

February 8, 2006

The Forrester Wave™: BI Reporting And Analysis Platforms, Q1 2006

by Keith Gile

TECH CHOICES

FORRESTER®

Helping Business Thrive On Technology Change



February 8, 2006

The Forrester Wave™: BI Reporting And Analysis Platforms, Q1 2006

Business Objects And Cognos Lead In Our Product Evaluation

by **Keith Gile**

with Kyle McNabb, Connie Moore, and Lucy Fossner

EXECUTIVE SUMMARY

Forrester evaluated 10 leading business intelligence (BI), database, and application vendors across 92 criteria and found Business Objects has established early BI platform leadership, followed by Cognos. Hyperion, MicroStrategy, and SAS offer strong enterprise analytics, while Actuate and Information Builders are strong in enterprise reporting and scalability. Microsoft's latest release offers tighter integration with Microsoft Office, while Oracle and SAP emphasize integration with their respective enterprise applications over deeper reporting functionality.

TABLE OF CONTENTS

- 2 Why BI Reporting And Analysis Platforms Matter**
 - Vendors Try To Deliver An Integrated BI Platform
- 3 BI Reporting And Analysis Platforms Evaluation Overview**
 - Evaluation Criteria Include Enterprise And Analytic Reporting And Strategy
 - Evaluation Methodology Includes Vendor Surveys And Customer Interviews
 - Vendors Selected For BI Market Share And Focus
- 5 Business Objects And Cognos Are Tops In Analytic Reporting . . .**
- 8 . . . And Lead Enterprise Reporting, Followed By Actuate**
- 10 Vendor Profiles**
- 12 Supplemental Material**

NOTES & RESOURCES

Forrester conducted an in-depth evaluation of 10 vendors: Actuate, Business Objects, Cognos, Hyperion, Information Builders, Microsoft, MicroStrategy, Oracle, SAP, and SAS. We also spoke with 11 customer reference accounts.

Related Research Documents

- ["Standardizing On A Single BI Reporting And Analysis Platform: Possible? Yes. Practical? No"](#)
October 25, 2005, Best Practices
- ["Business Intelligence Driven By Compliance, Standardization, And Performance Initiatives"](#)
April 5, 2005, Market Overview
- ["The Emergence Of Process-Centric BI"](#)
December 27, 2004, Trends
- ["Grading BI Reporting And Analysis Solutions"](#)
August 23, 2004, Tech Choices



WHY BI REPORTING AND ANALYSIS PLATFORMS MATTER

BI contains two distinct reporting categories: 1) analytic reporting (functionally rich, query/OLAP/analysis mechanism targeted at a limited number of power user producers of BI applications) and 2) enterprise reporting (format rich report authoring mechanisms for a large community of casual user report consumers).¹ Up until now, these reporting options were delivered as separate products or capabilities with completely different performance, usage, and scalability metrics. For example, analytic reporting scalability is generally measured in the number of users per CPU while enterprise reporting is usually measured in pages per second. And because they have been historically different products, companies have bought, licensed, and supported them separately. Today large companies have between five and 15 BI reporting and analysis solutions and some have more than 20 separate products.²

How nice it would be if these two distinct reporting approaches could be combined on a single platform, with shared services, broad scalability, application development capability, analytic functionality, and usability. However, when you factor in that most large companies already have an abundance of reporting and analysis solutions, switching to a new, integrated platform may seem unlikely. Yet many companies are interested in adopting a single BI reporting and analysis platform to:

- **Lower overall reporting costs.** Companies will cut software, hardware, administration, and development costs by standardizing on fewer reporting solutions.³
- **Get BI into the hands of more decision-makers, which is a must.** Companies understand reporting, but want more users to be able to make better, more timely decisions using BI.⁴
- **Integrate more tightly with IT infrastructure.** BI capabilities must be embedded within enterprise process flows, requiring adaptability to existing IT infrastructures.

For these reasons, companies have in some instances already begun the long process of standardizing on fewer, if not a single BI reporting and analysis platform, which Forrester estimates will take between three and six years to complete.

Vendors Try To Deliver An Integrated BI Platform

In the past 12 months, three of the four tier one BI vendors have released new, Web-services focused, integrated reporting and analysis platforms in BusinessObjects XI, Cognos 8 Business Intelligence (BI), and Hyperion System 9 BI+.⁵ Add to this the arrival of Microsoft SQL Server 2005 with enhancements to analytic (Analysis Services), and enterprise reporting (Reporting Services) — both complemented by features available within the Microsoft Office platform. What companies have are legitimate options for addressing both analytic and enterprise reporting needs on a single platform.

