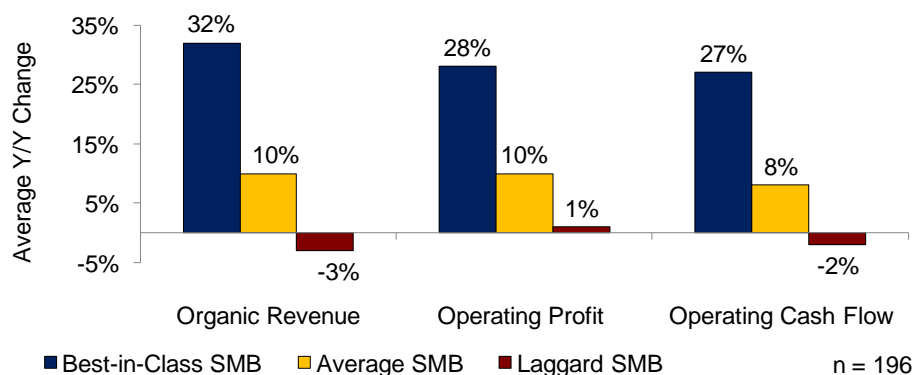Aberdeen *Group*
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Effective Analytics in the SMB Market: Delivering Measurable Business Results

Among the most visible and urgent trends in the business world are the challenges associated with growth in data volume and complexity along with an increase in the need for fact-based decision support. In effect, companies across the business landscape are seeing more data, and more people are seeking ways to extract value from that data, and thus the need for efficient business analytics comes to the forefront for many organizations. These issues however, are not reserved only for large enterprises, but rather span all company sizes. According to Aberdeen's December 2010 research on _Data Management for BI_, Small to Midsize Businesses (SMBs) are managing an average of 12 unique data sources - including data warehouses, enterprise applications, spreadsheets, and even sources of unstructured, text-based information - while also seeing an average 43% year over year growth in data volume. At the same time, the number of decision makers looking to augment their experience with fact-based decision support is expanding as well. Findings from Aberdeen's June 2011 report, _The Analytical Masses_, demonstrate that 44% of SMBs view the increase in analytically inclined decision makers as a key driver behind their Business Intelligence (BI) strategy.

This Aberdeen Sector Insight draws on the two discrete data sets from December 2010 and June 2011 referenced earlier, in order to explore the tangible performance impact that small and midsize organizations are gaining through efficient business analytics. The research demonstrates that by focusing on two key areas - the data, and the people - Best-in-Class SMBs have been able to deliver more meaningful and widespread business insights, ultimately leading to significant and measurable business performance improvements (Figure 1).

Sector Insight

Aberdeen's Sector Insights provide strategic perspective and analysis of primary research results by industry, market segment, or geography

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.

Aberdeen Methodology

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 performance

Figure 1: Top SMBs Drive Performance with Business Analytics

Source: Aberdeen Group, June 2011

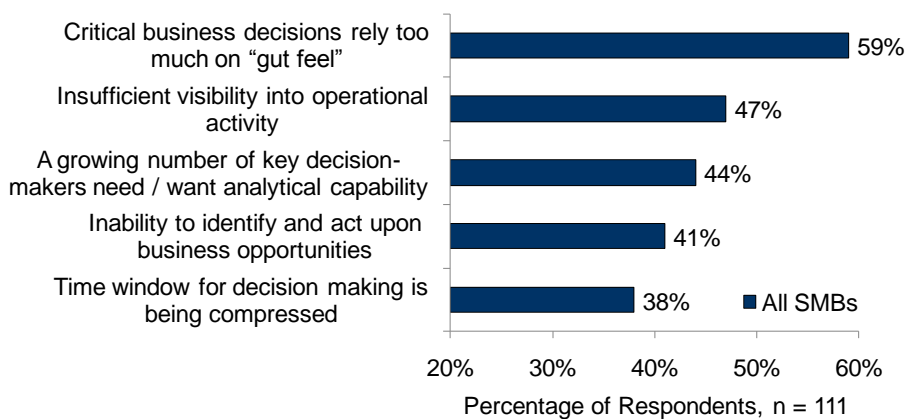Aberdeen *Group*
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The Growing Need for Business Analytics

As the business world struggles to regain its footing after the financial crisis of 2008, companies that once relied solely on industry experience and firsthand knowledge to shape their operational and strategic activities are finding that many of the old models no longer apply. The new and rapidly fluctuating marketplace demands a decision making environment that incorporates not only domain expertise, but fact-based analysis rooted in clean, relevant, and timely information. In order to adapt to this new decision-making environment, companies of all sizes are increasingly exploring BI and analytical methodologies that can gracefully merge the wisdom of the past with present day fact.

