

The Analytical SMB

More Data, More Users, Less Time

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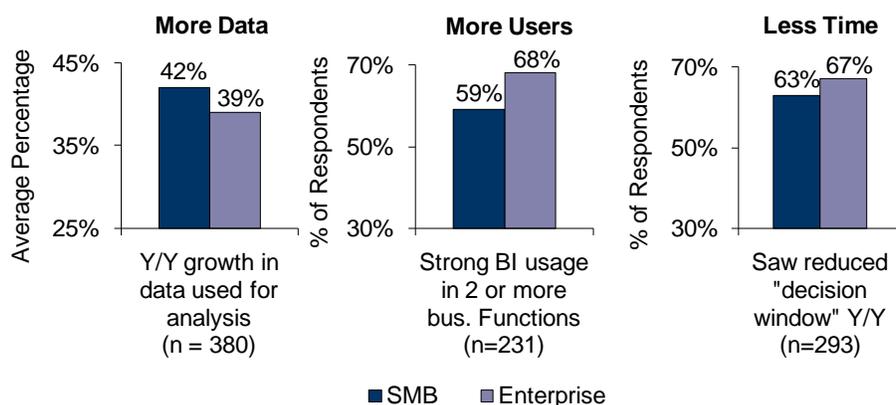
The Analytical SMB: More Data, More Users, Less Time

The challenge of staying competitive in today's unpredictable business environment is further exacerbated by three prominent trends, all of which have a significant impact on our most important business decisions. First, the sheer volume of data flowing into organizations every day, along with the complexity and disparity of that data, makes for a significant challenge for anyone looking to make fact-based decisions. Second, more business decision makers in more job roles and more functions are seeking ways to make better sense of data through their own brand of analytical activity. Third, these very decision makers are reporting that their effective time window for decision-making is shrinking at an alarming rate. In short: more data; more users; and less time. These challenges, while they may seem focused only on enterprise-level companies, are just as prevalent within Small to Midsize Businesses (SMBs - see definition in sidebar). To better manage these issues, many SMBs are increasingly leveraging Business Intelligence (BI) and analytical ideologies to boost the quality of their decisions. This Aberdeen Research Brief draws on three discrete data sets in order to understand the tangible business impact of effective analytics in the SMB market.

Context - The Growing Analytical Imperative

The three trends discussed above form the foundation of a growing imperative around business analytics. Based on data gathered from three different benchmark reports (see sidebar at right), Aberdeen's research offers some quantitative insight into those trends (Figure 1).

Figure 1: Key Trends in Business Analytics



Source: Aberdeen Group, December 2010, June 2011, September 2011

Research Brief

Aberdeen's Research Briefs provide a detailed exploration of a key finding from a primary research study, including key performance indicators, Best-in-Class insight, and vendor insight.

Small to Midsize Businesses (SMBs) Defined

For the purpose of clarification, this document defines small to midsize businesses as any organization with fewer than 1,000 employees.

Research Sources

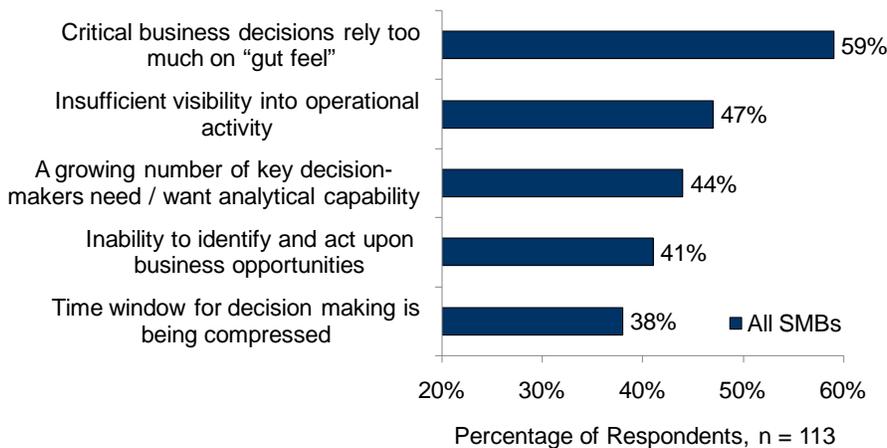
This research utilizes data collected from three separate benchmark reports. These reports are listed below, along with the SMB survey respondent count for each:

- ✓ [Data Management for BI](#), December 2010, 193 SMB respondents
- ✓ [The Analytical Masses](#): July 2011, 113 SMB respondents
- ✓ [Operational Intelligence](#), (unpublished at this time) September 2011, 161 SMB respondents

In comparing SMB respondents to enterprise-level respondents (over 1,000 employees), it's interesting to note the lack of significant disparity in these three trends above. No longer are these challenges reserved for the most deep-pocketed and heavily staffed organizations. Companies of all shapes and sizes are struggling to keep up with a more complex analytical environment and a shorter time window.

