

Seizing the BI Opportunity

CEOs, CFOs, COOs and CIOs are dramatically increasing their use of business intelligence and analytics as well as the infrastructure to support these tools.



An exclusive survey and research report



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Methodology

BusinessWeek Research Services (BWRS) launched a research program in February 2006 to determine C-level executives' views on the use and value of information technology with a special focus on business intelligence (BI) and analytics tools and their required infrastructure.

This research program included three components:

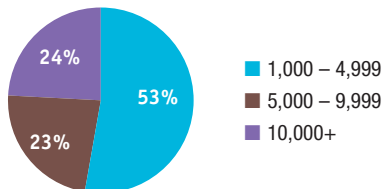
- An online survey of the "C-team" subset of BWRS's Market Advisory Board, a group of 14,000 subscribers in North America to *BusinessWeek* Magazine and/or the *BusinessWeek* Online Web site. There were 353 respondents by the March 2, 2006, cut-off date.
- In-depth telephone interviews with 10 senior officials of large and midsize companies known to be using BI and analytics.
- An analysis of the survey results and the interviews with BI/analytics users in this report.

Methodology

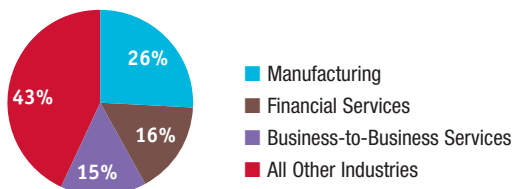
Here are the demographics of the 353 survey respondents by title:



And by number of employees in each respondent's company:



And by industry sector:



Almost 70 percent of these executives identified their role in their organization as business-oriented, while 16.4 percent described their role as technology-oriented. The others reported an equal balance of the two roles.

In addition to the survey, 10 senior executives of large and midsize companies throughout North America were interviewed in-depth on the telephone to gain their additional thoughts on deploying and using business intelligence and analytics. The organizations that participated in the interviews included:

- Automotive supplier (East Coast)
- Casual Male Retail Group
- Hydro One
- Insurance company (East Coast)
- Jefferson Wells
- Jones Lang LaSalle
- Princess Cruises, a subsidiary Carnival Corp.
- The Regence Group
- Sodexo USA
- VeriSign

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For more information about this project, please contact the Director of Primary Research at *BusinessWeek* at chris_rogers@businessweek.com.

Executive Summary

- IT spending will rise significantly this year—almost half the respondents plan to spend more on information technology products and services compared to last year.
- The continual enhancement of their computing infrastructure—servers, storage, networking gear, etc.—remains a top IT goal for these predominantly non-IT officials.
- More than 50 percent of the respondents' companies currently use business intelligence and analytics to support each of the following business processes or functions: budgeting, customer service, sales, forecasting, marketing and operations.
- Most of those taking the survey said they are more than satisfied with the ability of their systems to support a large number of users and with the level of value their organizations derive from their operational BI and analytics systems.
- Although cautious about large and grandiose IT projects in general, almost four out of 10 executives said they will increase their spending for BI and analytics hardware and software by at least 5 percent this year.
- More than half the respondents said improved decision-making is their top driver for BI and analytics investments this year. Reducing costs is the second most important factor, followed by streamlining operations and delivering information faster.
- More than 70 percent of the respondents said that BI and analytics tools should be made available to managers, executives and key professionals. Almost half said all professionals should have access, while one out of four respondents said everyone in their organization should have access.
- From a hardware infrastructure perspective, respondents consider network, server and desktop performance among the most important prerequisites for success in expanding the distribution of BI and analytics to support business processes.
- The highest priority functional areas to receive BI and analytics support over the next two years are sourcing/procurement, research and development, and manufacturing processes.

Introduction

Growing business demands—globalization, intense competition, higher customer service standards, the ubiquity of access and interest in the Internet—are driving more companies to use business intelligence and analytics throughout their organizations. Originally aimed at small numbers of PhDs and financial analysts to determine marketing or financial trends, the use of BI and analytics is exploding throughout the corporate landscape, expanding to all workers who need more precise, salient and real-time information.

Our survey and interviews show that the impetus for BI and analytics dovetails with companies' top business goals—improving customer service and retention, reaching new customers, managing sales growth, and increasing sales and market share are among their highest business priorities (see chart 1, Customer Service, Not Revenues, Top Business Goal, next page).

