

MotioCI Case Study

IBM Leverages Motio to Save Money and Improve Satisfaction in World's Largest Cognos Environment

IBM Business Analytics Center of Competency and Blue Insight

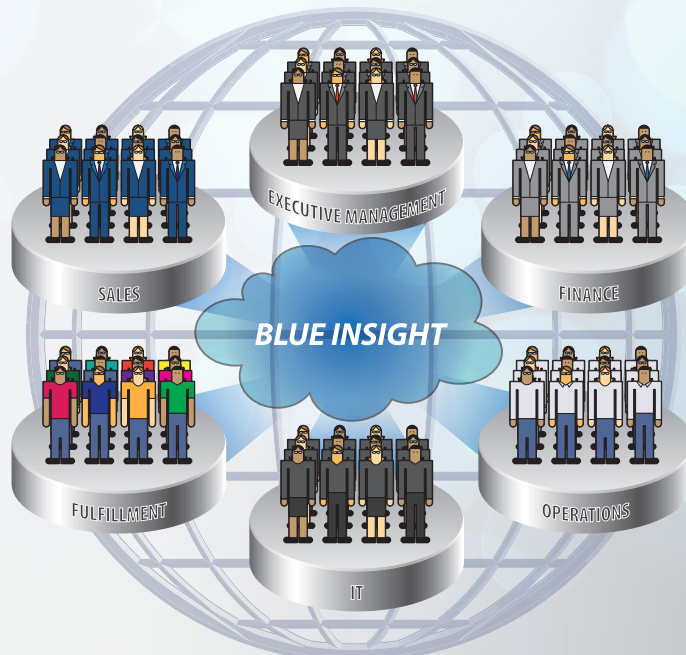
The IBM Business Analytics Center of Competency (BACC) manages IBM's enterprise-wide business analytics environment and standardizes processes which guide adopters to efficiently deliver business analytics solutions.

Since 2009, IBM has been making headway on its internal business analytics (BA) strategic roadmap, centralizing BA infrastructure, reducing implementation and operational costs, and evolving streamlined BA processes and practices. IBM established the BACC at the onset of this roadmap to manage, implement and service its business analytics game plan. The BACC empowers hundreds of thousands of IBMers by providing business analytics offerings, services, education hosting and internal support.

With the help of Motio, IBM BACC is well on its way to achieving a goal of \$25 Million in savings over the 5-year span of this plan, while also improving the capabilities and satisfaction of hundreds of thousands of internal IBM Cognos users.

Since the onset of this plan, the IBM BACC has consolidated 390 departmental BI installations into a single production Cognos platform hosted on a private analytics cloud named, "Blue Insight."²

Built upon the highly scalable System z platform, Blue Insight is the world's largest private cloud computing environment for business intelligence and analytics. Blue Insight empowers IBMers around the world with the information and business insight to make smarter decisions.



Industry

Technology

About Blue Insight

Blue Insight is IBM's strategic analytics platform, designed to empower hundreds of thousands of IBM employees with access to sophisticated business intelligence and predictive analytics via a cost-effective private cloud architecture.¹

Key Benefits

Reduced Cognos administration and support costs

Achieved a balance between autonomy and governance

Enabled self-service BI in a governed manner

Improved development processes by enabling Agile BI methods

Recovered \$155,000 of initial investment within one year



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Administration Challenges

By mid-2013, the population of Blue Insight users had grown to include more than 200 globally diverse business teams comprised of over 4,000 Cognos developers, 5,000 testers, and over 400,000 named users. Blue Insight was hosting over 30,000 Cognos report specs, drawing data from over 600 source systems, and executing an average of 1.2 Million reports each month.

As the adoption rate of the Blue Insight platform continued to accelerate, the BACC operations team found itself spending more and more time servicing the administrative requests from these Cognos business teams.

