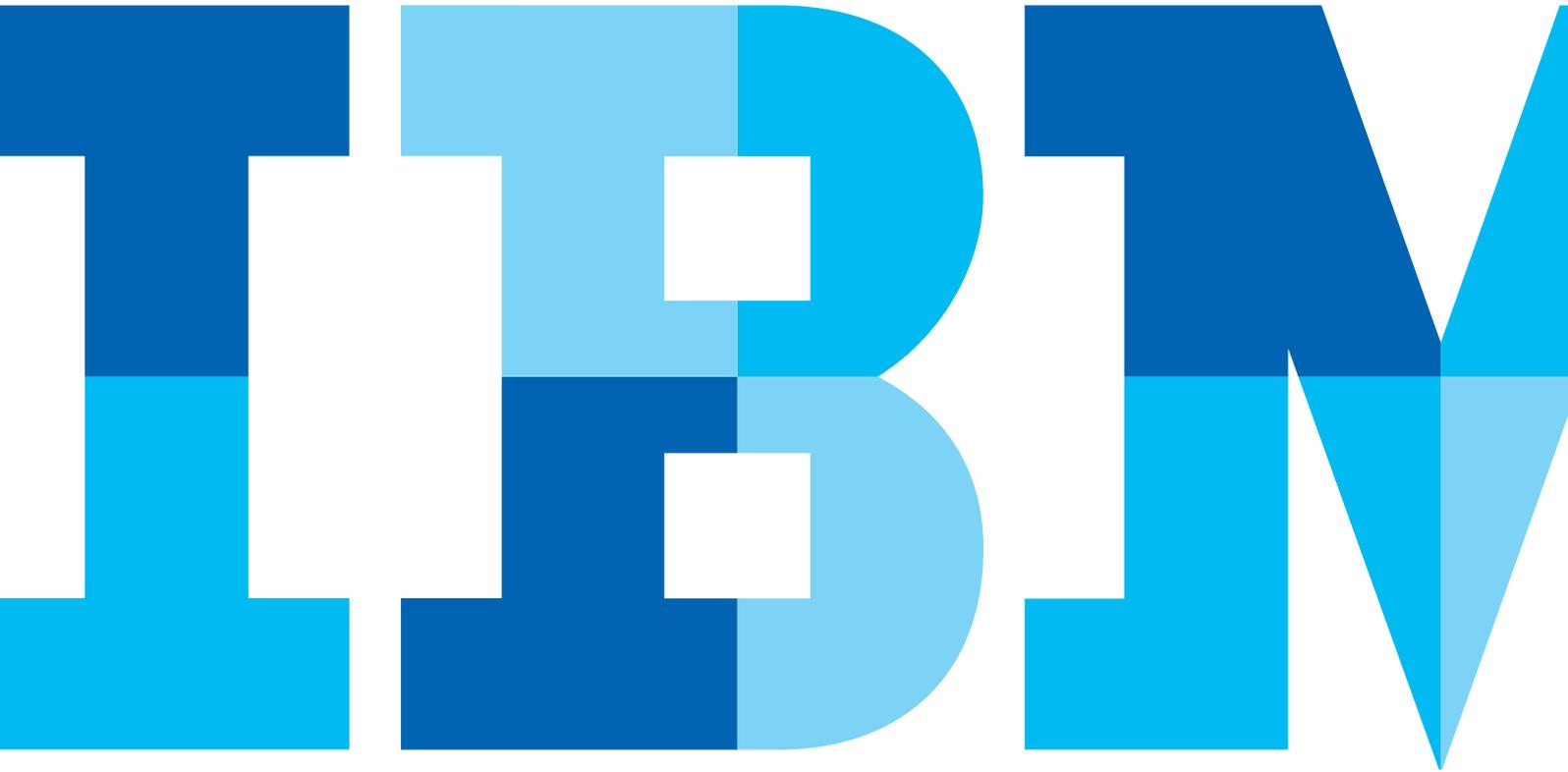


# How to reduce TCO and increase ROI of Business Intelligence

*IT can bring strategic value to the business*



## Contents

<b>Executive Summary</b>	<b>2</b>
<b>Struggling to meet objectives</b>	<b>3</b>
<b>Creating value for the business while lowering TCO</b>	<b>4</b>
<b>Cost savings #1: Reduced complexity of deploying BI</b>	<b>4</b>
<b>Cost savings #2: Reduced time spent managing BI</b>	<b>6</b>
<b>Cost savings #3: Reduced efforts spent providing BI</b>	<b>8</b>
<b>Conclusion</b>	<b>9</b>

