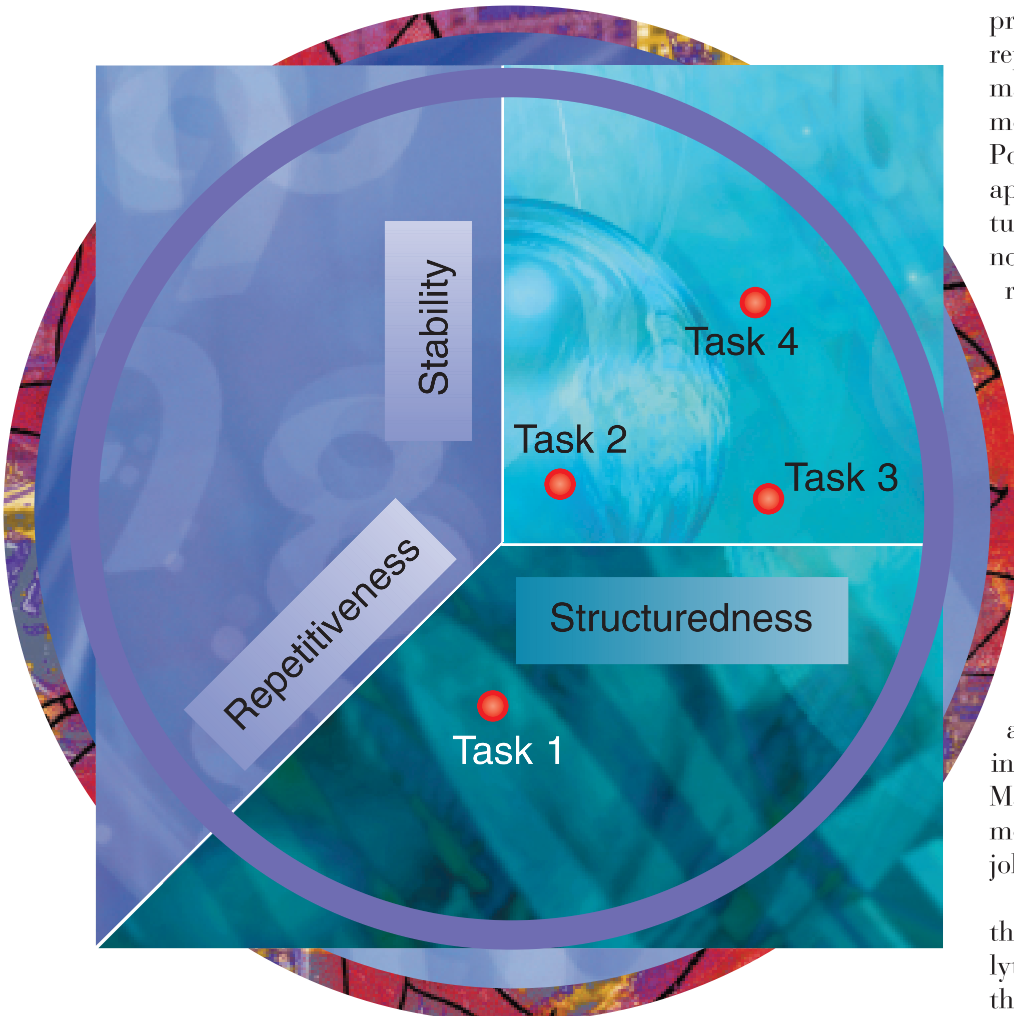


Figure 1 Job representation as a set of tasks in 3D space

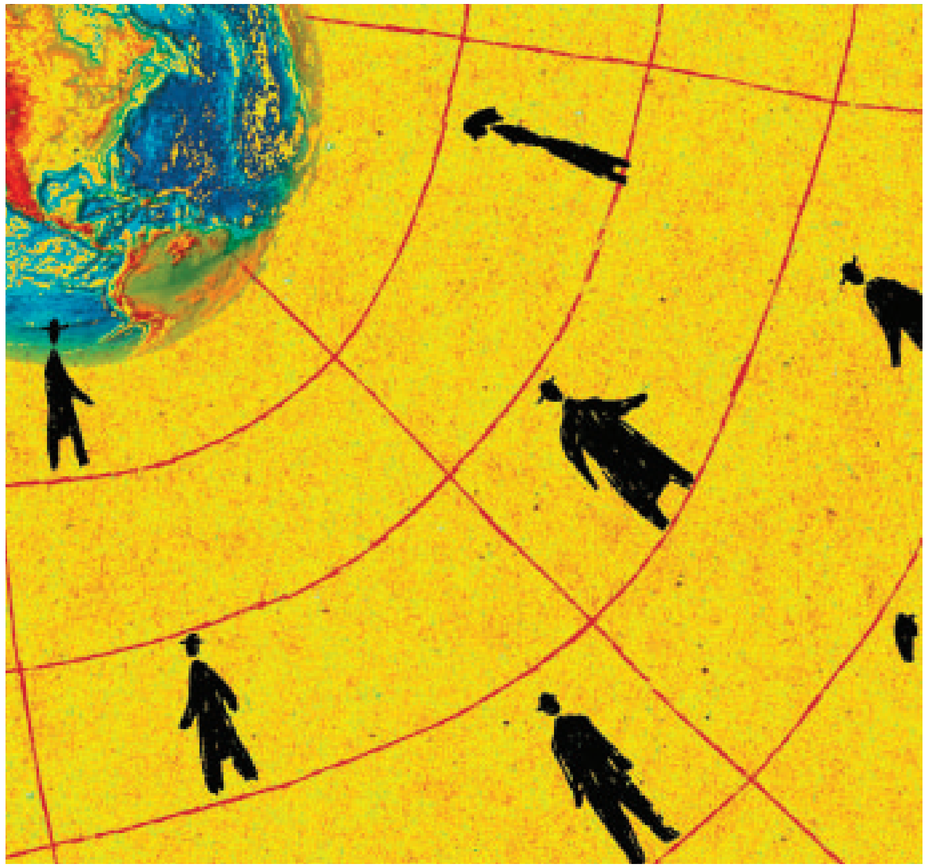
(each dimension is measured in terms of High and Low, where High is at the origin and Low at the end of the axis)

mated is that of the Client Accountant. This job is responsible for ensuring that all the client's transactions settle properly, all funds are transferred, and all the account balances are reconciled with various parties involved in a transaction. It is a very routine and paper intensive job that rates very high on all three dimensions in **Figure 1** (the point is close to the origin). Over the past few years, this job has been automated in the financial services and other industries. A single client accountant can now monitor the transaction activities of 10 times more accounts than was feasible in the past.

