Performance Dashboards: Defining and Creating an Effective Tool for Management

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What is a Performance Dashboard?

A Performance dashboard is a focused, clarifying, snapshot of key data that communicates to all viewers—even a novice viewer—the status of efforts (the performance) and what successes and failures the organization or project is having. A performance dashboard is much different from a spreadsheet or report, and must be:

- easy to read and comprehend
- focused to convey a need for action in specific areas
- not overly dense with data
- distilled down to only a few key data points
- up-to-date

Like the one in your car, a dashboard must tell you many key pieces of information at a glance and in only enough detail to cause an actionable response (putting your foot on the brake when you see the speedometer needle pass the speed limit mark).

Easy to Read and Comprehend

A dashboard should require no explanation to anyone within your organization about the meanings of values or graphs. The key function of a dashboard is communication and therefore must not be laden with “small print” or exclusionary details. The visual quality should be like a traffic light: it should cause a visceral response in the viewer. This response is often a result of clever choice of color, arrangement, font and graphical display of data. For example, the use of green, red and yellow to reflect good, bad or adequate performance is intuitive and common. A very well designed and highly visual dashboard will cause the viewer to worry or feel satisfaction at even a quick glance.

Graphs on a performance dashboard must be practical for the type of data they contain and well designed to highlight trends. The graphs should be so much more visibly comprehensible than a view of the many numbers in the spreadsheets from which the dashboard is drawn. Graphs must also use consistent axis labels to make it easy to make visual comparisons over multiple graphs.
Focus on data to influence behavior

Dashboards focus the viewer on key data variations and discrepancies in order to influence behavior. Areas of concern or success are emphasized using arrows, inserts, circles or color codes around key data points. The old saying “a picture is worth a thousand words” is epitomized in good dashboards where excessive verbiage is your enemy—visual communication is the aim. A key quality of a good dashboard is that its visual nature communicates both quickly and accurately, where energy and focus should be directed. Data is arranged to provide visual grouping of related factors, allowing space between categories and demonstrating trends that cause the eye to be attracted naturally to key areas that require focus.

Most dashboards fail to communicate because they are too dense with data. Instead of being an efficient, one-page, visual, tell-me-what-I-need-to-know tool, many organizations label their collection of multi-page spreadsheets and databases a dashboard. These worksheets are not the same things as a performance dashboard—they are simply spreadsheets full of data. Spreadsheets generally don’t get reviewed—except by the person or team creating them—because they are overwhelming, irrelevant and/or poorly organized. Whatever cannot be seen in one visual frame doesn’t get communicated and renders all data equally unimportant. Remember, the key function of a dashboard is communication. While emailing spreadsheets could be technically considered communicating data, a dashboard uses elegant and informed design in order to communicate effectively. Simplicity of data is the secret to effective, comprehensible communication.

Use a few key data points.

Too often dashboards fail not because they lack key data points but because they don’t discern the few key points from all of the other data points available. A dashboard must be created by someone intimate enough with the data (usually a key team of process superstars) who can draw conclusions about performance from a few (no more than ten to fifteen) data points and focus the viewers on those points. Key data points must be determined by the aspirations of the organization or project for which the performance dashboard is being created. Many Electronic Health Records (EHRs) come with data dashboard functionality, yet they are difficult to tailor and they don’t allow for ongoing adjustment to suit the ever-changing aspirations and focus of the organization. In short, too much data becomes the enemy to a focus on performance and outcomes.
Use Current Information.

Finally, a good data dashboard must be up-to-date to reflect data that just happened. It should never be more than one week old. This current status of the dashboard is a must in order to influence behavior. Organized but aged data is not a dashboard, it is a report—and a historic report at that. Recall that a dashboard is a tool created to communicate and influence both behaviors and impact performance. Now, imagine that you are a driver of a car and your dashboard is altered so that you could no longer see your speedometer while you were driving. You could therefore not glance down nor react while the performance is happening—thus you could not affect your outcome in any informed way. Instead of having a speedometer, imagine that you could get a printout—once you arrive at your destination—of your speed and its variations. That report may well be ‘interesting’ but it is certainly not useful as it is too late to cause an action to correct outcome. An aged report is NOT a dashboard.

(Cartoon from the December 6, 2010 New Yorker Magazine.)

Why Does my Organization or Project Need a Performance Dashboard?

The primary value of a data dashboard is to focus everyone on performance and outcomes. Dashboards are powerful because unlike data reports, a dashboard taps into the tremendous persuasiveness of visual perception and causes a physical reaction to what is displayed. By using a dashboard effectively a team can translate that reaction into a response and further action.

