

Business Intelligence Buyer's Guide: Bl for Everyone

SUMMARY EDITION





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Business Intelligence: A Buyer's Guide



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Business Intelligence: A Buyer's Guide

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This buyer guide is intended for business owners, managers, decision makers, and anyone interested in learning about the deployment of business intelligence (BI) systems across large enterprises as well as small to medium businesses (SMBs). It presents a comprehensive view of the wide spectrum of BI software solutions currently available and investigates how they match different types of organizations according to size and need.

The guide addresses software solutions in three major groupings:

- · BI for large enterprises
- BI for SMBs
- Software-as-a-service (SaaS) BI offerings

Given this classification, the guide covers a wide range of BI solutions for almost all organizations, and anyone interested in a BI system should be able to identify a potential suitable solution. Each section contains specific information to help organizations research and analyze BI solutions, and make decisions about which BI software is a good fit for them.

Large, Medium, or Small?

To help understand what this guide covers, some parameters must be established for defining large, medium, and small businesses. An organization can be defined according to economic, geographical, and local characteristics. However, for the purpose of this guide, only total revenues and the number of employees will be considered as defining parameters:

- Large enterprises have more than 500 employees and over \$50 million (USD) in revenues.
- **Small to medium businesses** have 1 to 500 employees and revenues of up to \$250 million (USD).

IT in Large Enterprises

Almost all large organizations demonstrate some of the following characteristics:

- They have specific in-house information technology (IT) department staff, with clearly defined functions and roles. This gives them the organizational maturity to have internal BI staff in place.
- They rely on pre-existing technology frameworks that enable them to prepare for large-scale BI system deployments, in terms of technical and human resources.
- Their executives rely heavily on information gathered via a variety of sources that generate large and complex volumes of data, all of which needs to be analyzed using specific software tools (such as corporate BI solutions).
- They can rely on extensive budgets to meet corporate software needs and can afford to deploy state-ofthe-art solutions.

IT in SMBs

When it comes to SMBs, the story is rather different. Many SMBs show some of the following features:

- They have a very small in-house IT staff, or none at all. In general, they count on only a few people to carry out all IT-related functions, from hardware maintenance to software and network services.
- They rely on a set of limited technology frameworks to deploy software solutions. In many cases, IT staff
 must develop applications from scratch or adapt existing applications.
- As with large enterprises, SMB executives rely heavily on information gathered from complex but varied sources that can generate large and complex volumes of data, all of which needs to be analyzed using specific software tools (BI solutions).
- SMB budgets are tight and limited. Every software system resource needs to be selected with care to comply with all the organization's requirements.

SaaS BI: The New Alternative

The SaaS BI space is gaining increased coverage and users around the globe. Despite some initial fear and doubt among the buyer community, SaaS BI vendors and services are on the rise, and some traditional on-premise vendors are launching SaaS versions of their BI solutions. SaaS BI software solutions will undoubtedly be the next big trend in the coming years, as they add new value for organizations with specific budget, human resource, and technical constraints, while providing access to BI analysis and reporting tools—and negating the hardware and IT personnel costs of a traditional BI system deployment.

Is BI Really for Everyone?

BI for Large Enterprises

Because of the nature of BI, which traditionally involved the incorporation of expensive high-end software technology, BI software systems were first deployed in large enterprises. To encompass the complete BI life cycle process, it was necessary to have strong budgets, as well as the means and justification for taking financial risks in order to gain a competitive advantage. To achieve this competitive advantage, many large companies were eager for software tools that would enable them to improve their decision-making process. Some software companies responded to this need by accelerating the evolution of classical decision support systems to provide sophisticated analysis tools with high-end software technology. Naturally, the high cost of these types of tools limited their accessibility to large-scale companies (also, the technical requirements for this technology could be met by big corporations only).

In the last four or five years, economic factors as well as the exponential growth of data volumes generated by organizations have forced the development of very sophisticated BI applications, and also expanded the kind of tools a classical BI system normally uses. The BI space is still growing and maturing, and large corporations are still demanding new solutions for new enterprise needs.

BI for SMBs

With recent economic conditions and the information boom, many smaller companies have found themselves requiring analysis tools that enable them to improve their business monitoring and performance improvement strategies. BI solution innovation has cascaded down from large companies to provide adapted and specific services to companies with a need for advanced analytic software tools but with very limited budgets. Recent BI tools have improved the BI life cycle to help organizations of every size and shape to improve analysis, data management, and data visualization tools.

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The State of the Market

The Growing Interest in Bl

It was in the late 1970s when the first decision support systems—predecessors of modern BI applications—arrived in the corporate world. In those days, only certain very large companies could afford these kinds of applications to help their executives with the business decision process. Nowadays, BI solutions play a major role in almost every organization, with many companies needing to analyze vast amounts of data to generate valuable information to gain insight into the organization and make the best possible decisions.

In addition to huge companies requiring the analysis of enormous amounts of data, smaller companies are generating more and more operational information. Economic conditions have forced these smaller companies to find ways to increase productivity and improve business performance—traditional operational tools being simply not sophisticated or powerful enough to get the job done. Nowadays, many SMBs use specific tools to analyze and process these greater amounts of data and come up with the best possible business decisions.

Over the last few years, Technology Evaluation Centers (TEC) has seen a steady increase in the interest in BI software—not only from large companies, but also from SMBs trying to address their data management needs and decision support processes. The number of overall BI software selection projects in TEC's Evaluation Centers

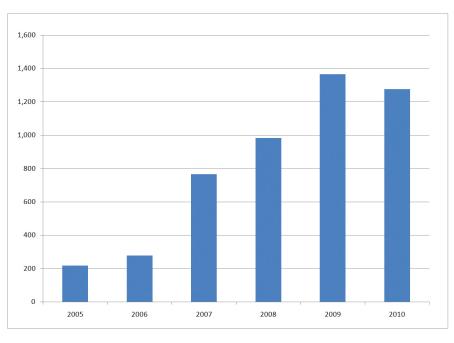


Figure 1. BI software selection projects (2005 to 2010)*

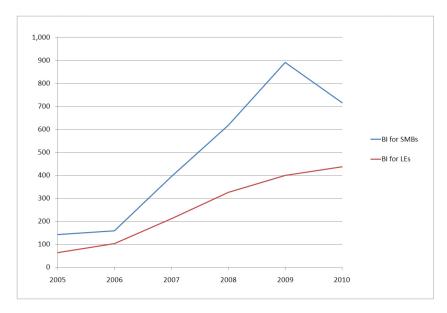


Figure 2. Interest in BI: large enterprises (LEs) versus SMBs

has increased in a linear fashion over the last five years, with a slight decline from 2009 to 2010. This indicates a stabilization in the demand for BI solutions, and for business software in general. However, we could expect a slower but steady growth in the near future (see figure 1). This trend is seen in all subsequent figures as well.

This growth trend is not exclusive to large enterprises; many smaller companies are looking for tools to gain organizational insight and improve productivity and performance. Indeed, SMB interest in BI has grown at an extremely steep rate over the same period (see figure 2).

Moreover, interest in BI and business performance management tools over the last five years has been increasing at a steadier rate as compared to other business software tools, such as enterprise resource planning (ERP) systems and human resource management (HRM) systems (see figure 3).

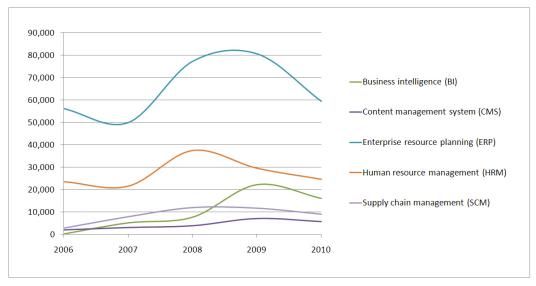


Figure 3. Interest in BI solutions compared to other business software

Despite the respectable position of BI solutions in comparison to other classes of business software, BI system adoption is still in a growth phase, for the following reasons:

- The SMB market space is adopting this kind of business software solution to improve overall operations and decision-making processes.
- Large enterprises are still looking to improve analytical and decision-making processes due to the
 information explosion that is resulting from more complex business models and corporate mergers and
 acquisitions.
- Regulatory and compliance pressures are pushing companies to improve their reporting and analytical standards to comply with new and more rigorous regulations. This has generated the need for BI solutions that incorporate specific functionality to comply with distinct governmental and industry regulations.
- Some industries require specialized functionality to accommodate specific complex business processes. This phenomenon is pushing BI software vendors to create specific industry vertical functionality for BI systems.

The BI Life Cycle: Classical versus Modern BI Tasks

BI solutions were originally conceived as tools for information analysis and decision support, with historical data as a source. Extensive sets of historical data were processed, analyzed, and delivered to the user via visualization tools such as reports or dashboards. The traditional BI approach resembles a batch process in which information follows a sequential process from source to target. In general terms, this BI life cycle approach is a composite of the components shown in figure 4.

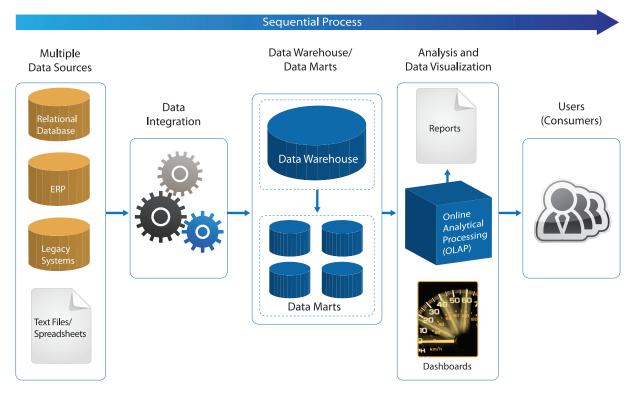


Figure 4. Classical BI life cycle process

Data Sources

The classical BI life cycle process collects data directly from the point where it's generated. Data can be originated from many types of systems and applications, including relational databases, business software such as ERP or customer relationship management (CRM) applications, plain text files, or office application files such as spreadsheets.

Data Integration Process

The data is moved or copied from its source location to a data warehouse or data mart. During this process, which is called *data integration*, some subtasks take place:

- A data quality process ensures that the information remains consistent, accurate, and "clean"— i.e., there is a process to avoid/correct/detect problems within the data that is being moved to the data warehouse.
- A data transformation modifies the structure of the data to satisfy the conditions imposed by the design of the data warehouse, and to ensure the consistency of all information.
- The load process allocates the information into an information repository (such as a data warehouse or data mart).

Data Warehouse/Data Mart Component

The data warehouse or data mart is an information repository that is used for analysis purposes. What this means is that the data warehouse has a specific structural design that enables the analysis of large volumes of data in a shorter period of time than with a traditional relational database system. Common relational database systems are designed using a "relational model," in which data elements are grouped and stored to facilitate the registration of transactions. Relational databases are used for operational purposes; they are not intended for extensive data analysis, but rather are used for registering and performing operations with specific quantities of information. A data warehouse, on the other hand, is designed in such a way as to enable the exploration and analysis of large volumes of data.

Analysis and Data Visualization Process

Once the information is in the data warehouse, the analysis process can begin; that is, the data is transformed into valuable information for the user.

The BI life cycle process ends when the information is presented in a form that enables an improved decision-making process.

At first, this appears to be a fairly simple process, as each task follows a straightforward sequence. However, at each stage a complete set of tasks must be performed in order to proceed to the next stage of the BI life cycle. This is one of the reasons why many vendors offer solutions to perform specific parts of the overall BI life cycle process.

You should consider such a solution if your organization already has part of a BI solution, or if you need to improve any part of the general BI process. In fact, many organizations have completed their BI solutions with a mixture of software from different vendors. Another effect of this application diversity is that many so-called point solutions have features intended to complement and integrate with other BI applications to comprise a complete BI solution.

For example, the vendors listed in table 1 offer solutions dealing with a specific stage of the process.

Data Integration	Data Visualization
DataFlux (Data Management Studio)	Corda Technologies (CenterView)
Informatica (PowerCenter)	Dundas (Dundas Dashboard)
Information Builders (iWay)	Universal Mind (Spatial Key)
Talend (Open Studio)	VisualCalc (analysis software)
Pervasive Software (Data Integrator)	

Table 1. Vendors offering solutions for data integration and data visualization tasks

Over the last 10 years, the BI life cycle process has changed significantly in terms of shape and performance. The drivers for these changes include the augmented data volumes generated by all organizations, the increase in complexity of business models and business operations, the availability of computing resources due to technology improvements, and universally difficult economic conditions.

Since the beginning of the decade, many companies have been elaborating progressively more complex business models. Mergers and acquisitions increased, and the volume of data being generated exploded. The increase in data volumes and the speed with which this data must be delivered forced traditional BI applications to apply different solutions not only to augment their ability to manage such volumes, but also to modify the traditional way of performing the data integration process. What was originally based on a batch set of processes for moving, transforming, and cleansing thousands of records on a monthly, weekly, or even daily basis transformed into a cycle that moves smaller quantities of data, but with an important increase in frequency—two, four, or eight times a day, or every hour, or even more frequently. This gave the BI life cycle process a new dimension, as it now aimed to deliver data almost at the moment it is generated—that's to say, at an operational pace.

Such "near real-time" solutions essentially enabled organizations to leverage their BI systems to increase datarefreshing periods. More recently, some organizations have applied technologies to enable data collection in actual real time. The number and types of data sources had been growing and becoming more diverse, and modern organizations are reading data from sources such as social media content and unstructured text. This diverse set of sources is obliging organizations and software vendors to manage information arriving at different rates of speed, and coordinating these efforts can be a challenge. Besides all this, the data visualization phase has also increased the options available to users. Dashboards and scorecards now comprise only part of the available tools. Interactivity between BI tools and office applications is increasing and extending BI functionality, and mobile technologies are taking their own place in the equation, with BI providers now capable of distributing BI information to mobile devices. All these trends in the data visualization phase are enabling more people within the organization to become BI software consumers or users. Even customers can now be part of the BI solution. Figure 5 depicts a modern BI life cycle model.