Another example of a job currently being partially automated in some companies is that of a Marketing Associate, who helps create a company's responses to various Requests for Proposals (RFPs) or Request for Information (RFIs). One of the tasks for which Marketing Associates are responsible for is the collection, reviewing, and compiling of the account-related information (such as performance figures, market values, etc.) into a presentable format. It is a laborious, manual process involving running various reports, cutting and pasting information from Excel and Word documents, and eventually building a PowerPoint presentation. In many applications this process is structured, straightforward, and does not require much creativity. It also rates high on all three dimensions in **Figure 1**, and is a good candidate for automation. Some companies are currently trying to automate this task. However, that does not mean that the job of a Marketing Associate will be eliminated, since it also involves other tasks that are less routine and structured. Instead, Marketing Associate jobs are more likely to be consolidated and restructured by automating the tasks of responding to RFPs and RFIs and letting Marketing Associates focus on the more human-oriented parts of their jobs.

These two examples represent the simplest types of symbolic-analytic service jobs that are currently the primary targets for automation. The students also provided numerous examples of more advanced automation tasks. Currently, many business processes have already been partially automated by delegating some parts to machines and other parts to humans. Examples of such human-centered tasks include moving information from one system to another or checking the results returned from one part of the business process before initiating another. These human activities are often required because various systems may not "talk" to each other or may return questionable results that need to be inspected before the business process can continue. These activities usually constitute the leftovers from previous automation projects and comprise the hardest parts of these projects that were left un-automated for the reasons mentioned above. Naturally, they are primary candidates for new automation attempts using more recently developed information technologies.

The students also explored various other jobs that are significantly harder to automate, such as new product development, sales support, systems analysis, and project management, which all require significant advances in technologies before smart machines can perform these jobs. Although they claimed that such unstructured, non-repetitive, and evolving jobs are impossible to eliminate, the students identified various tasks within those jobs that could be automated within the next 10 to 15 years.



More Deep Blues

Although many findings in the student reports were quite unusual, they should not be very surprising upon further reflection. Consider the chess program Deep Blue, developed by IBM, which defeated the world champion Gary Kasparov in 1997. Or the projects attempting to automate the art of painting, writing poetry, and composing music, such as robotic painter Aaron, music-generating software EMI, and Kurzweil's Cybernetic Poet, that are described in Ray Kurzweil's book *The Age of Spiritual Machines*. Although these efforts are still in their infancy, it is quite possible that significant progress can be achieved in the next 10 to 15 years. And if such highly creative, unstructured, non-repetitive, and evolving tasks as playing chess, painting, composing music, and writing poetry can be automated, then significant portions of the work currently performed by symbolic-analytic workers can also be.

"If such highly creative, unstructured, non-repetitive and evolving tasks as playing chess, painting, composing music and writing poetry, can be automated, then significant portions of the work currently performed by symbolic-analytic workers can also be."

Moreover, the low-hanging fruits are being picked right now, as is evidenced from such activities as automation of the client accounting and marketing associate functions described earlier. As another example, Lehman Brothers Inc. is currently automating payroll and other administrative functions. The main question is: How far will the IT industry be able to advance along the three dimensions of **Figure 1** within the next 10 to 15 years?

The scope and extent of possible automation of the symbolic-analytic jobs described is possible only because of the development of advanced technologies that can enable these automation processes. It is these technologies that will propel the continued productivity enhancements in the coming decade. Many smart devices and technologies have been developed over the past few years, including smart homes, refrigerators, laundry machines, even tires. These are enabled by so-called smart software that monitors their behavior and drives and guides these devices. Meanwhile, numerous information technologies help remove the user from the loop from various business processes and thus make these processes more automated. These include Web services that help distributed computer systems interact among themselves and understand one another without any human intervention, workflow automation, and document analysis and processing technologies. Much human effort in the knowledge economy pertains to the processing of various multimedia documents containing text, images, video, and audio information. This labor-intensive activity is very difficult to automate because it involves natural language understanding and/or computer vision, which constitute two very hard areas of computer science. However, significant progress has been made in both of these areas over the past several years, and certain types of specialized textual documents and images can be analyzed by machines now.

Recent advancements in networking and wireless technologies will enable the development of new automation methods and new ways to redesign business processes. For example, RFID tag technologies might allow for the elimination of the check-out lines in the department stores and elimination of many cashier jobs. The tags would also enable automation of the business processes in the supply chains resulting in numerous efficiency improvements. And EZ-Pass-like technologies are certainly not limited to toll collection applications. The EZ-Pass concept – a person walking through a monitoring device that recognizes the provided service and automatically bills this person – could find numerous applications in all spheres of business within the next several years.

The integration of wireless, location-based (e.g., Global Positioning Systems, [GPS]) and Web services technologies constitutes a powerful combination that would enable numerous automation applications within the next 10 to 15 years. As an example, there should be no need for parking meter inspectors in the future. When a parking meter expires, and the car is still located in the parking spot, computer vision technologies could read the license plate of the car and the pertinent information for issuing a parking violation ticket could be wirelessly sent to the central office using Web services technologies.

"These productivity improvements will have profound effects on the labor market, with many jobs and job categories being eliminated or significantly reduced."