One example of a frequent request involved the promotion of BA content between Cognos environments. The Blue Insight platform provides three Cognos instances targeted at different stages of the BA lifecycle: Development, Test and Production. For each business team, BA content is authored by developers in the Development environment, and then promoted into the Testing environment, where it can be verified by quality assurance professionals. Finally, BA content which has passed the necessary tests gets promoted from the Testing environment into the live Production environment, where it can be consumed by end users.

For business teams utilizing the Blue Insight platform, each time BA content was ready to be promoted between Cognos environments, a service request ticket would be created with the details of the request. The ticket would then be assigned to a member of the BACC operations team, who would manually promote the designated content, verify its configuration in the target environment, and then close the ticket.

“Before the introduction of MotioCI, the promotions that we were doing from Development, Test, and Production were all done manually,” said Edgar Enciso, Project Manager of BACC Support. “We would gather the designated reports or packages, export them from the source environment and then import them into the target environment. We would then need to verify the settings such as permissions on the promoted content. At times we were doing 600 report promotions and 300 package promotions each month.”

Other frequent administrative requests: 1) Data recovery - the restoration of accidentally deleted content, 2) Identity management - the provisioning or synchronization of baseline permissions, 3) Issue resolution - helping with root cause analysis of defects in the authored BA content, 4) Security - maintenance of security groups across business teams and environments, etc.

Challenges – The Need for Empowerment AND Governance

Some of the impediments to adoption of the Blue Insight platform were political rather than technical. Typically with any consolidation effort, teams moving from departmentally controlled BI installations into a centrally managed environment sometimes fear a loss of autonomy. Conversely, the BACC team responsible for managing Blue Insight needed to enforce a certain level of governance in order to keep the different teams from stepping on one another in the common environment.

BACC Challenges

Frequent administrative requests for the BACC support team involved the promotion of content between Cognos environments, the restoration of accidentally deleted content, the provisioning or synchronization of baseline permissions, helping with root cause analysis of defects in the authored BA content, and maintenance of security groups across teams.

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Making the vision of Blue Insight a reality involved the usual technical and process issues of centralization, but also social and philosophical ones: How could the Blue Insight team convince users that a centralized private cloud solution was the right way forward for IBM's business to achieve its 2015 roadmap? ¹

The BACC team is responsible for the health and administration of the shared BA platform, but each business team hosted on the platform is responsible for authoring, testing and maintaining its own BA content. One of the key challenges in this consolidation effort has been to strike the proper balance between empowering each business team to act in a creative and autonomous way and still enforcing the proper levels of governance and accountability to ensure that different groups do not impact one another in the centralized Cognos environment.

Enter Motio

Faced with administering the largest business analytics environment in the world for a diverse set of 200 geographically distributed business teams, the IBM BACC began to search for solutions which could automate many day-to-day Cognos administrative tasks, provide increased levels of self-service, and still maintain the desired level of governance and accountability.

After an in-depth review of commercial options for automating version control and content deployment in Cognos environments, the IBM BACC selected MotioCI. The MotioCI rollout to the Blue Insight platform was scheduled to be implemented concurrently with an upgrade to Cognos 10.1.1, an effort which began in mid-2012.

As the BACC has gradually transitioned each business team from Cognos 8.4 to Cognos 10.1.1, the transitioned team has also gained access to MotioCI capabilities. In the first year, the BACC operations team used MotioCI to carry out approximately 60% of the content promotions and have begun enabling the business teams to utilize MotioCI for self-service promotion.

Governed Self-service Cognos Deployment

One of the most immediate paybacks for onboarding each Blue Insight business team to MotioCI has been the amount of work required for promoting BA content between the Development, Test & Production Cognos environments. Using the content promotion capabilities in MotioCI, the BACC has been able to evolve towards a "self-service" model for BA content promotion.

In contrast to the previous approach, which involved the creation of tickets for the BACC support team to manage content promotion, entitled users in each business team are now empowered to carry out these content promotions themselves. From a governance perspective, there is an entire level of accountability, control and auditing layered around each content promotion.

"We have a number of features with Motio that are central to the promotion process," said David Kelly, IBM BACC Project Manager. "We can now provide the opportunity for each project to manage its own content promotions."