So, what's the catch? The problem is that three of the four platforms were just released in the last quarter of 2005, making them untested in the real world. On top of that, each vendor partially or completely re-architected their core components to make them more suitable in a service-oriented architecture (SOA).

BI REPORTING AND ANALYSIS PLATFORMS EVALUATION OVERVIEW

Forrester asked 10 leading BI pure-play, database, and application vendors to participate in this in-depth evaluation of BI products and suppliers (See Figure 1).

Figure 1 Vendor Information

Vendor	Product	Top two scoring criteria
Actuate	Actuate iServer v8	<ul style="list-style-type: none"> • Application scalability • Report development
Business Objects	BusinessObjects XI release 2	<ul style="list-style-type: none"> • Metadata definition/assimilation • Presentation/formatting
Cognos	Cognos 8 Business Intelligence	<ul style="list-style-type: none"> • Query • Unification
Hyperion Solutions	Hyperion System 9 BI+	<ul style="list-style-type: none"> • OLAP • Administration
Information Builders	WebFOCUS 7	<ul style="list-style-type: none"> • Data access and integration • Application scalability
Microsoft	Microsoft SQL Server 2005	<ul style="list-style-type: none"> • Internationalization • Administration
MicroStrategy	MicroStrategy 8	<ul style="list-style-type: none"> • OLAP • Microsoft Office integration
Oracle	Oracle Business Intelligence 10.1.2	<ul style="list-style-type: none"> • Administration • Internationalization
SAP	SAP NetWeaver 2004	<ul style="list-style-type: none"> • Internationalization • Application scalability
SAS	SAS9 v9.1.3	<ul style="list-style-type: none"> • Data access and integration • Advanced analytics

Source: Forrester Research, Inc.

Evaluation Criteria Include Enterprise And Analytic Reporting And Strategy

After examining past research, user need assessments, and vendor and expert interviews, we developed a comprehensive set of approximately 92 evaluation criteria (see Figure 2), which we grouped into three high-level buckets:

- **Current offering.** Forrester assessed each vendor's analytic functionality, usability, and application development.
- **Strategy.** Forrester assessed each vendor's product direction, commitment, and pricing and licensing.
- **Market presence.** Forrester assessed each vendor's company financials and installed base.

Figure 2 Evaluation Criteria

CURRENT OFFERING	
Analytic functionality	How extensive is the vendor's current business intelligence (BI) set of analytic capabilities?
Usability	How consistent are the product's user interfaces, its ease of use, and how well does the product integrate with other components such as productivity suites, enterprise portals, and collaboration platforms?
Application development	How extensive are the vendor's current BI set of application development capabilities?
STRATEGY	
Product direction	How strong and sound is the vendor's BI strategy in terms of increasing functionality to meet customer demand and in positioning the company for future growth?
Commitment	How committed is the vendor to development of its products and the reporting and analysis market through technology and channel partnerships, and number of BI-specific product developers?
Pricing and licensing	How flexible are the vendor's licensing options, first-year average costs, and average consulting costs?
MARKET PRESENCE	
Company financials	How strong is the vendor's financial position?
Installed base	How large is the vendor's estimated BI installed base of customers?

Source: Forrester Research, Inc.

Evaluation Methodology Includes Vendor Surveys And Customer Interviews

Forrester used a combination of three data sources to assess the strengths and weaknesses of each solution:

- **Vendor surveys.** Forrester surveyed vendors on their capabilities as they relate to the evaluation criteria. Once we analyzed the completed vendor surveys, we conducted vendor calls where necessary to gather details of their qualifications.
- **Product demos.** We asked vendors to conduct demonstrations of their product's functionality. We used findings from these product demos to validate details of each vendor's product capabilities.
- **Customer reference calls.** To validate product and vendor qualifications, Forrester also conducted reference calls with at least two of each vendor's current customers.

Vendors Selected For BI Market Share And Focus

Forrester included 10 vendors in the assessment: Actuate, Business Objects, Cognos, Hyperion, Information Builders, Microsoft, MicroStrategy, Oracle, SAP, and SAS. Each of these vendors is:

- A vendor with annual estimated BI revenue in excess of \$100 million.
- A vendor with or more products specifically targeted at the BI reporting and analysis market.
- A market-leading pure-play BI vendor, RDBMS, or enterprise application vendor with a native analytic or enterprise reporting product/component, or a supporting reporting engine and repository.