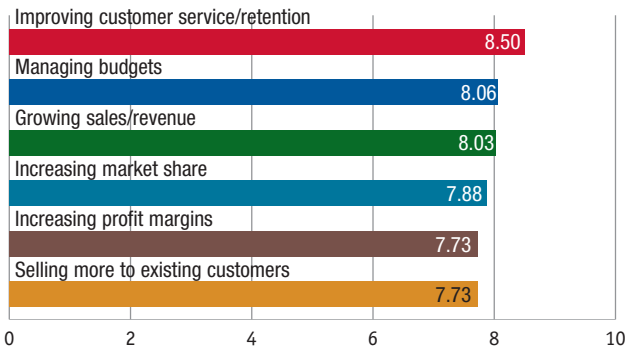
With corporate technology and business strategy becoming increasingly aligned, IT goals are now more likely to clearly flow from business goals. Our study indicates that the top IT goals

are aimed at creating robust, flexible infrastructures that can meet the demands of more users and more demanding applications.

Chart 1

Customer Service, Not Revenues, Top Business Goal

C-level executives rated customer service and retention significantly higher than managing budgets and increasing revenues, profits or market share. On a scale of 1 to 10, with 10 meaning extremely important, they rated the following business goals, in descending order of mean score.



Source: BusinessWeek Research Services, "Wave VIII: Tighter Embrace of IT," April 2006 Presentation

Improve network and data security, build an e-business infrastructure for customer service and cost reductions, upgrade infrastructures to boost bandwidth, and upgrade hardware and software are among the highest IT goals of the C-level officials of the large and midsize companies who responded to our survey. These priorities have remained roughly the same for the past several years (see chart 2, Improving the Infrastructure Key IT Goal).

Budget Expansion

Additional funding to support business and technology goals is more available now than at any time in the past five years of surveys of the BWRS Market Advisory Board. Almost half the respondents of our survey say they plan to spend "more" on technology compared to last year. This is the first time since BWRS began these studies in 2001 that

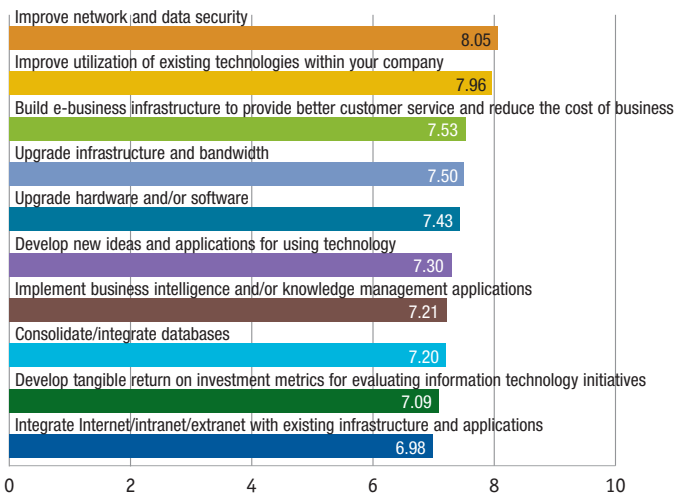
"more spending" received a higher percentage of respondents than "flat spending" (see chart 3, Strong IT Spending, next page).

No matter what their spending increment or decrement, our survey found a clear tilt on the part of C-level executives toward a more cautious approach to IT expenditures. When asked about the level of aggressiveness in their IT goals for this year, they indicated it is a bit less aggressive than in the past several years (see chart 4, Less Aggressive IT Initiatives, page 8).

Chart 2

Improving the Infrastructure Key IT Goal

C-level executives rated various infrastructure-related IT goals as their top priorities. Using a scale of 1 to 10, with 10 meaning extremely important, their IT goals are rated in descending order of mean score.



Source: BusinessWeek Research Services, "Wave VIII: Tighter Embrace of IT," April 2006 Presentation

As one senior executive who requested anonymity notes, he wants "sure win" projects, where the advantages of using BI and analytics are unquestionable, the time period to value is short, and the implementation and technology risks are low.

Dennis Hernreich, executive vice president, COO/CFO of Casual Male Retail Group, a \$420 million clothing retailer for big and tall men, comments, "I don't want to use innovative technology. I want to use existing technology in innovative ways."

When it comes to BI and analytics, companies are looking to reduce their risk as well as to speed implementation. As one IT director says, "the big bang era of BI is over, and users won't wait more than a couple of months for a project to be implemented."

Based on their prior BI/analytics implementation experiences, C-level officials are more likely to move ahead on more modular projects, where there is a clear long-term enterprise strategy and architecture but a distinct series of short- and medium-term deliverables that provide value on their own.

“We focus on modular projects or ones that start small and can be scaled,” says Lauralee Martin, the CFO and COO of Jones Lang LaSalle, a \$1.4 billion real estate services and money management firm.

Turbo-Charging BI/Analytics

Another example of the more measured approach to IT investment is heightened interest in adding on, as opposed to building from scratch. Companies are trying to leverage their existing infrastructures as much as possible by augmentation rather than wholesale replacement. Just as the automakers added turbo-chargers to their existing engines instead of building bigger gas-guzzling engines, many IT departments are adding devices that accelerate the performance of servers used to power BI and analytics applications.

