

Beating the odds in **market entry**

How to avoid the cognitive biases that undermine market entry decisions.

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The annals of business history report that for every successful market entry, about four fail. Inexperienced start-ups suffer some of these disappointments, but so do many sophisticated corporations and seasoned entrepreneurs who should know better. After all, industrial economists and strategists generally agree about what makes market entrants successful: factors such as timing, scale relative to the competition, and the ability to leverage complementary assets. Moreover, the magnitude and importance of entry decisions—encompassing everything from geographic expansion to new products to diversification efforts—should prompt detailed analysis.

But cognitive biases—systematic errors in the way executives process information—often wreak havoc on market entry decisions.¹ For one thing, when confronted with a difficult decision, most executives rely solely on an inside view: they focus excessively on the specific case at hand. This tendency prevents many of them from developing an outside

¹ Behavioral economists have written extensively about the impact of cognitive biases on financial markets and on a wide range of decisions. See Charles Roxburgh, “Hidden flaws in strategy,” *The McKinsey Quarterly*, 2003 Number 2, pp. 26–39 (www.mckinseyquarterly.com/links/19454) for an overview of the relationship between cognitive biases and strategic mistakes, as well as a partial summary of the broader literature on this topic.

Article at a glance

Most new market entrants are doomed to fail. Why? Cognitive biases—systematic errors in the way people process information—often undermine the planning and decision-making processes of otherwise astute executives.

Taking biases out of decision making is difficult. Few executives are well equipped to sort out which biases undermine what aspects of the planning process.

This article shows executives how to overcome common biases when they weigh the factors—capabilities, market size, potential competition, market share and revenue, and costs—that most companies take into account in deciding whether to enter a market.

A reference class—a group of similar cases—provides a valuable reality check.

perspective based on previous market entries and even from evaluating opportunities in the light of common predictors of success. Furthermore, when an analysis is conducted, cognitive biases often lead executives to believe that a company's skills are more relevant than they really are, that the potential market is bigger than it actually is, or that rivals won't respond to the entry move.

The costs of miscalculation can be large. The efforts of Anheuser-Busch to diversify into the snack food business, for example, went awry when the beer giant underestimated Frito-Lay's response to a threat to its Doritos franchise. Similarly, EMI failed to capitalize

successfully on an exciting medical innovation—the CAT scanner—because the company overestimated its ability to compete in this new market and underestimated the strengths of experienced competitors such as General Electric and Siemens.

Fortunately, some practical steps can help executives control cognitive biases in market entry decisions. Objective predictors of success, for example, can be used to create a reference class: a group of similar decisions that other companies have made in the past.² The reference class yields comparative data that are an invaluable reality check on the inside-view analysis. (Government bodies in the United Kingdom have used reference class forecasting to predict the cost of infrastructure projects, and the American Planning Association, a society of professionals focused on public-works projects, has endorsed the use of reference classes.) Additional tools, which can improve the quality of the inside view itself, include competitive-gaming exercises, the study of industry life cycles, and a policy of involving managers from diverse parts of the organization in important decisions. In our experience, the combination of a robust outside view and an improved inside one—better assessments of value propositions,

²For a description of how reference classes can inform decisions extending beyond market entry, see Dan Lovallo and Daniel Kahneman, "Delusions of success: How optimism undermines executives' decisions," *Harvard Business Review*, July 2003, Volume 81, Number 7, pp. 57–63 (www.hbr.com).

capabilities, market size, competitors, market share and revenue, and costs—dramatically raises the odds of making good entry decisions.

Step outside

Companies have no reason to repeat the mistakes of others. Yet they frequently fail to learn from history, because a myopic focus on the market entry decision at hand prevents them from creating a reference class of at least five (and preferably more) similar entry decisions in the past. Such a reference class promotes systematic learning from the successes and failures of other companies. It also counteracts the tendency of many decision makers to fall into the “confirmation trap”: seeking information that confirms their hypotheses. A broad reference class, in other words, forces analysts to consider more possibilities and new data.

The failure rate of projects is high in industries such as pharmaceuticals, oil and gas, and motion pictures. Companies in these sectors do understand how important it is to play the probabilities and can draw on a rich body of cases in creating a reference class. But companies that place product bets less frequently, and with less apparent risk, have fewer internal reference cases to compare and generally either don’t consider looking at the experience of outside companies and industries or, if they do, often conclude that the effort isn’t worth the expense. Since the tens (if not hundreds) of millions of dollars at stake in a typical big-company market entry far outweigh the costs of forming a reference class, that conclusion is penny wise and pound foolish.