Machine-to-machine interaction technologies, which facilitate direct interactions between the machines, currently include distributed systems, networking, Web services, and workflow technologies. However, more complicated and smarter machine interactions will be possible in the future by integrating other types of technologies into the mix, including some of the artificial intelligence-based technologies.

Some automation applications require formidable computing power. So far, the IT industry has met this challenge and continues to follow Moore's Law – the notion that computing power can be doubled essentially every 18 months. That makes computation-intensive automation solutions more feasible. It is important for some of the automation activities that Moore's Law continues to be followed in the future.

It is easy to be sanguine about the promise of new technologies, and frequently IT advocates and industry representatives paint a picture of unblemished progress when discussing innovation. However, the next wave of automation will have both positive and negative outcomes. It will have significant effects on productivity in terms of improved efficiencies and increased production speeds which will reduce costs. But these productivity improvements will have profound effects on the labor market, with many jobs and job categories being restructured, significantly reduced, or eliminated. Of course, job restructuring and elimination in some parts of the economy will result in job creations in other parts of the economy. Companies have learned over the last few decades that information technology can be a powerful competitive weapon that can significantly affect the economy and the society at large. To be able to respond properly to this coming wave of automation that will change not only routine production but also symbolic-analytic jobs, it is crucial to study and discuss the effects of this wave of automation before it affects us in profound ways.

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ORVIDAS

COMMAND & CONTROL?

In most companies, management tries to shape employee behavior through a system of incentives and sanctions. But creating an environment that encourages self-regulation of behavior may be a more effective way to ensure that everybody follows the rules.

By **Steven L. Blader** and **Tom R. Tyler**

The viability of any company depends on ensuring that employees follow the organization's formal rules and procedures. Historically, the dominant approach to gaining such adherence has been a top-down, command-and-control approach. This approach regards employees as rational actors whose primary concern is the maximization of the outcomes they receive from their organization. From this perspective, an organization's best hopes for realizing employee adherence to rules and policies lie with linking employee rule-following to the outcomes they receive. In many companies this translates into the development and implementation of systems that provide incentives (to encourage rule-following) and sanctions (to discourage rule-breaking). The intention is that these incentives and sanctions will shape employees' workplace behavior.

However, this approach comes with significant costs. To implement such systems appropriately, organizations must be able (and willing) to devote substantial resources to surveillance methods, so that employees feel that their rule-following or breaking behavior will be detected. Indeed, the extensive use of such surveillance techniques – cameras, the monitoring of telephone calls and computer usage, drug testing, time clocks, and ordinary managerial monitoring of employees – is testament to just how prevalent such systems are in the modern workplace. In addition to tangible costs, such systems have intangible social costs. The command-and-control approach typically communicates a message to employees that they are not trusted and that the organization is their adversary (and vice versa), leading to the breakdown of trust between employees and their organizations.

"We predict that employees will be intrinsically motivated to follow their organization's rules if they feel that those rules develop from a system that is consistent with their own set of moral values."

Evidence also suggests that the success of this approach is limited. Employees intent on breaking rules often find ways to do so undetected. This often leads organizations to devote even more resources to surveillance, further adding to the tangible and intangible costs of those mechanisms. And even then,

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employees often find new ways to circumvent detection. The downward spiral of this approach can be debilitating to an organization.

Such problems raise the question of whether there might be an alternate strategy for gaining employee adherence to organizational rules. We have been conducting research exploring just such an alternative: the self-regulatory approach. Rooted in social psychological research, the self-regulatory approach argues that employee rule-following can be best achieved by activating an intrinsic desire by employees to follow organizational rules. Rather than relying on extrinsic factors such as incentives and sanctions, our self-regulatory model argues that the key to employee rule-following is to design organizations that lead employees to intrinsically want to follow organizational rules. In such an environment, employees do not need to be coerced into following rules through the provision of incentives and sanctions.

What might breed an intrinsic desire among employees to adhere to organizational policies? In our work, we have focused on the influence of two judgments employees make about their work organizations. The first is the assessment by employees that there is congruence between their own moral values and those of the organization. That is, we predict that employees will be intrinsically motivated to follow their organization's rules if they feel that those rules develop from a system that is consistent with their own set of moral values. The second judgment is the assessment by employees regarding the legitimacy of those with power in their organizations – i.e., whether employees believe that those who wield control over the rules of the organization are entitled to such control. We predict that employees will also be intrinsically motivated to follow the organization's rules if they feel that those rules are developed and enforced by authorities they regard as legitimate.

In sum, our research on the self-regulatory approach is based on the prediction that these two judgments foster an intrinsic desire on the part of employees to follow organizational rules, and, furthermore, that the intrinsic desire they inspire outweighs the influence of command-and-control mechanisms. We set out to test this prediction by creating studies that compare the relative efficacy of these two approaches for promoting three forms of employee rule-following: compliance, deference, and rule-breaking. Compliance refers to employee's straightforward following of their organization's rules. Deference refers to rule-following that is specifically discretionary in nature – i.e., do employees follow rules even when no one, including their bosses, will know that they did so? On the other hand, we also set out to consider the flip side of compliance and deference, which is rule-breaking. Rule-breaking refers to conscious decisions by employees to ignore or violate organizational rules or policies.

Testing Predictions

The first study we conducted was based on confidential questionnaires distributed to the employees at a division of a multinational banking firm. The respondents held positions ranging from clerical to managerial, with the bulk of the employees involved in directly providing banking services to high-profile customers. A total of 540 surveys were returned. For those responding to the survey, the mean tenure with the firm was 13 years, the mean age was 42 years, and there was an average salary of $84,000. These characteristics mirrored those of the broader set of employees working in this division.

Respondents were asked to respond to a series of questions about their rule-following. Sample questions, with responses on a scale of (1) never to (6) very often, included: "How often do you follow the policies established by your supervisor?" (for compliance); "How often do you follow organizational policies even when you do not need to do so because no one will know whether you did or not?" (for deference); and "How frequently do you neglect to follow work rules or the instructions of your supervisor?" (for rule-breaking). To assess the two judgments related to the self-regulatory approach, respondents indicated their agreement with statements such as "Disobeying one's supervisor is seldom justified" (for legitimacy) and "I find that my values and the values of my company are very similar" (for moral value congruence).

