

Great innovators develop five critical capabilities—and always look at the process from both sides of the brain.

By Eric Almquist, Mitchell Leiman, Darrell Rigby and Alex Roth



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"Throughout the 1980s and well into the 1990s, our company was an unquestioned innovation leader. We were hungry. Great success followed, and we began to play it safe and depended upon reputation. Our leadership is now tired and has lost the will to redevelop the street-fighter mentality that got us where we are. Innovation must be a part of the leader's DNA. Having experienced that, I can tell you it was magical. Having experienced the loss of that magic is hell."

> —Executive responding to Bain's Innovation Assessment Survey

Innovation is one of the most popular acts in business, but one of the hardest to pull off. Bain & Company recently surveyed nearly 450 executives around the world at enterprises with more than \$100 million in revenue, and two-thirds said their companies made innovation one of their top three priorities. Yet fewer than one-quarter believed that their companies were effective innovators. Even fewer, just one in five, said they were strong at "breakthrough" innovation.

We did find companies that are great at innovation, and we don't mean just iconic innovators such as Apple, Amazon.com and Samsung. Virtually all the top quartile of innovators in our survey agree with the following statements:

- We consistently meet or exceed our innovation goals
- We have a winning, repeatable model for innovation that we apply consistently in different regions and categories
- We currently have projects that will meet or exceed our financial targets for innovation
- We are prepared for major market disruptions through innovation

Many executive teams still treat innovation as a black box, the serendipitous achievement of a few gifted individuals. But our survey found that innovation leaders consistently outperformed laggards on five manageable capability areas (see the sidebar "The innovator's edge"). The disparity suggests that innovators rely on a systematic approach, not just on finding people who happen to be innovative.

Innovation capabilities and the BothBrain[®] ingredient

What are the five capabilities? The first is a clear, specific innovation strategy, which includes setting goals and determining investment priorities in a way that captures both hearts and minds. The second is an organization with a culture that nurtures innovationan organization supported by the right people, processes and organizational structure. Third, this organization should have effective idea generation and development processes to create attractive new offerings, both by generating a broad and diverse set of ideas and, especially, by converting these ideas into profitable business concepts. Fourth, a company has to manage a diverse innovation portfolio that has the right size, shape and speed—a portfolio aligned with its strategy. Fifth, a company has to be effective at scaling new business ideas, supporting them with the appropriate level and type of resources. It also has to create feedback loops to learn how best to reinforce, redirect or (when necessary) kill new ideas.

These capabilities are necessary for sustained innovation, but nearly all successful innovation relies on one essential ingredient that permeates all five. We refer to it as a "BothBrain" approach, and it underlies many of the systems and procedures that successful innovators adopt to manage innovation.

BothBrain derives from the recognition that innovation requires both the creation of brilliant new ideas and the ability to successfully commercialize them. Some may interpret these skills as "right brain" thinking (typically imaginative, intuitive, whimsical) and "left brain" thinking (rational, logical, linear). Most of us are more adept at one set of skills or the other. People who are equally adept at both kinds of thinking, like Leonardo da Vinci, are extremely rare, making up less than 3% of the population.

The innovator's edge

Successful innovation delivers business results (see figure). According to our survey of executives around the globe:

- Companies in the top quartile grew significantly faster than others—an average annual growth rate of 13%, compared with 5% for other companies. Compounded over five years, the top performers will grow 84%, compared with 28% for lower performers, a threefold difference.
- Top-quartile companies are also winning the war for talent. We measured this through employee Net Promoter[®] scores (eNPS), a widely used indicator of employee loyalty and enthusiasm. Top performers' eNPS is 23, compared with a low of negative 56 for others in our survey. That's a striking difference by eNPS standards.
- Top-quartile companies are better at making and executing decisions, as measured by Bain's
 proprietary assessment of corporate decision effectiveness. (The measure includes the quality,
 speed and yield of decisions, along with the effort involved.) Greater decision-making skills produce better strategy, better selection of projects and better alignment among organizational units.



Innovation's top performers see higher sales growth, employee NPS and decision effectiveness

Notes: High=top quartile of "innovation average" scores; Other=the rest; Org effectiveness score is equal to average of (quality DM score, speed DM score, yield DM score, 1 – effort DM score) – where DM stands for decision multiplier; revenue growth rates (2008–2011) Source: Bain Innovation Assessment survey, 2012 (n=437)

Many companies tend to separate creative activities from commercial ones. They expect the creatives to come up with new ideas, and then they ask the commercial types to analyze those ideas (and, often, to shoot them down). But it's far more productive for companies to build integrated teams that bring together people with both orientations and skill sets. These teams can then work together from idea conception all the way to testing and scaling an innovation. We call the approach BothBrain because it engages both kinds of thinking at every stage.

