

The Three Threes of Performance Dashboards

THREE APPLICATIONS

Three sets of functionality in every performance dashboard:

1. Monitoring so users can quickly view performance
2. Analysis so users can identify root causes
3. Collaboration so users can discuss the data before taking action

THREE LAYERS

Three layers of performance information:

1. Graphical, abstracted views of performance status and trends
2. Summarized, dimensional data that users can slice and dice
3. Detailed data for taking action

THREE TYPES

Three types of dashboards to support different requirements:

1. Operational dashboards to monitor real-time processes
2. Tactical dashboards to track departmental goals
3. Strategic dashboards to monitor strategic objectives

Based on Performance Dashboards: Measuring, Monitoring, and Managing Your Business by Wayne Eckerson (John Wiley & Sons, 2005).

OPERATIONAL DASHBOARDS

Track mission-critical operational processes using detailed data that is refreshed frequently—every day, hour, or minute, depending on requirements. Operational dashboards emphasize monitoring more than analysis or collaboration.



Operational executives and managers at BNSF Railway meet daily to review information contained in this operational dashboard. This top-level screen contains four unique views that let users quickly ascertain overall operational performance across 45 measures the company tracks on a daily basis.

TACTICAL DASHBOARDS

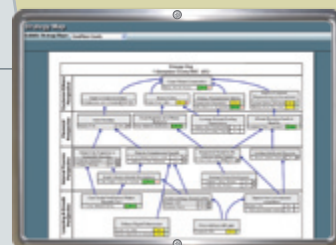
Track departmental processes and projects and emphasize analysis more than monitoring or collaboration. They are often implemented using portals and run against data marts or warehouses, where data is updated weekly or monthly.



Top executives at Rohm and Haas, a global manufacturer of specialty materials, use this tactical dashboard embedded within the company's corporate portal to view performance across all business groups, units, and regions using the drop-down filters on the left. Highlighting one of the 10 metrics in the top table populates the line charts below with corresponding trend data.

STRATEGIC DASHBOARDS

Monitor the execution of strategic objectives at each level of the organization using cascading scorecards. Strategic dashboards emphasize collaboration more than monitoring or analysis and are often deployed using a formal methodology.



This is a strategy map for a county government that shows the cause-effect relationship among strategic objectives across four perspectives often used by governments following the Balanced Scorecard methodology. Using performance metrics associated with each objective, the strategy map visually displays the organization's progress toward achieving its objectives via numeric scores, color-coded status boxes, and color-coded trend arrows.

TOP LAYER

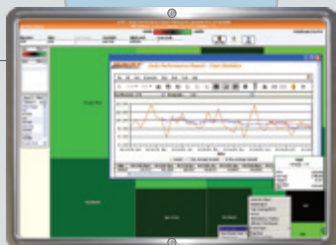
Graphs, symbols, and colors that enable users to monitor overall performance at a glance

MIDDLE LAYER

Dimensional views of data that users can navigate and filter to analyze root causes and effects

BOTTOM LAYER

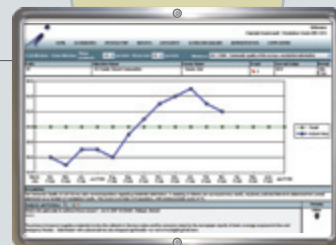
Detailed data that highlights the impact of performance problems and enables users to take action



By clicking on one cell in the treemap (or heatmap) on the top-level page, users drill into a more detailed treemap that shows performance for one metric (e.g., gross ton miles) in the railway's 14 divisions. Right-clicking on one cell (e.g., the Gulf Division) presents numerous options, including a 36-day trend chart (shown).



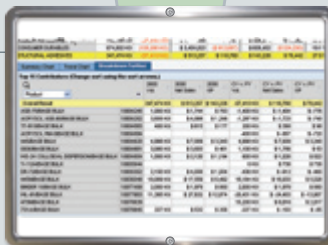
Users visually examine the root cause of indicators for higher-level metrics (e.g., gross profits) using a decomposition tree. In this case, users quickly see that standard costs (Std COS) are higher than planned and may soon affect standard gross profit.



By clicking on a measure in the strategy map, a user can pull up a trend chart for that objective that shows performance over time against predefined targets. The chart also describes the objective—and the metric used to represent the objective—and enables users to annotate and record their discussions about performance results.



Users can also click on the map chart on the front screen to get a more detailed view of the performance of individual rail segments in specific regions. Clicking on a rail segment reveals additional performance data.



Drilling further, users can view a detailed table that shows the top 15 contributors to net profits. They can filter this table by other dimensions.



