

ERP plus BI

Maximizing the Return on your ERP Investment

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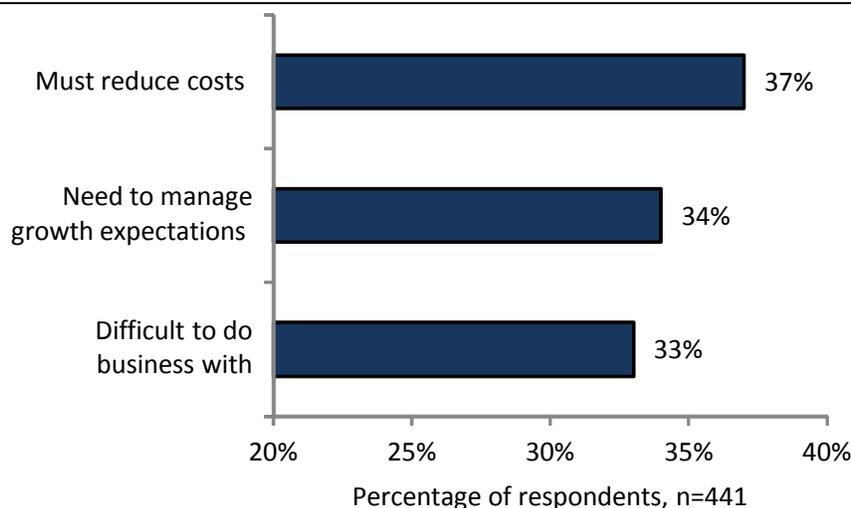
ERP plus BI: Maximizing the Return on your ERP Investment

Aberdeen defines Enterprise Resource Planning (ERP) solutions as an integrated suite of modules that form the operational and transactional system of record upon which any business is based. As such, ERP systems contain large amounts of data that can be used to gain visibility into business operations and underpin informed management decisions. But, often there is difficulty in finding the data needed and analyzing it to gain insight. Data may be siloed or inaccessible to business users, preventing these organizations from gaining the full Return on Investment (ROI) from their ERP implementations. On the other hand, Business Intelligence (BI) solutions can provide tools for business users to interact with and analyze data. By making data more consumable for the end user, organizations are arming employees with the tools they need to seek out data and integrate it into all business decisions. This ability for agile decision-making is incredibly valuable in a volatile market. This Analyst Insight, based on data collected by Aberdeen's Business Intelligence and Enterprise Resource Planning practices, illustrates how organizations can effectively integrate ERP and BI solutions to provide better access to management information than either solution can provide alone.

Intelligent Cost-Reduction is the Driving Force

The recession may be over, but tough economic times continue. Aberdeen's 2011 ERP Benchmark survey, which collected responses from over 441 ERP users between May 2011 and April 2012, finds companies striving to perform a delicate balancing act (Figure 1).

Figure 1: Top Business Pressures Impacting ERP Strategies



Source: Aberdeen Group, April 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

Survey Demographics

Data for this research is drawn from two surveys. 549 organizations completed Aberdeen's 2011 ERP survey, with 441 of those currently using ERP:

- ✓ 38% had annual revenues of less than \$50m, 22% had annual revenues of \$1bn or more
- ✓ 56% were based in North America, 23% in Europe, 13% in Asia Pacific, 4% in Latin America and 4% in the Middle East and Africa

553 organizations completed Aberdeen's January 2012 survey on role-based analytics, with 420 of those currently using BI