Consider, for example, how a BothBrain orientation affects each of the five capabilities:

- Creating an innovation strategy isn't simply about building appealing products and developing spreadsheets to make a business case. It's about generating passion and excitement—capturing the hearts as well as the minds of your customers and the people in your organization.
- An organization's talent management processes and innovation decisions need to reflect the importance of both kinds of thinking. Otherwise it won't be able to create the kind of culture that fosters innovation.
- Idea generation and development almost always involves gathering data about customer needs and preferences. But analytic people can stare at this data all day long without coming up with new ideas. A creative person, by contrast, may draw on the same data to find an imaginative new intersection between customer needs, a company's distinctive capabilities and the vulnerabilities of competitors.
- A successful portfolio of innovations always needs to include a balance between incremental and radical innovations. To create that balance, companies have to give their creative people more leeway on radical innovations, and not allow analysts with spreadsheets to shoot the ideas down prematurely. Most successful products evolve substantially from idea conception to commercial success. Creatives and commercials have to work through the twists and turns together, not just give up whenever they hit a bump in the road.

 When a company thinks about how to scale an idea, it needs art and intuition as well as science to determine whether it should stay the course, pivot or kill an offering.

Properly applied, BothBrain engages and affects all the elements that make up an innovation system.

The success factors

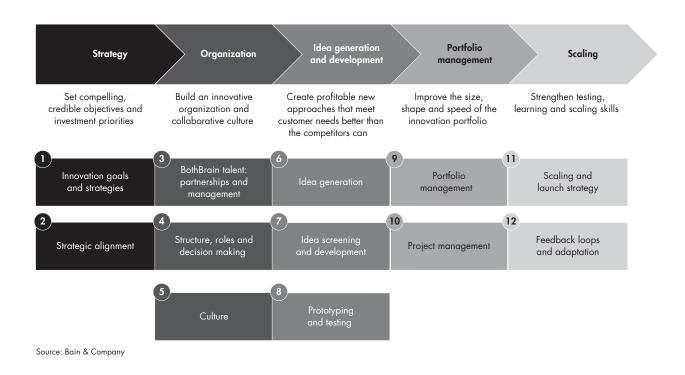
The five capability areas are quite broad. But the survey responses and our analysis help focus on the specific factors behind a company's success or failure in each area (*see Figure /*). A handful of examples will illustrate how these factors contribute to each capability.

Strategy: Set compelling, credible objectives and investment priorities

- Clear, specific innovation goals and models covering both incremental and breakthrough innovations
- Strategic alignment on objectives, investment priorities and risk management

Novartis, the healthcare products company, has a welldefined and differentiated innovation strategy that reflects a BothBrain-style "hearts and minds" approach. "It means that every time we choose a new disease focus, we don't ask ourselves, 'What is the NPV' but rather 'Is there a patient in need? Can we change the practice of medicine?'," says Mark Fishman, president of the Novartis Institutes for BioMedical Research. To offset the risk of investing in rare diseases, Novartis aims to identify multiple uses for a discovery. For example, Novartis scientists suspected that Afinitor, a drug originally approved for certain types of cancers and rare tumors, could treat other types of cancers as well, and so began parallel testing. The company recently gained approval for the drug as a treatment for the most common form of advanced breast cancer-a major breakthrough for the many women who suffer from the disease.





Organization: Build an innovative organization and a collaborative culture

- BothBrain talent: well-managed partnerships among creative people and business executives, both inside and outside the organization
- Structure, roles and decision processes that foster innovation
- A culture that values, supports and rewards innovation

Pixar is one model of an organization that encourages innovation. The company's development department brings together small "incubation teams" to help directors develop their ideas. Daily reviews of work in progress and post-mortems at the completion of a film foster creative thinking. Structure is important, however: While everyone is encouraged to give feedback, the ultimate decisions about a film rest with the director. Setting the tone for the culture is the BothBrain partnership of John Lasseter and Ed Catmull. Lasseter—animator, film director, storyteller and chief creative officer—is the creative spirit behind Pixar. Catmull—computer scientist and president—provides technical and managerial expertise.

