Performance Measurement: Dashboards

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This is the third in a series of articles detailing best practices for the implementation of strategic planning and methods for performance measurement. Previously we discussed methodologies for the outlining of critical success factors, which are the activities or elements required for an organization to reach its stated objectives. Then, we described how to outline and use key performance indicators (KPIs) to quantify objectives and measure the success of your previously outlined factors.

Now, in this article, we will explain how a dashboard is an exceptionally useful system for measuring and visually reporting on key performance indicators. Combining key performance indicators with a dashboard better enables the organization to monitor, analyze and manage important business processes from numerous perspectives, impacting both organizational effectiveness and agility.

Why Are Dashboards Necessary?
In essence, dashboards serve a crucial purpose in connecting executives with the company's overall performance indicators. In many cases, companies suffer from multiple application and database sources of disparate data that are rarely integrated. In such instances, a significant amount of manual aggregation is required. The resulting performance data is then typically presented in a functionally-centric display, with each part of the organization focused on their slice of the business. Rather than depending on a reported format that is hard to digest, dashboards provide a vehicle by which data can not only be more easily reported, but multiple data can be integrated into fewer reports. For example, having one dashboard report that displays quality incidents, customer complaints, return processing, and warranty replacement metrics with gross margin performance will provide more insightful information than if using traditional functionally-centric reporting methods. By making the data easier to understand, it can then be more readily translated into corrective action.

What Are the Benefits of Dashboards?
As just discussed, there are a number of benefits to using dashboards for the reporting of your data. The first and most obvious benefit to using dashboards is that they present large amounts of data with easy-to-grasp visuals, revealing at a glance what is most important. This means that complex, dense statistical information becomes understandable and easy to convert into action.

When dashboard metrics are connected to the compensation system, through the use of bonuses and other compensation, there is a commensurate increase in motivation to achieve the stated goals, potentially at every level of the organization. In the absence of a compensation linkage, dashboards tend to be a less effective motivator.

With the increased level of communication, dashboards provide comes a higher level of empowerment as more parts of the organization understand how their functions integrate into the total business plan. For example, as production line personnel become more sensitized to the impact of quality incidences at their work station, they better understand the potential profitability gains that can be achieved by eliminating quality incidences.

Yet, perhaps most importantly, dashboards ensure that information is dispersed throughout all levels of the company, in all necessary formats. Dashboards are able to deliver both a high-level view for executives, which supports better business decisions, and drill-down views for each department. C-level, upper management, department management, and staff can all see their performance and trending results, so that they can not only identify problem areas quicker, but also better align their responsibilities with overall corporate strategies.

How Do You Create a Dashboard?

For many years, dashboards were only within the realm of six-figure business intelligence applications like Cognos and Hyperion. However, recent versions of Microsoft Excel – particularly Excel 2007 and 2010 – support creation of full-featured executive dashboards, especially with the introduction of PowerPivot by Microsoft.

The following steps show how it is possible to create your own executive dashboard.

The dashboard ought to be based on previously-identified critical success factors and KPIs, so it is necessary to first follow necessary steps to identify and design those structures for your company. If you are uncertain how to proceed on this step, consult our previous two articles for tips on how to identify your own critical success factors and KPIs.

Once factors and KPIs are identified, it is possible to start building your dashboard. First, build in the dashboard layout including the desired combination of visual depictions. These might include graphs, gauges, charts, or maps, to name a few.

Then it is time to build in your data. Build in the desired data sources, followed by the desired level of data drill-down. Then identify the desired filtering capability of your dashboard.

Finally, after the data input step is completed, you can build any desired user features. This could include navigation capabilities, value range selection, or data input options. This final stage ought to also include the development of parameters surrounding supported users and security features.

Examples of Dashboard Usage

Shown at the top of the following page is a sample dashboard for the Line Fill Rate critical success factor identified in the first article. Given that there are other supply chain-related critical success factors (e.g., inventory turns), in actual application the dashboard would be expanded to include any other supply chain-related metrics. Note that the critical success factor has been placed in the most prominent position, that being the upper-left corner of the display. The supporting key performance indicators are in a secondary position on the right side of the display.

In the first article, the required Line Fill Rate goal was set at 99.5%. In support of this Line Fill Rate goal, the dashboard was supplemented with key performance indicators as follows: 1) Forecast Accuracy percent was targeted at 98% (this is the average volume variance comparing planned shipments against actual shipments), 2) Backorder Dollars was targeted at or below $18,000 (invoice value of product awaiting shipment due to lack of supply), and 3) Order Fulfilment Cycle Time was targeted at 15 days or below (the days from order receipt to delivery receipt).

