

ERP and BI in the SMB

Bringing Light to Data in the Shadows

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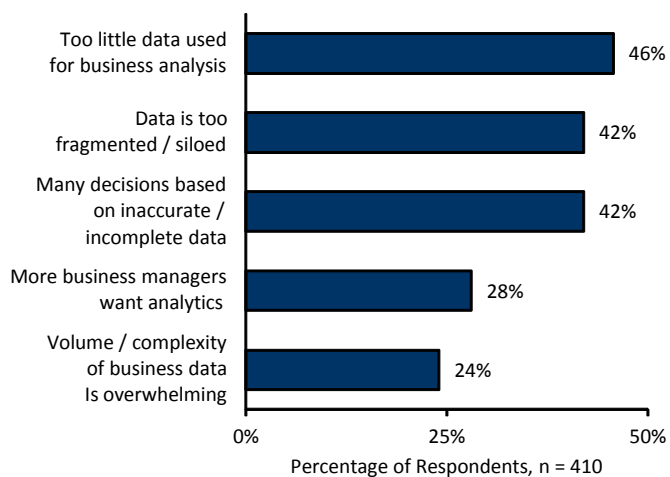
ERP and BI in the SMB: Bringing Light to Data in the Shadows

Businesses vary in complexity, but most have many moving parts. As a result, running a business effectively and efficiently requires timely operational decisions. Increasingly, small and medium-sized businesses (SMBs — see sidebar definition) adopt Enterprise Resource Planning (ERP) solutions to help manage that complexity. In fact, [Aberdeen's 2012 ERP Benchmark survey](#) found that 75% of Best-in-Class SMBs have implemented ERP. However, ERP systems are designed to streamline business operations, not facilitate decision making. This Analyst Insight explores how Business Intelligence (BI) solutions extend and enhance the capabilities of ERP solutions when they are integrated. Aberdeen's research finds that SMBs with integrated ERP and BI saw a 20% decrease in time-to-decision over the past year and an increased percentage of the expected ERP benefits than SMBs that have not integrated ERP and BI. Read further to understand why organizations combine BI and ERP, as well as the increased capabilities these organizations receive and the impact on their bottom line.

In the Land of the Blind...

Companies that have not integrated BI with ERP (see sidebar definition) cite a number of challenges. But collectively, the top challenges boil down to: "Too much data, not enough information" (Figure 1).

Figure 1: No Integration = Data Problems



Source: Aberdeen Group, September 2012

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

Company Size Definition

Aberdeen defines small and medium sized businesses (SMBs) as organizations with less than 1,000 employees.

Defining Integrated BI and ERP

In the context of this research, integrated business intelligence and enterprise resource planning covers two main implementation styles:

- ✓ BI is embedded into the ERP solution so that it is easily accessed, more or less seamlessly, within the context of a relevant business process.
- ✓ BI is implemented standalone and is fed data from the ERP solution via a data integration solution.

In either case, integration between the two solutions may be either batch-based, or occur in near real-time.

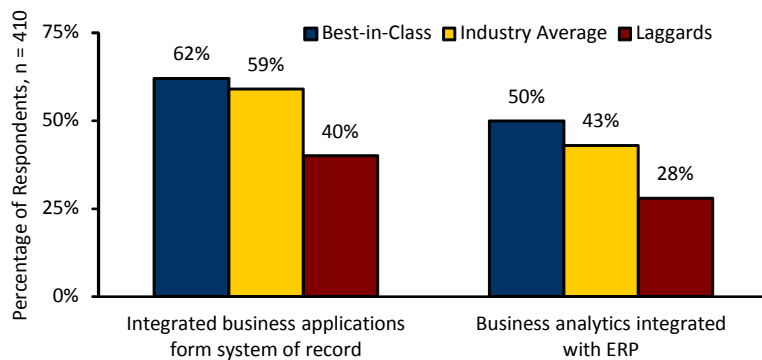
For many companies, data is plentiful. As coal, iron, and steam provided the raw materials that powered the industrial revolution, data is the raw material that feeds information and insight. Business intelligence is the forge. BI solutions collect raw data, transform it into useful information and distribute it to the managers that need insight to direct their actions.

In organizations that lack BI, the process of converting data to information is also lacking. Forty-six percent (46%) of organizations state that much of their data is not converted into information, while 42% acknowledge that too many of their decisions are not based on the data they have. In addition, 42% of firms note that their data is so fragmented that it is difficult to build a single coherent picture of business operations. Data integration can be a challenge. Aberdeen’s June 2013 agile BI survey (*Agile Analytics: Staying Afloat on the Rising Tide of Information*) found that, on average, it takes 23 days for organizations to integrate a new data source into a BI project. As a result, if the data required for analytics is spread across multiple, disparate source systems, integration can appear to be an insurmountable challenge. In this case, ERP systems can be a godsend. When a single solution contains so much valuable enterprise data, integrating that system with BI can provide a jumpstart on providing managers with the insight they need.

