WHAT'S NEW IN IBM COGNOS BUSINESS INTELLIGENCE V10.1 ONLINE DEMO TRANSCRIPT

TABLE OF CONTENTS

Overview

Outperforming the competition begins with better decision making — at the strategic and operational levels. And better decision making begins with insight derived from analysis based on the most accurate and up-to-date information possible.

Now there's a new way to connect everyone in your organization with the insight, analytics and information they need to make better, faster, smarter decisions: IBM® Cognos® Business Intelligence version 10.1.

It starts with a new, limitless BI workspace that revolutionizes the user experience, enabling you to work the way you think…and powerful collaboration tools that drive collective intelligence to improve decision making across people and departments.

IBM Cognos Business Intelligence delivers actionable insight to all users where they need it, when they need it and how they need it — giving decision-makers the power to quickly see rapidly changing conditions and to make smarter decisions.

It combines a proven BI platform with powerful planning, scenario modeling, real-time monitoring and predictive analysis — everything you need to maximize your competitive advantage.

Experience the IBM Cognos Business Intelligence difference yourself by choosing a user type.

Active Report

Today, businesses need to support an evolving workforce in a highly competitive environment — people who need ready access to business intelligence wherever they are — on the road, at home or at the office. IBM Cognos Active Report delivers interactive dashboards that business users can work with offline, giving them the flexibility they need to access vital information even when they're not connected to a network.

As you're about to see, it's easy for report authors to add Active Report capabilities to an existing report. We'll begin by choosing the controls we want to include in our active report from the list of Insertable Objects. We'll add Data Drop-Down Lists and List controls by dragging them onto our report.

The Active Report interface makes it easy to select report controls and data filters. After we've defined our product filters for the report, we'll use interactive settings to define the connections between our controls. We'll make connections between the data drop-down list and the core products list to specify what options our drop-down displays…and then set the Reaction Behavior of our controls.

As the report author, you can choose to output this report as an MHT file, a type of HTML format. The MHT format is self-contained, meaning that the data and interactivity you need to view and use the report are available from within the report itself — even when you're not connected.

As a result, Active Report delivers endless possibilities to the fast-paced business user or executive.

Now, let's take a look at an interactive dashboard containing a market analysis that includes a geo map, charts and crosstabs. First we dive down to view the details of customer revenue by state. Then we review the distribution of product shipments by year. Notice that as we hover over our pie charts, we can see the details of each value.

We can schedule these reports to run at a specified time and be automatically sent to specific individuals (or even large audiences), so that the right people receive the right data when they need it.

IBM Cognos Active Report extends the reach of business intelligence to a wider audience of enterprise business consumers who may not typically leverage an organization's BI infrastructure. Now all users can realize the benefits of business intelligence through a stand-alone reporting application, enabling them to make smart business decisions at the point of impact.

Analysis for Microsoft Excel

With IBM Cognos Analysis for Microsoft® Excel®, you can take advantage of the spreadsheet functionality you're familiar with to perform flexible, interactive exploration and analysis of multi-dimensional data from IBM Cognos Business Intelligence.

Let's take a look at how you can conduct some basic analysis and create a simple income statement report. We'll begin our analysis of business intelligence data by dragging our Income Statement Account into the cross tab…followed by our time dimension. We'll use Amount as our measure.

Because the data supporting our analysis is multi-dimensional, we can drill down to get more detail. Let's drill down on Cost of Goods Sold and Operating Expenses.

We can quickly remove all row items without data.

A powerful, new time-saving feature allows calculations in Exploration mode so we can add standard business calculations to columns and rows without shifting to Formulas mode. Commonly used, easy-to-understand calculations such as percent change and percent difference increase the speed of analysis. Here we'll perform a simple calculation that adds columns Q1 and Q2.

Basic formatting has also been added to Exploration mode. We can add the title First Half 2010 to our new column…and format the look of our income statement by removing the current borders and patterns. Now we'll apply a new number format to all the cells. And, lastly, we'll underline our column titles.

Now that we've completed the analysis and created our report, we have a number of options available for sharing it with others. We could publish it as an Excel file, which would enable another business analyst on the marketing team to apply additional analysis. Or we could open our analysis as an IBM Cognos BI report, then apply professional report formatting or perform additional BI analysis. In this case, we'll open the report in Business Insight Advanced, an authoring environment that enables us to quickly build or modify existing reports.

By providing the ability to work in a familiar environment, IBM Cognos Analysis for Microsoft Excel enables you to support fast, accurate decision making based on trusted IBM Cognos data.

Business Glossary and Lineage

IBM Cognos Business Intelligence includes seamless integration with IBM InfoSphere™ for quick visibility into the meaning of data. Using an enterprise dictionary of terms and detailed information about the data's origin, you can gain a more complete understanding of your business data and its relevant uses.

Let's begin by analyzing data in the Business Insight workspace. We notice that Asia has a good margin percentage, but has negative growth, and it appears that there is a spike in COGS (Q4). First we need to understand what makes up Gross Margin, and what COGS Q4 really means. To do this, we'll right-click and select Glossary. We now see the definitions for Gross Margin and COGS, which is Cost of Goods Sold.

We need to get more detail on COGS (Q4), so we'll click on it to see how this information is used, as well as who owns the data (so we can follow up if we have any questions). After a closer look, we now understand that the Cost of Goods Sold represents the cost of producing and delivering our product, and we understand how it is calculated. We can also see how this relates to Gross Margin.

