Innovation Metrics: 11 KPIs for Measuring Innovation Success

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Title	Innovation Metrics: 8 KPIs for Measuring Innovation Success	
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Description	This is a rewrite of an extant blog post describing innovation metrics. It also merges content and concepts from other Wellspring and Sopheon resources	
Main CTA	Book an Accolade demo	
Further instructions	Upon publication: Add a link from Wellspring's "Data-Driven Innovation: How to Establish an Effective Metrics Framework" blog post to the final version of the post in this brief. 301 redirect these URLs to sopheon.com/blog/innovation-metrics https://www.sopheon.com/blog/why-is-measuring-innovation-so-difficult https://www.sopheon.com/blog/what-are-okrs-and-how-do-they-work https://www.sopheon.com/blog/how-to-measure-innovation-performance Post-migration: Retire the following pages and 301 redirect their URLs to the post-migration version of this piece: https://www.wellspring.com/blog/data-driven-innovation-metrics-framework https://www.wellspring.com/blog/financial-innovation-success-metrics	

Innovation is the lifeblood of an organization—but it requires a great deal of time, resources, and talent, and it can be difficult to track. Enterprise R&D organizations and disruptive startups alike often run into issues when deciding how to measure innovation, especially when it comes to choosing which metrics to monitor. These organizations often have no fixed framework for innovation management to guide their efforts and decision making, and they tend to rely on a grab bag of metrics borrowed from other departments—metrics that weren't purpose built for the needs of an innovation group.

This approach to innovation metrics wastes time and money in the short term. Worse, in the long run, focusing on unhelpful metrics puts potentially paradigm-shifting innovation opportunities on the backburner—if they aren't overlooked entirely.

So how do you choose which innovation metrics to use?

In this guide, we'll explore the inherent difficulties of measuring innovation efforts, as well as some principles and commonly-used metrics successful innovators use today.

Why innovation metrics are so hard to track

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Innovation metrics: 11 KPIs to consider

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Measure innovation activities with confidence

Why innovation metrics are so hard to track

Most business departments have straightforward ways to measure success. Many sales, marketing, finance, accounting, maintenance, and HR activities can be easily tied to quantifiable inputs and outcomes—and their department heads have the dashboards and quarterly reports to prove it.

The same can't often be said for innovation groups. By nature, innovation and performance metrics don't easily mix.

Organizational innovation poses several problems to those who try to measure it. While these problems don't make innovation exempt from quantitative performance metrics, they do tend to

make choosing the right metrics and gathering the right data tricky. If you're measuring innovation, it's best to begin by recognizing the inherent challenges.

1. Innovation is difficult to define

Whereas "revenue," "head count," and "uptime" are easily defined and quantified, "innovation" is not. For many businesses, one of the fundamental issues with trying to measure innovation is the fact that innovation itself can be defined in a variety of ways. Its meaning can depend on the organization itself, the person or team leading the project, the part of the business it affects, and the type of innovation itself.

Take these activities for example:

- A. Coming up with new ideas and products to take to market
- B. Finding ways to increase productivity or refine existing processes
- C. Preparing to integrate with emerging technology when it goes mainstream
- D. Brainstorming last-ditch tactics to meet short-term goals

Depending on whom you ask, any, all, or none of these activities may count as innovation.

Having a clear definition of innovation for your business and a practical set of metrics to measure performance by is essential when proving its value. But with so many variables involved in determining what innovation actually is, it's understandable that many organizations find it tricky to measure.

2. Innovation is difficult to contain

Not every organization has a dedicated R&D department, and even if they do, innovation usually doesn't stay confined to it. Innovation can (and often does) take place throughout the organization. Innovation breaks things by nature, and that includes the buckets we try to keep it in.

This introduces an accuracy problem when it comes to metrics. When innovation can happen anywhere, it's difficult to get an accurate read on which resources have been used for innovation, *and* it's difficult to properly attribute the returns on innovation.

3. Innovation is difficult to predict

Whereas other groups within an organization usually have reams of past data to extrapolate projections from, innovators often don't have this luxury. If an R&D team is developing a new product unlike anything else the company offers, there may not be any historical data to build benchmarks from. Benchmarking becomes even more nebulous if a team is working on something entirely new—there may not even be competition or precedents to benchmark against!

If quotas and projections are based on unhelpful (or absent) data, then the success of innovation efforts can be very difficult to accurately measure. A new project that's going well in its own right may look like a failure due to inflated quotas. Likewise, faulty projections may kill an otherwise game-changing project before it ever makes it out of the idea stage.

4. Innovation is difficult to track

In addition to the problems above, innovation can be an amorphous process. A breakthrough may happen at any time, whether sooner or later. This means progress on certain projects can be especially difficult to track—it's not always clear how close a project is to being "done."