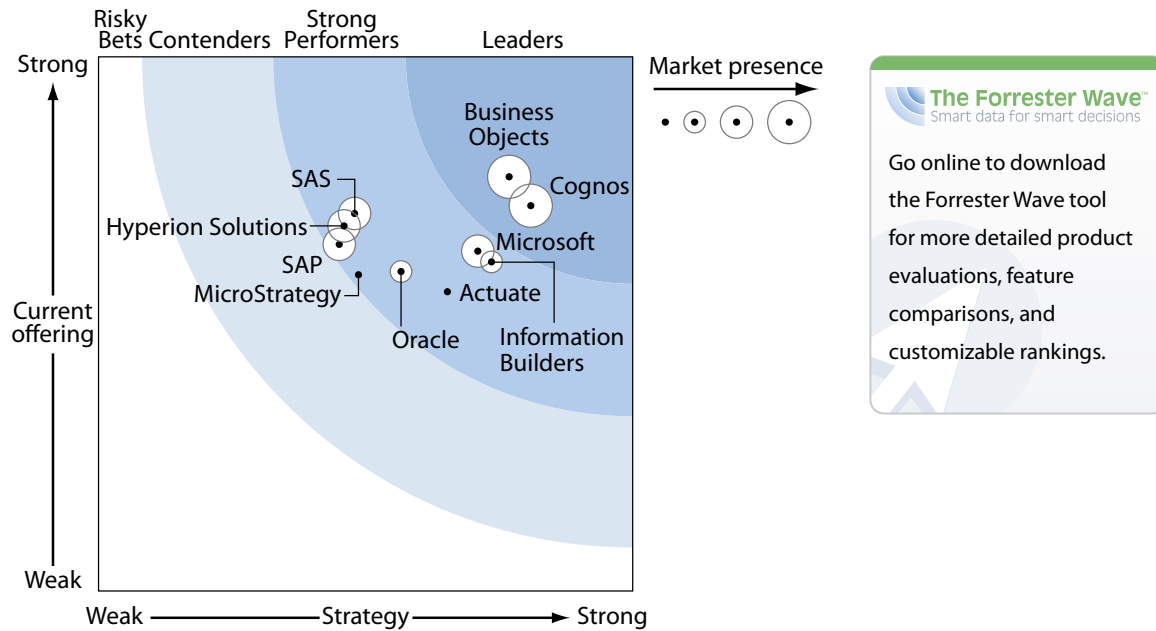
There are other vendors with targeted products that are viable BI solutions; however, the company or products did not meet the evaluation criteria for inclusion in this report. These vendors include Applix (TM1), arcplan (dynaSight), Panorama Software (Proactive Business Management), ProClarity (ProClarity Analytics 6), QlikTech (QlikView), Siebel (Siebel Business Analytics), and Temtec (Executive Viewer).

BUSINESS OBJECTS AND COGNOS ARE TOPS IN ANALYTIC REPORTING . . .

This evaluation of the BI analysis market is intended to be a starting point only. Readers are encouraged to view detailed product evaluations and adapt the criteria weighting to fit their individual needs through the Forrester Wave Excel-based vendor comparison tool. The evaluation uncovered a market in which (see Figure 3):