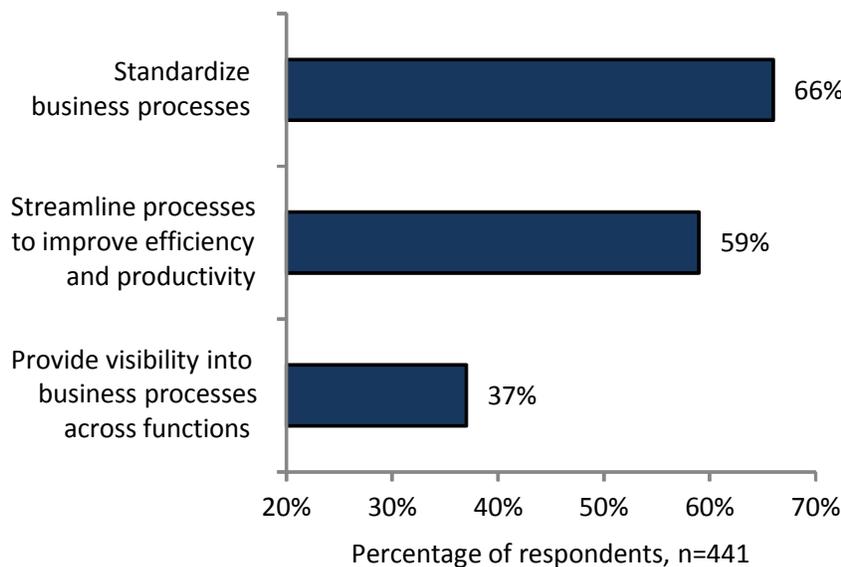
- ✓ 39% had annual revenues of less than \$50m, 27% had annual revenues of \$1bn or more
- ✓ 59% were based in North America, 23% in Europe, 14% in Asia Pacific, 3% in the Middle East and Africa, and 1% in Latin America

Overall, companies are working to reduce costs, realign their resources to be more customer-focused, while also delivering growth. With these three joint priorities, there's only one kind of cost-cutting that makes sense, and that is intelligent cost-cutting. Growing strategic areas of the business and improving customer service performance can both help to grow top-line revenue. Reducing costs in parallel can help to improve profit margins. And yet, care does need to be taken to ensure that cost-cutting does not hurt those parts of the business that are driving performance improvement. For all but the smallest organizations, these goals can only be achieved with high quality management information. That is, reducing costs with intelligent cost-cutting can only be achieved through the use of an enterprise-wide view of business performance.

Putting Cost Reduction into Practice

The strategic actions being taken to address the pressures shown in Figure 1 reflect the delicate balance that must be made (Figure 2).

Figure 2: Strategic Actions to Drive Cost Reduction and Efficiency



Source: Aberdeen Group, April 2012

Standardizing business processes can simultaneously reduce costs while improving performance in the eyes of the customer. For example, imagine that two divisions within a corporation have different sales order processes. This can lead to a number of issues. First, a customer that buys products from both divisions would most likely have to work with a different sales representative from each division. Additionally, each sales representative would most likely be working with a different internal sales process. This inconsistency can be difficult for the customer to manage. In addition, it probably means that the customer does not gain the level of sales discount that their aggregate sales volume should merit. Internally, the different

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.
- ✓ **Industry Average:** Middle 50% of respondents.
- ✓ **Laggard:** Bottom 30% of respondents.

In this report, using data from the 2011 ERP Benchmark survey, Best-in-Class organizations achieved:

- ✓ 3.2 Days to close a month
- ✓ 34.4 Days sales outstanding
- ✓ 96% Complete and on-time delivery
- ✓ 18% Growth in operating margins over the last two years

approach used by each division is likely to be supported by a different infrastructure for processing sales orders. This duplication of effort increases costs as well as making the company harder to do business with.

In addition to standardizing business processes, 59% of organizations are also aiming to improve the efficiency of processes, while 37% aim to improve visibility into processes. Often, one strategy is a precursor to the other. Better visibility and insight into business processes is required before business processes can sensibly be rationalized. Without this insight, businesses risk cutting muscle, not fat. But unfortunately, it is not always easy to gain actionable insight from the substantial amount of data available in ERP. Respondents to Aberdeen's 2012 survey into role based analytics ([Embedded BI: Boosting Analytical Adoption and Engagement](#)) that are armed solely with ERP and lack BI found it difficult to actually use that data for decision-making (see sidebar). One way that top performing organizations have chosen to combat this challenge is by integrating BI with their ERP solution. Forty-nine percent (49%) of Best-in-Class (see sidebar) organizations responding to the 2011 ERP Benchmark study have implemented ERP and BI compared to 41% of other organizations.

