

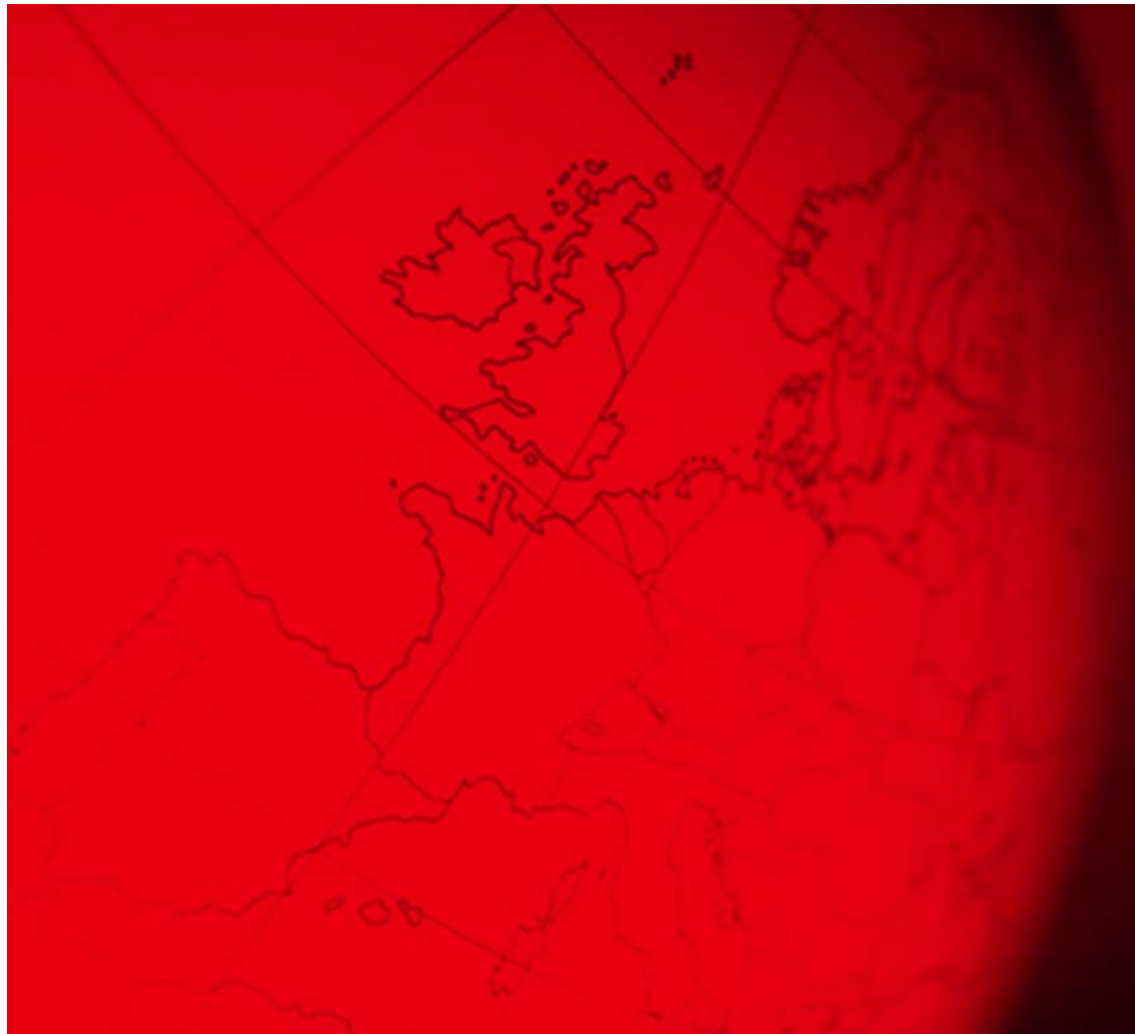
NUCLEUS
RESEARCH

May 2009

Document **J18**

ROI EVALUATION REPORT

IBM COGNOS SOFTWARE



Corporate Headquarters
Nucleus Research Inc.
100 State Street
Boston, MA 02109
Phone: +1 617.720.2000

Nucleus Research Inc.
NucleusResearch.com

THE BOTTOM LINE

Companies that use IBM Cognos software are able to improve productivity, reduce or avoid headcount, reduce financing costs, and increase profitability. These benefits are achieved because when employees can rapidly access and analyze data in consistent ways, they are better able to make business changes that both lower costs and increase revenues.

