

October, 2010

## Mobile BI: Delivering Actionable Intelligence to the Point of Decision

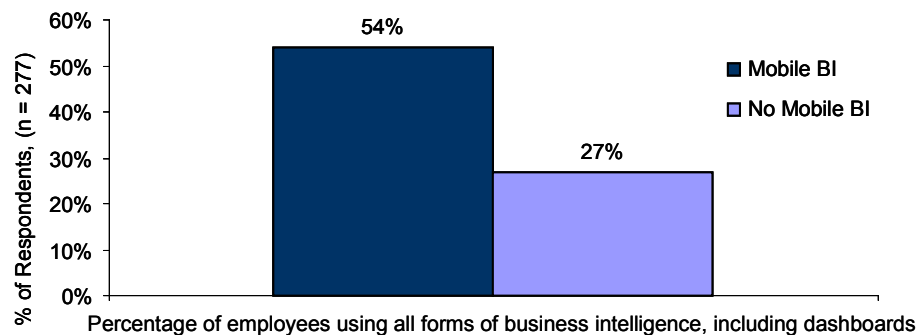
In the July 2010 Aberdeen report *Operational Performance Visibility: Improving Decision Timeliness and Accuracy*, the sales growth of those organizations that deployed mobile Business Intelligence (BI) exceeded the performance of 80% of all other respondents, and in many cases approached or exceeded the top performers across multiple metrics, the Best-in-Class. By extending the reach and usage of their existing BI infrastructure to mobile devices through the use of mobile visualization tools such as dashboards, charts and graphs, organizations can more rapidly respond to market changes and customer need, increasing business efficiency and improving customer satisfaction and retention,

### The Mobile Imperative

Mobility adoption in the enterprise is on the rise and has unstoppable momentum. The March 2009 Aberdeen benchmark report *More Mobility – Less Budget: Enterprise Strategies in the Current Economic Downturn* reported that 84% of responding organizations already had a mobility initiative in place, with less than 2% without any mobility plans within the next 12 months.

Pervasive mobile infrastructure follows the end-user demand, and the same infrastructure that delivers voice and messaging can deliver business data anytime anywhere. The July 2010 report found that BI usage among organizations with Mobile BI was twice the level of those who had not mobilized their BI (Figure 1).

**Figure 1: Mobility Increases BI Usage**



Source: Aberdeen Group, July 2010

### Analyst Insight

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

### Definition of Terms

- ✓ **Business Intelligence (BI):** the combination of processes, disciplines, organizational capabilities and technologies associated with the collection and integration of business performance data; providing access, visualization and delivery of actionable information via Key Performance Indicators (KPIs) to business decision-makers.
- ✓ **Dashboard:** A BI reporting tool that graphically represents KPIs on a single screen, utilizing basic visual tools such as charts, graphs, tables, and gauges.



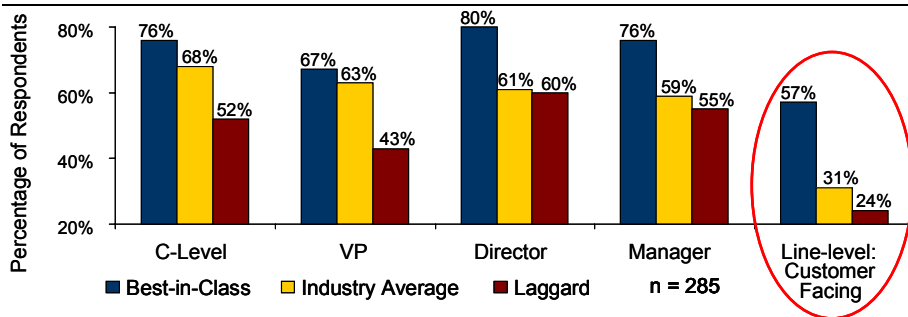
Example of a Mobile BI dashboard

### Democratization of BI Knowledge Access

Historically, BI was typically deployed exclusively to executive decision makers, the so-called "C-suite." This was necessitated by the relatively high cost of software customization required by the deep integration with legacy enterprise application servers such as Enterprise Resource Planning (ERP), Sales Force Automation (SFA), and Customer Relationship Management (CRM); as well as by a corporate culture that equated knowledge with executive power.

Times have changed, and widely disseminating knowledge throughout the organization has become a hallmark of top performing organizations. The May 2009 study *Executive Dashboards: The Key to Unlocking Double Digit Profit Growth* revealed that three-quarters of the Best-in-Class were deploying dashboards to managers, and more than half were putting BI in the hands of customer-facing staff. The latter is at a rate almost twice that of 'all others' (defined as the total of Industry Average and Laggard organizations), as seen in Figure 2.