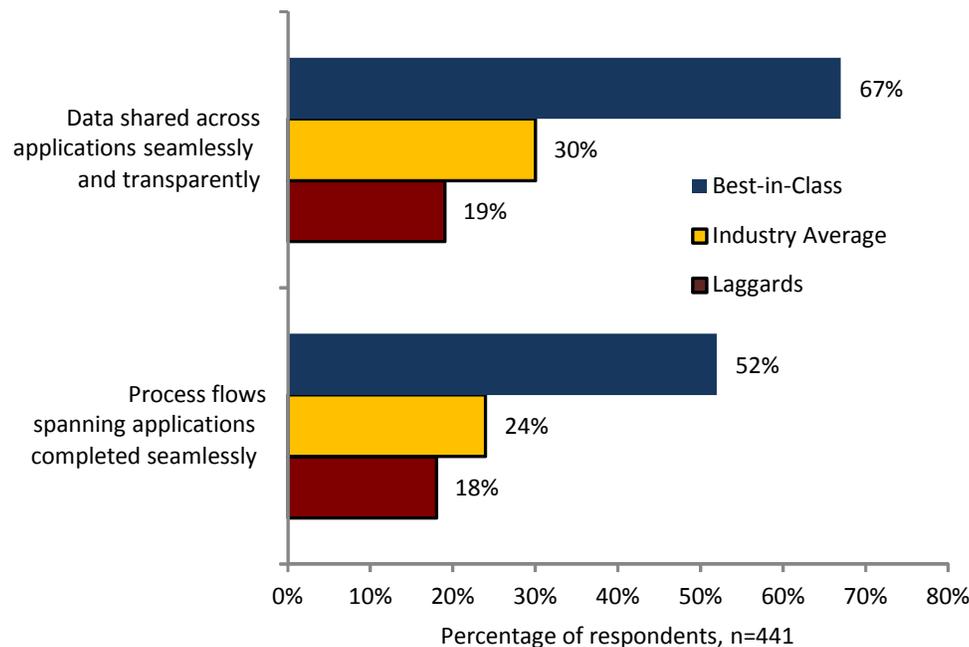
Firms that have a robust ERP implementation already in use have - by definition - a significant body of data that they can unlock to fuel the analysis and insight they need. Aberdeen's research data shows how top performing organizations are able to unlock the data held within their ERP solutions (Figure 3).

Fast Facts

Organizations with ERP only were asked to select their top two pressures driving their line of business to explore analytics initiatives:

- √ 48% too many decisions based on incomplete data
- √ 33% Data is too siloed to develop a clear picture of the business
- √ 33% Lack of operational visibility
- √ 26% Too much data is underutilized

Figure 3: Seamless Integration is Key to Unlock Value of ERP



Source: Aberdeen Group, April 2012

Organizations that gain the most value from their ERP implementations (the Best-in-Class) are more than twice as likely to be able to share data easily and seamlessly across applications. Likewise, over half (52%) of Best-in-Class organizations have business processes that seamlessly span applications. Only 24% of Industry Average and 18% of Laggard organizations have this capability currently in place. The critical word in both of these findings is seamless. Seamlessly sharing information across the applications allows executives and managers to react faster when action is required. They no longer have to switch between applications, fight political battles, or toil to manually integrate data to find the information they need. Similarly, companies see a substantially reduced burden on corporate IT and their BI developers to continually deliver new views of different combinations of data. The process is simplified and the end user can better make use of the data contained in ERP.

Table I shows how such tight integration helps to derive the best possible benefit out of the data that ERP provides, according to data from Aberdeen's [2012 Business Analytics survey](#).

