RESEARCH NOTE
IBM COGNOS 10

THE BOTTOM LINE

By giving users access to more data, types of data, and capabilities, IBM Cognos 10 enables people to make better decisions when they are looking for ways to improve operations, cut costs, or increase revenues. The application also improves end user productivity.

IBM's recently announced Cognos 10 gives decision makers broader access to data in a more interactive and intuitive analytical workspace. It also leverages better caching and query management to deliver results faster. Key characteristics users are likely to find attractive include:

- Broader access to data. Without the advanced report writer capabilities they needed before, users can create new reports and dashboards from existing reports, access additional data sources, and even add and model external data from within a single analytical workspace.

- Broader analytical capabilities. Cognos 10 includes business intelligence, planning, reporting, performance management, statistical reporting functionality, and data visualization capabilities in one application so users can rapidly analyze data as needed.

- Greater interactivity. Users can independently use interactive reports to create what-if analyses for planning purposes. These assets can also be modified and exchanged so that people can help each other fine tune their analyses and plans.

IBM's strategy with IBM Cognos 10 is clearly an evolution of the integration of Cognos, SPSS reporting assets, and other analytics acquisitions toward the goal of analytics for every user: giving people more ways to examine and share data and the ability to analyze it faster, so they perform analyses of a more thoughtful nature when planning, forecasting, or looking for ways to increase profitability.

THE CHALLENGE

Many companies have adopted BI and PM as a way to give employees access to company data so that people can make better decisions. Although Nucleus has analyzed many high-ROI deployments of these applications, most offerings actually place limitations on how much analysis people can do. Finance users can typically access only financial data and view it with a particular set of graphical depictions and reports. Users in other departments have access to different sets of data and capabilities. Nucleus finds that this often falls short of the broader goals of

analytics, because people don't have access to all the data and analytical capabilities they need to support a particular decision.

IBM's recently launched IBM Cognos 10 accommodates the fact that when it comes to BI and PM, the lines between roles, capabilities, and data sources are fuzzy at best. It follows on the IBM Cognos 8 platform, which gave people more end-user driven functionality and made them less reliant on their IT departments or report builders. IBM Cognos takes this democratization of BI and PM a step further by lowering barriers between users, their designated roles, the data they can access, and the capabilities they can use.

To understand the incremental value Cognos users can get from moving to Cognos 10, and more broadly, the value driven by a more integrated approach to analytics and data sources, Nucleus analyzed the experiences of a number of Cognos customers who took part in the IBM Cognos 10 beta program.

KEY BENEFITS

Nucleus finds that companies can use IBM Cognos 10 to improve productivity, reduce report building costs, improve profitability, and, in some cases, avoid other software and supporting technology costs.

Improved productivity

IBM Cognos 10 improves productivity by providing users access to more data and more ways to assemble the reporting assets they require, including the ability to perform iterative what-if analyses for planning purposes. Productivity also improves because a new workspace called Business Insight combines into one platform the query, reporting, and analysis assets which had been in separate "studios" in IBM Cognos 8.

Business Insight changes the BI and PM user experiences by enabling people to rapidly drag and drop items on their analytical workspace, and continuously change the data sets they are examining and how they are analyzed. What's different is that a user who is planning her business unit's next fiscal quarter can surf from a stacked bar chart depicting revenue by product to a heat map depicting price sensitivity, and then sort or filter a standardized report on manufacturing capacity in local markets, all without requesting a report or contacting someone in another department who might be the keeper of one of the underlying data sources. Users can also create their own reports or analytical assets in a sandbox area so that they can experiment with data or create new assets without changing the governed and trusted sources.

Time savings from the new platform are valuable because they enable employees to perform more analyses of a more thoughtful nature in the limited time that they have available for planning and analysis. It also means they spend less time on operational tasks related to analysis, such as requesting reports or e-mailing colleagues who can help locate data:

- *"Our users flow from one ad-hoc analysis to another based on their exploration of data for whatever they're doing. Because things like dragging and dropping and chart building move almost as fast as decision making in their head, they're able to accomplish about 20 to 30 percent more work in a given period of time."*

- *"We publish data for subscription-paying customers. Completing projects end to end without going to non-IBM Cognos tools for visualization or reports is taking about 20 percent off of our project cycle times."*