Idea generation and development: Create profitable new offerings

- Regular development of new ideas in every aspect of the customer experience
- Thorough idea screening and development: prioritization and nurturing ideas into business concepts
- Prototyping and testing

Kraft Foods is an example of a company that is rewriting its innovation playbook to improve profitability. It brainstorms new uses for iconic products, such as Philadelphia Cooking Creme and Velveeta Cheesy Skillets, and it has invested in new products such as MiO, a zero-calorie beverage. Overall, the company is focusing on bigger bets than in the past. To ensure focus, Kraft Foods has

What innovation takes: Ten voices from the survey

The following are verbatim comments, edited for length, from 10 respondents to Bain's recent Innovation Assessment Survey of nearly 450 executives around the world.

- "Innovation cannot be successful if it does not come from the top to the bottom. In other words, the CEO must be completely convinced that innovation is the best strategy to achieve success. Innovation has to be part of the company's culture to be part of the company's achievements."
- "Innovation is driven bottom up. If it's a top-down approach, more often than not it doesn't succeed. The other important factor is absolute commitment from the top management, that is, the key stakeholders in the company."
- "Our organization is improving in our approach to innovation due to the introduction of new senior managers who understand the requirements of using innovation successfully across the organization."
- "I would consider innovation from an end-to-end perspective. 'Creating' (a product or service) is as important as 'realization' of it in the marketplace. Only after realization can the creation be considered successful or not."
- "A philosophy of 'fail fast' is absolutely critical to innovation and success in general. You have to validate your assumptions with the target audience as quickly as possible and make course corrections as needed. The more iterations you are able to get in a specified time, the better your chances of getting close to the goal."
- "Success at innovation means not being afraid to make big mistakes."
- "The market does not reward risk taking. Therefore, many companies rely upon outside sources, such as universities and start-up companies (innovative acquisition vs. organic innovation) for innovation."
- "We just have to set targets and be willing to tolerate mistakes (both time and money wasted)."
- "Innovation requires true long-term commitment and focus to bring disruptions to the industry."
- "For innovation to be optimized, the entire value chain must play a role and agree upon a direction."

added rigor to its development process, setting consistent hurdles for projects and tying its decisions more tightly than ever to the economics of each product. In 2011, it generated \$600 million in sales from a relatively small handful of innovations.

Portfolio management: Improve the size, shape and speed of the innovation portfolio

- Effective management and monitoring of the project portfolio, including establishing hurdles, assessing speed of execution and terminating projects when appropriate
- Effective management of individual projects, learning from past efforts

Diageo, the global alcoholic beverages company, has worked hard to improve its portfolio of innovations. "We have built the leading innovation capability in the industry," declared CEO Paul Walsh in 2011. "Six years ago, we implemented a new approach to innovation, which now accounts for over 50% of our growth in developed markets and is a consistent growth driver for Diageo. We have launched 200 new products in the last two years and have a pipeline of another 200 new products." For example, the company created an autonomous innovation-oriented team within its niche and specialist brand unit. According to a report by Raymond James analysts, the team "is harnessing the entrepreneurial flair needed to succeed in premium new products" and has already launched a variety of successful premium beverages.

Scaling: Strengthen testing, learning and scaling skills

- Allocation of resources to launches based on the opportunity's potential
- Feedback loops and adaptation, including course correction when necessary, and post-launch efforts to support projects

Unilever has been highly successful in its approach to scaling innovations. By focusing resources on priority brands and bigger initiatives, the company's projects launched in 2012 represented a tenfold increase over projects launched a few years ago. Unilever's average value per project has increased 75% over the past few years, whereas time to market has decreased between 25% and 50%. The company is quick to adapt new products when required. For example, an initiative in the company's Hindustan Unilever unit encourages employees to buy new products at steep discounts and then provide quick feedback, thus acting as in-house beta testers.

Are some success factors more important than others?

In seeking to learn more about these factors, we wondered whether some of them might turn out to be the keys to the innovation kingdom—the most essential skills for would-be innovators to acquire. Some did turn out to be more important than others as starting points, as we will see in a moment. In general, however, every element of the five capabilities is necessary. Top-quartile companies outperformed others on every measure. Bottom-quartile companies underperformed others on every measure (*see Figure 2*).

This analysis underscores an important point. Almost every company comes up with a good idea once in a while; otherwise most companies would never get started in the first place. The real question is what it takes to generate good ideas on a sustainable, repeatable basis. The most successful companies make innovation a core management process. Success comes from focusing the organization on goals, adhering to solid practices in moving toward those goals and making decisions quickly and effectively. Using the Bain Innovation Assessment—a tool we applied in this research—a company hoping to improve its innovation capacity can assess where it is strong or weak in each of these areas. It can then launch targeted investments to increase its skills and develop the necessary capabilities.