Table I: ERP with BI Provides Better Access to Information

	ERP Only	BI Only	ERP+BI
Frequency of accessing management information in the time required	59%	68%	73%
Time average knowledge worker spends looking for information	6.2 Hours	4.6 Hours	4.4 Hours

Source: Aberdeen Group, May 2012

Managers at companies that have BI integrated with ERP are 7% more likely to be able to find the information they need in the time required, compared to managers at organizations that merely have BI. Likewise, compared to organizations that employ ERP alone, managers are 24% more likely to find the information required. Similar benefits are apparent when we consider the time that employees spend each week simply searching for the information they need.

Additionally, pairing ERP and BI breaks down information silos. For example, if sales data can be collected and aggregated automatically from different divisions, executive management can get timely insight into the challenges that the sales teams are encountering. On the other hand, if extensive work is required to construct a company-wide view of sales performance insight may be delayed. Such work may include extracting data from different applications within each division, transforming raw data into a common format and integrating it to make a summarized view - a process that inherently takes longer. When it takes longer to create that view management is deprived of fact-based insight throughout that delay.

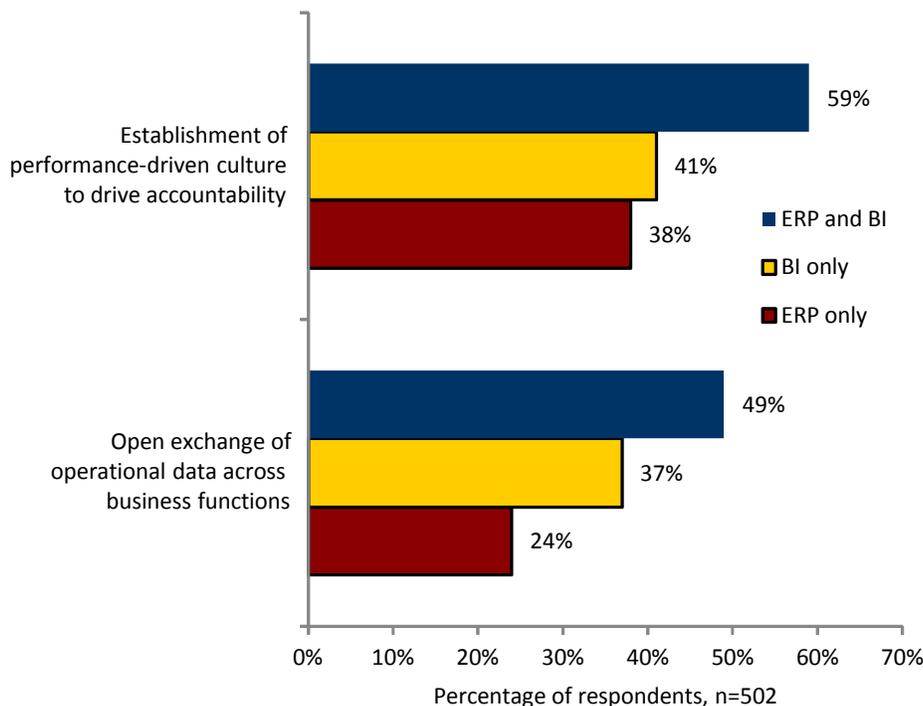
Not only does seamless sharing of data allow managers to take corrective action sooner, it can also allow the pulse of the business to be measured more frequently. If it takes a week to pull together a picture of company-wide sales performance then most likely that picture is only going to be updated relatively infrequently - perhaps once a month. If that picture can be updated automatically, then updates are likely to happen more frequently. Pairing ERP and BI can help to lead to more agile decision making and the ability to gain greater value from available data. But, other capabilities are required in order to gain the most value from an integrated ERP and BI solution.

Growing and Supporting the Analytical Organization

Business intelligence can play a pivotal role in helping companies to reduce costs, sharpen their customer focus and improve their growth. Data from Aberdeen's [2012 Business Analytics survey](#) presented in Table 1 shows how allaying BI with ERP can help to deliver powerful insights into the business that are just not possible with either ERP or BI alone. As is often the case, it's not just all about the technology - many other factors are necessary to achieve success.

