

Yellow-Light Leadership

How the World's Best Companies Manage Uncertainty

by Bruce A. Pasternack and
James O'Toole

Winston Churchill in 1940. Rudolph Giuliani in 2001. They have “what it takes,” said *Fortune* magazine, in a story about crisis leadership last November. The article implied corporate America is in a financial crisis and, like New York City after September 11, is sorely in need of the Churchill and Giuliani “take charge” brand of leadership.

But corporate leaders will ape both these men's flair for the dramatic at their peril, for *Fortune's* major premise was false. In late 2001, the survival of American industry wasn't hanging in the balance, recession or no, even when compounded by the terrible events of September. And *Fortune's* minor premise — that forceful, visionary, and emotional leadership is more effective in adverse times than careful, analytical, and cerebral management (or, as *Fortune* wrote, “After years of losing ground to its dowdy cousin, Management, Leadership is back”) — is, at best, an oversimplification.



Bruce A. Pasternack

(pasternack_bruce@bah.com) is a senior vice president with Booz Allen Hamilton in San Francisco. He is coauthor, with Albert J. Viscio, of *The Centerless Corporation: A New Model for Transforming Your Organization for Growth and Prosperity* (Simon & Schuster Inc., 1998).

James O'Toole

(otoole_jim@bah.com) is research professor in the Center for Effective Organizations at the University of Southern California. He has written 13 books, including *Leadership A to Z: A Guide for the Appropriately Ambitious* (Jossey-Bass Inc., 1999).

In fact, our research finds that the CEOs whose companies are best weathering the recent downturn are practicing old-fashioned, pragmatic management by the numbers — what we call yellow-light leadership. This conclusion is based on an ongoing Booz Allen Hamilton study of about 40 Fortune 500 companies, conducted with the Center for Effective Organizations at the University of Southern California and initiated in 2001.

This finding is significant because it casts doubt on the conventional wisdom that says there are only two models of leadership. One is visionary, or “green-light,” leadership, appropriate to periods of economic growth. The other is crisis, or “red-light,” leadership, best applied when companies, industries, and economies are tumbling. Our ongoing research suggests that while there is value in both the green-light and red-light models, neither extreme is effective in times of uncertainty.

Green, Red, or Yellow

Of course, a recession, like a ball game, isn't over till it's over, but our preliminary findings in this study follow patterns in behavior we have seen before. Many CEOs in the 1990s overreacted to the Peter Drucker/Warren Bennis admonition that corporations are “overmanaged and underled.” In the process, they became so carried away with “the vision thing” that they lost sight of the numbers. In light of the countless failures of visionary dot-com CEOs (and charismatic high-tech supernovas such as PeopleSoft Inc.'s David Duffield), we now know many companies have been overled and undermanaged, a bias that has hurt performance far more than declining economic growth. Indeed, there is evidence that the recession did not cause the problems many companies have experienced in the severe downturn of 2001 and

2002. Instead, adverse economic conditions have exposed underlying managerial sloppiness that was concealed by late-1990s hypergrowth.

In the go-go '90s, most students of business were attracted to the hands-off green-light leadership model in which CEOs are, in the words of Harvard University's Ronald Heifetz, “above the fray.” Such leaders are said to spend their time defining organizational vision, values, and purpose, and creating conditions in which their followers (the preferred title is “associates”) are de facto co-leaders with requisite authority and resources to make operating decisions without approval of the person at the top. During that Golden Age of Growth, the business press was replete with tales of such visionary leaders, among them the CEOs of Cisco Systems, Southwest Airlines, Hewlett-Packard, Schwab, Corning, and, sure enough, Enron.

In the last decade, the red-light model had fewer advocates — largely because it was reserved for bad times when the survival of an enterprise was threatened and rapid turnarounds were required. When leaders are in this mode, they “take charge” (put themselves visibly on the line), present a “burning platform” (a compelling case for change), offer a plan of action, hold employees' feet to the fire, and extrude those who don't get with the drill. In the extreme, this model was exemplified by Al Dunlap, but it also was used, in one form or another in the 1980s, by Lee Iacocca at the Chrysler Corporation, Robert Crandall at American Airlines Inc., and Jack Welch at General Electric Company during the crisis periods of their tenures. Curiously — one might say confusingly — it was a “soft” variation of this typically “hard-nosed” form of leadership that former Mayor Giuliani was said to have manifested after September 11.

