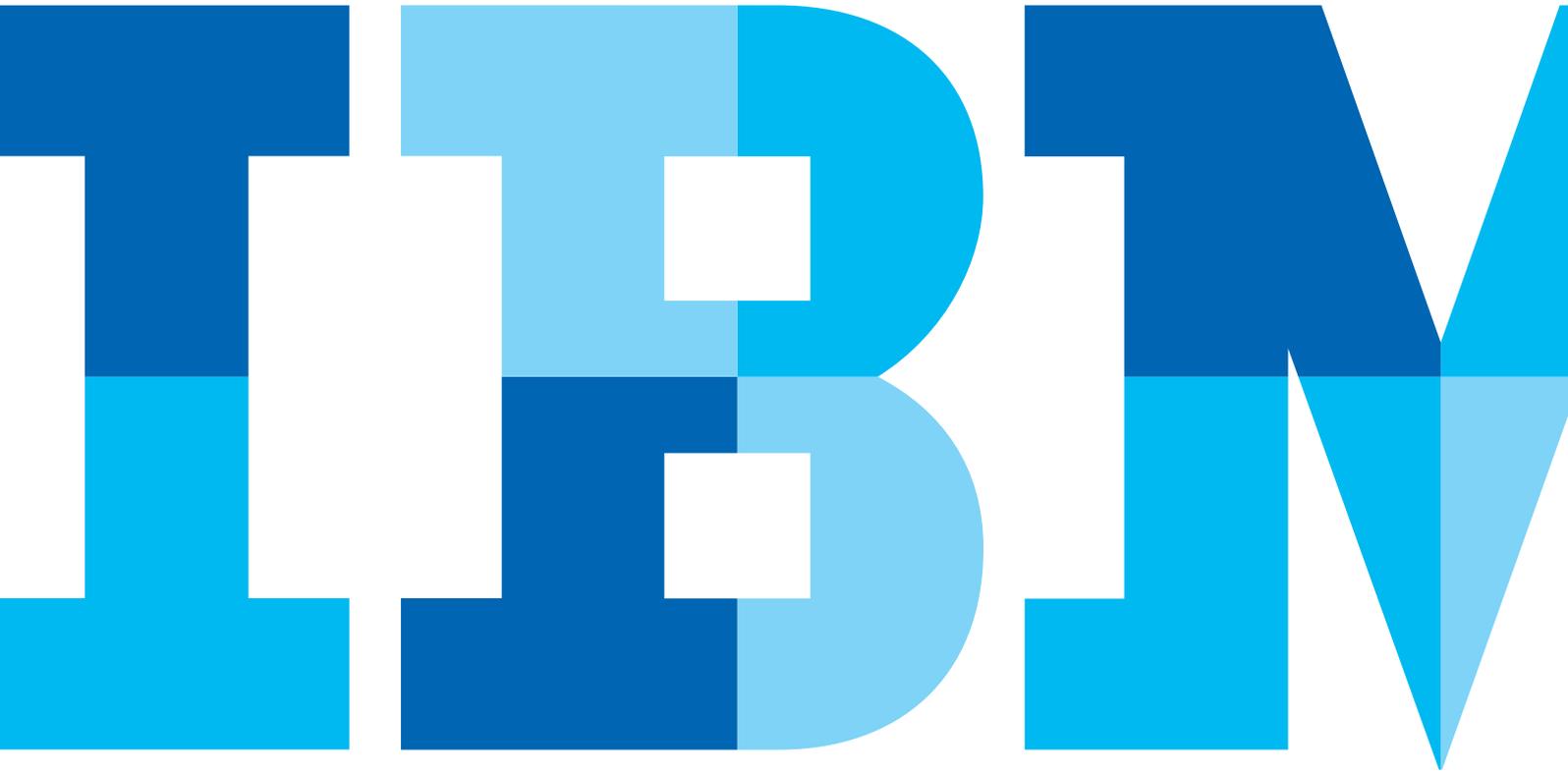


# Optimizing Transaction Systems for Faster Business Insight



## Overview

Many IT organizations are asking themselves how they can deliver more business insight from their transactional data sources to enable smarter, faster decision making. They want to provide their business stakeholders with the actionable information needed to answer the most fundamental questions: “How are we doing?” “Why?” and “What should we be doing?” And they want to do so at the lowest possible cost.