Organizations that are using both BI and ERP are more likely to provide a strong supporting infrastructure for management decision-making. Specifically, as Figure 4 shows, organization maturity is important.

Figure 4: Organizational and Technical Maturity



Source: Aberdeen Group, April 2012

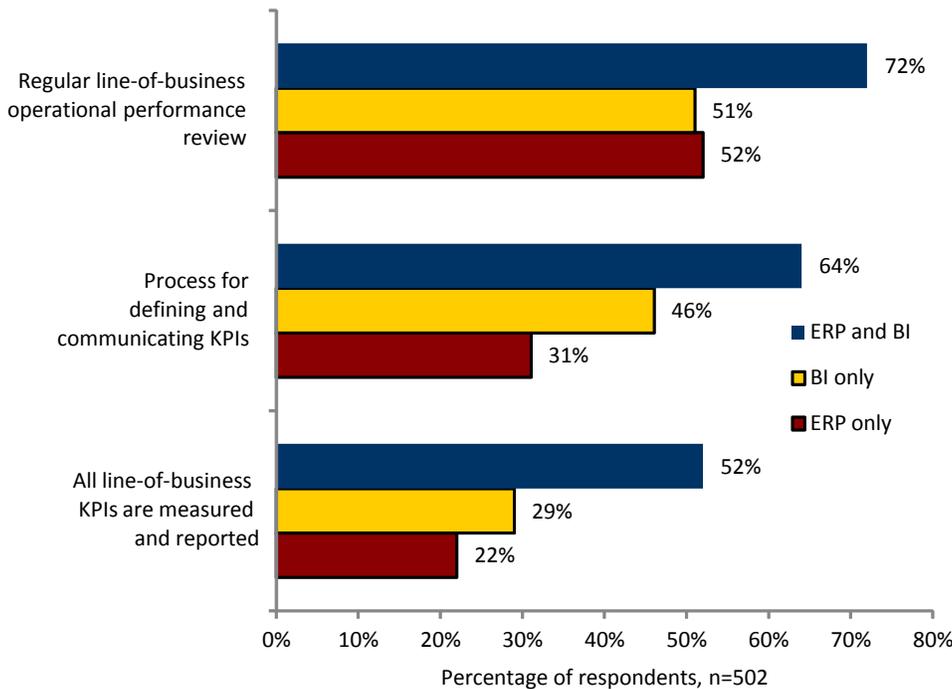
Case Example

A leading grocery retailer in North America leverages open data sharing to foster a sense of friendly competition among its managers. Using mobile devices, store team leaders have access to dozens of KPIs on their store performance. But, each manager can also tailor the data shown to them to include other stores. So, for example, team leaders can easily compare their performance to that of their nearest neighbor, the top performing stores in the region, or stores of a similar size.

The open exchange of data across organizational boundaries requires both a mature corporate culture as well as technical maturity. Culturally, senior managers must be willing to share information that relates specifically to their department or division. It is only through open sharing of performance information that business leaders are able to gain insights into performance across all parts - and aspects - of the corporation. Similarly, open sharing of information allows managers in different divisions to compare performance to their peers and not simply keep it locked up within each department (see sidebar).

In tandem with this, companies that have a performance driven culture in place are more likely to harness BI with ERP data. A company that is laser-focused on performance needs to be fed data that is comprehensive, regularly updated, and delivered in a timely fashion. The combination of BI and ERP facilitates this. If data is of poor quality, or is delivered too late to be useful, it will be difficult to establish and maintain a performance-driven working environment. Figure 5 illustrates how companies establish, maintain, and grow performance management.