Finding a Solution

Faced with administering the largest business analytics environment in the world for a diverse set of 200 geographically distributed business teams, the IBM BACC team began to search for solutions which could automate many day-to-day Cognos administrative tasks, provide increased levels of self-service, and still maintain the desired level of governance and accountability.



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This transition has drastically reduced promotion turnaround times, avoided potential bottlenecks, and freed up valuable man hours for the BACC team.

“We are saving a great deal of time using Motio for promotions,” said Enciso.

Based on its initial experience with the MotioCI promotion capabilities alone, IBM has calculated it will recover significant savings within the first year. The BACC aims to transition the remainder of their business teams to this self-service model in the coming year, further magnifying its return on investment.

“We calculated an annual number based on experience thus far and determined that MotioCI should give us savings of about \$155,000 over the course of a year,” said Meleisa Holek, Manager, IBM Business Analytics Enablement Team. “We hope to be able to expand our savings upwards as we transition all of our business teams to the self-service model.”

Cognos Content Deployment with MotioCI

The screenshot shows a web interface for deployment history. At the top, it says "Deployment History" and "Deployment at 09/11/13 01:20 PM". Below this is a "Deployment Summary" section with the following details:

- Type: Promotion
- Description: September Release
- Source: Development
- Target: Integration and Testing
- Property Set: Default
- User: roger
- Undo: [Undo Deployment](#)
- Status: Executed

Below the summary is a section titled "Deployed Items (6)" which contains a table with the following data:

Path ^	Comment in Source Instance	Result	Actions
/Public Folders/IBM Security Services	Granted query users access	Changed	
/Public Folders/IBM Security Services/Customer Comparison	Added column customer region	Changed	
/Public Folders/IBM Security Services/Customer Outage Tickets	Changed description	Changed	
/Public Folders/IBM Security Services/Device Specific Activity	Corrected device labels	Changed	
/Public Folders/IBM Security Services/Max Date Info	Updated Title	No Change	
/Public Folders/IBM Security Services/Quiet Devices	Corrected Image references	No Change	

“Using the System z and DB2 technologies, IBM has scaled Cognos to an amazing level. They currently have 1.25 Million Cognos objects (reports, packages, dashboards, etc.) under version control in MotioCI. From a pure technology standpoint, it was exciting to deploy MotioCI into this environment, and particularly gratifying to see the value that the IBM users have realized thus far with version control and promotion.”

—Roger Moore
Product Manager
MotioCI

Version Control for Business Analytics Content

Version control is another aspect of MotioCI which has proven valuable to the Blue Insight Cognos business teams. Having the content and configuration of these massive Cognos environments implicitly versioned any time there is a modification has led to increased awareness and a more self-sufficient model.

Prior to the introduction of MotioCI, the BACC was often brought in to assist various teams with issues such as data recovery, repairing accidentally broken reports or root-cause analysis. Since MotioCI was introduced, the development teams have become far more self-sufficient.



Customer Success Story

"I know of one instance several weeks ago where a set of reports went missing off the development environment and a ticket was submitted for the BACC support team," said Kelly. "We were able to quickly show them how you can just restore the missing reports using MotioCI and their panic was over. It's evidence like that, that we see with version control, that just makes our life easier."

The massive scale of the Blue Insight platform and the extraordinary amount of Cognos content hosted therein has proven to be an exciting challenge for MotioCI.

"Using the System z and DB2 technologies, IBM has scaled Cognos to an amazing level," said Roger Moore, Product Manager of MotioCI. "They currently have 1.25 Million Cognos objects (reports, packages, dashboards, etc.) under version control in MotioCI. From a pure technology standpoint, it was exciting to deploy MotioCI into this environment, and particularly gratifying to see the value that the IBM users have realized thus far with version control and promotion."

The version control capabilities in MotioCI have greatly increased customer satisfaction, have empowered teams with the ability to trace back to when problems were introduced and have enabled users to better manage the development life cycle around projects and across locales.