Along these lines, senior officials see BI and analytics appliances, accelerators and other techniques becoming key technologies for more efficient processing of huge data collections like those at large auto manufacturers or credit corporations.

“BI appliances and accelerators will become increasingly necessary as users demand more reporting off real-time data,” says the director of business intelligence at a large automotive supplier who requested anonymity. “We’ll have a lot of transactions flying through operational systems that have the potential to create bottlenecks.”

Already Substantial BI/Analytics Use

Indeed, C-level officials have focused on business intelligence and analytics use throughout their organizations for many years. Respondents note a dozen different business functions or processes that are supported by BI and analytics. These range from the traditional bastions of BI use—financial and customer service—to sales, marketing, research and development, asset management and operations.

As a financial executive at a large East Coast insurance company puts it, “Our use of business intelligence and analytics is becoming ubiquitous across the full spectrum of our organization.”

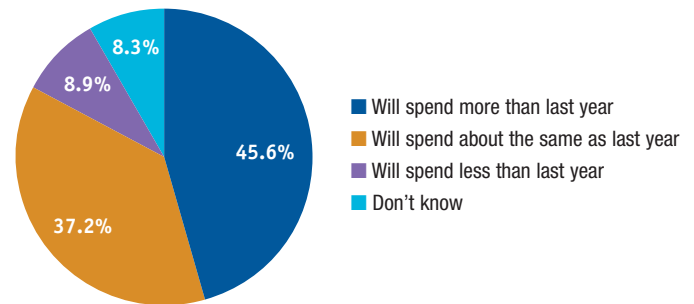
Most organizations currently are using at least six types of business intelligence and analytics and have come to rely on them to help manage their sales, budgeting and financial forecasting functions, for example (see chart 5, Rush to Add BI/Analytics Functionality, page 9).

Typically, an organization will launch a BI/analytics initiative for one process but plan for it to be linked to other processes. A case in point: Casual Male Retail Group. In 2004, the retailer implemented business intelligence to monitor and predict inventory requirements at its 531

Chart 3

Strong IT Spending

Almost half the respondents said they would spend more on IT this year than in 2005, a much higher proportion than in past C-team surveys.



Source: BusinessWeek Research Services, “Wave VIII: Tighter Embrace of IT,” April 2006

stores across 44 states. Merchandise needs vary considerably from region to region and the inventory is diverse, with the chain stocking, for example, 49 different sizes of pants. The BI benefit: Stocking and procurement costs plummeted, according to company officials.

The BI system also helped increase sales, and Casual Male leveraged this effort into a marketing pitch: If an item was neither in stock nor available within five days, it would be shipped to the customer for free. During the initial phase, the company budgeted for shipping 4,000 free items; however, the system was so efficient that only 13 items needed to be shipped.

Furthermore, a new BI module will provide another sales boost. Casual Male is testing a system where sales associates use handheld devices to instantly access customer information from the corporate CRM system. By knowing what items a customer has purchased previously, associates will be able to suggest complementary clothing and accessories. The system also will enable sales associates to offer discounts before the customer starts shopping, rather than waiting until he is already at the register and eager to go home.

Satisfaction With Current Systems

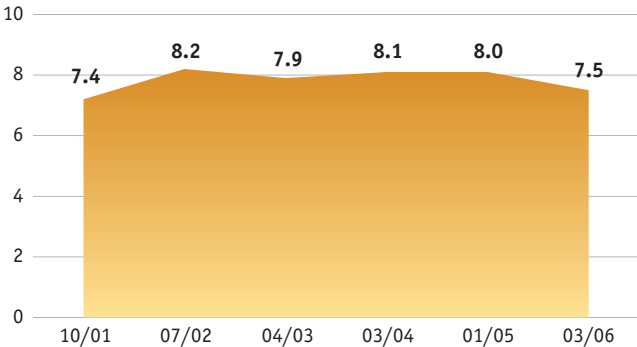
Overall, survey respondents say they are quite satisfied with their BI/analytics implementations. On a scale of one to 10, with 10 indicating extreme satisfaction, the mean score for their satisfaction with the value of insights derived from their BI/analytics systems is 6.63. They also are pleased with the ability of their systems to support a large number of users (see chart 6, Satisfaction Delivered, page 10).

“We can now slice and dice our data,” says Greg Bozigian, director of financial planning for Princess Cruises, a subsidiary of \$8.7 billion Carnival Corp. “Once we have consistent reporting, we can compare our different brands, such as luxury and economical, on a like basis, allowing us to analyze our business more efficiently.”

Chart 4

Less Aggressive IT Initiatives

C-level executives indicated that nowadays they are a bit more reluctant to invest in difficult IT initiatives than in years past. On a scale of 1 to 10, with 10 meaning they rate their IT goals as very aggressive, the mean score has declined to the 2001 recession-era level.