The challenge for small and midsize companies is that more data is flowing into the organization every day, and more business decision makers are clamoring for analytical capability, yet many are not equipped with the IT infrastructure and in-house expertise needed to fully capitalize on the potential of business analytics. SMBs that have found the right blend of analytical culture, widespread usage of analytical methodology, and the appropriate supporting technologies, are enjoying Best-in-Class performance in tangible metrics like revenue growth profit (Figure 1).

In order to achieve Best-in-Class performance improvements, SMBs are looking to drive analytical capability down into more areas of the company and arm more line-of-business managers with timely business insight. Aberdeen's *The Analytical Masses* report reveals the key business pressures that compel SMBs to implement business analytics. Not surprisingly, the top pressure is related to the need move away from "gut feel" decisions and toward a more fact-based decision environment (Figure 2).

Best-in-Class Definition

Some of the data used in this document was taken from Aberdeen's December 2010 benchmark report on *Data Management*. Best-in-Class performance from this benchmark report is defined as follows:

√ 12 days, on average, required to integrate new data sources into the analytical systems

√ 93% of information delivered in "right-time"

√ 82% of respondents "satisfied" or "very satisfied" with their information environment

Figure 2: Top Pressures Driving Business Analytics for SMBs

Percentage of Respondents, n = 111

Source: Aberdeen Group, June 2011

From an operational perspective, SMBs are also experiencing a marked lack of visibility into what drives their business. Many small and midsize companies simply feel like they don't fully understand how the changing business landscape will affect their day-to-day operations. The third most

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commonly cited driver behind business analytics relates back to the theme of the changing user mindset. Organizations are seeing a noticeable increase in the number of decision makers who rely on data, not just as a tactical decision support tool, but as a philosophy on how to run the business. More non-technical managers are embracing a data-driven decision environment as a strategic priority.

Maximizing the Value of Data

In order to achieve the performance benefits depicted in Figure 1 and create a Best-in-Class business analytics environment, SMBs are looking to strengthen their activities around data collection, information assembly, and insight delivery. The research consistently demonstrates that efficient business analytics starts with the data. Top performing SMBs recognize the priority of capturing and closely managing their growing data volumes. Aberdeen's *Data Management for BI* report revealed that top performing SMBs are able to integrate new data sources into the system faster, deliver key information to decision makers within their necessary timeframe, and ultimately generate a better information environment with more satisfied end-users (Figure 3).
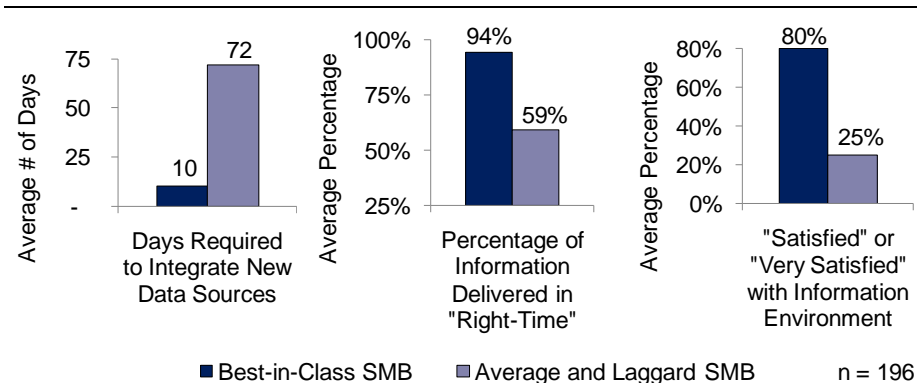
Figure 3: Best-in-Class Data Management Efficiency

