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Misunderstanding the Nature of
Company Performance:
The Halo Effect and Other Business Delusions

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In February 2005, Dell Computer was ranked #1 among the World's Most Admired Companies by *Fortune* magazine. Just two years later, in February 2007, amid slumping performance, Michael Dell removed CEO Kevin Rollins and took over the reins to revive the company.

What had gone wrong? Observers were quick to offer their views. According to *Business Week*, "Dell succumbed to complacency in the belief that its business model would always keep it far ahead of the pack." It had been "lulled into a false sense of security." An unsuccessful acquisition was said to be evidence of "hubris."¹ In *Leadership Excellence*, a management consultant explained that Dell "got stuck in a rut" and became "reluctant to change." When rivals had matched Dell's strategy of customization, managers "fell back on an old practice: they cut costs to maintain market share." The *Financial Times* quoted a business school professor at the University of Maryland who opined: "[Dell has] forgotten how to make customers happy. I have to believe the problems with the company are cultural and they begin at the top."²

Dell's misfortunes made for an irresistible story—*How the mighty have fallen*. The reasons that were advanced—*complacency, hubris, reluctance to change, and poor leadership*—all sounded reasonable. They offered explanations that most readers would find sensible and satisfying. On closer inspection, however, the coverage of Dell illustrates some of the common errors that distort our understanding of company performance.

Start with the suggestion that Dell had been "complacent." It's easy to infer from Dell's slowing performance that it must have been "complacent," but the claim doesn't stand up to closer scrutiny. In fact, as far back as the late 1990s, Michael Dell and his top managers knew that their dominance wouldn't last forever. They identified new growth opportunities, seeking to build upon

Dell's core strength—a disciplined fast-cycle manufacturing process. High on their list were related hardware products where they might apply this capability, such as computer storage, printers, and televisions. Dell also acquired a company—ConvergeNet—that promised a sophisticated new storage product. None of these actions are evidence of complacency. Further, Dell responded to renewed competition by finding new ways to lower costs, hardly evidence of an unwillingness to change.

A fair-minded assessment suggests that for Dell, extending its manufacturing model into related products was a sensible strategy. Suppose that Dell had never tried to expand into new fields—*that* might be grounds to charge it with “complacency.” Or suppose that Dell had ventured into entirely different businesses, such as software or consulting, or into a very different product segment—*that* might be evidence of “hubris.” Such a choice would have been much less sensible, and if things had gone badly, the press would have hammered Dell for abandoning its core strength in pursuit of an impossible dream. Michael Dell would have been accused of arrogance and derided for a naïve belief that he could succeed in very different markets.

The Halo Effect and the Problem of Data Independence

The story of Dell is an example of errors we commonly make in explaining company performance. Today, knowing that Dell's performance faltered, it's easy for pundits and professors to claim that someone blundered. Decisions that turned out badly are castigated as bad decisions. However, these sorts of judgments are erroneous, made retrospectively in light of what we know to have happened subsequently. These errors are surprisingly widespread in the business world. They affect not only journalistic accounts about specific companies, but also undermine the data used for large-scale studies about company performance. They lead to a broad misunderstanding of the forces that drive company success and failure. As we will see below, some of the most popular business studies in recent years are undermined by fundamental problems of data integrity.

One of the root causes is the halo effect. First identified by American psychologist Edward Thorndike in 1920, the halo effect describes the basic human tendency to make specific inferences on the basis of a general impression.³

How is the halo effect manifested in the business world? When a company is doing well, with rising sales, high profits, and a surging stock price, observers naturally infer that it has a smart strategy, a visionary leader, motivated employees, excellent customer orientation, a vibrant culture, and so on. When that same company suffers a decline—when sales fall and profits shrink—many people are quick to conclude that the company's strategy went wrong, its people became complacent, it neglected its customers, its culture became stodgy, and more. In

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fact, these things may not have changed much, if at all. Rather, company performance creates an overall impression that shapes how we perceive its strategy, leaders, employees, culture, and other elements.