Figure 5: Putting Performance Management into Action



Source: Aberdeen Group, April 2012

Organizations that use both ERP and BI are more likely than others to have a standardized process for defining and communicating KPIs. This helps to ensure consistency of measurement across the organization. In this way, it allows the performance of different parts of the company to be reliably and meaningfully compared. For example, standardizing KPIs enables the sales

Fast Facts

Uniting BI with ERP helps to make the use of analytics more pervasive. At these companies, strong adoption of analytics is present in the following percentages of corporate functions:

- ✓ **68%** - Finance and administration
- ✓ **58%** - Corporate management
- ✓ **52%** - Sales / business development
- ✓ **49%** - Supply chain
- ✓ **49%** - Information technology
- ✓ **48%** - Operations

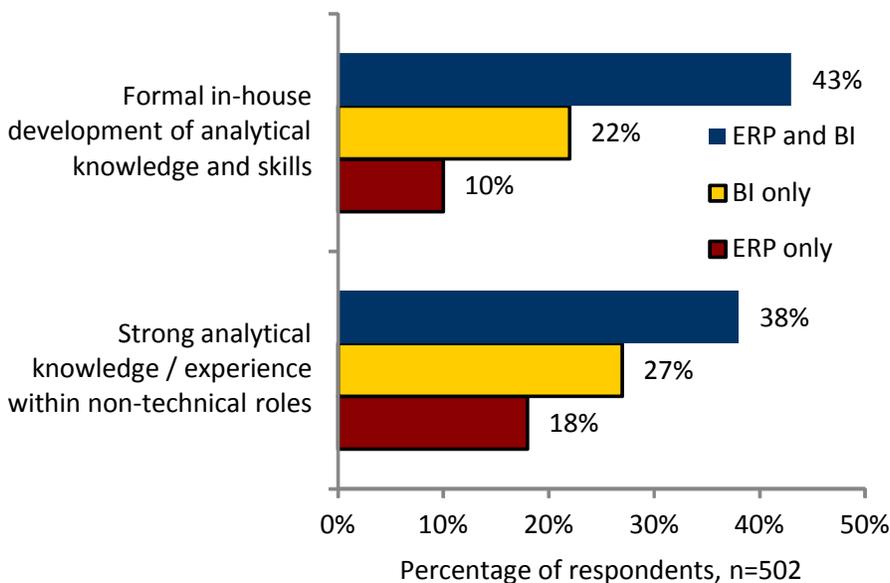
performance of one region to be compared to another, or productivity of one manufacturing facility to be compared to a second - and so on.

However, merely having a standard process for defining key performance indicators is not enough. Companies that combine the use of analytics and enterprise resource planning software are more likely than others to rigorously apply and enforce those standards.

Just over half (52%) of organizations using both BI and ERP infuse the measurement of performance throughout their lines-of-business. Only 29% of companies using solely BI, and 22% of companies using just ERP are able to achieve this. In addition to defining KPIs throughout the business, there is also a commitment to measure and monitor regularly and take corrective action where necessary. Seventy-two percent (72%) of companies using both BI and ERP regularly monitor and review their operational performance. Just over half of other companies undertake this.

Of course, in order to take advantage of the technology available to them, employees need to learn the skills to actively engage with analytics. This organizational development is evidenced in Figure 6.

Figure 6: Organization Development is Essential for Success



Source: Aberdeen Group, April 2012

Organizations with both ERP and BI are over four times as likely to have formal in-house development of analytical knowledge and skills. These organizations formally develop training and make it available to employees in order to make the most of their BI assets that are backed by the foundation of ERP data. These employees will be able to find the information they need more quickly and are more likely to integrate analytics into all decisions. Additionally, it is important to provide this knowledge to those employees

in non-technical roles. This only furthers the image of the analytical culture. Performance culture leads to strong focus on analytical skills and fact based decision making.

Case in Point

Regency Lighting provides lighting replacement, construction, and maintenance services across the United States. Headquartered in Chatsworth, CA, the organization manages lighting projects for its customers from design to completion. Founded in 1981 as Regency Enterprises, the organization quickly identified opportunities in the lighting distribution industry and changed its name to Regency Lighting. For the past several years, the organization has been ranked amongst the top 100 electrical wholesalers in the United States by Electrical Wholesale Magazine and it continues to grow as it enters its fourth decade.

