

# THE FULL PROMISE OF BUSINESS INTELLIGENCE

COGNOS 8 BUSINESS  
INTELLIGENCE

SIMPLE, COMPLETE,  
AND PROVEN.



THE NEXT LEVEL OF PERFORMANCE™

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## ONE PRODUCT FOR BUSINESS INTELLIGENCE

In 2003 Cognos introduced new reporting software, Cognos ReportNet™, built on a Web services-based architecture. The open, modern architecture of ReportNet was its key innovation, and key to its value for both business users and IT. ReportNet bridges the worlds of pixel-perfect production reporting and highly flexible business reporting. It promises and delivers a single product for all reporting requirements, with simplified deployment, maintenance, and integration; drag-and-drop ease of use; multilingual reporting; among many other innovations.

Cognos ReportNet is phenomenally successful; it addresses the pent-up demand among customers looking for a single reporting product to meet all of their reporting needs. Because of this, many organizations have selected Cognos ReportNet as their reporting standard.

Following the launch, analyst firm Butler Research commented: "It is our opinion that in ReportNet, Cognos has created an architecture that not only delivers robust and scalable reporting solutions, but which can act as a future platform for the organization's entire BI/CPM strategy."<sup>1</sup>

The promise of such a future platform was appealing. With a unifying architecture for all business intelligence capabilities, an organization could choose one product to bring together its previously separate capabilities of reporting, analysis, dashboards, scorecarding, and more. This single BI product would not only provide more value for less resources, it would be an obvious choice for business intelligence standardization.

Many technology companies claim this is what they deliver. Typically, however, they are offering integrated components that may share some services, or a common

portal in front of disparate products, or basic-level interoperability among a mix and match of quite separate products (often the result of various acquisitions).

In contrast, Cognos has fulfilled the promise. It is offering one product with all BI capabilities, on a single, modern architecture. This is Cognos 8 Business Intelligence.

### *One product on a single, proven, and modern architecture*

Cognos 8 Business Intelligence takes the strength of the ReportNet platform and delivers a single, Web services architecture for all business intelligence capabilities.

Cognos 8 Business Intelligence offers reporting, query, and analysis; dashboards and scorecarding; event lifecycle management; and the unifying power of centralized metadata in one product, on a single, proven service oriented architecture. Cognos 8 BI delivers all of these capabilities through a 100 percent Web browser interface for all users.

The promise of business intelligence is all users accessing at the right time all of their data, in any way they want, to understand what is happening, why, and determine what actions they should take to help the organization succeed.

This is the Cognos vision for business intelligence. This vision is made possible with Cognos 8 BI—simple, complete, and proven business intelligence.

## CHOICE FOR STANDARDIZATION

*"Organizations intending to standardize on a BI suite should consider Cognos 8 BI as a foundation for that effort."<sup>2</sup>*

Ventana Research

<sup>1</sup> Butler Group, *Corporate Performance Management, A New Approach to Business Control and Planning*, June 2004.

<sup>2</sup> Ventana Research, *Cognos Offers a Sneak Peak at Version 8*, Eric Rogge, July 15, 2005.

## MODERN ARCHITECTURE FOR BUSINESS INTELLIGENCE

Cognos 8 BI provides a single, modern Web services architecture that is built from the ground up to minimize development, deployment, and maintenance for lower cost of ownership. This is key to why Cognos 8 BI simplifies your IT environment while serving all of your user needs.

### Purpose-built Web services architecture

- Modern, multi-tier architecture is built using open, modern Web standards such as XML, SOAP, and WSDL.
- A single application protocol interface lets programmers customize, expose, or hide any BI capability using any programming language (e.g., Java, Visual Studio, .Net, C, C++).
- A peer-to-peer, multi-threaded architecture provides a distributed environment with automatic load balancing, no single point of failure, and server independence.
- Component-based, with the flexibility to distribute components geographically, across servers, firewalls, etc. according to the needs of the business.
- Completely scalable to hundreds of thousands of users to support a globally distributed organization.
- Business and production reports, dashboards, analysis, scorecards, event management, and data management rules are written once and deployed globally to reduce reporting backlog.

