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Abstract: This article focuses on the issues of distortions and deceptions in strategic decision making in a company. It states that chief executive officers (CEO) are often required to make judgments without relying on indisputable financial calculations, despite the resources devoted to strategic planning. It mentions that these large decisions are based on the CEO's trust in the individuals who make the proposal. It comments on the principal-agent problem, when employee incentives are misaligned with the company interests which results in the employees looking out for themselves in deceptive ways. It suggests that errors in strategic decision making can happen due to cognitive biases.

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Distortions and deceptions in strategic decisions

Companies are vulnerable to misconceptions, biases, and plain old lies. But not hopelessly vulnerable
The chief executive of a large multinational was trying to decide whether to undertake an enormous merger — one that would not only change the direction of his company but also transform its whole industry. He had gathered his top team for a final discussion. The most vocal proponent of the deal — the executive in charge of the company's largest division — extolled its purported strategic advantages, perhaps not coincidentally

because if it were to go through he would run an even larger division and thereby be able to position himself as the CEO's undisputed successor. The CFO, by contrast, argued that the underlying forecasts were highly uncertain and that the merger's strategic rationale wasn't financially convincing. Other members of the top team said very little. Given more time to make the decision and less worry that news of the deal might leak out, the CEO doubtless would have requested additional analysis and opinion. Time, however, was tight, and in the end the CEO sided with the division head, a longtime protégé, and proposed the deal to his board, which approved it. The result was a massive destruction of value when the strategic synergies failed to materialize.

Does this composite of several real-life examples sound familiar? These circumstances certainly were not ideal for basing a strategic decision on objective data and sound business judgment. Despite the enormous resources that corporations devote to strategic planning and other decision-making processes, CEOs must often make judgments they cannot reduce to indisputable financial calculations. Much of the time such big decisions depend, in no small part, on the CEO's trust in the people making the proposals.

Strategic decisions are never simple to make, and they sometimes go wrong because of human shortcomings. Behavioral economics teaches us that a host of universal human biases, such as overoptimism about the likelihood of success, can affect strategic decisions. Such decisions are also vulnerable to what economists call the "principal-agent problem": when the incentives of certain employees are misaligned with the interests of their companies, they tend to look out for themselves in deceptive ways.

Most companies know about these pitfalls. Yet few realize that principal-agent problems often compound cognitive imperfections to form intertwined and harmful patterns of distortion and deception throughout the organization. Two distinct approaches can help companies come to grips with these patterns. First, managers can become more aware of how biases can affect their own decision making and then endeavor to counter those biases. Second, companies can better avoid distortions and deceptions by reviewing the way they make decisions and embedding safeguards into their formal decision-making processes and corporate culture.

Distortions and deceptions

Errors in strategic decision making can arise from the cognitive biases we all have as human beings.[1] These biases, which distort the way people collect and process information, can also arise from interactions in organizational settings, where judgment may be colored by self-interest that leads employees to perpetrate more or less conscious deceptions (Exhibit 1).

Distortions

Of all the documented cognitive distortions, overoptimism and loss aversion (the human tendency to experience losses more acutely than gains) are the most likely to lead people who make strategic decisions astray, because decisions with an element of risk — all strategic ones — have two essential components. The first is a judgment about the likelihood of a given outcome, the second a value or utility placed on it.

When judging the likelihood of potentially positive outcomes, human beings have an overwhelming tendency to be overoptimistic or overconfident: they think that the future will be great, especially for them. Almost all of us believe ourselves to be in the top 20 percent of the population when it comes to driving, pleasing a partner, or managing a business. In the making of strategic decisions, optimism not only generates unrealistic forecasts but also leads managers to underestimate future challenges more subtly — for instance, by ignoring the risk of a clash between corporate cultures after a merger.