In response to these trends, today's technology environment offers a variety of tools that can handle increased data volumes while still remaining relevant to a wide variety of users. In-fact, Aberdeen's July 2011 benchmark report, *The Analytical Masses*, shows that the top business pressure compelling SMBs to invest in business analytics is a need to move toward a data-driven decision environment and away from decisions that rely only on "gut feel" (Figure 2).

Figure 2: Top Pressures Driving Business Analytics for SMBs



Source: Aberdeen Group, June 2011

This figure also demonstrates how SMBs are leveraging business analytics as a tool to mitigate the trends discussed above. Because so many different crucial decision makers are now looking for a reliable method of generating trusted and effective decisions based on data, companies are looking to shape their analytical offerings to satisfy that need among a wide variety of job roles and business functions. Additionally, as the window for effective decision making shrinks, SMBs are now turning to business analytics to help accelerate those decisions and stay competitive in today's harried business environment.

Defining Best-in-Class SMBs

Responding to these three trends, companies in the SMB space are shaping their analytical strategy accordingly. First, in order to drink from the proverbial fire hose of company data and extract the most meaningful business insights, organizations are putting more formalized data management practices in place, and increasing the overall value of their

Aberdeen Methodology: The Maturity Class Framework

The Aberdeen maturity class is comprised of three groups of survey respondents. Classified by their self-reported performance across several key metrics, each respondent falls into one of three categories:

- ✓ **Best-in-Class:** Top 20% of respondents based on performance
- ✓ **Industry Average:** Middle 50% of respondents based on performance
- ✓ **Laggard:** Bottom 30% of respondents based on

Fast Facts

Best-in-Class SMBs achieved:

- ✓ **24%** year over year increase in new customer accounts sold
- Compared to:
- ✓ **12%** for the Industry Average
- ✓ **11%** for Laggards

* Data from unpublished *Operational Intelligence* study

company data. Second, reacting to the increased need for analytics within their diverse base of business decision makers, SMBs are seeking ways to make BI and analytics more pervasive within the organization. Third, the increased time urgency around decision making is forcing these small and midsize companies to define that so-called "decision window" within their organizations, and provide access to decision supporting information within that window. Restated, the quality of business analytics within the SMB space can be bucketed into three categories - data management, widespread BI, and timeliness of information. Using Aberdeen's standard maturity class framework (defined in the callout on the previous page), the research uncovers top performing SMBs across these three areas.

In the first category of effective data management, companies were measured against their ability to adapt their data infrastructure quickly and effectively to deliver on the needs of their user base. Taking data from Aberdeen's December 2010 benchmark report, [Data Management for BI: Fueling the Analytical Engine with High Octane Information](#), two key performance metrics were used to define performance in data management:

- **The agility of data management** is measured as the average number of days required to integrate new data sources into the BI systems
- **User satisfaction** is measured as an average percentage of respondents that report being "satisfied" or "very satisfied" with the quality, relevance, and timeliness of accessible information

Actual weighted average performance across these two metrics is listed in Table I.

Table I: Best-in-Class Performance - Data Management

Metrics	Best-in-Class	Industry Average	Laggards
Days required to integrate new data sources	8	47	133
Percent of respondents "satisfied" or "very satisfied" with information environment	84%	35%	5%

Source: Aberdeen Group, December 2010

When it comes to achieving a more pervasive degree of business analytics within the organization, SMBs were measured against their ability to deliver against the growing need for analytics, but also their ability to achieve a higher level of activity and engagement in analytics. Using data from Aberdeen's July 2011 benchmark report, [The Analytical Masses: Building Self-Service Insight for Line-of-Business Decisions](#), two key performance metrics were used to define performance in widespread BI:

- **The accessibility of analytical tools** is measured as an average percentage of employees with a need or desire for BI who have access to analytical functionality
- **Analytical engagement** is measured as an average percentage of BI users who are engaged with the analytical tools on a weekly (or more frequent) basis

Actual weighted average performance across these two metrics is listed in Table 2.