## Executive Summary

Organizations today are struggling to meet their strategic objectives for IT. They want to use IT resources to produce greater business value, but are often failing to connect strategy with execution, especially when it comes to Business intelligence (BI).

One strategy is to implement smaller BI projects to satisfy individual or departmental needs.

But the incremental costs of scattered BI deployments add up slowly over time. Organizations that want to successfully satisfy user requirements and reduce their costs over the long term should look at ways to increase efficiency and bring down the cost of managing their total BI infrastructure.

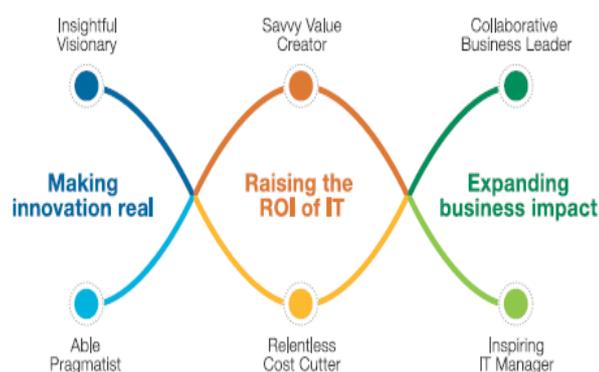
IBM Cognos® Business Intelligence helps organizations meet their strategic objectives and provide real value for the business by delivering the analysis everyone needs while reducing the burden on IT. Cognos Business Intelligence provides information that people want and trust, when they want it, and in the way they want it. It also simplifies the BI environment, allowing IT to maximize resources and ensure a lower cost of ownership as BI needs continue to grow.

## Introduction

While IT organizations have been focused on realizing efficiencies throughout the organization, to remain competitive today, they need to take the next step. IT experts are now focusing as much on bringing strategic value as they are on introducing efficiencies. While their role as service organizations has not diminished, their role in guiding an organization's strategic direction has increased, particularly when it comes to establishing competitive differentiation.

Chief Information Officers all over the world are noticing this. According to IBM's 2009 study *The New Voice of the CIO*, CIOs today have three primary goals: to make innovation real, to raise the ROI of IT and to expand the business impact of IT throughout the organization.

Conversations with more than 2,500 CIOs worldwide have shown that IT departments want to use IT resources to bring greater value to the organization, while maintaining an ongoing focus on lowering cost and creating more efficiency.



A 2009 study of over 2500 CIOs shows IT is focused on making innovation real, raising ROI and expanding business impact.<sup>1</sup>

## Struggling to meet objectives

However, while CIOs are setting these overarching goals for their organizations, actualization remains overwhelmingly low — a frustrating state of affairs for many CIOs and IT personnel today. Penetration of Business Intelligence in particular is low and connecting Business Intelligence to strategy execution even lower.

According to a *Pervasive Business Intelligence* report from TDWI, the penetration of active users of BI is only 24%,<sup>2</sup> while a 2009 *Computerworld* survey says “only 14% of companies are connecting strategy to execution with their BI and Performance Management initiatives.”<sup>3</sup>

Early adopters of business intelligence have realized the power of BI to some degree. However, individual BI successes have sometimes gotten in the way of overall corporate performance efforts. As companies attempt to bring departments together under one strategic plan, the pockets of BI success can become counter-productive. One department considers its reports “more correct” than another. You may have one version of the truth in a department, but multiple versions across the company.

These scattered deployments become very cumbersome for IT — there are simply too many tools to manage and constant user requests become resource intensive. Plus, it's confusing for the organization. Users aren't sure which tools to use or which numbers to trust.