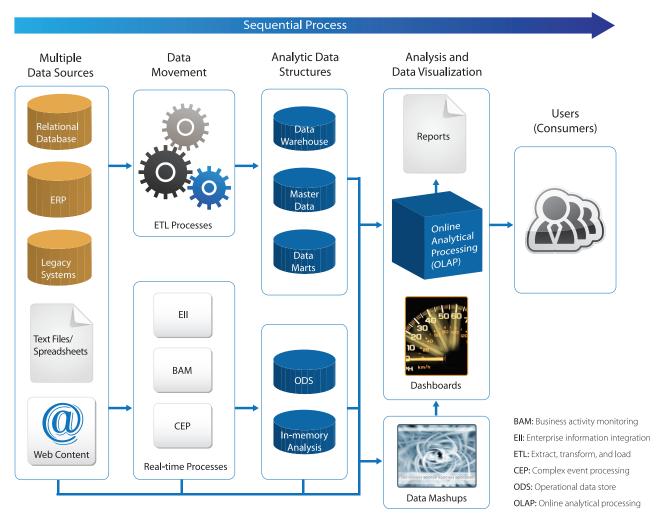


Figure 5. Modern BI life cycle process

For the modern BI life cycle process, the classical BI life cycle has been enriched with alternative technologies and improved methodologies and software tools to provide solutions for a wider number of business areas beyond those linked to financial issues. Modern BI applications can also provide specific vertical functionality for industries such as health care and retail, among others.

The Information Dilemma

Traditionally, data warehouse technologies have played a major role in the BI life cycle process. The reason is quite simple: data warehouses are the repositories where all information resides. A data warehouse management system comprises the storage, management tools, and data that when combined can deliver a large set of information for analytical purposes.

Among the core functionalities in a BI project, data warehousing is increasingly being regarded as a basic consideration for corporate BI solutions (see figure 6).

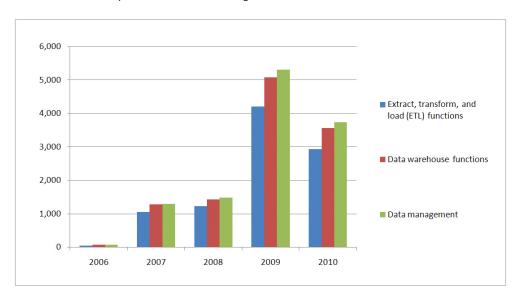


Figure 6. Interest in data warehouse functionalities and tools

Since about 2005, software vendors have been modifying the shape of classical data warehouses; in some cases the changes were minimal, but others included important design modifications. These modifications are due to the need for data warehousing to deliver data in a timely and accurate manner to be able to proceed through the rest of the BI lifecycle process. Some of these issues are:

Data explosion

The amount of data generated from operational sources has caused data warehouse systems to evolve in such a way that they not only store greater amounts of data, but also exploit this data in a fast and reliable manner.

Lack of human and technical resources

Many companies don't have sufficiently technically skilled human resources to successfully deploy a data warehouse project. Also, some of them don't have the software and hardware tools to deploy a data warehouse system.

• Data quality issues

When information grows in volume and the sources of information multiply, it becomes more difficult for the BI life cycle system and for the IT staff to ensure that data quality issues are addressed accurately.

Budget constraints

Many companies cannot shoulder the expense of acquiring high-end data warehouse technology. In many cases, economic conditions represent an important limitation to a company's ability to handle big amounts of data generated from different operational sources.

Some software providers are trying to address these and other issues to improve the performance of data warehouses and at the same time lower the cost of data warehouse implementations. Traditional data warehouses used to sit on top of common relational database management systems (RDBMSs). Because of the nature of this type of database, with many high-end technologies needed, data warehouse systems come with a high total cost of ownership (TCO). Nowadays, many software vendors are designing data warehouse systems using very different approaches and technologies from traditional relational databases, working to provide a powerful data warehouse but with reduced costs. Some data warehouse products are designed using very unique software engineering designs, but some general types of solutions can be easily identified:

Data warehouse appliances

Data warehouse appliances combine a set of software applications and hardware devices specifically designed and assembled for the deployment, operation, and maintenance of a data warehouse system. The system design takes advantage of the combination of hardware and software features for mass storage to achieve high performance. Data warehouse appliances can reduce direct software and hardware costs as well as operational costs by simplifying all administration and tasks. Many of the modern data warehouse appliances take advantage of high-end hardware technologies such as parallel processing and task distribution.

Analytical databases

Analytical databases are designed to improve the speed of analysis of increased amounts of data. Analytical databases take advantage of different design features, such as column- or index-oriented storage, data compression, and distributed and parallel computing, among others.

· In-memory databases

The innovative technology of in-memory databases enables users to work on a database that resides completely in memory. This optimizes database analysis because as all data resides in local memory, no data search takes place. This technology could reshape data warehouse design in the years to come.

These trends in the data warehouse space are making it easier for all kinds of organizations, from small to large companies, to acquire a data warehouse or data management solution for analytical purposes. Also, software vendors are expanding their licensing and deployment options for data warehouse technologies and making them more flexible. Table 2 shows some of the software providers for these types of data warehouse solutions.

Data Warehouse Appliances	Analytical Databases	In-memory Databases
Netezza	Kognitio	QlikTech
Dataupia	Vertica	Microsoft (PowerPivot)
Aster Data	Illuminate	
Teradata	Infobright	

Table 2. Vendors offering data warehouse solutions

BI Gets Real (Time): An Operational BI Briefing

One of the most important developments of the modern BI life cycle is inarguably the ability to collect data directly from the source. This is in distinction to the traditional BI life cycle process, which involved collecting, analyzing, and presenting results based on historical data. Once analyzed, this data was converted into information that C-level executives and decision makers needed to support decision-making processes. This information touched only the upper levels of the organization, and typically did not flow down to the lower levels. This information was used principally to support long-term decisions.

Technologies such as data federation, enterprise information integration (EII) systems, and business activity monitoring (BAM) have enabled different sets of solutions to be applied according to particular organizational needs.

Many companies can now analyze information that is valuable beyond a historical perspective. They can collect information that comes directly from the source, and thus measure the behavior of many aspects of the business almost instantly—and with a short-term perspective in mind. It's now possible not only to know how business is performing, but also to collect information that is useful only if used in a timely manner (for example, information generated from social media, stock markets, and other media).

This expansion in scope makes it possible to involve a wider number of users with BI tools, from C-level executives to users at the operational level. To sum up, here are some of the benefits that operational BI brings to the table:

- BI solutions can target a greater audience within the organization.
- BI solutions can be used not only to analyze and support decisions, but also to measure performance, react to changing circumstances, and indicate the appropriate measures to take.
- BI solutions can adjust to information that is moving at different speeds within the organization.
 Information now flows through the BI life cycle to get from source to target at the "right time" for the user.
 This process is no longer based on speed, but on "time to value."
- BI solutions can now support transactional environments. However, adequate support does presuppose high availability.

Transforming Data into Information

The basic idea behind the first BI solutions was to improve decision support systems by automating more tasks, and to provide decision makers with a more accurate version of the "truth." This paradigm has not changed, but two major components of it have evolved. Firstly, the complexity involved in the decision-making process has increased dramatically; and secondly, because of the integration of major technology software applications for handling data and processes, BI applications can help address a wider scope of problems. They can now support three levels of the decision-making process:

- **Strategic decisions** define the corporate future in the long term, and are normally made by the executive team. These types of decisions were addressed by the classical BI life cycle process, and involve analyzing large amounts of historical data. They answer the "What?" questions.
- Tactical decisions establish the initiatives that must be followed in order to accomplish strategic goals. They must be handled with care due to their connection between the strategic vision and day-to-day operations. They answer the "How?" questions with respect to strategic goals. In general, they involve limited amounts of data, in near real time or actual real time.
- **Operational decisions** relate to the day-to-day operation of an organization. They involve defining specific tasks to perform and operate. These decisions usually involve processes and procedures.

The incorporation of operational BI capabilities into the overall set of BI tasks enables modern BI suites to expand their reach to other areas such as business process management and business performance management.

Business Performance Management: BI with a Strategy

BI software providers are now incorporating many business performance management features to expand the reach of BI solutions and create a more proactive BI environment capable of measuring and planning, and suggesting corrective action if necessary. Business performance management tools can help construct a management methodology framework that (added to a BI technical and software infrastructure) can deliver not only organizational insights based on historical data, but also a measure of how an organization is performing against its goals. This integration between BI and performance management tools transforms the BI cycle from a passive data information factory into a proactive solution provider. Business performance management tools and BI applications are complementary, and the software industry is currently closing the gap (see figure 7) between tools that reflect the state of an organization and those that measure against goals and can help formulate a proactive strategy; it's clear that business performance management tools are extremely important to the BI life cycle.

Metrics and key performance indicators (KPIs) can be created as part of a planning strategy to measure financial and process performance and to provide the necessary means to forecast specific key indicators. As a set of techniques, performance management tools can improve an organization's overall business performance, and enable the incorporation of a framework to achieve performance management goals; balanced scorecards, six sigma, and other types of methodologies can be applied to align the operational-tactical-strategic trio according to overall goals.

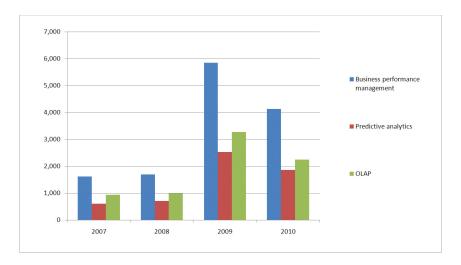


Figure 7. Interest in business performance management versus some core BI functionalities

In the BI life cycle, business performance management systems generally occur within the following contexts:

- integrated with strictly operational tools (e.g., BAM systems)
- as part of an enterprise BI system
- integrated with operational systems such as ERP, CRM, or supply chain management (SCM) systems to measure the performance of vertical business indicators

Some complete BI suites are now offering operational tools and business performance management capabilities to complete the overall functionality core of operational BI and business performance management. Also, some major business software providers are developing or acquiring vertical functionality to position their products in specific niches where BI is extremely important, as in retail, health care, financials, and other industries.

Some of the benefits of integrating business performance management capabilities into the overall BI life cycle infrastructure are as follows:

- Keep dashboards and scorecards up to date with the use of native operational BI capabilities.
- Encourage the use of collaboration tools to improve performance, communication, analysis, and response based on the ability to measure processes against specific goals.
- · Identify and predict operational problems faster, and take corrective or preventive actions.
- Encourage improvements to risk management strategies.
- Encourage better alignment to corporate goals at all organizational levels.

Many technologies continue to be embedded into the BI life cycle core infrastructure. BI tools are far from being at peak maturity, and you should expect them to include many new technologies in the not-so-distant future.

Trends and Challenges in the BI Space

As was mentioned earlier, BI applications and the general BI life cycle process are still maturing, with new software and hardware technology being incorporated into core BI functionality. Here are some BI trends to watch for in the near future:

Mobility

The incorporation of mobile technologies into the BI mainstream will increase in upcoming years. Many vendors are incorporating compatibility with several mobile providers and specific applications and interfaces to provide BI analysis information via mobile devices.

Social media

The data explosion has already arrived, but BI will be incorporating functionality to analyze structured and unstructured data coming from diverse social media sources. This trend is growing constantly due to the potential benefits in areas such as customer care and marketing, as well as product lifecycle management strategies.

Complex event processing

Complex event systems are being incorporated with BI functionality and vice versa to enforce the data movement from the operational source right through BI applications.

In-memory analytics

The software technology behind in-memory analytics is attracting hype and attention; it may be the key to reshaping the way we see and use data warehouses and BI applications in general. Analyzing millions of records in milliseconds or even faster will push BI life cycle processes to new limits.

Columnar databases

Columnar databases could mark the end of relational databases in the BI space; with its innovative architecture, columnar databases are a potential means of resolving the data volume problem.

SaaS BI

SaaS applications are still growing and evolving, but nowadays there are a fair number of SaaS BI offerings on the market. This software delivery model is a viable option for many SMBs, and may have some potential for large enterprises.

Verticalization of BI functionality

BI providers are working hard to gain specific industry markets that use BI tools intensively. Many large software vendors are incorporating functionality specifically created for industries such as construction, health care, financials, retail, etc.

Because of the analytical nature of the BI life cycle, the form BI solutions take is closely related to the way in which business evolves. Indeed, BI solutions are subject to continuous evolution at the same evolutionary pace of business models and information requirements. This of course triggers challenges that the BI life cycle has to address in order to remain current and maintain its ability to generate revenue for an organization. Here are some of the challenges facing organizations with respect to BI deployment:

• to maintain a methodology for activity and task standardization, as well as a methodology to manage the division of work

- to maintain BI systems that are trustworthy from the user perspective
- to maintain the ability to solve time-to-delivery problems
- to assess and measure the business value of BI solutions
- to maintain and encourage the iterative nature of the development and deployment of a BI solution
- to maintain and encourage a risk management strategy for data management (data quality, metadata management) and the impact this can have on an organization
- · to maintain an accurate strategy with respect to BI life cycle development

Naturally, every BI deployment has its own particular set of issues, risks, and problems, and there are as yet no iron-clad rules for deploying and ensuring the success of a BI system. However, by applying a formal strategy for assessing all phases of a BI deployment project, it is possible to ensure incorporation of the necessary tools for BI-assisted decision-making at the organizational level.

Social BI

Since the World Wide Web became publically available in 1991, social interaction has changed dramatically. This new era in social communication has seen the progressive incorporation of new communication media into the Web. In addition to e-mail, the Internet is being crowded with newer tools to enable individual and collective communication between people all over the world. Web mail, blogs, and instant messaging services have all enjoyed popularity. Now, many services—such as Facebook, LinkedIn, and Twitter—enable data communication through distinct types of interaction between users; this is what we call "social media."

BI and Social Media: The Structure of Unstructured Analysis

Along the social media evolutionary path, companies and institutions realized that these channels are producing vast amounts of valuable data that come directly from the source: customers (potential or existing), users, or even employees or associates of the company. The value of social media data resides in the fact that it reflects the sentiment of any given user with respect to a subject—easily a product, service, or brand. Social media data can be collected and analyzed to assess the intangible aspects of an organization, like popularity, market presence, and so on.

Recently, some companies have been working to provide tools not only for social interaction and collaboration, but also for analysis of the information generated. The goal of these types of applications—called "social media analytics" or "social Web analytics"—is to collect and interpret social media content.

BI and Social Media Analytics: The Best of Both Worlds

Currently, many software vendors are bringing social media analytics capabilities to organizations. The social media analytics space is divided between independent vendors offering specific solutions to address this niche and traditional software vendors (mainly BI vendors) that started adding social media analytics capabilities to a core set of BI functionality features. Having social media analytics capabilities can bring some specific advantages to an organization. Some of the major advantages are as follows:

Expansion of data sources

New BI tools not only analyze data coming from an organization's Web site, but can also acquire data from external social media sources. The analysis has expanded beyond the reach of direct feedback to information that is generated beyond the purview of the organization. Organizations are able to "hear" what is happening outside their boundaries.