This white paper explores how IT organizations can reach these goals with packaged, self-serve reports using IBM Cognos Analytic Applications, which consist of finance, workforce, supply chain and customer applications. More specifically, it examines how this application portfolio’s underlying technology, the Adaptive Application Framework, ensures continuously relevant reporting content, helps organizations respond to business change more effectively, and meets user requirements faster and at less cost, thanks to the applications’ superior manageability and lifecycle sustainability.

## The Challenge: Application Manageability and Sustainability

IT departments are under increasing pressure to meet the business demands of a dynamic economy by turning transactional data into actionable insight. They are facing these pressures in an environment of uncertainty, rapid change, and—of particular concern to IT professionals—steadily increasing data volumes. The pace of business change has created a need for a more adaptable application model, one that responds to change quickly, requires less work and less rework, and offers reporting and analysis driven not by the software vendor, but by the organization’s own competitive requirements and imperatives.

But meeting these challenges has proven difficult for traditional ERP vendors.

Consider these facts, based on the analysis of business requirement costs<sup>1</sup>:

- 30% of all project costs typically involve rework—with requirements mistakes accounting for the bulk of these costs.
- 49% of projects suffer budget overruns, and 62% fail to meet their schedules.
- Requirement activities affect 40% of a project’s effort, causing delay and redundant activities that consume up to 10% of the budget.

As a result, a six-month delay can cost companies up to 30% of ROI over a five-year period. The reason? The traditional model for managing applications is not suited to today’s business environment.

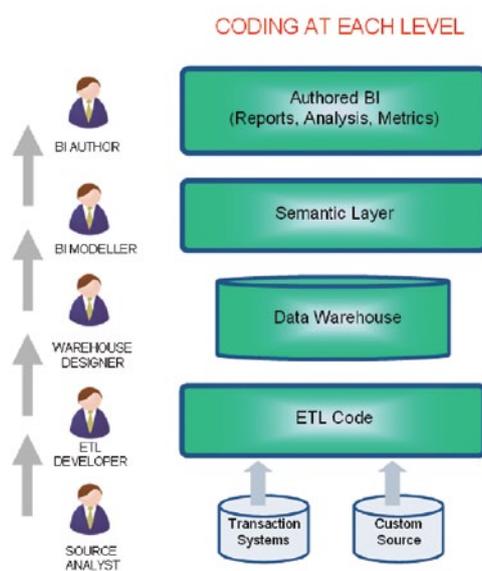
Organizations are confronted with fundamental choices in their approach to analytic applications. They can build their own. But there is a significantly high cost in meeting and maintaining the requirements for this kind of custom solution, never mind the in-house expertise needed to build it. They can buy applications from a traditional ERP vendor. But here too, there are challenges in reporting off of these solutions, which often have complex reporting and fragmented environments that require extensive coding through multiple touch points.

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*IT departments become bogged down ... in building and maintaining data warehouses that often have a high project failure rate, can cost several million dollars, and have lengthy business requirements with complex, fragmented fulfillment processes.*

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Simply put, this traditional approach is data-centric rather than business-centric. It requires costly, time-consuming processes involving the skills of several different IT professionals. Making report changes often takes a source analyst, an ETL developer, a warehouse designer or database administrator, a BI metadata modeler, and a BI report author. And more often than not, IT departments are forced to rely on ad hoc reporting to create relevant and timely reports, in spite of having limited domain expertise in the end-user business areas, such as HR, finance, procurement or sales.



Changing reports using the traditional, data-centric method requires coding—and the involvement of IT staff—at multiple levels.

The result is that IT departments become bogged down in managing a huge volume of information, answering disconnected, ad hoc reporting requests, and building and maintaining data warehouses that often have a high project failure rate, can cost several million dollars, and have lengthy business requirements with complex, fragmented fulfillment processes. In addition, the process can involve multiple technologies that are not well-integrated, requiring extensive manual customization that is time-consuming, costly and mistake-prone.