Because it's important to determine if we can trust the numbers for % Growth, we'll look at the origins of the data by selecting a cell in the report, right-clicking and then selecting Lineage.

Now we see a Business View showing the origin of the data.

We can also select Technical View to instantly see information about the query, the applied filters and the full path back to the data source (including any joins). Integration with the IBM InfoSphere Metadata workbench means that we can view the full lifecycle of this information — the transformation of the information to date and where this information is used for business intelligence.

IBM Cognos Business Glossary and Lineage enables you to better understand the information that forms the basis of important business decisions through a seamlessly integrated enterprise dictionary. Because you have quick access to the meaning of the data, as well as visibility into the origin of the data, you gain the confidence you need to make accurate, timely decisions.

Business Insight: Enhanced search

IBM Cognos Business Insight supports the constant quest for information with integrated search capabilities built directly into the workspace. This enables you to answer key business questions that impact your company.

You can quickly search through all your trusted Business Intelligence assets to find the artifact that best matches your search. For example, let's look for specific information pertaining to Customer Orders.

First we'll move to the search area and type in key words. Search looks through both the metadata associated with the report and the report content. Our search returns a number of objects.

We can select the Refine Search button to narrow the focus of the search to specific object types or specific data criteria: in this case, report objects. We can drag the object we're interested in into the Business Insight workspace.

A crosstab object appears with conditional formatting and a list of all customers. This object is a bit overwhelming visually. We want to modify the list and add additional data to provide context. We select the Do More button from the on-demand tool bar. This allows us to move seamlessly into a business authoring environment where we can modify the data. Notice that the user interface remains virtually the same. We now have the relevant metadata tree on the right-hand side.

To make this list object more relevant, we add the number of complaints. Then we pare down the list to the Top 5. Now that the data is modified for our needs, we can add it to our Business Insight workspace by pressing the Done button.

IBM Cognos Business Insight delivers a compelling, new user experience with integrated search capabilities that help you to find relevant content quickly and to easily add it to your workspace. This enables you to do more with the objects on your workspace so you can gain better business insights faster than ever.

Business Insight: The new BI workspace

IBM Cognos Business Insight is a revolutionary new BI workspace that helps you to answer key business questions that impact your company. Let's take a look at some of the capabilities this new, unified workspace delivers.

A workspace like the one being shown can be set up by anyone in an organization. Notice that you have the ability to display a number of objects on the workspace, including items such as charts, crosstabs, and Real-time Monitoring.

Looking at the chart, you quickly see values for particular bars related to the revenue by region for key products. If desired, you can move to the crosstab and drill down for more detail. Or you can move to the Real-time Monitoring object and see exactly how many calls came in to the call center at a given time.

Opening the content pane on the right, you can drag in trusted information from wherever it resides within the organization. This includes business intelligence information, TM1 objects, Metric Studio content, Real-time Monitoring objects, and more — everything you need to get a full, end-to-end view of your business. From the content pane, you can select a portion of a report and drag and drop it anywhere on the workspace to create a logical layout for your information.

Focusing on the most critical information is vital to answering questions in a timely manner. On the left are a number of filters that can be used to find the most relevant information. Moving the slider for years allows you to quickly filter the associated objects. A thumbtack display on the object lets you know you are looking at filtered data. This serves as a reminder of what data is being filtered to help prevent any incorrect assumptions.

Now we'll deselect the Alpha product line. Again you'll see that the objects are quickly filtered and the appropriate information is clearly displayed. Because data is of paramount importance to the Business Insight experience, this uncluttered interface allows you to focus on the information you need to make informed decisions.

Hovering over objects reveals an on-demand toolbar display. Now let's change the chart color by simply selecting a few menu options; no content re-authoring is required.

Moving to the Units Ordered crosstab, you can quickly apply a calculation to display the growth rate between 2008 and 2009. And if you need to see information presented in a different format, you can easily change a crosstab to a chart and adjust the content size to fit within your workspace. A few simple modifications are all that's required to see that the trend for successful sales looks very promising.

IBM Cognos Business Insight delivers a compelling, new user experience through a dynamic, highly personalized interface that lets you assemble and explore all types of data for any given timeframe.

Business Insight: What-if analysis

For the best business outcomes, your company needs timely and relevant reports, plans and analyses. Using IBM Cognos Business Insight, you can provide a complete business intelligence environment that includes dynamic "what-if" analysis for developing up-to-date, reliable and personalized scenarios and forecasts.

Imagine that you are a business manager responsible for revenue analysis and you need a composite view of your products' performance worldwide. Looking closely at our products, we see that Nova is lagging behind in global revenue, particularly in Europe and Asia. Nova is a new product with high profit margins, so our goal is to increase its sales.

We have the flexibility to create an unlimited number of "what-if" scenarios and then submit only the optimal solution for increasing sales. We'll start by creating a "what-if" scenario called 10% Promo. First we'll copy our baseline into this scenario using the prior year's actuals.

For this scenario, we'll use Forecast Units by region as our key driver. Our forecast revenue will be automatically calculated based on regional pricing and volume discount globally. Nova's revenue in North America has been excellent, so we want to hold it constant while we focus on increasing revenues in Europe and Asia. The red triangle in the bottom left corner of the cells identifies data that remains constant.