When probabilities are based on repeated events and can therefore often be well defined, optimism is less of a factor. But loss aversion is still a concern. Research shows that if a 50-50 gamble could cost the gambler \$1,000, most people, given an objective assessment of the odds, would demand an upside of \$2,000 to \$2,500.[2] Overoptimism affects judgments of probability and tends to produce overcommitment. Loss aversion influences outcome preferences and leads to inaction and undercommitment. But the fact that overoptimism and loss aversion represent opposing tendencies doesn't mean that they always counteract each other.

Loss aversion wouldn't have such a large effect on decisions made in times of uncertainty if people viewed each gamble not in isolation but as one of many taken during their own lives or the life of an organization. But executives, like all of us, tend to evaluate every option as a change from a reference point — usually the status quo — not as one of many possibilities for gains and losses over time across the organization. From the latter perspective, it makes sense to take more risks. Most of the phenomena commonly grouped under the label of risk aversion actually reflect loss aversion, for if we integrated most gambles into a broader set, we would end up risk neutral for all but the largest risks. This truth has important implications for strategic decision making.

Deceptions

The strategic decisions that companies make result from interactions among their executives: a manager proposes an investment, for example, and an executive committee reviews and evaluates it. In this kind of setting, a conflict of interest often arises between an "agent" (in this case, the manager) and the "principal" (the corporation) on whose behalf the agent acts.[3] Such "agency problems," which occur when the agent's incentives aren't perfectly aligned with the principal's interests, can lead to more or less intentional deceptions — misleading information provided to others — that compound the problem of the agent's unintentional distortions. Recall the CEO who was grappling with the big merger decision: trusting the protégé (the head of the largest division) exposed the CEO to the risk that the merger's proponent was not only overoptimistic but also attempting to further his own career by exaggerating the deal's upside or underestimating its risks.

When companies evaluate strategic decisions, three conditions frequently create agency problems. One is the misalignment of time horizons between individuals and corporations. Several consumer goods companies, for example, have noted that brand managers who rotate quickly in and out of their jobs tend to favor initiatives (such as introducing new product variants) with a short-term payback. These managers' deception, intentional or not, is to advance only certain projects — those aligned with their interests. The development of radically new products or other important projects with longer payback times can rarely succeed without a senior sponsor who is likely to be around longer.

Another problem that can generate harmful deceptions is the differing risk profiles of individuals and organizations. Consider a real-life example. A midlevel executive at a large manufacturing company decided not to propose a capital investment that had a 50-50 chance of either losing the entire \$1 million investment or returning \$10 million. Despite his natural loss aversion, the chance of a 5:1 gain should have enticed him into accepting the bet, and his superiors, for the same reasons, would have deemed it attractive. Instead, he worried that if the investment failed, his reputation and career prospects would take a blow, though he didn't anticipate being punished if the investment was forgone. As a result, he decided not to recommend it and thus in effect acted deceptively by not promoting an attractive investment. This asymmetry between results based on action and inaction is called the "omission bias," and here it magnified the executive's loss aversion.

The final agency issue arises from the likelihood that a subordinate knows much more than a superior does about a given issue. Higher-ranking executives must therefore make judgments about not just the merits of a

proposal but also their trust in the person advancing it. This is unavoidable and usually acceptable: after all, what more important decision do CEOs make than choosing their closest associates? The tendency, however, is to rely too much on signals based on a person's reputation when they are least likely to be predictive: novel, uncertain environments such as that of the multinational that went ahead with the megamerger. We call the tendency to place too much weight on a person's reputation — and thus increase the exposure to deception — the "champion bias."

Furthermore, the multinational's merger decision exhibited an element of "sunflower management": the inclination of people in organizations to align themselves with the leader's real or assumed viewpoint. The CEO had expected to find dissenting voices among his senior executives. But except for the CFO, they believed that the CEO favored the deal and that the merger would proceed no matter what they said and thus kept their doubts to themselves for fear of harming their careers. In effect, they misled the CEO by suppressing what they really thought about the deal.