· Analysis of both unstructured and structured data

In addition to analyzing information coming from traditional table, row, or field structures, organizations can now tap into data in different formats, such as plain text, quizzes, and so on.

Many of the vendors in the social media analytics space offer their services on demand. Many organizations can avoid the costs involved in the acquisition of an on-premise application but still leverage the capabilities to measure their product and company presence in the social media space.

New social media tools will continue to emerge while others disappear. Social media analytics applications are still in an early stage of maturation, and their adoption will likely expand throughout the corporate world in the coming years. Without a doubt, this class of tools will represent a core consideration in the decision-making process for almost all big (and even small to medium) companies looking to develop their marketing and publishing campaigns.

Public BI: BI in the Public Sector

Despite the noise surrounding the deployment of BI applications in the private sector, and extensive commentary on BI business performance management applications evolving to become a basic part of every large company's stack of applications, public sector organizations remain more interested in the development of BI solutions that comply with their own sets of unique conditions. This is especially true of those organizations that handle large amounts of data and rely on this data to support important decision-making processes.

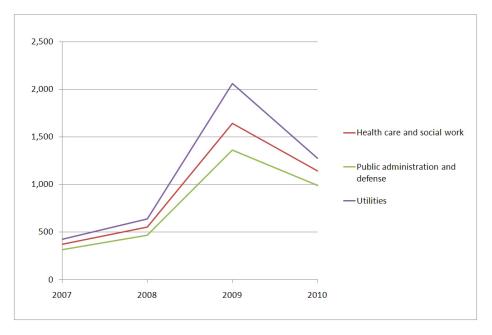


Figure 8. Public sector interest in BI applications

Over the last couple of years, government institutions have increased their interest in having BI applications to support their data management processes (see figure 8).

BI tools may be used in both the private and public sectors. In both cases they can be used to support a decision-making process and/or to measure and manage an organization's performance. By collecting, analyzing, and presenting data during the BI life cycle, BI applications transform this data into information to be used according to organizational needs. Data has to be moved within the organization in a manner that offers "time to value," which may vary according to the nature of the information; it's important that information be delivered in good time, but it's more important that it be delivered at the right time.

At this point, BI tools are used in similar ways in both the private and public sectors. The differences lie mainly in their specific interests and outcomes. While BI in the private sector deals with measuring sales, marketing, operations, and so on, BI in the public sector is dedicated to measuring service performance, goal achievement, and budget. While private sector businesses analyze information with an eye to augmenting profits, analysis in the public sector looks at social accomplishments and whether or not a project is on budget. So, it's only natural that general purpose BI applications do not meet all the specific needs of the public sector.

A BI solution for the public sector warrants some particular considerations; for example:

- transparency of information and process
- compliance with regulations and visibility of operations
- observance of budget constraints
- · tracking of institutional goals and accomplishment of these goals
- service levels and public access to information

In addition to these considerations and core BI functionality, a BI solution for the public sector may have the following requirements:

- · compliance with public administration regulation standards for operation and security
- · specific features to audit data management operations (storage, movement, and transformation)
- strong support for self-service functionality in order to provide broad access to BI tools for internal (within the public organization) and external (general public) users

Deploying a BI solution for the public sector is not equivalent to deploying a BI solution for large private organizations; radical differences exist in terms of regulation compliance needs, operational modes, and, of course, the organizations' strategic goals. The success of a BI solution deployment in the public sector may rely on ensuring that each data consumer has access to the required information in the way it's needed and ensuring that all processes occur with transparency, compliance, and accuracy.

The Big BI: BI for Large Enterprises

According to the document "How Large Enterprises Approach IT Infrastructure Consolidation" from Forrester Research, the two main motivators for data center consolidation in large enterprises are to improve operational efficiency and to reduce complexity. These two goals are partially achieved by consolidating strategy and operations, but BI and business performance management tools have a role to play in this consolidation. Major companies are trying to consolidate information from across all business areas by improving the way information is gathered, processed, and analyzed. For this purpose, BI tools are being reshaped to accomplish more tasks and to be proactive in the way they use and manage information for large organizations. Important BI software vendors are working hard to increase the set of functions that BI tools can perform, to cover more of the data management area: data integration, data warehousing, business performance management, data analysis, and data visualization. BI solutions are including even more high-end software tools, such as master data management (MDM), and specific collaboration tools, such as issue tracking systems, messaging systems, and others.

The BI growth phenomenon has triggered two main methods for developing BI solutions and achieving both IT consolidation and analysis services at all levels of the organization: Some large organizations go for a complete and unique set of solutions from a so-called mega vendor, while others go for a mix of tools provided from different vendors to achieve a best-of-breed set of tools that combine to make a complete BI solution. Taking these two approaches under consideration, the complete BI life cycle process can be fulfilled by a BI suite specifically designed for large organizations, or by a comprehensive set of tools to complete the set of all BI functionalities. In both cases, a complete BI solution consists of the following functional elements:

- a data management process that accounts for recompilation, storage, and movement
- an information delivery process to show, in different media, the results of analysis
- a data analysis procedure to support the decision-making process
- a business performance management functionality set to measure corporate performance
- an MDM and data governance functionality to handle all data assets of an organization
- a collaboration tool to enable the sharing of ideas and to manage interactive team work
- a set of BI functionality vertically oriented to cover specific industries such as health care, banking, etc.

The incorporation of more functionality into the BI life cycle process has also been influenced by some specific challenges that the BI space in large organizations has to deal with. Some of these challenges are:

- to address the data explosion
- to provide BI deliverables to a broader audience within the organization
- to reinforce and encourage its main decision support function
- to expand the BI analysis framework not only internally across the organization, but externally to all information coming from outside the organization

The BI space is continuously growing and evolving, and both corporate users and industry analysts hold many expectations for its future. In addition to constantly striving to improve performance and revenue, large enterprises will always need to adapt to business challenges coming from new industry conditions and regulations.

BI for Large Enterprises: Functionality Matrix

The following matrix contains a list of existing BI vendors on the market with solutions specifically designed for large enterprises. The matrix covers a core set of functionality features considered essential for a corporate BI product. In addition to a small set of technical criteria, the matrix consists of the following main areas:

- Information delivery
- Data analysis
- Data management
- Business performance management (BPM) functionality
- · Extended BI functionality

In order to reflect a comprehensive set of functionality features, each of these sections has a subset of criteria to assess capabilities in more detail.

The following ratings are based on vendor claims for solution functionality. The system fully supports (Full), partially supports (Partial), or does not support (None) the functionality, or the functionality may be supported through an additional product (With additional product). Other features are either available (Yes) or not available (No).

Note that these ratings are intended as a guide only. To determine which solution best meets your organization's requirements, you can conduct a comprehensive evaluation and comparison analysis in TEC's Business Intelligence Evaluation Center.

Com	pany	Actuate	Board International	IBM
Produ	ct	BIRT iServer Enterprise	Board ToolKit	Cognos 8 Business Intelligence
Regio	n	Global	Europe North America Australia	Global
	Multiplatform	Yes	Yes	Yes
	Localization	Yes	Yes	Yes
	Technical support	Yes	Yes	Yes
	Training	Yes	Yes	Yes
	Audit trail management	No	Yes	Yes
	Security management	Yes	Yes	Yes
	Central administration	Yes	Yes	Yes
	Analysis and reporting	Full	Full	Full
Information Delivery	Dashboarding	Full	Full	Full
eli	Mobile BI capabilities	With additional product	None	Full
آ D	Advanced data search	With additional product	Full	Full
atio	BI software gadgets (e.g., Oracle BI beans)	Yes	No	Yes
r	Advanced reporting	Full	Full	Full
Info	Microsoft Office integration	With additional product	Full	Full
	Geospatial capabilities	With additional product	Full	Full
<u>.s</u>	Standard analytics	Full	Full	Full
alys	Advanced analytics	With additional product	Full	Full
Data Analysis	In-memory analytics	Full	None	Full
ata	Web and social analytics	None	None	With additional product
Ω	OLAP services	Full	Full	Full
nt	Data warehousing	None	None	With additional product
agement	Enterprise data integration	Full	Partial	With additional product
age	Data quality	With additional product	Partial	With additional product
	Metadata management	Full	Partial	With additional product
Data Mar	Data mining	None	None	With additional product
Da	Operational BI capabilities	Full	None	Full
	Metrics and KPIs	With additional product	Full	Full
ţ	Scorecards	With additional product	Full	Full
nali	Planning	None	Full	With additional product
tio	Strategy management	None	Full	Full
oun	Budgeting	None	Full	With additional product
BPM Functionality	Financial consolidation	None	Full	With additional product
	Risk and performance management	None	Full	With additional product
	Forecasting	With additional product	Full	With additional product
	Portal integration	Yes	Yes	Yes
BI	Master data management	None	None	With additional product
Extended BI Functionality	Data governance	None	None	Partial
enc	Industry vertical functionality	No	Yes	Yes
Ext	Third-party application integration	Yes	No	Yes
	Collaboration tools	Yes	No	Yes

Com	pany	Information Builders	Microsoft	MicroStrategy
Produ	ct	WebFOCUS	Office 2010, SharePoint Server 2010, SQL Server 2008 R2	MicroStrategy 9
Regio	n	Global	Global	Global
	Multiplatform	Yes	Yes	Yes
	Localization	Yes	Yes	Yes
	Technical support	Yes	Yes	Yes
	Training	Yes	Yes	Yes
	Audit trail management	Yes	Yes	Yes
	Security management	Yes	Yes	Yes
	Central administration	Yes	Yes	Yes
	Analysis and reporting	Full	Full	Full
rery	Dashboarding	Full	Full	Full
Information Delivery	Mobile BI capabilities	Full	With additional product	None
n D	Advanced data search	Full	Full	None
atic	BI software gadgets (e.g., Oracle BI beans)	No	No	No
r.u	Advanced reporting	Full	Full	Full
Info	Microsoft Office integration	Full	Full	With additional product
	Geospatial capabilities	Full	Full	Full
.is	Standard analytics	Full	Full	Full
alys	Advanced analytics	Full	Full	Full
Data Analysis	In-memory analysis	Full	Full	None
ata	Web and social analytics	None	With additional product	None
	OLAP services	Full	Full	Full
ent	Data warehousing	With additional product	Full	None
anagement	Enterprise data integration	Full	Full	None
Jag	Data quality	Full	Full	None
	Metadata management	Full	Full	Partial
Data M	Data mining	Full	Full	Full
۵	Operational BI capabilities	Full	Full	None
	Metrics and KPIs	Full	Full	Full
<u>it</u> y	Scorecards	Full	Full	None
ona	Planning	With additional product	None	None
ctic	Strategy management	With additional product	None	None
Fun	Budgeting	With additional product	None	None
BPM Functionality	Financial consolidation	With additional product	None	None
8	Risk and performance management	Full	None	None
	Forecasting	Full	With additional product	Full
	Portal integration	Yes	Yes	Yes
d Bl ality	Master data management	Full	Full	None
Extended BI Functionality	Data governance	Full	With additional product	None
rter	Industry vertical functionality	Yes	Yes	Yes
9 Z	Third-party application integration	Yes	Yes	Yes
	Collaboration tools	No	Yes	With additional product

Comp	pany	Oracle	QlikTech	SAP
Produ	ct	Business Intelligence Suite Enterprise Edition Plus	QlikView	SAP BusinessObjects BI solutions, EIM solutions, EPM solutions
Regio	n	Global	Global	Global
	Multiplatform	Yes	No, Windows	Yes
	Localization	Yes	Yes	Yes
	Technical support	Yes	Yes	Yes
	Training	Yes	Yes	Yes
	Audit trail management	Yes	Yes	Yes
	Security management	Yes	Yes	Yes
	Central administration	Yes	Yes	With additional product
	Analysis and reporting	Full	With additional product	Full
Information Delivery	Dashboarding	Full	Full	Full
eliv	Mobile BI capabilities	With additional product	Full	Yes
ďπ	Advanced data search	With additional product	Full	Full
atio	BI software gadgets (e.g., Oracle BI beans)	No	Yes	Yes
Ë	Advanced reporting	Full	Full	Full
Info	Microsoft Office integration	Full	Full	Full
	Geospatial capabilities	None	Full	With additional product
<u>.s</u>	Standard analytics	Full	Full	Full
alys	Advanced analytics	Full	Full	Full
Data Analysis	In-memory analytics	With additional product	Full	With additional product
ata	Web and social analytics	Partial with additional product	Full	With additional product
Δ	OLAP services	Full	Full	Full
ınt	Data warehousing	With additional product	None	With additional product
gement	Enterprise data integration	With additional product	None	With additional product
age	Data quality	With additional product	None	With additional product
Man	Metadata management	With additional product	None	With additional product
Data Mana	Data mining	With additional product	None	Full
Ds	Operational BI capabilities	With additional product	Full	With additional product
	Metrics and KPIs	With additional product	Full	With additional product
ity	Scorecards	With additional product	Full	With additional product
BPM Functionality	Planning	With additional product	Full	With additional product
rtio	Strategy management	With additional product	Full	With additional product
בָּן.	Budgeting	With additional product	Full	With additional product
Ž	Financial consolidation	With additional product	Full	With additional product
BF	Risk and performance management	With additional product	Full	With additional product
	Forecasting	Full	Full	With additional product
	Portal integration	Yes	Yes	Yes
IBI Iity	Master data management	With additional product	None	With additional product
Extended BI Functionality	Data governance	With additional product	None	With additional product
ten	Industry vertical functionality	Yes	Yes	Yes
E F	Third-party application integration	Yes	Yes	Yes
	Collaboration tools	With additional product	Yes	Yes

Comp	pany	SAS Institute	TIBCO Software Inc
Produc	ct	SAS Enterprise BI Server	TIBCO Spotfire Analytics platform
Region	١	Global	Global
	Multiplatform	Yes	Yes
	Localization	Yes	Yes
	Technical support	Yes	Yes
	Training	Yes	Yes
	Audit trail management	Yes	Yes
	Security management	Yes	Yes
	Central administration	Yes	Yes
	Analysis and reporting	Full	Full
ery	Dashboarding	Full	Full
eliv	Mobile BI capabilities	Full	None
n D	Advanced data search	Full	None
atio	BI software gadgets (e.g., Oracle BI beans)	With additional product	No
Information Delivery	Advanced reporting	Full	Full
nfo	Microsoft Office integration	Full	With additional product
	Geospatial capabilities	None	Full
S	Standard analytics	Full	Full
ılysi	Advanced analytics	Full	Full
Data Analysis	In-memory analytics	None	None
ata	Web and social analytics	With additional product	None
Ö	OLAP services	Full	Full
nt	Data warehousing	Full	None
Management	Enterprise data integration	With additional product	None
age	Data quality	With additional product	None
lan	Metadata management	Full	Partial
	Data mining	With additional product	Full
Data	Operational BI capabilities	With additional product	Partial
	Metrics and KPIs	With additional product	Full
Ę	Scorecards	With additional product	None
BPM Functionality	Planning	With additional product	None
tion	Strategy management	With additional product	None
oun	Budgeting	With additional product	None
Σ	Financial consolidation	With additional product	None
ВР	Risk and performance management	With additional product	None
	Forecasting	With additional product	Full
	Portal integration	Yes	Yes
BI	Master data management	With additional product	None
led	Data governance	None	None
Extended BI Functionality	Industry vertical functionality	Yes	Yes
Ext	Third-party application integration	No	Yes
	Collaboration tools	Yes	With additional product

Actuate

Actuate founded and continues to co-lead the Eclipse BIRT (Business Intelligence and Reporting Tools) open source project. Actuate has over 4,500 customers globally in a diverse range of business areas, including financial services and the public sector. Founded in 1993, Actuate is headquartered in San Mateo, California, with offices worldwide.