The halo effect helps explain the way that Dell's performance was described. As long as Dell was successful, observers marveled at its strategy, its focus on customers, its disciplined operations, and its execution skills. When performance began to falter, those same things were seen in a different light. Very much the same thing happened at Cisco Systems, which was praised in the late 1990s for its brilliant strategy, its superb management of acquisitions, and its laser-like customer focus. When the tech bubble burst, Cisco was suddenly derided for a flawed strategy, sloppy acquisition management, and poor customer relations. In fact, Cisco really had not changed much—a decline in performance led people to see the company differently. The same happened at IBM and ABB—they were admired for when performance was strong, then criticized for the exact same things when performance fell, with little evidence of meaningful changes. Why is the tendency to make these attributions so strong? Because many everyday concepts in business—from leadership to corporate culture, and from core competencies to customer orientation—are ambiguous and difficult to define objectively. Our perceptions of them are therefore often based on other things that appear to be more concrete and tangible, namely financial performance. When financial performance is strong, people tend to have broadly favorable opinions of other things that are less tangible; and when performance falters, they make the opposite judgments. As a result, many of the things that we commonly believe *drive* company performance are better understood as the *result of* performance.

The halo effect may seem at first like harmless hyperbole that that helps reporters tell a coherent and satisfying story. In fact, however, the halo effect is pervasive in the business world and affects much more than journalistic accounts. In a series of experiments about group performance, UC Berkeley professor Barry Staw (then at the University of Illinois) showed that members attribute one set of characteristics to groups they believe are high performers, and a very different set of characteristics to groups they believe are low performers.⁴ When told their group had performed well, members described it as having been more cohesive, with better communication, and more open to change; when told it had performed poorly, they remembered the opposite. In fact, the groups had done just about as well—the only difference was what Staw had *told* them about their performance. Similarly, in a series of studies about leadership, James Meindl and his colleagues found that the words used to describe leaders were highly dependent on the performance of the company. In fact, they concluded that there was no adequate theory of leadership in the absence of knowledge about company performance.⁵ A successful company with a strong record of performance? The leader appears to be visionary, charismatic, with strong communication skills. A company that has suffered a downturn? The same leader appears to be hesitant, misguided, or even arrogant.⁶ The halo effect is also present in large-scale surveys. A prominent example is the *Fortune* Most

Admired Survey, where evaluations of things such as managerial talent, product quality, and innovation have all been shown to be affected by the halo cast by financial performance.⁷

In sum, the halo effect has a powerful influence on our evaluations of company performance, whether we look at evidence from experiments, from empirical studies of surveys, or from content analysis of journalism. The implication is clear: data independence is vital. As long as people are asked to assess companies when they already have an opinion about its performance, their evaluations are likely to be biased—and their resulting findings of questionable value.

Popular Studies of Company Performance: Dubious Data and Flawed Findings

Fortunately, many researchers—whether at business schools, in research institutes, or in consulting firms—are careful to be sure that their data are valid. Yet some of the most influential studies of recent years have relied on data of doubtful quality, leading to questionable findings and to a general misunderstanding of company performance.

Reliance on contaminated data is the principal flaw in several of the most popular studies from recent years. Let's look at three of the most influential.

1982—In Search of Excellence: Lessons from America's Best-Run Companies

The first of the modern business blockbusters was *In Search of Excellence: Lessons from America's Best-Run Companies* by Tom Peters and Robert Waterman, both at McKinsey & Co.⁸ Peters and Waterman asked a basic question: *Why are some companies more successful than others?* They began by identifying 43 excellent American companies, including Boeing, Caterpillar, Digital Equipment, Hewlett-Packard, IBM, Johnson & Johnson, McDonald's, Procter & Gamble, and 3M. Next, they gathered data from archival sources, press accounts, and from interviews. Based on these data, Peters and Waterman identified eight practices that appeared to be common to the *Excellent* companies, including "a bias for action," "staying close to the customer," "stick to the knitting," and "simultaneous loose-tight properties."