### A Sea Change for CIOs

Dealing with this myriad of factors is more than simply a technical Rubik's cube for BI modelers and technical professionals. CIOs are struggling with the business implications of managing their application environments and IT budgets.

A study of more than 2,500 CIOs worldwide, conducted in 2009 by the Institute of Business Value, said that CIOs recognize an increasing need to transform information into a “strategic asset.” The study contrasted CIOs in “high-growth” organizations with those in “low-growth” organizations and found that the distinguishing factor was that “high-growth” CIOs were those who were able to link their IT strategy to their organization’s overall business strategy.

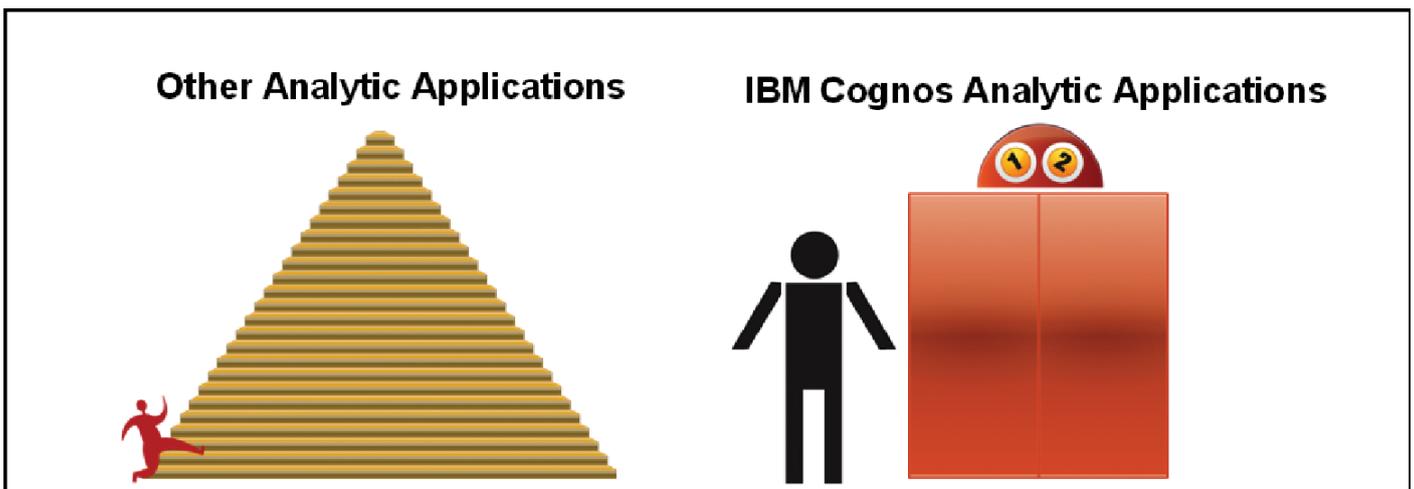
Seventy-four percent of CIOs expect their end-users to explore new channels of information in the next five years, while 66% anticipate much greater levels of integration and transparency. This means that IT executives and their staffs need to strip away the complexity, cost and confusion of managing applications. It means that they need a consistent, more cost-effective approach to their application strategy—one that demands greater manageability and sustainability of their investment in order to turn the growing volume of transactional and other forms of data into a strategic competitive asset.

### **Analytic Applications – A New Approach**

In general, analytic applications consist of packaged or ready-made reporting and analysis tools that provide actionable insight into specific domains or business problems to help organizations improve performance. Analytic applications have a defined method of extracting data, a data model for analysis and a collection of reports that can be accessed by the end user. Typical business analytics applications include analysis for customer, workforce, supply chain and finance domains.

