

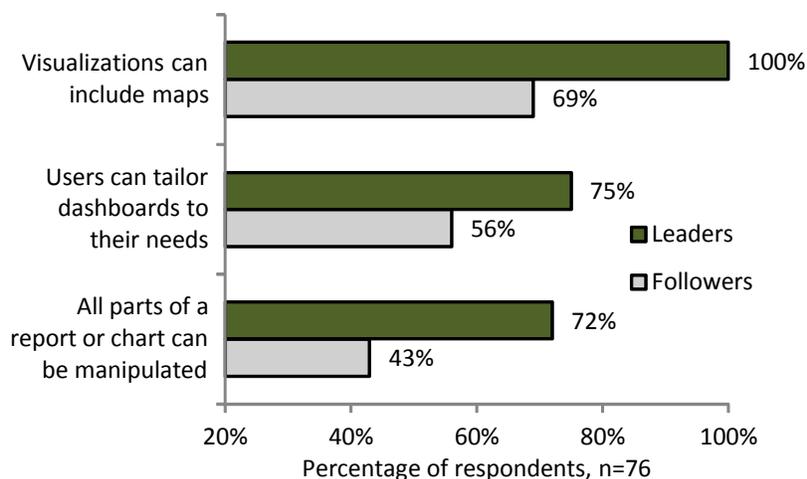
Making the Most of Your Dashboard Investments

Dashboards are one of three main types of business intelligence (BI) user interface described in the sidebar on page 2. Able to show metrics from many different areas of the business in a graphical way, dashboards are also quite pervasive. Just over half (76) of the 147 organizations responding to Aberdeen's [May 2013 agile analytics survey](#) use dashboards as part of their (BI) portfolio. But, simply having dashboards and using them effectively and efficiently is not necessarily the same thing. Aberdeen's research found that dashboard Leaders (see sidebar definition below) get more from their dashboard investments by providing a richer end-user experience and accelerating the dashboard development cycle.

Leaders have a Richer, More Compelling Experience

There are several capabilities that Leaders are more likely to exhibit than Followers. For example, as Figure 1 shows, Leaders are 34% more likely than Followers to have dashboards that can be tailored by end-users without help from skilled IT staff (75% vs. 56%). This brings benefits to both IT staff and dashboard users.

Figure 1: Visual, Interactive, and Tailored



Source: Aberdeen Group, May 2013

Dashboard users, for instance, get to see exactly the information they want to see the way they want to see it. This could be as simple as changing colors in a chart. Or, it could be as sophisticated as changing how a metric is presented, or even changing the metric shown. For example, call-center

Analyst Insight

Aberdeen's Insights provide the analyst's perspective on the research as drawn from an aggregated view of research surveys, interviews, and data analysis.

Leaders Defined

Based on data collected from 73 organizations using dashboards in April and May of 2013, the top performing 35% of organizations (Leaders) were segmented from Followers (the remaining 65%) using three criteria that reflect the effectiveness of their dashboard strategy. The relative performance of Leaders and Followers is also shown:

- ✓ **Frequency of finding information in the time required to inform decisions:**
Leaders – 91%,
Followers – 74%
- ✓ **Average total elapsed time to build a new dashboard:**
Leaders – 7 days,
Followers – 23 days
- ✓ **Percentage of all BI users with access to dashboards:**
Leaders – 81%,
Followers – 40%

* All results were normalized to allow for company size

wait time may be shown as a bar chart, with the mean time shown from one hour to the next. However, for those managers directly responsible for the call center, it may be more informative to show the current wait time as a gauge style display. This gauge could include color coding to indicate acceptable, mediocre, and unacceptable call wait times in a way that can quickly be comprehended, spurring action when necessary. Similarly, a call center manager may decide that the median call wait time is more useful to know than the mean. Given the right dashboard tools and supporting environment, these are changes that could potentially be made by dashboard users themselves. Not only does this help managers get exactly the information they need, but it can drive a closer engagement with, and commitment to, the analytics solution.

From a dashboard developer perspective, having users tackle this “last mile” of the dashboard solution can free up their precious skills for more technically demanding tasks. Fortunately, such a self-service approach is becoming more the norm. For example, 64% of the 147 survey respondents to Aberdeen’s agile analytics survey strive to enable their BI users to be more self-sufficient. It’s noteworthy that while Leaders are 36% more likely than Followers to have users tailor their own dashboards, Leaders are also able to build a new dashboard over three times faster than Followers. When users can take care of simple customization themselves, developers can add more strategic value. As well as building new dashboards faster, Leaders also get dashboards into the hands of twice as many BI users — 81% of the BI user population compared to 40%, respectively.