### Web-based development and deployment

- Provides a common zero-footprint browser-based environment that requires no desktop installs, plugins, or applets.
- Familiar point-and-click, task-based interface accelerates user adoption, increases user self-reliance, and reduces user dependence on IT.
- Administration can be centralized or distributed closer to the point of impact.
- Enables remote access to the system—log on from anywhere—and powerful, remote Web-based administration and report authoring.
- Single point of update to deploy changes to all users simultaneously.

### Integration with your existing infrastructure

- Leverages your existing IT assets and infrastructure, including security systems, RDBMS, application servers, Web applications, networks, and metadata.
- Integrates easily with Web portals such as IBM WebSphere, SAP Enterprise Portal, Plumtree, and WSRP-compliant portals.
- Supports Windows, Unix, and Linux operating systems in uniform and mixed platform deployments
- Supports numerous standards and data sources without the need for coding or data migration.
- Full flexibility to support complex mixed application environments.

This architecture is fundamental to the ability of Cognos 8 BI to deliver complete business intelligence. It delivers the full range of *all BI capabilities* to all users to improve decision-making and performance management enterprise-wide, drawing on *all data* sources and structures.

### MODERN ARCHITECTURE, SIMPLICITY FOR IT

In addition to being the foundation for all BI capabilities, Cognos 8 BI's open architecture extends to security, OLAP and relational data, application servers, Web applications, portals, networks, and metadata. Zero-footprint Web deployment further simplifies maintenance, upgrades, and use for IT and the business user. It does not require applets, downloads, or other client software installs, further simplifying the application of business intelligence in your company.

- Deploy one product on a single architecture for all business intelligence requirements. The standards-based architecture can snap into your existing IT environment.
- Add capabilities or modify them at any time to meet changing business conditions and user needs.
- Provide everyone across your organization with a single, trusted source for information.
- Eliminate the management and maintenance of duplicate services such as security.
- Centralized metadata model lets you apply consistent business rules, calculations, and dimensions to your data.

## COMPLETE: ALL BUSINESS INTELLIGENCE CAPABILITIES

Cognos ReportNet brought together the various styles of query and reporting—both production and business. Cognos 8 BI brings together the various styles of reporting, plus analysis, scorecarding, dashboards, and event lifecycle management. These are no longer separate products. They are not simply interoperable products, nor separate products on a common platform. They are one product that presents a consistent way to interact with your corporate information.

You can deliver the complete range of BI capabilities with the flexibility of modular deployment and proven scalability to hundreds of thousands of users. Cognos 8 Business Intelligence lets business users move among BI capabilities in a guided way, get the answers they seek, and collaborate while giving IT complete control over the BI environment.

### VALUE OF ALL CAPABILITIES WORKING SEAMLESSLY TOGETHER

**Single interface for each user's BI needs:** Each business user accesses a single, familiar interface delivering consistent and complete information automatically in the format that makes sense to the user role. Based on a person's role, IT can enable more or less functionality at the push of a button to fit the need.

**Single, adaptive authoring environment for all BI capabilities:** Gain a single adaptive authoring environment and adaptive report-authoring model for the complete range of enterprise reports, dashboards, scorecards, and other BI capabilities, based on a combination of either OLAP or relational data sources.

**Create dashboards and reports in one product:** Create visually engaging dashboards with gauges, charts, maps, and other graphical elements with built-in, fully automated drill-through capabilities—all from the same reporting interface you use for production and business reports. Use all of the same reporting distribution options for your dashboard, such as scheduling and “bursting” (delivering reports to different lists without rerunning the queries for every destination).