IBM Cognos software helps companies make better use of their data when performing tasks related to reporting, financial statements, budgeting, and analysis. The product offering includes:

- IBM Cognos 8 BI, which offers reporting, analysis, dashboard, and scorecard functionality for monitoring performance, analyzing trends, and evaluating operational or financial results. The application also offers tools for modeling how data in a business intelligence (BI) or performance management (PM) environment will be maintained, governed, and shared.
- IBM Cognos TM1, which is a performance management tool that enables companies to consolidate, view, edit, and analyze large volumes of data on a real-time basis.
- IBM Cognos Now, which is an operational BI solution that continuously monitors key performance indicators and line-of-business operational metrics.
- Department- and vertical-specific PM tools, which are for tasks related to workforce analytics, financial performance analysis, and credit risk management.
- IBM Cognos 8 Planning, which provides planning, budgeting, and forecasting.

THE CHALLENGE

Although organizations typically find it easy to accumulate data, it often remains unusable or unavailable to the decision makers who need it. Some of the barriers to better use of data include:

- Cost. Organizations often balk at the cost of strategic investments necessary to make data usable, such as master data management and tools for creating standardized reports, scorecards, and dashboards.
- Ad-hoc tools. In the absence of automation, people create their own reporting and analysis tools — typically in Excel — which leads to various versions of the truth and different ways to interpret data, which both reduce productivity.
- Static reports. Reporting systems based on static reports are also costly because they require report builders to continually create new customized report iterations in order to meet end users' evolving needs and preferences.
- Silos. In the absence of a structured way to use and analyze data, and without integration among data sources, employees get at best a limited view of their business, which severely limits their analytical and decision making abilities.

Even when companies adopt applications such as BI or PM, benefits are not always fully realized. Companies that have partially deployed BI or PM should consider extending their deployments in order to maximize benefits in the form of cost savings and productivity improvements.

Identifying the opportunity

Nucleus has found that limitations in reporting and analysis typically reveal themselves in the form of some common behaviors that include:

- **Guesswork.** Managers and employees who make critical operational decisions based on intuition and their own observations typically do so based on a relatively limited body of data which may be inaccurate and focus on the wrong performance indicators.
- **Reconciliation.** In the absence of automation, employees find it difficult to collaborate because they need to first reconcile the various ways in which they analyze and interpret critical data points and key performance indicators.
- **Rote input.** The more budgeting and other finance-related processes force people to manually and repetitively enter data rather than thoughtfully consider their operational and competitive environments, the more automation is required. Additionally, the more rote input processes have, the more error prone they are.

This report identifies the benefits that Nucleus finds companies can achieve by deploying IBM Cognos software. It is meant as a guide for CFOs, managers, or investment committees that are considering an investment in these applications and provides validations of benefits as well as best practices that make users more able to achieve them.

KEY BENEFIT AREAS

Companies that use IBM Cognos software are able to improve productivity, reduce or avoid headcount, reduce financing costs, and increase profitability. These benefits are achieved because when employees can rapidly access and analyze data in consistent ways, they are better able to make business changes that both lower costs and increase revenues.

Improved productivity

IBM Cognos software improves productivity by making it easier for people to locate, identify, and analyze data. Companies that deploy these applications also improve productivity because their managers and business analysts are able to use data to make more efficient use of their workers.

Productivity improvements are most readily achieved for report builders, finance staff, and line of business managers who perform analyses on a regular basis.

Report builders

IBM Cognos software improves the productivity of report builders by both making it easier for them to rapidly build reports and offloading some of their workload to end users. These applications also enable both report builders and end users to create standardized reports, clone them, and build customized reports using highly intuitive interfaces designed for use by people without an IT or report-building background. Because this enables end users — who tend to modify their reports on a continual and iterative basis — to build their own reports, report building staff and developers receive far fewer report requests and become significantly more productive:

- One customer said, *"Because there is so much functionality in IBM Cognos 8.3 BI, and it's wired into SAP, we spend a lot less time building custom reports."*
- Another user that upgraded to IBM Cognos 8 BI said, *"Cognos 8 integrates reporting capabilities with the cube data. So now we build reports from the ground up within Cognos BI framework, and publish to our Web site, all without intervention from developers."*
- A financial institution that deployed IBM Cognos TM1 said, *"To get the level of reporting that I have now with the old system. I would have to hire about two to three people. And these are MBA types, not just report builders."*

Finance staff

IBM Cognos software makes finance and line-of-business staff more productive by replacing budgeting processes that are semi-automated or spreadsheet-based with workflows that involve far fewer budgets and automate the consolidation of budgets up from the smallest business units, rather than relying on managers to accurately create their own consolidating spreadsheets. This means that finance personnel, as well as anyone participating in the annual budget process, spend far less time inputting data, reconciling spreadsheets, and combining statements. Nucleus found that companies readily identified productivity improvements for employees in their finance or accounting departments:

- *"Automating the budgeting and financial close process improved the productivity of my five accountants by about 20 percent."*
- *"I have a headcount of seven in my accounting group, and they are about 15 percent more productive because of the automation of reporting workflows."*