Table 2: Best-in-Class Performance - Widespread BI

Metrics	Best-in-Class	Industry Average	Laggards
Percent of potential users that have access to business analytics	93%	45%	9%
Percent of users that are engaged with BI solutions weekly or more often	91%	36%	7%

Source: Aberdeen Group, June 2011

Finally, as more time pressure is piled on organizational decision makers, SMBs need to provide quicker access to key information. Whether the "decision window" is real-time, hourly, daily, or less often, SMBs need to find ways to support these quicker decisions with timely information. Additionally, as customers become more impatient and demanding, the time urgency becomes just as much of a customer service/responsiveness issue as anything else. Leveraging data from Aberdeen's as yet unpublished survey on operational BI from September of 2011, two key performance metrics were used to define performance related to timely insights:

- **Timeliness of information** is measured as an average percentage of key operational information that is accessible within the pre-defined decision window
- **Customer responsiveness** is measured as an average percentage of on-time response to customer inquiries

Actual weighted average performance across these two metrics is listed in Table 3.

Table 3: Best-in-Class Performance - Timely Insights

Metrics	Best-in-Class	Industry Average	Laggards
Percent of critical information that is available within the "decision window"	94%	76%	31%
On-time customer response rate	96%	90%	74%

Source: Aberdeen Group, September 2011

"We need to be able to do analysis of data aggregated from a multitude of sources. We need to be able to better understand what we're doing or what we should be doing. We plan to make this analysis available to everyone in the company because the better informed they are, the better jobs they are going to do."

~ Ben Sommerville
Chief Operating Officer
Phoenix Logistics

The performance levels depicted in the tables above show a stark contrast between Best-in-Class companies and their Industry Average and Laggard peers in the SMB world. While Best-in-Class achievement in data management, widespread BI, and timely insight is impressive in its own right, the ultimate end game is about real, tangible business performance. With broader access to more data in a condensed time frame, managers can make operational adjustments to reduce cost and improve cash flow. Similarly, sales managers can identify and act upon previously unseen opportunities, and supply chain managers can collaborate better with distributors and suppliers and optimize product flow. The potential benefit of effective business analytics stretches to just about every corner of the organization and offers the ability to achieve tangible improvements in growth and efficiency. Based on these factors, top performing SMBs in-fact saw substantial improvement across several vital business performance metrics (Figure 3).

Fast Facts

Best-in-Class SMBs achieved:

✓ **16%** year over year reduction in total operating costs

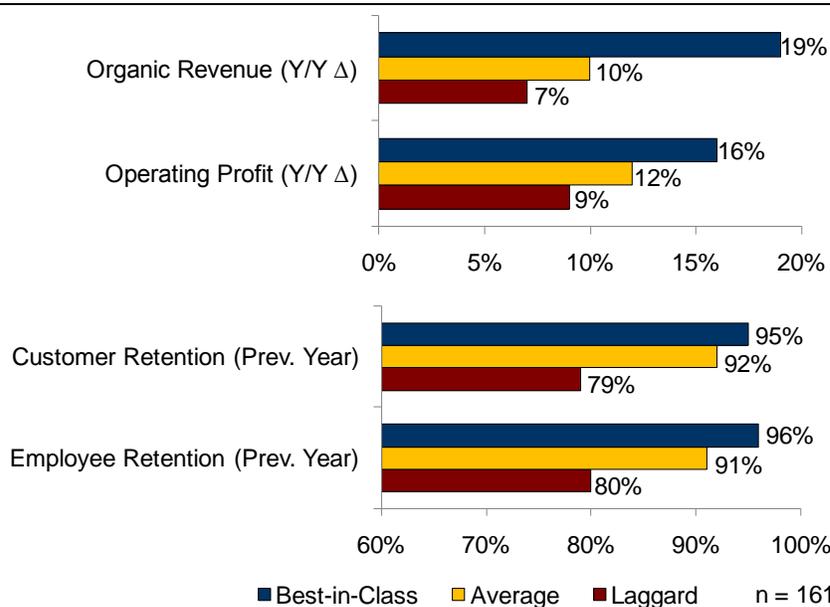
Compared to:

✓ **12%** for the Industry Average

✓ **9%** for Laggards

* Data from [The Analytical Masses](#)

Figure 3: Best-in-Class Boost Key Business Metrics



Source: Aberdeen Group, September 2011

By bringing analytical methods to more areas of the business, Best-in-Class SMBs are able to identify and act upon more opportunities for growth, within new markets, new customers, and new products. Equally important, top performers are able to drive waste and inefficiency out of their core processes by gaining better visibility into operational activity and driving down costs, ultimately leading to a greater degree of operating profit. While the Best-in-Class have been more successful in driving new opportunities and new revenue than they have in growing profitability, their performance in this crucial metric still outstrips that of their peers by a significant margin.