Finally, we asked two types of questions to assess the perceived incentives and sanctions for rule-following and behavior (i.e., to assess the command-and-control approach). First, to measure the expectancy that rule-following would be detected in the first place, we asked respondents questions such as "How much attention does your supervisor pay to whether or not you follow work rules?" Second, to measure the value employees placed on the incentives or sanctions for rule-following or breaking, we asked them questions such as "If you were caught breaking a work rule, how much would it hurt you?" Since it is possible that these types of judgments (i.e., judgments regarding expectancy and value) interact with one another, such that punishments or rewards only matter if they seem likely, we also included an interaction term in all our analyses to capture any such effects.

We used respondents' ratings to statistically test our key prediction regarding the relative efficacy of the command-and-control and self-regulatory approaches for encouraging rule-following. Specifically, we performed regression analyses in which we included the command-and-control variables (expectancy regarding detection of their behavior, value linked to the reaction to their behavior, and their interaction) and the two self-regulatory variables (legitimacy and moral value congruence) and examined their relationship with each of the three types of employee rule-following. The results of these analyses are presented in **Table 1**.

Confirming our predictions, the results indicate that self-regulatory variables such as employee views about legitimacy and moral value congruence had a unique impact on all three types of employee rule-following. Specifically, judgments about the legitimacy of organizational authorities significantly shaped compliance, deference, and employee rule-breaking. Moral value congruence also significantly shaped all three forms of employee rule-following. Central to our predictions, the analysis found no significant unique impact of any of the command-and-control judgments on these forms of employee rule-following. The results therefore provide strong support for the hypothesized importance of the self-regulatory variables.

We also utilized an additional statistical analysis called structural equation modeling (SEM) to further investigate the relative influence of the self-regulatory and command-and-control approaches. Rather than examining the variables included under each approach individually, this analysis allows direct examination and comparison of the variables comprising each approach as a set. The results of these analyses, also presented in **Table 1**, confirm that the self-regulatory approach is a more effective way of fostering employee rule-following.

TABLE 1

Study 1: Antecedents of employee adherence to organizational policy

Variable	Compliance with organizational policy		Deference to organizational policy		Rule-breaking	
	Regression analysis	*SEM*[1]	*Regression analysis*	*SEM*[1]	*Regression analysis*	*SEM*[1]
Self-regulatory variables		.60***		.58***		-.45***
Legitimacy	.29***		.29***		-.10*	
Moral value congruence	.14**		.19***		-.31***	
Command & control variables		.03		.01		-.02
Detection of behavior (expectancy)	.08		.00		.05	
Reaction to behavior (value)	.16^		-.11		.03	
Expectancy X Value	-.14		.14		-.18	

1 Two latent variables reflecting: (1) the two self-regulatory variables and (2) the three command-and-control variables were created. Chi-sq = 373.33, d.f. = 35, CFI = 0.98, NFI = .98, IFI = .98.

Note: ^p < .10; * p < .05; ** p < .01; *** p < .001. n = 540

Results control for respondent age, gender, and tenure with the organization

Additional Evidence

The first study did not contain independent ratings of rule-following behavior, and thus raises issues related to self-report of behavior. For instance, perhaps respondents were not accurately reporting their own behavior. We conducted a second study to address this limitation. This study was based on a large sample of employees from around the United States, who worked in a wide variety of companies and industries. Importantly, we obtained supervisor ratings of employee rule-following for a significant subset of respondents to address this potential criticism of the first study.

Study Two was based on responses to a questionnaire presented to a national panel of respondents via WebTV. We screened to ensure that all respondents worked at least 20 hours a week, had a primary supervisor, and had worked at their current employer for at least three months. Our final sample included 4,430 employees from a variety of organizations: 24 percent worked for small businesses, 20 percent for large companies in one location, 36 percent for large multi-city American companies, and 20 percent in multinational companies. Respondents answered questions similar to those described for Study One. In addition, supervisors of these employees answered a survey in which we asked them about the respondent's actual rule-following behavior on the job. Supervisors provided ratings of respondent's behavior at work for all three types of rule-following that we examine: compliance, deference, and rule-breaking.

First, we examined respondents' self-report of their behavior, to determine whether the effects we found in Study One were replicated in Study Two. As in the first study, variables representing the self-regulatory (legitimacy and moral value congruence) and command-and-control (detection of behavior, reaction to behavior, and their interaction) strategies were regressed on each of the three types of rule-following.

By and large, the results confirmed the findings from the first study. Specifically, legitimacy and moral value congruence were related to all three forms of rule-following, with evidence suggesting that legitimacy had a somewhat stronger effect than value congruence. However, in Study Two the command-and-control variables had effects not found in Study One. In particular, the belief that one's work behavior would be detected (expectancy) was significantly related to all three forms of rule-following, and expectations about the reactions to detected behavior (value) also had a significant, though small, effect on compliance and rule-breaking. Structural equation modeling was again used as an additional way of exploring the relative impact of the self-regulatory and command-and-control approaches to employee rule-following. The results of this analysis confirmed that, as predicted, the self-regulatory approach prevailed over the command-and-control approach in facilitating deference and for preventing rule-breaking. Contrary to predictions, however, the influence of the command-and-control approach actually exceeded that of the self-regulatory approach in shaping compliance. This was the only finding which did not replicate the support for our predictions found in study one.

"Not only is the self-regulatory approach to employee rule-following more effective, it is also more efficient, since employees take the responsibility of following rules on themselves."

However, the key reason we conducted study two was to test our predictions using supervisor ratings of employee rule-following. Regression analyses and structural equation models similar to those conducted on the self-report data were therefore conducted using the supervisor ratings of behavior that we collected. The results of these analyses are presented in **Table 2**.