Reduced report building costs

By giving people access to more data and more ways to perform what-if analyses and planning, IBM Cognos 10 further reduces the workloads for report builders and IT departments. IBM Cognos 8 went a long way in moving asset creation to the user's desktop from the IT department or report building staff. IBM Cognos 10 goes further because people can create and share more types of analyses independently without having to involve IT. Improvements to user interfaces and speed also make it easier for people to create assets on their own. One user is in a position to reassign report building staff and said, *"In Cognos 8, people had to have the Report Studio module in order to build their own reports. This has been replaced by a more friendly user interface in IBM Cognos 10. And people can merge assets from the trusted data sources with data from their PC. Beta users create more assets on their own; they give 30 to 40 percent fewer requests to report builders."*

Increased profitability

IBM Cognos 10 enables users to explore data and perform planning in ways that are ad-hoc, independent, and interactive. When people combine this ability to freely explore data with their entrepreneurial initiative, they typically discover opportunities to increase their organization's revenues or reduce costs. Using IBM Cognos 10, a product manager could independently find a way to increase profits after examining customers' price sensitivities, product gross margins, and plant capacity data, all on one desktop. Because of the interactivity of Business Insight assets, the analyses that led to this strategy could then be shared with key decision makers and other managers, so that the product manager could refine his plans and then operationalize them.

Nucleus observed these capabilities in a proof-of-concept deployment of the application. They were also validated by users at beta sites:

- *"Business users will be able to perform advanced filtering on segments of customers or individual customers to see if retention is slipping anywhere. If it is we'll take quick actions such as discounting to reverse that trend."*
- *"IBM Cognos 10 makes people a lot more productive, but we're not cutting any staff. We want people using this visibility and decision making capability to do things like manage suppliers for lower costs and adjust product and customer mixes so that margins increase."*
- *"Because there are fewer bold lines between the type of user a person is, and the data and tools they can access, we'll use IBM Cognos 10 to get them to actionable data faster when doing things like inventory management, market basket analysis, or pricing work."*

Reduced software costs

Increased functionality in IBM Cognos 10 enables companies to avoid investments in complementary applications. Capabilities in IBM Cognos 10 that were unavailable in IBM Cognos 8 include analytical reporting functionality from IBM's SPSS acquisition and highly granular and interactive visualization capabilities which were available only from point solution vendors such as Tibco Spotfire. Bundling

BI, PM, analytics, and powerful visualization capabilities into one application means some customers will be able to reduce expenditures for other applications. One beta user will cancel at least 100 seats of Tibco Spotfire and said, "*Currently, users experiment and explore data in Spotfire which we can't use as a delivery tool. Then they start all over again in IBM Cognos 8 to create the report we'll sell. With IBM Cognos 10, the entire process, from authoring to fine tuning to publishing extremely powerful reports, will happen in IBM Cognos 10.*" Other users can avoid additional investments in SAS because of analytical reporting functionality available in IBM Cognos 10.

Performance improvements in IBM Cognos 10 enable companies to make better use of their underlying data-related assets and avoid costly upgrades to them. Over the lifetime of a deployment, system performance often degrades as a result of growing user populations or increasingly complex usage by super users. Overcoming scale challenges often requires expanding or cloning data cubes, or investing in costly upgrades to data storage applications such as Teradata. IBM Cognos 10 has better data caching and improved query management capabilities that can reverse performance declines.

A retailer that uses new data query analyzer tool to ensure high levels of system performance said, "*We can make sure that queries will hit the cubes in an efficient way. We can't have complex one-off queries slowing regular users down when they are doing things like inventory management or market-basket analysis.*" By using IBM Cognos 10 to reverse performance declines brought on by growing demands on the system, this beta user is in a position to avoid a multi-million dollar upgrade to its Teradata assets.

CONCLUSION

Deciding whether or not to invest in an upgrade can be a difficult financial decision. Nucleus found that in the case of IBM Cognos 10, it is not an upgrade with incremental benefits, but rather one that can significantly improve users' ability to make decisions. Where many BI and PM deployments give users limited capabilities and data, enabling decision making of a largely tactical nature, IBM Cognos 10 enables people to make more highly researched decisions of a strategic nature. The usability and flexibility of Cognos 10, coupled with performance-improving enhancements, can move users a step further from quarterly planning based on limited historical modeling to ongoing strategic planning based on a broader set of models, capabilities, and information.