■ Best-in-Class SMB   ■ Average and Laggard SMB   n = 196
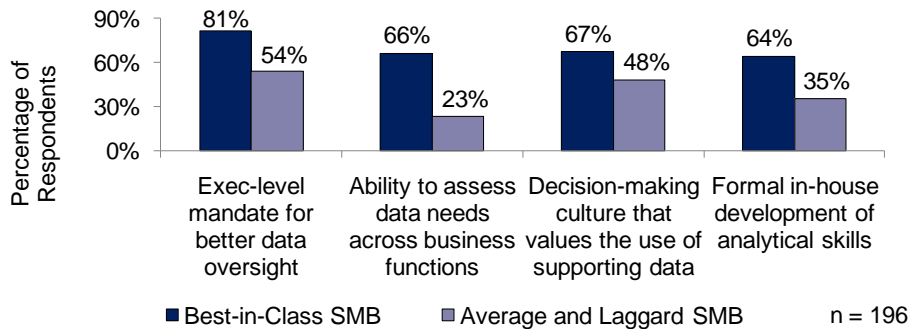
Source: Aberdeen Group, December 2010

Companies collect data for a variety of reasons, but what truly matters is the ability to extract business value from that data. One thing that separates top performers in the SMB world is their relentless pursuit of generating cleaner, more relevant, and more timely data to support their business, thus capitalizing on their growing volumes of information.

Best-in-Class Characteristics

In order to achieve the data management efficiency described in Figure 3 above, top performing SMBs are leveraging the right combination of people, process, and technology. From an organizational standpoint, Best-in-Class companies have several internal capabilities in place to support better data management. First, because of the premium they place on quality data as a strategic asset to their company, the Best-in-Class are more likely to have

Fast Facts

Top inhibitors to efficient data management*:

√ Lack of IT resources - 52%

√ Software and services are too expensive - 45%

√ End-users have not provided well-defined information needs - 42%

√ Lack of top management commitment to projects - 38%

√ Business need is not high enough - 24%

all survey respondents

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executive level support or even mandates for better oversight of these vital data assets. Additionally, when it comes to leveraging data for decision support, different organizational functions will have different requirements for delivery time frame and data source access. Best-in-Class SMBs are more than twice as likely as all other SMBs to have the ability to assess and act upon those needs across business functions (Figure 4).

Figure 4: Key Data Management Capabilities in Place

■ Best-in-Class SMB   ■ Average and Laggard SMB   n = 196

Source: Aberdeen Group, December 2010

Two more key aspects of a Best-in-Class decision environment have to do with the users themselves, both depicted above in Figure 4. Top performers are more likely to report a culture or analytical mindset within their organizations where key managers rely on data as a key aspect of their decision making process. Part of what leads to that type of culture is the Best-in-Class insistence on nurturing that mindset in their organization through formal training programs and efforts to display the power of business analytics to more business users within the organization

Additionally, from a technology perspective, findings from Aberdeen's June 2011 report, _The Analytical Masses_, demonstrate that Best-in-Class SMBs are more likely than all other companies to use supporting tools at each stage of the decision process from data collection, to information assembly and insight delivery (Figure 5).

Figure 5: Leveraging the Right Technologies

■ Best-in-Class SMB   ■ Average and Laggard SMB   n = 111
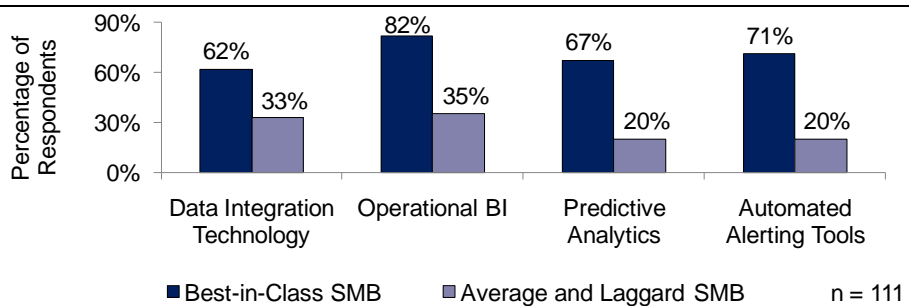
Source: Aberdeen Group, June 2011

In order to increase the value of their data and make it more accessible by the decision support systems in place, Best-in-Class SMBs are twice as likely

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Best-in-Class Definition

Some of the data used in this document was taken from Aberdeen's June 2011 benchmark report, _The Analytical Masses._ Best-in-Class performance from this benchmark report is defined as follows:

√ **27% year over year increase** in organic revenue

√ **95% of users**, on average, are satisfied with their decision support environment

√ **94% of critical information** is delivered on-time

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as Laggards to utilize data integration technology. From a day-to-day or tactical perspective, the Best-in-Class are using operational BI tools to deliver real-time or near real-time insight to the right managers within the necessary decision window, and automated alert reporting tools to enable immediate visibility into changes in key operational metrics. Additionally, Best-in-Class SMBs are also using predictive analytics as a key element of their analytical strategy. These tools help to create "what-if" scenarios that enable better anticipation of market changes and an improved understanding of the revenue, cost, or cash flow impact of those market fluctuations. Compared to all other SMBs, the Best-in-Class are more than three-times as likely to leverage predictive analytics (Figure 5).