(He had been noted for the harder variant in his earlier efforts to rid New York of crime and grime.)

Although the red-light/green-light models differ in most respects, they nonetheless are both personality based: In each, charismatic leaders are said to set goals and then use behavioral tools to align their followers with organizational values and strategic direction. Almost all of the individuals cited above consider themselves the antithesis of managers. They are proud to be focused on the big picture and comfortable leaving managerial details to subordinates. Of course, this characteristic is a double-edged sword: With one side it may empower followers, but with the other it may undercut discipline. Depending on the personal interests of the leader, it may lead to the development of an effective, self-managing organization (Herb Kelleher's Southwest Airlines Company), or a lack of accountability (Bob Allen's AT&T Corporation).

Until recently, most academics and practitioners found the green-light/red-light formulation compelling. First, it conforms to an archetypal (albeit politically incorrect) belief that the person found at the top of any group has leadership running in his veins (genetically, leaders are alpha males). Second, it follows the conventional wisdom that leadership style is contingent on circumstances (in good times, leaders employ green-light behavior and, in bad times, red). Third, by framing the world in terms of either/or, it simplifies the decisions leaders must make (apply steady pressure to the organizational accelerator when the light is green; slam on the brakes when it is red). Thus this dual-mode model of leadership is neat and clear-cut, and the logic is simple. The problem is that it doesn't square with the practices of leaders we're observing during this protracted recession or what we've observed during past downturns.

Few leaders of the companies we are studying characterize the current operating environment as "good times" (9.1 percent), and, even immediately after September 11, fewer than half (43.3 percent) spoke in crisis terms. (Before September 11, only 18.2 percent were talking crisis.) Instead, most leaders in our study tell us their companies are in a yellow-light phase, the prime characteristic of which is uncertainty. Both in our

survey and in personal interviews, leaders repeatedly say they are unsure about the nature and duration of current economic trends, unclear about the extent to which their company's internal weaknesses are contributing to their declining revenues, and uncertain whether the current economic storm is of a passing nature (and thus to be ridden out) or is a lasting change in weather patterns requiring new strategies, capabilities, and behaviors.

Analysis Replaces Charisma

Leaders tell us that yellow-light conditions present a harder test for them than do red-light situations. When the light is yellow, leaders have to make judgment calls — and that can be challenging, as any driver who has been trapped in the middle of a busy intersection will attest. Moreover, in times of economic uncertainty, conditions are akin to a European traffic signal, with a flashing yellow before *and* after every green and red light. So the leadership challenge is to read flashing economic signals to understand whether they presage recovery or harder times ahead.

When the yellow light is flashing, leaders tell us they face the widest range of strategic alternatives and have the most true decision-making power. (It may appear that leaders have more options when the light is green, but try making that argument to anyone who has attempted to make a fundamental change when the going is good.) And, although followers are more open to change when their backs are against the wall, leaders typically have few viable alternatives open to them during a crisis. In short, when the yellow light is flashing, leaders have as blank a strategic slate as they ever face, and the scope of their decision-making authority is as broad as it ever is. Times of uncertainty may be a hard-

Whereas emotional intelligence was the name of the leadership game in the 1990s, old-fashioned IQ is now making a comeback in the executive suite.

er test for a leader, but they are also a tremendous opportunity for those who make the right choices.

The key leadership capabilities needed to make those choices turn out to be analytical ones — and that’s one big reason we believe Nissan Motor Company’s Carlos Ghosn, IBM’s Louis V. Gerstner Jr., the Intel Corporation’s Craig R. Barrett, and the Capital One Financial Corporation’s Richard D. Fairbank are fast becoming the most frequently praised business leaders of the new millennium. Most didn’t turn up on published lists of great leaders until quite recently. Whereas emotional intelligence (EQ) was the name of the leadership game back in the 1990s, old-fashioned IQ now seems to be making a comeback in the executive suite.

