

Innovation: What's your score?

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Can companies measure the impact of their innovation activities? Can they benchmark their performance on innovation against that of their peers? Can the long-term effects of innovation strategies be tracked systematically? Yes, yes, and yes. In fact, not only can companies objectively assess innovation; we believe they must. Only then will they know how to select the right strategies and execute them well.

Measuring innovation

Because innovation is the holy grail of 21st-century business, it is no surprise that many people have taken a stab at evaluating it. Typically, they focus on indicators regarding inputs (such as R&D spending) or outputs (such as number of patents filed). There are also a number of interview-based innovation assessments and rankings available.

However, these measures have some serious shortcomings. Many of them only provide a narrow view of innovation. Often, the role of successful execution or the evolution of innovation performance over time are not taken into account, and data availability remains a challenge, in particular when comparing between companies. Finally—and perhaps most important—most metrics fail to connect innovation to company performance. Furthermore, interview-based company assessments are often skewed by halo effects ¹ from other areas, such as brand image or specific products.

As a result, we propose a new way to measure innovation. It focuses on objective outcomes, is based upon publicly available data, takes a broad look at innovation, and assesses the power of good ideas over time. We are still in the early stages of applying this new concept, but the results so far have been very promising.

How do we do it? We start with McKinsey's proprietary granularity of growth database, which contains revenue streams from more than 750 companies across 16 sectors, though the analysis could be applied to any company for which sufficient granular data is available. In many cases, we go beyond the company level by looking at data across business segments, geographies, or some other narrower gauge. We then dissect data, looking for revenue growth attributable to innovation.

To do that, we first look for revenues generated by new reporting segments within a company—either from new initiatives or from acquisitions that go beyond mere geographic expansion. This is what we call market creation (if the segment is new to the world) or market entry (if it is only new to the company). We also take into account

revenues from acquisitions that lead to new products and activities, even if they are not broken out as a new reporting segment.

We then compare the revenue growth of the company to the overall market and attribute any out-performance to the company's ability to innovate. We assume that if the company consistently outgrows the market over a significant period of time (say, five to seven years), it must be introducing new products, processes, or business models that allow it to perform better than its peers. By making these calculations over time, we eliminate the influence of short-term effects such as marketing campaigns or price cuts.

This analysis generates an innovation performance score (IPS), expressed as a percentage, which shows the compound annual growth rate for a specified period that can be attributed to innovation. For instance, in the television industry, top innovators LG, Samsung, and Sharp generated scores well above other well-known innovators. LG generated a score of 13.7 percent from 1999 to 2007, because of early and significant investments in liquid crystal display (LCD) panels, an aggressive culture, and flexibility in adapting to evolving trends.

Perhaps not surprisingly, our research so far (which covers 80 companies, mainly in consumer packaged goods, pharmaceuticals, and consumer electronics) reveals considerable differences in scores among industries. TV and telephone makers, for instance, generally score higher than beer and drug companies. We also found that business model innovation tended to generate bigger gains than product or process innovation, probably because the innovation was harder for competitors to copy and the advantage was therefore longer lasting.

In addition, for the companies we looked at, a strong IPS appears to be a reliable indicator of a company's stock market performance. We found a relatively strong correlation (with R2 of ~0.3) ² between a company's IPS and its total return to shareholders (TRS). This correlation is stronger than it is for other growth-related metrics—a result that suggests that innovation performance measured in IPS is strongly correlated with overall company performance.

IPS adds a new perspective to the usual discussions around innovation and growth. Choosing the right markets in which to play is critical for any company's strategy.³ But so is figuring out how to use innovation to grow faster than competitors. That excess growth is what the IPS measures.

The lessons of IPS

Our research has revealed several insights that cut across industries and are valid throughout the business cycle.

1. We have found that strong innovators do consistently well. They achieve their success in large part (70 percent to 80 percent of IPS 4) by outperforming the markets that they are already in rather than by entering or creating new segments.

http://whatmatters.mckinseydigital.com/innovation/innovation-what-s-your-score

2, Looking at past economic downturns, such as the burst of the dot-com bubble, we found that top innovators continued to outperform their peers even during the tough times. Their agility and capacity to innovate made it easier for them to cope with the challenges. Indeed, many important products have been introduced during times of crisis. To paraphrase President Obama adviser Rahm Emanuel, these companies didn't let a good crisis go to waste.

3. The roles of different types of innovation—product, process, and business model 5 — are especially interesting. While the relative importance of each will vary across industries, we found that a significant degree of business model innovation seems to be necessary for superior innovation impact.

4. There may be an optimum level of innovation. Companies with the lowest innovation performance clearly suffered in the market. However the players that have the very highest IPS aren't always rewarded proportionally in terms of higher TRS. So, while companies must make sure that they are well-positioned in the innovation game, it's unclear whether being a distant leader pays off in higher TRS. We are still working on this intriguing question.

Assessing corporate innovation performance

All this is interesting, but how can it be applied? We have found that understanding the details of innovation performance can help companies determine where they stand in innovation impact vis-á-vis their competition by comparing their respective innovation scores and asking the following questions: Who are the most successful innovators in my industry? Which are the most promising new markets? Are we overlooking any challengers? What has changed in our relative performance in the recent years and why?

Second, IPS can be applied internally to compare innovation performance across business units. That makes it possible to identify best practices that can be rolled out across the company and to allocate resources more productively. Taken together, this analysis provides a valuable fact base for determining future strategic options.

No question, Understanding he full dynamics of innovation performance will require additional study. But we believe that better metrics will enable companies to adjust strategies and investments and ultimately to improve their competitiveness.

¹ The halo effect is the tendency to make specific evaluations based upon other impressions related to, for example, brand, financial performance, and stock market performance. See Phil Rosenzweig, The Halo Effect:...and the Eight Other Business Delusions That Deceive Managers, New York: Free Press, 2007.

 $^{^2}$ r2 is the proportion of variance explained by a regression.

³ For more, see *The Granularity of Growth* by McKinsey partners Patrick Viguerie, Sven Smit, and Mehrdad Baghai (Hoboken, NJ: Wiley, 2008).

⁴ Based on a sample of about 40 companies.

⁵ A product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses; A process innovation is the implementation of a new or significantly improved production or delivery method; Business innovation is the creation of substantial new value for customers and the firm by creatively changing one or more dimensions of the business system, Sawhney, M. et al (2006): The 12 different ways for companies to innovate, MITSIoan Management Review, vol. 47, No. 3, p. 3.

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