These regression analyses indicate significant effects of legitimacy on compliance and deference and effects of moral value congruence on deference and rule-breaking. The only significant effect among the command-and-control variables was for the effect of perceived reactions to behavior (value) on rule-breaking. Results of the structural equation models likewise indicate that, as predicted, the self-regulatory approach outpaced the influence of the command-and-control approach on supervisor-rated compliance, on supervisor-rated deference to organizational policies, and on supervisor-rated rule-breaking.

In summary, using these supervisor reports of employee behavior, we again found that the self-regulatory model provided a superior account of the factors that shape employee rule-following than the command-and-control approach. This confirms that employees follow organizational rules, and are perceived by their supervisors as following those rules, when they hold an intrinsic desire to do so. Although the command-and-control approach to encouraging rule-following (which emphasizes threatening employees with punishments for breaking rules and rewarding them for following them) may also influence rule-following, its relative utility is secondary when compared with the self-regulatory approach.

TABLE 2

Study 2: Antecedents of supervisor-rated employee adherence to organizational policy

Variable	Compliance with organizational policy		Deference to organizational policy		Rule-breaking	
	Regression analysis	*SEM[1]*	*Regression analysis*	*SEM[1]*	*Regression analysis*	*SEM[1]*
Self-regulatory variables		.81***		.90***		-.67***
Legitimacy	.08*		.08*		-.01	
Moral value congruence	.04		.08*		-.13***	
Command & control variables		.04		.09		.02
Detection of behavior (expectancy)	.10		.12		-.11	
Reaction to behavior (value)	.19		.22		-.34*	
Expectancy X Value	-.19		-.19		.31	

1 Two latent variables reflecting: (1) the two self-regulatory variables and (2) the three command-and-control variables were created. Chi-sq = 1,288, d.f. = 41, CFI = 0.82, NFI= 0.82, IFI = 0.82.

Note: ^p < .10; * p < .05; ** p < .01; *** p < .001. n = 4,430.

Results control for respondent age, gender, and tenure with the organization

Implications

Traditionally, organizations have subscribed to a belief that the only way to get employees to follow organizational rules is to monitor them and then reward or punish them, depending on whether they did indeed follow the rules or not. Such an approach can get employees to fall in line with organizational expectations, at least to the extent that monitoring systems are extensive and reward/punishments sufficiently large. However, our studies show that this approach generally has a weaker impact on rule-following than the self-regulatory approach we have outlined and tested.

Companies may thus have a great deal to gain by going beyond conventional instrumental strategies of social control. Further, not only is the self-regulatory approach to employee rule-following more effective, it is also more efficient, since employees take the responsibility of following rules on themselves. This leads to a reduction in the command-and-control strategy's tangible costs as well as the intangible toll of polluting the employee/employer relationship. In turn, the self-regulatory approach allows organizations to devote greater organizational resources to uses that are more central to the achievement of organizational goals. It also enables organizations to more easily gain the loyalty and commitment of employees.

The results therefore suggest that one promising way to bring the behavior of employees into line with corporate codes of conduct is to design organizations in ways that activate an intrinsic desire among employees to follow rules. The challenge, of course, is to know how to design organizations in ways that breed an intrinsic desire among employees to follow organizational rules. The current findings suggest two important ways to foster such a desire. First, organizations should strive to bring organizational practices into line with employees' moral values and to make such congruence in values apparent to employees. Second, organizational authorities should strive to engage in actions that support judgments among employees that their authority is legitimate. Additional research we have conducted also emphasizes the importance of fostering organizational cultures dominated by fairness and treatment of employees with respect. Such fairness and respect likewise foster an intrinsic motivation among employees to follow rules and to work in pursuit of the organization's success.

The more general point is that the development of intrinsic motivations among employees begins at the top, with the leadership of the organization. When upper management does not itself conform to ethical codes of conduct, as appears to have been the case in several recent corporate scandals, the legitimacy of those authorities is eroded and the perceived congruence of values between the employee and the organization is diminished. But when the leaders of the organization appeal to employees' value systems and present themselves as deserving of the power they hold, new approaches to fostering employee cooperation become viable and superior routes to organizational success emerge.

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Hot Off The Press

During a corporate crisis, the media can aggravate an already difficult situation. But by employing effective media relations, leaders can guide their companies safely through the storm.

By **Irv Schenkler**

Corporate leadership frequently finds its greatest tests during crises. Characterized by fast moving developments and an element of danger, crises can overwhelm executives and present them with often contradictory tasks and responsibilities. And it's difficult to act strategically when minute-by-minute demands require a host of immediate decisions. The media adds yet another degree of complexity to such situations. It can act as a conduit to important audiences during a crisis, or become an obstacle to the delivery of messages.

Of course, not every organizational difficulty attracts media notice. And not every problem is a crisis. When a new product roll-out gets caught in an unexpected patent infringement suit, it's definitely a problem. A crisis? Not necessarily. But when a business problem threatens to severely affect the organization's normal workflow, when it distracts senior management, when it affects a company's financial well-being and image and reputation in the eyes of critical constituencies – it's likely a crisis.

The U.S. National Weather Service ranks hurricanes in severity from Category 1 to Category 5. Organizational crises can be assessed in a similar way. And just as a Category 1 or 2 hurricane can suddenly mutate into a Category 4 or 5 monster, so organizational crises can spiral into unexpected proportions. And the media's pres-

ILLUSTRATIONS BY GORDON STUDER

ence during a crisis raises the potential for greater organizational harm.

Understanding which category of crisis a company faces can help determine the media sources best suited to deliver a message. And because crises are by definition volatile, the nature of a crisis may shift from one category to another. These shifts occur when a new set of stakeholders become affected or concerned and when the media tracks this new-found interest.