Source: BusinessWeek Research Services, “Wave VIII: Tighter Embrace of IT,” April 2006 Presentation

Another area of satisfaction is the ability of respondents’ networks, servers, storage, desktops and other infrastructure parts to support their initial BI/analytics initiatives. “Business intelligence is being spurred by the universal law of computing—hardware simply becomes better and better,” says an automotive IT executive.

Although C-level executives see value in BI and analytics, these days they are not as focused on quantifiable returns on investment (ROI). It’s not just the hype factor overwhelming rationality. Some companies are realizing they need to rethink the justifications for BI/analytics projects to capture the true benefits of these initiatives.

In the past, a common justification for a BI or analytics project was the automation of manual processing tasks, thereby eliminating the need for the people who currently perform such tasks. In reality, though, headcount is rarely reduced through BI/analytics initiatives. Instead, those people are retrained with a higher skill set and empowered with new tools that lead to more sophisticated insights. Without question, BI/analytics provides tremendous value; however, it can be difficult to determine exactly how much value.

“Too often, companies overemphasize the quantifiable benefits, such as ROI, while underestimating the qualitative benefits,” notes James Robertson, director of corporate planning and performance management at VeriSign, the \$1.6 billion intelligent infrastructure services provider. “That approach puts you in danger of making bad business decisions.”

In addition, traditional ROI calculations that depend on three- or five-year paybacks are out of touch with the current business reality for many companies. Even companies that expect BI/analytics initiatives to reduce headcount note that making better decisions is the true reason for these projects.

Our survey indicates that managing the ROI of BI/analytics going forward doesn't have the same level of priority as it had during the recession of several years ago. Being responsive to rapidly changing market conditions trumps a spreadsheet calculation.

“The rapid speed of market change means there is less time for a return before upgrades and modifications are required,” says Martin of Jones Lang LaSalle. “However, not initiating projects can lead to significant loss of market share.”

Implementation Plans

Given their high level of satisfaction with business intelligence and analytics in the past as well as the continuing business challenges—response times, globalization, improving customer service—C-level executives plan to dramatically expand BI/analytics throughout their enterprises.

Spending for BI/analytics specifically is on the rise, according to our survey. Almost four out of 10 respondents say this spending will rise by more than 5 percent. This dovetails with a recent Gartner Inc. prediction that it will increase by 7 percent annually for the next several years (see chart 7, BI/Analytics Spending Accelerating, page 11).

Our survey also indicates what executives expect to get from these BI/analytics outlays. Better decision-making, reduced costs, streamlined operations and more timely delivery of information topped the list, in that order. The gap between the first and second driver is significant: Improved decision-making was cited by 54 percent, while reduced costs was named by 36 percent (see chart 8, BI/Analytics Is Not Just a Cost Cutter, page 11).

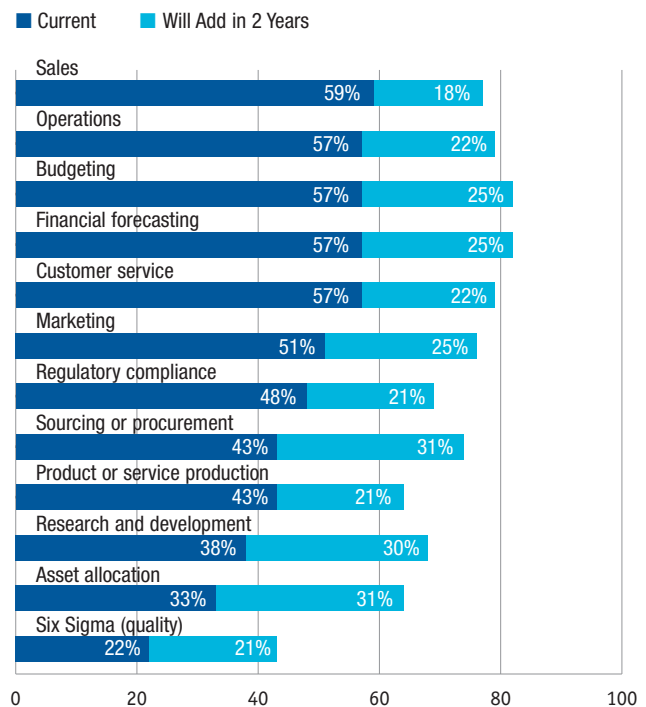
Here are two examples:

- An insurance firm uses BI/analytics to evaluate the extent of automobile accident damage by asking customers a few questions and then immediately scheduling a repair truck and service appointment wirelessly.

Chart 5

Rush to Add BI/Analytics Functionality

C-level officials are enthusiastically adding BI/analytics capabilities to a host of already deployed functions and processes. Survey respondents indicate which processes BI/analytics currently supports and which processes will be supported in two years (% of respondents supporting or will support each function or process).



