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Ten Tips to What's Hiding Behind Your Dashboard

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IT project dashboards provide senior management with a top-down view of their organization -- allowing them to see a high-level, up-to-date status and drill down to the details that might concern them. Like any interface, the dashboard can obscure as much as it illuminates. Moreover, the assumptions used in its construction and maintenance will color the conclusions one draws from it and bear critically on its strategic utility. Whether you now have or are considering adopting an IT project dashboard, here are 10 questions you should be asking to make sure that your effort will support your goals.

1. How Green Is GREEN?

Most dashboards report the variance between expectations and reality, using color-coded (red, amber, or green) signals to show what's on or off track. The downside to this simplicity is that discrete signals, unlike their analog counterparts, remain green as long as they are within their preset tolerance. They shift, suddenly, to amber or red when that tolerance is exceeded. Green may mean *green*, or it may mean *almost amber*. The first question any dashboard user should ask is: just how far off target can a metric go before it's not green? Also, can the tolerance be varied by project, measure, or some other way to reflect business priorities?

2. How Is Data Aggregated?

The essence of the dashboard is the collection of detailed metrics and their aggregation into summary values. It's important to know how that aggregation is done. Is it based on the underlying measures or (as is most common) their discrete signals? Is it calculated as an average, median, worst-case, or best-case condition? Is some kind of weighting applied to reflect priorities or does every detailed item have equal impact on the summary value?

3. How Are Data Items Rolled Up?

Most IT dashboards roll up data along organizational lines, with projects rolled into programs, and programs rolled up to an overall departmental health, and so on. While this makes it easy for a senior executive to call his or her reports to account for their numbers, it discourages cross-organizational analysis. At best, it hinders creative analysis; at worst, it encourages managers to doctor the numbers to support the message they want to send.

4. Can These Numbers Be Trusted?

Dashboards present the illusion of certainty -- discrete, clean measures for processes that are inherently messy and vague. Most dashboards attempt to identify the variance between the project's performance against expectations in terms of schedule and cost, using the PMBOK definitions of those measures. For both, the key inputs are the "earned value"; and the actual cost work performed -- and their accuracy depends entirely on the rigor and consistency with which the data is collected.

5. How Is Earned Value Realized?

Earned value presents additional difficulty, as it is based on the estimated cost of an initiative and not its actual value to the business. A project can earn value for design work for features that are never constructed or for delivery of features that are never used. For dashboard purposes, a better measure might adjust earned value for actual business value -- a rough analogy to the accounting principle of

"lesser of cost or market value.";

6. Against Whose Expectations Is Project Performance Measured?

It's vital that projects come in within estimated budget and schedule, but by using only self-generated benchmarks, your dashboard may train your people to pad their estimates. One option -- use internal, realistic, estimates for estimating project schedules and budgets but also compare them to external benchmarks, and ask your managers to account for differences.

7. What Are the Trends?

Most dashboards are based on a moment in time. They show items that are broken and prompt managers to do something to fix them. The focus on making quick fixes can promote a culture of reactivity. Proactive, strategic changes take time -- and measuring change over time means viewing the present against the past, and making sure the trend is in your favor.

8. What's Wrong with Red (or Amber)?

An all-green dashboard can mean any of three things: your budgets are padded, your managers are hiding problems, or the dashboard is gathering the wrong metrics. The first step in improvement is to honestly recognize and deal with failure. That means tuning your measurements to pick up the trouble spots. It also means taking effective action to address problems instead of "shooting the messenger.";

9. What's Better than Green?

Most dashboards are structured around negative exception reporting -- guiding the executive to the areas where trouble lurks and allowing them to drill down to find its causes (or at least those responsible for nongreen signals). Positive exceptions (better-than-expected performance) just show up as more green. Rooting out the causes of underperformance will get your organization to perform well, but excellence can be achieved only by identifying your top performers and spreading their magic around. Your dashboard should allow you to see what's going really well as well as what's wrong -- and, most importantly, give due attention and recognition to your best performers.

10. Who Cares?

The single greatest challenge that IT managers face is to demonstrate their value (at their actual cost and budget) to their business customers. Dashboards that focus solely on whether projects are moving according to plan don't support that need. Business metrics of IT success, including the ongoing, bottom-line contribution of completed projects need to be tracked on the dashboard as well.

I welcome your comments on this issue of the *Cutter IT E-Mail Advisor* and encourage you to send your insights to comments@cutter.com.

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