Board International

Founded in 1994 and based in Lugano, Switzerland, Board International is committed to integrating the best of two worlds: the technical benefits of a BI tool and the data analysis power of traditional business performance management software. Board International provides a toolkit that combines BI and business performance management in a single solution, allowing rapid creation and deployment of BI and business performance management applications.

IBM

IBM and Cognos represent a solid fusion between a long-term leader in the IT space and a leader in the BI market. Cognos gave IBM the BI empowerment to become one of the leaders in the data management space. Cognos 8 BI is its cutting-edge tool for the BI market.

Information Builders

With more than 12,000 customers and 60 offices around the world, Information Builders delivers a complete enterprise BI suite, as well as comprehensive business-to-business, business process automation, and enterprise information management solutions to global customers. Its WebFOCUS and iWay solutions, well known to provide a reliable set of BI and integration tools, are widely distributed among a wide range of organizations. Information Builders also has a solid reputation for outstanding customer service.

Microsoft

SharePoint Server represents the core of Microsoft's wide BI offering. The Redmond, Washington–based company relies on its Sharepoint Server solution to bring BI functionality to any type of organization. Along with other Microsoft software applications such as SQL Server and Office, Microsoft is able to provide an entire set of BI tools for corporate users.

MicroStrategy

Founded in 1989 and based in McLean, Virginia, MicroStrategy is a unique survivor of mergers and acquisitions, which has allowed the company to develop and evolve its BI solution to the point where it can compete on the enterprise market. MicroStrategy's long experience with its BI solution means that it contains best-of-breed technology. The company also has the expertise to deliver customer service levels in accordance with the expectations of the corporate market.

Oracle

Oracle is one of the biggest software companies in the world. It provides business software solutions for almost any type of organization and business area. Oracle is committed to acquiring and developing a diverse set of solutions to expand its reach across a greater number of industries and software markets. Its set of BI software solutions provides a strong BI suite for the corporate business market.

QlikTech

Qliktech is a pioneer of the in-memory analysis space. The company was founded in Lund, Sweden, in 1993. QlikTech has explored and exploited a new way to analyze data. QlikView is one of the most popular BI products for midsize companies, and it is expanding rapidly to larger companies.

SAP

The SAP-Business Objects partnership is able to offer a complete set of BI tools enriched with an additional set of capabilities. Business Objects is widely recognized for providing powerful BI tools for a wide range of customers all over the world. SAP BusinessObjects delivers a complete BI suite for enterprise deployments that require high-quality, reliable data management analysis.

SAS Institute

SAS develops high-quality solutions to provide companies with the information to make better decisions and improve their performance and productivity. With more than 30 years of experience in the data information space, SAS has a reliable set of BI tools to bring to the market and is a strong competitor in the enterprise BI field.

TIBCO Software Inc.

TIBCO, headquartered in Palo Alto, California, has a wide range of business software solutions. TIBCO offers the TIBCO Spotfire Analytics platform, a robust BI application for large-scale companies. Spotfire Analytics platform is enriched by a full set of tools that enable Spotfire to complete the BI requirements of any company.

BI for SMBs

Data is growing in both amount and complexity for businesses of all types and sizes around the globe. In order to transform data into useful information for the decision-making process, many SMBs are finding it necessary to complete their maturity process. Having acquired an operational data management solution such as an ERP, CRM, or financial system, they now need massive data management systems to help them analyze all the data generated by those systems. Many SMBs are ready to handle data processes that can enable them to measure their performance and improve their entire operational process. Currently, many SMBs need specific BI tools to address their data management needs. According to TEC's data, SMBs are strongly involved in and committed to finding the right BI solution for their needs (see figure 2 on page 8).

In searching for a BI solution, SMBs must find the optimal balance between the lowest possible cost and the fullest possible set of BI core functionality. Because of the increasing interest from SMBs in BI solutions, both traditional and new software vendors have been targeting the SMB space and releasing BI products designed specifically for SMBs. All of the BI offerings for the SMB market are trying to improve the decision support process for SMBs by offering strong analytical capabilities, while considering technical and budget limitations. BI applications for the SMB market must meet the following set of requirements:

- lower TCO
- · easy administration
- · reduced hardware and technical requirements
- strong core set of analytic capabilities
- · basic data management capabilities
- a simplified and, as much as possible, automated data integration and administration process
- integration with Microsoft Office applications (commonly with Excel)

Also, many of the BI applications designed for SMBs include a subset of functionality features adapted from corporate BI solutions for the SMB market. Among the most important of these functionality features are:

- a complete set of reporting and analysis capabilities
- dashboarding capabilities
- OLAP services
- basic data integration features
- advanced data search

The challenges that software providers must overcome to deliver solutions satisfying all the BI needs for each industry are considerable, no matter the size of the enterprise. Many software vendors have managed to create BI suites with features that suit the general needs of most SMBs across several industries.

BI for SMBs: Functionality Matrix

The following matrix contains a list of existing BI vendors with solutions specifically designed for SMBs. The matrix considers a core set of functionality features for an SMB BI product.

The following ratings are based on vendor claims for solution functionality. The system fully supports (Full), partially supports (Partial), or does not support (None) the functionality, or the functionality may be supported through an additional product (With additional product). Other features are either available (Yes) or not available (No).

Note that these ratings are intended as a guide only. To determine which solution best meets your organization's requirements, you can conduct a comprehensive evaluation and comparison analysis in TEC's Business Intelligence Evaluation Center.

Company	IBM	InetSoft	Jaspersoft	LogiXML	Oracle
Product	Cognos Express	Style Intelligence	Jaspersoft Business Intelligence Enterprise Edition	Logi 9 Platform	Oracle Business Intelligence Standard Edition One
Region	Global	North America	North America Europe Asia Africa	North America Europe	Global
Multiplatform	No, Windows	Yes	No	Yes	Yes
Localization	Yes	Yes	Yes	Yes	Yes
Support	Yes	Yes	Yes	Yes	Yes
Training	Yes	Yes	Yes	Yes	Yes
Audit trail management	Yes	Yes	Yes	No	No
Security management	Yes	Yes	Yes	Yes	Yes
Central administration	Yes	Yes	Yes	Yes	Yes
Analysis and reporting	Full	Full	Full	Full	Full
Self-service reporting	Full	Full	Full	Full	Full
Ad hoc queries	Full	Full	Full	Full	Full
Dashboarding	Full	Full	Full	Full	Full
Information mashups	Partial	Full	Full	None	None
Mobile capabilities	None	Partial	None	Partial	None
BI software gadgets (e.g., Oracle BI beans)	No	No	Yes	Yes	No
Advanced data search	None	None	None	None	None
Microsoft Office integration	Full	Partial	With additional product	Partial	With additional product
Geospatial capabilities	Full	Full	Full	Full	None
Standard analytics	Full	Full	Full	Full	Full
Predictive analytics	None	Partial	None	None	None
OLAP services	Full	Full	Full	Full	With additional product
In-memory analytics	Full	Partial	Full	Full	None
Embedded/basic data integration	Full	Full	Full	Partial	Full
Basic metadata management	Full	Partial	Full	Partial	Full
Metrics and KPIs	Full	Full	Full	Full	Full
Planning and budgeting	Full	Partial	None	None	With additional product
Forecasting	Full	Partial	None	None	With additional product
Portal integration	Yes	Yes	Yes	Yes	No
Industry vertical functionality	No	No	No	No	No
Third-party application integration	Yes	Yes	Yes	No	Yes
Collaboration tools	No	Yes	No	No	No

Company	Panorama Software	Pentaho	QlikTech	SAP	Tableau Software
Product	NovaView	Pentaho BI Suite Enterprise Edition	QlikView	SAP BusinessObjects Edge Business Intelligence	Tableau Desktop, Tableau Public, Tableau Reader, Tableau Server
Region	North America Europe Middle East	North America Europe	Global	Global	Global
Multiplatform	No, Windows	Yes	No, Windows	No, Windows	No, Windows
Localization	Yes	Yes	Yes	Yes	Yes
Support	Yes	Yes	Yes	Yes	Yes
Training	Yes	Yes	Yes	Yes	Yes
Audit trail management	No	Yes	Yes	Yes	Yes
Security management	Yes	Yes	Yes	Yes	Yes
Central administration	Yes	Yes	Yes	Yes	Yes
Analysis and reporting	Full	Full	With additional product	Full	Full
Self-service reporting	Full	Full	With additional product	Full	Full
Ad hoc queries	Full	Full	With additional product	Full	Full
Dashboarding	Full	Full	Full	Full	Full
Information mashups	None	Partial	Full	Full	Full
Mobile capabilities	None	Full	Full	Full	Partial
BI software gadgets (e.g., Oracle BI beans)	No	Yes	Yes	Yes	Yes
Advanced data search	None	Full	Full	Full	Full
Microsoft Office integration	Full	Partial	Full	Full	Full
Geospatial capabilities	Full	Full	Full	Full	Full
Standard analytics	Full	Full	Full	Full	Full
Predictive analytics	None	Full	Partial	None	Partial
OLAP services	Full	Full	Full	Full	Full
In-memory analytics	None	Partial	Full	None	Partial
Embedded/basic data integration	Full	Full	Full	With additional product	Full
Basic metadata management	None	Full	Full	With additional product	Partial
Metrics and KPIs	Full	Full	Full	Full	Full
Planning and budgeting	None	Partial	Full	Full	None
Forecasting	None	Full	Full	Full	Partial
Portal integration	Yes	Yes	Yes	Yes	Yes
Industry vertical functionality	No	Yes	Yes	No	No
Third-party application integration	Yes	Yes	Yes	No	Yes
Collaboration tools	Yes	Yes	Yes	Yes	Yes

IBM

IBM and Cognos represent a solid fusion between a long-term IT leader and a leader in the BI market. Cognos gave IBM the BI empowerment to become one of the leaders in the data management space. Cognos Express is a BI tool designed especially for the midsize market.

InetSoft

InetSoft developed a BI solution that's a good fit for the midsize market. Since 1996, InetSoft has been providing BI software that can deliver the kind of information that SMBs need.

Jaspersoft

Started in 2001 as an open source reporting product named JasperReports, Jaspersoft now provides a complete set of BI tools for organizations that want to take advantage of open source software. Jaspersoft has been breaking down the wall in recent years to become a serious competitor in the BI landscape.

LogiXML

Founded in 2000 and based in McLean, Virginia, LogiXML develops XML-based software. With the LogiXML platform, an XML-based BI solution, organizations can embed LogiXML reports and charts with ease into almost any Web-based platform. LogiXML delivers a BI solution that comprises an interesting set of tools for midsize companies.

Oracle

Oracle is one of the biggest software companies in the world. It provides business software solutions for almost any type of organization and business area. Oracle is committed to acquiring and developing a diverse set of solutions to expand its reach across a greater number of industries and software markets. Its set of BI software solutions provides a strong BI suite for SMBs around the world.

Panorama Software

Having a strong partnership with Microsoft, Panorama Software delivers a strong set of BI tools that can be deployed in Windows environments. Panorama delivers powerful BI tools since 1993 and is a leader in BI solutions in Windows environments. Panorama Software can bring powerful BI tools to empower basic and experienced users with information management abilities.

Pentaho

Founded by BI industry veterans, this commercial, open source BI provider offers a BI suite that has a vast set of BI tools for reporting, dashboarding, OLAP analysis, and data integration services. Pentaho is one of the world's most deployed open source BI solutions. The company also has a wide number of partnerships.

OlikTech

QlikTech is a pioneer of the in-memory analysis space. The company was founded in Lund, Sweden, in 1993. QlikTech has explored and exploited a new way to analyze data. QlikView is one of the most popular BI products for midsize companies, and it is expanding rapidly to larger companies.

SAP

The SAP-Business Objects partnership is able to offer a complete set of BI tools enriched with an additional set of capabilities. Business Objects is widely recognized for providing powerful BI tools for a wide range of customers all over the world. SAP BusinessObjects delivers a complete BI suite for enterprise deployments that require high-quality, reliable data management analysis.

Tableau Software

Tableau originated in 1997 and has its roots in a group of people from Stanford University. With their expertise in business and science, Tableau developed a series of products producing high-quality visualizations of data for the United States Department of Defense. Since then, Tableau has developed Tableau Server to deliver a BI tool with high-quality visual standards and query performance. Creator of the VizQL language, Tableau has proven itself as a serious competitor in the BI space.

SaaS BI

SaaS will perhaps be one the most important trends in IT and business software history. SaaS applications are one of the main offerings of a cloud computing infrastructure, and SaaS is reshaping the way everyone works with business applications.

During the last couple of years, there has been an increase in the number of software vendors launching SaaS versions of their traditional business software applications. Currently, many software vendors strongly believe that having a SaaS delivery model as part of their software offerings will have an important effect on their business in terms of revenue in the medium and long term. Other software vendors are starting out as native SaaS-based solution providers.

What Is SaaS Anyway?

In February 2001, The Software & Information Industry Association (SIIA) published an article called "Software as a Service: Strategic Background." The term "software as a service (SaaS)" was coined to describe a model in which an application is deployed on a central server and accessed remotely using a network such as an intranet or the Internet. In this delivery model, for users to access the application, users must connect to a remote computer, which is generally accessed based on a subscription or rent schema (see figure 9).