Source: BusinessWeek Research Services, "Wave VIII: Tighter Embrace of IT," April 2006

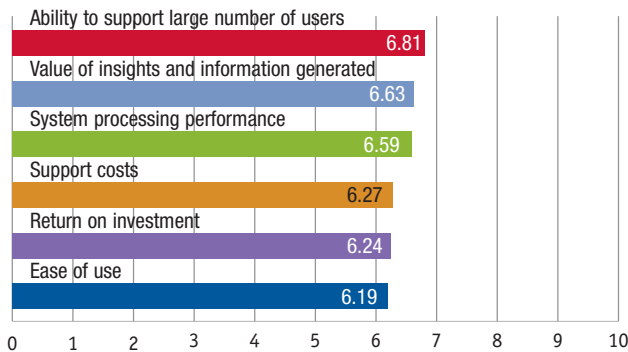
- Jefferson Wells, the \$400 million financial services firm, sees rolling out BI/analytics as “a critical component of business reporting and a key means to moving from compiling information in spreadsheets to analyzing drivers of value in an organization.”

Once the province of only a few key professionals, BI/analytics now is being widely dispersed throughout organizations. Three quarters of the respondents say that companies should distribute BI/analytics to key professionals and 72 percent say it should go to managers and executives. Nearly half of the firms say that the technology should be provided to “all professionals,” and a whopping 27 percent say “everyone” should have access to BI/analytics (see chart 9, Broad Access to BI and Analytics Eyed, page 12).

Chart 6

Satisfaction Delivered

C-level officials have a high level of satisfaction with the value derived from their existing BI/analytics systems. They rated the following characteristics on a 1 to 10 scale, with 10 meaning extremely satisfied (mean scores in descending order).



Source: BusinessWeek Research Services, “Wave VIII: Tighter Embrace of IT,” April 2006

At Sodexho USA, the \$6 billion food and facilities management firm with 120,000 employees, for example, all 30,000 line managers in the United States now have access to Web-based analytics tools that provide insights into their units.

Casual Male is putting technology in the hands of customer-facing sales associates, who greet customers as they walk into the store and instantly call up their prior purchasing history. This empowers the associates to better assist customers in the selection process and thereby boosts sales.

At The Regence Group, the \$6.7 billion affiliation of health plans in the Pacific Northwest and Mountain State regions, about 20 percent of the organization has access to BI/analytics or uses systems embedded with these technologies. In two

years, that figure will rise to 60 percent to 80 percent as BI/analytics assists in everything from Operational Management to better workflow in customer service.

Embedding BI/Analytics

From an end-user standpoint, BI/analytics becomes most powerful when it goes unnoticed. A case in point is embedded BI/analytics, which goes beyond simply pushing information into a portal or letting it be viewed within an application. Instead, embedded BI/analytics works from real-time data.

BI/analytics is being embedded in processes or accessed through familiar desktop tools such as Web browsers and office applications like Microsoft Excel, thereby allowing users to easily generate their own reports, use their own desktops and control the embedded analytics on those desktops.

C-level executives say the most important areas to incorporate BI or analytics are customer service, product or service production, quality, research and development, and sourcing and procurement. Now that the core business applications have BI/analytics, it is spreading to other uses. Over the next two years, the most in-demand BI/analytics application will be sourcing and procurement. Three out of 10 respondents say their companies will be adding BI/analytics functionality to purchasing operations.

It's easy to understand why. The technology can analyze the cost, quality and delivery performance of suppliers, pinpointing the most efficient and cost-effective partners.

However, the demands for individual process support tend to be very industry-specific. In the aerospace industry, for example, the need for better procurement and materials handling are understandably huge. Not so in some service organizations.

Overcoming the Challenges

Although companies realize the benefits of widespread distribution of BI and analytics tools to help workers realize strategic goals, they are equally mindful of the challenges this brings from both a people perspective and a technology perspective.

Our survey shows a variety of concerns about rolling out BI/analytics to a broader base of users. The ability of servers, storage devices, networks, databases and other infrastructure components to provide fast query responses as well as to support tens of thousands of users is uppermost in the minds of C-level executives. On a scale of 1 to 10, with 10 indicating extreme concern, survey respondents give system and server performance almost an eight. Other concerns include security, ROI, integrating data from disparate systems and tool proliferation (see chart 10, Challenges to Overcome, page 13).

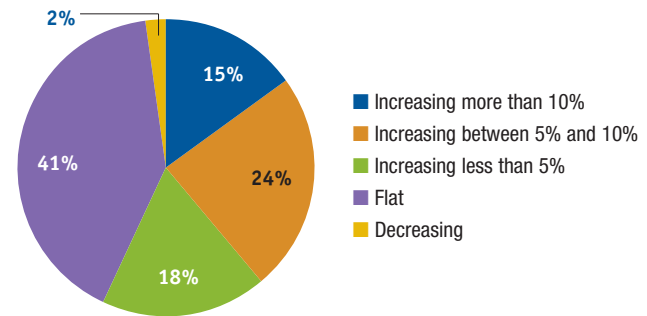
Pioneers at broadly dispersing BI/analytics tools validate the survey data. The Regence Group recently launched a dramatic expansion of access to its BI tools, which are used to monitor fraud and improve disease management, among numerous other purposes. This growth has driven higher than expected costs for hardware and disk space—the BI implementations required larger servers, more memory, faster network connections and significantly more disk space than the company ever imagined.

