# Choosing a standard for business intelligence

## Simplify the IT environment, reduce your TCO and increase your ROI

**Cognos.**
software

## Abstract

Standardizing business intelligence tools across an entire organization has obvious benefits in terms of simplification and cost-savings. But for standardization to be truly effective, it must revolve around the right solution, one that addresses the organization's exact business intelligence (BI) needs at a relatively low total cost. IBM Cognos® products—from IBM Cognos ReportNet for enterprise reporting to IBM Cognos 8 Business Intelligence for complete BI capabilities—have a proven record of success. And with speedy deployment times that ease strain on IT and intuitive interfaces that lead to wide user adoption, IBM Cognos solutions achieve a fast return on investment.

## Overview

### What drives the move to standardization?

The reasons driving standardization in business intelligence and reporting are core to every company—cutting costs, boosting revenue, and increasing profits. What drives the increased interest in standardization today is the fact many companies are actually doing it. Other companies don't want to miss the competitive opportunity.

Early adopters of business intelligence have leveraged the power BI has brought—for unified data, for greater understanding of the "Why" behind results, for better decisions. However, individual BI successes may be hampering their overall corporate performance efforts. Different departments and divisions may all have bought into the promise of business intelligence, but pursue it in different ways, and with different vendors.

## Business problems

**The need for one version of 'the truth'**

As companies attempt to align departments on one strategic plan, the pockets of BI success in certain departments may be counter-productive. One department may consider its reports "more correct" than its peers. You may have one version of the truth in a department, but multiple versions across the company.

Standardization addresses these problems. It paves the way for BI to be less the tactical tool, and more, the strategic partner.

When technologies become strategic, they trigger companies to look at standardization. That is the case now for BI. Companies can standardize on one vendor who can meet the diverse needs of various departments, user types, and IT infrastructures.

Whether your company standardizes IT systems because of the need to reduce costs, increase competitiveness or is forced to by vendor consolidation, Ventana Research advises: "*It will happen, so be ahead of the curve*," the analyst firm wrote in their recent white paper, *Standardizing Business Intelligence*.

Analyst firms such as Gartner and Forrester back up Ventana's assertion: BI and reporting standardization is happening. Leading companies must consider their response.

# Business drivers

**Factors to consider in a BI standards vendor**

Choosing a BI standard requires that the technology meet stringent enterprise-class requirements. For example, it must be able to manage deployments to thousands of users, spanning multiple countries and corporate boundaries.

In its recent white paper, *Standardizing Business Intelligence*, Ventana research recommends a number of characteristics to look for when considering standardization.

**Broad coverage:** A standard must meet the needs of as much of the organization as possible. This minimizes the exceptions that can lead to requests for non-standard technologies. Look for solutions that cover: production reporting, business reporting, ad hoc query, OLAP reporting and analysis, dashboarding, and scorecarding.

**Modern Services-Oriented Architectures:** Standards should leverage other standards, when possible. Look for technologies that use Web Services standards such as SOAP, XML, and WSDL. These architectures will be easier to integrate with your existing environments and will be more adaptable as new technologies and standards evolve.

**Scalability:** The underlying server technology must support the performance and scalability requirements of business users who expect fast responses to their business questions. Look for vendors who have distributed architectures where load balancing can be distributed across multiple servers. It is best if they can support both UNIX® and Microsoft® Windows® environments.

**Heterogeneous data access:** Most organizations have many different data sources, of many differing types. Your BI standard should be able to model and query against these multiple, heterogeneous data sources.

**Global capability:** A BI standard must be deployable in the language of the users' preference. Since most large companies have employees, customers, and suppliers all over the world, a BI solution must be multilingual. [Not all multilingual solutions are created equally. Look for UNICODE throughout, not just support for UNICODE data sources. Choose a solution that doesn't require writing separate reports for each language, or knowing the language of each individual user prior to deployment.]

**Security:** A BI standard should leverage and support your existing enterprise security. This means you don't have to duplicate or change the approach you've already implemented for information security.

## The solution

**Choosing IBM as your BI standard**

There are a variety of business users, with a wide variety of information needs — executives, business users, managers, professional authors, and IT administration, for example. Depending on the job, people may need regular reports, vital signs at-a-glance, up-to-date reports, or the ability to dive more deeply into information. They need software, a portal into information, and a user interface that fits their varied needs, rather than one tool developed for highly technical users. The result: everyone can use the same system and common data. This increases collaboration across roles and functions. One BI product that can satisfy all users' needs means considerable value in terms of easier deployment, maintenance, and training.

Your BI standard delivers a common business view. It must connect your disparate information systems — supply chain, operations, finance, customer relationship — for a complete view of the business. For IT, this means having one product that offers a flexible, cost-effective framework with centralized metadata for uniting multiple ERP vendors and data sources: relational, OLAP, flat files, XML, and more.