Dashboard users at Leaders also benefit from a richer, more interactive solution. Seventy-two percent (72%) of Leaders have dashboards where all elements are fully interactive, while only 43% of Followers do so. Interacting with data — through drill-down, filtering, and sorting, for example — is another powerful aspect to help BI become more self-sufficient. All Leaders also have the ability to include maps in their visualizations, whereas only 69% of Followers can do so. When users are presented only with static views of information, they often reach an impasse if those views do not contain the answers they need at any point in time.

Lacking interactive tools to manipulate data, business managers are dependent on skilled IT staff to help them find those answers. Often, that help isn’t available in time to support management decision making. But highly interactive dashboards can help. When managers are able to manipulate data directly, they are able to explore cause-and-effect and gain insights that cannot be gained from staring at static views of information. In this way, the self-service capability ushered in by the ability to interact with data can help managers find the answers to unanticipated questions. While Leaders are 67% more likely than Followers to have highly interactive dashboards, managers at Leaders are 22% more likely than Followers to find the information they need, exactly when they need it.

The Flavors of BI

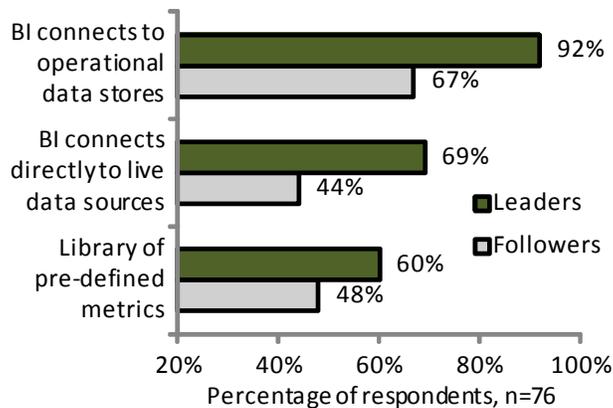
Broadly, business intelligence comes in three different styles:

- √ **Managed reporting:** Information is often presented as tables of numbers, perhaps with the occasional chart. User interaction is often limited or non-existent.
- √ **Dashboards:** Presents information both numerically and graphically. The ability to interact with data — using “drill-down,” for example — is common. In many cases, IT skills are heavily involved in the completion of dashboard projects.
- √ **Visual data discovery:** A rich, highly interactive, visual tool is provided to business users to allow them to manipulate and explore information directly. Although corporate IT is still involved, a large part of the responsibility for creating and accessing different views of the data falls on the business community.

Foundations of Top Dashboard Performance

As Figure 2 shows, Leaders are 25% more likely than Followers to have a library of metrics (or key performance indicators — KPIs) that they can draw from as they create or enhance their dashboards.

Figure 2: Foundations of Leaders Dashboards



Source: Aberdeen Group, May 2013

This can have advantages for both dashboard developers and dashboard users alike. For developers, a library of predefined metrics can accelerate dashboard development. Instead of having to define each metric — such as overtime hours worked, or on-time shipping percentage, for example — each time it is used, developers can use the existing definition. This can save time. For dashboard users, however, the benefits can be even more powerful. Consider what can go wrong when developers must define a metric every single time they use it to populate a dashboard. Potentially, that metric could be defined differently every single time. In this way, different departments within the same organization may inadvertently measure overtime differently, or on-time shipping rate differently. Such confusion can make it virtually impossible to compare the performance of different business units across the enterprise, for instance. In other words, using a library of predefined key performance indicators can lay the foundation for the single version of the truth that still eludes many organizations today.

In addition, the quest for timely information to support decision-making means that traditional analytics data stores — such as a data warehouse — are not always an adequate solution. A data warehouse can provide a comprehensive body of historical data, neatly summarized and aggregated. However, data warehouses are typically updated periodically with batches of transactions, not in real-time (or near real-time). Consequently, a data warehouse usually cannot provide recently captured data to answer questions. For example, “What is the average call duration so far today?” cannot be answered by tapping a data warehouse. The data to answer this type of question can best be sourced from an operational data store (ODS),

Engaging Dashboards

Leaders typically develop more engaging dashboards than Followers:

- ✓ At Leaders, 32% of dashboard users interact extensively with dashboards. Only 19% of users do so at Followers.
- ✓ At Leaders, 53% of managers used BI at least once a week. Only 37% of users do so at Followers.