Improving individual decisions

Knowing that human nature may lead decision making astray, wise executives can use this insight to fortify their judgment when they make important decisions. To do so, however, they must know which bias is most likely to affect the decision at hand. Exhibit 2 offers a road map for the types of decisions where overoptimism or excessive risk aversion will probably be the determining factor.

In general, the key to reducing overoptimism is to improve the learning environment by generating frequent, rapid, and unambiguous feedback. In the absence of such an environment — for instance, when companies face rare and unusual decisions, which, unfortunately, are the most important ones — there is a bias toward optimistic judgments of the odds. The size of a decision determines the appropriate degree of risk aversion. For major ones, a certain amount of it makes sense — nobody wants to bet the farm. For smaller ones, it doesn't, though it often prevails for reasons we'll soon explore. Companies should see minor decisions as part of a long-term, diversified (and thus risk-mitigating) strategy.

As Exhibit 2. shows, companies don't always rationally factor risk into their decisions. In the large, infrequent ones (for instance, the industry-transforming merger that went horribly wrong) represented in the exhibit's upper-left quadrant there is a tendency to take an overly optimistic view. In essence, faulty judgments lead executives to take risks they would have avoided if they had had an accurate judgment of the odds. Since executives facing such a rare decision can't benefit from their own experience, they should learn from the experience of other companies by collecting case studies of similar decisions to provide a class of reference cases for comparison.[4]

Conversely, excessive risk aversion is usually the dominant bias in the small but common decisions shown in the exhibit's lower-right quadrant: good learning environments temper optimism, and the human reluctance to bet — unless the potential gains are much bigger than the losses — comes to the fore. A key factor in such cases is the tendency of companies not to see individual projects within a stream or pool of similar undertakings. If companies did so, they would move closer to risk neutrality. Instead they tend to evaluate projects in isolation, which leads them to emphasize a single project's outcome and thus to fear the losses. A complicating factor, as we have already noted, is the possibility that the decision maker expects to be blamed if an investment fails and thus has a more risk-averse attitude than might be rational for a company, which can pool comparable investments into an attractive risk-mitigating portfolio. Senior executives sometimes fail to compensate for this bias, as they could by encouraging a higher degree of risk taking in minor decisions, which are often made in lower levels of the corporate hierarchy.

The remaining two cases in the exhibit are relatively unproblematic. In large, frequent decisions — for example, a private equity firm's deliberations about a new investment or the construction of a new plant using existing technology — a significant degree of risk aversion is sensible and the frequency of the endeavors offers ample learning opportunities. In small, rare decisions optimism and loss aversion may counteract each other, and by definition this class of decision is comparatively unimportant.

Engineering better decision making

Organizations don't all suffer equally from distortions and deceptions; some are better at using tools and techniques to limit their impact and at creating a culture of constructive debate and healthy decision making. Corporate leaders can improve an organization's decision-making ability by identifying the prevalent biases and using the relevant tools to shape a productive decision-making culture.

Identifying the problems

Corporate leaders should first consider which decisions are truly strategic, as well as when and where they are made. Applying process safeguards to key meetings in formal strategic-planning exercises is tempting but not necessarily appropriate. Often the real strategic decision making takes place in other forums, such as R&D committees or brand reviews.

After targeting the crucial decision-making processes, executives should examine them with two goals in mind: determining the company's exposure to human error and pinpointing the real problems. A decision-making safeguard that is useful in one setting could be counterproductive in another — say, because it reinforces a high level of risk aversion by enforcing hard targets for new projects. An objective analysis of past decisions can be a first step: does the company often make overoptimistic projections, for example?

Tools against distortions and deceptions

Once companies undertake this diagnostic process, they can introduce tools that limit the risk of distortions and deceptions. One way of tempering optimism is to track the expectations of individuals against actual outcomes in order to examine the processes (such as sales forecasts) that underlie strategic decisions. Companies should review these processes if forecasts and results differ significantly. They can also provide feedback where necessary and show clearly that they remember forecasts, reward realism, and frown on overoptimism.