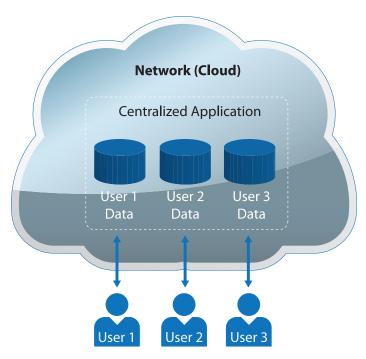


Figure 9. General SaaS application model

From a customer perspective, the benefits of having a SaaS business application in place are inducing many organizations to move from an on-premise solution to a SaaS solution provider. Some of the most important benefits include:

- Users have access to their business applications with the use of only a "thin client"—a Web browser such as Internet Explorer or Firefox. There is no need to install an application on the user machine.
- All software maintenance is done by the service provider. The service provider guarantees application maintenance, updates, and support.
- The service offering is flexible, based on number of users, consumption, or other factors.

The advantages of the SaaS delivery model over traditional, on-premise applications have important effects on the way software vendors are developing their new business software versions, especially in some application areas such as CRM and BI systems, in which SaaS versions are increasingly being added to the vendor's software list.

On the other hand, vendors that are starting out as native SaaS software developers have a competitive advantage because of their focus on SaaS versus the more diffuse experience of on-premise software vendors. While native SaaS application providers have the specialized knowledge of developing and deploying their SaaS tools as well as marketing them, they may lack experience in terms of support and services that big software vendors commonly have.

SaaS in the BI World

SaaS applications might be on the right path to being the next technology breakthrough. ERP system providers are adopting SaaS as an alternative to their traditional on-premise application offers; CRM and sales force automation (SFA) systems are expanding their reach with SaaS products, some of which, like Salesforce.com and NetSuite, are quite well known. In terms of BI applications, the SaaS segment is growing slowly but steadily, with SaaS solutions coming from both traditional and native SaaS software vendors in significant numbers (see figure 10).

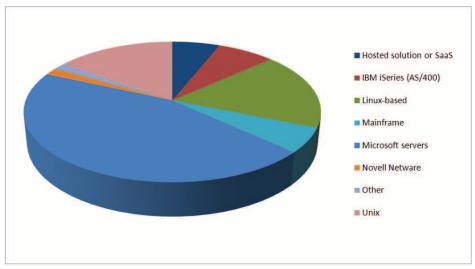


Figure 10. Platforms used for BI solutions

The Benefits of SaaS BI

Despite SaaS BI applications being in the early stages of their development, they can provide important benefits to an organization planning to follow the SaaS path. Some of the main benefits of SaaS are as follows:

- shorter implementation cycles
- · flexible licensing and pricing models
- · smooth scalability
- lower TCO than on-premise applications

Because of these benefits, especially the lower TCO and shortened implementation cycle, SaaS BI tools have a particular appeal for the SMB market. SMBs can readily afford to acquire these types of solutions quickly and on a small budget, but SaaS can also make it easier for large enterprises to rapidly incorporate BI solutions for specific business areas into their business application stack. Interest in SaaS BI solutions is steadily growing (see figure 11). With the many benefits that SaaS can bring to various types of organizations, this growth can be

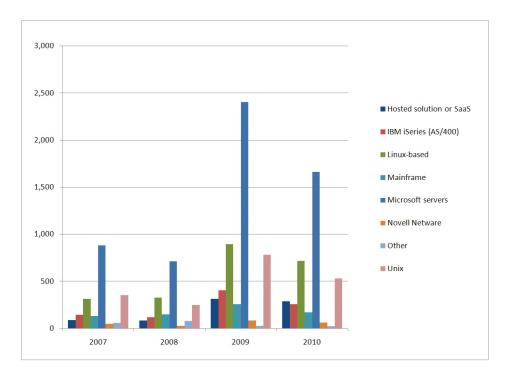


Figure 11. Demand for platform types for BI solutions

expected to continue in the coming years.

And the Challenges

As interest in BI SaaS applications is continuously growing, SaaS technology faces several challenges before it can achieve the necessary maturity for mainstream adoption. Some of these challenges are particularly relevant to the BI space due to the vital nature of the information that BI systems deal with. Some of the biggest challenges to address are:

- security, to ensure that data storage location, infrastructure (hardware and software), and human resources
 will not compromise data
- service-level agreements (SLAs), to ensure the reliability of the services provided by a SaaS application
- · elasticity, to ensure SaaS application scalability to meet new requirements
- · integration, to provide the necessary integration with alternative computing models and systems

SaaS BI applications can bring several benefits to organizations in terms of cost, ease of deployment and operation, and low TCO. SaaS BI applications still have to grow to a phase in which they can offer the flexibility and functionality power of traditional on-premise solutions, and of course, they will have to face these challenges and others in order to achieve the necessary elements for their generalized adoption.

SaaS BI: Functionality Matrix

The following matrix contains a list of BI vendors with solutions specifically designed as SaaS applications. The matrix considers a core set of functionality features for a SaaS BI product.

The ratings are based on vendor claims for solution functionality. The system fully supports (Full), partially supports (Partial), or does not support (None) the functionality, or the functionality may be supported through an additional product (With additional product). Other features are either available (Yes) or not available (No).

Note that these ratings are intended as a guide only. To determine which solution best meets your organization's requirements, you can conduct a comprehensive evaluation and comparison analysis in TEC's Business Intelligence Evaluation Center.

Com	pany	Adaptive Planning	Birst	Bitam	Cloud9	GoodData
Produ	ct	Adaptive Planning	Birst 4	KPI Online	Cloud9 Analyst Suite	GoodData
Regio	n	North America Europe	North America	North America	North America Europe	North America
	Localization	Yes	Yes	Yes	No	No
	Support	Yes	Yes	Yes	Yes	Yes
	Training	Yes	Yes	No	Yes	Yes
	Service-level agreement	Yes	Yes	No	No	No
	Audit trail management	Yes	No	No	No	No
ro	SOX compliance	No	No	No	No	No
Security and Control	SAS 70 Type II compliance	Yes	Yes	No	No	No
ity and	Application-level security	Full	Full	None	None	None
cur	Data-level security	Full	Full	None	None	None
Se	Data encryption	Full	Full	None	None	None
	Central administration	Yes	Yes	Yes	No	No
	Analysis and reporting	Full	Full	Full	Full	Full
	Dashboarding	Full	Full	Full	Full	Full
	Data mashups	None	None	None	None	None
	Advanced data search	Full	None	None	None	None
	Alerts and exceptions	Full	Full	Full	None	None
<u>₹</u>	What-if analysis	Full	Partial	None	None	None
General Functionality	Microsoft Office integration	None	Partial	Full	None	None
dun	Geospatial capabilities	None	Full	Full	None	None
ш	Standard analytics	Full	Full	Full	None	Full
	Predictive analytics	None	Full	None	None	None
	OLAP services	Full	Full	None	None	None
	Data warehousing tools	None	Full	None	None	None
	Disparate data source integration	Full	Full	Full	Full	Full
	Metrics and KPIs	Full	Full	Full	Full	Full
ess	Planning and budgeting	Full	None	Full	With additional product	None
Business Performance	Cost management	Full	None	None	With additional product	None
Ğ	Strategy and performance	Full	None	None	With additional product	None
	Portal integration	No	Yes	No	No	No
	Industry vertical functionality	No	Yes	No	Yes	No
	Third-party application integration	Yes	Yes	No	No	No

Com	pany	NetSuite	Oco	PivotLink	SAP	We Are Cloud
Produ	ct	SuiteAnalytics	Oco Business Analytics Solutions	PivotLink BI Platform	SAP BusinessObjects BI OnDemand	Bime
Regio	n	North America Europe Asia	North America Europe	North America	Global	Europe
	Localization	Yes	No	No	No	Yes, French/English
	Support	Yes	Yes	No	Yes	Yes
	Training	Yes	No	No	No	Yes
	Service-level agreement	Yes	Yes	No	No	No
	Audit trail management	Yes	No	No	No	No
2	SOX compliance	No	No	No	No	No
Cont	SAS 70 Type II compliance	Yes	Yes	Yes	No	No
Security and Control	Application-level security	None	Full	Full	Full	Full
cur	Data-level security	None	Full	None	Full	Full
Se	Data encryption	Full	Full	None	None	Full
	Central administration	Yes	Yes	Yes	Yes	Yes
	Analysis and reporting	Full	Full	Full	Full	Full
	Dashboarding	Full	Full	Full	Full	Full
	Data mashups	None	None	None	Full	None
	Advanced data search	None	None	None	Full	None
	Alerts and exceptions	Full	Full	Full	Full	Full
<u>i</u>	What-if analysis	Full	None	None	Full	Partial
General inctionality	Microsoft Office integration	None	None	None	None	None
Ge	Geospatial capabilities	None	Full	None	Full	Full
ш	Standard analytics	Full	Full	Full	Full	Full
	Predictive analytics	Full	None	None	None	None
	OLAP services	Full	None	Full	None	Full
	Data warehousing tools	None	Full	None	None	None
	Disparate data source integration	Full	Full	Full	Full	Full
d)	Metrics and KPIs	Full	Full	Full	Full	Full
Business Performance	Planning and budgeting	With additional product	None	None	None	None
3usi rfor	Cost management	None	Full	None	None	None
Per	Strategy and performance	None	Full	None	None	None
	Portal integration	No	Yes	No	No	No
	Industry vertical functionality	No	Yes	Yes	No	No
	Third-party application integration	Yes	Yes	No	Yes	No

Adaptive Planning

Adaptive Planning delivers an on-demand BI tool with business performance features. The company was founded in 2003 and is based in Mountain View, California.

Birst

Birst was founded in 2004 by veterans of the BI industry and is based in San Francisco, California. Birst specializes in BI software.

Bitam

KPI Online is an on-demand BI and business performance application based on the onpremise solutions of its parent company, Bitam.

Cloud9

From Redwood City, California, Cloud9 Analytics is a SaaS-based company that provides various BI solutions for different markets and industries. Cloud9 Analyst Suite is its core BI application.

GoodData

GoodData is a BI provider headquartered in San Francisco, California, and engineered in the Czech Republic.

NetSuite

NetSuite is a cloud-based company that offers different types of on-demand solutions. SuiteAnalytics is its BI offering. NetSuite is based in San Mateo, California.

Oco

Oco stands as one of the first SaaS BI providers in the market. The company is based in Waltham, Massachusetts.

PivotLink

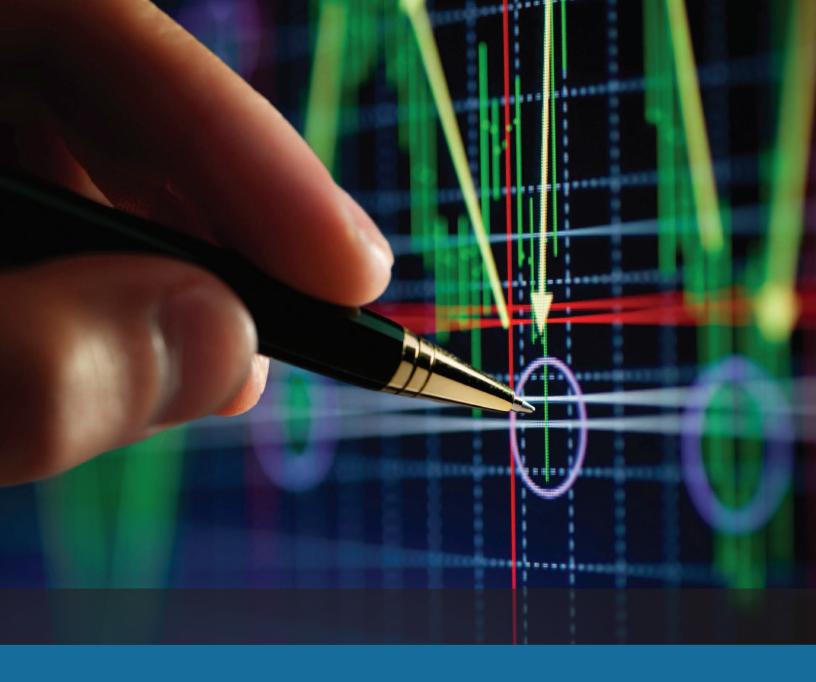
PivotLink applies an innovative approach to developing BI solutions. The company is based in San Francisco, California.

SAP

Business Objects is widely recognized for providing powerful BI tools for a wide range of customers all over the world. BI OnDemand offers the BI functionality of traditional SAP BusinessObjects products, now on the cloud.

We Are Cloud

We Are Cloud, from Montpellier, France, produces Bime, a BI solution focused on ease of use but with powerful features. We Are Cloud give users a neat BI solution with easy start-up.



TEC Special Report

TEC Special Report

The Role of Business Intelligence in Content Strategies

This special report from Technology Evaluation Centers (TEC) takes a look at the role that business intelligence (BI) can play in extracting value from content sources to benefit business decision making. It also reveals some of the tools and technologies that BI vendors are developing to analyze unstructured content, and examines the ways businesses are applying these technologies to extract actionable insights from their content management systems (CMSs) and from the Internet.

With so much business being transacted online, the amount of corporate content generated by—and about—the average organization is staggering. Companies are relying on CMSs to handle enormous quantities of information from a wide variety of sources. Hidden in this information is valuable data that, properly analyzed, can provide key insights into what makes businesses run, and what can make them run better. The problem, of course, is finding a way to analyze the data.

Extracting BI from Unstructured Data

BI, a branch of enterprise software focused on making sense of massive amounts of data, seems at first glance to be a likely solution here. However, traditional BI solutions are designed to work with data that's already structured in ways that make analysis easy. They tend to work with structured data from, e.g., databases under which the data has a very well-defined structure (fields, registers, tables, and so on). CMSs, in contrast, store mostly unstructured data. Such data lacks a formal data model or structure, and requires much more complex analysis techniques.

Now that demand for unstructured data analysis is on the rise, BI vendors are investing heavily in specialized analytical tools and technologies. Some of these innovations are introduced here, with commentary on what you should look for from the vendors that provide them.

BI and CMS: Closing the Gap

While traditional BI systems have been able to provide analysis derived from "cold numbers" such as total revenue, total sales, etc., many business areas need to expand these capabilities in order to analyze complex information based on more qualitative notions, such as brand positioning in the market, customer satisfaction, or customer preferences.

Also, many organizations have come to realize that valuable information is contained in unstructured documents (as in plain text documents or spreadsheets), which has triggered the development of new types of analysis tools. The aim of such tools is to enable analysis that uncovers meaning or "sentiment" within an organization's documents and other content. This type of data has traditionally been maintained within CMSs.