Companies developing an outside view can benefit from a wide body of statistical research showing that six factors are particularly important predictors of successful market entry (Exhibit 1, on the next page). Even before companies select their reference cases, an explicit review of these factors sometimes shows that the dice are loaded against going forward.

In constructing a reference class, the first step is to review which of these factors are most relevant. Say a small, technologically adroit company that lacks complementary assets enters a new industry at the same time as large, diversified companies that do have them enter it. In this case, the small company should create a reference class of similar entrants in other industries, not this one. Next, companies should look for reference cases involving as many of the most important factors as possible (Exhibit 2, on the next spread). It’s important to uncover both successful and, even more, failed entries so that the reference class approximates the distribution of actual outcomes. The greater the overlap with the experience of the industry in question, the more valuable each example will be for the reference class.

EXHIBIT I

Predictors of success in market entry

Predictor	Description
Size of entry relative to minimum efficient scale	Companies that are closer to an industry's minimum efficient scale upon entry are much more likely to succeed. Entering below minimum efficient scale and then quickly scaling up is more viable when companies test a new market than as part of a plan for gradual growth.
Relatedness of the market entered	The more related the market is to a company's current portfolio of products and services, the greater the chance of success, but properly measuring <i>how</i> related is crucial. A thoughtful assessment requires careful examination of the degrees of difference between the current portfolio and the potential market. For example, Dell's move into business servers was a related move in the 1990s, while DEC's ¹ foray into PCs in the 1970s required many more changes to its business model and economics and thus was much less related. Judgment and nuance are critical to avoiding mistakes like DEC's.
Complementary assets	Core assets and capabilities are important when entering a new market. However, complementary assets, such as marketing and distribution, are often more important factors for success than core assets, such as engineering prowess. Counting on core assets to save the day when a company lacks complementary ones is a risky path.
Order of entry	While first movers have the advantage over laggard rivals in some settings, greenfield and diversifying companies are on very different entry clocks. Early greenfield entrants often are 'optimistic martyrs,' losing out to experienced players that diversify into the market later.
Industry life cycle stage	The life cycle stage of an industry when a company enters it is easily determined and greatly influences opportunities for success. Companies entering early in an industry's life cycle have greater odds for success than those entering near the shakeout.
Degree of technological innovation	When a high level of 'inside' industry knowledge is necessary to innovate, incumbents have a major advantage over new entrants. When 'outside' knowledge is essential, entry is easier. Innovative entrants are more likely to succeed by staying small in niches that dominant players ignore rather than by expecting to compete with them as equals.

¹Digital Equipment Corporation; acquired by Compaq in 1998.

But it is also useful—and sometimes, if the industry is a new or emerging one, necessary—to reach out across different industries.

The use of a reference class guards against a weak and dangerous alternative: hypotheses based on an analysis of just one or two cases, whose selection is subject to the “availability bias”: choosing whatever comes to mind most readily. During the buildup to the current conflict in Iraq, for example, the two analogies consistently reported in the press were the Vietnam War and the 1991 Gulf War. These were natural choices, since they were the two most recent large-scale conflicts involving the United States, but they weren't necessarily the most similar ones. Expanding the reference class to include the troubles in Northern Ireland, Britain's involvement in the Middle East after World War I, and US policy in Europe after World War II might have raised fresh, relevant questions

about troop requirements, the policing of occupied populations, and postwar reconstruction.

Improve the inside view

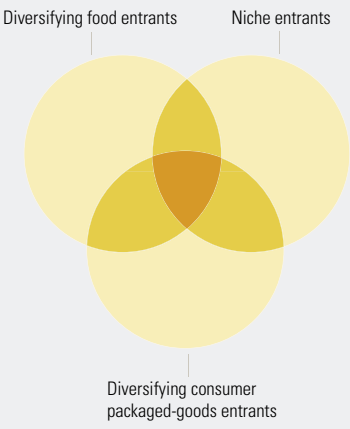
Besides developing a reference class, companies should remove any bias from their analysis of the entry decision. Start by targeting five core issues: the value proposition and capabilities, the market’s size, the competition, market share and revenue, and costs (Exhibit 3, on the next page). Of course, other analyses (of regulatory issues, for example) are occasionally necessary and sometimes of paramount importance.

What value proposition and skills are necessary?