Varieties of Crises

Crises come in several varieties. If a company is facing bankruptcy, hostile take-over, a strike, or massive employee lay-offs, the crisis originates in the financial arena, and financial media and business reporters will naturally have the most initial interest. Examples of notable financial crises include the Salomon Brothers Treasury Bill crisis of 1991-92 and Enron. When the courts form the battleground – in litigation crises – the adversarial system lends itself to vocal, antagonistic claims from plaintive parties, which can find their way onto the front page. Examples of such crises include the long-running Dow-Corning breast implant crisis of the 1990s and the Microsoft-U.S. antitrust battles.

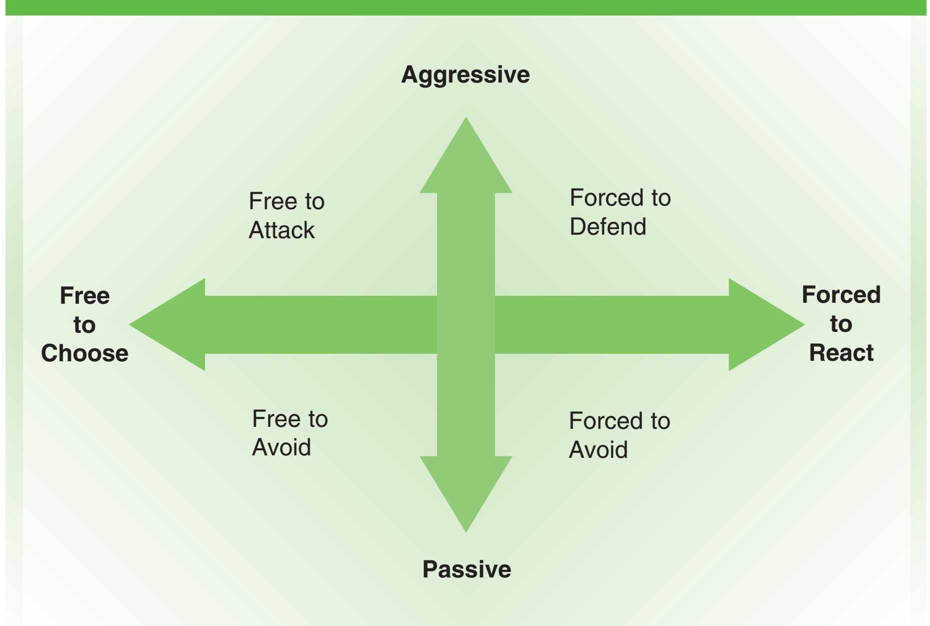
Some business issues become popular crises, which can gain strength over time and can foment the need for legislative action. Frequently, these crises arise when the issue's advocacy group can enlist media to publicize its sense of fear, or when an issue speaks to a constituency's sense of moral or legal rights. Examples include Nike's use of Third World factory production and Nestle's marketing of infant formula in Third World countries in the 1970s and 1980s. Finally, crises can be caused by physical events such as fires, earthquakes, hurricanes, contamination, or criminal actions. Examples of such physical crises include Three Mile Island in 1979 or the Exxon-Valdez oil spill of 1990. In most crises, a primary objective is to keep the situation anchored in one of the categories and reduce the likelihood that it will shift to another.

If handled properly, the media can be an important ally. But one has to understand the five key drivers that spur the media's crisis coverage in order to do so. Fundamentally, informing is the media's business – who, what, when, where, and why. Failing to respond to questions is thus a prescription for confrontation with reporters. In physical crises – such as natural disasters and chemical spills that threaten communities – the public and government rely on the media, especially electronic media, to convey information and aid to the public. The downside of media coverage is the press' tendency to play to the worst of tabloid journalism's excesses. The goal of titillation has plenty of critics. But news directors at competing stations will still risk the wrath of police chiefs by flying so many news choppers above a breaking story that they impede the police. Assigning blame is a consistent goal for the press – and something companies want to avoid. Finally, the national exposure that can accompany an individual journalist's coverage of a crisis can be a springboard for job offers and career advancement.

An organization under intense media scrutiny can respond with a variety of overall strategies (**See Figure 1**). At root, leaders have to make decisions in two dimensions: how aggressive or passive a company responds, and how free a company feels about its options.

Based on those decisions, four initial strategies emerge: "Free to attack" is the strategy that can work only when a company has a highly credible story to tell. The underlying facts must support the message and the tactics employed must take

Figure 1 CRISIS RESPONSE STRATEGIES



into account the culpability lurking beneath the accusations. In the 1990s, this strategy was adopted with varying degrees of success. In 1993, NBC's Dateline broadcasted footage ostensibly showing a Chevrolet pick-up explode as a result of gas tanks positioned beneath the driving cab. General Motors learned that the sequence had been staged, using incendiary devices to set off the explosions. GM obtained outtakes, called a news conference, and exposed the deception. NBC apologized publicly and fired those responsible.

When choices are limited and a company nonetheless feels compelled to react, it is "forced to defend." For such an approach to work, the company needs to receive a receptive hearing from the media or, at least, get its version of events delivered in a credible context. Accused of underpaying and exploiting labor in the Third World, Nike in the 1990s defended its business strategy by claiming financial benefits for the shoe workers. Later, Nike defended its actions by claiming it did not directly run the sneaker factory. Eventually, the company adopted a problem-solving strategy – to be discussed later in this article – and instituted a series of remedies, including overseers and improved accountability.

The "forced to avoid" approach positions the company in passive mode, in which conditions force a kind of silence. Because of extenuating circumstances or lack of information, this strategy is most frequently framed by the message, "We are unable to comment at this time." Legal departments will often counsel using this approach since it offers apparent protection from miscues and misquotes that could be used against the firm. Even when justified legally, however, this strategy puts the company in a vulnerable position. In the court of public opinion, silence or the refusal to defend oneself is equated with guilt. Meanwhile, any number of other interested parties will be sure to voice their reactions. In 1999, when the Bank of New York was charged with money laundering for organized crime, the firm adopted this strategy. However, information was leaked to the press, apparently from those close to the investigation. Coverage increased as reporters searched for the names of responsible parties to blame. The Bank of New York, with its patrician reputation in the crucible, suffered from media over-exposure and tabloid-like investigation.