Case Study — Cincinnati Zoo

More than 1.2 million people a year visit the Cincinnati Zoo's exhibits, which feature over 500 animal and 3,000 plant species. The Zoo was also rated the number-one attraction locally and one of the top zoos in the nation by Zagat Survey. The challenge facing the management team was how to maximize the recent increase in attendance and raise guest spending through new incentives and loyalty programs while improving services for visitors. Additional revenue would allow management to provide increased care for zoo animals and potentially add new exhibits.

After considering several options, The Cincinnati Zoo decided to implement a business analytics solution to replace a variety of disparate systems with a single, integrated platform. This was designed to give employees and management a single view of data that provides insight and an "at a glance" view of the business across multiple segments.

As a result, the Zoo has transformed its business processes to make key decisions on things such as what items were most frequently purchased, spending patterns and relationships between guest behavior across business segments, and fluctuations in attendance mix (paid, member, and others). For example, the Zoo's 'Beer Hut' concession features six different brands, rotated based on sales volume and the seasons. With business analytics, management can now instantly identify which beer is selling best, on what day, and at what time to make sure inventory meets demand. Previously, it took seven to 14 days to get this information, which required hiring part-time staff to sift through register tapes.

"Almost immediately after going live with business analytics, we were able to increase our in-park spending by as much as 25% by utilizing 360 degree customer views. We turned that information into strategic offers to our guests, and arming our managers with real-time data enabled them to react to a dynamic and fluid business driven by seasonal weather patterns. It was instant payback," said John Lucas, Director of Park Operations for Cincinnati Zoo and Botanical Gardens. The zoo projects a $350,000 increase in revenue in the first year, and an additional 50,000 in new visits per year as a result of their business analytics implementation.

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Building Widespread Engagement in Business Analytics

Like any other type of technology or methodology, the value of business analytics is inextricably linked to its adoption within the organization. From an ROI perspective, the ability to take the total package of resources applied toward business analytics (e.g. people, money, time, and infrastructure) and spread that investment out among more business functions, is a powerful way of magnifying the impact of analytics.

A well conceived and efficiently executed strategy for business analytics can deliver measurable business improvements in two key areas: growth, and efficiency. Analytical activity around sales pipeline management, customer service, and marketing campaigns for example, can help identify opportunities for revenue growth. Similarly, applying these concepts to supply chain, inventory management, or Customer Relationship Management (CRM) activities can root out process inefficiencies, reduce cost, and improve operating profit. Whatever the primary activity of a given business function, effective business analytics can generate substantial impact to the top and bottom line. Findings from Aberdeen's June 2011 report, *The Analytical Masses*, shows that top performing SMBs (measured on a scale of 1 to 5) report having a deeper and more pervasive deployment of business analytics among a wide variety of business functions (Figure 6).

Figure 6: Best-in-Class Expand Analytics to More Functional Areas

■ Best-in-Class □ Industry Average ■ Laggard   Avg. Score, n = 111
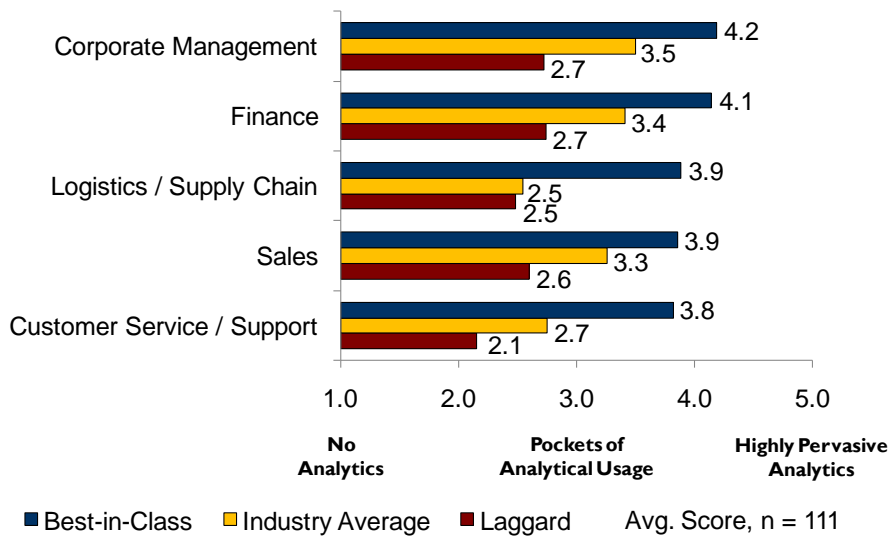
Source: Aberdeen Group, June 2011