The closer a company stays to its core capabilities and value proposition, the greater its chances of mounting a successful entry.³ But companies can

EXHIBIT 2

Developing the reference class

Ideal reference class	Reference class for selected companies
<p>Reference class = group of similar business situations; key to finding the most similar situations is to base choice of cases on intersection of relevant industries with relevant predictive factors of success</p>	<p>EMI</p> <ul style="list-style-type: none"> • Unrelated diversifiers • Medical-diagnostic-imaging companies • Companies in early stage of business life cycle • Technological leaders with few complementary assets for target market competing against diversifiers with complementary assets for markets related to it
	<p>Anheuser-Busch Eagle</p> <ul style="list-style-type: none"> • Diversifying food product entrants: <ul style="list-style-type: none"> – Beverages – Snacks – Candy • Diversifying consumer packaged-goods entrants • Niche entrants competing against dominant broad-based incumbent in both diversified food and consumer packaged goods
<p>● Ideal reference class ● Second-best reference class</p>	<p>Segway</p> <ul style="list-style-type: none"> • Early transportation manufacturers, including <ul style="list-style-type: none"> – Automobiles (early 1900s) – Fuel cell, hydrogen cars – Private airplanes – Bicycles, scooters – Motorcycles • Other entrants requiring unique infrastructure <ul style="list-style-type: none"> – Electric power – Telephones – High-definition television (HDTV)

³ Companies should measure the distance in “degrees.” Selling the same product through the same distribution channel to the same customer groups, but in a new geography, represents one degree of difference. Selling to different customer groups as well adds a second degree.

EXHIBIT 3

Avoiding biased decisions			
Core market entry analysis	Description	Common biases	Advice
Value proposition, capabilities	<ul style="list-style-type: none"> • What is my distinctive value proposition, and what business model should I build? • Do I have the necessary capabilities and competencies to succeed in the market (including talent, experience in adjacent markets)? 	<ul style="list-style-type: none"> • Egocentric interpretations—considering resources/assets you possess to be the determining factors for success 	<ul style="list-style-type: none"> • Play devil's advocate; calculate degrees of difference in capabilities needed in the new market (this number should be small)
Potential market size	<ul style="list-style-type: none"> • What geographic area will I serve, and how much demand will there be in the market? 	<ul style="list-style-type: none"> • Optimism—expecting better-than-average outcomes • 'Anchoring and adjustment'—adjusting estimates insufficiently from an initial value 	<ul style="list-style-type: none"> • Don't anchor assumptions on current growth; understand life cycle of the industry
Competition	<ul style="list-style-type: none"> • Who are the existing competitors in the market, and are there other potential entrants? 	<ul style="list-style-type: none"> • Competitive blind spots—failing to anticipate entry of new players into the industry 	<ul style="list-style-type: none"> • Brainstorm about who could potentially enter the market—both companies in your industry as well as those in industries adjacent to the target market—and test these hypotheses in a disciplined way
Estimates of market share revenue	<ul style="list-style-type: none"> • What sales do I expect to see for my offering? 	<ul style="list-style-type: none"> • 'Brick wall effect'—failing to consider competitive response of existing players 	<ul style="list-style-type: none"> • Conduct gaming exercises involving potential responses of competitors
Detailed cost estimates	<ul style="list-style-type: none"> • What costs (input, distribution, shared) and economies of scale/scope will I face? 	<ul style="list-style-type: none"> • Planning fallacy—underestimating time to completion and cost of the endeavor 	<ul style="list-style-type: none"> • Play devil's advocate or engage independent reviewer

be egocentric: they may assume, for example, that since their employees are excited about a product customers will feel the same way, that the resources and assets they already have are the ones needed to meet the needs of the target market, that what they do well is sufficient for success in it, or that they can easily acquire any missing skills. All of these biases undermine the analysis.

A memorable example of a company that underestimated the difficulty of developing new skills dates back to the 1970s, when the music producer EMI entered the CAT scanner business on the back of an innovation developed primarily by Godfrey N. Hounsfield, a researcher in the company's labs. EMI had no experience in the manufacture of medical-diagnostic-imaging equipment or in medical sales and distribution. Its senior management decided to build these capabilities rather than partner with other companies to obtain them. More than five years passed before

EMI delivered the first product. Soon thereafter, General Electric, with its world-class manufacturing and sales and distribution networks (and 75 years of experience with X-ray equipment), entered the US market. So did Siemens, which had already entered the European one. Not surprisingly, GE and Siemens became dominant and EMI exited after sustaining substantial losses. (Hounsfield, however, won a Nobel Prize in 1979.)