Mr. Gerstner personifies the anticharismatic, antivisionary, antiemotional leader. In the press, the Gerstner leadership style is typically characterized as no-nonsense, left-brained, impersonal, decisive, and cerebral. He is also said to be objective, consistent, and demanding — traits he looks for in others on his executive team. Mr. Gerstner’s successor at IBM, Sam Palmisano, is known to set challenging profit objectives for his direct reports, and then to be unwilling to accept arguments that they are unachievable. And he keeps vigilant track of the numbers, checking sales data weekly. Significantly, Mr. Palmisano does this with a smile and without abuse: You either perform or you are out, no hard feelings, nothing personal. And, if this seems to work, it is exactly because it is objective and impersonal: Yellow-light leaders are not Nice Guys, caring and emotionally available; instead, they are seen to be Good Guys by their subordinates because their consistent and objective behavior inspires trust.

Forty-five percent of the leaders in our study are

reported by their subordinates to be behaving more analytically today than in the past. Why is this type of leadership emerging in an era of uncertainty? Probably because unemotional CEOs like Lou Gerstner and Carlos Ghosn aren’t “in love” with the existing technologies, products, or strategies. Therefore, they can evaluate those with an open mind and, if finding them wanting, walk away from them quickly and completely. When former Johnson & Johnson CEO Jim Burke (himself a high-EQ leader) chaired the committee that selected Mr. Gerstner as IBM’s CEO, his traits of mental toughness and strategic acuity were exactly what the company’s board was looking for. As Mr. Burke told *Fortune*, “We needed somebody who was by instinct, training, and interest very strategic in his thinking. Everybody knew that was one of Lou’s hallmarks. He thinks strategically about everything. I once asked him if he thought strategically about his dog.”

Patient Action

Setting the right strategic course is a major challenge facing executives in adverse times because it is difficult to interpret the economic and competitive environment accurately. Unfortunately, the usual indicators of recessionary trouble — declining sales, increasing inventories, reduced orders — are of little analytical use when their causes are unknown: Is the problem limited to one’s industry, or is there a general recession? Is the problem national or global? Is it a passing cloud or a climatic shift? Has there been a technological transformation in the industry?

To answer such complex questions requires appropriate data and, especially, disciplined thought. The temptation for executives is to be overly optimistic

about future conditions. That behavior is chronic in such industries as energy, publishing, toys, and fashion, and inevitably leads to trouble when euphoric executives overinvest by betting on the come. On the other hand, Cassandra-like predictions of crisis can be just as dangerous to the health of a company. Some jittery executives interpret every passing cumulus as a sign of an impending hurricane, and head immediately for the storm shelter. In contrast, analytical executives are able to “look at a storm with some composure,” in President John Adams’s words. Particularly in short-cycle industries, executives like Craig Barrett learn to read downward signs and to plan accordingly, avoiding short-term panic and positioning themselves to catch the next wave of, for example, innovation.

Accepting what everyone else asserts to be true about the future is, perhaps, the most dangerous forecasting error a leader can make. In late 2000, Hewlett-Packard Company’s Carly Fiorina put in place a major restructuring of her company, arguing that revolutionary change was occurring in all of industry that required, she said, “nothing less than reinventing business in fundamental ways.” Believing this, Ms. Fiorina was driven to the conclusion that HP had no choice but to get into e-business by acquiring PricewaterhouseCoopers. The merger was never completed.

She might have avoided getting embroiled in that bid had she read the environment the way Lou Gerstner did at approximately the same time: He saw a process of evolutionary change effected through an ongoing process of fine-tuning, improving, and realigning at IBM. The ability to break ranks with lemmings and stay calm when others panic has been a hallmark of Mr. Gerstner’s tenure at IBM. Shortly after he assumed

office in 1983, *Fortune* called IBM “a company in crisis.” But when interviewed by the magazine, Mr. Gerstner was quick to say, “I don’t have a sense of crisis.”

When Carlos Ghosn took the reins at Nissan in 2000, the company was hemorrhaging so much red ink that many industry observers thought his first act should be to panic and engage in major surgery. Instead, he calmly introduced a phased revival plan, which included cost reductions and improvements in margins and asset effectiveness. He put in place a new operating model and a global organization to implement these changes and increase accountability. When his competitors announced zero-interest loans to kick-start demand for new cars, Mr. Ghosn quietly demurred, saying that, even in bad times, companies shouldn’t mortgage their futures. Analytical leaders like Messrs. Gerstner and Ghosn demonstrate both discipline and patience — their confidence in their ability to read the operating environment allows them to stick with a strategy long enough to give it a chance to work.