Additionally, in a fluctuating economy, retention - of both employees and customers - can make or break a company. Generally, existing customers

are much more profitable than newly acquired customers, so the ability to retain an ever demanding customer base is a key underpinning of success. Similarly, the main competitive advantage of most organizations - beyond just the quality of its products or services - is the intellectual horsepower and timely execution of the workforce. Customer and employee turnover are both major deterrents to success in the SMB space and Best-in-Class companies have found a way to retain a high percentage of both key contingencies.

The Path to Best-in-Class Performance

The performance of Best-in-Class SMBs described in the previous sections demonstrates not just a higher degree of business execution as an output, but implies a greater degree of organizational maturity as a foundation for that success. In order to generate efficiencies in data management, widespread BI, and timely insight, top performing SMBs draw on a comprehensive portfolio of organizational capabilities, leveraged in conjunction with the appropriate technology enablers.

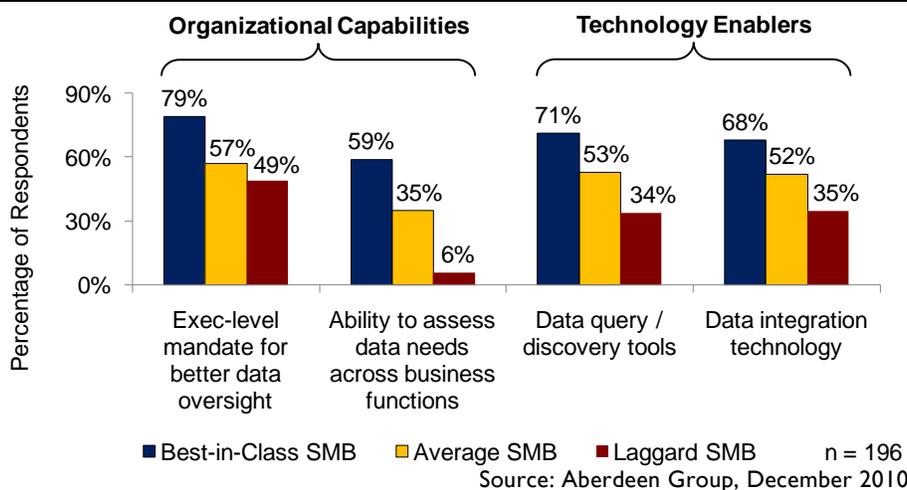
From a data management perspective, Best-in-Class SMBs are more likely to charge the oversight and management of vital company data to an executive level leader within the organization. Having this responsibility rest with senior management lends more credence to the need for better data oversight, and helps improve the quality, relevance, and timeliness of that data as a result. Additionally, when it comes to having strong data management and oversight, it is essential to have clear visibility into different departments within the organization and assess what their specific needs are. Sales and marketing data are intertwined, and depend on inventory/back office data, which in turn relies on accurate data from the supply chain, all of which ultimately feeds into the financial reporting processes. Having transparency into this complex web of data connections is a powerful way to mitigate confusion and Best-in-Class SMBs are almost 10-times more likely than Laggards to have this capability in place (Figure 4).

"In addition to BI, there is a need for dashboarding of the BI so that senior executives can, at a glance, know from a high level if things are 'on target' in specific functions and cost centers."