To avoid such mistakes, companies should use the reference class to identify the key determinants of successful entries into similar markets. Which product attributes and business models have succeeded in the past? Were the winners superior marketers? Did they have outstanding distribution systems? If new capabilities seem to be needed for success, companies should exercise caution and consider contractual approaches, such as joint ventures and licensing, that can help them secure the missing assets. It's frequently valuable to have people who are not directly involved in making the decision help determine what's needed for a successful entry. After all, the analysis of managers from different divisions will be less biased by ingrained knowledge of the organization's current value proposition and skills.

How big is the market?

Estimating a market's potential size typically involves categorizing customers into a number of segments and then using pricing and elasticity assumptions to estimate the percentage of buyers in each category the company might capture. Two biases typically distort such estimates. One is the fact that human beings, when considering potentially positive outcomes, are almost always optimistic. The second is "anchoring and adjustment": the failure to adjust estimates sufficiently from an initial value, regardless of its origin. An optimistic anchor that often infects market estimates is an industry's current growth rate, which rarely endures for long. Another anchor is the initial "gut" forecast number an analyst plugs into a spreadsheet with the intention of making adjustments as more information arrives.

How influential are such anchors? In one recent study, experienced real-estate brokers, who had contended that the listing price⁴ of a house wouldn't affect their evaluation of its "true" value, were asked to assess a property. Each broker received a ten-page booklet on the house and on the prices and characteristics of houses in the area. Each then visited it, plus others in the neighborhood. The agents didn't know that the listing prices they had been given for the house in question were all different and had

⁴The price a person selling a house asks for it publicly.

been randomly manipulated within a range of plus or minus 11 percent of the actual listing price. Those spurious listing prices significantly affected the evaluations of the agents. Yet even when they were told about the results, they maintained that the listing-price anchor had had no effect on them.

To avoid anchoring estimates on a target market's current growth rate, companies should always try to determine the life cycle stage of the business they wish to enter. At some point, most industries experience shakeouts, which can be particularly severe in fast-growing sectors. Although it is difficult to predict the exact timing, efforts to think through the possibility of a shakeout—and how many companies are likely to survive it—often highlight the unsustainability of current growth rates.

A second useful way of improving estimates of market size is to use the reference class of other entrants as a benchmark. Consider the fate of the Segway, a new type of two-wheeled vehicle unveiled in December 2001. Although we don't know for sure what the inventor, Dean Kamen, did to estimate the size of the market, we do know how many Segways he thought could be sold after a year: 10,000 a week. A typical approach for arriving at such a figure would have involved combining an analysis of the number of consumers who could both afford the Segway and realistically use it for commuting or recreation, on the one hand, with penetration rates in this demographic for similar products, such as scooters and bicycles, on the other.

But the Segway's usefulness depended on changes to infrastructure. How many cities would allow people to drive the vehicle on sidewalks? If roads were the only alternative, how many potential purchasers would still be willing to use it? Since the answer to both questions was "not many,"

*Many companies don't grasp the likelihood that their **rivals** may enter the same market they have targeted*

just 6,000 Segways were sold in the first 21 months. A broader reference class that included conventional automobiles, fuel cell cars, hydrogen cars, and infrastructure-dependent

technologies such as high-definition television and telephones might have shown that securing the right to ride the Segway in cities was of paramount importance. After all, it took years to create the roads, power grids, standards, and networks necessary for cars, electric lighting, HDTV, and telephone service to become ubiquitous.

Who are the potential competitors?

Other market entries fail because companies underestimate the competition. Many decision makers, for example, don't grasp the likelihood that their



rivals may enter the same market they have targeted; they suffer from competitive blind spots when thinking about what could go wrong. That's what happened to British Satellite Broadcasting (BSB) after it outbid Rupert Murdoch's Sky Television, in 1988, to win the contract to broadcast on a new British satellite. Even as BSB prepared to launch its service, Murdoch obtained the rights to broadcast from a Spanish satellite that could reach Great Britain. Sky went on the air in early 1989, beating BSB to the market by 13 months. Despite Murdoch's 1988 bid, Richard Brooke, BSB's treasurer, said that "Murdoch's announcement came from left field and took everybody by surprise."

While it is difficult to generate a reference class for potential entrants, in our experience it can be very helpful to brainstorm about them and then to test these hypotheses in a disciplined way. The first companies to consider are those in the same industry; after all, if one of them is contemplating plunging into a market, its competitors probably are too. If companies in other industries could succeed in the target market, they should be considered as well. Hindsight will always reveal the "necessary" capabilities, but expanding the list of possible competitors increases the odds of spotting unexpected threats. Although discretion is sometimes the better part of valor, this analysis is meant to help companies react to the competition's moves before they happen, not to scare entrants away from a fight.