Complementary Dashboards

Organizations typically use dashboards in conjunction with managed reporting. Of the 76 dashboard users included in this survey, 69 also use managed reports. Managed reporting solutions can distribute routine information periodically very cost effectively. By contrast, dashboards are often used for ongoing monitoring and exploring cause-and-effect.

or by tapping directly into live data sources. One of the reasons that Leaders are more likely to find the right information in time to inform decisions is because they are more likely to access these data stores to fuel their analytics (Figure 2).

Recommendations

Overall, 46% of survey respondents using dashboards cite that an increasing or changing demand for analytics is the top pressure shaping their approach to BI delivery. Given that, delivering effective dashboards efficiently should be a priority for all organizations. However, business users at Leaders are, on average, 23% more likely than Followers to find the information they need in time to influence their decision making.

To make the most of their dashboard investments, organizations should consider:

- **Adding operational data stores or live data feeds.** As noted, Leaders are 37% more likely than Followers to provide access to operational data stores and 57% more likely to tap live data feeds through BI. This allows managers to make decisions using data that may have been generated too recently to have been migrated to a traditional data warehouse. This, in part, accounts for the increased ability of managers to find timely information.
- **Maximizing interactivity to drive self-service.** While 72% of Leaders have fully interactive analytics environments, only 43% of Followers do so. The ability to manipulate data extensively underpins self-service analytics. It allows business users to find answers to unexpected questions without the help of time-pressed IT staff. Interactivity also enables managers to navigate easily through layers of information to determine cause-and-effect when problems arise. In this way, interactive dashboard solutions help to increase the odds that managers can find the information they need in time to support their decisions.
- **Optimizing developer productivity.** On average, Leaders are able to develop a new dashboard in seven days — Followers take 23 days. This helps to explain how dashboards can be deployed to a much greater percentage of all business intelligence users (81% vs. 40%). Ensuring that users can customize their own dashboards can relieve skilled IT personnel of the burden of many time-consuming, yet simple, change requests. Ensuring that users are as self-sufficient as possible by providing interactive solutions also helps in this respect. The less time IT staff need to spend changing existing dashboards, the more time they can spend developing new ones. Finally, aspects of the dashboard development solution, such as a library of pre-build metrics, can also help to accelerate the development of new dashboard projects.

For more information on this or other research topics, please visit www.aberdeen.com

Survey Demographics

The demographics of the 76 survey respondents currently using dashboards were:

- √ **Headquarters:** North America – 57%; Europe – 31%; Asia / Pacific – 11%; Latin America – 1%
- √ **Headcount:** Large (more than 1,000 employees) – 38%; midsize (between 101 and 1,000 employees) – 24%; small (100 employees or less) – 38%
- √ **Annual Revenue:** Large (greater than \$1bn) – 25%; midsize (between \$50m and \$1bn) – 30%; small (Under \$50m) – 45%
- √ **Industry:** IT consulting / services – 23%; software – 21%; insurance – 6%; retail – 6%; government / public sector – 4%; telecommunications services – 4%; travel and hospitality – 4%; other – 32%

Related Research

[Visualization: Set Your Analytics Users Free](#); August 2013

[Agile Analytics: Staying Afloat on the Rising Tide of Information Needs](#); June 2013

[Software-as-a-Service Helps Deliver Satisfied Analytics Users](#); May 2013

[Decisions on the Move: Mobile BI 2013](#); April 2013

[A Simple Cost Justification for Self-Service Analytics](#); February 2013

[Packaged Analytics: The Gift that Keeps on Giving](#); January 2013

[Agile Data Integration: The SMB Perspective](#); December 2012

[BI Without Tears: Analytics without Coding](#); October 2012

[The Grinning CFO: How to Get a Return on BI Projects in Less Than 4 Months](#); October 2012

[Pervasive Cloud BI: Analyst, Advocate, Problem-Solver - All in One](#); September 2012

[Real-Time Data Integration: Driving Near Real-Time Analytics](#); September 2012

[Beyond Agile Analytics: Is Agile Data Integration Next](#); June 2012

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