

Innovation Metrics

Measuring Innovation to Drive Strategic Business Growth

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How do you measure innovation? One of the reasons that only about 1/3 of all Fortune 1000 companies have formal innovation metrics is because this simple question does not have a readily apparent simple answer.

Metrics can be important levers of innovation – for driving behavior, as well as evaluating the results of specific initiatives. Companies like 3M have had innovation metrics for years – the most noteworthy that 15% of employees' time can be used for experimentation with new opportunities and that 35% of the corporations' revenues should come from products introduced within the past four years.

But defining the right metrics for your business can be tricky. There's generally no one right answer and determining what, exactly, to measure can feel like more of an art than a science.

The Heart of the Problem

The heart of the problem is that today's competitive environment is radically different from the industrial environment in which traditional innovation metrics were born. Because most discussions of metrics begin with benchmarks of industries leaders (like 3M), innovation metrics tend to revert back to traditional measures of R&D investment and effectiveness. Across the Fortune 1000 that do possess innovation metrics, for example, the most prevalent metrics include¹:

- Annual R&D budget as a percentage of annual sales
- Number of patents filed in the past year
- Total R&D headcount or budget as a percentage of sales
- Number of active projects
- Number of ideas submitted by employees
- Percentage of sales from products introduced in the past X year(s)

While some of these metrics can be valuable for driving investment in innovation and evaluating results, they provide a limited view. In today's

environment in which "open innovation" (sourcing ideas and technology from outside the company) can create differentiation and competitive advantage, for example, some of these metrics actually *inhibit* strategic innovation. And in an environment in which disruptive innovation and business cannibalization must be wholeheartedly embraced as a core strategy, fundamentally new types of behaviors are required, and subsequently new structures and related metrics to drive these behaviors.

Another challenge experienced by business leaders interested in defining metrics is "metrics overload". A *Business Week* article recently noted that "many companies have too many metrics and try to measure everything with different criteria". This overload causes executives to view their metrics as missing "the heart of the matter" and are dissatisfied with their existing approach to measuring innovation. What gets measured drives behavior. Too many metrics leads to excessive activities that provide little value and often drive behavior in cross-purposes.

The Metrics Imperative

Because innovation is now a widely recognized critical requirement for virtually all companies across all industries, the metrics imperative is here. Leaders must establish a new breed of metrics that move beyond conventional measures and that:

- Create an organizational environment that supports and drives strategic innovation
- Establish critical capabilities tuned to the evolving competitive business landscape
- Evaluate innovation efforts to ensure both return on investment and support feedback loops of learning and improvement

A Framework for Innovation Metrics

Our framework for innovation metrics attempts to create a simple solution to a complex challenge. With the assumption that successful innovation is

the result of the synergies between a number of complementary success factors, our model incorporates two core principles:

- Creating a “family of metrics” is essential for ensuring a well-rounded portfolio of measures
- Including both “input metrics” and “output metrics”² is essential for ensuring measures that drive resource allocation and capability building as well as return on investment assessment

Creating a “family of metrics” ensures a well-rounded portfolio of measures that cover the most important innovation drivers for your specific organization.



The following are the three categories that should be considered for any metrics portfolio:

Return on Investment Metrics

ROI metrics address two measures: resource investments and financial returns. ROI metrics give innovation management fiscal discipline and help justify and recognize the value of strategic initiatives, programs and the overall investment in innovation.

Organizational Capability Metrics

Organizational capability metrics focus on the infrastructure and process of innovation. Capability measures provide focus for initiatives geared toward building repeatable and sustainable approaches to invention and re-invention.

Leadership Metrics

Leadership metrics address the behaviors that senior managers and leaders must exhibit to support a culture of innovation within the organization, including the support of specific growth initiatives.

Within each of these categories, there are “input metrics” and “output metrics”. Input metrics are the investments, resources and behaviors that are necessary to drive results. Output metrics represent the desired results for the metric category.

Proctor & Gamble, for example, uses an organizational capability input metric focused on “the percentage of external sourcing of ideas and technology” as a way to drive its *Connect and Develop* strategy for open innovation. In 2000, 10% of the company’s R&D was outsourced – in 2006, 50% of all ideas and technology came from the outside.