In addition to displaying objectives and performance measures, strategic scorecards may allow users to drill down to see initiatives (or projects) that have been launched to close key performance gaps. This may display the owners, start and end dates, sub-initiatives, and other information relevant to the progress of the initiative.



Cognos

Cognos, the world leader in business intelligence and performance management solutions, provides the full spectrum of performance dashboards to help companies monitor, measure, and manage organizational performance.

Cognos 8 BI Scorecarding offers strategic dashboards that help organizations link strategy to execution by enabling them to measure performance against strategic objectives, communicate strategy, ensure accountability and ownership, and provide employee focus.

Cognos 8 BI dashboarding produces tactical dashboards that aggregate data from multiple sources, providing a comprehensive snapshot of KPIs. As a core capability of Cognos 8 BI, this at-a-glance view enables seamless drill to the platform's powerful BI capabilities, enabling deeper analysis to improve decision making and reduce lag time in recognizing organizational performance issues.

The **Cognos Now!** BI appliance provides operational dashboards that continuously monitor critical operational business information across the organization. It includes an easy-to-use interface that enables self-service dashboard creation and edit, metric customization, alert setting, and drill down to detailed data. By continuously monitoring operational execution, Cognos Now! optimizes operational processes and improves business performance.

By providing the full spectrum of performance dashboards, Cognos continues to provide its customers with all the capabilities required to drive business performance.

www.cognos.com



Corda

Corda delivers anywhere-anytime visual access to your data that allows insight into the big picture as well as the root causes, enabling timely, accurate, and more informed decisions.

Corda's innovative performance dashboard and data visualization solutions work with almost any data source, from spreadsheets and databases to custom applications. Corda works on almost any platform and with any Web-enabled device.

Corda's products help organizations deliver the—

- Right information in the
- Right format to the
- Right people at the
- Right time.

Gain unprecedented insight and agility with Corda. Corda's dashboards make finding the right information easy and intuitive. Data is easily navigated, can be programmatically controlled to highlight threshold exceptions, and can be presented in ways that best suit specific business processes and metrics. Infinite drill-down capabilities allow decision makers to start at the 50,000-foot view but quickly get to the ground level, so they can spot trends and still see the root causes. Dashboard deployment is fast, flexible, and re-usable with limitless customization. Corda's products and solutions deliver enterprise performance and scalability. Performance dashboards can be created quickly, giving your organization the maximum return on investment.

Decision makers can access their dashboards from any Internet-enabled device, including Palm Treo and BlackBerry.

www.corda.com



Distributive Management

When you make decisions about your business, are you confident that you are always working with accurate and timely information?

Distributive's Web-based performance management software, DataDrill EXPRESS, helps companies of all sizes leverage performance measurement to improve project, process, and business performance through user-friendly dashboards. EXPRESS makes it easy to have up-to-date information accessible 24/7, working to help you understand results, execute strategy, and achieve superior performance. EXPRESS is an exceptionally cost-effective approach for deploying an automated, fully scalable performance management solution. The built-in performance reporting tools and out-of-the-box metrics libraries are designed to get performance dashboards up and running effortlessly. Our intelligent integrations to your sources of data keep performance measurement low-impact and nonreliant on IT resources. EXPRESS consistently delivers the right information to the right people in time for them to act on it. Personalized dashboards, compliance tracking, and exception reporting are delivered in familiar and easy-to-use Web views. EXPRESS includes interactive tools for creating, monitoring, and refining plans and targets alongside actual performance data, and leverages historic data, lessons learned, and best practices to improve the results of current and future endeavors. Visit us for product information, demos, and white papers.

www.distributive.com



DSPanel

"By adding DSP to the Microsoft BI stack, we were able to customize Web Parts... giving our employees in-depth information and key metrics, making it possible for them to directly act on the information now available."

—Lei Fu, VP of Business Applications, LendingTree

Using DSPanel Performance Canvas 2007, a business user, without any knowledge of OLAP, cubes, measures, or dimensions, in 15 minutes can:

- Analyze the business situation, comment and communicate to initiate action.
- Find relevant data using standard search technologies like Microsoft Enterprise Search.
- Create a new drillable performance dashboard/scorecard based on business terms using only a Web browser.
- Publish the performance dashboard for mobile use in his/her cell phone or BlackBerry and send the link to a colleague.

All of this is done while maintaining the core values of real business intelligence solutions:

- Extremely high performance powered by the industry's leading business intelligence infrastructure—Microsoft SQL Server 2005.
- One version of the truth used by all information workers in the organization.
- Fully using and leveraging the open standards for business intelligence, giving unparalleled possibilities in consistent integration of business data by business professionals.

www.dspanel.com



Dundas

If you're looking for custom performance dashboards, Dundas is the only name you need. Founded in 1992, Dundas has grown into the world leader in advanced data visualization solutions for Microsoft technologies.