Our promotions will be targeted in Asia and Europe, so let's increase our forecast units by 7 percent in Asia by typing a simple shortcut of Inc7. We instantly see the impact of these changes on revenue through the color changes in the cells.

Looking at the total 2011 Forecast Revenue for Asia, we are concerned this scenario may be too aggressive. To address this we'll use the Reset Data option to undo the increase and revert to our original plan. Instead of 7 percent, we'll increase Asia's revenues by 5 percent.

Now let's turn our attention to Europe. Because we have stronger distribution channels in Europe, we can be a bit more aggressive and increase our Forecasted Units by 7 percent.

A quick review of our total regional 2011 Forecasted Revenue shows that it is in fact a reasonable goal. Based on this analysis, we commit the 10 percent increase scenario. The workspace is immediately updated and we can start monitoring product performance relative to the updated plan.

IBM Cognos Business Insight provides the ability to monitor, analyze and plan for future demand through a dynamic, highly personalized interface. Using "what-if" analysis, you can build alternative scenarios, share and collaborate with the team and submit the best scenarios to help you make smarter, more informed decisions that drive better business results.

Business Insight Advanced: Dimensional data

From IBM Cognos Business Insight, you can seamlessly transition to the deeper analysis capabilities of IBM Cognos Business Insight Advanced. This enables the interactive exploration of information regardless of where the data is stored.

With Business Insight Advanced, you start with a blank canvas. In this dimensional analysis example, we begin by adding Customer Geography to the Rows, Product to the Columns, and Revenue Ordered as the analysis Measures from the Sales Pipeline area. The dimensional nature of the data allows for simple exploration using drill-down and drill-up techniques. We can click on Asia to drill down and see countries that make up the customer geography for that region. We can then click on Asia again to drill back up and return to the view showing all customer geographies. If we want to focus on the individual components, we can delete the total for Customer Geography by using the context menu and selecting Delete.

Now let's look at the country dimension in more detail. We can expand Europe to display its members and select a country — in this case, Germany. By using the Exploration menu option, we can choose to replace the current view With Level Members. This displays all countries in each Customer Geography.

Next we'll change the focus of our analysis to the top-performing countries. Using the Context menu, we'll select the ranking function Top or Bottom. In this case we want the Top 5 based on Revenue Ordered. The result displays the top 5 performing countries.

To further enhance the analysis, let's add a specific set of countries to the top performers — in this case, European countries. Simply navigate to the Customer Geography, select Europe to expand the members and select those countries to add them to the top 5 already displayed.

You can then group items by simply joining them together. Joining items is accomplished by creating a union within the Explore menu for the sets of countries you want to combine.

Now let's focus on our top 3 performers. For a business analyst or author, this analysis is simple yet extremely powerful. But it's also important that other business users who use the same type of analysis understand how it was created. Using the Context menu, you can invoke the Edit Set function. This function illustrates how the set was created and enables additional manipulation of the results. For example, let's select the Top 3 and change it to the Top 8.

It's also easy to add charts to enhance your results. By selecting the Create Chart button and then the Column Chart option, you can quickly add a visual representation of your analysis. And you can adjust the formatting of the numbers and scale with a few simple clicks. Then you can resize the chart to fit optimally within your workspace.

IBM Cognos Business Insight Advanced enables users to perform complex analysis tasks quickly and easily from their BI workspace. It helps them understand the underlying reasons behind an event or action so they can make better decisions that result in improved business performance.

Business Insight Advanced: Relational query

From IBM Cognos Business Insight, you can seamlessly transition to the deeper analysis capabilities of IBM Cognos Business Insight Advanced. This enables you to perform complex analysis quickly and easily, providing the insight you need to understand why an event or action occurred so you can improve business performance.

Using IBM Cognos Business Insight Advanced, let's see how you can perform relational analysis to better understand the impact of complaints on order revenue and the net negative effect of returned revenue.

We'll open Business Insight Advanced and view the Customer Service Area. Let's begin by adding Customer Region to the analysis, followed by Customer Country and then Product Line. We'll expand the Fact Area under customer service and add the Number of Complaints to the analysis, as well as Number of Calls.

Now let's narrow the focus of our analysis to include the complaints only on products that are currently for sale. We'll select the products Alpha, Charger and Nova and then apply a filter to include only these three products.

We can also create a regional focus by grouping the Customer Region. We'll select the Region column and click on the Group By icon. This creates groups by region and automatically displays subtotals.

Now let's add Revenue Cancelled to the data by dragging and dropping it from the Fact area into our analysis. We can add a calculation to the analysis that shows the Cancelled Revenue divided by the Number of Complaints, then drag the result to the desired location. We'll also shorten the title to Cancelled/Complaint…and then Sort Layout by Descending order so that the largest value is displayed at the top. Now it's easy to tell that Singapore and Korea have a higher Cancelled Revenue/Complaint than other Asian countries. Lastly, we'll group our information by Customer Country and add the actual Customer Name to the right of the Country.

The customer service management team can now easily see this should be addressed, as it is a potential drain on revenue.

Using IBM Cognos Business Intelligence, you can share this report or assign a task to help ensure that action is taken to address the problem. IBM Cognos Business Insight Advanced enables you to better analyze data and identify the cause of underlying problems so you can drive smarter decisions for better business results.