As an organization with a large distribution network, Regency Lighting had a need for an ERP system to help it track materials and provide managers with visibility into operations. Still, sometimes business users had difficulty making use of the data contained in the ERP system. For example, the system that Regency Lighting selected had limited reporting capabilities. Hoon Kim, VP of Finance, identified the problems with the ways in which the organization was using the data. The organization was exporting data from the ERP system into spreadsheets and using a lot of pivot tables. Since there was no direct link between the desktop software and the ERP system, the “data was only as good as what we could extract from the system.” Data was siloed. Generating reports caused them to rely on the IT department. The company was producing different versions of sales reports and none of them agreed with each other. Kim said, “This caused a major concern.” Clearly, the current process was difficult and cumbersome. The company needed more accurate financial reporting. Kim stated, “There was a strong need for a BI tool in order to report more efficiently.”

There were several things that Regency Lighting looked for when selecting a BI solution. First and foremost was ease of use. Since the reason for implementing BI was to pull data from an ERP system and make it more consumable, employees needed to be able to easily interact with the software. Self-service functionality was essential. Kim said, “We didn’t want to have to hire a database programmer to continue to run reports.” This would save the company time and money.

The benefits that Regency Lighting received from integrating an ERP system and BI were numerous. Kim said, “We are less dependent on the accounting department.” Users now have the ability to run their own accurate reports. Reports can now be published to a centralized location rather than being delivered through email. They introduced efficiencies to the budgeting process through templates. The result is quicker decisions and more informed investments as a result of forecast accuracy. According to Kim, “I would definitely say that projections are more accurate. We are able to make better informed decisions as a result of more accurate projections.”

Key Takeaways

Both ERP and BI provide tangible and repeatable benefits for managing organizations when deployed and utilized effectively. ERP can help to provide standardization, operational efficiency, and collaboration. Likewise, BI can help organizations to drive performance improvements based on data, not opinions. Aberdeen notes the following characteristics of organizations that use business intelligence and enterprise resource planning solutions in unison:

- **Managers are more likely to find the information they need in the timeframe required to support decisions.** As noted, managers at companies using BI and ERP together are 7% more likely to be able to find the information they need in the time required compared to managers at organizations that just use BI. When compared to organizations that just used ERP, managers are 24% more likely to find the information required in a timely way.
- **Open, performance-driven cultures help to drive success.** Companies that use both BI and ERP are more likely to have open organizations that are willing and able to share information. This requires a culture of data sharing, as well as the technical ability to do so. Over twice as many organizations with ERP and BI are open to information sharing compared to those that use ERP alone (49% vs. 24%). Similarly, these organizations are 50% more likely to have a performance driven culture than their peers that use just one of these two classes of technology.
- **Analytic education is vital.** Managers are inherently becoming more tech-savvy as successive generations enter the workforce. However, education in the art and science of analytics is still a key ingredient for those organizations using BI and ERP. Thirty-eight percent (38%) of these firms already have strong analytical skills within their business ranks, while 43% have formal programs in place to develop and enhance these skills further.

Data becomes more consumable and business users are more likely to seek it out and integrate it into all decisions. The organization becomes more informed, active and agile.

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

Related Research

[Turning Data Growth into Business Growth: ERP and BI in the SME;](#)

October 2011

[High Performance Organizations](#)

[Empower Employees with Real-Time](#)

[Mobile Analytics;](#) April 2012

[Picture this: Self-Service BI through Data Discovery & Visualization;](#) March 2012

[Case Study: ERP and BI Put Business Problems to Bed;](#) June 2011

[Case Study: ERP & BI in the Outback Information Management and Delivery in Extreme Remote Australia;](#) June 2011

[Agile BI: Three Steps to Analytic Heaven;](#) June 2011

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