Integrated Analytics is a Best Practice

Data collected in Aberdeen’s [2012 ERP Benchmark survey](#) provided insight into the best practices commonly used by top performing SMBs (the “Best-in-Class” — see sidebar definition). Two Best-in-Class capabilities stand out in analytics context of analytics (Figure 2).

Figure 2: Best-in-Class SMBs Integrate Business Analytics



Source: Aberdeen Group, September 2012

First, 62% of Best-in-Class organizations have a robust system of record as the foundation for their business. In fact, top performers are over 50% more likely than Laggards to possess what is often referred to as a single version of the truth.

Often, businesses record data on key transactions in different applications and databases. For example, a company that grows through mergers and

Best-in-Class Definition

The Aberdeen maturity class segments survey respondents into three groups based on a weighed aggregate of a number of performance metrics:

- ✓ Best-in-Class: The top performing 20%
- ✓ Laggards: The bottom performing 30%
- ✓ Industry Average: The remaining 50%

SMBs that took part in the survey were segmented based on four criteria:

- ✓ Time to close a month: Best-in-Class – 3.1 days, Industry Average – 5.1 days, Laggards – 9.1 days
- ✓ Days sales outstanding: Best-in-Class – 29, Industry Average – 40, Laggards – 61
- ✓ Complete and on-time delivery: Best-in-Class – 96%, Industry Average – 91%, Laggards – 84%
- ✓ Year-over-year change in operating margins: Best-in-Class – 17% increase, Industry Average – 7% increase, Laggards – 1% decrease

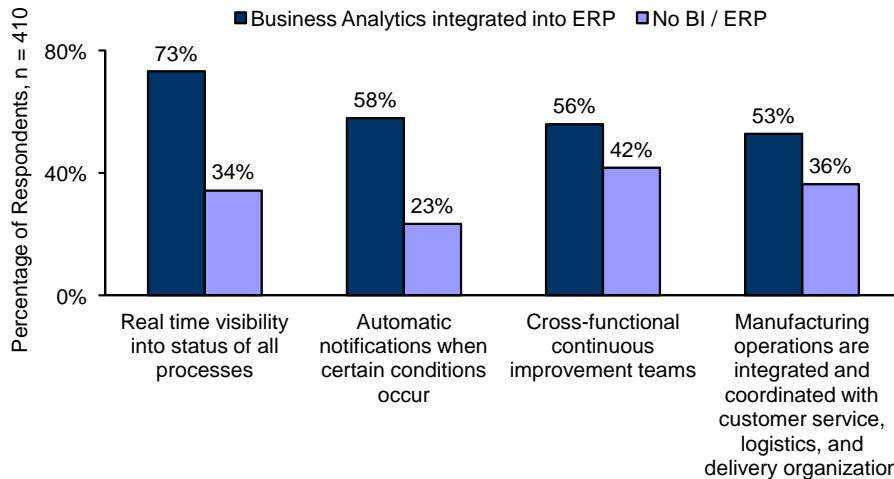
acquisitions may find it has a multitude of different ERP solutions in different departments and subsidiaries. In this situation, organizations often suffer from conflicting information — and opinions — when they try to make decisions. This results because data may be collected in different ways, and metrics or key performance indicators (KPIs) may be derived differently. When this happens, distrust of the data typically ferments amongst managers, leading to decisions based on instinct or office politics.

An auditable system of record can prevent this — and a business intelligence solution can be a key part of this. Notably, half of the Best-in-Class integrate business analytics with their ERP solutions, while only 28% of Laggards do so. Analytics can be the technology that binds disparate applications together, creating the single version of the truth that managers can trust, day-in, day-out. Consistent, up-to-date management information can streamline operations and play a significant role in helping to close the books faster, improve supply chain performance, and so on.

The Benefits of Integrated Analytics

Integrating BI and ERP helps to enhance visibility into the data contained within ERP and increased collaboration (Figure 3).

Figure 3: Increased Visibility and Collaboration



Source: Aberdeen Group, September 2012

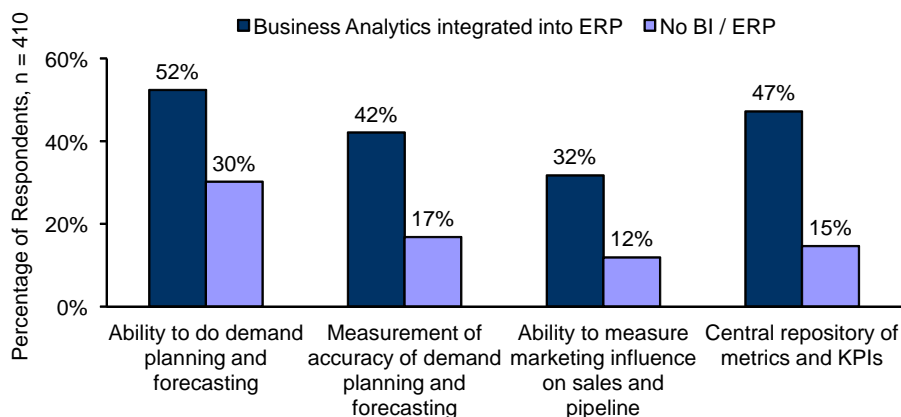
BI is intended to enable decision-makers to access and utilize any relevant data that is available. Therefore, SMBs that integrate ERP and BI are significantly more likely to have real-time access to data than those that have not integrated, permitting immediate and agile decisions. For example, 73% of SMBs that integrate ERP and BI have real-time visibility into the status of all processes from quote to cash. Therefore, when it comes to project management, business leaders can understand where roadblocks exist and can alter plans to maintain schedules and keep costs in check. As an extension of this, SMBs that integrate ERP and BI are over twice as likely

as those that have not to be able to automatically notify decision-makers when select conditions occur.