Business Viewpoint

IBM Cognos Business Viewpoint gives business users the ability to maintain, govern and share the dimensions they need to optimize business performance, all while allowing IT to maintain control.

We'll begin in the IBM Cognos Business Insight workspace, where we're reviewing information about a product line we manage. Let's imagine that sales management has asked us to add a new product category to address the overwhelming popularity of our Gold Product Line.

We'll open IBM Cognos Business Viewpoint so that we can reorganize existing information and add new information as needed. First, we'll find the dimension we need to reorganize — in this case, Products — and then select it so we can make changes. We want to add a new color; the first step is to select a color — in this case, Black — from the list. To be sure this change flows through our hierarchy, we'll select Product Line so we can add our new product category. Next we'll switch to the diagram view and expand our product lines. Now we'll create a New Member, giving it the name Alpha.

Because the administrator has created a validation rule to ensure that the integrity of our data is maintained, we'll need to use a unique name in the attributes section for our new member: we'll call it Gold Product Line. To associate the Gold products with the Gold Product Line, we'll drag and drop them to the new product line we've created.

We could also set up a facilitated process for ensuring alignment of changes across stakeholders that might better reflect the business. But, for now, we'll simply approve the changes already made.

We'll add a comment to indicate the rationale for our new addition.

Now we'll create a version with our changes and publish them to make them available across the organization, ensuring consistent reporting, analysis and forecasting.

We can go back to the IBM Cognos Business Insight workspace and refresh to see the changes that we've made.

The capabilities we've just seen for managing dimensions provide transparency to a process that is typically manual and error prone. In addition, they decrease the time required for reporting. IBM Cognos Business Viewpoint ensures alignment of business structures to provide consistent, sanctioned versions of business dimensions across your organization. This enables you to manage your business dimensions with confidence, knowing that the data is both accurate and secure.

Charting

IBM Cognos Business Intelligence includes enhanced charting capabilities for professional report authors to speed report authoring time. It delivers new options that enable you to create rich, more visually appealing charts.

We'll start by building a bullet chart in Report Studio. Bullet charts are the latest addition to the Cognos reporting capabilities. This new visualization option allows you to compare forecast and actual values. The chart authoring interface is dramatically improved, featuring a more intuitive drag-and-drop interface, as well as active previews of charts.

Here we want to compare actual Order Units and Forecast Units by Product Line. The chart is updated with a preview of the final result. We need to re-size the chart to account for multiple product lines. Our final chart allows us to easily compare actual and forecast values for each product line.

The colored regions (a new feature of most chart types) allow you to highlight positive zones in the chart. This helps you to see the key information quickly.

Pie charts remain a cornerstone of charting and visualization, allowing for fast comparisons to determine contribution to the whole. But pie charts can become overly busy when too many values are displayed. Let's see how IBM Cognos Business Intelligence solves this issue.

We want to examine Distribution Cost contribution by Carrier. With so many carriers, the chart is difficult to read. Let's focus on our top carriers and group the remainder into an Other category. As you can see, we have many ways to determine which slices to group into the Other category. The option we select simply collapses the slices with the lowest values into a single category.

Another option allows you to summarize slices that are smaller than a specific value or percentage. As you see here, the top four carriers are preserved and the others are rolled into the Small Carriers category.

With the latest charting capabilities of IBM Cognos Business Intelligence, it's easier than ever to create meaningful, engaging visualizations that quickly communicate key business insights for faster, more informed decision making.

Collaboration: Annotations

IBM Cognos Business Intelligence collaboration capabilities facilitate decision making for groups and teams by enabling you to enter annotations on key business reports and dashboards directly from within IBM Cognos Business Insight.

Here we see a value on our Business Insight shared workspace that we want to draw attention to. With a simple mouse click we can add a comment to point out an anomaly requiring follow-up or to add perspective by explaining the anomaly. After we add a comment on a shared workspace, the thread of all comments is available to everyone who has access to the workspace.

When we hover over a cell containing a comment, all additional comments for that cell are displayed. Here we can see that annotations made at the cell level also display at the summary level after drilling down. This means that annotations are accessible regardless of how different users view the data. And while annotations can be applied at the cell level, as you've just seen, they can also be applied at the object level for an entire list or chart.

Now let's export our information to a Microsoft Excel spreadsheet or to a PDF file. Notice that the annotations that provide perspective or additional context are automatically preserved as endnotes.

With IBM Cognos Business Intelligence collaboration capabilities, there's no need to duplicate efforts when providing the important insight that underlies your information. Everyone across the organization can access consistent and complete information to stay aligned and make better decisions.

Collaboration with Lotus Connections

Business users have come to expect the same level of interactive communication in their daily work environment that they experience personally on FaceBook, Twitter and other social Web sites that foster group collaboration. IBM Cognos Collaboration drives smarter decisions with fully collaborative activities, complete with due dates, activity owners, group members and threaded discussions — all accessible directly from within IBM Cognos Business Insight.

Let's say we've identified a problem from within the Business Insight workspace and want to resolve it. Instead of calling a meeting, we can easily view any collaboration taking place and communicate with all the parties involved — even when the issue spans geographies, departments or management units. IBM Cognos Business Intelligence delivers a completely collaborative environment to help resolve business issues from within any workspace.

In the collaboration pane we can see any current activities associated with the workspace and select More for additional details. When we select one of the Activities we gain access to the details of all ongoing collaboration related to that activity.