Beyond the natural evolutions of both BI and CMS applications, the way data is handled within an organization has also contributed to closing the gap between CMSs and BI systems. Organizations promote better data sharing between the two types of applications, and BI techniques are being applied to unstructured data, such as

- semantic publishing frameworks and standards (e.g., the Resource Description Framework [RDF] and
 extensible markup languages [XMLs]) that enable documents to be better documented and described, as
 well as providing features for porting to different platforms;
- technologies such as sentiment analysis and text-mining techniques, which enable organizations to analyze
 or measure the polarity of opinions regarding an object of study, or to uncover valuable information within
 text content; and
- software development frameworks such as service-oriented architecture (SOA) to build more user-centric
 applications, which promote collaboration and interoperability between different types of systems.

Another enabler of this collaborative BI/CMS evolution is the growth of the so-called social media space, which has expanded the need for organizations to analyze the content coming from within the organization, as well as, more particularly, the content generated from outside the organization.

Content Analysis and Its Relevance to the Organization

In the context of the analysis of massive amounts of complex data, many business areas require tools that can help them interpret and extract valuable information for decision support purposes. There are several advantages to using BI technologies for these purposes:

- · They can expand analysis potential, not only in terms of data quantity, but also in terms of data quality.
- They enable easier searching within corporate information and content based on semantic properties (as opposed to, e.g., keyword criteria alone).
- They expand analysis capabilities to a broader number of users by applying easier-to-operate interfaces for data analysis.
- They create more unified frameworks for applying BI, in more instances or business units.

Information analysis based on sentiment or appreciation, and tools that help users create alternative ways to gather information (such as data mashups, enterprise search strategies, and the development of models for text and data mining) allow users to detect important patterns, such as customer behavior, possible fraud detection, and more.

Emerging BI Subcategories: Enterprise Information Systems and Content Intelligence

The merging of CMS and BI technologies is contributing to the development of a new space, in which we encounter several types of applications that deal with content in various ways, from tools for text analysis to semantic Web techniques. BI tools are rapidly being converted from systems devoted to strategic and tactical decision support to applications that support operational areas in daily tasks, as well as helping a broader number of users to search and discover data insights directly at the information source in other types of enterprise software applications, e.g., customer relationship management (CRM) systems.

There are two major approaches to combining BI and content management: 1) the development of enterprise information management systems that aim to cover all areas of organizational information management, and 2) a more targeted approach called content intelligence, which combines CMS content management abilities with a strong set of BI capabilities. This combination provides the power to analyze information coming from both structured and unstructured data. Content analysis carried out by BI systems has several core functionalities:

Semantic technologies

The goals of semantic technologies are to develop the standards, frameworks, and software that find meaning in the information managed within an organization. Semantic technologies can be applied to several different areas, but nowadays they play a major role in the decision support process, as they provide analytics applications with valuable information for the BI life cycle process. At this stage, semantic technologies enable the management of the unstructured data that deals with business interaction in all business process layers (from transactional systems to employees and customer interaction). Semantic technologies include tools for categorization, autorecognition of topics and concepts, and extraction of data and its meaning.

• Enterprise search

Enterprise search tools are devoted to easing the search for particular content within an organization. In a way, they are comparable to Web search processes: information is collected and integrated (possibly using a crawler, as in a Web search), processed, and indexed. At this point, information is ready to be queried and matched by or for users. An enterprise search system can collect information from a wide variety of systems, particularly combinations of databases and CMSs.

• Analytics (text analytics/mining and Web analytics/mining)

One of the core features of the mix between content management and BI functionality is the possibility of performing content analysis. This type of feature is expanding from traditional text analytics to the ability to provide a statistical distribution of text elements such as words and phrases, and from traditional text-mining techniques to the categorization of text elements, as well as the creation of models to find text patterns over different types of content.

Trends to Watch For

As in any space in the software industry, CMS and BI software systems are in a state of evolution, and many new technologies are being adopted to enhance the capabilities of content intelligence systems. Significant trends to watch for in upcoming years will be based on three major points: 1) data storage and exploitation, 2) social media, and 3) collaboration.

1. Data storage and exploitation

Traditionally, BI-related processes have been carried out using information stored in relational databases. This was fine for the analysis of information taken from traditional transactional systems, but turns out to be quite challenging when it comes to the use of unstructured data. In recent years, a growing movement toward the design and implementation of non-relational databases has led to the generation of products for managing content-based information. Products such as the MarkLogic Server (an unstructured database created specifically to manage unstructured information), as well as cloud databases such as Amazon's SimpleDB, can help companies simplify some of the processes involved in traditional BI solutions. This can ease the process of data integration from disparate sources, as well as providing a unique information repository, capabilities for digital content storage, and powerful metadata management capabilities. Other options include "NoSQL" providers such as CouchDB and MongoDB, which are databases specifically designed for content-based information. Despite some challenges for NoSQL databases, such as their lack of atomicity, consistency, isolation, and durability (ACID) and ad hoc query capabilities, some providers will certainly evolve to the point where they can provide reliable services for BI/CMS fusion.

2. Social media data and analysis

More and more organizations are incorporating social media strategies to reinforce their brand and marketing positioning, and to improve social industry relations. This strategy implies the collection of large sets of unstructured data for analysis. The massive corporate intrusion on the social media space will help drive improved analytic applications for content (which in the mid-term will be transferred to inhouse BI solutions). Thus, although tools for sentiment analysis and text mining are in the early stages of productive usage, they will be forced to rapidly evolve and expand in power and versatility.

3. Integrated collaboration

As with other types of enterprise software applications, content intelligence systems will continue to trend toward the incorporation of more collaboration capabilities. This enhancement will lead to more user-centric systems that can deliver services to a wider number of users (i.e., beyond the C-level executives who were the traditional audience for BI applications). The result is a virtuous circle where the ability to manage and analyze unstructured data is reflected by the need to address a wider audience (the proposition being that more business areas need to be involved in the organization's analytical processes). At the same time, due to the variety of users involved in the analytical process, content intelligence solutions will need to be designed in a way that centers on the user, by providing elements for facilitating search, localization, analysis, and user sharing/collaboration.



Vendor	Product	Headquarters	Toll-free International-access	E-mail Web site
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CareLogistics	Real-Time Performance Analytics	Georgia, USA	1-800-930-0870	info@carelogistics.com www.carelogistics.com
SL Real-Time Visibility	RTView	California, USA	1-800-548-6881 +1 415-927-8400	info@sl.com www.sl.com
SL Real-Time Visibility	RTView for TIBCO	California, USA	1-800-548-6881 +1 415-927-8400	info@sl.com www.sl.com
SL Real-Time Visibility	RTView for APM/OC Monitor	California, USA	1-800-548-6881 +1 415-927-8400	info@sl.com www.sl.com
Business Intelligence				
AgileGraph	AgileGraph	Texas, USA		www.agilegraph.com/contact.asp www.agilegraph.com
Aginity	Customer Facing Analytics	Illinois, USA	1-888-821-1201	info@aginity.com www.aginity.com
Altosoft	InsightBI	Pennsylvania, USA	+1 484-427 2800	info@altosoft.com www.altosoft.com
AnyChart	AnyChart	Washington, USA	1-888-845-1211 +1 206-984-1843	sales@anychart.com www.anychart.com
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Arcplan	Arcplan Enterprise	Philadelphia, USA	+1 610-902-0688	sales@arcplan.com www.arcplan.com
Balanced Insight	Balanced Insight Consensus	Ohio, USA	+1 513-322-1646	info@balancedinsight.com www.balancedinsight.com
BI-Cycle	KPI Management Tool	Georgia, USA		www.bi-cycle.com/maintenance _consultant/index.htm www.bi-cycle.com
BI-Cycle	RCM Analysis Tool	Georgia, USA		www.bi-cycle.com/maintenance _consultant/index.htm www.bi-cycle.com
Bitam	Artus	Virginia, USA	1-888-820-7776	sales@bitam.com www.bitam.com
Board International	Board Management Intelligence Toolkit	Massachusetts, USA	+1 781-290-4800	info@board.com www.board.com
Business Intelligence Systems Solutions	BIS ² Suite	Amsterdam, The Netherlands	+31 20 34200 28	sales@bis2.net www.bis2.net
Centrifuge	BI 2.0	Virginia, USA	+1 571-830-1300	info@centrifugesystems.com www.centrifugesystems.com
ComponentOne	Studio Enterprise	Pennsylvania, USA	1-800-858-2739 +1 412-681-4343	sales@componentone.com www.componentone.com

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ComponentOne	Studio for Sharepoint	Pennsylvania, USA	1-800-858-2739 +1 412-681-4344	sales@componentone.com www.componentone.com
Connotate	Agent Community	New Jersey, USA	+1 732-296-8844	www.connotate.com/contact_us.aspx www.connotate.com
Corda	Corda Builder	Utah, USA	1-800-968-3240 +1 801-805-9400	www.corda.com/contact-corda.php www.corda.com
DataMentors	PinPoint	Florida, USA	+1 813-960-7800	lbedgood@datamentors.com www.datamentors.com
DataSelf	DataSelf BI	California, USA	+1 408-351-3560	info@dataself.com www.dataself.com
Dimensional Insight	The Diver Solution 6.2	Massachusetts, USA	+1 781-229-9111	info@dimins.com www.dimins.com
Distributive Management	DataDrill Portal		1-800-779-6306	info@distributive.com www.distributive.com
dMine Business Intelligence	dMine Dashboards			sales@dminebi.com www.dminebi.com
DSP Panel	Performance Canvas	Stockholm, Sweden	+46 8 669 03 40	info@dspanel.com www.dspanel.com
Dundas	Dundas Dashboard	Ontario, Canada	1-800-463-1492 +1 416-467-5100	sales@dundas.com www.dundas.com
ElegantJ BI	Business Intelligence Suite	Gujarat, India	+91 79-66527011	sales@elegantjbi.com www.elegantjbi.com
Eshbel	Priority	Rosh Haayin, Israel	+972 3-9251000	www.eshbel.com
eThority	eThority Enterprise Edition	South Carolina, USA	1-800-846-9200	sales@ethority.com www.ethority.com
Exact	Exact Business Analytics	Delft, The Netherlands	+31 15 262 4323	sales.usw@exact.com www.exact.com
Fractal Edge	Fractal Intelligence	UK	+44 20 7084 7494	contact@fractaledge.com www.fractaledge.com
Fractal Edge	Fractal Server	UK	+44 20 7084 7494	contact@fractaledge.com www.fractaledge.com
FusionCharts	FusionCharts	Kolkata, India		www.fusioncharts.com/contact www.fusioncharts.com
HumanIT	InfoZoom	Bonn, Germany	+49 228 90954-0	info@humanit.de www.infozoom.com
IBM	IBM Cognos 8 BI	New York, USA	1-800-426-4968 +1 914-499-1900	www.ibm.com
IBM	IBM Cognos Express	New York, USA	1-800-426-4968 +1 914-499-1900	www.ibm.com
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InetSoft Technology	Style Intelligence	New Jersey, USA	1-888-216-2353 +1 732-424-0400	info@inetsoft.com www.inetsoft.com
InfoCaptor	InfoCaptor	Pennsylvania, USA	+1 412-532-6273	contact@infocaptor.com www.infocaptor.com
Information Builders	WebFOCUS	New York, USA	+1 212-736-4433	askinfo@ibi.com www.informationbuilders.com
InsFocus	InsFocus BI	Petach-Tikva, Israel	+972-3-9233766	info@insfocus.com www.insfocus.com
Integrated Services Inc.	SQL Rx	Texas, USA	+1 214-526-7680	sales@isi85.com www.isi85.com
Intellicus	Intellicus	California, USA	+1 408-213-3314	sales@intellicus.com www.intellicus.com
iOLAP	Executive Dashboard, Reporting/OLAP Tools	Texas, USA	+1 214-618-5000	sales@iolap.com www.iolap.com
Jaspersoft	Jaspersoft BI Suite	California, USA	1-877-600-5767 +1 415-348-2398	sales@jaspersoft.com www.jaspersoft.com
Jedox	Palo Suite	Freiburg, Germany	+49 761 15147-0	info@jedox.com www.jedox.com
Juice Analytics	JuiceKit	Virginia, USA	+1 571-482-7760	info@juiceanalytics.com www.juicekit.org
Kalido	Kalido KONA	Massachusetts, USA	+1 781-202-3200	http://info.kalido.com/contactus.html www.kalido.com
Klipfolio	Klipfolio Dashboard	Ontario, Canada	1-877-233-6149 +1 613-233-6149	info@klipfolio.com www.klipfolio.com
Kognitio	BI for Leisure	Bracknell, UK	+44 1344 300770	info@kognitio.com www.kognitio.com
Kognitio	BI for Retail	Bracknell, UK	+44 1344 300770	info@kognitio.com www.kognitio.com
KXEN	KXEN Analytic Framework	California, USA	+1 415-904-4160	sales-us@kxen.com www.kxen.com
LogiXML	Logi Info	Virginia, USA	1-888-564-4965 +1 703-752-9700	info@logixml.com www.logixml.com
Lyzasoft	Lyza	Colorado, USA	+1 303-825-1040	www.lyzasoft.com
MAIA Intelligence	1Key Agile BI Suite	New Mumbai, India	+91 22-66888999	www.maia-intelligence.com/contact.htm www.maia-intelligence.com
Marketing NPV	Dashboard Platform	New Jersey, USA	+1 609-688-0606	www.marketingnpv.com/contact-us www.marketingnpv.com/dashboard -platform

V I	Product	Headquarters	Toll-free	E-mail
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Microsoft	Microsoft BI (Sharepoint Server, SQL Server, etc.)	Washington, USA	1-800-642-7676 +1 425-882-8080	www.support.microsoft.com/contactus/ emailcontact.aspx?scid=sw;en;1539&ws= corpinfo&ws=support&ws=mscom www.microsoft.com
MicroStrategy	MicroStrategy 9	Virginia, USA	1-888-537-8135 +1 703-848-8600	info@microstrategy.com www.microstrategy.com
Netezza (an IBM company)	Netezza Spatial	Massachusetts, USA	1-877-638-3992 +1 508-382-8200	www.netezza.com/company/contact_ form.aspx www.netezza.com
Neubrain	Neubrain CPM Solutions	Maryland, USA	+1 301-296-4477	inquiries@neubrain.com www.neubrain.com/performance.html
Nevron	Nevron .NET Vision	Delaware, USA	1-888-201-6088	sales@nevron.com www.nevron.com
Nevron	Nevron SSRS Vision	Delaware, USA	1-888-201-6088	sales@nevron.com www.nevron.com
Nevron	Nevron SharePoint Vision	Delaware, USA	1-888-201-6088	sales@nevron.com www.nevron.com
Oracle	Hyperion Enterprise	California, USA	1-800-392-2999 +1 650-506-7000	oraclesales_us@oracle.com www.oracle.com
Oracle	Oracle BI Suite Enterprise Edition Plus	California, USA	1-800-392-2999 +1 650-506-7000	oraclesales_us@oracle.com www.oracle.com
Oracle	Oracle BI Suite Standard Edition	California, USA	1-800-392-2999 +1 650-506-7000	oraclesales_us@oracle.com www.oracle.com
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Panorama Software	Panorama NovaView	Ontario, Canada	1-877-709-5858 +1 416-545-0990	support@panorama.com www.panorama.com
Pentaho	Pentaho BI Suite	Florida, USA	1-866-660-7555 +1 407-812-6736	www.pentaho.com/contact www.pentaho.com
Phocas	Phocas 5	Oxford, UK	+44 1865 481 420	info@phocas.biz www.phocas.biz
Prelytis	LiveDashBoard	Paris, France	+33 1 44 10 41 80	contact@prelytis.fr www.prelytis.com
ProfitMetrics	Dashboard Solutions	Texas, USA	+1 713-667-5570	info@profitmetrics.com www.profitmetrics.com
PureShare	PureShare ActiveMetrics	Ontario, Canada	1-877-467-9377 +1 613-236-1644	info@pureshare.com www.pureshare.com
QlikTech International	QlikView	Pennsylvania, USA	1-888-828-9768	infous@qliktech.com www.qliktech.com