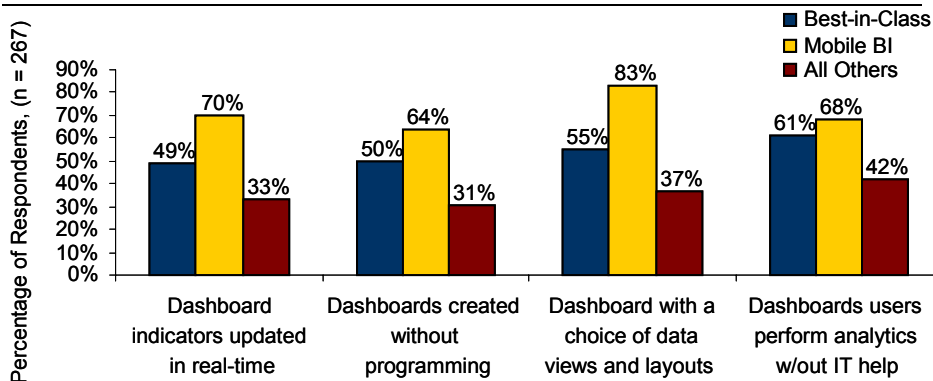
**Figure 2: Best-in-Class Expand Dashboard Use to More Roles**



Source: Aberdeen Group, May 2009

This BI 'access democratization' extends the reach and increases the usage of the organization's existing BI investment, improving its operational efficiency, and ultimately its ROI.

**Figure 3: Mobile Dashboards Improve Efficiency and Responsiveness**



Source: Aberdeen Group, July 2010

#### Definition of Terms

- ✓ **Best-in-Class:** as measured across a variety of business performance metrics, the top 20% of survey respondents
- ✓ **Industry Average:** middle 50% of survey respondents
- ✓ **Laggard:** bottom 30% of survey respondents

#### Best-in-Class Performance Criteria

In *Operational Performance Visibility: Improving Decision Timeliness and Accuracy*, Aberdeen used three performance criteria to distinguish Best-in-Class companies:

- ✓ Customer satisfaction rate of 92%
- ✓ Year-over-year change in revenue performance of 38%
- ✓ Forecast to plan ratio of 87%

Mobile dashboard capability can have a direct impact on the overall efficiency and responsiveness of the total BI system. As shown in Figure 3, Mobile BI users are 43% more likely than Best-in-Class users to have their dashboard indicators updated in real-time as operational data changes. They're 28% more likely to be able to create customized dashboards without the need for software programming, and 51% more likely to provide user-selectable graphic views and layouts, which becomes increasingly important with today's smartphone and tablet customizable touch-based user interfaces. They're also able to perform data analysis in a self-service mode, without direct assistance from IT.

By reducing the support burden on corporate IT, BI becomes pervasive in the organization. Having more users that are self-supporting frees IT to scale to support even more BI users.

### Increasing Efficiency at the Customer Interface

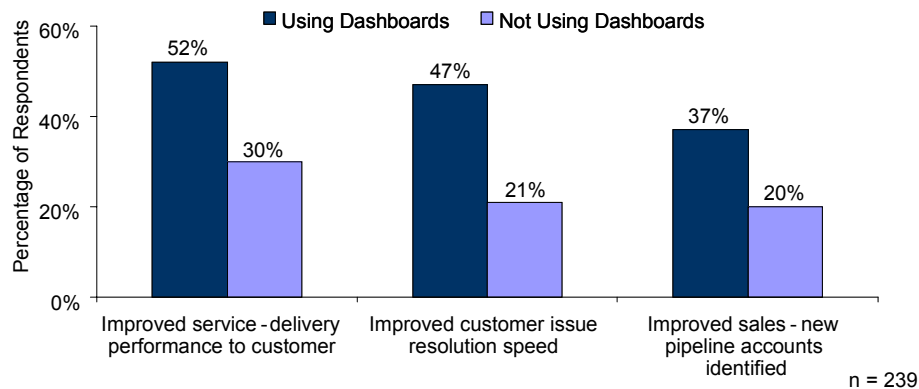
In addition to supporting an increase in the internal efficiencies, Mobile BI also fosters increased efficiency for externally-facing customer interactions.

The value of BI at the customer interface has been evident for quite some time. As early as September 2008, in the report [\*One Version of the Truth 2.0: Are Your Decisions Based on Reality?\*](#), Aberdeen identified the use of BI dashboards as enhancing the performance of customer-facing interactions (Figure 4).

“We are able to easily develop and distribute mobile reports that ensure our executives and sales force are always connected to the pulse of our business.”

~ Manoj Prashad, Vice President of Enterprise Architecture, Global Applications and Testing Life Technologies, Inc.