For many of the same reasons, the highly analytical leaders of Capital One, CEO Richard Fairbank and COO Nigel Morris, have been able to steer through the recession with greater assurance than many of their competitors. For example, during good times their lending model was premised on bad times. Hence, they disciplined the organization not to pursue some 33 million potential customers because they had been identified as “default candidates” during a recession.

Determining whether their own companies are healthy is one of the most difficult assessments leaders must make during a recession. In effect, they must ask, Is this an epidemic, or are we the ones who are sick? From what we have observed, many nonanalytical leaders’ first instinct is to blame external factors for declining performance. Although such factors almost always play a part in corporate setbacks, to leaders at IBM, Nissan, and Intel, an adverse business environment is not an acceptable excuse.

Since there are both high and low performers in every period of the economic cycle, the quality of leadership counts, and all leaders have options. In times of adversity, yellow-light leaders look at their own operations objectively to assess where they are weak and what the causes are. This knowledge allows them to act more selectively than simply calling for a 15 percent reduction in costs across the board, which could, in the long run, weaken business areas that need to be strong in order for the entire company to recover. At Nissan, for example,

Mr. Ghosn is carefully maintaining, or increasing, investment in areas designated to be engines of future growth, even as he cuts costs. We have found that such disciplined self-diagnosis increases the effectiveness of austerity medication.

Examine Strategic Alternatives

Leaders have the toughest time making the right calls when a company is headed into crisis. During the September terrorist attacks, business leaders who acted appropriately — those who visibly took charge and gave people hope — were praised widely, whereas those who responded slowly or without reassuring vigor compromised their authority and may have even jeopardized the long-term viability of their organizations. When Continental Airlines Inc.'s Gordon Bethune went from a yellow-light posture into crisis mode in the days following the terrorist attacks, he recorded a daily voice-mail message to keep all his employees fully informed about the fast-changing situation in their industry: "I needed to give them reassurance that things were not coming to an end," he told the *New York Times*. "I told them who I had talked to and the progress we had made so that all of us are aware of what we're trying to do.... Adversity makes trust more important."

Conversely, when leaders jump into a crisis mode prematurely, or when it is uncalled for, they lose the trust of employees. For example, in 1999, when PeopleSoft abruptly went from being a high-growth company to one that was fast losing market share and profitability, the formerly humanistic CEO, Dave Duffield, slammed on the organizational brakes without ever slowing down. He laid off thousands of workers who had been led to believe they had job security and,

in the process, caused a culture precariously based on trust to be ejected through the company's front window.

Being able to tell what time it is (that is, knowing the difference between merely difficult times and true times of crisis) is one of the most important analytical skills a leader can have, especially with respect to formulating or reassessing strategy.

When the yellow light is flashing, analytical leaders carefully examine all their strategic alternatives, subjecting each to a rigorous benefit/risk assessment. In a formal and disciplined process, they ask if they should:

- **Ride out the recession?** This seems to work best in strong companies and in short-cycle industries (such as computer chips and entertainment). The risks in this strategy are that the cycle may turn out to be longer than anticipated, and that a company may not be as strong financially as assumed.

- **Invest aggressively?** In the past, companies like Wal-Mart Stores Inc. grabbed market share and grew during recessions, while their weaker competitors contracted. This usually works only for the largest company in a given industry.

- **Cut and run?** Almost all companies try to cut costs and inventories during adverse times, but some (like Toys "R" Us Inc. in the current recession) radically downsize, trim product lines, reduce capacity, and exit entire businesses. The risk of this scenario is in going too far — as such companies as Arco and the Polaroid Corporation discovered in the 1990s. Once a company starts a downward spiral, it is hard to pull out, and it creates the difficult challenge of devising a radically new strategy to restart growth.

- **Reframe?** This entails tweaking or redirecting the existing strategy (as at IBM under Mr. Gerstner in the

“Reframing” can move a company from adverse times back toward good times. That’s what Lou Gerstner did in fine-tuning, improving, and realigning IBM.

1990s) and rethinking and redefining core business practices (as at Ford Motor Company under Donald Peterson and Harold “Red” Poling in the 1980s and early 1990s) — but it seldom if ever means coming up with a totally new strategy (as when Corning Inc. exited homewares in the 1990s). Such rare, complete breaks with the past typically work best when times are good.