Line-of-business managers

IBM Cognos software makes line-of-business managers more productive by making it easier to locate and analyze data. In addition to providing end-user driven reporting, these applications enable end users to independently monitor or investigate key performance indicators and other factors with a variety of tools including dashboards, alerts, and database queries. Additionally, interactive reporting — which enables users to drill down into data points to investigate underlying drivers — enables people to independently and iteratively explore data while also spending less time on research. End users typically became more productive as a result of these improvements to their workflows:

- *"Now that it's easier to build and use reports, people spend less time hunting for data and manually reconfiguring it or asking IT for follow-on special report requests."*
- *"There are 223 end users consuming data from Cognos. Because they're now doing their own ad-hoc reporting with things like drilling down in interactive reports, they are about 10 percent more productive."*

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

When the scale of benefits is large enough, or when IBM Cognos software is used as a tool for labor analytics, the benefits can go beyond productivity and be achieved in the form of reduced staffing needs.

Reduced staffing needs

IBM Cognos software enables organizations to reduce staffing requirements by both improving the productivity of large teams performing data-related functions and giving line-of-business managers the labor analytics they need to utilize their staff more cost effectively. When managers use BI to achieve productivity improvements for large groups of workers performing similar or identical tasks, companies can reduce costs by laying off workers, redeploying them, or not replacing them as attrition reduces headcount over time. For example, a bank manager with responsibility for staffing at 15 branches could combine demand drivers such as weather and promotional activity with information on the available pool of tellers to reach conclusions that help her both assign the right number of tellers to each branch and utilize the least-cost employees with the required skill sets. Reduced staffing needs such as this are most readily achieved for general workers, but they can also be achieved for business analysts, accountants, and staff dedicated solely to report building:

- *"We laid off five FTEs out in the lines of business; three analysts and two managers."*
- *"We're using analytics to figure out where our investigators are needed and compare this to where they are deployed. If we hadn't done these analyses, we probably would have added 100 investigators to our staff."*

Nucleus finds that when organizations use IBM Cognos software to improve the productivity of its workforce or analyze how it is deployed, staffing needs can be reduced by up to 15 percent.

Reduced purchases

Companies can use IBM Cognos software to reduce the amounts of inventory, accounts receivable, and other assets they purchase and maintain on their balance sheet. Even though companies typically have aging reports for their inventories and accounts receivable, this information is typically underutilized because it is either ignored by managers or is stranded at the business-unit level. However, a company with a BI deployment can create a unified view of the levels of these assets. Senior line-of-business managers or analysts in the department of finance can use such a view to identify assets that are stale or converting to cash too slowly, and then identify the root cause of the problem. In fact, Nucleus finds that IBM Cognos software deployments can be so effective at identifying bloated assets and determining their root cause that this is often one of the first business challenges tackled after the go-live date. Nucleus commonly sees IBM Cognos software used to better control asset levels:

- An IBM Cognos TM1 user that operates gift shops at its resorts said, *"We use TM1 to monitor inventory and identify slow-moving stock. Immediately we reduced inventory by half a million dollars. Now we use it to make sure only this year's models are in inventory, because otherwise the gross margin slips."*
- A company that uses Cognos for budgeting and planning said, *"Cognos enables us to plan production better and identify inventory padding. We've reduced inventory by 700 tons."*

Nucleus finds that IBM Cognos software enables companies to reduce asset levels by up to 15 percent.

Increased profitability

IBM Cognos software enables line-of-business managers to analyze their operating environments and identify changes they can make to increase revenue or reduce costs. Managers and other workers are typically too busy with day-to-day operations to stop and effectively analyze the factors that determine profitability or their trends. For example, call-center center managers with no BI tools are likely to evaluate customer service representatives based on their mean time to resolution even though the real goal of a call center is maximizing customer satisfaction so that customer churn is minimized. Similarly, managers with pricing responsibility typically have little or no meaningful data about customer demand, leaving them to make pricing decisions based on intuition. In fact, Nucleus typically finds that when employees and managers have strong BI tools — especially those with end-user driven functionality that enable iterative and experimental exploration of data — they are able to make day-to-day operational decisions that improve profitability:

- An IBM Cognos TM1 user said, *"In TM1, our front-line managers combine data about current bookings, customer demand, seasonality, and weather so that they can maximize room utilization without hurting margins."*
- A Cognos 8 user at a financial services firm said, *"We use Cognos to identify which customers are more likely to be long term customers, which have investments that are about to mature, and who should be cross sold. So our average revenue per customer is up and our churn is down."*

IBM Cognos software can also be used to achieve operational visibility that protects existing revenues and customer satisfaction levels from external disruptions. When a major manufacturer of IP telephony systems extended its Cognos deployment to overcome a critical disruption in its value chain, one of its managers said, *"By integrating Cognos with SAP, we were able to deliver on \$40 million to \$50 million of quarterly sales that was at risk because of this contract manufacturer problem. We also would have lost services equal to 30 percent of these hardware sales. Ten percent of his revenue probably would have been lost permanently."*

BEST PRACTICES

For an organization to be successful with BI and PM, it needs to make sure that both the applications and the underlying data accommodate end-user needs and preferences. It's also important to achieve a mandate early on in the deployment, and to scale the costs with the benefits. Nucleus found that companies were most successful when they kept this in mind and followed a number of best practices.