**Figure 4: Dashboard Users Drive Performance Enhancements**

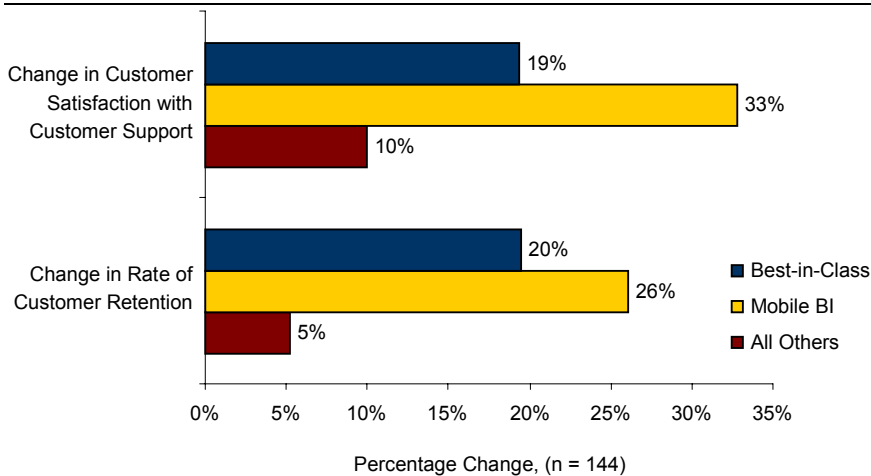


Source: Aberdeen Group, September 2008

### Customer Impact

In the July 2010 study [\*Operational Performance Visibility: Improving Decision Timeliness and Accuracy\*](#), organizations that had mobile BI solutions in place saw a 33% improvement in customer satisfaction with customer support, and a 26% improvement in the rate of customer retention (Figure 5).

**Figure 5: Year-to-Year Impact on the Customer Experience**



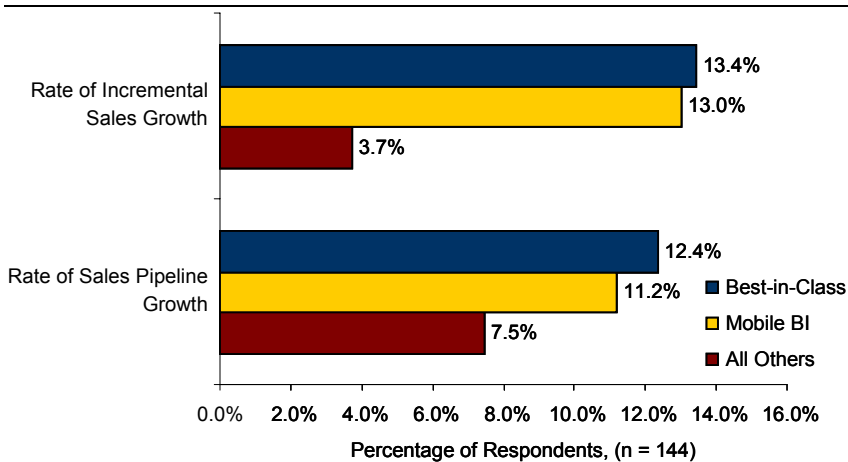
Source: Aberdeen Group, July 2010

This shows significant impact, at a rate 73% greater than the Best-in-Class in terms of customer satisfaction with support, and 30% greater in terms of customer retention. As shown, this was 3.3-times the improvement of all other companies (Industry Average plus Laggard) in customer support satisfaction, and over 5-times the customer retention rate of all others.

### Growing the Top Line

The democratization of information access enabled by mobile BI can do more than increase organizational agility and improve customer-facing performance metrics. As a result of delivering actionable intelligence to the point of decision and improving the customer experience, it also has a significant positive impact on the rate of incremental sales growth and sales pipeline growth, as shown in Figure 6.

**Figure 6: Mobile BI Helps Increase the Sales Funnel**



Source: Aberdeen Group, July 2010

The rate of incremental sales growth of all mobile BI-enabled organizations in the study approaches that of the top 20% (the Best-in-Class) of all organizations without mobile BI. They also achieved 250% more incremental

sales growth than the remaining 80% of non-mobile BI organizations (Industry Average plus Laggard); and 49% more sales pipeline growth, respectively.

## Case in Point: Dow Corning

Dow Corning is a global leader in silicones and high purity silicon, with more than 7,000 products/services, approximately 25,000 customers and 10,000 employees, and over \$5B USD in sales in 2009.

They have had a strategic objective to mobilize their BI systems for several years, but found that the flexibility provided by customized systems was costly to develop and deploy, which hindered broad adoption. These 'first-generation' mobile BI systems also depended on constant connectivity to interact with BI data, which made them useless when the mobile device was not connected or in range of a wireless signal.

The mobile BI tools available at that point in time were text-centric and required navigation through multiple modal menus to obtain the desired information. By attempting to squeeze a full text-based BI report into the confined screen real estate of a mobile device, employee adoption was limited and end-users complained of non-intuitive use, slow response time, and the lack of an offline or 'out-of-signal' mode.