**Cooperative report development:** Various users can collaborate when producing a report. A business user can author a simple ad hoc report and give it to others for their reference, or to a professional author to be enhanced or edited. The report then returns to the business manager, and he or she can share the finished report(s) with intended recipients. Integrated security ensures people only view what they should.

**Guided analysis from scorecards, dashboard, or report:** View information in a scorecard, dashboard, or report and get further detail all in one product, with content automatically maintained as you navigate. Interactive, dynamic scorecards, dashboards, and reports let business users follow their questions about how the company is progressing against its strategy.

**Deep comparative analysis:** Analyze large volumes of data from all business dimensions, regardless of where the data is stored—OLAP or dimensionally aware relational sources, or any relational source. Use drag-and-drop techniques such as pivoting and filtering to analyze large data sets with fast response times. All BI capabilities in Cognos 8 Business Intelligence provide a dimensional view on top of relational data.

## COMPLETE: ALL BUSINESS INTELLIGENCE CAPABILITIES

### *Reporting*

Create any type of report, for any user, with any data.

- Covers the complete range of reporting needs—managed, production, ad hoc, personalized. Report against all operational systems, OLAP, and relational data sources. Display reports in all desired output formats (Email, HTML, PDF, Microsoft Excel, CSV's, XML).
- Drag-and-drop data elements, formatting, and selection extends self-service report authoring to users, offloads IT requirements, and reduces the reporting backlog.
- Single, zero-footprint and adaptive authoring interface for reports and dashboards.
- Drill-through and drill-down automatically built-in.
- Build a report once and deploy in any language.

### *Analysis*

Explore and analyze large volumes of data covering all dimensions of the business, whether stored in OLAP or dimensionally aware relational sources.

- Analyze large data sets with an easy-to-use, drag-and-drop user interface.
- Compare performance to see trends over time.
- Pursue business questions through analysis and exploration with fast and predictable response times.
- Powerful, yet easy-to-use comparative analysis. See performance outliers, such as most and least effective suppliers, in one analysis.

### *Scorecarding*

Link initiatives and projects to strategy with metrics and strategy maps. Use the same scorecard metrics to drive enterprise planning for integrated performance management.

- Easily see and track the status of key performance indicators and initiatives.
- Understand the root cause of performance issues.
- Scorecards and metrics use the same single meta-data model that drives analysis and reporting.
- Attach reports and analysis to get the information underpinning metrics and understand what drives the performance.
- Link metrics to owners to help drive accountability.
- Support Balanced Scorecard or other scorecarding approaches.

### *Dashboards*

Deliver Web-based dashboards with information from different data sources in a single visual report. Provide an at-a-glance snapshot of the business.

- Cut the time to decision with multi-object performance reports, maps, charts, scorecards, and interactive OLAP analysis coordinated in a single view.
- Set up personalized information centers to monitor performance.
- Connect dashboard elements with underlying data for further context and analysis.
- Support various management methodologies.

### *Event lifecycle management*

Event lifecycle management goes beyond the basic notification functionality provided in other products to automate the decision-making process, launch business processes, and integrate with Business Process Management. Where human intervention is required, through decision-process automation, event lifecycle management notifies the people who are accountable and provides the relevant information they need to resolve the issue. Where human intervention is not required, it initiates business processes such as data updates or Web service procedures to resolve the issue. Throughout the event lifecycle, it continues to monitor and notify, ensuring that all relevant players and systems take appropriate action at the right time.

