Global Headquarters: 5 Speen Street Framingham, MA 01701 USA P.508.872.8200 F.508.935.4015 www.idc.com

MARKET ANALYSIS

Worldwide Business Analytics Software 2012–2016 Forecast and 2011 Vendor Shares

Dan Vesset
Mary Wardley
Brian McDonough
David Schubmehl

IN THIS EXCERPT

The content for this excerpt was taken directly from the IDC Market Analysis: Worldwide Business Analytics Software 2012–2016 Forecast and 2011 Vendor Shares by Dan Vesset, Brian McDonough, Mary Wardley and David Schubmehl (Doc # 235494). All or parts of the following sections are included in this excerpt: IDC Opinion, In This Study, Situation Overview, Essential Guidance, Synopsis and Methodology. Also included are Figures 1 and 2, and Tables 1, 2, 3, and 4.

IDC OPINION

For the past decade, IDC has defined the business analytics software market as the combination of the data warehouse (DW) platform software with performance management and analytic applications and business intelligence (BI) and analytic tools. In 2011 the business analytics market extended its post-2009 recovery with another stellar performance. In 2011, the market grew 14.1% and is now forecast to continue to grow at a 9.8% compound annual growth rate (CAGR) through 2016. Key observations about the business analytics software market include:

- The media attention on Big Data has put broader business analytics on the agenda of more senior executives.
- New business analytics software options based on nonrelational data management technology are forcing all vendors to accelerate R&D efforts and acquisitions focused on new tools and applications and the integration of new and existing technologies.
- The mass market demand for business analytics solutions is exposing the previously minor issue of the shortage of highly skilled IT and analytics staff.
- Recent acquisitions by large business analytics vendors will require these vendors to execute go-to-market strategies that depend on ever finer segmentation of target audiences by industry, region, and organization size. This unchartered territory for most large vendors will create execution challenges for some vendors and will provide a competitive advantage to those vendors with effective partner ecosystems.

Filing Information: June 2012, IDC #235494, Volume: 1, Tab: Vendors
Business Analytics Solutions: Market Analysis

IN THIS STUDY

This study examines the business analytics software market for the period from 2007 to 2016, with vendor revenue trends and market growth forecasts. Worldwide market sizing is provided for 2011, with trends from 2007. A five-year growth forecast for this market is shown for 2012–2016. Revenue and market share of the leading vendors are provided for 2011, with trends from 2009. This study also provides a competitive market map and related profiles of leading business analytics software vendors.

Methodology

See the Methodology in the Learn More section for a description of the data collection and analysis methodology employed in this study.

In addition, please note the following:

- The information contained in this study was derived from the IDC Software Market Forecaster database as of May 2012.
- All numbers in this document may not be exact due to rounding.
- For more information on IDC's software definitions and methodology, see *IDC's Software Taxonomy, 2011* (IDC #228020, July 2011).

Business Analytics Software Market Definition

IDC defines the business analytics software market as an aggregation of several software tools and application markets, with the functionality to aggregate, manage, organize, analyze, access, and deliver structured and unstructured data. As shown in Figure 1, the business analytics software market has three primary segments: performance management and analytic applications, business intelligence and analytic tools, and data warehouse platform software. Each of the primary segments has subsegments as follows:

- **Business intelligence and analytic tools.** Business intelligence and analytic tools include query, reporting, and analysis tools; advanced analytics tools; spatial information analytics tools; and content analysis tools. The business intelligence (BI) tools segment includes both standalone and embedded software:
  - Standalone BI software refers to tools that are packaged and marketed under separate products and are accounted for within the IDC functional markets of end-user query, reporting, and analysis and advanced analytics.
  - Embedded BI software refers to tools that are components of other software, specifically relational database management software or application server software. These products are not priced separate of the software into which they are embedded. Examples include Microsoft SQL Server Analysis

 ©2012 IDC

Services embedded within Microsoft SQL Server, Oracle Reports embedded within Oracle Application Server, and IBM InfoSphere Warehouse Data Mining embedded within IBM InfoSphere Warehouse.