- **Business Objects and Cognos show clear analytic reporting leadership.** Business Objects and Cognos have been leaders in analytic reporting for several years with strengths in query, OLAP, usability, and metadata that align with business' needs. Business Objects' combination of Web Intelligence, OLAP Intelligence, and Desktop Intelligence within the BusinessObjects XI platform — all leveraging the metadata “Universes” make for a strong, integrated offering that includes products for both analytic and enterprise reporting. Cognos takes a single product approach with Cognos 8 Business Intelligence, which contains analysis, query, and reporting capabilities that leverage the metadata “Framework Manager.” This makes it the only product to include both analytic and enterprise reporting capabilities.
- **Microsoft and Oracle improve their analytic foundations.** Microsoft SQL Server 2005 has strong OLAP engine and advanced analytic capabilities with Analysis Services but has limitations in the front-end capabilities for most of its core engines. Oracle Business Intelligence 10.1.2 provides general OLAP, query, and advanced analytic capabilities, as well as strong Open APIs with BI Beans, but lacks in metadata and overall usability.
- **Actuate and Information Builders improve their analytic scalability.** Information Builders WebFOCUS 7 offers the strongest data access capabilities of all participating vendors with strong query capabilities but lacks OLAP and advanced analytic capabilities. The Actuate iServer 8 provides basic OLAP and query capabilities with limited advanced analytics but does offer comprehensive application scalability and an improved metadata capability in Information Objects.
- **SAP and Hyperion have broad offerings.** SAP NetWeaver 2004 has the strongest process capabilities of all participating vendors along with strength in data access, but has limitations in usability and query front-end with BEx Analyzer. Hyperion System 9 BI+ has comprehensive OLAP capabilities with Essbase loosely integrated with query capabilities in Interactive Reporting (formerly Brio Intelligence) but limitations in Microsoft Office integration and advanced analytic capabilities.
- **SAS and MicroStrategy have targeted, high-end analytics in their offerings.** SAS9 includes general query capabilities in Enterprise Guide and OLAP capabilities through its OLAP Server, and comprehensive advanced analytics via its Enterprise Miner data mining product, but lacks usability and report development. MicroStrategy has strong OLAP and query capabilities with its MicroStrategy 8 dynamic and operational SQL engines but lacks strength in data access and advanced analytics.

Figure 3 Forrester Wave™: BI Analytic Reporting, Q1 '06



Source: Forrester Research, Inc.

Figure 3 Forrester Wave™: BI Analytic Reporting, Q1 '06 (Cont.)

	Forrester's Weighting	Actuate	Business Objects	Cognos	Hyperion Solutions	Information Builders	Microsoft	MicroStrategy	Oracle	SAP	SAS
CURRENT OFFERING											
Analytic functionality	20%	2.20	3.57	3.35	3.59	3.13	3.18	2.73	3.24	2.97	3.89
Usability	35%	3.43	3.98	3.52	3.06	2.99	3.23	2.92	2.37	3.23	2.95
Application development	45%	3.35	4.21	3.95	3.26	3.00	3.10	3.22	2.76	3.53	3.18
STRATEGY											
Product direction	50%	3.00	4.70	5.00	3.00	3.70	3.00	2.70	2.00	2.30	3.00
Commitment	20%	1.90	4.30	4.00	1.60	3.60	3.30	2.30	2.30	2.30	3.00
Pricing and licensing	30%	4.60	2.10	2.50	1.60	3.70	4.60	2.10	4.60	2.10	1.00
MARKET PRESENCE											
Company financials	50%	0.95	4.85	4.85	3.10	2.95	3.40	2.60	2.15	3.25	3.25
Installed base	40%	1.00	4.60	4.80	3.20	1.20	3.40	1.00	2.80	3.40	3.40
International presence	10%	3.00	4.00	5.00	4.00	3.00	3.00	2.00	5.00	4.00	4.00

All scores are based on a scale of 0 (weak) to 5 (strong).

Source: Forrester Research, Inc.

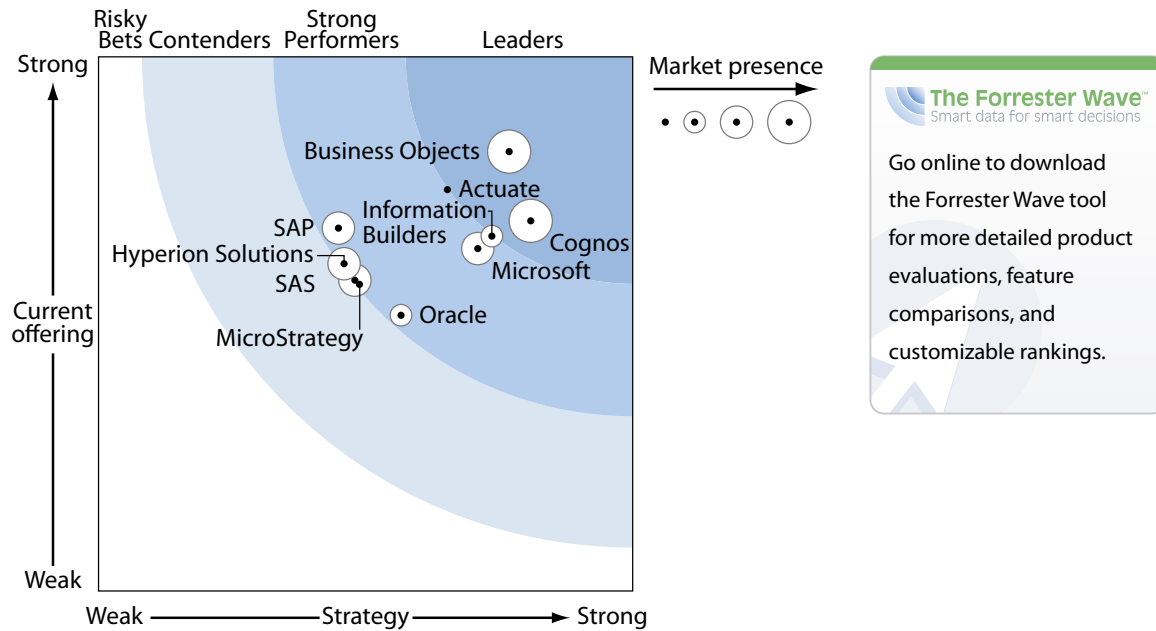
... AND LEAD ENTERPRISE REPORTING, FOLLOWED BY ACTUATE

