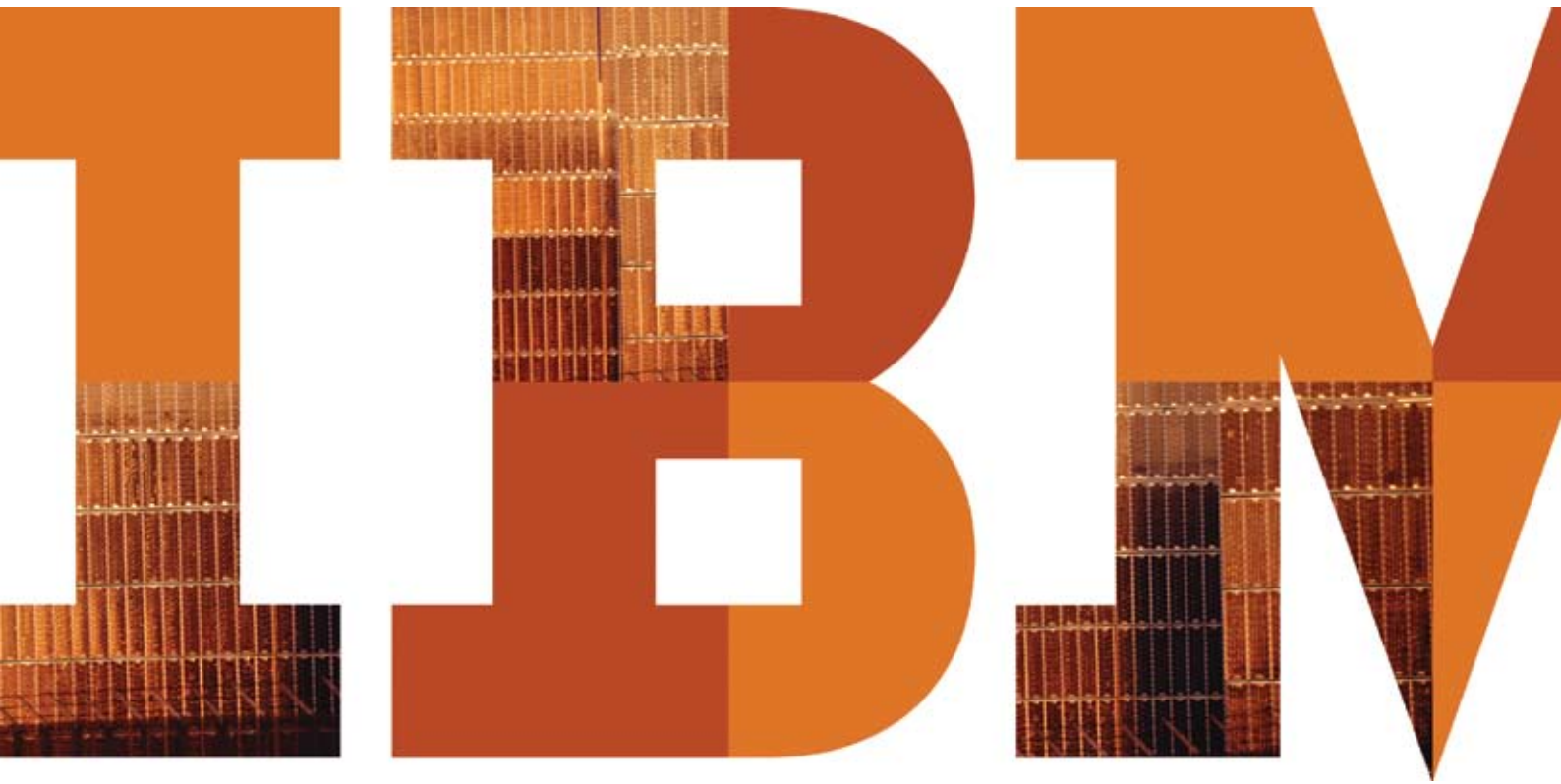


Extending business intelligence with dashboards



Overview

Imagine being able to track the key performance metrics for processes, products or supply chains most important to you and then drilling down whenever you wanted to see transaction details most pertinent to your personal needs. You would gain key insights faster and be able to take immediate action on the decisions you contribute to for better business outcomes.

Now, consider the possibility of having the inventory metrics you need to review a problem in a distribution center (DC) on the spot without being connected to your business intelligence infrastructure. And, having someone at another DC in another country getting inventory metrics specific to that DC the same way. Or, being confident that everyone in a conference call with participants from all over the world has the same sales figures for a product that launched six months ago.

With the right kind of dashboards, all this is possible.