Key Input & Output Metrics

The following are the key input and output metrics for each category. These illustrations are not meant to be exhaustive but rather provide an initial list of options for those looking to instill metrics within their own organizations.

Return on Investment Metrics	
Input Metrics	Output Metrics
<ul style="list-style-type: none"> ▪ % of capital invested in innovation activities such as submitting and reviewing ideas for new products and services and developing ideas through an innovation pipeline ▪ Percentage of “outside” vs. “inside” inputs to the innovation process (open innovation) ▪ Number of new products, services, and businesses launched in new markets in the past year 	<ul style="list-style-type: none"> ▪ Actual vs. targeted breakeven time (BET) ▪ % of revenue/profit from products or services introduced in the past X years ▪ Royalty and licensing income from patents/intellectual property
Organizational Capability Metrics	
Input Metrics	Output Metrics
<ul style="list-style-type: none"> ▪ % of employees who have received training and tools for innovation – e.g., instruction in estimating market potential of an idea ▪ Existence of formal structures & processes that support innovation ▪ Number of new competencies (distinctive skills and knowledge domains that spawn innovation) 	<ul style="list-style-type: none"> ▪ Number of innovations that significantly advance existing businesses ▪ Number of new-to-company opportunities in new markets

Leadership Metrics	
Input Metrics	Output Metrics
<ul style="list-style-type: none"> ▪ % of executives' time spent on strategic innovation versus day-to-day operations ▪ % of managers with training in the concepts and tools of innovation ▪ % of product/service or strategic innovation projects with assigned executive sponsors 	<ul style="list-style-type: none"> ▪ Number of managers that become leaders of new category businesses

Driving Innovation Metrics

Creating and driving the effective use of innovation metrics goes beyond simply defining and communicating new measures. Creating innovation metrics requires a strategic and disciplined approach that starts with the enterprise growth strategy and cascades throughout each business unit, division and group structure. By establishing a “family of metrics” that support the collective innovation imperatives of firm, business leaders can drive return on investment, organizational capability and leadership behavior at multiple levels of the organization.

Using metrics to drive and assess growth is more than a one time exercise. As an ongoing tool for innovation management, the approach involves:

Planning: Involving key stakeholders in the identification of metrics to insure the assumptions about the sources of value are explicit and clear, and metrics align to the firm’s strategy.

Monitoring: A structured activity of monitoring metrics against goals as a means to gauge progress and define necessary adjustments to measures & strategies.

Learning: A continuous feedback loop that assesses progress, engages key stakeholders in identifying implications and new opportunities to support the firm’s metrics-driven goals.

One potential approach to establishing innovation includes the following steps:

1. Clarify enterprise strategic business objectives
2. Define innovation goals to support growth objectives

3. Identify required innovation capabilities for the future
4. Identify desired innovation-related leadership behaviors
5. Identify organizational processes and models required to drive incremental and strategic innovation
6. Create a family of metrics that support the enterprise innovation strategy of the company
7. Create cascading metrics that align business units, divisions, groups and lateral process capabilities
8. Revisit and recalibrate strategies and metrics on an ongoing basis

Whatever the process, it is critical to engage key stakeholders in defining your metrics that will guide the organization into the future. Learning loops that capture insights gleaned from successes and failures must be integrated into the process and valued as a ongoing capability. And finally, metrics shouldn’t be viewed as an end in themselves but rather an indicator of the types of strategic capabilities and behavior required of each and every employee to ensure long term success and business growth.

About InnovationPoint

InnovationPoint is a non-traditional consulting firm that helps its Fortune 1000 clients take a strategic approach to innovation. InnovationPoint blends traditional and unconventional methodologies to identify breakthrough opportunities, develop growth strategies and consumer-inspired new products, and to align organizational strategy and design in a way that supports sustainable innovation. InnovationPoint’s clients include Hewlett-Packard, Kimberly-Clark, PepsiCo, Frito-Lay, Philips, Dial, Charles Schwab, Visa, Microsoft and Yahoo!

¹ Goldense Group, 2005

² Muller, Valikangas & Merlyn, Woodside Institute