This evaluation of the enterprise reporting market is intended to be a starting point only. Readers are encouraged to view detailed product evaluations and adapt the criteria weightings to fit their individual needs through the Forrester Wave Excel-based vendor comparison tool.

Enterprise reporting — or operational/production reporting — has resurged in popularity during the past three years as companies realize how critical it is to get information to a broad audience of casual users in the right context and format. Additionally, more vendors understand that offering enterprise reporting makes their product portfolio more attractive to IT and end users. Our final evaluation shows (see Figure 4):

- **Business Objects and Cognos lead the enterprise reporting pack.** Business Objects with its Crystal Reports XI offers comprehensive layout and formatting, report development, and ease of use with limitations in process association. The Cognos 8 BI product includes a reporting capability inherited from the Cognos ReportNet product, with strengths in layout, formatting, and metadata but limitations in application scalability and report development.
- **Actuate, Information Builders, and SAP offer strong enterprise reporting options.** Actuate's iServer 8 e.Report offers comprehensive report development, application scalability, and result dissemination capabilities with limitations in usability and metadata. Information Builders' WebFOCUS 7 offers comprehensive data access, strong application scalability, and result dissemination with limitations in dashboard and scorecards, and layout and formatting. SAP NetWeaver 2004 owes much of its enterprise reporting functionality to BEx and the OEM of Crystal Reports, with its strengths in report development, layout, and formatting, but SAP NetWeaver 2004 has usability limitations. SAP Netweaver 2004s is scheduled for release in May 2006 and is slated to replace Crystal Reports with a native report development mechanism.
- **Hyperion, Microsoft, and MicroStrategy provide competitive options.** While competitive, each lacks one or more critical areas of enterprise reporting. Microsoft SQL Server 2005 Reporting Services provides strengths in internationalization and general layout and formatting offset by limitations in report development and dashboard and scorecard capabilities. MicroStrategy 8 includes Report Services, which leverages the same metadata layer as all MicroStrategy capabilities, and has strength in Microsoft Office integration, but that is offset by severe data access, dashboard, and scorecard limitations. Hyperion System 9 BI+ includes a Production Reporting (formerly SQR) component and is strong in data access, layout, and formatting, but is limited in report development and Microsoft Office integration.
- **Oracle offers weak enterprise reporting.** The re-architecting of Oracle BI components as Java applets may have enhanced Oracle BI Discoverer, but not for enterprise reporting, as Discoverer has severe limitations in layout and formatting, along with limitations in report development and result dissemination.

Figure 4 Forrester Wave™: BI Enterprise Reporting, Q1 '06



Source: Forrester Research, Inc.

Figure 4 Forrester Wave™: BI Enterprise Reporting, Q1 '06 (Cont.)