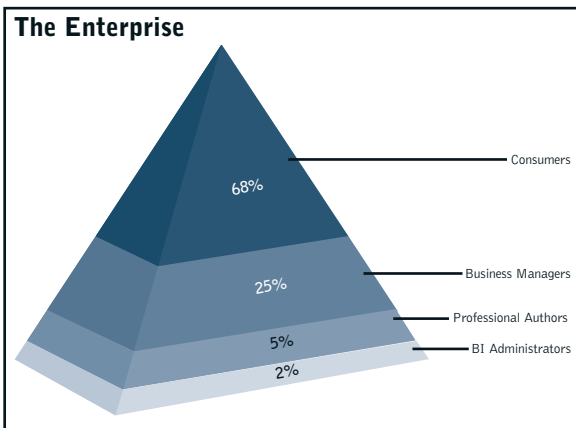
Event lifecycle management benefits include:

- Link different parts of the organization together for enterprise-wide event management.
- Compress the time to action and resolution.
- Define compound events and tasks using event conditions.
- Manage events in context.
- Use both decision-based and business-process issue resolution.
- Track critical events.

## COMPLETE: SERVING ALL USERS

Cognos 8 Business Intelligence recognizes and accommodates the different needs of all BI users in your organization. Delivering a single source of business intelligence to everyone provides many benefits:

- Everyone uses the same reports, analysis, scorecards, and other views, promoting more effective collaboration.
- Common business intelligence reduces debates over the numbers, letting you spend more time deciding the right actions.
- You establish a common information layer on top of disparate data sources.



### *BI Consumers*

Representing the majority of enterprise users, this group also includes BI recipients that require little or no interactivity with the reports they use.

- Access to regularly distributed reports.
- Clear data presented the way they need to see it.
- Secure, personalized and browser-only access.

Cognos 8 BI delivers

- Report scheduling and bursting personalized information to the consumer desktop.
- Personal viewing preferences for language, time zone, currency, etc.
- Dimensionality built in automatically to the reports for easy drill-down to detail.
- Secure access over the Web that can recognize and adapt to mobile devices.

### *Executives*

Your organizational leaders function as **BI Consumers** with some unique needs reflecting the strategic perspectives they require.

- At-a-glance awareness of organizational health.
- Regular updates and status alerts on their areas of responsibility.
- Secure access to business information from anywhere.

Cognos 8 BI delivers:

- Business dashboards for quick communication of complex data, and scorecards that track progress against individual objectives.
- Scheduled reports delivered to desktops, and event notification delivered anywhere helps organizations respond quickly and uniformly.
- A secure BI Web portal with 128-bit encryption and 24/7 availability.

### *Business Managers*

Representing one quarter of the average enterprise, these users have a wider range of responsibilities than typical consumers, demanding a wider range of self-serve access to different BI capabilities.

- Drillable business information that offers the detail, context, and the ‘why’ behind the numbers.
- Basic BI authoring that is easy to use.
- Occasional ad hoc queries, analysis, and metrics management.

Cognos 8 BI delivers:

- A familiar, self-serve working environment for all BI capabilities.
- Drag-and-drop BI authoring in the same zero-footprint interface.
- Automatic translation for distributed BI.

### *Professional Authors*

Also known as ‘power users’, professional authors are the traditional target of most BI software. The advanced BI capabilities required by these users include:

- High-volume BI distribution.
- The full range of BI elements and output types.
- High-speed data trending over time.
- Sub-second response times for exploring large volumes of data.

Cognos 8 BI delivers:

- Multi-page, multi-query, high volume bursting via email or portals.
- Queries run against multiple relational and dimensional data sources for display in a single report.
- BI content elements including: charts, maps, crosstabs, 3D bar, pie line, gauge, funnel, scatter, dot density, waterfall, and live applications.

### *IT Administrators*

From Information Architects to Help Desk, the IT Administrators who support BI users require:

- The full range of BI functionality and control over functionality for others.
- Self-service BI for all users.
- Low maintenance BI that takes advantage of existing infrastructure.

Cognos 8 BI delivers:

- Centralized metadata on a single layer.
- A zero-footprint, browser-based environment.
- Access to all common relational and OLAP data sources.

## COMPLETE: VALUE FROM ALL DATA

Cognos 8 BI connects your disparate systems to deliver a common business view of your data—from operations and resources to customers and finance. You can quickly find answers, extract business-critical information, and stay connected to what's happening in your organization. Benefits of this common view include:

- Reducing the demand on IT to gather all relevant data.
- Not missing business opportunities because you can't find the right data when you need it.