"In the court of public opinion, silence or the refusal to defend oneself is equated with guilt."

Free to Ignore

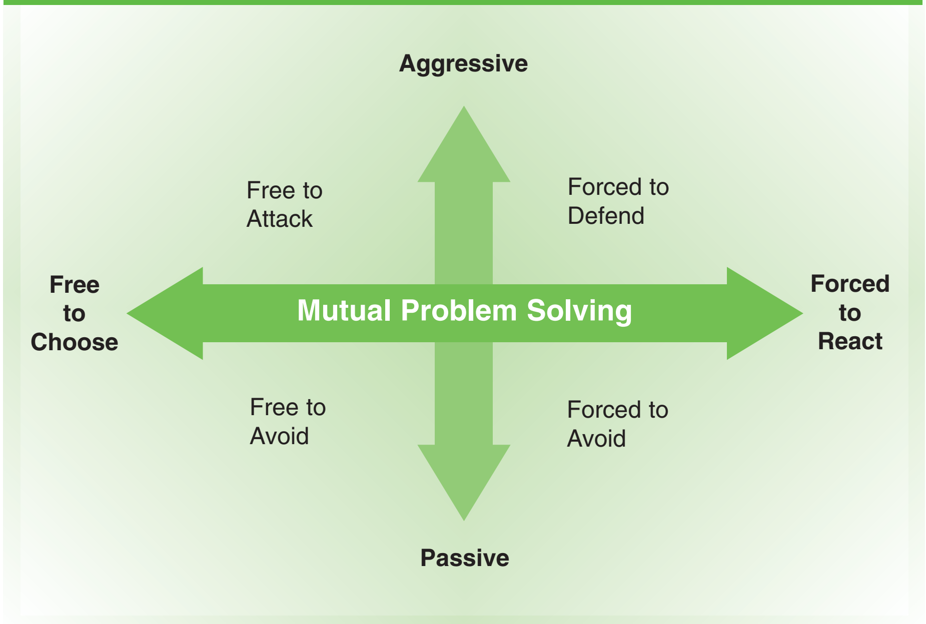
If a company believes it cannot be harmed by media coverage, then it may opt not to make spokespersons available. This strategy has often been adopted by industrial suppliers or non-consumer based companies. Privately held companies also often believe that this response to media inquiry is the best. And international companies with U.S. based subsidiaries sometimes adopt this approach; their cultural misreading of the media's role in the U.S. business scene leads them to believe that what works in the home country – silence – will work well here.

The danger behind this strategy lies in its assumptions of insularity and strength. Most companies in fact do need to consider the secondary effects that result from the media's coverage of its actions. And privately held companies ultimately have customers who are susceptible to media influence. During the 1980s, companies felt particularly free to ignore media inquiry. Hooker Chemical, which adopted a no-comment policy in the wake of the Love Canal environmental crisis, was a prime example. By the time the company responded to allegations and lawsuits, its credibility was profoundly undermined. Unanswered, third-party comments will accumulate, potentially affecting image and reputation.

Overlooked Strategy

A fifth strategy is frequently overlooked: problem-solving. Whenever a company can position its response as a meaningful effort to acknowledge and correct the phenomenon that led to the crisis, media coverage will become more favorable and

Figure 2 CRISIS RESPONSE STRATEGIES: PROBLEM-SOLVING



stakeholder impressions will in the long run not impugn the company's reputation.

Figure Two illustrates how this approach can be placed on the original model's horizontal axis spanning "free to respond" to "forced to respond." Thus, a company can be proactive and "free to solve." For example, a company can appoint an outsider to oversee new personnel policies in the face of federal discrimination suits. Or it can be apologetic – "forced to solve" – as when it acknowledges system or worker error as the cause of an accident.

A problem-solving strategy, however, rarely comes to mind for most managers. Reasons range from concerns about admitting legal liability to the cultural reluctance of competitive, success-oriented business executives to admit error. But when a company can position its response as a meaningful effort to acknowledge and correct the phenomenon that has led to the crisis, media coverage will usually become more favorable and stakeholder impressions will not ultimately impugn the company's reputation.

A notable example of the problem-solving approach came in 1996. When the oil giant Texaco was accused of racial discrimination by the Equal Employment Opportunity Commission, Texaco CEO Peter Budjar pledged an impartial investigation, brought in a respected outside jurist to conduct it, and publicly acknowledged the need for improvement in hiring and promotion procedures. Media coverage, which was intense, waned.

While each of these five strategies may represent an appropriate response to crisis, it's also important to realize that shifts in strategy may occur – or become necessary. Most commonly, strategic shifts will militate towards "mutual problem-solving." For example, in 1996, the EEOC sued Mitsubishi over sexual discrimination in the workplace. The company first responded in a "free to attack" mode. After several months, however, the results were an increase in negative media coverage, a U.S. boycott, and protests at Tokyo corporate headquarters. The company changed course, replaced the management of the U.S. subsidiary, and moved into the "mutual problem-solving" mode. An outside overseer was appointed to examine and change employment policies.

By contrast, A.H. Robins, which made the Dalkon Shield, employed a "free to ignore" strategy when confronted with scores of reports that the controversial birth control device was malfunctioning and causing harm. When media attention heightened and lawsuits were about to be filed, it shifted to "free to attack" and attempted to vilify the women who brought suit, alleging an assortment of unsavory personal behaviors as the cause of the malfunctions. This damaged Robins' credibility and reputation immensely. The company went bankrupt and was later acquired by a competitor.

Effective Tactics

Once a strategy is chosen, companies must assess which tactics will best help achieve their desired objectives. Regardless of the strategy, all corporate leaders should follow one inviolate rule: Do not lie to the press. Lying to the press is like throwing blood into the shark tank. Lies are always found out. Beechnut found out the hard way when its "100%" apple juice was found to contain a cocktail of sugar and water and very little real fruit juice. The company was fined $2 million and its president pleaded guilty to felony charges.