~ SVP, Sales

Mid-Sized North American
Technology Company

Figure 4: Capabilities and Enablers - Data Management



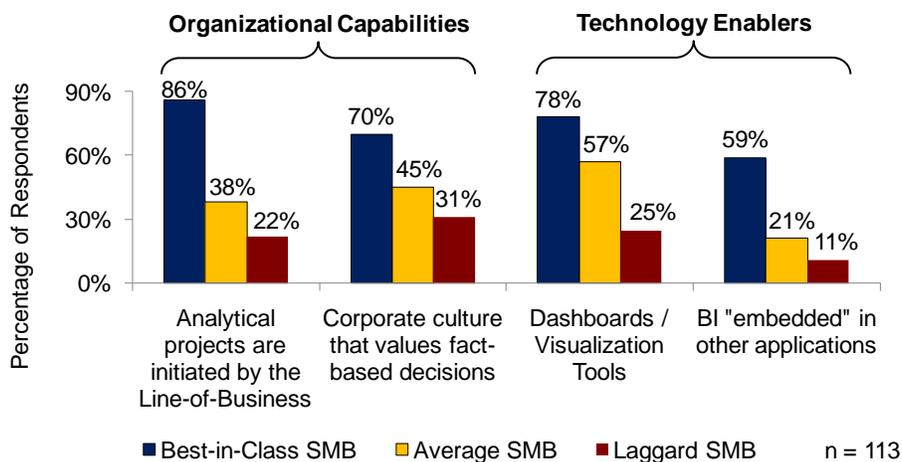
On the technology side, two types of tools come to the forefront to help SMBs make better use of their data. First, query and discovery tools can help both business users and IT administrators to ask questions of the data, understand what drives the business, and determine ways of making adjustments on the fly. As data volumes grow, the ability to address larger quantities in an efficient way is a very useful capability, and top performing SMBs are more likely to use tools to query that data. Similarly, data integration technology helps gather disparate sources of data in order to homogenize that data and make it more usable and consumable for the analytical tools and processes in place. Best-in-Class SMBs are almost twice as likely as Laggards to use data integration technology (Figure 4).

The capabilities required to improve analytical adoption and drive towards a more pervasive BI atmosphere are typically more cultural than they are process based, and that rule of thumb holds true in the SMB space as well. In order for BI to be successful in any business function, there needs to be a substantial degree of engagement at both the executive levels and the front lines. The research shows that Best-in-Class SMBs are more likely to have an executive level champion for business analytics, but at the same time have analytical projects initiated at the Line-of-Business (LoB) levels. Top performing SMBs are also more likely to report a widespread mindset that values the use of data to help support decision making. This type of environment or "information culture" helps drive more activity and involvement on the part of front line managers, and top SMBs are 56% more likely than the Industry Average to report that type of culture within their organizations (Figure 5).

Fast Facts

- Best-in-Class SMBs achieved:
- ✓ **18%** year over year increase in operating cash flow
 - Compared to:
 - ✓ **6%** for the Industry Average
 - ✓ **5%** for Laggards
- * Data from unpublished Operational Intelligence study

Figure 5: Capabilities and Enablers - Pervasive BI



Source: Aberdeen Group, June 2011

To further the cause of pervasive BI, Best-in-Class companies are more likely to use dashboards, portals, and other visual reporting tools to help intuitively display business insight to more leaders in the company. Another route many SMBs take from a technology perspective is to leverage

analytical capability integrated as a module or extension within other enterprise applications such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), or other industry or job-role focused software tools. Best-in-Class SMBs are over three-times more likely than all others to use this type of "embedded BI" (Figure 5).

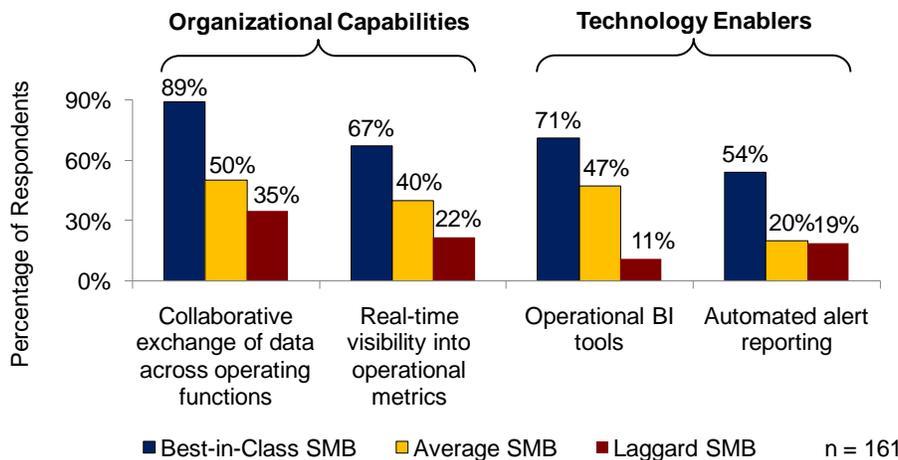
The final piece of the puzzle involves getting business insight into the hands of more decision makers within the timeframe they require. At most organizations, the key to a quicker decision rests not only on the speed of access to data within their department, but in other business functions as well. Top performing SMBs typically report having a strong ability to collaborate and share information (securely and appropriately) across business functions to help accelerate the decision making process. The Best-in-Class are also more likely to report having real-time or near real-time visibility into their key operating business metrics in order to understand and react when crucial state changes occur (Figure 6).