The broader distribution of BI/analytics is usually part of a strategic business initiative to provide better customer service or faster response to external competitive pressures. However, that means companies must deal with exponentially expanding numbers of BI/analytics users and terabytes of data as well as handle the intricate technology that allows for event-driven real-time analysis. The shift to a business process dependent on real-time operations also requires more network and server horsepower than many managers expected.

Chart 7

BI/Analytics Spending Accelerating

Most companies are increasing their spending on BI/analytics systems (% of respondents indicating which level of spending most closely corresponds to their plans for 2006).

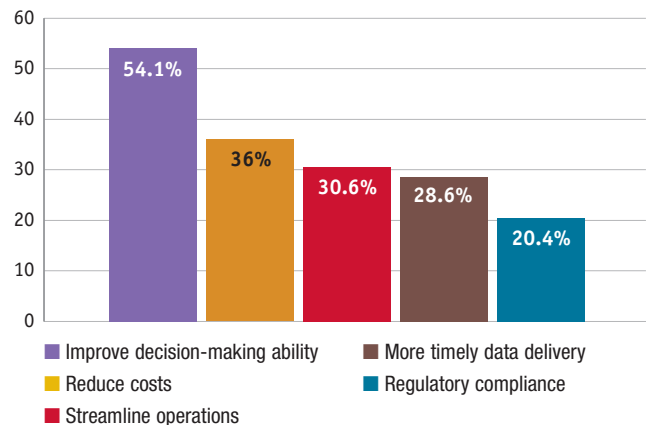


Source: BusinessWeek Research Services, "Wave VIII: Tighter Embrace of IT," April 2006

Chart 8

BI/Analytics Is Not Just a Cost Cutter

Most C-level executives consider the ability of BI/analytics to help their professionals and managers make better decisions faster to be, by far, the key driver of spending for the technology (% of respondents selecting a criterion as one of the three most important drivers of their 2006 BI/analytics spending; top 5 of 14 criteria).



Source: BusinessWeek Research Services, "Wave VIII: Tighter Embrace of IT," April 2006

For example, a rising number of organizations now use continuous or intraday data feeds for their business analytics, which means an increase in the refresh rates for data marts and data warehouses. Although this type of computing challenge is standard procedure at banks and securities firms, it is now becoming a requirement at retailers, distributors and consumer packaged goods manufacturers as well.

Wider BI/analytics use places another strain on the hardware infrastructure. Operational BI applications are combining data from organized sources like databases with relatively disorganized e-mails, PowerPoint presentations, Word file memos and text in customer service logs. The challenge of collecting data from multiple processes and applying the information cross-functionally also increases the computing burden.

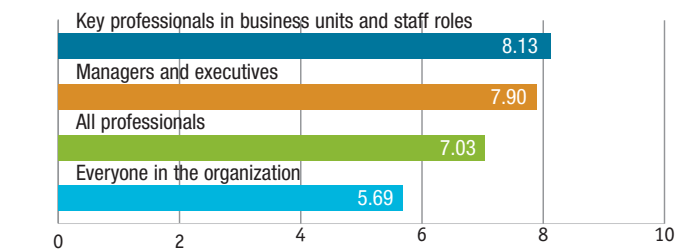
Our survey also found that many C-level executives recognize that the increased reliance on an enterprisewide BI/analytics system for operations highlights the need for a more robust infrastructure because companies cannot afford to have these systems go down.

Furthermore, including more inexperienced end users instead of veteran number-crunchers requires more computer processing cycles at the server and desktop levels. "Broader distribution means a higher level of analytic applications," says Vail of The Regence Group.

Chart 9

Broad Access to BI and Analytics Eyed

C-level executives said it was quite important to expand access to BI and analytics tools throughout the organization. On a scale of 1 to 10, with 10 meaning extremely important, expansion from a small group of professionals to most managers and executives is a high priority.



Source: BusinessWeek Research Services, "Wave VIII: Tighter Embrace of IT," April 2006

Improving Data Quality

Most companies don't fathom the poor quality of their data until they begin to aggregate information from multiple systems into a broader enterprise application. These types of applications are more sensitive to data issues, Vail notes.

For many companies, data consolidation efforts are underway. The goals are to deliver more consistent data, reduce costs, standardize the IT portfolio and move to a more real-time infrastructure. At The Regence

Group, the familiar data integration challenge meant populating a data warehouse from 1,500 sources across four companies. Also triggering additional costs were cleanliness of source data, data volumes and data complexity beyond the average users' ability to query.