We can add a member to an activity and specify that they (and others) are to be automatically notified by email when their participation is required. We can also assign a member a To Do Item and instantly notify all participants of the new activity via email. These notifications can also be accessed via their mobile devices so they can stay informed even when they are away from the office.

Now, imagine that you discover a new anomaly on your Business Insight workspace and want to assemble a group of people who can work toward a solution. You can start your own threaded discussion on this topic by creating a new Activity. New activities can be based on pre-defined templates that include logical groups of members for matrixed team collaboration. And once you've created an activity, members can quickly and easily access it directly from within their IBM Cognos workspace. You can add new entries and supporting files so the team can work collectively toward a common goal.

Within Lotus® Connections, you can collaborate using Activities…
…easily find relevant colleagues using Profiles…
…collaborate around a common topic using Communities…
…create web content together using Wikis...
…or present your own ideas or learn from others using Blogs.
And you can easily leverage trusted IBM Cognos information from anywhere within Lotus Connections.

All of these collaborative capabilities exist directly within the business analytics information that frames the issue or opportunity you're working on. Because you have all of the resources you need at your fingertips, you can proactively align and engage the right people to drive initiatives and effectively and efficiently solve problems.

<u>Dynamic Query Analyzer</u>

IBM Cognos Dynamic Query Analyzer enables you to remotely access and view query logs without leaving the application. It provides an environment that makes it easy to understand and analyze these queries for further tuning and optimization.

As we begin, you'll see that we can seamlessly locate relevant query logs from the Content Store view. Logs are organized by the content store structure, report name, and time of execution. The Log view provides a snapshot of the entire logging directory as an alternative means of accessing your queries. You can use either method to locate relevant query logs you're interested in. With IBM Cognos Dynamic Query Analyzer you no longer have to rely on the system administrator to provide the query logs before you can start the query analysis process.

Now we'll run the report from the Content Store view and easily retrieve the report data. Notice that a new query log is available under the report we executed. The ability to run reports from the Dynamic Query Analyzer saves you time when you're alternating between views. You can analyze the report data along with the query from within a single environment.

Let's take a look at the query generated by this report. The tree representation of the query provides a true mapping of the query structure.

The graph navigation view allows you to easily locate query nodes. Each query node contains additional information about the query action. For example, here you see a sort node set to ascending order. The graph navigation view provides processing metrics enabling you to identify query areas that may need additional tuning and optimization. Color-coded metric bars indicating processing time accompany the query nodes. For example, a red bar indicates a query action that requires significant processing time as compared to total execution time.

Let's select a node with a metric indicator. We can view metrics for node execution time, waiting time, and the time needed to execute the node's children. These metric indicators allow you to quickly navigate to areas requiring high processing time so that you can perform further analysis and, where possible, optimization.

Dynamic Query Analyzer also allows you to visually compare queries side by side. Here you see a comparative analysis providing additional information that can help you with optimizations. Plus, you can analyze and compare similar report queries to understand differences, anomalies and process-intensive query behaviors.

The graphical view of the query tree, combined with the ability to track time-processing metrics, makes it easy to optimize, tune, and troubleshoot report queries.

With IBM Cognos Dynamic Query Analyzer you can seamlessly access query logs and run reports from a single environment. This reduces the overall time required to gather the information you need to tune and optimize the reports your business depends on.

External data access

Today, more than ever, you need information from a number of different sources to make the right decisions. But some of this information, such as interest rates or GDP rates, often can't be found in sanctioned corporate databases. IBM Cognos Business Intelligence enables you to quickly integrate external data into your business intelligence reporting and analysis, providing the additional information you need to gain a broader perspective and make smarter decisions.

Once you have been granted permission by your administrator, you can gain access to external data at the metadata level. This enables you to update and create packages that leverage data outside your traditional database, as well as to combine external and internal data to create reports.

Let's take a look. We'll start by dragging external data into our revenue workspace. Next we'll merge external data from a spreadsheet stored locally with the data contained in the object we just dragged into the workspace.

Now let's select the Win/Loss List from our dashboard…and select the Do More button to display the Business Insight Advanced workspace.

The next step is to manage the external data. We'll begin by selecting the data we want — in this case our locally stored spreadsheet — and then map it to the appropriate query subject and establish a link. We'll verify our data attributes…and confirm our mapping options.

After completing the wizard, we'll publish the new package.

Now that this external data package is available for use we can create reports that combine this package with our enterprise data. The ability to access external data is available through both IBM Cognos Business Insight Advanced and IBM Cognos professional reporting capabilities.

IBM Cognos Business Intelligence with external data access provides the infrastructure to support direct, self-service reporting while significantly reducing or eliminating IT involvement. It enables you to easily add perspective to your corporate information so you can quickly make accurate business decisions.

Human Task Service

The enhanced event management features of IBM Cognos Business Intelligence enable you to do more with critical business information and respond faster as information changes. By integrating business intelligence into your everyday workflow, it's easier for you to stay informed and to make important decisions more quickly.

Let's say we want to modify an alert related to low revenue growth. First we'll select the desired alert and choose Modify. Here we can see how our existing rule is set and, if necessary, make edits to our alerts. We can also modify our message and change the recipients or notification options. The next time the defined condition is met, a notification displays in My Inbox. It contains details of the event detected, as well as the relevant report. After reviewing it we can acknowledge that we've received the notification.