In Search of Excellence was an enormous popular success, in part because it inspired American managers at a time when they felt beleaguered by Japanese competitors. Managers felt reassured—by following these eight principles, they were told, they could lead their companies to high performance. Yet when we look at the sources of data, we find that Peters and Waterman relied on sources that were likely to be compromised by the halo effect. It's no surprise that *Excellent* companies were thought to be good at managing people and listening to customers, or were said to have strong values or a good corporate culture. That's what was said about Cisco and ABB, and more recently about Dell. That's very much what we would expect given the halo effect.

In the years after the study ended, the performance at most of the 43 *Excellent* companies regressed sharply. Over the next five years, only one-third of the *Excellent* companies grew faster than the overall stock market, while the rest failed to keep up. If we look at profitability rather than stock market performance, the record is even worse: of the 35 companies for which data were available, only 5 improved their profitability, while 30 declined. Whether we look to market measures or profit measures of performance, the pattern is the same: most of these companies, selected precisely for their high performance, did not maintain their edge.

The rapid decline in performance seems puzzling if we believe that Peter and Waterman had successfully isolated the reasons for high performance. It would be remarkable that so many *Excellent* companies, which did so many things well, would fade so quickly. Yet the pattern of regression is entirely reasonable when we realize that their findings were, for the most part, not the *causes* of performance but rather *attributions based on* performance. In fact, the research method of Peters and Waterman contained two basic errors. First, they studied a sample made up entirely of outstanding companies. They selected their sample based on the dependent variable—that is, based on outcomes. If we look only at companies that have performed well, we can never hope to show what makes them different from companies that perform less well. Compounding this error was a second mistake: much of their data came from sources that are commonly biased by the halo effect. By relying on sources of data that are not independent of performance, the data were tainted from the start. The result may have been a pleasing set of stories, but it was hardly a valid description of why some companies were high performers—or what other companies could do to achieve similar success.

1994—Built to Last: Successful Habits of Visionary Companies.

Jim Collins and Jerry Porras of Stanford University conducted the most influential study of company performance in the 1990s.⁹ Rather than focus on today's successful companies—many of which might soon falter, as had the companies studied by Peters and Waterman—Collins and Porras turned their attention to companies that had been successful over the long term. They hoped to find the “underlying timeless, *fundamental principles* and patterns that might apply across eras” (italics in the original).

Collins and Porras began by identifying 200 leading companies from a wide range of industries, then narrowed their sample to include the most durable and successful of them all, the “best of the best.” Eighteen companies were worthy of this distinction—truly outstanding, enduring, *visionary* companies. Included were some of the great names of American business: high-tech companies such as IBM, Hewlett-Packard, and Motorola; financial services giants such as Citicorp and American Express; health care companies such as Johnson & Johnson and Merck; plus Boeing, General Electric, Procter & Gamble, Wal-Mart, Disney, and more.

Collins and Porras knew that *In Search of Excellence* had made a fundamental error by simply looking for commonality among successful companies. As they noted, if you look at a group of successful companies and try to find what they have in common, you might conclude that they all reside in buildings. Very true, but hardly something that distinguishes successful companies from less successful ones, or that might conceivably lead to success. So Collins and Porras went a next step: for each of their *Visionary* companies, they identified a *Comparison* company from the same industry, of about the same vintage, and that was a good performer—not a “dog.” Boeing was paired with McDonnell Douglas, Citicorp with Chase Manhattan, Hewlett-Packard with Texas Instruments, Procter & Gamble with Colgate-Palmolive, and so forth. This way, they might be able to isolate what made the most successful and enduring companies different from others that weren’t quite so outstanding.

The next step was to study these 18 matched pairs. Supported by a team of researchers, Collins and Porras undertook an extensive process of data collection. They read more than 100 books including company histories and autobiographies. They consulted more than 3,000 documents, from magazine articles to company publications. They read business school case studies. All together, they amassed data that filled several cabinets and bookshelves. As they described it, their research method was disciplined and rigorous.

Based on their data, Collins and Porras distilled their findings into a set of “timeless principles” that distinguished the 18 *Visionary* companies from the 18 *Comparison* companies: having a strong core ideology that guides the company’s decisions and behavior; building a strong corporate culture; setting audacious goals that can inspire and stretch people; developing people and promoting them from within; creating a spirit of experimentation and risk taking; and driving for excellence.