Dow Corning evaluated several 'next-generation' mobile BI systems, seeking a solution that would allow them to leverage their existing BI and security infrastructure, as well as leverage their existing BI reports. They chose the RoamBI Enterprise Server (ES) edition from MeLLmo, a San Diego, California-based mobile BI software company. RoamBI interfaces directly with their back-end BI system, without requiring custom programming.

The solution integrates advanced data visualization tools, and is optimized for the touch and gesture-based user interfaces familiar to users of the latest smartphone and tablet devices. Taking advantage of the onboard graphics processing of these devices enables onboard caching of compact data files, which enables real-time end-user interaction with the data, while simultaneously supporting offline use and minimizing network data traffic.

## Key Takeaways

For organizations that already have a BI implementation in place, as well as for those who are beginning a BI installation or considering one, the following considerations may assist in developing strategic and tactical plans for mobile BI initiative that enhances overall business vitality:

- A mobile BI initiative should not be considered without a well-implemented mobile infrastructure to deploy, manage, support and secure it. For specific recommendations, please refer to the May 2010 Aberdeen report [Enterprise Mobility Management: Optimizing the Full Mobile Lifecycle](#)
- In order to be compatible with the variety of existing mobile devices already in use in the organization, a multi-platform mobile BI solution is recommended
- If the organization has more than one BI system in place, a mobile BI solution that already includes the necessary BI interfaces will be required

"With demands on workers increasing and less time spent at their desks, we knew it was important to provide our employees with easy to access, easy to navigate, business critical information via their mobile devices. Our mobile BI solution lets us dive into this effort without a major time or resource investment."

~ Jeff Duly, Senior Enterprise Architect, Business Intelligence, Dow Corning

### Mobile BI Checklist:

Issues to consider when approaching a Mobile BI strategy:

- ✓ Integration with the organization's existing mobility initiative
- ✓ Multi-platform compatibility
- ✓ Graphically-based UI
- ✓ Optimized for touch and gesture-based interfaces
- ✓ Capable of real-time or in-memory data analysis
- ✓ Compatibility with each of the BI systems in-house

- Given the graphically sophisticated user interfaces becoming commonplace among mobile devices such as smartphones and tablets, an interface optimized for visualization and touch or gesture-based interaction is suggested
- As the BI back-ends develop real-time or in-memory data processing capability, mobile BI endpoints that have a real-time update capability will provide a distinct advantage
- If there is more than one BI system in the entire organization, cross-compatibility of the mobile BI endpoint with each of those BI systems becomes essential

When deployed across the organization, mobile BI fosters a culture of organizational agility, by delivering decision-critical information wherever and whenever it's needed. This can be while at a desk, in the hall, a conference room, in the street, in a cab, or at the airport. It can also be especially effective when deployed at the customer interface.

A well-implemented mobile BI initiative can also bestow a "halo effect" upon both the organization and the IT team which implements it. What better way to enhance customer interaction and real-time decision making than carrying all the relevant business intelligence in the palm of your hand? For more information on this or other research topics, please visit [www.aberdeen.com](http://www.aberdeen.com).

Related Research	
<p><a href="#"><i>Operational Performance Visibility: Improving Decision Timeliness and Accuracy</i></a>; July 2010</p> <p><a href="#"><i>Enterprise Mobility Management: Optimizing the Full Mobile Lifecycle</i></a>; May 2010</p> <p><a href="#"><i>Data Management for BI: Strategies for Leveraging the Complexity and Growth of Business Data</i></a>; December 2009</p> <p><a href="#"><i>Enterprise Mobile Strategies 2010: More Productivity, Same Budget</i></a>; December 2009</p> <p><a href="#"><i>Executive Dashboards: The Key to Unlocking Double Digit Profit Growth</i></a>; May 2009</p>	<p><a href="#"><i>From Data Discovery to Business Insight</i></a>; April 2009</p> <p><a href="#"><i>Managing the Total Cost of Ownership of BI: The Four Hidden Costs and How to Avoid Them</i></a>; April 2009</p> <p><a href="#"><i>More Mobility – Less Budget: Enterprise Strategies in the Current Economic Downturn</i></a>; March 2009</p> <p><a href="#"><i>An Opened Door: Enter the New Mobile Enterprise Platforms</i></a>; November 2008</p> <p><a href="#"><i>Mobile Business Intelligence: A Path to Pervasive BI?</i></a>; November 2008</p> <p><a href="#"><i>One Version of the Truth 2.0: Are Your Decisions Based on Reality?</i></a>; September 2008</p>
<p>Author: Andrew Borg, Senior Research Analyst, Wireless &amp; Mobility, <a href="mailto:andrew.borg@aberdeen.com">andrew.borg@aberdeen.com</a></p>	

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