- **Data warehousing platform software.** IDC defines data warehousing as a process that organizes time-based data coming from multiple sources according to subjects meaningful to the business and driven by the need to inform decision makers. The data warehouse platform software competitive market includes two market segments:

  - **Data warehouse generation.** These software tools are software used in the design, cleansing, transformation, loading, and administration of the data warehouse.

  - **Data warehouse management.** These software tools are database management software used to manage data in the data warehouse.

- **Performance management and analytic applications.** IDC defines these applications as software that must meet each of the following three conditions:

  - **Business process support.** Commercial application software that structures and automates a group of tasks pertaining to the review and optimization of business operations (i.e., control) or the discovery and development of new business (i.e., opportunity)

  - **Separation of function.** Can function independently of an organization's core transactional applications, yet can be dependent on such applications for data and may send results back to these applications

  - **Time-oriented, integrated data from multiple sources.** Extracts, transforms, and integrates data from multiple sources (internal or external to the business) — supporting a time-based dimension for analysis of past and future trends — or accesses such a database

  IDC tracks the following performance management and analytic applications submarkets:

  - Customer relationship analytic applications

  - Supply chain analytic applications

  - Services operations analytic applications

  - Workforce analytic applications

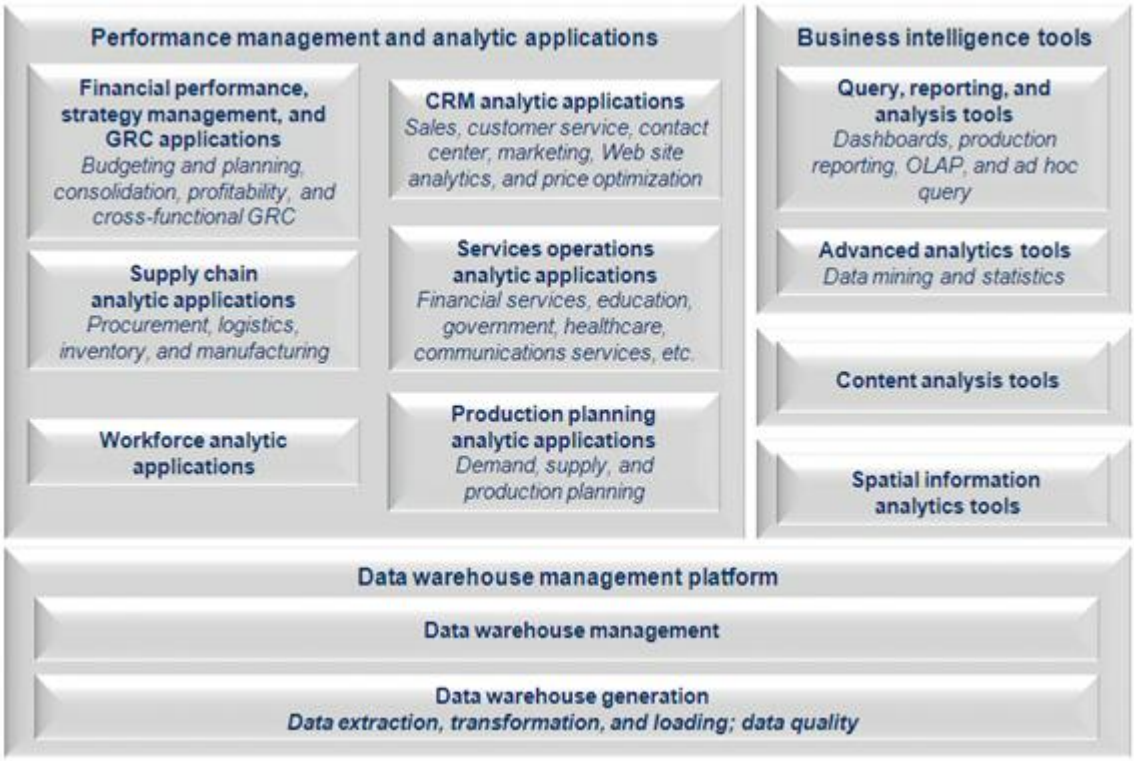
  In addition, IDC classifies two functional markets as being part of the performance management and analytic applications market. These markets are:

  - Financial performance, strategy management, and GRC applications

  - Production planning analytic applications

FIGURE 1

IDC's Business Analytics Taxonomy, 2012



Source: IDC, 2012

Exclusions

IDC's definition of business analytics software excludes tools that are typically deployed to automate tactical decision-making processes. These tools include but are not limited to rules engines, complex event processing engines, streaming data analytics, and business process automation suites.

SITUATION OVERVIEW

The Business Analytics Software Market in 2011

In 2011, the worldwide business analytics software market grew 13.8%, exceeding even the strong 11.6% growth of 2010, which had been a rebound year following the dismal performance of recession-plagued 2009. Of the three primary segments of the market, the data warehousing platform software segment grew the fastest, at 15.2%,

 ©2012 IDC

followed by the analytic applications segment, which grew at 13.3%, and the BI and analytic tools segment, which grew at 13.2%.

Business analytics adoption is a worldwide cross-industry phenomenon represented by organizations of all sizes as indicated by IDC's BuyerPulse Deals database of software deals, which was launched in 2008 to track business analytics software deals. For information about IDC's BuyerPulse Deals Database: Worldwide Business Analytics Software, go to **www.idc.com/getdoc.jsp?containerId=IDC_P19667**.

Performance of Leading Vendors in 2011

Table 1 displays 2009–2011 worldwide revenue and market share and 2010 and 2011 growth rates for leading business analytics software vendors.

TABLE 1

Worldwide Business Analytics Software Revenue by Leading Vendor, 2009–2011

	Revenue ($M)			Share (%)			Growth (%)	
	2009	2010	2011	2009	2010	2011	2009–2010	2010–2011
Oracle	4,563.5	5,194.9	6,117.4	18.3	18.7	19.3	13.8	17.8
SAP	3,472.4	3,990.5	4,600.6	14.0	14.4	14.5	14.9	15.3
IBM	3,458.2	3,826.6	4,369.3	13.9	13.8	13.8	10.7	14.2
Microsoft	1,870.7	2,110.6	2,349.7	7.5	7.6	7.4	12.8	11.3
SAS	1,898.2	2,007.5	2,263.2	7.6	7.2	7.1	5.8	12.7
Other	9,624.3	10,655.1	12,002.2	38.7	38.3	37.9	10.7	12.6
Total	24,887.3	27,785.2	31,702.4	100.0	100.0	100.0	11.6	14.1

Note: This table does not take into account any mergers and acquisitions that closed after December 31, 2011.