As BI/analytics expands, companies must grapple with departmental silos versus a single version of the truth. These individual efforts often use inconsistent ways of describing customers, products and key metrics.

The resulting analytic silos with inconsistent information challenge the ability of BI/analytics to deliver accurate, enterprisewide business insights. Getting divisions to agree on, say, the definition of a customer is a tremendous task. The danger in all this is ending up with a patchwork quilt of systems and different views of reality, as opposed to bringing the single version of the truth that is at the heart of BI/analytics.

Jones Lang LaSalle, for example, is focusing on connecting its budgeting, sales, customer service, operations and other areas through a common CRM system that also links to its financial and HR reporting tools.

Another solution to the data quality problem is to shut legacy systems. However, that option raises thorny political issues. Other alternatives range from grandfathering in legacy BI/analytics solutions to changing the perception of executives and the practices of end users to having the company's IT department manage the entire system rather than each individual marketing, customer service, HR or finance department manage its own system.

However, this last option can trigger one of the biggest challenges to solving the data quality problem. Business units are wary about turning over analytical applications to central IT groups, which they inherently distrust; they are concerned these IT groups are fixated on standards rather than business value. For example, the finance department typically views itself as the keeper of data, doling it out to users as it sees fit.

George Herrmann, vice president and CFO at Jefferson Wells, attributes this phenomenon to "finance department arrogance" and suggests that finance organizations need to change their focus to empowering decision-makers in the business by providing them with timely and easy access to information rather than hoarding it.

Releasing this data to end users, and creating tools to allow decision-makers to leverage the data, requires a dedication to support and empowerment that still makes many CFOs uneasy. Because of this, larger BI/analytics projects require buy-in from the top of the organization to succeed.

A third of our survey respondents consider training the top priority of BI/analytics investments, while another half say it is a medium priority. However, interviews with BI veterans indicate that some respondents may be underestimating the importance of training when rolling out a major BI/analytics program.

Educating and persuading employees to use new BI/analytics technology is a major challenge, respondents say. With broader distribution, users of BI applications must have skills to understand the data or information. Too often, though, such rollouts end up putting the tools in the hands of people who don't know how to use them because of inadequate funding for training.

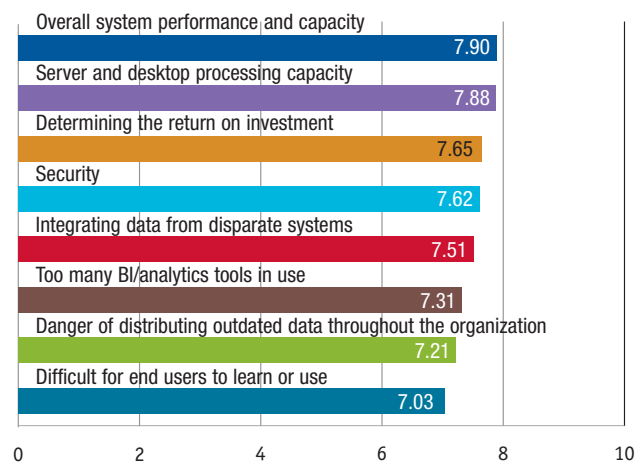
"The biggest 'gotcha' is training and getting the workforce familiar with these tools," says David Scanlan, senior vice president of finance in the corporate services and vending division at Sodexo. "It's not resistance as much as the time needed to assimilate a different process and different view of the data."

The opposite response also can be a problem. If the system is oversold, it leads to other difficulties. "The biggest misconception is that business intelligence can solve all your problems," says Princess Cruises' Bozigian. "If you choose the right tool and implement properly, you'll have better data and reporting. But it's not a magic pill. It won't miraculously make you a better company. You still need sound business practices and to make good decisions."

Chart 10

Challenges to Overcome

C-level officials indicated a number of concerns about the broad distribution of BI and analytics tools throughout their organizations. On a scale of 1 to 10, with 10 meaning extremely concerned, here is how respondents rank the various challenges to wider distribution (mean score).



Source: BusinessWeek Research Services, "Wave VIII: Tighter Embrace of IT," April 2006

Extending Infrastructure

Our research shows that companies realize they need to strengthen their infrastructure for more widespread BI/analytics deployment. Although they are more inclined to enhance and extend existing foundations than to rebuild—they see more value from, say, adding analytics to ERP systems—many remain flexible about adding a new technology or vendor if it provides a clear business advantage. Companies believe that standardization of the IT foundation should be fairly rigid but that the layers of support hardware and software can be more diverse.

“Business advantage is what the game’s about,” VeriSign’s Robertson notes. “It makes no sense to say, out of the gate, that you would not consider a new technology—especially considering the explosion of tools and new categories of tools—if it provides a competitive advantage.”