A more resource-intensive way of avoiding overoptimistic decisions is to supplement an initial assessment with an independent second opinion. Many companies try to do so by assigning important decisions to committees — for instance, the investment committees of investment firms. If the members have the time and willingness to challenge proposals this approach is effective, but committees depend on the facts brought before them. Some private equity firms address that problem by systematically taking a fresh look: after a partner has supervised a company for a few years, a different partner evaluates it anew. An executive with a fresh pair of eyes and no emotional connections can sometimes see things that escape the notice of more knowledgeable colleagues.

Loss aversion, magnified by career-motivated self-censorship of "risky" proposals, has its roots in explicit and implicit organizational incentives. Lower-level managers typically encounter more but smaller risks, so organizations can embed a higher tolerance for them in certain systems—for instance, by using different criteria for the financial analysis of larger and smaller projects.

Financial incentives also can be used to counter distortions and related principal-agent problems. Many companies, for example, find that operating unit managers tend to optimize short-term performance at the expense of long-term corporate health, partly because their compensation is tied to the former and partly because they might well have moved on by the time longterm decisions bear fruit. Some companies address this problem through "balanced scorecards" that take both dimensions into account. Others tie compensation to the performance of an executive's current and previous business units.

Another technique is to request that managers show more of their cards: some companies, for instance, demand that investment recommendations include alternatives, or "next-best" ideas. This approach is useful not only to calibrate the level of a manager's risk aversion but also to spot opportunities that a manager might otherwise consider insufficiently safe to present to senior management.

Finally, the radical way of counteracting the loss aversion of managers is to take risk out of their hands by creating internal venture funds for risky but worthwhile projects or by sheltering such projects in separate organizations, such as those IBM sets up to pursue "emerging business opportunities." The advantage is that norms can change much more easily in small groups than in companies.

Fostering a culture of open debate

It is essential to realize that these tools are just tools. Their effectiveness ultimately depends on the quality of the resulting discussions, which can't be effective unless the organization has a culture of reasonably open and objective debate.

Shaping such a culture starts at the top, as one chief executive discovered. This CEO was eager to encourage debate on the strategic plans of his company's divisions but didn't want to put his direct reports under pressure by publicly challenging them himself. He therefore created a process intended to make all division heads challenge one another in open debate. These managers refrained from voicing any real dissent, however, so the result was a dull and pointless exercise. Later, they made it clear that they had seen no upside in challenging their peers, given the company's non-confrontational culture and rigid organizational silos.

Although the CEO's experiment failed, he was on the right track. A CEO in a health care company ingeniously solved a similar problem by separating proposals from the proposers. Previously, strategic options for the company's future were closely identified with their most vocal proponents, so it was hard to conduct dispassionate debates. Instead of having each executive present his or her favorite option, the CEO organized a senior-management seminar where he asked each person to advocate another's preferred strategy. Although everyone knew that the exercise was intentionally artificial, it helped foster rational debate instead of a battle of egos. More important, perhaps, it helped senior executives see the merits of other strategies and led the group to adopt a plan that synthesized aspects of several proposals.

One way to initiate a culture of constructive debate is for the CEO and the top team to reflect collectively on past decisions. A willingness to ask how they emerged — in effect, holding a conversation about conversations shows that the company can learn from its mistakes.

Another prerequisite of good strategic decision making is the ability to "frame" conversations in order to ensure that the right questions get asked and answered. One key principle, for instance, is clearly distinguishing a discussion meant to reach a decision from one meant to align the team, to increase its commitment, or to support a project champion. This elementary but often overlooked distinction may also change the composition of the group that attends discussions intended to reach decisions.

Once it becomes clear that a meeting has been called to reach a decision, framing the discussion involves understanding the criteria for reaching it and knowing how far the range of options can be expanded, especially if the decision is important and unusual. Thus a well-framed debate includes a set of proposed criteria for making the decision and, when appropriate, an effort to demonstrate their relevance by providing examples and analogies. Some companies also set ground rules, such as the order in which participants voice their opinions or a ban on purely anecdotal arguments or on arguments that invoke a person's reputation rather than the facts.