	Forrester's Weighting	Actuate	Business Objects	Cognos	Hyperion Solutions	Information Builders	Microsoft	MicroStrategy	Oracle	SAP	SAS
CURRENT OFFERING		3.73	4.09	3.44	3.03	3.30	3.17	2.85	2.56	3.37	2.89
Analytic functionality	20%	2.28	3.83	3.11	3.35	4.02	3.08	2.05	2.97	3.24	3.99
Usability	35%	3.77	4.12	3.55	3.01	3.04	3.29	3.08	2.28	3.43	2.95
Application development	45%	4.35	4.19	3.50	2.90	3.20	3.12	3.03	2.60	3.39	2.35
STRATEGY		3.26	3.84	4.05	2.30	3.68	3.54	2.44	2.84	2.24	2.40
Product direction	50%	3.00	4.70	5.00	3.00	3.70	3.00	2.70	2.00	2.30	3.00
Commitment	20%	1.90	4.30	4.00	1.60	3.60	3.30	2.30	2.30	2.30	3.00
Pricing and licensing	30%	4.60	2.10	2.50	1.60	3.70	4.60	2.10	4.60	2.10	1.00
MARKET PRESENCE		1.18	4.67	4.85	3.23	2.26	3.36	1.90	2.70	3.39	3.39
Company financials	50%	0.95	4.85	4.85	3.10	2.95	3.40	2.60	2.15	3.25	3.25
Installed base	40%	1.00	4.60	4.80	3.20	1.20	3.40	1.00	2.80	3.40	3.40
International presence	10%	3.00	4.00	5.00	4.00	3.00	3.00	2.00	5.00	4.00	4.00

All scores are based on a scale of 0 (weak) to 5 (strong).

Source: Forrester Research, Inc.

VENDOR PROFILES

Vendor profiles are provided in alphabetical order.

- **Actuate.** Actuate iServer 8 provides a platform for developing and deploying reporting applications in support of analytic and enterprise reporting. The product offers comprehensive application development capabilities, including strengths in report development and dissemination, layout and formatting, solid security and administration, internationalization, and Web services capabilities. Product weaknesses include analytic functionality with basic OLAP and little or no predictive analytics or business process capabilities. Actuate's e.Spreadsheet product for integrating BI reporting with Microsoft Excel provides a clear differentiator.⁶
- **Business Objects.** BusinessObjects XI Release 2 provides a strong, integrated reporting and analysis platform that includes a best-of-breed solution for both analytic reporting in WebIntelligence XI and enterprise reporting in Crystal Reports XI. The product offers comprehensive query capabilities, metadata functionality, and report development features along with strong usability, internationalization, and result dissemination. Business Objects is one of a growing number of vendors — also including Actuate, Cognos, Hyperion, Microsoft, and MicroStrategy — that offer both analytic and enterprise reporting capabilities on an integrated platform; however, BusinessObjects XI Release 2 contains proven and tested reporting and analysis products.⁷
- **Cognos.** Cognos 8 Business Intelligence (BI) offers a single, strong BI reporting and analysis product for support of analytic and enterprise reporting. The product is strong in all three areas — analytic functionality, application development, and usability — with comprehensive support for unification, internationalization, and open APIs, and strong support for OLAP, query, metadata, dashboards, and scorecards. Cognos 8 BI is a completely new, Web-based product that incorporates much of the functionality from Cognos legacy BI products, such as PowerPlay, Metrics Manager, Impromptu, ReportNet, and others.⁸
- **Hyperion.** Hyperion System 9 BI+ is an integrated platform built on a framework that supports all Hyperion applications and tools, including performance management, financial budgeting/planning/consolidations, and BI. The product provides strong analytic functionality via its Essbase 9 OLAP engine along with unification of the interface, with general metadata functionality, application scalability, report layout, and Microsoft Office integration.⁹
- **Information Builders.** Information Builders WebFOCUS 7 provides a strong application development platform for developing and deploying operational BI apps. The product provides comprehensive data access, excellent application scalability, and security and administration, but lacks usability and robust report layout and design capabilities. WebFOCUS is best suited for production reporting applications and operational BI, but is not well suited for advanced analytics or OLAP applications.¹⁰