Reframing is what Lou Gerstner did at IBM. He stressed four themes, notably the shift from a technology to a services company, and introduced changes gradually over eight years by way of countless decisions — from buying Lotus and walking away from Prodigy, to shrinking investment in PCs and mainframes and shifting 25 percent of R&D to developing Internet applications.

When done successfully during adverse times, reframing can move a company back in the direction of good times (avoiding the crisis mode altogether). Indeed, the greatest benefit of hard times is the opportunity to ask basic reframing questions:

- Where are we making all of our profits?
- What businesses should we get out of?
- Are our organizational processes undercutting the value of our strategy?
- Do we really need to manufacture our own products?
- Why aren’t the ideas coming out of R&D put into operation?
- Why does it take us two years to introduce a new product when our competitors do so in six months?

Of course, the true advantage of a flashing yellow light is not that leaders have permission to *ask* such questions, but that they have the power to *act* on them. Fully 54 percent of the companies in our study say that they are “focused on execution.” Only 6 percent say they

are coping with the recession by introducing a new vision or grand strategy (and only 9 percent are going the route of a major acquisition).

Focus on Execution

If reframing works, why isn’t it the preferred strategic approach of all leaders? Because its success depends, in the final reckoning, not on style or charisma, but on old-fashioned management skills, in particular the unglamorous ability to implement effectively and swiftly. History shows that CEOs who dither over tough decisions cause companies to get stuck in adversity and, ultimately, to drift into crisis. Polaroid’s decade-long inability to implement several new strategies stands as an astringent warning to leaders tempted to play Hamlet. The secret appears to be to “get on with it”: The game is won in the long term based on successful execution of a strategy, even a flawed one. As Intel’s Craig Barrett told *Fortune*, “If you ask...what keeps me awake at night, I’ll say the same thing I’ve been saying for more than 10 years: I worry about the internal execution of our product road maps. If we do that, we win. If we stumble there, we give the competition a chance.”

Whether they are at Intel making computer chips or at Frito-Lay making potato chips, analytical leaders are focused on execution of their strategies. In practice, execution means clarifying down the line who has the rights and responsibilities to make what decisions. It also means closely managing capital allocation, goal setting, and performance appraisal systems to create the two prime attributes needed for long-term success: alignment and adaptability. And it means measuring everything, setting challenging improvement goals, and meeting those goals. At Cisco, leaders are trying to get the

company back on track by refocusing on a key metric from their early days — revenue per employee. Again drawing on past bad experience, Frito-Lay Inc.'s managers today are measured simultaneously on *both* increases in revenue and decreases in the cost of manufacturing and distribution.

If yellow-light leadership sounds like a return to old-fashioned leadership by the numbers, there is one major difference: Yellow-light's central rule is no winging it. And no excuses, either. Over the years, nearly every leader we have worked with has talked about the need for "accountability," but precious few have practiced what they preached. Today's adversity appears to be changing that. Accountability means making good on promises and meeting targets, or paying a price if one doesn't deliver. This may sound hard-nosed, but when it is done objectively and by the numbers, it actually creates a sense of fairness in organizations. If people have to be laid off, almost everyone believes that the fairest criterion for being chosen is poor performance. Retaining and motivating high performers lays a healthy basis for future growth, and morale is kept high in the interim.

One of the ways analytical leaders prepare their companies for the future is by carefully examining and learning from past experience. Intel executives remember the 1980s, when the Japanese captured the computer memory business Intel had invented (and thought it owned). Caught by surprise, the company had to lay off thousands of employees. Since then, Intel has insisted on continually redeploying assets and people: exiting businesses that aren't doing well in an orderly way so displaced workers can compete for new jobs internally, and fanatically using financial controls to prevent new external hiring without volumes of supporting rationale.

About one-third of the companies in our study now say they were overexuberant during the 1990s — tending to hire too many people in good times, which now has forced them into repeated layoffs as times have gone bad. Capital One is an exception. As a matter of policy, Capital One restricts head-count growth precisely because it wants to avoid a roller-coaster ride of hirings and firings. It even makes its HR department do sophisticated financial analysis of the cost and benefits of each

proposed new hire. Moreover, no one at any level can be hired who doesn't pass a tough numerical reasoning test. That's disciplined management by the numbers.