Dundas produces sophisticated charts, gauges, maps, and calendar components for platforms such as ASP.NET, Windows Forms, SQL Server Reporting Services, and SharePoint 2007. These components are designed to work together to form custom dashboard solutions—feature-rich alternatives to cost-prohibitive and limited turnkey dashboard products. Leverage Dundas's data visualization products and dashboard expertise to create rich, interactive, and intuitive dashboard interfaces. Whether you need to display historical, KPI, geographic, or multidimensional data, all your requirements are met and exceeded by Dundas tools.

See for yourself why *Fortune* 500 companies across the globe choose Dundas and Dundas Consulting for their data visualization and custom dashboard needs. Visit www.dundas.com to view our dashboard galleries, online demos, product videos, and to download full evaluation copies of all our products.

www.dundas.com



IBM

IBM is the world's largest information technology company, with 80 years of leadership in helping businesses innovate. Drawing on resources from across IBM and key business partners, IBM offers a wide range of services, solutions, and technologies that enable customers to create an Information On Demand environment and gain insight into business information by combining through vast quantities of data quickly and then delivering that insight across the organization. These solutions provide right-time access to aggregated, cleansed information, which can be delivered in the context of the activities and processes being performed. Additionally, embedded analytics can also be leveraged as part of a business process to provide role-based access to information, enabling customers to gain competitive advantage by accessing and sharing information across department-level data marts and massive enterprise data warehouses. Not only do these solutions provide insight gleaned from structured information, but IBM also provides customers with the ability to incorporate knowledge from unstructured information, producing a more complete view of the business. All of these solutions are based on a standard reference architecture to ensure an open and flexible business intelligence infrastructure.

www.ibm.com/ondemand/workplace



iDashboards

iDashboards provides organizations with a comprehensive business intelligence dashboard solution to present real-time information. Companies are adopting iDashboards as the corporate standard to deliver performance management, scorecards, and business alerts. There is a strong payback when business users can instantly access, analyze, and drill through a wealth of information for effective decision-making. iDashboards is helping companies improve performance and accountability in every one of their operations.

iDashboards' Business Activity Monitoring (BAM) Module allows monitoring of key performance indicators (KPIs) through real-time e-mail alerts.

iDashboards can seamlessly integrate into any data environment. The iDashboards application draws data from database and data warehouse, data mart, spreadsheets, XML, OLAP, and other data sources. With its patented Visual Intelligence, iDashboards creates unified visual framework for metrics and key performance indicators (KPIs) from disparate data sources. It can pull live metrics from diverse applications such as ERP, financial systems, sales management, or any other business application.

iDashboards also works as a portal within any JSR168 compliant portal and integrates with Microsoft SharePoint. In addition, iDashboards is available for integration with existing software solutions through an OEM partnership.

Discover today's most exceptional dashboard solution.

www.iDashboards.com



Information Builders

Information Builders is the leader in enterprise business intelligence and real-time operational reporting. The company's WebFOCUS products—the industry's most scalable, secure, and flexible—are able to meet all the reporting needs of the extended enterprise, ranging from analysts to power users to the widest deployments for hundreds of thousands of users. Additionally, WebFOCUS is unmatched at empowering organizations seeking to leverage all their data by accessing it all from legacy to data warehouse.

"Operational performance management solutions include the ability to link goals, metrics, and projects in an actionable way. This promotes effective communication, alignment, and analysis, and enables everyone in the organization to understand and contribute toward strategic business goals and to help customers efficiently connect people and processes to manage business performance," said Gerald Cohen, CEO of Information Builders.

With the philosophy that everyone—from the CEO to process clerks to suppliers—needs access to good information for better decision-making, Information Builders' flexible, modular Performance Management Framework is easily tailored to enable a culture of accountability. Enterprise customers such as Eastern Mountain Sports (EMS) rely on Information Builders' WebFOCUS to understand corporate performance and drive business results.

www.informationbuilders.com



LogiXML

LogiXML makes it easy to build Web-based dashboards, develop sophisticated reports, and perform a variety of analyses. With the Logi 8 Business Intelligence Platform, users can combine charts, graphs, analysis grids, and other interactive features in a personalized, dynamic dashboard interface.

