Is Your Strategy Evaluation Biased?

The balanced scorecard may be the cause—and the cure.

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Managing organizations means managing people, and people have powerful motivations that shape their beliefs and judgments. These motivations can lead to disastrous business outcomes when they bias crucial decisions, such as selecting and evaluating strategy.
Ford Motor Company is a prime example. In 2008, in the midst of declining profitability, new CEO Alan Mulally asked all division managers at Ford to evaluate the results of their own division's operations. They were supposed to color-code operational reports according to their division's performance: Green indicated favorable results, yellow indicated caution, and red indicated problems. At his first few meetings with his division managers, Mulally noticed that they consistently colored their reports green despite successive years of multibillion-dollar losses. Finally, with some encouragement, a brave manager warned him about potential problems with a new product the company was set to introduce. Mulally recalled: “The whole place was deathly silent. Then I clapped and said, ‘I really appreciate that clear visibility.’ And the next week the entire set of charts were all rainbows.” (See Alex Taylor III, “Fixing Up Ford,” CNN Money, May 12, 2009.)

A cynic reading this vignette would say these managers were simply hiding bad results to save their jobs. This is possible, but it’s also possible, and even likely, that at least some of Ford’s division managers fell prey to what psychologists call motivated reasoning, a bias in which people unconsciously evaluate evidence in ways consistent with their own preferences. This type of bias can hinder a company’s ability to learn from mistakes and to build successful strategies.

Like Ford’s Alan Mulally, other executives must find ways to mitigate this bias to improve decision making. For Mulally, the solution was to change the motivation of his managers. He praised honest reporting of bad results, demonstrating to all that he valued transparency. In return, the managers responded positively to this approach and gave Mulally the insights he needed to turn the business around.

A 2009 study, sponsored by IMA (Institute of Management Accountants) and reported in the May 2010 issue of The Accounting Review, investigates the motivated reason-
ing managers succumb to when evaluating strategy, as well as how to overcome this bias by employing a popular management accounting tool, the balanced scorecard. (See William B. Tayler, “The Balanced Scorecard as a Strategy-Evaluation Tool: The Effects of Implementation Involvement and a Causal-Chain Focus.”) Here, we’ll first describe the ideas underpinning that study. Then we’ll discuss the implications of the research for managers seeking to improve their strategic decision making.

The Balanced Scorecard as a Causal Chain
Developed by Robert S. Kaplan and David P. Norton in the early 1990s, the balanced scorecard focuses managers’ attention on critical performance measures from four perspectives:

1. **Financial Perspective**—“How do we look to shareholders?”
2. **Customer Perspective**—“How do customers see us?”
3. **Process Perspective**—“What must we excel at doing?”
4. **Learning and Growth Perspective**—“Can we continue to improve and create value?”

The early version of the balanced scorecard (we’ll call it BSC 1.0) provides managers with exactly what its name suggests: balance. Illustrated in the top half of Figure 1, BSC 1.0 is made up of financial strategic objectives and measures as well as other meaningful objectives and measures from critical operations within an organization. These objectives and measures are typically grouped into the four perspectives just mentioned. This holistic framing of the organization encourages added attention to objectives and measures that managers might otherwise neglect.

Despite its strengths, however, BSC 1.0 fails to demonstrate how the various strategic objectives fit together to form a company’s overall strategy. In other words, there are no predicted causal connections between the objectives. Even the four perspectives encompassed within BSC 1.0 lack a cohesive relationship—they stand together as four groups with no established hierarchy. As a result, BSC 1.0 fails to convey how and why the objectives in each perspective help a company accomplish its ultimate goals. For example, why should executives invest in learning and growth activities when bottom-line financial results are their primary concern? BSC 1.0 can’t answer this question.