Yet for all their claims of rigorous research, Collins and Porras never addressed the basic issue of data independence. Much of the data they gathered came from sources that are known to be undermined by the halo effect. Unfortunately, if the data are biased, it doesn’t matter how many cabinets and bookshelves are filled. Pick any group of highly successful companies and look backwards, relying on articles in the business press and on retrospective interviews, and you may well find that they’re said to have strong cultures, solid values, and a commitment to excellence. Pick a group of comparison companies that are good but not outstanding, and they’re likely to be described in somewhat lesser terms. But unless the data were gathered in a way that was truly independent of performance, we don’t have a satisfactory explanation of performance at all. Did Collins and Porras successfully identify practices that led to high performance, or did high performing companies tend to be described as having these practices? Given what we know about the pervasive nature of the halo effect, the latter explanation is at least as likely as the former.

Built to Last was published in 1994 and became an immediate hit. It was called “The *In Search of Excellence* for the 1990s.” In its own words, *Built to Last* claimed to provide “a master blueprint for building organizations that will

prosper long into the future.” Collins and Porras were emphatic about the impact of the findings: “Just about anyone can be a key protagonist in building an extraordinary business institution. The lessons of these companies can be learned and applied by the vast majority of managers at all levels.” They concluded: “You can learn them. You can apply them. You can build a visionary company.” Many reviewers, including at the *Wall Street Journal* and *Harvard Business Review*, were taken in by the appearance of rigorous research, and concluded that *Built to Last* offered solid findings. After all, it was based on a large data set, and its results were presented with the authority of solid science. But of course, if the quality of data is poor, the *quantity* of data is entirely beside the point.

In the five years after the study ended, the performance of the 18 *Visionary* companies regressed sharply. If we look to a measure of market performance—total shareholder return—more than half did not even match the overall market over the next five years. If we use a measure of profitability—operating income as a percentage of total assets—the results are much the same: five companies improved their profitability, while eleven declined, with one unchanged. By either measure, the picture is the same: most of Collins and Porras’s *Visionary* companies, chosen precisely because they had done so well for so long, quickly fell back to earth once the period of study was over. The “master blueprint of long-term prosperity” turned out to be a delusion.

It is important to note that the fact some *Visionary* companies fell back does not, by itself, invalidate the findings. Some regression is to be expected, even among the best companies. However, the sheer amount of decline, so quick and so extensive after such a long period of success, should have raised serious questions. Such a pattern is decidedly not what one would have expected had Collins and Porras truly isolated the reasons for long-term success. On the other hand, the pattern of sharp regression is entirely consistent with what we would expect if their principles of success were not the causes of high performance at all, but rather attributions based on performance. That, in a word, is the fundamental weakness of *Built to Last*: by using biased sources of data, the very things that were claimed to be *drivers of* enduring performance—strong culture, commitment to excellence, and more—were in fact attributions *based on* performance.

Jim Collins and Jerry Porras corrected one of basic problems of *In Search of Excellence* by including *comparison* companies, but they didn’t solve the problem of data independence. Unfortunately, if the data are colored by the halo effect, we’ll never know what drives high or low performance; instead, we’ll merely find out how high and low performers are described. For all its claims of extensive research and scientific rigor, *Built to Last* was built on faulty data—and produced flawed results. Its basic ideas are probably helpful for many companies much of the time—after all, who can argue against such things as strong values, customer orientation, and a commitment to excellence?—but are hardly the reasons for long-term success.

Some have argued, in defense of Collins and Porras, that no data set is perfect. Any database will have some errors—some data may be missing, or

coded incorrectly, or misplaced. Yet such an argument overlooks the critical distinction between noise and bias. If errors are randomly distributed, we call that *noise*. If we gather sufficient quantities of data, we may be able to detect a signal through the noise. However, if errors are not distributed randomly, but are systematically in one direction or another, then the problem is one of *bias*—in which case gathering lots of data doesn't help. The halo effect, unfortunately, is a problem of bias: what is known about company performance has a systematic effect on evaluations, and therefore will produce skewed results.