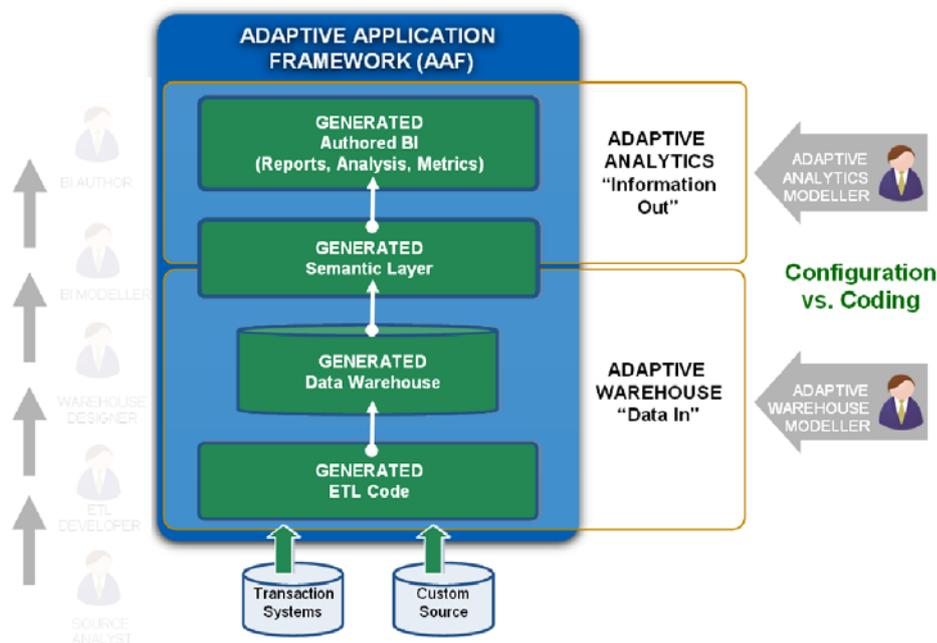
But the traditional application management model – of distinct, siloed management processes – has become too complex and costly, particularly for new business requirements. The alternative to the traditional, code-based, data-centric approach can be found in IBM Cognos Analytic Applications. They deliver reporting and analytics using an application management model called the Adaptive Analytic Framework. This model provides users with insight into their performance far more quickly and cost-effectively than if they were to build an application themselves or use another vendor’s packaged application.

Here’s how the framework works. First and foremost, the IBM Cognos solution is grounded in a business-centric approach that allows users to modify their reporting and analysis using a drag-and-drop interface. It differs from the traditional approach in that changes can be configured at the metadata layer instead of through lines of code. This significantly reduces the customization, interpreting and coding involved in making report changes for new business requirements—a distinct advantage for managing and sustaining the application’s value and reporting content over its lifecycle.



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Code-based applications require multiple steps to change a report. With IBM Cognos Analytic Applications, it's 24 times faster.



The Adaptive Application Framework streamlines the process of making report changes, freeing IT staff for more value-added work.

Within the framework itself, data can be drawn from multiple sources, including transactional data sources, SaaS, and others. This is fed into a data warehouse, and the solution then synchronizes the extraction procedures and changes to the ETL code, automatically generating these changes within the warehouse itself and at the semantic layer. This means less work for IT and faster insights for stakeholders in the domain-specific areas that the applications provide analysis for: finance, workforce, sales and procurement. In fact, with IBM Cognos Analytic Applications, it's possible to create a report, on average, 24 times faster than using the traditional toolset from a large ERP vendor. And this can be done because the Adaptive Application Framework has three unique application management model attributes:

## Configuration

The framework ensures continuously relevant reporting content and enables users to make changes to business rules, data attributes and sources. It eliminates much of the coding, customizing and interpreting of data, which:

- Reduces manual rework with drag-and-drop configuration that maps new or modified reporting information to new or existing data sources automatically—including easily handling the flex fields of other vendors.
- Meets new reporting requests quickly by configuring and validating reports before they are published to end users.
- Improves ROI by continuously creating new reporting and analysis options to meet the ever-changing business requirements of your organization.

## Synchronization

The solution automatically synchronizes the generation of the application's ETL, data repository, semantic layer and reporting layer from multiple sources. Traditionally this was a manually intensive process that required specific coding changes to each of the different layers. But the streamlined IBM Cognos process:

- Automatically synchronizes component changes to generate scripts to the data warehouse, the ETL code and the BI semantic layer, making the attribute available for new reports.
- Requires only two interfaces to synch changes from source to insight in the application.
- Improves ROI by boosting efficiency in meeting business requirements and making reporting changes.