This shortcoming was addressed as the balanced scorecard evolved. After years of use, Kaplan and Norton

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**Knock Out Managerial Bias With This One-Two Punch**

**The Problem:** Managers often evaluate strategies that they selected themselves. In data-rich business environments, managers’ motivations can bias how they gather and interpret data and, in turn, how they make strategic decisions. When managers justify decisions based on cherry-picked data, self-serving choices masquerade as data-driven decisions, and companies lose out on opportunities to grow and improve.

**The Solution:** Managers can use the balanced scorecard to constrain biased strategy evaluation by employing the following two tactics.

1. **Involve managers in the selection of balanced scorecard measures.** Involving managers in measure selection “fights fire with fire,” pitting managers’ biases against themselves because managers want to believe that they selected not only good strategic initiatives but also good scorecard measures. A good scorecard measure captures the targeted dimension of performance on the balanced scorecard and also predicts performance in other perspectives along the causal chain (illustrated in Figure 2).

2. **Frame the balanced scorecard as a causal chain.** For the first tactic to work, managers need to think about the balanced scorecard as a causal chain from the beginning. By framing the balanced scorecard as a causal chain, managers can see that good strategic initiatives impact not only objectives and measures targeted directly in the causal chain, but also those that are further along the chain.

In isolation, neither of these tactics prevents managers from believing that their strategic initiative was successful. Together, however, the tactics mutually reinforce each other and lead managers to evaluate their own initiatives more objectively based on a broader set of scorecard measures.
began recommending that the components of the scorecard be linked together into a causal chain. Illustrated in the bottom half of Figure 1, BSC 2.0 proposes that performance in one perspective naturally causes performance in another perspective. For example: Learning and growth activities create more efficient workforces and work processes (process perspective). Internal processes generate high-quality products and services that delight customers (customer perspective). Satisfied customers buy the company’s products and services at profitable margins, producing healthy returns on invested capital (financial perspective).

In addition to the general linkages between scorecard perspectives, BSC 2.0 allows for causal linkages between all objectives and measures within each of the four scorecard perspectives. As illustrated in Figure 2, this allows managers to see what Kaplan and Norton call the Strategy Map, which helps managers visualize how each objective and measure fits into the performance puzzle of their company.

Equipped with this version of the balanced scorecard, managers can look to a balanced set of objectives and measures to gauge performance. They can also look at leading and lagging indicators that gauge the effectiveness of strategic initiatives: the actionable plans managers implement to improve performance in targeted objectives. As illustrated in Figure 3, a successful strategic initiative impacts not only objectives and measures targeted directly in the causal chain but also those that are further along the chain. For example, an initiative designed to increase on-time deliveries should not only improve delivery promptness but also a customer’s satisfaction and willingness to buy the product.

**Strategy Selection and Evaluation**

Almost as important as selecting good strategic initiatives is understanding how to evaluate the performance of those initiatives. Consider a recent operations and marketing initiative of Domino’s Pizza. Starting in 2009, executives at Domino’s implemented a plan to include...
higher-quality ingredients in all of its pizza recipes. They coupled this initiative with marketing focused on rebranding the company as a low-cost, high-quality restaurant, enabling it to attract and retain new customers. But the executives didn’t stop there. Domino’s hired Brand Keys, a company that tracks customer loyalty, so the restaurant chain could gauge the success of the new initiative. By 2011, Domino’s was among Brand Keys’s top 100 Customer Loyalty Leaders and retained its ranking in 2012—the only pizza chain to make the list. Therefore, the initiative was a measurable success.

Companies—yours, too, if it doesn’t already—should evaluate the success of initiatives by considering a variety of performance measures that are part of the complete picture presented by the balanced scorecard. For example, in addition to its Brand Keys measures, Domino’s also used focus groups to assess the success of its quality-ingredients strategy. The causal-chain version of the balanced scorecard displayed in Figure 3 also emphasizes that a successful strategic initiative should lead to improvements in Domino’s financial results. (An unsuccessful initiative, on the other hand, may improve customer satisfaction but not financial performance.) As it turns out, Domino’s saw dramatic improvements in its customer loyalty scores and in its sales and profitability in the quarters after implementing its quality-ingredients initiative. Further, the company’s stock price has surged more than 500% since 2009—fairly convincing evidence that better pizza has led to happy customers and happy shareholders.