Innovation doesn't always happen in a straight line. A project may be two months "behind" one quarter and six weeks "ahead" the next. As you can imagine, this makes time- and progress-based innovation metrics tricky.

5. Easy metrics aren't always helpful metrics

Since innovation has such a reputation for being difficult to measure, many organizations fall into the trap of simply monitoring what's easiest to track, rather than focusing on metrics that paint a more accurate picture.

These easy metrics may include the percentage of sales that come from newly developed products, or the number of active projects within a set period of time. However, these metrics don't necessarily help you allocate resources, assess program effectiveness, or hold team members accountable for a project's success.

When measuring something as nuanced as innovation, simplistic metrics can do more damage than good.

6. Better outputs don't always mean better outcomes

Not only are some of the current metrics too simplistic, but they can also be counterproductive. If, for example, one of your metrics is the number of new products or services you bring to market, you risk having your team focus on the wrong outcome. Such a KPI can encourage your organization to rush many new products to market instead of focusing on making one or two new products a success.

Ideally, your teams should be using KPIs that maximize your entire product portfolio's ROI—that goes for both the new products in development and existing live products.

When choosing success metrics for measuring innovation, it's important to ask, "If the team focuses on this, what might fall through the cracks?"

7. Metrics overload can hamper actual innovation work

On the other hand, it can be tempting to create a dashboard that monitors as many metrics as possible in order to ensure that nothing is missed. However, given the problems previously mentioned, getting the requisite data for the right metrics can be arduous and time-consuming. This runs the risk of focusing too much on the metrics themselves, taking attention and resources from the actual innovation process.

Innovation should be measured, but not over-measured.

How to build your innovation metrics framework

Effectively measuring innovation is difficult, but not impossible. One way we've seen organizations succeed in this is by ring-fencing key areas of their innovation infrastructure, then choosing KPIs that build a holistic view of their lnnovationOps practices.

One helpful way of thinking about innovation metrics is to compare them to the vital signs a physician checks when seeing a patient. The metrics of body temperature, blood pressure, heart rate, and breathing rate give your doctor a general idea of your immediate state of health—your KPIs should give you a similar overview of your InnovationOps' state of health.

With that in mind, here are a few fundamental layers of InnovationOps health that almost any organization can monitor to drive sustained innovation success. Consider what each of these layers looks like at your organization, then choose appropriate innovation metrics to keep tabs on them.

1. Innovation pipeline health

In order to find innovation success, you need a clear view of your innovation pipeline. This is probably the InnovationOps area with the most straightforward KPIs: most of your measurement will concern how many projects enter, exit, or move through the pipeline.

However, while these metrics are fairly straightforward, many organizations overlook them. It's common for innovation teams to be unaware of how many opportunities they have, how long it takes a project to move from one phase to the next, and other factors that one might assume are no-brainers to keep track of.

From a competitive standpoint, this is good news: getting more insight into your innovation pipeline not only makes your organization more informed, but it also allows you to maneuver your InnovationOps in ways many of your competitors can't.

2. Innovation portfolio health

Once foundational pipeline oversight has been established, you can begin synthesizing these findings to see how well your project portfolio is furthering your organization's short-term, mid-term, and long-term innovation goals.

Portfolio health is about measuring how closely your innovation portfolio matches your organization's strategic intent. The most successful innovation departments have a clear sense of how each individual project is faring as well as how they all ladder up to the organization's OKRs. Renewable innovation is about more than just one-off projects either making it or falling flat; it's about building an entire ecosystem of projects that feed into one another and allow for simultaneous, widespread perpetual growth.

The clearer insights you get into your innovation portfolio, the better decisions you can make. By measuring your whole portfolio's performance, you can accumulate a repository of historic learnings to inform current and future initiatives. Over time, you'll be able to use past portfolio performance to inform success metrics for future ones.

Measuring portfolio health can also help you manage innovation risk: by assigning risk levels to individual projects and analyzing your project portfolio in aggregate, you can evaluate new projects in the context of the whole. This gives you the freedom to take calculated risks, balancing moonshots against shoo-ins.

3. Innovation system health

System health by far is the most amorphous and challenging aspect of an innovation apparatus to measure. This area concerns the higher-level thinking around an organization's innovation operations. When setting up system health metrics, you might look into more intangible items such as:

- Engagement with innovation at the executive level
- Governance process effectiveness
- Person-role fit for innovation team members
- Knowledge flow between upstream and downstream reporting
- Information consistency between internal and external knowledge networks
- Innovation ambitions versus available resources

Measuring system health is tough, and it may require a more novel and flexible approach to get it right in comparison to pipeline or portfolio measurement. But your innovation system is the link between your organization's OKRs and your innovation team's ability to deliver on them, so you need to keep that system healthy. Devising metrics that give you insights on system performance is a smart way to do so.