Logi 8 provides your report developers with a comprehensive platform that takes advantage of the latest technologies like AJAX to create fully dynamic and interactive, role-based dashboards, scorecards, and information portals for end users. The Logi 8 interactive dashboards allow managers and executives to monitor, measure, and share key performance metrics instantly and view the information most pertinent to their roles.

www.logixml.com/dashboards



Microsoft

Microsoft Office PerformancePoint™ Server 2007 is an integrated performance management application designed to help improve operational and financial performance across all departments and all levels of your organization. With Office PerformancePoint Server 2007, you can monitor progress, analyze what is driving variances, and plan your business from budgeting to creating management reports. You can have metrics, key performance indicators (KPIs), and reports delivered to every desktop through intuitive scorecards, dashboards, and the easy-to-use 2007 Microsoft Office system environment. A key component of the Microsoft Business Intelligence (BI) offering, Office PerformancePoint Server 2007 can help you understand how performance can align with personal and departmental goals and objectives.

Microsoft Business Intelligence Overview

Microsoft BI is delivered through three layers or workloads: data warehousing, reporting and analysis, and performance management. These are designed to provide a consolidated, comprehensive data source and tools to help improve decision making. In our view, the promise of Microsoft BI is to help decision makers at all levels throughout your organization have confidence that their decisions support your company's goals and initiatives.

www.microsoft.com/bi



MicroStrategy

MicroStrategy is a global leader in business intelligence (BI) technology. Founded in 1989, MicroStrategy provides integrated reporting, analysis, and monitoring software that helps leading organizations worldwide make better business decisions every day. Companies choose MicroStrategy for its advanced technical capabilities, sophisticated analytics, and superior data and user scalability.

With thousands of customer successes and a reputation for innovation and leadership, MicroStrategy is the clear choice for your business intelligence requirements. More information about MicroStrategy is available at www.microstrategy.com/BestInBI. Find out more about our dashboard solutions at our Web site.

www.microstrategy.com/performance



Noetix

Immediate Access to Business Intelligence

Noetix Dashboard provides immediate access to your Oracle E-Business Suite and Siebel Business Applications data, enabling decision makers to actively guide business performance and address emerging problems as they arise.

Benefits of Noetix Dashboard include:

- Fast implementation time
- Leverages your existing technology
- Decisions made with up-to-date data
- Centralized management and administration
- Improved business performance and profitability

With a library of dashboard templates that display key metrics for tracking your organization's performance, you can quickly deploy dashboards that meet your needs. For users of the Oracle E-Business Suite or Siebel Business Applications, Noetix provides hundreds of preconfigured KPIs, which connect automatically to your data through NoetixViews technology.

Noetix provides software that automatically generates metadata from Oracle's Enterprise Applications, enabling immediate access to business intelligence data. More than 1,300 customers worldwide use Noetix's proven technology, empowering users to quickly generate the ad hoc operational reports and dashboards needed for critical and timely business decisions.

Discover how to dramatically increase the return on your reporting investment and enhance your ability to quickly answer critical business questions. Call us toll-free at 866-4NOETIX or visit our Web site.

www.sap.com



The Three Threes of Performance Dashboards

Performance dashboards are the new face of business intelligence. The dashboards of today are full-fledged business information systems, designed to help organizations communicate strategy, monitor and adjust the execution of strategy, and deliver insights and information to all.

Performance dashboards provide a layered interface that conforms to the way users work, helping them move through successive layers of information in a carefully guided and systematic manner. When aligned with strategic objectives and plans, performance dashboards empower users to work more efficiently and effectively toward a common set of goals. They help measure the past, monitor the present, and forecast the future, allowing an organization to adjust its strategy and tactics in real time to optimize performance.

TOWI thanks BNSF Railway, Rohm and Haas, and InsightInformation for supplying the screenshots for this poster.



Oracle

Oracle's business is information—how to manage it, use it, share it, protect it. The world's largest enterprise software company, Oracle is the only vendor to offer solutions for every tier of your business—database, middleware, business intelligence, business applications, and collaboration. With Oracle, you get information that helps you measure results, improve business processes, and communicate a single truth to your constituents.

www.oracle.com



SAP

SAP is the world's leading provider of business software. More than 38,000 customers in more than 120 countries run SAP applications—from distinct solutions addressing the needs of small and midsize enterprises to suite offerings for global organizations. Powered by the SAP NetWeaver™ platform to drive innovation and enable business change, SAP software helps enterprises of all sizes around the world improve customer relationships, enhance partner collaboration, and create efficiencies across their supply chains and business operations. SAP solution portfolios support the unique business processes of more than 25 industries, including high-tech, retail, financial services, healthcare, and the public sector. With subsidiaries in more than 50 countries, the company is listed on several exchanges, including the Frankfurt stock exchange and NYSE, under the symbol SAP.

www.sap.com