Motivated Reasoning in Strategy Evaluation
Although the balanced scorecard is an excellent tool managers can use to evaluate strategy, it also provides fertile ground for them to fall prey to psychological biases. Motivated reasoning, a well-known theory in psychology, demonstrates that individuals acquire, evaluate, and use information in a manner that coincides with their goals and desires. Tom Gilovich, a prominent psychology pro-
Professor at Cornell University, explains it as follows: When approaching a disagreeable proposition, people tend to ask, “Must I believe this?” and search for arguments and evidence that refute the proposition. Yet when faced with something agreeable to them, people ask, “Can I believe this?” and search for arguments and evidence that support the proposition.

These alternative approaches to agreeable and disagreeable propositions lead individuals to bias how they assemble, assess, and integrate information and, in turn, lead them to biased conclusions. This tendency is quite pervasive: People are incredibly proficient at seeing what they want to see in data.

The 2009 IMA-sponsored study demonstrated that motivated reasoning has important implications for strategy selection and evaluation. Managers want to believe that the strategic initiatives they select are successful. Beyond concerns for keeping their jobs, managers (and people in general) like to believe they’re smart. And because smart people make good choices, managers want to believe they make good choices. Thus, when evaluating our own choices, it can be very difficult to remain unbiased—and bad outcomes call into question the abilities of the decision maker.

Compounding this problem is that managers often evaluate the strategic initiatives that they selected and implemented. These managers will likely approach data from balanced scorecard measures with the “Must I?”/“Can I?” criteria we described. A balanced scorecard setting is ripe for this kind of selective data processing because the scorecard provides multiple measures from which to cherry-pick good results. Thus, a strength of the scorecard—a balanced view of performance via multiple measures—becomes the breeding ground for this pernicious psychological bias.

On average, the participants in the IMA-sponsored study succumbed to motivated reasoning: They were much more likely to perceive a strategic initiative as successful when they were involved in selecting the initiative relative to how they evaluated the same data when someone else chose it, even without financial incentives to consciously bias their judgments.

**Targeting Several Key Remedies**

Individuals who fall prey to motivated reasoning believe what they want to believe. Yet despite this very human tendency, most people do attempt to maintain the appearance of objectivity, often collecting what they deem to be sufficient evidence to convince outside observers. Because of this “reasonableness” constraint, a variety of factors can influence the degree of a person’s motivated reasoning. The IMA-sponsored study published in *The Accounting Review* tested two tactics that together constrain motivated reasoning in strategy evaluation.

First, companies can involve managers in the selection of balanced scorecard measures. When designing a balanced scorecard, companies try to select measures that best capture the underlying economic activities that drive success. These firms choose only a handful of measures from hundreds, or even thousands, that are tracked, making selection a critical task. Domino’s Pizza, for example, might use customer satisfaction surveys, customer interviews, customer retention, or brand ranking as its focal measure of customer satisfaction, but it’s unlikely to use all four.

Involving managers in selecting measures “fights fire with fire,” pitting motivated reasoning against itself because managers want to believe that they selected not only good strategic initiatives but also good scorecard measures. A good scorecard measure captures the targeted dimension of performance on the balanced scorecard and also predicts performance in other perspectives along the causal chain. For example, if customer satisfaction isn’t a leading indicator of sales, it probably isn’t a good measure (at least, when it comes to pizza). When
managers who were involved in measure selection evaluate the success of their own initiatives, they’ll be less likely to focus only on the scorecard measures that most indicate strategic success because they believe that the measures they select should predict success in other causally connected scorecard measures.

Of course, this reasoning assumes that managers are thinking about causal performance to begin with. Therefore, for this to work, companies must use the second tactic: They need to frame the balanced scorecard as a causal chain as illustrated in Figure 2.