Innovation metrics: 11 KPIs to consider

The following is a list of example metrics that are commonly used by innovation teams—but before we get into these, it's important to remember that **your metrics should be specific to your innovation environment**. As discussed earlier, innovation is difficult to define and contain, and every organization will approach doing so differently.

The way you innovate is specific to your organization. The way you measure innovation performance should be, too.

That being said, these metrics are popular among innovation leaders, and they may provide some inspiration for you as you begin building your own innovation metrics framework.

1. Product portfolio NPV

Net present value is the default basis of all go/no-go decisions, so it follows that organizations often keep it front and center. Portfolio NPV ignores past spend as sunk costs and focuses on what the product portfolio is worth *right now* in context of projected spend, revenue, discount rates, and opportunity costs.

2. Days over launch

Project lag is a persistent problem in the world of new product development—it's common for new products to launch months after they were originally intended to. Keeping track of actual launch dates against planned launch dates gives organizations an idea of how effective their processes truly are.

3. R&D-to-product (RDP) conversion

<u>Championed by McKinsey & Company</u>, R&D-to-product conversion answers the question, "How does R&D investment translate to new product sales?" This metric involves three components:

- Total sales
- New-product sales as a percentage of total sales
- R&D spend as a percentage of total sales

RDP is then calculated by dividing the new-product sales percentage number by the R&D spend percentage number, giving a general idea of the return ratio for R&D spend.



New-product sales as % of total sales

R&D spend as % of total sales

4. New products-to-margin (NPM) conversion

Also from McKinsey, new products—to—margin conversion answers the question, "How well do sales of new products translate to gross margins?" This metric also involves three components:

- Total sales
- New-product sales as a percentage of total sales
- Gross margins as a percentage of total sales

NPM is then calculated by dividing the gross margins percentage number by the new-product sales percentage number.



Gross margins as % of total sales

New-product sales as % of total sales

5. Time to market (TTM)

This is a straightforward one: it's the amount of time it takes to bring an idea to market. You can measure this in weeks, months, quarters, years—whichever makes most sense for your organization.

This metric (or variations of it) may prove helpful in assessing your innovation pipeline health. Over time, you may be able to use TTMs from multiple similar projects to benchmark your portfolio's health as well.

6. Idea generation rate

While idea generation is just the beginning of the innovation process, the beginning is still important. Assessing the average number of ideas generated over a given period of time can be

helpful when planning innovation pipeline activities, and as you gather and document information over time, you can begin planning for surges and dry spells.

7. Idea kill rate

The idea kill rate gives you an idea of what percentage of ideas *don't* make it to market. This can be especially useful when making resource allocation decisions. If a high percentage of projects that enter the pipeline never make it out, it could be a sign that ideas need to be validated earlier and more thoroughly so as to reserve more resources for successful projects.

8. Product kill rate

Just like not every idea makes it into development, not every product makes it *out* of development. Product kill rate tells you the percentage, on average, of new products that get shut down mid-development.

For most organizations, this should be a non-zero number—killing products is generally a good indicator that an organization is regularly aligning the project portfolio with strategic objectives.

9. Weighted average portfolio risk score

By assigning a risk score to every project, you can construct a weighted average risk score for your entire portfolio. Combining this risk score with a target risk window can help you keep your portfolio aligned with your organization's risk appetite, so you neither take on excess risk nor play it too safe.

10. Senior leadership innovation mix

One way to assess your innovation system health is by seeing what percentage of senior leadership time is spent on innovation activities. This could be taken as a blanket percentage across all senior leadership hours, or it could be expressed as quotas for specific roles (e.g., the chief product officer may be expected to devote 25–35% of their hours to innovation activities, whereas the comptroller may not be expected to spend any more than 5% of their time on innovation).

This is usually more of an aspirational metric. Most organizations that use this don't have executives fill out innovation timecards—rather, they set a desired mix as a guideline for allocating time and attention.

11. Employee innovation mix

Similar to the previous metric, measuring the percentage of employee time spent on innovation activities can help you assess your innovation system health. Combining this metric with innovation quotas can be used to encourage non-R&D employees to collaborate with R&D, which can protect your R&D teams from being siloed away from the rest of the company.

Measure innovation activities with confidence

When innovation isn't measured properly, you risk wasting time, money, and resources—and getting buy-in for future innovation projects will become more of a challenge.

One way to get a head start on measuring innovation performance is to use an innovation management system. Innovative organizations use <u>Accolade</u> to reduce time-to-market, increase product success, improve efficiency, and optimize portfolio value—<u>book a demo today to see</u> how Accolade can help you measure (and improve) innovation operations for you.