Practical and Effective Metrics

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Anyone who hangs out in the technical communication community regularly encounters the problem of measuring performance, quality, usability, or some other parameter intended to describe how good a job we’re doing. Collectively, these parameters are known as “metrics,” derived from the Greek term metrikos, which means “relating to measurement.” The primary goal of measuring, of course, is to create a standard against which something can be judged: That is to say, how does the result compare to the work used to create the standard? Does the quality of a product measure up? What’s often forgotten is that metrics can be used not only to measure performance, but also to identify specific problems that are affecting performance.
In this article, I focus on metrics developed by writers and editors in response to management requests, but managers can apply the same reasoning to developing their own metrics.

The Perils of Performance Monitoring

Let me start with two warnings. First, long before Heisenberg developed his uncertainty principle, it was well known that the act of measuring influenced the system being measured. Second, measuring serves little purpose if it provides no means for improvement. Let’s look at both points in turn.

If you must develop metrics, be wary about the statistics you collect. The metrics communicators most often encounter are designed to describe human behavior, and human behavior changes easily. Flexibility in behavior is a good thing when your goal is to encourage improvement. But it also poses a problem: Most of us are more than smart enough to deliver precisely what we’re asked to deliver when we know a metric will be used to judge our work. The classic example of a metric that targets the wrong problem is the one that specifies writing a minimum number of pages per hour. We all know that it’s easier to explain even a simple concept in twenty words than in ten, so that metric will have the unintended consequence of longer documents. Unfortunately, that’s not what our managers and our clients really need.

Although this particular example may be trivial, discussions on the techwr-l discussion group (www.raycomm.com) suggest that this kind of simplistic approach to measuring performance is quite common. In addition, it illustrates the larger problem: When you develop a metric, you define which aspects of quality everyone will work to improve. That means you’d better be defining the right aspects.

Equally important, if you’re going to go to all the effort to develop a metric and measure whether everyone is living up to a standard, you should do more than just measure against a benchmark. A truly useful approach should also identify the problems that lead to failures to meet performance targets. Identifying and solving problems changes the focus from monitoring performance, which inherently involves criticism of those who don’t measure up, to helping workers meet productivity or quality targets. If that’s honestly the primary goal behind developing metrics, you’re more likely to get the results you want (true improvements) because everyone is more likely to accept the approach.

Effective metrics must be objective (measurable), unbiased, and able to provide enough resolution (detail) to assess the factors that need improvement.

Objectivity

“Objective” and “measurable” are deceptively simple words. In practical terms, both mean that any two people who set out to calculate the value of a metric must be able to produce comparable results. Subjective metrics are hard to measure because their value depends as much on opinion as on demonstrable fact. The problem with opinion is twofold: Even two experts are likely to disagree on an issue to some extent, and even a single expert can produce different assessments on different days. A truly objective metric is less likely to prompt disagreement between experts, and is likely to produce consistent results.

Certain metrics are surprisingly easy to quantify. The two most common types of metric involve rates (performance per unit time for productivity or per hundred tries for success) or quantities (something that can be counted). Two good examples of objective performance criteria are the following:

- Time: All paperwork must be completed within twenty-four hours of the final program meeting.
- Quantity: Editors will find no spelling or grammatical errors in the document.

These criteria are objectively measurable if there’s agreement on what constitutes a grammatical error, and if they relate directly to the execution and quality of the resultant job. Compare them with two poorly defined criteria:

- The department manager is satisfied that the work is complete.
- Fewer problems were reported today than yesterday.

In contrast to the first two examples, these are highly subjective. A picky manager might reject work that a laissez-faire manager would accept—perhaps because they have different criteria. Or one manager might reject work today that they would accept two days later, when feeling less judgmental, stressed, or rushed. Moreover, neither criterion relates to the work in such a way that you can define problems and suggest improvements.

Biases

Creating metrics can be difficult. You may have to spend considerable time working with the managers who asked you to develop a metric to understand what they really want. Sometimes they can’t define their requirements explicitly, and you’ll have to ask for examples of what they consider good and bad outcomes. With persistence, examining these examples will reveal commonalities...
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The Merits of the Metric System

The approach in this article works whenever you can identify biases (such as office politics), the manager’s actual needs, and individual actions to assess. The nicest thing about this approach is that it’s easy to adapt to just about any situation, provided that you can work with managers to identify their true needs and can work with those whose performance will be measured to identify the individual actions you must assess.

An additional benefit of this approach is that it can break down walls between performance-oriented managers and their employees by fostering a collaborative approach to identifying and solving problems. This helps teach the managers what their staff actually do so they can make it easier for the workers to do their jobs, improving both productivity and quality. Worker satisfaction also improves, since they are being helped to do their jobs better rather than being judged.

Metrics are a fact of life in the modern, fast-paced workplace, and understanding how to use them correctly can turn the potential unpleasantness of performance evaluations into an opportunity to make life easier for everyone. If your metrics aren’t working, you can try breaking them down into separate metrics. Once you know which parts of the process work well and which ones don’t, you can take measures to correct the problems. You can apply this same analytic approach to any process in which quality is important. Once you understand all the steps in the process that contribute to quality (or its lack), you can investigate each using a separate metric and identify the problems with each step.