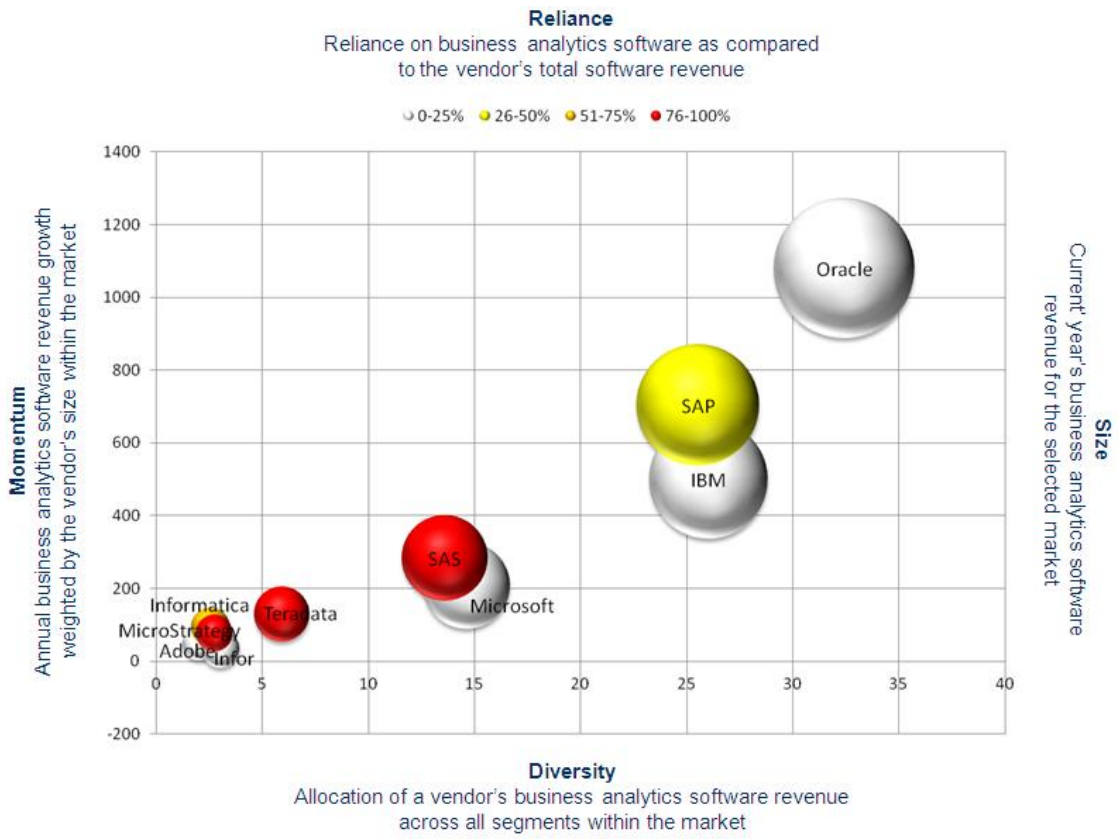
Source: IDC, June 2012

Business Analytics Competitive Market Map

To evaluate the competitive market dynamics among the leading vendors in a complex market, IDC presents the business analytics competitive market map (CMM) in Figure 2.

FIGURE 2

Worldwide Business Analytics Software Competitive Market Map, 2011



Note: This competitive market map includes only the top 10 largest business analytics software vendors based on 2011 software revenue.

Source: IDC, 2012

Definition and Methodology of the Competitive Market Map

The goal of the CMM is to present a quantitative software vendor comparison tool based on IDC's rigorous software taxonomy and the depth and breadth of software market data collected and analyzed by IDC. The CMM depicts the competitive positioning of the leading software vendors based on the four dimensions discussed in the sections that follow.

 ©2012 IDC

Size

Company size is shown by the size of the bubble, which is based on the current year's software revenue in U.S. dollars. Total software revenue is a combination of license and maintenance revenue (including subscription revenue) but excludes any other company revenue such as consulting or training services or hardware. (Refer back to Table 1 for revenue size for individual vendors.)

Momentum

Momentum, shown on the vertical axis, represents the growth rate of each vendor weighted by the vendor's size. Momentum is a function of a vendor's annual software revenue growth rate and the company's size (i.e., revenue) in the software market. It is calculated as a one-year growth rate of software revenue multiplied by the company size. Growth is an important measure of software vendors that is available from the vendor share tables in IDC's competitive analysis studies, IDC Software Market Forecaster databases, and trackers. However, momentum offers an alternative metric that considers both growth and company size in the same context.

Reliance

Reliance refers to the extent that a vendor's total software revenue is dependent on the selected software market segment's revenue (in this case, business analytics software revenue). Shown through color coding, reliance, on the one hand, represents each vendor's focus on business analytics software. On the other hand, reliance indicates dependence on the business analytics software revenue.