At the start of *Built to Last*, Collins and Porras wrote that it is not possible to study company performance using the techniques of scientific experimentation. Companies cannot be put in a Petri dish, and therefore “we have to take what history gives us and make the best of it.” However, good researchers don't simply “take what history gives us.” They challenge and probe the data, they look for corroborating evidence from reliable sources, they triangulate, and then they set aside what is suspect and rely on data that are solid and rigorous. The result will not be perfect, and will likely always include some noise, but should be free of strong and systematic bias.

2001—Good to Great: Why Some Companies Make the Leap . . . and Others Don't

The most influential study of company performance in the present decade has also been conducted by Jim Collins.¹⁰ Whereas *Built to Last* looked at companies that had been successful for many years, Collins's next study asked a different question: Why do some ordinary companies make the shift to outstanding performance while others don't?

Once again, Collins and his researchers began with a large sample—they considered all the companies on the *Fortune 500* between 1965 and 1995, 1,435 in all. From this group, they identified a very few that fit a particular pattern: 15 years of stock market returns near the general average, followed by 15 years of stock market returns well above the average. Just 11 fit the profile: Abbot, Circuit City, Fannie Mae, Gillette, Kimberly-Clark, Kroger, Nucor, Philip Morris, Pitney Bowes, Walgreen's, and Wells Fargo. Then Collins identified, for each, one comparison company in the same industry and active at about the same time. This way, it might be possible to isolate the factors that distinguished those companies that became great from those that remained merely good.

Collins and his team then gathered another extensive data set about the 11 pairs of companies. They cast their net widely, considering everything from strategy to corporate culture, from acquisitions to compensation, from financial measures to management policies. As Collins wrote in a lengthy appendix, his team read dozens of books and reviewed more than 6,000 articles. They also conducted scores of interviews with managers, asking them to explain the events of past years. The result was a vast trove of data, filling crates, and entire cabinets, as well as 384 million bytes of computer storage. Based on these data, Collins and his team found that the 15 years of average performance were described as a Build-Up phase, characterized by strong yet humble leadership

(known as “Level Five Leadership”), getting the right people on board (“First Who . . . Then What”), and facing reality directly and courageously (“Confront the Brutal Facts”). The 15 years of rapid growth were called the Breakthrough phase, and were characterized by focus (“The Hedgehog Concept”), execution (“Culture of Discipline”), and, finally, the use of technology to reinforce progress (“Technology Accelerators”).

The results were presented as rigorous research, carefully undertaken over several years of hard work. By his own account, Collins claimed to be searching for the immutable principles of organizational performance, those things that would remain valid and useful at any time and place—the equivalent of physics. Once again, however, there are serious problems with the data. Some of the data appear to be free of the halo effect: for example, measures of top manager turnover, or the presence of major institutional shareholding blocks, or the extent of board ownership, are all matters of public record and not likely to be shaped by perceptions, whether by journalists, company spokespeople, or by the recollections of the managers themselves. Yet much of the data was problematic. A great deal came from magazine and newspaper articles, sources that are biased by the halo effect. Other data came from retrospective interviews with managers who were asked to look back and describe the factors that contributed to greatness. These sorts of interviews, while often producing colorful quotes and inspiring stories, are commonly biased by the knowledge of eventual performance. For all the attention paid to the large quantity of data, there was no apparent effort to ensure that the data were of high quality—indeed, there was not even a concern that so much of the data came from questionable sources.

Collins claimed to have explained why some companies made the leap from good to great while others did not, but in fact his book does nothing of the kind. *Good to Great* documented what was written and said about companies that made the leap versus those that did not—which is completely different. At the start of his book, Collins urged his readers to “confront the brutal facts.” Yet one important fact was not confronted: if researchers begin by selecting companies based on outcome, then gather data by collecting articles from the business press and conducting retrospective interviews, they are not likely to discover what led some companies to become *Great*. They will mainly catch the glow of the halo effect.