Through efforts to broaden the reach of their analytical tools and strategy, Best-in-Class SMBs have created more inroads or touch points into their operating performance. This higher degree of analytical pervasiveness enables these top performers to extract more decision supporting value from their growing volumes of data, equip more business decision makers with timely insight, and ultimately achieve substantial improvements to the top and bottom line.

Fast Facts

√ **51%** of BI users at Best-in-Class companies are actively engaged in business analytics on a weekly or more frequent basis

Compared with:

√ **38%** of BI users at Industry Average companies

√ **24%** of BI users at Laggard organizations

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Recommended Actions

Small and midsize companies have a lot to gain from effective business analytics. From opportunity recognition to process efficiency, timely business insight can provide support to crucial decisions across multiple areas of the business and deliver 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 have put the right chess pieces in place in order to exploit the strategic value of their growing data volumes and harness the analytical brainpower residing in their key decision makers. For SMBs seeking a more effective strategy for data management and business analytics, the following recommendations should be considered:

- **Establish data quality as a strategic priority.** There are a variety of factors that dictate the usability of data by a BI system. These include data timeliness, relevance, and ease of access, among others. But from a simple and practical standpoint, the data also needs to be clean, free of corruption, duplication, and missing elements. One of the most logical uses of technology comes in the form of data quality assurance. Best-in-Class SMBs are 81% more likely than all others to use tools like data cleansing and hygiene technology, as well as data enrichment / append / matching tools. Having a higher degree of data quality reduces wasted time and effort, increases trust in the data, and allows for a more efficient analysis to be performed as a result.

- **Create a cross-functional team to develop data management strategy.** One of the biggest challenges of data management involves assigning value and prioritizing data from different departments across the organization. Customer data, financial data, transactional data, supply chain data, just to name a few, all have a claim on resources for data management. One way this challenge is addressed is to establish a team or committee with cross-functional representation, to come together and develop a logical data management strategy and roadmap. Best-in-Class SMBs are 3-times more likely than all others to have this type of cross-functional team in place. Regardless of the name - Center of Excellence, Competency Center, SWAT team, etc. - having a central body representing multiple departments will go a long way toward alleviating the challenges of data silos and will promote a higher degree of cross-functional collaboration.

- **Start tracking analytical utilization and engagement.** Aberdeen's research shows a demonstrable correlation between analytical adoption and business performance. Companies that deliver on their user needs for analytics, and provide more usable solutions that can touch more area of the business, are reaping the benefit of visibility and opportunity identification that analytical tools provide. The research shows that Best-in-Class SMBs are 3.7-times

Fast Facts

√ **82%** of Best-in-Class companies report having self-service, or minimally assisted access to analytical capability

Compared with:

√ **74%** of Industry Average companies

√ **55%** of Laggards

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more likely than all other SMBs to track the utilization of, and engagement in, business analytics. By putting a process in place to understand who uses the tools and how often, SMBs will be in a better position not only to refine and improve their analytical offerings, but to impact overall business performance in a more meaningful way.

- **Consider implementing predictive analytics.** In today's business landscape, data moves faster, decisions are made faster, and the competitive landscape transforms more quickly. In the face of such a rapidly changing marketplace, organizations are continuously looking for ways to reduce their reliance on only historic data to inform decisions. Top performing SMBs are becoming more predictive than reactive when it comes to understanding how their long-term stability will be affected by the changing environment. To assist in this process, Best-in-Class companies are 3.3-times more likely than all others to utilize predictive analytics technology. Leveraging the "what-if" scenario building and predictive modeling capabilities these solutions offer, SMBs will be in a more advantageous position to compete and thrive in today's fast-paced business climate.

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