Yield on Yellow

Only a year ago we were extolling the virtues of the green-light leaders at Schwab, Cisco, Corning, and Enron. Although it would be useful to know precisely what went wrong at their companies in 2001, and why it went so wrong so fast, we've concluded that, like Tolstoy's unhappy families, each of those companies fell from grace in its own way.

Yet we believe there was one common denominator: Each company believed it would continue to see only green lights on the road ahead and, therefore, had only to keep going in the same direction to stay on course.

Some leaders of those companies were guilty of a sin that afflicts many powerful people: hubris. They believed the press reports that they were avatars of leadership who had the "right" strategy and had created "best" business models. The clearest — and most tragic — example of this was the Enron Corporation's Jeffrey K. Skilling, who, as recently as the spring of 2001, was telling the press, "We are on the side of angels." But business performance is not determined by finding the eternal formula for success; it means getting up each morning and doing the hard, ever-changing managerial work of providing the goods and services customers are willing to pay for.

During this past year, companies facing financial trouble weren't derailed by their competitors; instead, the derailment was caused by the failure of the leaders of troubled companies to identify their own weaknesses and to shore up vulnerable areas. In hindsight, leaders at Cisco, Schwab, and Corning now admit that a yellow light had been flashing for some time, and that signs of impending trouble were missed because of the euphoria that comes from growth (and great press).

The good news is that the afflictions at those companies were far from fatal, and all will survive (thanks to piles of cash, sound core businesses, and leaders who have proved themselves in good times, and now bad). The next leadership challenge they face will be a test of

whether they have learned lessons from the current era of adversity, the way Intel, Frito-Lay, and IBM internalized lessons from their past crises. For leaders who wish to learn such lessons less painfully, we offer the words of the late David Packard, cofounder of HP: “You get the most satisfaction in trying something useful, and after that you must forget about it and do something else. You shouldn’t gloat about anything you’ve done, and you ought to keep going and try to find something better to do.”

That brings us to the last, most important question: If the prime characteristic of analytical leaders is the ability to tell what time it is, and then to act accordingly, aren’t we simply calling attention to conventional “situational leadership”? Not at all. Situational (or contingency) leaders adjust their styles, acting “tough” during bad times and “soft” when things are going well. The analytical leaders we have been observing are not engaged in such Machiavellian playacting or stylistic reinventions designed to manipulate followers.

Effective leaders change what they do, not who they are, and people trust them because their behavior is consistent. In all situations, they are active listeners, they involve others in decision making where appropriate, and, above all, they show respect for followers by telling them the truth. That’s because all organizations need empowered, informed leaders at all levels, regardless of economic conditions.

There is nothing wrong with the characteristics of green-light leadership identified by the experts — the problem is the necessary attributes the experts leave out. Scholars in the 1990s omitted analytical and strategic activities from the other necessary aspects of leadership. They did so probably because they were focused on

what leaders were saying in their bullish annual reports and public speeches, instead of observing what they were actually doing on the job. In so divorcing analytical from behavioral aspects of leadership, the experts distorted perceptions about the role of leadership in good times, in bad times, and in between.

In truth, most companies, most of the time, find themselves near the middle of the continuum, and seldom at the extremes. From what we’ve seen, all leaders at all times ought to do more of the things effective leaders do when the yellow light is flashing: build their skills relating to reading the environment, diagnose the health of their organizations, maintain flexibility to meet the continuing challenge of change, and, above all, resist the temptation to bask in their own success. We believe leaders won’t go wrong if they learn to behave as if green lights were always yellow. +

Reprint No. 02208

Resources

Bruce A. Pasternack, “Leadership: Dreamers with Deadlines,” *s+b*, Fourth Quarter 2001
www.strategy-business.com/press/article/?art=25258&pg=0

Gary Hamel, “What CEOs Can Learn from America,” *Fortune*, November 12, 2001
www.fortune.com/indexw.jhtml?channel=artcol.jhtml&doc_id=204831

Jerry Useem, “What It Takes,” *Fortune*, November 12, 2001
www.fortune.com/indexw.jhtml?channel=artcol.jhtml&doc_id=204826

James O’Toole, *Leadership A to Z: A Guide for the Appropriately Ambitious* (Jossey-Bass Inc., 1999)

Alec Levenson, *Levenaging Adversity for Strategic Advantage*, Working Paper, March 2002, Center for Effective Organizations, Marshall School of Business, University of Southern California