Now let's say we want to change the schedule for this Action. We can set the report to run immediately or at a later time.

Let's go ahead and run the report now. We decide this event requires immediate and guided intervention, so we invoke event management capabilities that trigger required actions and interventions from assigned owners and stakeholders. In this case, we'll set an intervention that sends an escalation email to our stakeholder. It's important that she is alerted to the decline in growth so that she can take appropriate action.

Now let's set the approval process for our finance report in motion. We select the agent we've created and choose Run. All recipients receive an Inbox notification of the assigned task. They can view the report, add comments, and Approve or Reject the report directly from within the notification. If approved, the report is automatically distributed to others who need this information.

The Human Task Service capability offers a powerful way to manage business events with task deadlines, email notifications, required acknowledgements, and burst capabilities. It drives repeatable and automated event-driven processes that help to speed decision making for improved business performance.

Lifecycle Manager

IBM Cognos Lifecycle Manager is an application that performs automated testing of IBM Cognos Business Intelligence report content in multiple environments. It validates, executes and then compares report outputs to ensure that there are no differences between versions due to upgrades. With IBM Cognos Lifecycle Manager, you can quickly and efficiently compare reports using any supported language or output type.

Let's take a look at an upgrade project currently in progress. This project is comparing and validating report content between IBM Cognos version 8.4.1 and IBM Cognos version 10.1. In order to automate the execution of hundreds (or even thousands) of reports, prompt values must first be gathered and saved for any report that requires them. These prompt values are then used to validate and execute reports in both systems to ensure consistency.

Notice that several of our folders indicate a status of Prompt Values Missing. You'll need to make sure that missing values for the reports in these folders are fulfilled before they can be compared. While IBM Cognos Lifecycle Manager allows prompts to be manually generated, one of the powerful features of this application is its ability to automatically generate those prompts. This is particularly useful when you need to validate a large number of prompted reports, especially reports you're not familiar with. Once the prompts are generated, the status is updated and the reports are ready for validation or execution.

Now we can select Output Comparison. This time-saving feature of IBM Cognos Lifecycle Manager executes reports in both the source and target environments, enabling you to view a comparison of all reports in a single step. It's immediately apparent that the Recruitment Report has differences that we'll need to resolve.

By launching the Flash Output Compare tool, we can take a closer look at the differences using either the side-by-side or data comparison options. This powerful comparison feature also enables you to place the target and source output on top of each other and adjust the transparency of your Target so that you can quickly identify the differences by comparing reports with charts and graphs. This easy-to-use tool eliminates the time-consuming and error-prone process of identifying differences between reports.

Once we've identified a difference, we can approve or reject it, and we can also add a note explaining the reasons behind our decision. This helps manage the overall upgrade project by enabling the documentation and distribution of information that's critical for understanding the report.

Now we'll look at our Task Summary. Here you can track and manage the upgrade process, as well as print or export this summary to share it with others. The Task Summary view displays the progress of each task and indicates any relevant notes or items still to be completed. It also shows the report execution run times for both the

source and target environments, as well as the output type and the language that the report was executed in.

IBM Cognos Lifecycle Manager streamlines the upgrade process by validating report content in two environments, greatly simplifying the upgrade cycle. And because it's easy to configure, you can quickly assess the impact of a change to your reporting environment.

<u>Mashup Service</u>

IBM Cognos Business Intelligence includes IBM Cognos Mashup Service to provide BI that's relevant to your daily workflow. This capability extends the reach of your valuable BI assets to existing applications and processes that your business uses every day.

Let's take on the role of a sales rep who has been asked to investigate whether any opportunities can be moved into this quarter.

Here we have a sales force automation application's portal — a personalized portal you can use on a daily basis to monitor sales opportunities. Let's see how the IBM Cognos Mashup Service enables you to embed IBM Cognos Business Intelligence within this application. With IBM Cognos Mashup Service, every saved report, analysis, ad hoc query and metric are exposed as a web service. You can embed an IBM Cognos report as-is, maintaining the same graphics, report logic and security as in your existing application. IBM Cognos Mashup Service also provides the ability to maintain the look and feel of your existing applications. As you see here, all report logic and security settings are maintained, including settings that limit access to only appropriate people.

As a sales rep looking at upcoming opportunities, you want to identify any opportunities that can be moved up into the current quarter. To identify these opportunities, let's enter the opportunities screen, where we get a high-level view of the opportunities. Now, by simply rolling over the account, we can see an historical view.

Based on a recent conversation with this customer, we know it's possible to move this deal forward into the current quarter by offering a discount. Next we'll dive down into the account to see more details on total opportunities by stage. Notice that the same interactivity is still maintained, such as the ability to roll over items for more detail. After reviewing the details of both counts…and dollars involved…we decide we're comfortable moving the deal forward into this quarter. Now we'll add a note that our Next Step is to get a discount approval so we can offer pricing based on the total pipeline. Because we're in the sales force application, we can immediately initiate the process to request a discount for this customer. Returning to the account summary, we see that our report has already been updated to reflect the actions we've taken and the key decisions we've made within the sales process. Note that our portal now reflects the changes as well.

IBM Cognos Mashup Service provides the analytical insights you need to make quick decisions without ever leaving your business applications. And because business intelligence is delivered directly into your everyday working environment, it's simple to use the most relevant information to support your daily decision-making needs.