Yet once again, very few people looked closely at these shortcomings, perhaps because *Good to Great* offered such an encouraging message: *You, too, can transform your good company into a great one*. Collins was explicit on this point. He wrote: “Greatness is not a matter of circumstance. Greatness, it turns out, is largely a matter of conscious choice.” It’s a compelling story. People want to believe their good efforts will be rewarded, that good things come to those who wait, and that’s exactly what Collins was saying: with vision and humility, by caring about people, through persistence and focus, a company can achieve greatness. Regrettably, however, the logic and data of this popular book are badly flawed. Does having “humble leadership” and “great people” lead to success? Or is it more likely that successful companies are described as having

excellent leadership, better people, more persistence, and greater courage? Given the way the data were gathered, and given the widespread tendency to make attributions based on performance, the latter is more likely than the former.

Beyond the Halo Effect: Misunderstanding Company Performance

The studies reviewed above are not the only ones to be based on questionable data, but they are worthy of attention because they are among the most prominent and the most widely quoted business books of recent years. At best, they offer basic principles that managers may find useful to steer their organizations: to have strong values, to care about people, to listen to customers, and to stay focused. There is nothing wrong with general principles such as these, which are probably useful for many managers much of the time. Nor is there anything wrong with success stories that can inspire managers and provide comfort during troubled times. However, these principles and stories do not constitute the explanation for performance that is claimed by the authors.

In fact, these and other popular studies have done more than simply arrive at erroneous conclusions about the causes of company performance. They have helped bring about a fundamental misunderstanding of the nature of company performance. They have diverted our attention from a more accurate understanding of what it takes for companies to achieve success.

A first misconception is the notion that there exists a formula, or a blueprint, which can be followed to achieve high performance. Jim Collins, in particular, has been explicit on this point, claiming that his findings in *Good to Great* constitute “immutable laws of organizational performance,” akin to physics in their rigor and predictive accuracy. In subsequent interviews, he has emphasized repeatedly that his findings are comparable in their accuracy and predictive power as the laws of physics.¹¹ The apparently clear and solid nature of his findings, however, is a product of circular logic—the very data that were used to arrive at conclusions about high performance were, in fact, shaped by the performance they were said to explain. Once we recognize that much of the data are the result of attributions based on performance, then the purported causal relationships are exposed as unfounded.

In fact, formulas can never predictably lead to business success with the accuracy of physics for a simple but profound reason: in business, performance is inherently relative, not absolute. This is an exceedingly important point, yet is routinely overlooked—a 2005 *Harvard Business Review* article about company performance missed the point entirely.¹² Why do we not grasp the relative nature of performance? Part of the problem is that we often think in terms of laboratory science—whether physics or chemistry. Put a beaker of water on a burner, and you’ll find that it boils at 100 degrees Celsius, a bit less at high altitude. Put a hundred beakers on a hundred stoves, and you’ll find they still boil at 100 degrees. One beaker doesn’t affect another. However, that’s not how

things work in the business world, where companies compete for customers, and where the performance of one company is inherently affected by the performance of others.

The relative nature of competition becomes clear when we consider the case of Kmart. Long a dominant U.S. retailer, Kmart went into steep decline during the 1990s and declared bankruptcy in 2002. Yet on several objective dimensions—including inventory management, procurement, logistics, automated reordering, and more—Kmart actually *improved* during the 1990s. Why then did its profits and market share decline? Because on those very same measures, Wal-Mart and Target improved even more rapidly. Kmart's failure was a relative failure, not an absolute one. The same holds for General Motors. Compared to what it produced in the 1980s, GM's cars today are better on many dimensions: features, quality, safety, and styling. Why then is it bordering on failure? Because other automakers, including many from Japan and Korea, have improved still further. Indeed, one of the reasons why GM has made important strides is precisely because of the competitive pressures imposed by foreign rivals. Thus the paradox: a company can get better and fall further behind its rivals at the same time.