Diversity

Diversity, also referred to as distribution of software revenue, shown on the horizontal axis, represents the allocation of a vendor's software revenue across all the market segments of the given market (in this case the 12 segments of the business analytics software market). Distribution of software revenue is weighted by the total size of each individual market segment among all segments along the selected dimension. Distribution of software revenue does not evaluate the specific features or functions of vendor's products.

Diversity is calculated as follows:

$$\text{Diversity}_k = \sum_{\text{market segments } j} W_j * (1 - (1/10^{\text{share}(k,j)})), \text{ for all vendors, } k$$

Where:

- Diversity(k,j) is the share of vendor k in market segment j
- W_j is the share of market segment j among all segments along the selected dimension

Note that scale increments on the x- and y-axes exist only for comparing vendors' relative position to each other. The absolute values of the scale hold no other significance.

Vendor Profiles

SAS

SAS is the fifth-largest business analytics software vendor and the largest vendor that is exclusively dedicated to business analytics. SAS continues to dominate the advanced analytics market, with 35.2% market share. It also holds share as a top 3 vendor in data warehouse generation, services operations analytic applications, and CRM analytic applications markets. Despite its healthy 12.7% growth in 2011, SAS has to increasingly contend with larger competitors in the broader business analytics market. Nevertheless, SAS continues as the primary driver of advanced analytics that it markets as standalone tools and as the basis for all of its analytic applications, which account for 30% of SAS overall software revenue. In addition, for its size SAS has a very broad portfolio of business analytics products that span all 12 segments of the market. In 2011, SAS placed special emphasis on high-performance analytics, building a base from which to serve the emerging Big Data market requirements.

The Broader Business Analytics Software Market

Although the 10 largest business analytics vendors account for 70.2% of the software revenue (up from 67.6% in 2010, based on revenue as reported in *Worldwide Business Analytics Software 2011–2015 Forecast and 2010 Vendor Shares,* IDC #230022, September 2011, prior to accounting for 2011 acquisitions), there is a large and competitive market that represents the remaining 30% of the market.

Hundreds of ISVs worldwide operate in the 12 segments of the business analytics market. Some provide a single tool or application, others offer software that spans multiple market segments. Some of these vendors are highly focused on specific business processes and/or industries, others offer horizontal technology applicable across the market. There is also a range of business models (e.g., commercial software and open source) and deployment options (e.g., on-premise and public and private cloud) among these vendors.

Business Analytics Market Performance by Segment

Tables 2–4 depict leading vendors within major business analytics market segments. Note that Table 2 shows the leading business intelligence tools vendors but excludes revenue from spatial information analytics and content analytics markets to provide a basis for comparison with business intelligence tools vendors shares published in previous years.

Business Intelligence Tools: End-User Query, Reporting, and Analysis and Advanced Analytics Tools

Table 2 depicts leading vendors in the combined standalone and embedded end-user query, reporting, and analysis and advanced analytics market. Note that Table 2 does not include revenue from spatial information analytics and content analytics markets.

 ©2012 IDC

TABLE 2

Worldwide Business Intelligence Tools Software Revenue by Leading Vendor, 2009–2011

	Revenue ($M)			Share (%)			Growth (%)	
	2009	2010	2011	2009	2010	2011	2009–2010	2010–2011
SAP	1,557.1	1,866.4	2,074.5	19.5	20.7	20.5	19.9	11.2
IBM	1,213.7	1,303.4	1,484.1	15.2	14.5	14.6	7.4	13.9
SAS	909.5	975.2	1,062.8	11.4	10.8	10.5	7.2	9.0
Oracle	718.5	801.4	934.5	9.0	8.9	9.2	11.5	16.6
Microsoft	703.2	805.2	901.4	8.8	9.0	8.9	14.5	11.9
Other	2,872.4	3,244.6	3,686.5	36.1	36.1	36.3	13.0	13.6
Total	7,974.4	8,996.2	10,143.8	100.0	100.0	100.0	12.8	12.8

Note: This table does not take into account any mergers and acquisitions that closed after December 31, 2011.