Starting points

What should you attack first? A company's starting points, of course, will depend on what it learns from the assessment. But when we applied two statistical analyses (logistic regression and Chi-square Automatic

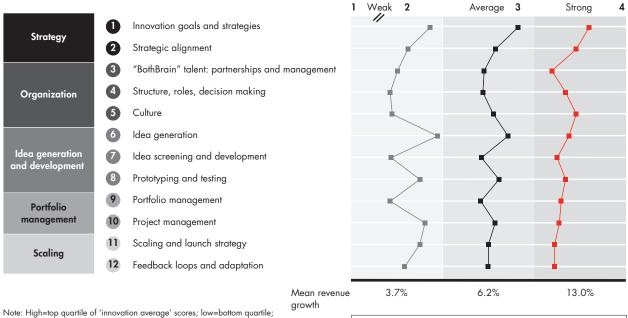


Figure 2: Innovation high-performers excel on all of the 12 innovation success factors

Note: High=top quartile of 'innovation average' scores; low=bottom quartile; average=all other; revenue growth rates (2008–2011) Source: Bain Innovation Assessment Survey. 2012 (n=437)

Interaction Detection, or CHAID) to our survey data, we found two areas likely to be critical:

- Innovation goals and strategies. The statistics show that this is the most important factor in determining top performance. A half-point improvement on the four-point scale of responses increases a company's probability of being a top performer by almost half, from 25% to 37%. Of the companies that score themselves low on this dimension, only 3% are top performers.
- Portfolio management. This factor is almost as important, but with a twist: Good portfolio management makes a significant difference only among companies that already perform well on innovation goals and strategies. Of those companies that score well on innovation goals and strategies but score poorly on portfolio management, only one-quarter are top performers. Among companies that score well on both measures, almost three-quarters are top performers.

These factors turn out to be better starting points than idea generation, for instance, or scaling and launch strategies. The fundamentals have to come first. Without specific innovation goals, a company is unlikely to get anything accomplished. Without good portfolio and project management, even the best ideas are likely to languish. Innovation is like a building: It needs all the requisite elements and it has to be built on a solid foundation.

- Average performer - High performer

Low performer

Why did idea generation not emerge as a major determinant of top innovation performance? It's probably because ideas are only the seeds of innovation. Put good ideas in a bad company and they die. That's why so many acquisitions of innovative companies fail: new ideas get buried in the acquirer's bureaucracy and the creative people who came on board get frustrated and leave. Only when a company nurtures its ideas and builds a system around them do they lead to innovation. However, our analysis does show that good idea generation can help some companies that are otherwise failing with setting innovation goals and strategies.

Survey methodology

We collaborated on the Innovation Assessment Survey with the Association of Executive Search Consultants, which provided access to the sample of nearly 450 executives. A majority of respondents were in general management (CEOs and division heads), marketing, R&D and finance. To qualify, respondents had to be knowledgeable about innovation in their company, rating four or five on a five-point scale.

About half of the respondents' companies are in North America, about a quarter in Europe and the rest from other areas around the globe. Roughly one-third of the companies surveyed are in one of the following revenue-size categories: \$100 million to \$1 billion, \$1 billion to \$10 billion and more than \$10 billion. The range of companies spanned nearly every industry, including telecommunications, technology, financial services, manufacturing, construction and transportation.

Among companies that score low on innovation goals and strategies (less than 2.25), 37% are average performers overall. Some of the companies in this group, however, score high on idea generation (greater than 2.75), and a full 66% of these become average performers. Thus, some companies that are managing innovation poorly have been lucky enough to somehow find or acquire good ideas, and those ideas have helped them perform better than they would have otherwise.

Our survey also examined companies' relative success with "incremental" innovation vs. "breakthrough" innovation. Companies clearly struggle more with breakthrough innovation: Overall, only 18% of respondents assess their companies as "very effective" vs. 38% for incremental innovation. Top performers are much more likely to be effective with breakthrough innovation (44%), while almost no low performers are very effective with it (1%). From a practical point of view, successful innovation appears to come from focusing the organization on goals, adhering to solid management practices in moving toward those goals and making decisions quickly and effectively. Innovation is a complex process that must be managed like any other complex process. It must mobilize key factors essential to achieving success: leadership, management, process alignment and repeatability. This is not a purely linear, logical, left-braingenerated process. Companies that cultivate both aspects of human brain functioning—both left- and right-brain thinking—to inform their innovation initiatives are likely to outstrip their competitors in creating great new products, processes and services.

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