This paper reviews the benefits of dashboards in general and then shows how a new generation of business dashboards that meet specific needs can enrich business intelligence (BI) solutions and become an integral part of your business analytics arsenal.

Business challenges: Cracking the code of business intelligence

“The main challenge is determining the appropriate end user tool to use to meet any specific reporting need and coordinating the requests with the various internal support groups.”¹

—David O’Keefe, IT manager for Honeywell International, Inc.

It is no secret that business intelligence-fueled organizations make better decisions and perform better than the competition. Data that becomes information in context is a powerful force to align people in terms of what you want to achieve, to keep track of how you’re doing and help you determine how you can correct your course as conditions change (Figure 1).



Figure 1. When dashboards are a part of your BI solutions, you can easily and quickly keep track of how you’re doing and even determine how you can course-correct as conditions change.

So, why doesn’t every organization embrace dashboards as part of their BI approach?

The answer to that question lies in the common challenges associated with ensuring broad usage of BI tools and information:

¹Jeff Kelly, “Survey: Aligning BI with users, funding among top BI challenges.” SearchBusinessAnalytics.com, 8 July 2010 <http://searchbusinessanalytics.techtarget.com/news/2240019957/Survey-Aligning-BI-with-users-funding-among-top-BI-challenges>

- **Technical skills and training can be limited or bandwidth constrained.** Most decision-makers are not power users. Redesigning and streamlining functionality over disparate sets of tools to make the features more obvious is neither cost effective nor an efficient use of skilled IT resources.
- **The degree of needed interaction can vary.** Because the roles and the skills of decision-makers can cover such a wide range, some are comfortable using and working with BI tools independently, while others require significantly more initial and ongoing support.
- **Getting BI in the hands of all users is difficult.** In a 2010 SearchBusinessAnalytics.com survey, 58% of respondents said that they plan to roll out BI to more business users over the next year, but some indicated a concern over whether current BI tools could be tailored to meet the needs of all the different types of users.²

Dashboards can take the confusion and guess work out of navigating the information provided by your BI and business analytics solution.

An important tool in your business analytics arsenal

“When something artistic is produced based on electronic data, it can be worthwhile without leading to a better understanding of the stories contained in the underlying data, but it isn’t information visualization.”³

—Stephen Few, Perceptual Edge

Dashboards are one of the most effective ways of delivering BI quickly to people because they can help cut through the clutter of information that is available today. According to Louis Barton, a Frost Bank IT executive, dashboards add value by “reducing the cycle time it takes to analyze information. . . . You can make a decision sooner. That means people are more productive.”⁴

Despite the many benefits to all employees in an organization, dashboards have still not ventured very far out of the executive suite. There is a perception that dashboards are “nice to have” when you can understand them. Many current dashboard solutions create a complicated experience that do not use best practices for data visualization and that can leave users confused and resistant to implementing them. Also, until recently, none of the different approaches to dashboard presentation (slide shows, graphs in spreadsheets, data warehouse reporting packages and third-party BI add-ons) was optimal for presenting a clear view of business.

The key to the successful use of dashboards is to recognize the different ways people interact with information and the different business realities they face. This approach is the foundation of a new generation of dashboards designed to meet the needs of all the users out there who need information that is most meaningful to them fast and in all types of formats, whether they are in the office or on a plane. Users receive personalized information or professionally authored reports in the form they need it without having to wait for IT to make changes or without being connected to BI infrastructure or even a browser.

²Jeff Kelly, “Survey,” 8 July 2010.

<http://searchbusinessanalytics.techtarget.com/news/2240019957/Survey-Aligning-BI-with-users-funding-among-top-BI-challenges>

³Stephen Few, Information Visualization, Design, and the Arts Collision or Collaboration? *Visual Business Intelligence Newsletter*, January 2010. http://www.perceptualedge.com/articles/visual_business_intelligence/information_visualization_and_art.pdf

⁴Charlie Russo, “Performance dashboards aren’t just for executives.” *CIO News*, 5 October 2005. <http://searchcio.techtarget.com/news/1131634/Performance-dashboards-arent-just-for-executives>

**A new generation of dashboards:
The freedom and flexibility for everyone
to explore and see relevant information
in ways most meaningful to them**

“I believe too much of the focus is still being placed on collecting, manipulating and managing data when it really should be put on how users interact with the data, and what business conditions they are trying to improve via this interaction.”⁵

—Tom Gonzalez, Managing Director of BrightPoint Consulting, Inc.

The true driver of success comes from putting information and insight into the hands of many different users. Because they have different experiences, roles and responsibilities, your employees need the freedom and flexibility to explore and see relevant information in ways that are most meaningful to them. Simple, familiar user interfaces should help them find answers to their own questions without changing tools or learning new applications as they expand their thinking. They should be able to view dashboards on their mobile devices and whether they are connected to BI infrastructure or not.