“Standard reports driven from the ERP systems are too generic, poorly formatted and only extract data from a single source. Business reporting needs to be pertinent to the user, portable, professional, and comprehensive such that the recipients are not required to consolidate reports from multiple sources.”

~ IT Manager

Mid-Size European Food & Beverage Company

Figure 6: Capabilities and Enablers - Timely Insights



Source: Aberdeen Group, June 2011

In order to process that information faster and support quicker fact-based decisions, Best-in-Class SMBs rely on technologies like operational BI to provide that real-time reporting and analytics capability for their operational / transactional data. Similarly, as top performers have real-time visibility into key operating metrics, they also have ability to alert decision makers through the use of automated technology when changes occur in those key operating performance metrics. Best-in-Class SMBs are more than twice as likely as all other SMBs to utilize automated alert reporting tools.

Recommended Actions

The value of well-planned and efficiently executed business analytics can touch many functional areas and provide significant value for small and midsize companies. From boosting process efficiency to improving opportunity recognition, timely business insight provides support to crucial

decisions across the business and delivers a measurable impact in some of the most visible and mission-critical business metrics. However, the ability to realize those types of performance enhancements is predicated on far more than just a turnkey software implementation. Best-in-Class SMBs are more organizationally mature and have put technologies in place in order to exploit the strategic value of their growing data volumes, expand analytical capability to more decision makers, and deliver more timely decision-supporting insight. For SMBs seeking a more effective strategy for business analytics, the following recommendations should be considered:

- **Treat data as a strategic asset.** Clean, relevant, and timely data fuels today's organizations the same way that high-octane gasoline fuels a high-performance automobile. Top performing SMBs treat this data, not as a nuisance or a purely IT-centric problem, but as a strategic asset for the company. Best-in-Class SMBs are 46% more likely than all others to have executive-level ownership and support for better data oversight, and they are also more likely to have policies in place for data governance and compliance, ensuring the proper usage and distribution of data to the right stakeholders. From a technology standpoint, the Best-in-Class are also more likely to use tools to help cleanse and integrate their data more efficiently, ultimately improving the overall value of their data.
- **Expand the reach of business analytics.** As more users see the relevance and develop a strong need for effective analytics, many companies get tripped up in their ability to deliver the tools and methods to a growing user base. Best-in-Class SMBs do a few things to help ensure a more pervasive deployment of BI. First, the top performers are more than twice as likely as all other companies to have a clear process in place for gathering end-user needs for analytics. Second, they are more likely to measure and consistently track the utilization of BI tools to ensure the solutions aren't falling into the wasteland of "shelfware," delivering no tangible value to the organization. And third, Best-in-Class SMBs, in addition to improving the quality of the data going into their analytical systems, are also taking strides to make the output of those systems more digestible for the business end users. Through the use of visual tools like dashboards, portals, and other intuitive reporting interfaces, the top performing SMBs deliver insight to their key decision makers in a way that makes sense for each type of user.
- **Accelerate the delivery of actionable information.** In the SMB space, the window of time for making effective business decisions is just as crucial as it is for enterprise level companies. Moreover, the shrinking of that decision window is just as prevalent for smaller companies as well. Because of market volatility, an increasingly demanding customer base, and because of today's competitive environment people are being asked to do more with less, and to do it quicker. Whether that window of time is real-time, 10 minutes, an hour, a day, or a week, Best-in-Class SMBs deliver

Fast Facts

Best-in-Class SMBs report that, on average, **62% of their data** is accessible by their analytical systems:

Compared to:

√ **49%** of data for the Industry Average

√ **35%** of data for Laggards

* Data from [Data Management for BI](#) report

actionable information within that time frame at a rate that far outstrips all other companies. Top performers are more likely to track key metrics in real time, they are more likely to share information with their network of stakeholders across business functions, and they are more likely to lean on the right types of technologies to automate the delivery of information, and provide quicker visibility into what is happening on a tactical or operational basis.

Putting these three elements in place will help SMBs mitigate the challenge of more data, more people, and less time, ultimately supporting an enhanced level of business performance, and providing a foundation for growth and long-term business sustainability.

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

Related Research	
<u><i>The Analytical Masses: Building Self-Service Insight for Line-of-Business Decisions</i></u> ; July 2011 <u><i>Business Intelligence on the TCO Diet: Slashing the Cost of Insight with Analytical Fitness</i></u> ; May 2011	<u><i>Data Management for BI: Fueling the Analytical Engine with High-Octane Information</i></u> ; December 2010
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