Right size the deployment

Too often, companies choose not to adopt BI or PM because they think it will be too expensive or because a vendor's proposal makes it look cost prohibitive. One way around this is to match the level of software purchases to the number of users and the robustness of the functionality each will be using. IBM Cognos software helps its customers follow this best practice with pricing that both increases with the scope of the deployment and takes into account the fact that users will require a broad range of functionality. Pricing is both role and task based. Roles consist of administrator, author, and consumer. The tasks consist of reporting, analysis, and score carding. Companies can also purchase functionality on a per-user or per-CPU

basis. Champions of BI or PM deployments who are looking to ensure that their proposed deployment will generate a sufficient ROI should consider this pricing structure as a way to not only minimize costs, but also address the concerns of CFOs or investment committees who evaluate potential deployments.

Drive a mandate with early success

Creating valuable wins early on is critical to the success of a BI or PM initiative. BI and PM generate the most returns the more broadly they are deployed and adopted, so it's helpful if the CFO's office or investment committee understands the value of these applications when it comes time for investments in new software seats or training. Early projects should address a broken workflow or management blind spot that is easily fixed with automation of reporting or analysis. The keys here are to select something small in scope, which is readily fixed, has little operational risk, and will catch the eye of senior management. For example, one company used the planning functionality within IBM Cognos 8 BI to improve the budgeting process in one subsidiary while maintaining the old workflows in parallel. Once a group of finance users were enthusiastic about how much more rapidly they completed their budget work, senior finance personnel viewed these tools more favorably.

Focus on end-user needs

Deployment teams should collaborate with end users throughout the project — and even past the go-live date — because the more end users adopt a deployed IBM Cognos application, the higher the ROI on the deployment will be. Project teams should, as early in the deployment as possible, interview end users in order to have detailed information about data-related workflows and analyses that will be improved by the deployment. Nucleus finds that companies are most successful when this is done with a combination of face-to-face interviews, focus groups, and surveys.

Even after business requirements have been identified and development is underway, deployment teams should repeatedly test the tools and applications under development with end users in order to maximize adoption. Iterative end-user testing is important because end users often have limited knowledge of BI and PM capabilities when their business requirements are being identified at the outset of a deployment. As a result, testing is likely to give end users a better understanding of the capabilities of these tools, enabling them to refine their business requirements in ways that will help the deployment team deliver more functionality that improves productivity or decision making ability.

Be prepared to spend time on the data

Automating reporting and analysis typically relies on large amounts of data from different applications, databases, and entities within a company. Because of the potential scale and complexity of working with data in this way, deployment teams should both analyze the data at the outset, and find ways to mitigate any potential risk that data will throw the project off track. Deployment teams should plan to build the data cubes that IBM Cognos software will be accessing based on both the analysis or reporting needs of end users and the workflow challenges to be overcome. This will enable the right data to be stored, and in formats that provide the proper reporting and query results.

Deployment teams should also anticipate how they will get around integration challenges. If a deployment will be migrating or integrating data that is highly diverse, then many one-to-one mappings will be necessary. Deployment teams should avoid creating custom code development for this, because this is extremely labor intensive and costly. It also makes a deployment more costly to maintain. Teams should instead utilize applications which automate mappings based on the data sources and destinations. Automating the creation of these mappings means that data integration and migration — the riskiest part of a deployment — is less likely to disrupt a project and this portion of the platform will be less costly to maintain over its lifetime.

CONCLUSION

CFOs and other managers in charge of utilizing IT budgets should consider deploying IBM Cognos software to streamline their reporting, budgeting, and analysis workflows. When employees involved with these tasks are supported with automation, their productivity improves, and they become better able to independently perform research and analysis that leads to profitability-improving operational changes. When undertaking such a deployment, project champions and their teams should be prepared to use proof-of-concept successes to drive a mandate and keep end users involved throughout the deployment. They should also analyze the data demands of their deployment before it begins, and be prepared to consider automating tasks related to data transfer, integration, migration, and quality control.

Nucleus Research is a global provider of investigative technology research and advisory services. Building on its unique ROI case study approach, for nearly a decade Nucleus Research has delivered insight and analysis on the true value of technology and strategies for maximizing current investments and exploiting new technology opportunities. For more information or a list of services, visit NucleusResearch.com, call +1-617-720-2000, or e-mail info@NucleusResearch.com.