Two types of dashboard solutions can meet these needs: personalized, interactive dashboard solutions that are integrated into BI solutions (Figure 2) and solutions that help produce a professionally authored dashboard once that can be shared with everyone who needs it. This new generation of dashboards moves BI content beyond the specialists who have used and benefitted from it for years and makes it available to everyone, no matter where they are, what application they’re using or whether they are connected.



Figure 2. With personalized dashboards, you can view, interact with and analyze the result sets most meaningful to you.

⁵Tom Gonzalez. “The Future of BI: Are dashboards pointing the way?” *Dashboard Insights*, June 18, 2008. <http://www.dashboardinsight.com/articles/new-concepts-in-business-intelligence/the-future-of-bi.aspx>

Personalized dashboards: Limitless workspace

Personalized dashboards make it possible to:

- View, interact with and analyze information that is meaningful to you.
- Help others follow your train of thought and understand your unique perspective.
- Drag-and-drop trusted content, filters and other content, such as RSS feeds, HTML, text, and images.
- Modify and arrange layout, add colors and text, add comments and personalize widgets.
- Change display, add calculations, filter/prompt, drill up/down and sort data.
- Share dashboard objects for collaboration.

The principles of the new generation of dashboards

The following principles serve as an effective guide for understanding why a new generation of dashboards can help your organization manage performance better and create new opportunities for business optimization:

- **The new generation of dashboards recognizes that dashboards mean different things to different people.** There is no one size fits all and no single definition that applies across the board. The new generation of dashboards

accommodates different comfort levels with technologies and individual roles. Close alignment between the user's role and the user interface enables productivity and acceptance.

- **The new generation of dashboards helps users turn insight into action.** A dashboard should provide all types of users with information they can use to move from insight to action quickly. It should enable an approach to exploring issues that can also predict potential outcomes and allow a course change (if necessary) before future issues arise.
- **The new generation of dashboards is open to new contexts.** The new generation of dashboards delivers views beyond the boundaries of standard BI products. Users can easily add new contexts—and, therefore new insights—to the information at hand and have the flexibility to add new data (such as market data) or adopt new visualizations to drive more insight and address new business questions. They can also see the information they need to in their choice of interfaces or applications so that they can make sense of it quickly.
- **The new generation of dashboards is easy to manage.** IT resources are scarce and valuable in most organizations and they don't have time for complicated dashboard management tasks. The new generation of dashboards enables an IT environment where dashboard views can be authored once and then scheduled, burst and accessed anywhere in familiar formats, which maximizes utility to a business.

The characteristics of the new generation of dashboards

The new generation of dashboards provides the right level of information in a format that makes sense to users and can be accessed any time they need it. They should not have to be connected to your BI infrastructure or a web browser—or be using a specific application. This is because business users don't have days to spare to come to a decision. They must make the call almost as soon as an issue becomes apparent. The new generation of dashboards removes this roadblock by giving each person a “birds-eye” view of their role and letting them interact with content with these features:

- Rich graphics that make charts and gauges visually appealing to help quality information make the best impression
- Functionality for changing their views and updating them on the fly
- Self-service capabilities so IT intervention is rare or eliminated
- Role-based information delivery to ensure that each user assembles a dashboard only from reports he or she has clearance to access
- Integration with Microsoft® Office applications so users can work easily and comfortably with familiar interfaces
- Easy to personalize search tools (Figure 3)



Figure 3. An easy-to-use search tool makes it easy to integrate a dashboard into everyday work flow.

The new generation of dashboard also takes into account the users who want interactive dashboards they can use to explore and analyze information without having to create or author them. For these users, there are “write once, use many” dashboards that are distributed in forms they can use, even if they are not using a web browser or connected to BI infrastructure.

Dashboards you can author once, consume anywhere

The new generation of dashboards offer more than just a workspace users can personalize; they also offer the capability to create single report that users can access on multiple devices, in multiple formats and in other applications and processes. These types of dashboards make it possible to:

- Import and refresh BI content in Microsoft Office.
- Embed BI content in third-party applications and portals.
- Take reports with you on your mobile devices.
- Review and interact with content offline.

The benefits of the new generation of dashboards

The new generation of dashboards helps users make decisions quickly, without any guesswork and without having to wade through irrelevant information. These dashboards provide an intuitive environment so people can request, edit and adapt dashboard content. This means users at all levels, from executives to employees in the field, can:

- Change the content or layout of existing dashboards without difficulty and frustration.
- Receive the dashboards they need without having to think about creating them.
- View content the way they prefer because there are no constraints on the type of content and how it is presented, other than security precautions.