Without a performance dashboard, the data usually becomes the responsibility of either no one or a small cadre of data wonks. The keepers of the data cannot, by themselves, create a change in behavior to influence the data. Without a performance dashboard, those who collect, enter and graph the data cannot effectively communicate the outcomes shown in that data to those who can influence behavior and future outcomes.

Many health care organizations have data to drive their quality, financial or clinical operations. Where they fail to make the leap is in communicating the data—not simplifying, focusing, or making it available to those individuals who need to alter their actions to impact performance. Managers typically have the data, but front lines staff have no idea how their actions affect performance. Having a good data dashboard makes sharing and communicating outcomes easy and stimulating and it sparks both conversation and action.

Creating a Performance Dashboard—Getting Started

The first step to creating a performance dashboard—and often one of the most difficult—is to make a clear decision, from a project leadership or management team perspective, about what outcomes (data) are most important. The best way to avoid the universal conclusion that “it’s all important to us” is to instead focus on answering one powerful question: “What do we aspire to?” Everyone on the top management team should together answer that question in a very clear, concise way. This is usually the toughest step because it highlights a lack of focus on priorities—which perpetuates a lack of focus on the data.
Once you have your aspirations distilled to the top goals for your organization, then brainstorm all the data points that could get you to that goal. As you do your brainstorming, the adage that “when brainstorming, nothing is ever wrong” is certainly true. Be sure to encourage wild ideas about potentially revealing data and capture on a flip chart all possible data points that could help you monitor your progress and point you toward your goals. Once that brainstorming is done, there’s another tough step ahead—narrowing the possible data points down to a few key points that frame your dashboard.

**Selecting Data Points for your Dashboard**

From your list of brainstormed data points you will select the key data points that will help you reach your goal. Whittle them down by eliminating those measures that do not directly help you gauge your progress. Then review the remaining data points and select only those measures you really need.

Watch out for pitfalls that will take you off course and make your final dashboard much less useful. The most common data selection pitfalls can be discerned in the following phrases often uttered by someone around the management table:

- This is a data point we already have access to so it makes sense to include that point.
- This would be a very interesting “thing” to know.
- I went to a conference last week and they said that we should be paying attention to this.
- You can never have too much data about this area of operations.
- It’s a confusing data point to understand but it’s important because….

It is easy to latch on to a data point that you already have access to since that data is already readily available. But in order to make critical decisions, a good manager must have data that answers critical questions. If you are working to improve the health of your diabetic patients, knowing their HgA1C is a good data point, as might be variations of their daily glucose levels. You could also record the color of shirt that they wear during each blood draw; after all, it would be easy data to collect—but just because it is available does not make it relevant.

**Bottom Line:** If you have a data point, but it does not specifically get you to an answer that tells you how you are progressing toward your goals, cross that data point off the list and do not include it in your performance dashboard.

It’s very tempting to get caught up in looking at data that is interesting. Data has a reputation of being boring so any point that promises to spice things up is certainly tempting, even to the most disciplined. However, a judicious manager knows that success isn’t achieved by glamorous distractions, but rather through diligence. Any data point that promises to be interesting or exciting without drawing attention to your progress regarding goals falls directly into the category of bright, shiny objects. Bright, shiny objects are great to look at but they are highly distracting and must be crossed off the list of potential dashboard data points.
Another data point pitfall comes from outside the organization and makes its way in by way of someone’s recent attendance at a conference, class or meeting. It’s very easy to hear a compelling speaker and get wrapped up in a data point du jour. Before getting distracted, you must determine if that data truly helps you to directly gauge your progress in meeting your aspirations or goals. If it does not directly help you to understand your operations, then that data point is simply another bright and shiny object and should be ignored.

Yet another pitfall in data point selection is the notion that you can never have too much data. “The more the merrier” works for many concepts, but not for a performance dashboard. Not only can you lose focus, but too much data also highlights a lack of understanding about exactly how each data point directs you to meet the goals of the organization. Since the maximum number of useful data points on a dashboard is ten to fifteen, each point must be chosen wisely in order to cover all key areas.

The final major pitfall of narrowing down key data points is that of using a data point that is so complex that it has little value to most who review it. Stephen Wolfram in his book *A New Kind of Science* challenges the notion that complexity must be responded to with complexity rather than simplicity. Data for a dashboard must be easy to understand and any point on the dashboard must be able to stand alone and tell its own view of progress toward the goal of the organization. Esoteric data has no place on a performance dashboard.

**Using your Performance Dashboard**

Knowing what data goes on a performance dashboard and arranging it in a clear, concise and compelling way is the most challenging part of setting up a performance dashboard. Once the dashboard is created it should be tested on a small scale and put into regular use. Understand however, that a truly useful data dashboard must be continually honed and adjusted in order to meet changing and evolving data needs and operational outcomes.

References:


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