Supply Chain Dashboard (Date as of June 30, 2012)
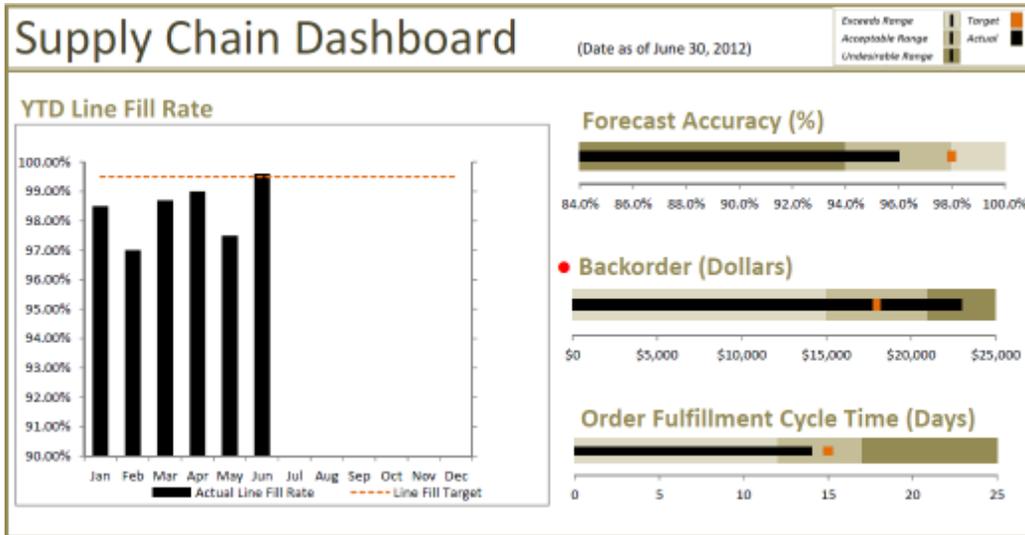
The Line Fill Rate is displayed with trended data to provide additional context for management's use. The associated key performance indicators are based on current-month results – such as, Forecast Accuracy percentage for June, or other similar factors – summarizing the essential performance result, which is actual vs. target. Each of the three key performance indicators is displayed using the following gradient: 1) the lightest shade indicating performance that Exceeds expectations, 2) the middle shade indicating Acceptable performance, and 3) the darkest shade indicating Undesirable performance.

Here is a more detailed description of the Forecast Accuracy key performance indicator:
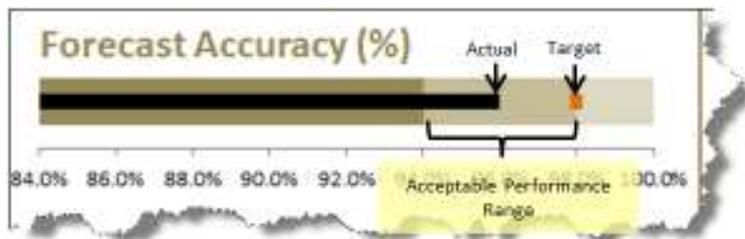
Forecast Accuracy for the month of June was at approximately 96% against a target of 98%. But given that the Acceptable performance range spans from 94% to the target – 98% – no action is required.

The dashboard above utilizes a number of design ideas in an effort to increase effectiveness, including the use of muted colors, elimination of extraneous horizontal and vertical grid lines, and inclusion of bright colors for significant variances. Also notice the indicator light adjacent to the Backorder Dollars metric, which indicates that Backorder Dollars are in the Undesirable performance range. Using the red signal indicator (•) helps focus management's attention on key performance indicators requiring the greatest attention.

In Summary

In conclusion, dashboards are particularly useful tools for the dissemination and integration of data throughout your company, as well as for measuring and managing performance.

- A dashboard measures and visually reports on KPIs, with the goal of enabling faster overall understanding of business performance and trending.

- Dashboard reporting methods improve significantly on manual methods by disseminating information more quickly, and by ensuring it reaches all levels of corporate organization so that everyone may be aligned with company strategies.

- While previously dashboards were only available to companies with access to high-cost applications such as Cognos or Hyperion, now it is possible to create a full-featured executive dashboard with tools made available through recent versions of Microsoft Excel.

Los Angeles executives who do not feel that they have the staff expertise or bandwidth needed to create a dashboard may consider consulting an external service provider. An outside expert can create a high-level application in less time, leaving staff free to focus on other company matters.

The final piece in this series will wrap up our discussion of performance management best practices with a discussion of balanced scorecard systems.

About CFO Edge

CFO Edge, LLC is a leading Southern California provider of outsourced CFO services. Based in Los Angeles, we are a group of experienced chief financial officers who engage with CEOs and CFOs on demand to address strategic planning, business management, and day-to-day financial operations challenges. Our seasoned professionals deliver services as interim CFOs, part-time CFOs, project-based CFOs, recruitment-to-permanent CFOs and interim-to-permanent CFOs. At CFO Edge, we're passionate about helping our clients create, grow and sustain value. For more information, visit www.cfoedge.com or call 626.683.8840.

About Resource Planning Solutions

Chase Morrison is the Managing Director for Resource Planning Solutions Corporation. As the firm's Chief Financial Consultant, he combines extensive experience as a director of financial planning and analysis with his passion and knowledge for innovative IT solutions. While much of his career has been working with Fortune 500 companies, Mr. Morrison is now focused on using those same performance management tools to help small-to-mid-sized companies, mostly in the manufacturing and distribution industries. For more information, visit www.rpscgi.com or call 818.436.0781.