### *Data consistency*

Disconnected data and applications are a major source of complexity in an organization. Without a common framework, you can compromise the value of your business information:

- How do you achieve a consistent view of your business?
- How do you achieve enterprise-wide collaboration?
- Who has the right numbers? Are people acting on incomplete information?

Cognos 8 BI delivers a single view of your corporate data and the essential one version of business issues. Operating with a single source of integrated metadata (information about data sources, content, business rules and access authorizations) delivers consistent information. Cognos 8 BI offers a centralized metadata model and access to all data sources and BI capabilities. This lets you integrate, share, centrally manage and leverage metadata across the entire organization. This reduces

the complexity of BI deployments, means fewer maintenance issues, and enables the full value of all Cognos 8 BI's capabilities on one product—delivering a lower cost of ownership and single version of enterprise truth.

### *Timeliness of data*

Different people in an organization have different data latency demands:

- A customer service representative might need access to a customer order to find out the real-time status of a late shipment. This requires access to the most up-to-date information.
- At the end of the month, a manager may have to create a report providing details on all late shipments for the department. In this case, real-time information is not required; rather, the need is for accumulated data over a period of time.

Cognos 8 BI delivers the right business information in the right time frame, based on whether you require up-to-the-minute data or historical information across months, quarters, or years.

### *Data access capabilities*

Cognos 8 BI connects the dots by delivering a sophisticated and powerful array of data access capabilities.

ETL: Data from multiple systems is integrated, cleansed, transformed, and aggregated to deliver a consolidated historical view that drives analysis:

- Built on a dimensional framework to provide information based on the way business users think.
- Meets high latency requirements for daily, weekly, monthly, or yearly cumulative data.

**EII:** With built-in Enterprise Information Integration (EII) capabilities, Cognos 8 BI connects to multiple disparate data sources in real-time. Ensure fast performance of federated queries (queries against multiple data sources), sophisticated session caching, and a single view of information. Meet low latency requirements for up-to-the-minute information.

- Ensures fast performance, sophisticated session caching, and a single view of all data sources—including modern sources such as XML, JDBC, WSDL, and LDAP.
- Meets low latency requirements for up-to-the-minute information.

**Direct access:** If you already have a data integration strategy and tools in place—as well as OLAP, dimensionally modeled relational data, or relational data—Cognos 8 BI can draw information directly these sources.

**Common metadata:** The Cognos metadata model provides a common set of business rules, calculations, and filters for a conformed, business-driven view of your data. This means users can explore any aspect of their data, knowing all of the information comes from a common foundation.

## OPEN DATA STRATEGY

The open data strategy of Cognos 8 Business Intelligence ensures that you can access data no matter what its source.

- All relational databases, including dimensionally aware sources like SAP BW.
- Widely deployed ERP systems, including Oracle, PeopleSoft, SAP, and Siebel.
- Enterprise data warehouses and marts, with both 3NF and star schemas.
- All widely used OLAP or dimensional sources, including Cognos PowerCubes™, SSAS, DB2 OLAP Server, Oracle 10G, and Essbase
- Modern data sources, such as XML, JDBC, LDAP, and WSDL.
- Planning and budgeting data from Cognos.
- Satellite sources, including Excel files, Access files, other flat files and more.
- Mainframe sources, including VSAM, IMS, IDMS, Cobol copybooks and others.
- Content management data, including FileNet, Documentum, Opensoft and others.
- Portal standards, such as JSR 168 (Java Specification Request 168 which enables interoperability among portlets and portals.)

## FOUNDATION FOR PERFORMANCE MANAGEMENT

Business intelligence is the foundation for performance management. Scorecards let you see where you are right now. The variety of reports let you understand the ‘why’ behind your results. Through analysis of relational or OLAP data, you can discover trends, threats, and opportunities. Event lifecycle management lets you manage processes and events, shortening the time to action and reducing the demand on resources for constant vigilance.