To be clear, company performance is inherently relative but it is not necessarily a zero-sum game. There are instances where the success of one firm may have spillover benefits to another. As Michael Porter argued, the close proximity of companies in a given industry can help each other, creating a cluster that attracts talented employees, complementary firms that offer support services, and ultimately customers. Such clusters provide benefits to all players. Yet even within clusters, companies compete against each other for customers. In a competitive market economy, company performance remains fundamentally relative: for most customers, purchasing a Toyota this year precludes buying a Ford; consuming more private label soft drinks leads to lower sales of branded drinks; and Internet stock trading cuts into the business of traditional broker sales. In these and many other instances, performance is best understood as relative, not absolute.

A second misperception stems from this first one: if we mistakenly believe that firm performance is absolute, not relative, we may wrongly conclude that it is driven entirely by internal factors, such as the quality of its people, the values they hold, their persistence, and the like. It may be comforting to believe that one's destiny rests in one's own hands—that "greatness is a matter of choice"—yet once we recognize that performance is fundamentally relative, it becomes clear that analysis of the competition is central to performance. Strategic choices are critical, and they are based on an assessment of not only our capabilities and resources, but on those of our present and potential rivals. Regrettably, that basic dimension of company performance is missing in formulaic treatments, which emphasize what is internal and overlook the complex and unpredictable competitive landscape.

A third error follows logically. Since strategic choices are made under conditions of uncertainty—uncertainty about competitors and their actions,

about customers and their changing preferences, about technology, and more—they always involves risk. As a consequence, even good decisions may turn out badly—yet the fact that they turned out badly does not mean they were necessarily mistaken. Thus we come full circle: whereas it is easy to make positive attributions when performance is high and tempting to make negative judgments when things turn out badly, this view is a gross oversimplification. The business world involves a series of choices, made under uncertainty, that aim to produce a relative advantage. In a competitive market economy, there is no such thing as a formula for success, nor a guarantee of high performance, and there is scant evidence that high performers in one time period will endure in a next. Claims to the contrary are appealing, but usually based on errors of research design, flawed data, or a combination of the two.

Clear Thinking About Company Performance

Once we have set aside some of the common misconceptions that afflict popular studies, what then? What lessons we can draw to think more clearly and accurately about company performance?

A first lesson, which applies to journalists, researchers, and managers alike, is to beware of the halo effect. It is to refrain from making easy attributions based on company performance, but instead to insist that we are making decisions based on valid data. This view is consistent with ideas about evidence-based management, advanced by Jeffrey Pfeffer and Robert I. Sutton of Stanford University in their excellent 2006 book, *Hard Facts, Dangerous Half-Truths, and Total Nonsense: Profiting from Evidence-Based Management*.¹³ As they have persuasively argued, it is important to discard half-truths and nonsense that pervade the business world, and instead to rely on hard facts. By extension, it's important to recognize what constitutes a "hard fact," and when to detect that an apparently solid fact is in fact biased by performance. Rather than assume that a successful company has superb customer orientation and excellent execution skills, or that a struggling company must have displayed complacency or weak execution, it is important to seek independent evidence. We need to ask: "If we didn't know how the company was performing, what would we think about its culture, execution, or customer orientation?" As long as our judgments are merely attributions reflecting a company's performance, our data will be biased, our logic circular, and our conclusions doubtful.

For managers, in particular, there are further lessons. Wise managers know to be skeptical of formulas. They know that performance is relative, not absolute, and therefore no formula can predictably lead to success. After all, if all companies followed the same formula, would they all be successful? Of course not. Next, since performance is relative, it follows that companies succeed when they do things differently than rivals, which means that they must make choices under conditions of uncertainty, which in turn inevitably involves risk. Wise managers must therefore shift away from the search for blueprints and formulas, and instead think of the business world in terms of probabilities.

Strategic leadership is about making choices, under uncertainty, that have the best chance to raise the probabilities of success, while never imagining that success can be predictably achieved.