- **Microsoft.** Microsoft's BI technology includes SQL Server 2005 with Integration Services for data integration, Reporting Services for production reporting, and Analysis Services for analytic functionality. It provides a solid, albeit incomplete solution for analytic and enterprise reporting. Microsoft's products feature good usability and application development capabilities, with average analytic functionality — highlighted by the OLAP functionality in Analysis Services. However, the newness and immaturity of Reporting Services, along with the brand new report authoring capabilities, make this a work in progress.¹¹
- **MicroStrategy.** The MicroStrategy 8 platform provides a solid BI product for analytic and enterprise reporting. The offering provides strong OLAP capabilities with extended access to SAP BW cubes, along with strong administration and security capabilities with solid Microsoft Office integration capabilities. MicroStrategy includes an enterprise reporting component (Report Services) within the core product; however, limitations in data access lower the overall appeal of the production reporting mechanism.¹²
- **Oracle.** Oracle Business Intelligence 10.1.2 provides a Java application-centric BI reporting and analysis amalgam of products bundled within the Oracle 10g database and Oracle 10g application server for support of analytic and enterprise reporting. The product provides comprehensive security and administration along with application scalability and basic Microsoft Office integration, but lacks robust report layout and development functionality and ease of use. This product is but one of a few — others include Microsoft SQL Server 2005 and SAP NetWeaver 2004 — that provides BI functionality bundled within a database or application server platform.¹³
- **SAP.** SAP NetWeaver 2004 is an integration and application platform. The product provides comprehensive BI application development tools and capabilities targeted at operational BI apps embedded within SAP processes. It has an embedded data warehouse (SAP BW), analytic reporting tool (BEx), and enterprise reporting (Crystal Reports via OEM). A strong international presence and solid metadata management mechanism are balanced against basic support for usability, report development, and dashboard capabilities. Unlike most BI products, SAP NetWeaver 2004 offers a broad range of BI and non-BI application server capabilities, which often creates confusion with buyers about what to license and how to implement NetWeaver as a BI solution.¹⁴
- **SAS.** SAS9 v9.1.3 provides a solid BI product for analytic reporting, but has clear limitations in enterprise reporting. The product provides comprehensive data access to most relational database management systems and multidimensional databases along with mainframes and legacy apps, as well as advanced analytics in data mining and predictive analytics. Other strengths include solid metadata development and security capabilities with improved usability, including Microsoft Office integration capabilities. However, SAS is the only tier one BI vendor that does not have a viable enterprise reporting solution to complement its analytic reporting capabilities, which makes SAS less attractive to companies looking to standardize on a single reporting solution.¹⁵

SUPPLEMENTAL MATERIAL

Online Resource

The online version of Figure 3 and Figure 4 are Excel-based vendor comparison tools that provide detailed product evaluations and customizable rankings.

Data Sources Used In This Forrester Wave

Forrester used a combination of data sources to assess the strengths and weaknesses of each solution:

- **Hands-on lab evaluations.** Vendors spent one day with a team of analysts who performed a hands-on evaluation of the product using a scenario-based testing methodology. We evaluated each product using the same scenario(s), creating a level playing field by evaluating every product on the same criteria.
- **Vendor surveys.** Forrester surveyed vendors on their capabilities as they relate to the evaluation criteria. Once we analyzed the completed vendor surveys, we conducted vendor calls where necessary to gather details of vendor qualifications.
- **Product demos.** We asked vendors to conduct demonstrations of their product's functionality. We used findings from these product demos to validate details of each vendor's product capabilities.
- **Customer reference calls.** To validate product and vendor qualifications, Forrester also conducted reference calls with current customers of each vendor.

The Forrester Wave Methodology

We conduct primary research to develop a list of vendors that meet our criteria to be evaluated in this market. From that initial pool of vendors, we then narrow our final list. We choose these vendors based on: 1) product fit; 2) customer success; and 3) Forrester client demand. We eliminate vendors that have limited customer references and products that don't fit the scope of our evaluation.

After examining past research, user need assessments, and vendor and expert interviews, we develop the initial evaluation criteria. To evaluate the vendors and their products against our set of criteria, we gather details of product qualifications through a combination of lab evaluations, questionnaires, demos, and/or discussions with client references. We send evaluations to the vendors for their review, and we adjust the evaluations to provide the most accurate view of vendor offerings and strategies.

We set default weightings to reflect our analysis of the needs of large user companies — and/or other scenarios as outlined in the Forrester Wave document — and then score the vendors based on a

clearly defined scale. These default weightings are intended only as a starting point, and readers are encouraged to adapt the weightings to fit their individual needs through the Excel-based tool. The final scores generate the graphical depiction of the market based on current offering, strategy, and market presence. Forrester intends to update vendor evaluations regularly as product capabilities and vendor strategies evolve.