Aligning with the BACC Strategy of Empowering Blue Insight Business Teams

Having MotioCI in place has also helped support the BACC's case in appealing to IBM teams which have not yet joined the Blue Insight platform.

"One of our battles is that we have these departmental installations that we need to bring into our centralized environment and the fact that we have MotioCI running is definitely a competitive advantage for Blue Insight vs. their departmental installation," said Holek. "These additional capabilities provided by Motio often get people over the hump, who may not have been supportive of moving over at first. Even though we have a CIO mandate that people should be using our environment, we still have to kind of sell people on moving over."

Key factors for the success of the BACC have been the relationships with internal champions in each business team to facilitate the adoption of the centralized approach, and the transition to the "self-service" BI model which allows each team to remain empowered, even while running on the common platform. The BACC provides the infrastructure to allow governed self-service, maximizing the quality of the BI implementation while minimizing the ramp-up time and risk. Cognos and MotioCI together help to provide this balance of centralization and empowerment.

Embracing Agile BI

Like many organizations, IBM has transitioned many of its internal projects to a more agile approach in recent years. Key tenets of this approach include the enablement of rapid deployment of content, a tight feedback loop with end-users, and the avoidance of IT bottlenecks.

"We were searching for a balance between governance of the shared environment and flexibility for each business team. MotioCI has enabled us to strike this balance, and has eased the adoption of our centralized environment. For example, we have a number of features with Motio that are central to the promotion process. We can now provide the opportunity for each project to manage its own content promotions."

—David Kelly
Product Manager
IBM BACC



Customer Success Story

Moving to the “self-service” model has enabled IBM’s own Cognos authors to promote their Cognos content in a controlled and repeatable fashion, all the while keeping their development cycles moving at the brisk pace that they need. By using the self-service capabilities of MotioCI, projects can now manage themselves, allowing the BACC to get out of the development phase of each project and focus on other areas.

“MotioCI has helped us move along the self-service roadmap and we’re growing quite rapidly,” said Kelly. “By the end of this year, most of our projects will be able to do much of the management themselves - from promotions to scheduling to security to whatever they want to do within their space. This will allow the operations team to focus on some of the other service areas we’re looking to expand.”

Three years into its 5-year plan, IBM is continuing to expand upon the agile BI movement internally. Automated testing is one of the next tasks the BACC team will be tackling.

Historically, the testing of Cognos content hosted on IBM’s Blue Insight platform has been an overly manual process, and the BACC is currently investigating approaches for compressing this phase of the development life cycle. In the coming year, the BACC will begin leveraging the automated testing capabilities of MotioCI both to reduce the time required for each testing cycle and to expand their scope. For example, MotioCI will play an instrumental role in reducing the man-hours devoted to manual regression testing after each software upgrade on the Blue Insight platform.

The Results

In the first year, during which only a subset of the capabilities of MotioCI were deployed, IBM has achieved significant return on investment through pure labor savings alone. These savings will continue to grow annually as further capabilities of MotioCI are rolled out. MotioCI has enabled a more agile approach for over 200 global Cognos business teams inside IBM, has eased the adoption of the centralized Business Analytics strategy, has increased customer satisfaction and has improved the development and project management processes authored and championed by IBM’s own Business Analytics Center of Competency.

References

John Boyer, and others, “5 Keys to Business Analytics Program Success” (Boise, ID: MC Press, 2012), 60-62

Julie Severance, Meleisa Holek and David Kelly, “How IBM Uses Business Analytics for Its Own Competitive Advantage” (Session 1734A Presented at IBM Information on Demand, Las Vegas, Nevada, October 21 - 25, 2012)

The Road Ahead

In the coming year, the BACC will begin leveraging the automated testing capabilities of MotioCI both to reduce the time required for each testing cycle and to expand their scope. For example, MotioCI will play an instrumental role in reducing the man-hours devoted to manual regression testing after each software upgrade on the Blue Insight platform.