The benefits of recognizing and countering potential entrants can be large. Consider the case of Softsoap, the first liquid-soap manufacturer. The shift from hard to liquid soap was an incremental innovation that couldn't be protected by a patent; there are too many ways to make the product. The businessman who had the idea for Softsoap, Robert Taylor, knew that if it entered the industry without protection, consumer-marketing giants like Dial would crush it. His solution: signing contracts to obtain all of the existing capacity for the pumps capable of dispensing Softsoap. The result was an 18-month lead on the competition. Today, Softsoap is synonymous with the product category in the same way Coke is with cola drinks.

What market share and revenue can be achieved?

In addition to overlooking potential competitors, companies often fail to factor in the likely responses of current ones. We call this the "brick wall effect": assuming that competitors won't adjust their prices, broaden

their product offerings, or otherwise change strategy in response to the entry. (The focus on current competitors rather than potential new ones distinguishes the brick wall effect from the competitive blind spots described previously.)

Consider the experience of Anheuser-Busch after it diversified into snack foods, in 1979. Its Eagle Brand operation initially succeeded by staying small and focusing on supplying airlines and taverns. Once Anheuser-Busch expanded beyond these markets, however, it was encroaching on Frito-Lay's turf, stimulating a harsh counterattack: deep across-the-board price cuts by Frito-Lay and a concerted effort to drive Eagle out of supermarkets. These aggressive moves ultimately forced Anheuser-Busch to sell Eagle to P&G.

The best way to anticipate competitive responses is to conduct gaming exercises, with executives role-playing competitors to gain insight into their likely behavior. One telecommunications company that leaned toward using

a premium-feature, low-cost strategy to enter a new market assumed that the incumbents would maintain the status quo of premium features and high prices. But after using game theory, simulations, and competitive analysis to assess the incumbents' likely responses, the prospective entrant

realized that it had overestimated its returns by a hefty 800 percent. It modified its entry strategy and performance expectations accordingly.⁵

Using the reference class to set reasonable bounds on market share estimates also helps. If the reference class attained only a 3 to 5 percent market share, decision makers should pause when they see higher estimates.

How much will it cost?

Good cost estimates can make the difference between creating value and destroying it, but many companies can't arrive at them, because of the "planning fallacy": the tendency to underestimate the duration and cost of any endeavor. Most of us recognize this problem in our own lives, and research shows that we should. One study assessed the accuracy of the estimates that psychology students made of the time they would need to complete their honors theses. Even though the question was asked toward the end of the year, 70 percent of the students took longer than they had

>>> *Game theory can help managers make better strategic decisions when facing the uncertainty of competitive conduct. See "Games managers should play" (www.mckinseyquarterly.com/links/19569).*

⁵Hugh Courtney, 20/20 *Foresight: Crafting Strategy in an Uncertain World*, Boston: Harvard Business School Press, 2001, pp. 167-71.

predicted—on average, 7 days longer than their worst-case forecast (48 days) and 22 days longer than their “realistic” one (33 days). Studies of holiday shopping, tax filings, and other routine chores yield similar results.

Large corporations are also susceptible to the planning fallacy. Even in fairly routine endeavors (such as launching new consumer products), expenditures often exceed forecasts dramatically. In more novel initiatives, the effects of the planning fallacy are often severe. A Rand Corporation study of 44 chemical-processing plants owned by Fortune 500 companies, for example, found that the actual construction costs of these facilities, on average, were more than double the initial estimates. One year after start-up, about half of the plants produced less than 75 percent of their design capacity; a quarter produced less than 50 percent.

If sufficiently broad, a reference class is a potent tool to counteract the planning fallacy. For a new type of polymer-processing plant, say, the reference class should include not only plants built by the company contemplating it but also cutting-edge processing plants in the chemical industry and perhaps new types of processing plants in other industries. A broad reference class gives would-be entrants a realistic range of costs associated with attaining various market share levels. Cost estimates far below the realized costs of the reference class should make decision makers think again.

Paraphrasing Thomas Hobbes, the renowned late economist Paul Geroski, of the London Business School, once said, “The life of a typical entrant is nasty, brutish, and short.” He was right. Fortunately, companies can boost their odds of success by tackling cognitive biases head on. **Q**

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