ENDNOTES

- ¹ Analytic reporting includes OLAP, query and analysis, predictive analytics, and other functionally rich products, while enterprise reporting is represented by operational and production reporting and format capabilities. See the August 23, 2004, Tech Choices [“Grading BI Reporting And Analysis Solutions.”](#)
- ² In a survey of IT managers, more than half stated that they had between five and 15 separate BI solutions. See the June 29, 2005, Trends [“Keeping IT Sane In A Crazy BI World Of Excel.”](#)
- ³ The main reason to standardize on a single reporting tool is cost reduction. See the October 25, 2005, Best Practices [“Standardizing On A Single BI Reporting And Analysis Platform: Possible? Yes. Practical? No.”](#)
- ⁴ The message from end users is loud and clear: they want BI to help them do their jobs, not just report on the data. See the April 5, 2005, Market Overview [“Business Intelligence Driven By Compliance, Standardization, And Performance Initiatives.”](#)
- ⁵ Business Objects released a combined Business Objects and Crystal Reports product 13 months after the acquisition. See the January 11, 2005, Quick Take [“Business Objects Delivers XI Under Extreme Conditions.”](#) Cognos follows the ReportNet architectural approach with Cognos 8 BI. See the September 28, 2005, Tech Choices [“Cognos 8 BI Redefines Cognos’ BI Approach And Raises The Bar For Integrated BI Platforms.”](#)
- ⁶ View the vendor summary for more detailed analysis on how Actuate fared in this evaluation. See the February 8, 2006, Tech Choices [“Actuate Strong In Layout, Scalability For BI Reporting And Analysis Platforms.”](#)
- ⁷ View the vendor summary for more detailed analysis on how Business Objects fared in this evaluation. See the February 8, 2006, Tech Choices [“Business Objects Leads In BI Reporting And Analysis Platforms.”](#)
- ⁸ View the vendor summary for more detailed analysis on how Cognos fared in this evaluation. See the February 8, 2006, Tech Choices [“Cognos A Leader In BI Reporting And Analysis Platforms.”](#)
- ⁹ View the vendor summary for more detailed analysis on how Hyperion Solutions fared in this evaluation. See the February 8, 2006, Tech Choices [“Hyperion Strong In OLAP, Integrated Security For BI Reporting And Analysis Platforms.”](#)
- ¹⁰ View the vendor summary for more detailed analysis on how Information Builders fared in this evaluation. See the February 8, 2006, Tech Choices [“Information Builders Strong In Data Access, Scalability For BI Reporting And Analysis Platforms.”](#)

- ¹¹ View the vendor summary for more detailed analysis on how Microsoft fared in this evaluation. See the February 8, 2006, Tech Choices “[Microsoft Low Cost To Scale For BI Reporting And Analysis Platforms](#).”
- ¹² View the vendor summary for more detailed analysis on how MicroStrategy fared in this evaluation. See the February 8, 2006, Tech Choices “[MicroStrategy Strong In OLAP Functionality For BI Reporting And Analysis Platforms](#).”
- ¹³ View the vendor summary for more detailed analysis on how Oracle fared in this evaluation. See the February 8, 2006, Tech Choices “[Oracle Strong In Java Development, Security For BI Reporting And Analysis Platforms](#).”
- ¹⁴ View the vendor summary for more detailed analysis on how SAP fared in this evaluation. See the February 8, 2006, Tech Choices “[SAP Strong In Application Integration For BI Reporting And Analysis Platforms](#).”
- ¹⁵ View the vendor summary for more detailed analysis on how SAS fared in this evaluation. See the February 8, 2006, Tech Choices “[SAS Strong In Advanced Analytics, Data Access For BI Reporting And Analysis Platforms](#).”

FORRESTER®

Helping Business Thrive On Technology Change

Headquarters

Forrester Research, Inc.
400 Technology Square
Cambridge, MA 02139 USA
Tel: +1 617/613-6000
Fax: +1 617/613-5000
Email: forrester@forrester.com
Nasdaq symbol: FORR
www.forrester.com

Research and Sales Offices

Australia	Israel
Brazil	Japan
Canada	Korea
Denmark	The Netherlands
France	Switzerland
Germany	United Kingdom
Hong Kong	United States
India	

*For a complete list of worldwide locations,
visit www.forrester.com/about.*

For information on hard-copy or electronic reprints, please contact the Client Resource Center at +1 866/367-7378, +1 617/617-5730, or resourcecenter@forrester.com. We offer quantity discounts and special pricing for academic and nonprofit institutions.

Forrester Research (Nasdaq: FORR) is an independent technology and market research company that provides pragmatic and forward-thinking advice about technology's impact on business and consumers. For 22 years, Forrester has been a thought leader and trusted advisor, helping global clients lead in their markets through its research, consulting, events, and peer-to-peer executive programs. For more information, visit www.forrester.com.