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Ramco Systems	Ramco DecisionWorks	New Jersey, USA	1-800-472-6261 +1 609-620-4800	info@rsc.ramco.com www.ramco.com
Raymark	Xpert-Series	Quebec, Canada	1-800-346-7296 +1 514-737-0941	info@raymark.com www.raymark.com
Relational Solutions	POSmart, BlueSky Analytics, BlueSky Forecasting	Ohio, USA	+1 440-899-3296	www.relationalsolutions.com
Revolution Analytics	Revolution R Enterprise	California, USA	1-855-438-7386 +1 650-646-9545	http://info.revolutionanalytics.com/ contact-us-form.html www.revolutionanalytics.com
SAP	SAP BusinessObjects Edge Business Intelligence	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/contactsap/index .epx?pmelayer=true&kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAP	SAP BusinessObjects Enterprise	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/contactsap/index .epx?pmelayer=true&kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAP	SAP BusinessObjects Enterprise Information Management Solutions	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/contactsap/index .epx?pmelayer=true&kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAS Institute	SAS Enterprise BI Server	North Carolina, USA	1-800-727-0025 +1 919-677-8000	www.sas.com/apps/forms/index .jsp?id=gendetail www.sas.com
SAS Institute	SAS Enterprise BI	North Carolina, USA	1-800-727-0025 +1 919-677-8000	www.sas.com/apps/forms/index .jsp?id=gendetail www.sas.com
SpagoWorld	SpagoBI	Padua, Italy	+39 049 8283411	info@eng.it www.spagoworld.org
SpatialKey	SpatialKey	Massachusetts, USA	1-866-429-2481	www.spatialkey.com/contactcf/general.cfm www.spatialkey.com
Stottler Henke Associates	DataMontage	California, USA	+1 650-931-2700	stottler@stottlerhenke.com www.stottlerhenke.com
Strategy Companion	Analyzer	California, USA	1-800-905-6792 +1 714-460-8398	sales@strategycompanion.com www.strategycompanion.com
Swift Reporting	Swift Reporting Enterprise Edition	Ontario, Canada	1-877-794-3877 +1 416-479-028	info@swiftreporting.com www.swiftreporting.com

N. I	Product	Headquarters	Toll-free	E-mail
Vendor			International-access	Web site
Swiss Information Group	Swing Dashboard	Geneva, Switzerland	+41 22 979 35 45	info@swissinfogroup.com www.swissinfogroup.com
Syncfusion	Essential Studio Enterprise Edition	North Carolina, USA	1-888-936-8638 +1 919-481-1974	info@syncfusion.com www.syncfusion.com
Tableau Software	Tableau Server	Washington, USA	+1 206-633-3400	info@tableausoftware.com www.tableausoftware.com
TARGIT	TARGIT BI Suite	Hjørring, Denmark	+45 96 23 19 00	info@targit.com www.targit.com
Telerik	Telerik Reporting	Sofia, Bulgaria	1-888-365-2779 +359 2-8099850	sales@telerik.com www.telerik.com
TIBCO Software Inc	TIBCO Spotfire Analytics platform	California, USA	1-800-420-8450 +1 650-846-1000	mds@tibco.com www.tibco.com
TOTVS S/A	Business Intelligence	São Paulo, Brazil	+55 11 3981-7126	www.totvs.com
Vecta	Vecta Sales Intelligence	Sheffield, UK	+44 114 262 2032	jayneh@vecta.net www.vecta.net
Visibility	Visibility Reporting and Analytics	Massachusetts, USA	+1 978-269-6500	sales@visibility.com www.visibility.com
Visual Mining	NetCharts Performance Dashboards	Maryland, USA	1-800-308-0731 +1 301-795-2200	sales@visualmining.com www.visualmining.com
VisualCalc	VisualCalc Analysis Software	California, USA	+1 916-939-2020	www.visualcalc.com/contactme.htm www.visualcalc.com
WorldBI	suXess	Istanbul, Turkey	+90 212 285 4785	www.worldbi.biz/contact.asp www.worldbi.biz
XLCubed	XLCubed Excel Edition	Maidenhead, UK	+44 1628 763 222	xlsales@xlcubed.com www.xlcubed.com
XLCubed	XLCubed Web Edition	Maidenhead, UK	+44 1628 763 222	xlsales@xlcubed.com www.xlcubed.com
XLCubed	MicroCharts for Excel	Maidenhead, UK	+44 1628 763 222	xlsales@xlcubed.com www.xlcubed.com
XMLA Consulting	Report Portal	Florida, USA	1-800-860-0112 +1 813-866-3483	info@reportportal.com www.reportportal.com
Yellowfin	Yellowfin	Melbourne, Australia	1-877-643-0227 +61 3 9090 0455	www.yellowfin.com.au
Zap Technology	Zap Business Intelligence	Brisbane, Australia	+61 7 3211 8450	www.zaptechnology.com/contact /contact.asp www.zaptechnology.com
Business Performance	e Management			
ActiveStrategy	ActiveStrategy Enterprise	California, USA	+1 484-690-0700	http://info.activestrategy.com/contact -activestrategy.html www.activestrategy.com

	Product	Headquarters	Toll-free	E-mail
Vendor			International-access	Web site
Actuate	BIRT Performance Management	California, USA	1-800-914-2259 +1 650-645-3000	info@actuate.com www.actuate.com
Actuate	BIRT Product Suite	California, USA	1-800-914-2259 +1 650-645-3000	info@actuate.com www.actuate.com
Adaptive Planning	Adaptive Planning	California, USA	1-800-303-6346 +1 650-528-7500	info@adaptiveplanning.com www.adaptiveplanning.com
ASG Software Solutions	Performance Management Solutions	Florida, USA	1-800-932-5536 +1 239-435-2200	info@asg.com www.asg.com
Bitam	Artus	Virginia, USA	1-888-820-7776	sales@bitam.com www.bitam.com
Board International	Board Management Intelligence Toolkit	Massachusetts, USA	+1 781-290-4800	info@board.com www.board.com
Centrifuge	Performance Management	Virginia, USA	+1 571-830-1300	info@centrifugesystems.com www.centrifugesystems.com
Clarity Systems (an IBM company)	Clarity 7	Ontario, Canada	+1 416-250-5500	info@claritysystems.com www.claritysystems.com
Corporater	Corporater EPM Suite	Massachusetts, USA	1-800-670-8942	www.corporater.com/en/company /inquiry.html www.corporater.com
Covalent	Covalent Performance Management Suite	Somerset, UK	+44 1823 32 32 39	info@covalentsoftware.com www.covalentsoftware.com
DSPanel	Performance Canvas Planning	Stockholm, Sweden	+46 8 669 03 40	info@dspanel.com www.dspanel.com
ElegantJ BI	Business Intelligence Suite	Gujarat, India	+91 79-66527011	sales@elegantjbi.com www.elegantjbi.com
Epicor	Epicor Enterprise Performance Management Solutions	California, USA	1-800-999-6995 +1 949-585-4000	epicweb@epicor.com www.epicor.com
Exie	Performance Management Suites	Oslo, Norway	+47 23 00 96 90	www.exie.com/Exie.com/Contact_Exie.html www.exie.com
HardMetrics	On-Demand Analytics		+1 215-297-9738	info@hardmetrics.com www.hardmetrics.com
Host Analytics	Performance Management Suite	California, USA	1-866-391-4678 +1 650-249-7100	info@hostanalytics.com www.hostanalytics.com
IBM	IBM Cognos 8 Planning	New York, USA	1-800-426-4968 +1 914-499-1900	www.ibm.com
IBM	IBM Cognos TM1	New York, USA	1-800-426-4968 +1 914-499-1900	www.ibm.com
Infor	Infor PM 10	Georgia, USA	1-800-260-2640 +1 678-319-8000	sales@infor.com www.infor.com
Information Builders	Performance Management Framework	New York, USA	+1 212-736-4433	askinfo@ibi.com www.informationbuilders.com

Variation	Product	Headquarters	Toll-free	E-mail
Vendor			International-access	Web site
KCI Computing	Control	California, USA	+1 310-921-6222	info@kcicorp.com www.kcicorp.com
Klipfolio	Klipfolio Dashboard	Ontario, Canada	1-877-233-6149 +1 613-233-6149	info@klipfolio.com www.klipfolio.com
Lawson	Lawson S3 Enterprise Performance Management	US	1-800-477-1357	www.lawson.com/wcw.nsf/pub/ contactus www.lawson.com
Longview Solutions	Longview 7	Ontario, Canada	+1 905-940-1510	www.longview.com/company/contact-us www.longview.com
MicroStrategy	MicroStrategy 9	Virginia, USA	1-888-537-8135 +1 703-848-8600	info@microstrategy.com www.microstrategy.com
Neubrain	Neubrain CPM Solutions	Maryland, USA	+1 301-296-4477	inquiries@neubrain.com www.neubrain.com/performance.html
Nimsoft	Service Delivery Portal, SLA Reports, Unified Reporter	California, USA	1-877-752-6468 +1 408-796-3400	www.nimsoft.com/company/contact .php#01 www.nimsoft.com
Oracle	Hyperion Enterprise	California, USA	1-800-392-2999 +1 650-506-7000	oraclesales_us@oracle.com www.oracle.com
Performance Solution Technologies	ManagePro	California, USA	1-877-487-3001	pst@managepro.com www.managepro.com
Prodacapo	Corporate Performance Management Suite	Danderyd, Sweden	+46 8 622 25 00	prodacapo@prodacapo.com www.prodacapo.com
Prophix	Performance Management Software	Ontario, Canada	1-800-387-5915 +1 905-279-8711	slawson@prophix.com www.prophix.com
PureShare	PureShare ActiveMetrics	Ontario, Canada	1-877-467-9377 +1 613-236-1644	info@pureshare.com www.pureshare.com
QPR Software	QPR ScoreCard, QPR FactView	Helsinki, Finland	+358 290 001 150	www.qpr.com/contact-forms/contact -sales.htm www.qpr.com
Qualitech Solutions	Executive Dashboard	North Carolina, USA	+1 704-944-6040	www.iexecutivedashboard.com/contact/ contact_form.asp www.iexecutivedashboard.com
River Logic	Enterprise Optimizer	Texas, USA	1-866-326-0171 +1 214-393-4650	info@riverlogic.com www.riverlogic.com
Rocket Software	CorVu	Massachusetts, USA	+1 617-614-4321	www.rocketsoftware.com/about/contact www.rocketsoftware.com
SAP	SAP BusinessObjects Financial Consolidation	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/index .epx?kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects

Vendor	Product	Headquarters	Toll-free International-access	E-mail Web site
SAP	SAP BusinessObjects Financial Information Management	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/index .epx?kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAP	SAP BusinessObjects Planning and Consolidation	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/index .epx?kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAP	SAP BusinessObjects Profitability and Cost Management	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/index .epx?kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAP	SAP BusinessObjects Spend Performance Management	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/index .epx?kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAP	SAP BusinessObjects Strategy Management	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/index .epx?kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAP	SAP BusinessObjects Supply Chain Performance Management	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/index .epx?kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAP	SAP BusinessObjects XBRL Publishing	Pennsylvania, USA	1-800-872-1727 +1 610-661-1000	www.sap.com/usa/index .epx?kNtBzmUK9zU=1 www.sap.com/solutions/ sapbusinessobjects
SAS	SAS for Performance Management	North Carolina, USA	1-800-727-0025 +1 919-677-8000	www.sas.com/apps/forms/index .jsp?id=gendetail www.sas.com
Silvon Software	Stratum	Illinois, USA	1-800-874-5866 +1 630-655-3313	info@silvon.com www.silvon.com
Swift Reporting	Swift Reporting Data Analysis	Ontario, Canada	1-877-794-3877 +1 416-479-0289	info@swiftreporting.com www.swiftreporting.com
Tagetik Corporate	Tagetik 3.0	Lucca, Italy	+39 0583 96811	info@tagetik.com www.tagetik.com
Whitestein Technologies	Living Systems Process Suite	Cham, Switzerland	+41 44-256-5000	info@whitestein.com www.whitestein.com
Winterheller Software	Winterheller Enterprise	Graz, Austria	+43 316 8010-0	office@winterheller.com www.winterheller.com
Data Management				
Aginity	ETL Solutions	Illinois, USA	1-888-821-1201	info@aginity.com www.aginity.com

