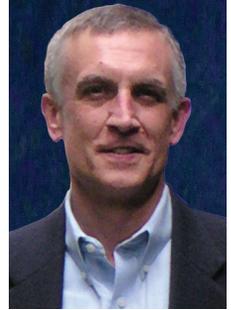


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Top-5 R&D Product-Development Metrics

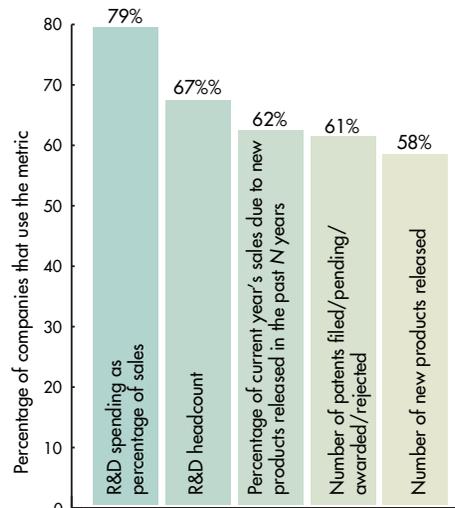
Five metrics affect every member of the R&D and product-development communities, regardless of their level of responsibility. GGI surveyed manufacturers about metrics in 2013 and has done so regularly since 1998. Interestingly, our research showed no change in these top five metrics throughout the great recession.

The top five metrics fall into two categories, “input” and “output.” The first two metrics are input metrics, “R&D spending” and “R&D headcount.” Each year, management determines how much to reinvest into R&D. R&D spending is typically measured as a percentage of sales. Some industries reinvest 1 to 2%, others 20 to 25%. The right amount depends on one’s industry, the company strategy, and what the competition is spending. You cannot judge the figure alone as either good or bad.

Headcount is a key metric for R&D. In operations, the unit of production capacity is generally “a piece of equipment assisted by people.” In R&D, however, the unit of production capacity is generally “people assisted by a piece of equipment.” An R&D organization’s capacity is best measured by its people. Appropriately, these are the top two metrics.

Why doesn’t everyone measure R&D spending? Public companies are required to disclose this figure and private companies are not. Headcount is more of a judgment call. Most firms measure it because people are the largest cost in the vast majority of R&D budgets and a key consideration for product-development capacity.

The third metric has a long name, “The percentage of the current year’s sales due to new products released in the prior N years.” A shorter name would be “New product sales,” or the “Vitality Index.” Unlike the first two metrics, the third metric did not exist until 1988 when 3M introduced it to the world. It immediately resonated. For decades, the corporate metrics that best resonated with every employee were sales and growth



TOP-5 R&D PRODUCT-DEVELOPMENT METRICS

in sales. That is still the case today, with customer satisfaction being a close second. What was missing was a metric that specifically measured new product sales, the force that sustains the lifeblood of most companies. Ah, but things are never easy. What exactly is “new”? And, doesn’t “new” differ by industry? Certainly so. That is why you see the variable N in the metric. The matter of defining “new” is more complex.

Across industries, N ranges from one to seven years. The most common N is 3. After three years, products are no longer new. Industry

averages are hard to come by, but figures ranging from 25% to 32% are generally accepted to be industry averages for N = 3. If your company has less than 25% of its sales in any year from new products, there is generally an opportunity to improve the new-product development engine.

The fourth metric is pretty straightforward: Patent production. Like “R&D spending” which is a required metric, patents are registered with governments and they are tracked as a matter of compliance. No surprise here, regardless of whether there is a great deal or little patent activity.

The fifth metric is “New products released.” Product releases are big events in every company and nearly all employees have responsibilities associated with new product releases. Product releases start the meter for counting the revenues associated with new products, in support of the third ranked metric. **md**

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