Companies can't afford to ignore the human factor in the making of strategic decisions. They can greatly improve their chances of making good ones by becoming more aware of the way cognitive biases can mislead them, by reviewing their decision-making processes, and by establishing a culture of constructive debate.

Article at a glance

Strategic decisions are never simple to make. they sometimes go wrong because of human shortcomings.

Behavioral economics shows that any decision with an element of risk is subject to universal human biases such as overoptimism and loss aversion.

Strategic decisions are also susceptible to the "principal-agent problem": when the incentives of certain employees are not aligned with the interests of the company, those employees look after their own interests in deceptive ways.

Companies can reduce their exposure to these intertwined and harmful patterns of distortion and deception by adjusting their decision-making processes and strengthening the culture of debate.

Overoptimism and loss aversion, though opposing tendencies, don't always counteract each other

For an overview of the different kinds of risks that companies encounter, see "Running with risk" (www.mckinseyquarterly.com/links/20127).

An objective analysis of past decisions can be a first step: for example, does the company make many overoptimistic projections?

When the top team is working at cross purposes, the whole company suffers. See "Teamwork at the top" (www.mckinseyquarterly.com/links/20092).

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1 Chales Roxburgh, "Hidden flaws in strategy," *The McKinsey Quarterly*, 2003 Number 2, pp. 26-39 (www.mckinseyquarterly.com/links/20048).

2 Daniel Kahneman and Amos Tversky, "Prospect theory: An analysis of decision under risk," *Econometrica*, 1979, Volume 47, Number 2, pp. 263-92 (www.econometricsociety.org).

3 Michael C. Jensen and William H. Meckling, "Theory of the firm: Managerial behavior, agency costs, and ownership structure," in Michael C. Jensen, *A Theory of the Firm: Governance, Residual Claims, and Organizational Forms*, Cambridge, MA: Harvard University Press, 2001.

4 John T. Horn, Dan P. Lovallo, and S. Patrick Viguerie, "Beating the odds in market entry," *The McKinsey Quarterly*, 2005 Number 4, pp. 34-45 (www.mckinseyquarterly.com/links/20051).

EXHIBIT 1: Distortions and deceptions

Legend for Chart:

A - Distortion

B - Potential result

A: Overoptimism, ie, high expectations of the unknown, 'hockey stick' forecasts

B: Underestimating technical challenges for large infrastructure projects or time needed to complete them

A: Loss aversion, leading to inaction in the face of acceptable risks

B: Scarcity of investment proposals

A: Overconfidence, resulting in underestimation of challenges

B: Understating risks of large acquisition

Legend for Chart:

A - Deception

B - Potential result

A: Misaligned time horizons, ie, focusing solely on time horizon for one's current position

B: Managers focus on incremental innovations with short-term impact

A: Misaligned risk aversion profiles, ie, real or perceived career risks in projects with moderate corporate risks

B: Managers avoid 'risky' projects that company might have deemed attractive

A: Champion bias, ie, accepting evaluation of proposal more willingly when proponent is trusted associate

B: CEO relies on judgment of most trusted associates though advice is biased

A: Sunflower management, ie, collective consensus around senior person's presumed opinion

B: Absence of dissent or debate in important decisions

EXHIBIT 2: Most likely to affect the decision

Size of investment decision

Large	Bias: excessive optimism Market entry/new products	Relatively unbiased Capacity additions in existing technology
	Unusual M&A decisions Investments in new technologies	New investments in private equity companies
	Biases tend to cancel out	Bias: excessive risk aversion
	Early H&D investments in mature industries	Small M&A decisions for serial acquirers Smaller product launches

Small

Low

High

Ability to learn from decision

(includes how frequently decision type presents itself)

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