## Extensibility

The ability to extend the model for analysis of other areas of the business provides a more integrated and expanded view of performance. Users can combine a robust range of measures and dimensions, or simply create new ones to extend the business model for a cross-domain, cross-departmental view of overall performance. For example, you can combine information on procurement and accounts payable to get a financial perspective on your procurement decisions. Or, you could learn where your sales are most profitable by channel, customer or product, and then determine which dimensions would be the most useful to share with others in finance, workforce, or procurement.

You simply can't do this with traditional applications, because each domain area has its own complex application management model, making it costly to gain insight beyond what's prescribed by the vendor. The framework lets you:

- Create cross-departmental insight using existing business models instead of setting up a silo of information that must be manually integrated into your existing reporting environment.
- Choose from an extensive library of measures and dimensions defined in the metadata, or create new ones, through a single touch point that can access multiple data sources.
- Meet corporate reporting requirements quickly and cost-effectively with a configurable drag-and-drop interface that uses a single model for application management.

As a result, precious IT resources in the form of the analysts, developers, and administrators mentioned above, can be redeployed to tasks that truly require their specialized expertise. These highly trained professionals can spend their time more profitably by reducing the backlog of projects that typically burden IT departments and hinder the performance of the entire organization.

The IBM Cognos approach also reduces the long-term cost of maintaining the analytic application and modifying it as the source ERP or transactional system changes. Software-based upgrades are faster and less costly than manual development, helping to lower the total cost of ownership (TCO).

## Domain-Specific Analysis

IBM Cognos Analytic Applications enable organizations to extend analysis deep within a specific domain or line of business, or among different domains, as was mentioned earlier, such as between procurement (from the Supply Chain Performance Procurement Analytics application) and accounts payable (from the Financial Performance Analytics application). This "business centric" approach connects the Analytic Applications to other components of business intelligence and performance management systems via the open, enterprise-

class IBM Cognos 8 platform. It allows drill-down and drill-through analysis, access to multiple data sources, and reporting that can be generated and managed by the business users themselves.

Perhaps the most important difference between the traditional,

IBM Cognos Analytic Applications – Areas of Analysis	
<b>Financial Analytics</b> <ul style="list-style-type: none"> <li>• Ledger</li> <li>• Payables</li> <li>• Receivables</li> <li>• Cash management</li> <li>• Customer/vendor risk</li> </ul>	<b>Sales Analytics</b> <ul style="list-style-type: none"> <li>• Pipeline performance</li> <li>• Sales force performance</li> <li>• Sales segmentation</li> <li>• Customer relations</li> <li>• Pricing and program analytics</li> </ul>
<b>Workforce Analytics</b> <ul style="list-style-type: none"> <li>• Talent development</li> <li>• Talent management</li> <li>• Talent retention</li> <li>• Workforce strength</li> <li>• Compensation</li> </ul>	<b>Procurement Analytics</b> <ul style="list-style-type: none"> <li>• Spend analysis</li> <li>• Vendor analysis</li> <li>• Contract management</li> <li>• Operational efficiency</li> </ul>

code-based approach and the IBM Cognos approach is in its “time to value.” IBM Cognos applications deliver faster time to value thanks to their ability to be configured, synchronized and extended using a robust library of dimensions, metrics and calculations, which can be modified more quickly and cost-effectively. Organizations then have access to multiple points of analysis, multiple permutations and different forms of analysis for a deeper view of departmental or corporate performance.

### Faster Insight, Smarter Decisions

Traditional analytic applications suffer from fundamental shortcomings when it comes to providing insight. In addition to high project costs, there can be serious delays and errors, along with a labor-intensive process that constrains IT departments who are already strapped for resources.

IBM Cognos Analytic Applications, on the other hand, improve the productivity of the IT department. They streamline the processes associated with managing applications and deliver faster time-to-value, extending insight across the corporation and ultimately delivering a lower total cost of ownership.

The ability to deliver faster insight at the point of business impact gives both IT and business stakeholders the power to meet business change head-on, while delivering greater application manageability and sustainability for your organization’s IT investment.



## 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 practices and professional services, organizations of every size can drive the highest IT productivity and deliver better results.

## For more information

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