Companies must also assess reporters' motivations. Reporters can lie, too. It is incumbent upon executives to conduct due diligence on the media, to know with whom they're dealing. And leaders should never commit to put themselves or other members of their organization on the phone or in front of the camera unless they are trained and capable. A more personal touch from the top might ensure the best possible stories in one or two key business and trade media. Executives should also avoid saying "no comment." The phrase has come to be associated with admission of guilt. It's far better to provide a sense of the process involved. Finally, they should avoid the blame trap. For many organizations, the instinctive response to accusations of blame is first to deny and then later find a scapegoat. Yet nothing sets off a feeding frenzy among the press more quickly than an attempt to shift blame that doesn't stand up to scrutiny.

Every crisis response must balance responsible behavior with protecting reputation. Those are not mutually exclusive concepts. Accepting responsibility can be different from taking the blame. It can also be the best way to move forward to address the real crisis, and at the same time develop support from the general public, the media, and other key audiences.

Let's contrast the handling of two similar crises by two oil companies. In 1989, the Exxon Valdez spilled tons of oil into pristine Prince William Sound in Alaska. More than a decade later, Exxon still is vilified by many for its mishandling of that crisis. Seemingly at every turn, Exxon's response was hostile and combative. First, the company tried to assign blame to the single individual – the "drunken" boat captain. This tactic begged the question as to whether Exxon had put too much responsibility in one set of shaky hands, and without adequate backup systems. Then, the company appeared to fight cleanup efforts and besmirched those with concerns about the pollution of the sound, creating fresh enemies at every turn. Each of those strategies ensured that Exxon's name would forever be associated with a well-covered disaster.

"Whenever a company can position its response as a meaningful effort to acknowledge and correct the phenomenon that led to the crisis, media coverage will become more favorable."

In contrast, few today remember that Ashland Oil experienced its own disastrous spill. In 1988, 700,000 gallons of diesel fuel poured from a ruptured Ashland tank and was carried by the Monongahela River into the Ohio River, threatening the drinking water of Pittsburgh and an estimated one million people in Pennsylvania, West Virginia, and Ohio. Because Ashland's CEO insisted that local media be apprised immediately of the situation and what the company was doing about it, the story remained under control. The company signaled that it was more important to accept responsibility and do something about the crisis, rather than stop to figure out whether real blame lay with the builder of the storage tank, or the manufacturer of the steel from which the tank was constructed. By keeping the media informed, Ashland was able to limit conjecture and rumor and to reduce the avalanche of criticism that such a significant oil spill would normally produce.

Avoiding the media may work sometimes, but in a time of crisis, it won't work for long. The press can find too many other sources of information – disgruntled employees, state environmental officials, competitors – many of whom may be more than happy for the media exposure. However, occasionally avoiding calls may be an appropriate short-term strategy – and the best way to temporarily delay media contact is to issue a "holding statement" that doesn't misrepresent current circumstances and provides enough information to fend off additional questions.

A good rule of thumb against which to measure crisis response is to take "the 60 Minutes Test," named after the grand-daddy of all investigative television programs. Executives should answer three questions: What did you know? When did you know about it? What did you do once you knew about it? Acknowledging an appropriate level of responsibility and helping drive toward solutions is the best way to pass this test and win acquittal in the Court of Public Opinion. When it comes to reminding the public of alleged or actual corporate errors, missteps or misdeeds, the media suffers no amnesia. As a Native American proverb instructs: "Don't shoot an arrow that will return against you."

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This article is adapted from Guide to Media Relations, *by Irv Schenkler and Tony Herrling (Prentice Hall, 2004).*

Follow The Leader

By **Daniel Gross**

ILLUSTRATION BY KEN ORVIDAS

Generally speaking, children's games aren't seen as having much bearing on the business world. Sure, most companies would like to play Follow the Leader, or King of the Mountain, or Capture the Flag. But as any management consultant worth his hourly fee will tell you, business is never that simple.

Nonetheless, for 120 years, one board-game company – Parker Brothers – has managed to make market leadership look like child's play. And at the center of Parker Brothers' unlikely story, told by former executive Philip E. Orbanes in *The Game Makers* (Harvard Business School Press, 2003), lies several crucial insights on the business of games, and on the game of business.

In 1883, George Parker, who lived near Boston, modified a simple card game to make a game he called "Banking." When big-city publishers turned down his ideas, he printed up 500 copies and sold Banking out of a suitcase. In the 1880s, as Orbanes noted, Parker "came to see a relationship between the *strategies* that guided success in parlor games and the *principles* that enhanced success in the 'game' of business." In fact, he codified them in 12 rules, many of which sound as if they were ripped from present-day management tomes: "Know your goal and reach for it;" and "When faced with a choice, make the move with the most potential benefit versus risk."

Parker Brothers' largest and most lasting breakthrough came with another business-oriented game. In 1934, when the company's sales had fallen by two-thirds from the 1929 level, George Parker was offered the opportunity to purchase a game in which players could amass riches by trading properties and railroads, and by building hotels and houses. Parker politely passed. But after its inventor, failed plumbing salesman Charles Brace Darrow, published Monopoly himself and it caught on, Parker Brothers was offered a second chance.

The company acquired Monopoly, and launched it nationwide during the 1935 Christmas shopping season. It became an instant hit, selling 250,000 units. George Parker, then in his late 60s, turned to one of his youthful rules: "Bet heavily when the odds are long in your favor." Parker in 1936 developed six different editions of the game, ranging in price from \$2 to \$25. In 1936, 1.81 million copies were sold.

George Parker died in 1952 at the age of 86. In the post-war years, Parker Brothers introduced a succession of smash hits: Risk, Careers, and Trivial Pursuit. The company, now a unit of Hasbro, has maintained its leadership by adhering to Parker's simple rules about business – and games. The most universal, perhaps, is Rule No. 4: "Learn from failure; build upon success."

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