To make matters even more dire, demand for Business Intelligence continues to rise as IT groups are just beginning to satisfy their current need. As user communities grow, the demand for more ways to interact with vast stores of information also increases. Users want more and varied capabilities like reports, dashboards and scorecards, which introduces more need for additional tools.

It's no wonder so many companies are seeing low rates of BI penetration. With different views of the information, frustrated users are going back to their spreadsheets, causing BI projects to fail, lowering ROI and driving up the total cost of ownership.

<sup>1</sup> *The New Voice of the CIO: Insights from the Global Chief Information Officer Study Executive Summary*. August 2009: (4). [ibm.com/voiceofthecio](http://ibm.com/voiceofthecio).

<sup>2</sup> *Pervasive Business Intelligence*. TDWI. 3rd Quarter, 2008.

<sup>3</sup> *Computerworld* survey. March 2009.

## Creating value for the business while lowering TCO

IT creates real value for the organization when it can provide quality information for individuals. For people across the organization to gain real value from data, they need to get information that helps them improve business efficiency *and* effectiveness.

To deliver this level of quality, the information provided must be relevant, accurate, consistent, fast, easy to access and easy to manipulate. When these criteria are met, users can get quality information that enhances their decision-making, and thus help organizations realize their objectives as a whole.

At the same time that IT wants to satisfy these criteria for delivering quality information, they also want to do it in the most efficient way possible.

Three main areas of focus ensure that IT can optimize resources when satisfying business needs for quality information. These include:

1. Reducing the complexity of deploying BI
2. Saving time spent managing the BI solution
3. Reducing effort required to meet business needs

IBM Cognos Business Intelligence solutions effectively meet all these requirements by offering the tools and data access users want while providing a single platform that IT can easily and efficiently manage, maintain and grow.

Let's look at each of these areas in more detail.

### Cost savings #1: Reduced complexity of deploying Business Intelligence

IT organizations can reduce the total cost of ownership of their Business Intelligence projects when they reduce the complexity of deploying BI solutions to the entire organization. The Cognos platform achieves this in several ways.

#### Common Business Model

For organizations with many data assets, applications, and users, disparate BI deployments scattered around the organization tend to produce different numbers. Business users spend time trying to reconcile the numbers, or worse still, drop the BI application altogether in favor of their tried-and-true (albeit cumbersome and inefficient) spreadsheets.

The Cognos platform provides a common view of the business with a common business model that ensures people never have to worry about the validity of their numbers.

The common business model provides cross-functional views of the business, across all data sources, no matter the type. This provides two distinct advantages: business users don't have to deal with the technical complexity underlying data sources, and IT can establish a common foundation for information-sharing across the enterprise.

With consistent information for the entire business, everyone can have confidence in the BI solutions. This helps increase ROI as individuals not only confidently take up the new BI tools, they encourage others to do so.

---

*A study conducted by Aberdeen Group found that IBM Cognos 8 BI users improved operating profits by 2 percent during the worst recession in 70 years, compared to a drop in profit for other companies.<sup>4</sup>*

---

#### Flexible architecture

Most IT departments have a preferred deployment strategy that determines where a solution is deployed and what hardware is required. A BI solution that has specific constraints for deployment can cost IT the advantages of consistent standards in hardware.

<sup>4</sup>Aberdeen Group. Research Brief. *Fighting the Tide: IBM/Cognos BI Users Reduce Overhead, Increase Operating Profit*. September 2009.

The Cognos platform provides inherent flexibility that allows organizations to make the most of whatever systems are already in place. It leverages existing security, portal and web environments, so organizations can easily meet the important technology requirements while serving user requests for BI quickly.

The standards-based, Services-Oriented Architecture (SOA) makes it easy to fit with existing deployments and to adopt any new standards as they emerge. It also lowers deployment costs, by allowing organizations to make the most of existing infrastructure investments.

#### **Comprehensive, optimized data access**

Most organizations have data sitting in different systems and data sources, which makes gaining access to *all* data difficult. This means employing expensive methods to ensure users get complete access to data.