Microsoft Office

IBM Cognos for Microsoft® Office extends the reach of your IBM Cognos Business Intelligence content to Microsoft Office applications, including Word, PowerPoint® and Excel®.

IBM Cognos for Microsoft Office enables you to work with data from within the familiar Microsoft Office environment…while at the same time addressing the concerns of IT by applying consistent security for access to your business intelligence data. Plus, IBM Cognos for Microsoft Office extends the value of business intelligence by enabling you to access your trusted corporate information in a way that is relevant to your workday.

Now you can easily import business intelligence content into a Microsoft Office application…and quickly focus on the data that's relevant for every business user.

Imagine we're preparing for a Quarterly Business Review and need to add business intelligence content into our slides to communicate an important point. After identifying the business intelligence content we want to use, we need only a few simple steps to add that information directly into our PowerPoint presentation.

Now we'll polish the look of our presentation. Using familiar Microsoft Office functions, it's easy for us to adjust the placement of our content or to add additional text to provide context.

You can also refresh data to ensure that the business intelligence content is up to date and relevant, and that it comes from a single, trusted source.

Now let's take a look at how we can use these same capabilities with other Microsoft Office applications — in this case Microsoft Excel. We can easily import our business intelligence content…and make modifications from within the Microsoft Office environment. These capabilities are extremely valuable for creating Briefing Books, Annual Reports and other business-focused documents.

IBM Cognos for Microsoft Office extends consistent, secure access to your trusted corporate information, while at the same time enabling you to work with data from within your familiar Microsoft Office environment. Now it's faster and easier to incorporate business intelligence into your daily workflow.

<u>Mobile</u>

IBM Cognos Mobile delivers access to business intelligence while you're away from the office, so you have the information you need to make responsive and informed decisions regardless of where you are. Let's take a look at how you can access information using a mobile device.

Here you see thumbnails of various reports. Let's select one of these actionable reports for closer review.

Using an iPad, iPhone or BlackBerry device, you can fully interact with business intelligence content that is targeted to your needs, while still enjoying the user experience that is consistent with your mobile device.

Now we'll drill down for additional information and insight right from our mobile device.

IBM Cognos Mobile allows you to add individual reports or dashboards to your Favorites list or Welcome screen for a customized personal experience.

Now let's use the optimized search engine. We type in our search term and see that Cognos Mobile finds the business intelligence reports relevant to our search criteria.

Selecting a report we're interested in, we quickly determine that it's highly relevant...
…so we add this report to our Welcome screen…where it's immediately available upon login.

Interacting with business intelligence content directly from your mobile device provides quick insight that helps you identify business problems and take immediate action. IBM Cognos Mobile delivers valuable business intelligence that is targeted, interactive and personalized to your needs, so you can stay fully connected and make informed decisions from anywhere, at any time.

<u>Real-time Monitoring</u>

IBM Cognos Real-time Monitoring is an actionable intelligence solution that addresses time-sensitive decision-making needs across your organization — from managers to senior executives. IBM Cognos Real-time Monitoring empowers you with detailed, intra-hourly data so you can make more informed decisions when immediate action is required.

As we begin you'll see that we can access our business's real-time monitoring content directly from Business Insight. Here you can access all the dashboard objects that can be created within Real-time Monitoring.

Continually updating metrics can be dragged and dropped from your Real-time Monitoring content tree directly onto your unified workspace. These metrics can then be displayed with the desired refresh interval.

For example, on this workspace for a Call Center Director, we'll set the Properties of the Call Volume to a Refresh interval of five seconds. Now we'll drag the Calls Waiting metric onto our workspace; Calls Waiting correlates with overall customer satisfaction, which we want to watch closely. The Forecast call volume is displayed in green within the Call Volume metric on the left. We can compare this Forecast against the Actual call volume, which is displayed in red, and we can also view the number of Handled calls, which is shown in blue.

We can see that there is a spike in incoming calls at 19:58 and can compare that spike to the Forecast. It's clear that there is a drop in Handled calls because the agents cannot keep up. As a result, there's also a spike in Calls Waiting at this same time interval.

You can also quickly and interactively configure display parameters to view the data more clearly. Since the Calls Waiting metric is hard to read, we'll reduce the Maximum value shown on the primary axis within the Chart Properties panel. After making the change, the Calls Waiting data is much easier to read.

For more in-depth analysis, let's drag the Agent Utilization by Call Center metric onto our workspace. We can drill into the data for the Nevada call center by simply clicking on the chart from the workspace. Now we can see each agent's Handle Time, Hold Time and overall Utilization. We can also maximize the widget view to perform further analysis.

Let's change the categories in the chart to show all Employees within these call centers. From this view, we can apply a filter to display only the top agent with the most problematic hold time. By selecting Restore This Widget we return to the workspace view; note that our filter is maintained. Now let's press the play icon and view our dynamically updating data.

IBM Cognos Real-time Monitoring helps you stay on top of the fast-breaking information that's critical to your operational front line. By displaying your data in an intuitive workspace that supports key intra-hourly and daily time intervals, you gain the insight you need to take quick, informed action.

SAP® Business Warehouse

Companies today need the most flexible business intelligence platform available — one that helps them rapidly discover, analyze and share information for optimal decision making. IBM Cognos Business Intelligence provides you with direct access to your SAP® Business Warehouse data sources, enabling you to create your own connections to data regardless of where it resides.