Business intelligence capabilities bring people and information systems together. A BI standard is one product delivering all BI capabilities: reporting, dashboards, scorecarding, analysis, event lifecycle management as well as data integration, on a modern architecture that doesn't complicate IT's already complex environment.

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

**Broadest and deepest BI coverage**
IBM Cognos ReportNet brought together the various styles of query and reporting—both production and business. IBM Cognos 8 Business Intelligence 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. IBM 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.

### 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 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 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 metadata 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.

• Use the same authoring environment and report infrastructure for scheduling and bursting as standard reports.

**Business event management**

Business event 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 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.

**IBM Cognos 8 Business Intelligence**

IBM Cognos 8 Business Intelligence offers one product, on a single architecture, that delivers all BI capabilities, for all users, and draws on all of your data. These are the hallmarks of a standard for business intelligence software.

**Deliver all BI capabilities from a single product**

- **Single product and architecture with all capabilities:** Reporting, analysis, scorecards, dashboards, event lifecycle management, as well as data integration.

- **Simplified maintenance:** Zero-footprint, browser-based deployment and administration. No duplication among BI capabilities.

- **Increase BI adoption:** One product meets the needs of your entire user base, from casual users to power users.

- **Proven integration:** Web services architecture simplifies deployment and administration. Single, open API lets you integrate with existing security, portals, and IT infrastructure. No single point of failure.

**Serve all users with BI that matches their needs**

- **BI consumers:** Deliver pixel-perfect reports to their desktops with secure Web portal access adaptable to mobile devices.

- **Senior executives:** Deliver scorecarding, dashboards, and reports for quick communication of complex data.

- **Business managers:** Deliver all BI capabilities, with drag-and-drop simplicity and the same zero-footprint interface.

- **Professional authors/analysts:** Deliver advanced features such as high-volume burst reports for distribution, full range of report elements and output types, and reporting and analysis against relational or multidimensional sources.

- **IT administrators:** Deliver a zero-footprint, browser-based environment, modular deployment, consistent metadata, and access to all corporate data on a Web services architecture.

**Leverage all corporate data**

- **Open data strategy and common metadata:** Common business rules, calculations, and filters consolidate your heterogeneous data into a consistent business view.

- **Direct access:** Leverage the information directly from existing sources including relational, OLAP, and other multidimensional sources.

- **Enterprise Information Integration (EII):** Access multiple disparate data sources in batch, historic, or real time. Use the built-in EII capability or third-party integration technologies.

- **ETL:** Integrate, cleanse, transform, and aggregate data for a consolidated historical view. A dimensional framework provides information formatted in the way business users think and optimized for all BI capabilities.

**Modern architecture, simplicity for IT**

In addition to being the foundation for all BI capabilities, IBM 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.

# Conclusion

**Increasing your return on investment (ROI )**

"*Just as you wouldn't choose a heart surgeon based on lowest cost, or an airline based on lowest amount of maintenance, you should not decide on IT based on the lowest cost of ownership,*" says one analyst from Nucleus Research.[1]

Simplification and savings are primary objectives when standardizing. However, your new standard must address your business problems, and address them in the best way possible. IBM Cognos solutions have a proven track record of delivering return on investment and value from business intelligence. For example, by reducing product returns, a global pharmaceutical leader now saves more than $35 million annually using an IBM Cognos solution. A major manufacturer used IBM Cognos software to eliminate unprofitable product lines, saving £26 million in working capital requirements over a three-year period. And a Northern U.S. university used IBM Cognos software to identify $5 million in unbilled tuition.

For software, ROI is affected by its ease of use and its breadth of capability to solve various business solutions. Standardization decisions should not center on compromise or finding least common denominators. Such methods diminish your chance of finding the best possible value.

The technology and vendor you select has to meet *all* of today's requirements. Further, it must also have the capacity to evolve with your business to meet tomorrow's challenges. Your objective when standardizing is to find the company that does both. This typically does not mean the cheapest solution available, unless you want to change your standards every few years as your company changes. Instead, you should be examining both total costs and total benefits. Then you can make an informed decision about what solution will provide the greatest positive impact to the bottom line.

Comprehensive reporting coverage, ease-of-use, and enterprise architecture drove market acceptance of IBM Cognos ReportNet and the fact that many organizations selected it as their reporting standard. IBM Cognos 8 BI, built with the same architecture and ease of use, adds complete business intelligence capability coverage to the IBM Cognos 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.

IBM 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 IBM Cognos 8 BI uniquely fulfils. It is the first to do so, and will be the industry standard all other solutions will attempt to match.

## About IBM Cognos BI and Performance Management

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

For further information or to reach a representative: www.ibm.com/cognos

## Request a call

To request a call or to ask a question, go to www.ibm.com/cognos/contactus. An IBM Cognos representative will respond to your enquiry within two business days.

**Endnotes**

1   Wettemann, Rebecca. The Strengths and Weaknesses of TCO, *CIO Magazine*. July 2, 2003.