Finally, since actions and outcomes are imperfectly linked, it is important not merely to infer that good outcomes are always the result of good decisions, or that bad results must mean that someone blundered. The fact that a given choice didn't turn out well doesn't always mean it had been a mistake. It is therefore necessary to examine the decision process itself and not just the outcome. Managers need to ask questions such as these: Had the right information been gathered or had some important data been overlooked? Were the assumptions reasonable or were they flawed? Were calculations accurate or had they been mistaken? Had the full set of eventualities been identified and their impact thoughtfully estimated? Had the company's strategic position and risk preference been considered properly? This sort of rigorous analysis, with outcomes separated from inputs, requires the extra mental step of judging actions on their merits rather than simply making after-the-fact attributions, be they favorable or unfavorable. Good decisions don't always lead to favorable outcomes, and unfavorable outcomes are not always the result of mistakes. Wise managers resist the natural tendency to make attributions based solely on outcomes.

The business world is full of books with comforting messages: that success can be achieved by following a formula, that specific actions will predictably lead to desired outcomes, and that greatness can be achieved no matter what rivals do. The truth is very different. The business world is not a place of clear causal relationships, where a given set of actions leads to predictable results, but one that is more tenuous and uncertain. The task facing executives is to gather appropriate information, evaluate it thoughtfully, and make choices that provide the best chances for the company to succeed, all the while recognizing the fundamental nature of uncertainty in the business world.

Another Look at Dell

All of which brings us back to Dell. For years, it had been widely applauded for its insightful strategy of selling direct, for its superb execution, and for its stellar management of operations. These plaudits were not merely inferred from performance—by objective measures, such as inventory turnover, cycle time, and working capital management, Dell was a leader among companies.

How, then, should we explain its recent decline in performance? It may be convenient to infer that Dell became complacent or stuck in a rut, but the evidence doesn't support such a verdict. Dell's management did not stubbornly remain fixed in PC manufacturing, but looked for new avenues of growth, seeking to leverage its capabilities in other products. Dell may not have been as successful in those new areas as it had hoped, but that doesn't mean it had made a mistake.

That sort of thinking misses the realities of competition in a free market economy. Strategy is about choice, and choices involve risk. Yet in our desire to tell a satisfying story, these complexities are set aside. We tend to prefer simple notions such as complacency, hubris, and cultural problems that we imagine start at the top.

Rather than resorting to easy retrospective attributions, we might more accurately understand the worsening of Dell's performance from 2005 through early 2007 not as an absolute decline, but as a relative one. One rival, Hewlett-Packard, improved dramatically since a new CEO, Mark Hurd, came aboard in 2005, and by 2006 it had overtaken Dell in market share. Another rival, Lenovo, had also become a stronger contender, in part because it was run by William Amelio, a former Dell manager who brought with him some of Dell's legendary strength at efficient execution. In fact, HP and Lenovo were both spurred to improve in large part *because* of Dell's previous excellence. That's the reality of competition—outstanding success in one time period tends to stimulate rivals, who raise the bar and make it tougher for the incumbent to maintain its success. Did Dell get worse? In relative terms, yes, but not obviously in an absolute sense.

The way forward for Dell—and for any other company in the midst of a brutally competitive industry—is far from obvious. Perhaps Dell's glory days have come to an end, and its efforts to reignite profitable growth will, despite its best efforts, sputter and fail. Or perhaps it will find ways to write a new chapter of success, innovating successfully with new products or services, or achieving higher levels of quality while offering still greater value. If we scour history, we can find examples of recovery as well as of failure. However, if Dell's eventual fortunes have yet to be decided, the challenge facing Michael Dell is abundantly clear. It is to set aside the superficial analyses from Monday morning quarterbacks, to disregard the simplistic formulas that are claimed to have worked elsewhere, and to focus on what every company must do: make a sober assessment of its capabilities, look closely at customer needs, and make a clear-eyed evaluation of the competition—and then make choices that might set it apart from its rivals. Again, strategy is about choice, and choice involves risk. There are no easy formulas to apply, no tidy plug-and-play solutions that offer a blueprint for success. At best, Michael Dell will make choices that stand the best chance of improving his company's chances of success, but there is no way to guarantee high performance. In a free market economy, where performance is relative and constantly rivals strive to out-do each other, despite our fondest longings for the secrets of success, outcomes will always remain uncertain.

Notes

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