Source: IDC, June 2012

Data Warehouse Platform Software: Data Warehouse Generation and Data Warehouse Management

Table 3 depicts the leading vendors from the combined data warehouse generation and data warehouse management markets.

TABLE 3

Worldwide Data Warehouse Platform Software Revenue by Leading Vendor, 2009–2011

	Revenue ($M)			Share (%)			Growth (%)	
	2009	2010	2011	2009	2010	2011	2009–2010	2010–2011
Oracle	2,368.3	2,728.0	3,303.0	31.9	32.3	33.7	15.2	21.1
IBM	1,707.8	1,901.6	2,142.8	23.0	22.5	21.9	11.3	12.7
Microsoft	1,080.3	1,210.0	1,344.2	14.5	14.3	13.7	12.0	11.1
Teradata	659.8	788.7	898.6	8.9	9.3	9.2	19.5	13.9

TABLE 3

Worldwide Data Warehouse Platform Software Revenue by Leading Vendor, 2009–2011

	Revenue ($M)			Share (%)			Growth (%)	
	2009	2010	2011	2009	2010	2011	2009–2010	2010–2011
SAS	444.6	454.2	504.2	6.0	5.4	5.1	2.2	11.0
Other	1169.3	1358.1	1605.1	15.7	16.2	16.4	16.1	18.2
Total	7,430.1	8,440.6	9,797.9	100.0	100.0	100.0	13.6	16.1

Note: This table does not take into account any mergers and acquisitions that closed after December 31, 2011.

Source: IDC, June 2012

Performance Management and Analytic Applications

Table 4 depicts the leading vendors in the aggregated performance management and analytic application market that is made up of financial performance, strategy management, and GRC applications; and supply chain, services operations, production planning, CRM, and workforce analytic applications.

TABLE 4

Worldwide Performance Management and Analytic Applications Software Revenue by Leading Vendor, 2009–2011

	Revenue ($M)			Share (%)			Growth (%)	
	2009	2010	2011	2009	2010	2011	2009–2010	2010–2011
SAP	1,667.3	1,846.5	2,153.1	19.7	20.2	20.8	10.7	16.6
Oracle	1,374.0	1,551.6	1,750.3	16.2	17.0	16.9	12.9	12.8
IBM	533.3	610.3	725.0	6.3	6.7	7.0	14.5	18.8
SAS	530.5	563.1	675.8	6.3	6.2	6.5	6.2	20.0
Infor	397.5	382.9	411.9	4.7	4.2	4.0	-3.7	7.6
Other	3,957.2	4,172.5	4,623.8	46.8	45.7	44.8	5.4	10.8
Total	8,459.8	9,126.9	10,339.9	100.0	100.0	100.0	7.9	13.3

Note: This table does not take into account any mergers and acquisitions that closed after December 31, 2011.

Source: IDC, June 2012

 ©2012 IDC

ESSENTIAL GUIDANCE

Business analytics technology is finally reaching the mainstream market. Organizations of all sizes worldwide are hearing more about the benefits of business analytics from widely publicized cases about large retailers, social networking sites, search engines, intelligence agencies, and other organizations that generate and analyze vast amounts of data. The lessons learned from some of the market leaders are being productized and applied to the rest of the organizations.