A self-service package wizard provides direct access to our SAP Business Warehouse data, so we can fully extend the reach of our business intelligence resources without depending on IT. We can see all the available data sources for creating a package. We can specify a name, add a description and choose a location.

Now we'll expand our Objects and select those that are appropriate and available to us based on our SAP Business Warehouse security profile. We can select any languages we want to include, as well as the Design Language. Here we select the object display name. We can also choose whether we'd like to enhance the package for SAP Business Warehouse organization of objects, select the Use Dynamic Query Mode, or both. After making the selections we want, we can select Finish and the package is created.

If variables exist, we are prompted to choose whether we wish to edit the variables. Let's choose to make some edits. The Edit SAP BW Variables page allows us to change variables such as the default value and prompt type. We'll choose typeIn and select OK.

Now that we've created our package, let's see how we can use it in the Business Insight Advanced environment. First we'll select a page layout…and insert a stacked column chart. We'll choose the Categories…Series…and the Measures or Key Figures we want to drag into our chart.

Now let's add a pie chart. Again we select the Measure we want to include…as well as the Series we're interested in.

Now we want to simplify our chart, so we'll apply a Top 10 filter based on Actual Revenue.

Our final step is to run this report based on our SAP Business Warehouse data.

The self-service package wizard from IBM Cognos Business Intelligence enables you to get fast, direct access to your SAP Business Warehouse data, regardless of your technical skills, so you can more easily leverage your business intelligence resources and make better, more informed decisions.

Scorecarding

IBM Cognos Scorecarding automates the monitoring and management of your business processes, enabling you to better capture your corporate strategy, as well as to define quantifiable goals and targets so you can track business performance at any time.

We'll begin by viewing an informative workspace that leverages the power of Business Insight. We want to review revenue by product line in order to understand how our top product is performing against its operational objectives. We can see that the Alpha product is the top performer in terms of Units Ordered and Sales Success.

Now we'll add the Alpha product scorecard so that we can see how the product is performing against its operational objectives. The red indicator tells us that we are below target in our Quality Control Fixed metric. Because we know that quality control is critical to our business success — and that if it can be improved, the company's revenue should improve accordingly — we want to closely monitor the status of this metric.

We'll launch IBM Cognos Scorecarding directly from our workspace and view the Alpha scorecard. With a few simple clicks, we'll add this metric to the Watch List. The Watch List enables the owner of a metric to receive notification whenever the status of a metric has changed or comments have been added to it.

Now we'll return to our Business Insight workspace and drag the Scorecarding Watch List directly onto our workspace. With the Quality Control Watch List added to our revenue workspace, we can easily monitor the Quality Control metrics that require our attention.

With IBM Cognos Scorecarding you can quickly assemble and use key business information to track performance against corporate strategy, to tie insight to action and to drive better results in all areas of your business.

Statistics

In order for you to be confident in your decisions and drive better business outcomes, you need proof that the numbers you are using are accurate. You also need to understand trends and patterns in the data and be able to monitor them on an on-going basis. With IBM Cognos Statistics, you can incorporate statistical results into your core Cognos Business Intelligence reports, reducing the time it takes to accurately analyze data.

Here we see an Operations workspace that includes statistical data. You can quickly create and modify dashboards like this, as well as business presentations and reports, to deliver key statistical information to broader business communities.

Let's take a look. Seamlessly integrated into IBM Cognos Business Intelligence, IBM Cognos Statistics provides a guided, wizard-driven interface that enables you to…use data analysis and testing to support hypotheses and maximize return on investment…drive customer profitability by identifying key customer demographics…and improve quality and reduce costs through statistical process control.

Imagine that we're a manufacturing company that must follow strict quality control guidelines and resolve any production issues quickly. Using trusted corporate data sources available in the BI environment, along with the statistics wizard, we can enhance existing manufacturing reports to include statistical evidence that highlights quality control issues for quick identification and resolution. We can easily include titles and footnotes directly from within the wizard.

Now that we've completed the wizard, let's run our report. As you can see, the statistical evidence we've included in the report provides supporting graphical and tabular information needed to help eliminate quality control problems and, as a result, increase customer satisfaction.

IBM Cognos Statistics supports many areas and functions within our organization. We can use data analysis and testing to support hypotheses and maximize return on investment. In addition, we can use control charts to gain visibility into defective products, including the severity of the defects, to help us identify successful product bundles and drive increased sales. This clear presentation of information provides you with a better understanding of how your data is distributed. It also provides visibility into the shape of the data, especially when data points are evaluated against one another. As a result, it's easy for those reviewing the data to quickly determine if the distribution of product defects is consistent or if the defects are clustered in certain product brands.

Fact-based decision making is essential for business success. Powered by the IBM SPSS Statistics engine, IBM Cognos Statistics incorporates statistical results into your core business reporting capabilities, providing you with the evidence you need to make informed business decisions.

<u>Learn More</u>

IBM Cognos Business Intelligence version 10.1 empowers everyone in your organization to make smarter decisions. Its new, limitless BI workspace, powerful collaboration tools and ability to deliver actionable insight where and when it's needed transforms the decision-making process.

Smarter, faster decisions. Better business results.

Find out more about IBM Cognos Business Intelligence by visiting us on the web.