The Cognos platform provides the ability to deliver all information from wherever it resides while isolating the end-user from technological complexity. This removes barriers to information and hides source complexity from metadata modelers.

---

*“Because there is so much functionality in IBM Cognos BI, and it’s wired into SAP, we spend a lot less time building custom reports.”<sup>5</sup>*

—IBM Cognos customer

---

Business users can interact and view all the data they need to make the best possible decision. What’s more, all capabilities associated with Cognos BI can access data as soon as any data source is made available to it.

With complete, optimized access to all information, Cognos software ensures satisfaction and a successful BI project that the organization will embrace and promote.

#### **Linear scalability**

To minimize cost, IT departments need to be able to plan and continuously manage their BI infrastructure to satisfy the needs of the organization. They want to ensure optimal response times, not just for initial deployment but for the future as demand and user communities grow.

Cognos solutions offer services that can scale up or scale out, ensuring predictable, linear response to workloads. IT administrators can easily determine the appropriate resource requirements for scaling the BI solution, and allows them to scale with confidence as user communities grow and demands put on the infrastructure increase.

This dramatically lowers the total cost of ownership for BI over the long term, and increases IT’s confidence in their ability to scale the BI solution, by allowing them to predict performance and plan more accurately.

#### **Cost calculations for a simplified BI environment**

In this sample scenario (Table 1), by consolidating eight separate BI deployments onto the Cognos platform, an organization can reduce the costs of redundant efforts from IT resources by as much as \$1,875,000 per year, optimizing IT resources and reducing the need for re-development.

**Table 1 - Cost calculations for a simplified BI environment**

	Variable	Baseline	Cognos BI
Total number unique BI products required for enterprise activities	<b>A</b>	8	1
Total number BI developers	<b>B</b>	50	35
Percentage BI developer skills that are interchangeable between products	<b>C</b>	20%	100%
Average percentage developer time dedicated to recreating/reformatting existing BI assets	<b>D</b>	15%	0%
Estimated percentage redundant effort resulting from a lack of SOA	<b>E</b>	15%	0%
Fully loaded labor cost of BI developer	<b>F</b>	\$125,000	\$125,000
<b>Formula (B x F)</b>		<b>\$6,250,000</b>	<b>\$4,375,000</b>
<b>Annualized benefit (baseline - target)</b>			<b>\$1,875,000</b>

## Cost savings #2: Reduced time spent managing BI

IT organizations should consider the time associated with deploying, managing and maintaining their BI solutions when considering the TCO and ROI of their Business Intelligence initiatives.

Cognos solutions offer tools that automate some of the more tedious and time-consuming tasks of managing a BI solution. This allows IT departments to focus more on the activities that bring greater value to the organization.

### Consolidated view of system activity

When IT doesn't have a centralized, comprehensive view of BI system activity, they are put into reactive mode: IT administrators must wait for users to call in with issues before they can do anything about it.

The Cognos task-oriented system monitoring gives administrators a consolidated view of all system activity, from scheduled and interactive report to servers and dispatchers.

With a single view that allows them to monitor the entire environment from one central location, IT administrators can move from being reactive to proactive. Administrators can identify and resolve issues before they disrupt the business, or even before the user knows anything about it.

### System management alerts

IT departments must also spend a lot of time trying to extract system metrics and understand system behavior in the management of their BI systems.

Cognos solutions reduce the amount of time administrators have to spend finding this information by providing detailed system metrics that can be monitored automatically.

Administrators can set thresholds that trigger personal alerts, allowing them to detect issues early and take action on them.

Centralized and exception-based system monitoring reduces the time it takes to resolve issues, makes for more efficient system monitoring and increases user satisfaction levels. With the right monitoring tools, IT departments can focus on strategic initiatives that help them meet and exceed SLAs (Service Level Agreements) instead of running around putting out fires.

### Proven practices and education

IT is given the task of fulfilling ever-growing demands for more information, in the way the business wants it, while also contending with limited budgets, decreased resources and aggressive timelines.

To help manage these challenges, Cognos Education offers courses, training and online support for ensuring a successful transition to the new BI solution. Organizations can choose from a wide range of courses to suit application, role, timeline and preferred learning format, whether through public or onsite classroom training, computer-based training, or instructor-led online courses.