The greater awareness about the benefits of business analytics, especially among executives, has driven a round of technology and services purchasing, proof of concepts, and general information gathering about the various components of the business analytics solution. As a result, vendors large and small have responded to the market demand. As the market develops over the forecast period, vendors will need to navigate a growing and more demanding customer base. Both end users and vendors should consider the following recommendations:

- A growing set of options for business analytics technology must be provided and evaluated. In the past, it was only the largest of vendors that had to provide multiple product packaging, pricing, and deployment options. Smaller vendors with one primary product offering also provided a single means of acquiring the software. Over the forecast period, vendors of all sizes will have to consider the need to provide a complex matrix of options including:

  - On-premise, private cloud, public cloud, and outsourcing-based deployment
  - Perpetual license, subscription, and free pricing options
  - Software only and hardware appliance–based packaging
  - Mobile applications, browser-based, on-client/server software

  A multitude of permutations among these and other variables will require vendors to intensify the efforts to manage these options and to provide customers with the most appropriate options, depending on their specific needs and requests.

- Vendor and users will have to devote more resources to business analytics services. These will include internal services provided by IT and analytics staff, business analytics strategy development and project management, and training of all relevant end users. External services will include those provided by systems integrators as well as analytics service providers. It will be increasingly important to manage the balance between internal and external services based on the level of human resources competency and budgets. As more organizations with less business analytics experience are becoming interested in this technology, vendors will need to provide more guidance to these users beyond simply selling them technology. Some of this guidance will be provided by the technology vendors themselves; in other cases, such consulting services will be provided by the thousands of professional services firms globally.

- In the past, large IT vendors have not had great success with highly specialized analytic applications. This is partly because each niche segment in itself represents a relatively small revenue opportunity for a large vendor. That makes it difficult to secure sufficient internal funding to bring such analytic applications to market. However, in the past two to three years several of the largest business analytics vendors have acquired a range of analytic applications vendors. A growing emphasis on industry and business process–specific analytic applications is going to take hold over the forecast period. This will be a long-term trend that is likely going to accelerate M&A activity in the business analytics market. Over the forecast period, large vendors need to develop strategies to enter ever more narrowly defined market segments. This trend will provide smaller vendors with an opportunity to showcase their specialized skills in narrowly defined niches of the market. Large vendors should continue to develop analytic applications that address the largest potential market opportunities while utilizing partners to develop additional applications on top of their BI platforms.

- The growth in appliances, SaaS, and outsourcing deals for business analytics technology will likely mean that end users will pay increasingly less attention to specific technology components, instead focusing on the business value arguments and overall functionality. Whether the database is row based or column based, is in-memory or disk based, or uses SQL or non-SQL technologies will over time become less and less relevant and will provide only short-lived competitive advantage to any vendor. System performance, availability, security, and manageability will all matter greatly. However, how they are achieved will be less of a point for differentiation among the vendors.

- Perhaps most importantly, all end-user organizations should develop a business analytics strategy that defines business goals, IT and analytics staffing, data, and technology requirements as well as steps by which the output of business analytics solutions will be incorporated into all strategic, operational, and tactical decision-making processes.

Synopsis

This IDC study examines vendor revenue performance in the business analytics software market for 2009–2011 and presents a forecast of the market, including its 12 segments, for 2012–2016. The study further presents short profiles of the leading business analytics software vendors and IDC's competitive market map of this market as well as of the analytic applications segment of the market.

"Driven by the attention-grabbing headlines for Big Data and over three decades of evolutionary and revolutionary developments in technology and best practices, the business analytics software market has crossed the chasm into the mainstream mass market," said Dan Vesset, program vice president for IDC's Business Analytics Solutions. "IDC expects the business analytics software market to grow at a 9.9% compound annual growth rate over the next five years."

 ©2012 IDC

Methodology

The IDC software market sizing and forecasts are presented in terms of packaged software revenue. IDC uses the term *packaged software* to distinguish commercially available software from custom software, not to imply that the software must be shrink-wrapped or otherwise provided via physical media. Packaged software is programs or codesets of any type commercially available through sale, lease, rental, or as a service. Packaged software revenue typically includes fees for initial and continued right-to-use packaged software licenses. These fees may include, as part of the license contract, access to product support and/or other services that are inseparable from the right-to-use license fee structure, or this support may be priced separately. Upgrades may be included in the continuing right of use or may be priced separately. All of these are counted by IDC as packaged software revenue.