The new generation of dashboards also takes into account the different needs of different users:

- Executives can easily access an at-a-glance view of how their organization is performing and then quickly drill down to an appropriate level of detail, which will help them make fast, effective decisions.
- Business users are able to assemble information into a view that makes sense for them with the flexibility for deeper analysis to drive their decisions.
- IT administrators can enable an environment where trusted content can be authored once and accessed anywhere (Figure 4). This maximizes efficiency for IT and empowers your business.



Figure 4. The new generation of dashboards include those that can be viewed and interacted with offline

IBM Cognos 10: Intelligence Unleashed Smarter Decisions. Better Results.

Cognos 10 delivers a revolutionary new user experience and expands traditional business intelligence (BI) with planning, scenario modeling, real-time monitoring and predictive analytics. With the ability to interact, search and assemble all perspectives of your business, Cognos 10 provides a limitless BI workspace to support how people think and work.

Cognos 10 enables organizations to outperform by providing:

- **Analytics** that everyone can use in a BI workspace that sharpens individual skills to answer key business questions
- **Collective intelligence** with built-in collaboration and social networking to connect people and insights to gain alignment
- **Actionable insight** everywhere in mobile, real-time and business processes to instantly respond at the point of impact

Built on a proven technology platform, Cognos 10 is designed to upgrade seamlessly and to cost-effectively scale for the broadest of deployments. Cognos 10 provides you and your organization the freedom to see more, do more—and make the smart decisions that drive better business results.

The new generation of dashboards integrated into your BI solution: IBM Cognos dashboard software

“We use the IBM Cognos BI dashboarding capabilities to track actual performance against benchmarks. The IBM Cognos Dashboard also allows our decision-makers to view the interrelationships of complex statistical data from a variety of sources such as Cognos multidimensional data cubes, third-party cubes, managed reports or flat files in a single visualization.”⁶

—Norm Costin, Vice President of IT, Blue Cross Blue Shield of Massachusetts

IBM Cognos® software unleashes the collective intelligence in your organization with personalized dashboards offered as part of Cognos Business Intelligence solutions, so everyone can see around corners, predict outcomes, make informed decisions and act smarter and faster than the competition. Users are provided with an interactive dashboard experience for a deeper understanding and improved decision-making where, when and how it is required.

⁶“Blue Cross Blue Shield Sees the Bigger Picture with IBM Cognos Dashboards.” *Information Management Magazine*, August 1, 2008. http://www.information-management.com/issues/2007_50/10001744-1.html

IBM provides dashboard capabilities that allow any user to access, interact and personalize content in a way that supports the way they make decisions. Users can quickly move from insight to action. They also benefit from the power of their dashboard content with information they can trust, from their perspective, in their desired format.

Because dashboard capabilities are an integral part of IBM Cognos Business intelligence, users can:

- Add, view and interact with and refresh dashboard content in Microsoft Office applications.
- View and interact with dashboards on many types of mobile devices.
- Schedule, burst and distribute professionally authored dashboard content to a broad audience of consumers who need disconnected access to their dashboards.

With Cognos software, users get a full view of all data from all time horizons for improved decision-making. This includes access to IBM Cognos Real-time Monitoring for comparing dashboard views with up-to-date, actionable intelligence. Also, users can bring in predictive models with IBM SPSS solutions to provide views of predictive modeling to analyze past performance at a detailed level to plan future strategies and tactics more effectively. Dashboards can also include content from IBM Cognos TM1 for scenario planning.

Conclusion

The challenges of making BI more widely available to users in all parts of your organization can be resolved in part by a new generation of dashboards that are integrated into your BI solution. IBM Cognos dashboard capabilities enable any user to access, interact and personalize content in a way that supports the unique way they make decisions. We even offer reporting solutions that distribute professionally authored, interactive dashboard content to your broader user community that they can access without being connected. When everyone in your business is provided with a personalized, interactive dashboard experience, not only is your company better aligned, but everyone gains a deeper understanding of your business and where it is headed.



About IBM Business Analytics

IBM Business Analytics software delivers complete, consistent and accurate information that decision-makers trust to improve business performance. A comprehensive portfolio of [business intelligence](#), [advanced analytics](#), [financial performance and strategy management](#) and [analytic applications](#) gives you clear, immediate and actionable insights into current performance and the ability to predict future outcomes.

Combined with rich industry solutions, proven practices and professional services, organizations of every size can drive the highest IT productivity and deliver better results.

For more information

For further information or to reach a representative: ibm.com/cognos.

Request a call

To request a call or to ask a question, go to ibm.com/cognos/contactus. An IBM Cognos representative will respond to your enquiry within two business days.

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