Organizations can rely on the flexibility and proven experience of IBM to ensure the BI solution is deployed faster and more easily, to jumpstart deployment and make the most of your IT team's expertise and skills.

**Table 2 - Cost calculations for a simplified BI environment**

	Variable	Baseline	Cognos BI
Number reports/analytics requests made by users per year	A	400	400
Average time for IT to develop first iteration of report (days)	B	5	0
Average time for IT to develop subsequent iterations of report (days)	C	2	0
Average time for user to complete report development process (definition, review, testing) (days)	D	2	1
Average number iterations required per report prior to user acceptance	E	3	0
Average daily fully loaded labor cost	F	\$600	\$600
Percentage process time dedicated to fulfillment of request	G	20%	100%
<b>Formula (A x (B + (C x E) + D) x F) x G)</b>		<b>\$624,000</b>	<b>\$240,000</b>
<b>Annualized benefit (baseline - target)</b>			<b>\$384,000</b>

**Optimized modeling**

People need to see their BI data in a way that makes sense to them. Reports that are hard to understand or that aren't relevant to the user discourage them from using the BI solution, and frustrate organizations looking to minimize training requirements.

Cognos solutions include the most current modeling guidelines, based on years of experience and thousands of deployments, for building data models. Cognos solutions also allow modelers to collaborate easily with each other, to ensure models properly meet the needs of the business.

*“Cognos 8 integrates reporting capabilities with the cube data. So now we build reports from the ground up within the Cognos BI framework, and publish to our website, all without intervention from developers.”<sup>6</sup>*

—IBM Cognos customer

Data modelers can build models more quickly, ensure models will be easy to manage and maintain, and have the confidence that best practices were followed in their development. Efficiently building models that fit business needs allows IT to shorten the time to ROI and ensure maximum performance from the BI solution.

**Costs calculations for a simplified BI environment**

In this sample scenario (Table 2), an IT department dramatically decreases the costs spent serving ad hoc report requests, by shifting low-level report requests back to the user. Organizations requesting 400 simple reports a year from IT can save \$384,000 year-over-year in labor costs.

### Cost savings #3: Reduced efforts spent providing BI

BI solutions can carry many hidden costs, especially when added efforts are required to serve basic needs such as deployment, maintenance, simple report creation, data model development and report re-use in other modes or languages.

Cognos solutions help lower TCO by reducing the effort required by IT departments to support these needs.

#### 100% Web-based applications

Business users need up-to-the-minute information from their systems in order to make accurate business decisions. Cognos BI solutions provide anytime, anywhere access to users with a zero-footprint, web-based deployment model.

Users can get up and running quickly, and get access to the same content and the same capabilities, regardless of their location. The built-in business process integration allows IT departments to easily integrate BI with other business processes to ensure people have the information they need when they need it.

A web-based system reduces the amount of time IT departments must spend maintaining the BI solution, is far easier to scale and ultimately lowers TCO over the long term.

#### Self-service reports

Employees, managers and executives need quick answers. They don't want to have to go to IT, who are already under pressure to do more with less, with constant requests for simple reports.

Cognos BI solutions offer self-service report creation that helps make the organization more productive and efficient. The interface is intuitive, easy to learn and use, and empowers users with the tools they need for quick answers to questions.

Self-serve reports are a welcome relief for IT, which is already under tremendous burden to serve the organization's entire IT needs. It reduces bottlenecks at IT and raises the satisfaction levels of end-users.

#### Tools for collaboration between users and IT

Report authors from the IT department spend valuable time creating reports and report templates. They don't want to waste time in a back-and-forth process with department heads and other users in determining requirements.

With Report lifecycle, the business can create the report they want through a self-service interface and then pass it on to the IT team. The advanced Cognos report authors can add features and other useful elements that the end user may not know how or have time to do.

Report lifecycle improves collaboration between the business and IT. Combined, self-service report creation and report lifecycle collaboration capabilities help free up IT resources and allow the IT team to focus more on meeting SLAs and strategic initiatives.