Packaged software revenue excludes service revenue derived from training, consulting, and systems integration that is separate (or unbundled) from the right-to-use license but does include the implicit value of software included in a service that offers software functionality by a different pricing scheme. It is the total packaged software revenue that is further allocated to markets, geographic areas, and operating environments.

The market forecast and analysis methodology incorporates information from five different but interrelated sources, as follows:

- **Reported and observed trends and financial activity.** This study incorporates reported and observed trends and financial activity in 2011 as of the end of February 2012, including reported revenue data for public companies trading on North American stock exchanges (CY 1Q11–4Q11 in nearly all cases).

- **IDC's *Software Census* interviews.** IDC interviews all significant market participants to determine product revenue, revenue demographics, pricing, and other relevant information.

- **Product briefings, press releases, and other publicly available information.** IDC's software analysts around the world meet with hundreds of software vendors each year. These briefings provide an opportunity to review current and future business and product strategies, revenue, shipments, customer bases, target markets, and other key product and competitive information.

- **Vendor financial statements and related filings.** Although many software vendors are privately held and choose to limit financial disclosures, information from publicly held companies provides a significant benchmark for assessing informal market estimates from private companies. IDC also builds detailed information related to private companies through in-depth analyst relationships and maintains an extensive library of financial and corporate information focused on the IT industry. We further maintain detailed revenue by product area models on more than 1,000 worldwide vendors.

- **IDC demand-side research.** This includes interviews with business users of software solutions annually and provides a powerful fifth perspective for

assessing competitive performance and market dynamics. Direct conversations with technology buyers provide an invaluable complement to the broader survey-based results.

Ultimately, the data presented in this study represents IDC's best estimates based on these data sources as well as reported and observed activity by vendors and further modeling of data that we believe to be true to fill in any information gaps.

Appendix

Tables 9 depicts shares of leading vendors in individual segments of the business analytics market. Note that vendor shares for CRM analytic and production planning analytic applications, content analytics tools, and spatial information analytics tools are available from either other IDC reports or the IDC Software Market Forecaster.

TABLE 9

Worldwide Advanced Analytics Software Revenue by Leading Vendor, 2009–2011

	Revenue ($M)			Share (%)			Growth (%)	
	2009	2010	2011	2009	2010	2011	2009–2010	2010–2011
SAS	529.0	582.5	659.9	34.5	34.8	35.2	10.1	13.3
IBM	234.9	269.1	315.4	15.3	16.1	16.8	14.5	17.2
Microsoft	30.7	41.9	46.4	2.0	2.5	2.5	36.7	10.8
KXEN	15.4	17.2	19.2	1.0	1.0	1.0	11.4	12.0
TIBCO	12.8	14.7	16.0	0.8	0.9	0.9	14.9	8.6
Other	709.5	746.5	818.4	46.4	44.7	43.6	5.2	9.6
Total	1,532.3	1,671.9	1,875.3	100.0	100.0	100.0	9.1	12.2

Note: This table does not take into account any mergers and acquisitions that closed after December 31, 2011.

Source: IDC, June 2012

 ©2012 IDC

Copyright Notice

This IDC research document was published as part of an IDC continuous intelligence service, providing written research, analyst interactions, telebriefings, and conferences. Visit www.idc.com to learn more about IDC subscription and consulting services. To view a list of IDC offices worldwide, visit www.idc.com/offices. Please contact the IDC Hotline at 800.343.4952, ext. 7988 (or +1.508.988.7988) or sales@idc.com for information on applying the price of this document toward the purchase of an IDC service or for information on additional copies or Web rights.

Copyright 2012 IDC. Reproduction is forbidden unless authorized. All rights reserved.