Cognos 8 Business Intelligence supports corporate performance management better than any other solution available because it delivers coordinated, consistent information. You know where you are in your strategy, what brought you here, and how best to set your sights for future performance. Together with integrated planning capabilities, you can then determine budgets, plan targets, and manage both effectively.

**Guided analysis of targets, drivers and dimensions of the business:** Scorecards have targets set by you to measure progress against corporate goals. Scorecarding is a core capability of Cognos 8 Business Intelligence. You can seamlessly move from the metric in a dynamic scorecard and link to reports, author queries, or analyze relevant data. Previously, companies manually created scorecards from various data sources, but lacked the ability to dig deeper on a metric without recreating and recalculating reports. This type of unconnected scorecard costs time when recognizing problematic business drivers and dealing with them.

**Link plan targets to scorecards:** Cognos 8 Business Intelligence can automatically draw targets defined through Cognos Planning into your scorecards. With Planning, you set targets that guide future performance; and with scorecarding, you measure your relevant progress towards your goals.

**Reporting and analysis off plans and budgets:** With Cognos 8 Business Intelligence, you can report, analyze, scorecard, dashboard—use any BI capability—accessing the Cognos Planning multidimensional data sources in addition to published plans.

**Event management applied to the planning and budgeting process:** You can set event lifecycle management alerts for planning/budgeting events to help you manage how the variety of contributors input and develop the plan.

With CPM technologies driving your business, you will understand:

- **What is happening**—An easy-to-see gauge of the most critical indicators for your business.
- **Why**—The ability to dig deeper on current results, and against what was expected, to understand and learn from what led to the numbers.
- **What should happen**—The facility to set plans, monitor them, and adapt.

The combination of integrated business intelligence and planning capabilities is core to a complete, closed loop performance management system. It seamlessly connects forecasts, metrics, targets, actuals, reports, and underlying factors.

## CONCLUSION

IT administrators, power users, business analysts, line of business managers, executives, and casual report users can all find value through the multiple windows Cognos 8 Business Intelligence opens into all your corporate systems and data. IT can deliver the best available value to all users with one business intelligence product—making it simpler, faster, and easier to manage.

Comprehensive reporting coverage, ease-of-use, and enterprise architecture drove market acceptance of Cognos ReportNet. Cognos 8 BI, built with the same architecture and ease of use, adds complete business intelligence capability coverage to the ReportNet value proposition.

Neither IT nor business users should feel limited by their BI systems. Business users need to see the business the way they want. They don't want to drown in irrelevant information. They need to see the big picture and the necessary detail. IT's ability to control costs and deliver value should not be undermined by maintaining multiple BI systems. They don't want BI that only covers some of the data. They need software that has room to grow to meet tomorrow's demands.

Cognos 8 Business Intelligence breaks through these limits and more. Business intelligence promises all users accessing all data, with all capabilities—understanding what happened, why, and determining what action should they take to help the organization succeed. This is the promise Cognos 8 BI uniquely fulfills. It is the first to do so, and will be the industry standard all other solutions will attempt to match.

## ABOUT COGNOS

Cognos is the world leader delivering an integrated performance management solution—reporting, analysis, scorecarding, consolidation, and enterprise planning.

Industry analysts and experts point to the breadth and excellence of Cognos performance management software as the source of this leadership.

Cognos backs up this leadership with the highest awards for customer service in the industry. More importantly, the return on investment Cognos delivers to its customers is proven by independent industry watchers, and backed up by customers across all major verticals, around the world.

Founded in 1969, Cognos today serves more than 23,000 customers in over 135 countries. Cognos enterprise business intelligence solutions and services are also available from more than 3,000 worldwide partners and resellers.

Leaders choose leaders. Leaders choose Cognos.

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