#### Re-useable reports

IT must frequently re-create reports in order to make them available in different modes or environments. This raises the total cost of BI in two ways: the re-work itself, which must be executed by an expensive IT resource, and report proliferation. Every new report is one that has to be created, managed, stored, archived and sometimes translated into several languages.

Cognos software eliminates the need for recreating reports. With Cognos solutions, business users author a report once, which can then be "consumed" anywhere, in any form. Whether someone is in the office, at home, on the road, they can access the same report in any mode, in any language.

This capability lowers cost, since IT departments have fewer reports to manage, and raises satisfaction levels with the organization.

---

*Nucleus finds that IBM Cognos software can improve the productivity of workers involved in reporting, finance, or analysis by up to 20 percent.<sup>7</sup>*

---

<sup>7</sup>Nucleus Research. ROI Evaluation Report: IBM Cognos Software. May 2009. (4)

**Table 3 - Cost calculations for a simplified BI environment**

	Variable	Baseline	Cognos BI
Number BI users	A	300	300
Percentage of users with ability to conduct analysis without IT intervention	B	25%	100%
Percentage of users with ability to develop multi-query reports	C	0%	100%
Average user salary + benefits	D	\$125,000	\$125,000
Percentage of time spent searching for appropriate analysis/reports	E	2.0%	1.0%
Formula (A x D x E)		<b>\$750,000</b>	<b>\$375,000</b>
<b>Annualized benefit (baseline - target)</b>			<b>\$375,000</b>

**Cost calculations for a simplified BI environment**

In this scenario (Table 3), when a company switches from relying mostly on IT resources for simple analysis to Cognos BI, the amount of time saved *by the users alone* adds up to \$375,000 year-over-year. Individual users can get data themselves using Cognos BI tools in half the time it takes to explain their requirements to an IT resource.

**Conclusion**

The incremental costs of scattered BI deployments add up slowly over time. Organizations that want to reduce their costs over the long term need to look at how they can continue to successfully serve user needs for more analysis while bringing down the cost of managing their total BI infrastructure.

Cognos Business Intelligence help organizations match strategy to execution with a successful BI deployment that satisfies business requirements and reduces the burden on IT resources.

Business users are highly satisfied with the solution because they have quick access to complete, consistent data that's relevant to them. Higher satisfaction rates ensure increased user uptake and thus a shorter ROI on the initial investment.

Cognos Business Intelligence helps IT deploy BI faster, easier and with less effort. A common business model, flexible architecture and linear scalability reduce the complexity of the BI environment. Centralized system management tools, proven practices and optimized models reduce the time spent managing BI. And online, self-service reporting tools, collaborative tools, and re-useable reports reduce the effort required to serve the organizations' BI needs. Combined, these aspects greatly speed the time to value and reduce the cost of supplying BI while increasing satisfaction levels.

Cognos Business Intelligence helps IT create real value for the organization by furnishing a truly strategic resource, all the while reducing the burden required to support it, both now and as needs continue to grow.

### **About IBM Business Analytics**

IBM Business Analytics software delivers complete, consistent and accurate information that decision-makers can trust to improve business performance. A comprehensive portfolio of business intelligence, advanced analytics, financial performance and strategy management and analytic applications gives you clear, immediate and actionable insights into current performance and the ability to predict future outcomes. Combined with rich industry solutions, proven best practices and professional services, organizations of every size can drive the highest IT productivity and deliver better business results. For more information, visit [ibm.com/cognos/insurance](http://ibm.com/cognos/insurance).

### **For more information**

For further information or to reach a representative:  
[ibm.com/cognos](http://ibm.com/cognos).

### **Request a call**

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



---

© Copyright IBM Corporation 2010

IBM Canada Ltd.  
3755 Riverside Drive  
Ottawa ON K1G 4K9  
Canada

Produced in Canada  
July 2010  
All Rights Reserved

IBM, the IBM logo and [ibm.com](http://ibm.com) are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at [ibm.com/legal/copytrade.shtml](http://ibm.com/legal/copytrade.shtml). Other company, product and service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.

P24809



Please Recycle

---