The results from the IMA-sponsored study demonstrate that managers’ involvement in selecting measures, as well as the use of a causal-chain framing of the scorecard, are crucial to constraining motivated reasoning in strategy evaluation. In isolation, neither of these tactics prevents managers from believing that their strategic initiative was successful. Together, however, the tactics reinforce each other and lead managers to evaluate their own initiatives more objectively based on a broader set of scorecard measures. When managers evaluate strategy based on measures they are involved in selecting, and with a causal-chain framing of the scorecard (BSC 2.0), they’re less likely to make judgments that reflect the influence of motivated reasoning.

**Experimental Method**

Bill Tayler, the author of the IMA-sponsored study, demonstrated these ideas with MBA students at Cornell University, who played the role of managers at a fictitious pizza chain, Paladin Pizza. Participants read background information about Paladin Pizza and learned about two strategic initiatives top management was considering, both of which sought to improve the customer experience. The “quality-ingredients strategy” included higher-quality ingredients in the company’s pizza recipes, and the “side-order strategy” offered customers a free side for every five pizzas purchased.

Half the participants in the study were involved in selecting strategic initiatives for the balanced scorecard; the other half were told that top management selected an initiative to implement. To test for the debiasing effect of selecting scorecard measures, some participants chose which customer satisfaction measure to include in the balanced scorecard, while others didn’t. Finally, to investigate the debiasing effect of the causal-chain framing of the scorecard, some participants were provided Paladin Pizza’s balanced scorecard framed as four separate groups, and others were given it framed as a causal chain.

The MBA students then evaluated the success of the strategic initiative that Paladin Pizza implemented, reviewing the restaurant’s balanced scorecard for the year following implementation. The balanced scorecard contained measures from each of the four scorecard perspectives for 14 restaurants, half of which implemented the initiative and half of which didn’t. Close examination of the balanced scorecard data revealed that the initiative
improved the customer-perspective measure but not the financial-perspective measure. Thus, participants who were motivated to perceive the new initiative as successful would be able to collect evidence in favor of their preferred conclusion (the increase in customer satisfaction), but data was also presented that cast doubt on this conclusion (the unfavorable financial results). Students rated the success of the initiative and then recommended whether or not to roll it out to the remainder of the restaurants.

Those who selected a strategic initiative to implement rated it as more successful and were more likely to recommend rolling it out than participants who didn’t select a strategic initiative. This was true despite the fact that all of the students evaluated identical data when coming to their conclusions. Yet when participants were involved in measure selection and viewed the balanced scorecard as a causal chain, they exhibited no tendency to favor an initiative that they had selected (see Figure 4).

The Bottom Line

In today’s data-rich business environment, managers often pride themselves on making data-driven decisions. Nevertheless, the research we’ve summarized here demonstrates that managers’ motivations can shape how they gather and interpret data and, in turn, how they make strategic decisions. As they say in statistics, “If you torture the data enough, it will confess to anything.” When managers justify business decisions based on cherry-picked data, self-serving choices masquerade as data-driven decisions. While this issue may appear to be a question of ethics, research on motivated reasoning suggests that this tendency is often unconscious.

In short, good people make bad decisions, driven by their preferences, without ever suspecting that their personal desires played a role in their data analysis. The study involving Cornell MBA students exemplifies this pernicious problem in the context of strategy evaluation and provides a prescription for the problem. Managers who are involved in selecting strategic initiatives perceive those initiatives as more successful than managers who aren’t involved in the selection process. Companies can mitigate this bias by framing the balanced scorecard as a causal chain and involving managers in the selection of scorecard measures that they’ll use to evaluate strategic success.

Is this a cure-all for every unconscious (and conscious) bias to which managers may succumb? No, but it’s a start. Motivated reasoning is at the heart of a lot of bad decisions. It’s time we recognize the problem and start rooting it out. SF

Suggested Readings


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