Another example of the more cautious approach to BI/analytics initiatives, and to IT in general, is to minimize software customization as much as possible. Hydro One, a \$4.4 billion power supplier, is going through a period of IT rationalization. The company’s philosophy is that strategic systems out of the box can meet 85 percent to 90 percent of its needs, so it shies away from further customization and higher future maintenance costs.

Conclusion and Recommendations

When it comes to business intelligence and analytics, our research indicates that companies are highly engaged and enthusiastic—but not totally satisfied. Executives understand that organizations properly embracing the technology can accrue tremendous business advantages.

Companies have come to realize that the biggest benefits of BI and analytics come from enterprisewide deployment. Given increased competition and the need to be ever more nimble, though, executives realize they can’t delay in moving in that direction.

To succeed with widespread BI/analytics efforts, organizations need to:

- Realize that the right people don’t just need the right information faster. They need it *much* faster.
- Recognize that underestimating the needed capacity and performance of the servers, storage devices and networking infrastructure will lead to costly retrofitting later.
- Consider augmenting existing data centers with devices designed to enhance BI/analytics performance.
- Appreciate the growing importance of training in making BI and analytics initiatives successful.
- Acknowledge that integrating data should be given a high priority by management, not just the IT department.
- Understand that the value of BI/analytics implementations is not truly known until after the systems are in production.
- Anticipate that company data is in much worse shape than executives probably imagine.
- Head off “finance department arrogance” by forging closer links among finance, IT and business groups.
- Not think of BI/analytics as a “magic bullet.” Business intelligence and analytics can dramatically enhance good underlying business practices and strategies, but these tools and techniques are not a substitute for them.

Intel and SAP: Innovating for the Future Today

SAP® has delivered enterprise applications that improve the visibility and control of complex operations for over 30 years. Through better resource management, information flow and business intelligence, SAP gives companies of all sizes the tools they need to think more strategically and execute more efficiently throughout their value chain.

Intel® has supplied innovative computing and communications technologies for high-end enterprise servers, mid-range processors, business desktops and mobile devices, powering business solutions everywhere.

SAP and Intel not only understand the challenges businesses face in today's volatile global marketplace, but since 1994 they've worked together to offer a powerful set of optimized solutions on innovative platforms that help companies quickly adapt their strategies and execution. Currently, more than 74 percent of new SAP installations are deployed on Intel platforms.

The collaboration continues with a proven software and hardware solution that delivers lower costs coupled with the flexibility, scalability and performance needed in today's marketplace.

Analytic Applications Provide Actionable Insights

Making timely business decisions has never been easy, but today it is more difficult than ever. Where valuable time is spent on gathering, integrating and interpreting information, opportunities are easily missed and unnecessary risks are taken. That is why SAP delivered a new breed of applications, the SAP xApps Analytics composite applications.

Integrating analytical, collaborative and transactional capabilities, these applications provide actionable insights where they are most needed—within business processes. Powered by the SAP NetWeaver® platform, these analytic applications are built on an advanced business intelligence framework that consolidates and aggregates corporate data. In addition,

the applications provide the mechanisms and tools to effectively explore and analyze that data. As a result, companies are able to run their businesses not only more efficiently but also smarter.

Enhancing Performance for Real-Time Business Intelligence

The volume of available information is ever increasing, as is the number of consumers of business intelligence within an organization. However, the volume and demand for real-time insights strains existing processors.

To meet this challenge, the SAP NetWeaver platform offers a new function, the BI Accelerator. This “snap-in” appliance was developed in conjunction with Intel. It enables businesses to supercharge analytic services and applications by combining high-performance software from SAP NetWeaver with an advanced hardware design from Intel that boosts analytics performance.

The BI Accelerator processes highly complex queries in seconds rather than minutes or hours. It not only delivers actionable information faster but also dramatically reduces the amount of support that an organization's IT department must provide for analytics. Furthermore, the technology enables entirely new types of analytic applications.

The BI Accelerator runs as part of standard 64-bit Intel processor-equipped “blade” systems. To activate the accelerator, IT management simply connects the appliance to the existing BI infrastructure of SAP NetWeaver and performs a few easy configuration steps.

With the BI Accelerator in SAP NetWeaver running on Intel processors, organizations empower their users to make the best decisions and take the best actions possible on behalf of the business. At the same time, it helps to free IT management to look for innovative ways to employ BI while keeping capital costs within budget—even while bringing on more users and finding more information sources.

For more information on the Intel and SAP alliance and our joint Business Intelligence solution (BI Accelerator), please visit: <http://www.SAPIntelAlliance.com>

For more information about SAP xApps, please visit: <http://www.sap.com/usa/solutions/xapps/index.epx>

For more information about SAP Analytics, please visit: <http://www.sap.com/usa/solutions/analytics/index.epx>

For more information on Intel server platforms, please visit: <http://www.intel.com/products/server/processors>