	Product	Headquarters	Toll-free	E-mail
Vendor			International-access	Web site
Clarabridge	Clarabrige	Virginia, USA	+1 571-299-1800	www.clarabridge.com/contactus.aspx www.clarabridge.com
Composite Software	Composite Information Server	California, USA	+1 650-227-8200	info@compositesw.com www.compositesw.com
DataFlux (a SAS company)	Data Management Studio	North Carolina, USA	1-877-846-3589 +1 919-447-3000	www.dataflux.com/contact/contact-us.aspx www.dataflux.com
DataMentors	DataFuse	Florida, USA	+1 813-960-7800	lbedgood@datamentors.com www.datamentors.com
Datanomic	Director Version 8	Cambridge, UK	+44 1223 228 450	www.datanomic.com/contact www.datanomic.com
Dataupia	Dataupia Satori Server	Massachusetts, USA	1-866-748-3282 +1 617-301-8400	info@dataupia.com www.dataupia.com
FICO	FICO Xpress 7	Minnesota, USA	+1 612-758 5200	www.fico.com/en/pages/contact.aspx www.fico.com
Infobright	Infobright Enterprise Edition	Ontario, Canada	1-877-596-2483 x225 +1 416-596-2483 x225	info@infobright.com www.infobright.com
Informatica	Informatica PowerCenter	California, USA	1-800-653-3871 +1 650-385-5000	http://vip.informatica.com /?elqpurlpage=483 www.informatica.com
iOLAP	Data Integration Tools	Texas, USA	+1 214-618-5000	sales@iolap.com www.iolap.com
Microsoft	Microsoft PowerPivot	Washington, USA	1-800-642-7676 +1 425-882-8080	www.support.microsoft.com/contactus/ emailcontact.aspx?scid=sw;en;1539&ws=c orpinfo&ws=support&ws=mscom www.microsoft.com
Pervasive Software	Pervasive Data Integrator	Texas, USA	1-888-926-5969 +1 512-231-6000	info@pervasivedataintegration.com www.pervasiveintegration.com
Syncsort	QPR ScoreCard, QPR FactView	New Jersey, USA	+1 201-930-9700	info@syncsort.com www.syncsort.com
Talend	Talend Data Management	California, USA	+1 650-396-7738	info@talend.com www.talend.com
Data Warehousing				
1010data	1010data	New York, USA	+1 212-405-1010	info@1010data.com www.1010data.com
Aginity	Data Factory	Illinois, USA	1-888-821-1201	info@aginity.com www.aginity.com
Algebraix Data	Algebraix Data A2DB	Texas, USA	+1 512-651-5834	www.algebraixdata.com/about-us/ contact-us www.algebraixdata.com
Aster Data	Aster Data nCluster	California, USA	1-888-278-3732 +1 650-232-4400	www.asterdata.com/contact_us/index.php www.asterdata.com

	Product	Headquarters	Toll-free	E-mail
Vendor		·	International-access	Web site
BI-Cycle	Plant Information Data Mart	Georgia, USA		www.bi-cycle.com/maintenance_ consultant/index.htm www.bi-cycle.com
BIReady	BIReady		1-888-868-5663 +31 343 563851	info@biready.com www.biready.com
EMC Greenplum	Greenplum Database	California, USA	+1 650-286-8012	www.greenplum.com/about-us/contact-us www.greenplum.com
EMC Greenplum	Greenplum Database Single-Node Edition	California, USA	+1 650-286-8012	www.greenplum.com/about-us/contact-us www.greenplum.com
IBM	IBM DB2 Universal Database Data Warehouse Edition	New York, USA	1-800-426-4968 +1 914-499-1900	www.ibm.com
IBM	Informix Dynamic Server for Data Warehouse	New York, USA	1-800-426-4968 +1 914-499-1900	www.ibm.com
Illuminate	Illuminate	Barcelona, Spain	+34 934 573 401	contactus@illuminateinc.com www.illuminateinc.com
Kalido	Kalido Dynamic Information Warehouse	Massachusetts, USA	+1 781-202-3200	http://info.kalido.com/contactus.html www.kalido.com
Kognitio	WX2	Bracknell, UK	+44 1344 300770	info@kognitio.com www.kognitio.com
McObject	eXtremeDB	Washington, USA	+1 425-888-8505	info@mcobject.com www.mcobject.com
Netezza (an IBM company)	Netezza Skimmer	Massachusetts, USA	1-877-638-3992 +1 508-382-8200	www.netezza.com/company/contact_ form.aspx www.netezza.com
Netezza (an IBM company)	Netezza TwinFin	Massachusetts, USA	1-877-638-3992 +1 508-382-8200	www.netezza.com/company/contact_ form.aspx www.netezza.com
Netezza (an IBM company)	Netezza Spatial	Massachusetts, USA	1-877-638-3992 +1 508-382-8200	www.netezza.com/company/contact_ form.aspx www.netezza.com
Panoratio	PANOsight	California, USA	+1 408-504-5016	info@panoratio.com www.panoratio.com
ParAccel	ParAccel Analytic Database	California, USA	1-866-903-0335	info@paraccel.com www.paraccel.com
Sybase	Sybase IQ	California, USA	1-800-792-2735 +1 925-236-5000	http://response.sybase.com/forms/sybase contactme?mc=financialservices100305c www.sybase.com
Teradata	Teradata Active Enterprise Data Warehouse	Ohio, USA	1-866-548-8348 +1 937-242-4030	www.teradata.com/t/contact-us www.teradata.com

Vandar	Product	Headquarters	Toll-free	E-mail
Vendor			International-access	Web site
Teradata	Teradata Data Mart Appliance	Ohio, USA	1-866-548-8348 +1 937-242-4030	www.teradata.com/t/contact-us www.teradata.com
Teradata	Teradata Data Warehouse Appliance	Ohio, USA	1-866-548-8348 +1 937-242-4030	www.teradata.com/t/contact-us www.teradata.com
Teradata	Teradata Database	Ohio, USA	1-866-548-8348 +1 937-242-4030	www.teradata.com/t/contact-us www.teradata.com
Teradata	Teradata Extreme Data Appliance	Ohio, USA	1-866-548-8348 +1 937-242-4030	www.teradata.com/t/contact-us www.teradata.com
Teradata	Teradata Extreme Performance Appliance	Ohio, USA	1-866-548-8348 +1 937-242-4030	www.teradata.com/t/contact-us www.teradata.com
Teradata	Teradata Purpose-Built Platform Pricing	Ohio, USA	1-866-548-8348 +1 937-242-4030	www.teradata.com/t/contact-us www.teradata.com
Vertica	Vertica Analytic Database	Massachusetts, USA	+1 978-600-1000	info@vertica.com www.vertica.com
XtremeData	dbX	Illinois, USA	+1 847-871-0379	www.xtremedata.com/contact www.xtremedata.com
Outsourcing				
BrightPoint Consulting	Dashboard, Data Visualization, Flex Architecture	California, USA	+1 760-634-7657	info@brightpointinc.com www.brightpointinc.com
ClaraView	BI Solution Services	Virginia, USA	+1 703-269-1500	info@claraview.com www.claraview.com
Consilium	BI Consulting Services	Rotterdam, The Netherlands		www.consilium.nl/contact/tabid/64/ default.aspx www.consilium.nl
eVerge Group	Oracle BI Deployments	Texas, USA	1-888-548-1973 +1 972-608-1803	sales@evergegroup.com www.evergegroup.com
Intelligent Solutions		Colorado, USA	+1 303-444-2411	moreinfo@intelsols.com www.intelsols.com
Kerberos	Bl Consulting	Mendoza, Argentina	+54 261 434-0205	info@kerberosconsultores.com www.kerberosconsultores.com
RMSource	Frontend	North Carolina, USA	1-877-319-3051	learnmoreaboutus@rmsource.com www.rmsource.com
Support Analytics	ProSourcing	Maryland, USA	+1 804-201-8256	info@supportanalytics.com www.supportanalytics.com
The BMA Group	Consulting Services	Chatswood, Australia	+61 2 9884 8499	info@bma.com.au www.bma.com.au
Software as a Service				
ActiveStrategy	ActiveStrategy Enterprise On- Demand	California, USA	+1 484-690-0700	http://info.activestrategy.com/contact -activestrategy.html www.activestrategy.com

V	Product	Headquarters	Toll-free	E-mail
Vendor			International-access	Web site
Actuate	BIRT OnPerformance	California, USA	1-800-914-2259 +1 650-645-3000	info@actuate.com www.actuate.com
Adaptive Planning	Adaptive Planning (On-Demand)	California, USA	1-800-303-6346 +1 650-528-7500	info@adaptiveplanning.com www.adaptiveplanning.com
Aginity	Data Factory	Illinois, USA	1-888-821-1201	info@aginity.com www.aginity.com
Altosoft	Insight On-Demand	Pennsylvania, USA	+1 484-427 2801	info@altosoft.com www.altosoft.com
Binocle	Binocle	Pennsylvania, USA	+1 484-887-1630	www.binoclebi.com/index.php?p=22 www.binoclebi.com
Birst	Birst	California, USA	1-866-940-1496 +1 415-644-5400	info@birst.com www.birst.com
Bitam	KPI Online	Virginia, USA	1-888-820-7776	sales@kpionline.com http://kpionline.bitam.com
Cloud9	Cloud9 Analytics	California, USA	+1 650-561-7855	info@cloud9analytics.com www.cloud9analytics.com
Cloudscale	Cloudscale Enterprise	California, USA	+1 650-206-2240	www.cloudscale.com/index.php/contact www.cloudscale.com
Cloudscale	Cloudcel	California, USA	+1 650-206-2240	www.cloudscale.com/index.php/contact www.cloudscale.com
Direction Software	Go Live	Illinois, USA	+1 312-924-3755	grow@directionsoftware.com www.directionsoftware.com
EMC Greenplum	Greenplum Chorus	California, USA	+1 650-286-8012	www.greenplum.com/about-us/contact-us www.greenplum.com
GoodData	GoodData	California, USA	+1 415 200-0186	info@gooddata.com www.gooddata.com
IDV Solutions	Visual Fusion SaaS	Michigan, USA	1-888-201-7282 +1 517-853-3755	www.idvsolutions.com/contactus www.idvsolutions.com
Infocentricity	Xeno	California, USA	+1 415-493-2090	support@infocentricity.com www.infocentricity.com
iPartners	Balanced Scorecard	Georgia, USA	1-888-618-8360 +1 678-710-0600	www.ipartners.net/info_request.asp www.ipartners.net
iTradeNetwork	Supply Chain Management and Intelligence		+1 925-660-1100	www.itradenetwork.com/html/contactus.htm www.itradenetwork.com
Jedox	Palo Suite SaaS	Freiburg, Germany	+49 761 15147-0	info@jedox.com www.jedox.com
K2 Analytics	EPM Maestro Suite			www.k2analytics.com/contactus.html www.k2analytics.com
Kognitio	WX2 (DaaS)	Bracknell, UK	+44 1344 300770	info@kognitio.com www.kognitio.com
Lityx	LityxIQ Intelligent Analytics Suite	Pennsylvania, USA	1-888-548-9947	info@lityx.com www.lityxiq.com

Vendor	Product	Headquarters	Toll-free International-access	E-mail Web site
Metricus	Metricus Enterprise SaaS	Rotterdam, The Netherlands	+31 10 71 10260	info@metricus.com www.metricus.com
NetSuite	SuiteAnalytics	California, USA	1-800-638-7847 +1 650-627-1000	info@netsuite.com www.netsuite.com
Oco	Oco On-Demand Business Intelligence	Massachusetts, USA	1-800-691-8880 +1 781-810-2100	sales-info@oco-inc.com www.oco-inc.com
OnDemandIQ	OnDemandIQ	Virginia, USA	1-866-396-7712	info@ondemandiq.com www.ondemandiq.com
PivotLink	PivotLink	California, USA	1-866-625-9884	info@pivotlink.com www.pivotlink.com
QMD Accountworks	Insight	North Carolina, USA	+1 828-877-2775	sales@qmduser.com www.qmduser.com
SAP	SAP BusinessObjects BI OnDemand	Germany	1-888-342-5727 +49 6227 7-47474	www.ondemand.com/contact www.ondemand.com/ businessintelligence
SuccessFactors	SuccessFactors Business Execution Software Suite	California, USA	1-800-809-9920	www.successfactors.com/company/contact www.successfactors.com
We Are Cloud	Bime	Montpellier, France	+33 4 67 41 60 64	contact@wearecloud.com http://businessintelligence.me
Social Media Analytic	S			
Radian6	Radian6 Dashboards	New Brunswick, Canada	1-888-672-3426 +1 506-452-9039	support@radian6.com www.radian6.com
Radian6	Radian6 Engagement Console	New Brunswick, Canada	1-888-672-3426 +1 506-452-9039	support@radian6.com www.radian6.com
Sentiment Metrics	Sentiment Metrics	Farnborough, UK	+44 845 658 9945	info@sentimentmetrics.com www.sentimentmetrics.com
Sysomos	Sysomos MAP	Ontario, Canada	1-866-483-3338	contact@sysomos.com www.sysomos.com
Sysomos	Heartbeat	Ontario, Canada	1-866-483-3338	contact@sysomos.com www.sysomos.com
Sysomos	Audience	Ontario, Canada	1-866-483-3338	contact@sysomos.com www.sysomos.com

Technology Evaluation Centers (TEC) helps private- and public-sector organizations choose the best enterprise software solutions for their unique business needs quickly, impartially, and cost-effectively. TEC's online Evaluation Centers, containing IT research and extensive knowledge bases that catalog vendors' support for thousands of enterprise software features and functions, are the leading resource for IT decision makers around the world. By combining that information with a proven methodology, unique Web-based software selection platforms, and years of software selection expertise, TEC delivers an unmatched range of online software evaluation and selection services that bridge the gap between enterprise decision makers and the vendor/value-added reseller (VAR) community.

Technology Research Meets World Class B2B Marketing

Ziff Davis B2B (formerly Focus Research) was founded in August 2005 by a world-class team comprised of top B2C online advertising and B2B sales and marketing veterans. Well known in Silicon Valley as one of the fastest growing B2B marketing services and media organizations, we were acquired in 2011 by Ziff Davis, Inc. In the acquisition, Ziff Davis added a large, active tech database, network of properties and rich content library to the significant resources already available at Ziff Davis B2B.

Today, Ziff Davis B2B continues to be the fastest-growing online business and technology media company. Our large technology buyer database is supported by broad distribution capabilities via our owned and operated websites as well as a network of more than 200 technology web publishing partners. Our web sites — strengthened by editors, analysts and objective product research — are recognized as industry destinations for buyers and professionals in the telephony, IT, internet services, business finance, HR, CRM and IT security markets. Our market leadership is supported by our client base, with more than 80 leading brands in various B2B industries. They rely on Ziff Davis B2B to capture new revenue and optimize their sales and marketing effectiveness.

Business buyers who visit our sites are at the core of our research and product offerings. Ultimately, it's our relationships with buyers that fuel the basis of our unique demand-generation methodology. Ziff Davis B2B provides buyers with objective research and tools that help them make better purchase decisions. We've published hundreds of research pieces and tools about B2B products, which are freely available to the buyer community. Our research is objective, easy to consume, and based on data collected from those same real buyers.

Ziff Davis B2B introduces thousands of buyers to vendors who can meet their needs every day. In turn, we help hundreds of the world's leading B2B vendors to:

- Introduce market-leading brands to decision makers and influencers
- Reach IT buyers at critical points during the purchase decision cycle
- Accelerate revenue through the highest quality leads available in the market



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