The facilitated data access that results from integrating ERP and BI also impacts an organizational collaboration. This is because employees are better able to share data with each other. For example, SMBs that integrate ERP and BI are more likely than those that have not to enable collaboration between business functions, such as manufacturing and logistics. The value of this collaboration can pay off in improved efficiency across the enterprise. When employees work together, they can identify new best practices, discover efficiencies, and complete tasks more quickly. This is why 56% of SMBs that integrate ERP and BI possess cross-functional, continuous improvement teams responsible for improving organizational performance.

So how can organizations actually take advantage of the increased access to ERP data that BI integration provides? Integrating ERP and BI provides business users with insight into all available data and factor it into decisions (Figure 4).

Figure 4: The Ability to Predict and Measure



Source: Aberdeen Group, September 2012

SMBs that integrate ERP and BI are 73% more likely than those that have not to be able to conduct demand planning and forecasting. This helps to avoid inventory holding costs and to ensure that they will be able to meet demand levels, to avoid missing out on opportunities. This ability is particularly important in SMBs, where the impact of every investment, such as the cost of materials or increased production, has a significantly larger impact and where any mistake in demand assessment could cost the company greatly.

Further, integrating ERP and BI creates a centralized repository, or “one stop shop”, for the data that employees need at their fingertips to make agile decisions. To this end, SMBs that integrate ERP and BI are 2.5 times as likely as those that have not to measure the accuracy of demand planning and forecasting. Measurement of accuracy enables these organizations to

better fine-tune future forecasts. These organizations are also 167% more likely to measure marketing's influence on closed sales and pipeline. This is because BI and ERP integration enables greater visibility into data across functions and processes.

Integration Brings Real Value

Ultimately, the justification for integrating ERP and BI comes down to increased business performance. SMBs that integrate ERP and BI report significant increases in several key metrics (Table 1). SMBs with integrated ERP and BI are able to react more quickly to business needs. These organizations are notified of business events within 5.5 hours, compared to 277.3 hours for SMBs lacking BI / ERP integration. Organizations that integrate ERP and BI receive the information they need when they need it to make informed decisions more often. The data is more accurate and it impacts quicker decisions. For example, these organizations can react much more quickly to customer service inquiries. Ultimately, it comes down to the bottom line. SMBs with integrated ERP and BI realize greater value from ERP projects and greater increases in profitability.

Table 1: The Impact to the Business

Performance	ERP and BI Integration	No ERP and BI
Increase in profitability over the past two years	10%	7%
Decrease in time to decision over the past year	20%	15%
Percentage of accurate financial reports	96%	93%
Percentage of time receiving information during decision-window	81%	72%
Hours between events happening and notification	5.5	277.3
Percentage of projected benefits that ERP solution attained	64%	57%

Source: Aberdeen Group, September 2012

Key Takeaways

SMBs that implement ERP have taken the first step towards improving their ability to monitor their business and promote efficiency. But what good is data if it cannot be easily accessed or factored into decisions? Fifty percent (50%) of top-performing SMBs have integrated BI and ERP, in comparison to only 28% of Laggards. This integration impacts data access and, ultimately, time-to-decision. For a growing organization, this could mean the difference between becoming a market leader or an also-ran.

Organizations that integrate these technologies may see enhanced:

- **Visibility.** SMBs that integrate ERP and BI are over twice as likely as those that have not to receive real-time notifications when certain conditions occur.
- **Analysis.** Fifty-two percent (52%) of SMBs that integrate ERP and BI have the ability to plan for and forecast demand in comparison to 30% for those that have not.
- **Collaboration.** Fifty-six percent (56%) of organizations that integrate ERP and BI are able to form cross-functional continuous improvement teams.

For SMBs, the decision to implement ERP is extremely significant. A deployment that is unsuccessful can hinder the organization greatly. By integrating ERP and BI, organizations increase the likelihood that their investment will be beneficial and promote the use of the data to make decisions that transform the business.

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

Related Research	
<i>Agile Analytics: Staying Afloat on the Rising Tide of Information Needs</i> ; June 2013	<i>Boosting Competitiveness with ERP and Business Analytics for the Mid-Market</i> ; July 2012
<i>Embedded Analytics: Enhancing Decisions with In-Process Intelligence</i> ; March 2013	<i>ERP plus BI: Maximizing the Return on your ERP Investment</i> ; June 2012
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