

## The power of performance management: Success in travel and transportation

### Overview

Companies across the travel and transportation industries are increasingly turning to IBM Cognos software to provide the sustainable competitive advantage that comes from performance management technologies. Changing economic conditions always spark a range of challenges including compromised cash flows, difficulty managing inventories to meet fluctuating demand, and declining sales, revenues and profits. Never before has it been so essential for travel and transportation companies to get the answers they need.

For airlines, freight and logistic, rail and travel services companies, IBM delivers world-leading enterprise planning, consolidation and business intelligence software, along with support and services to help companies plan, understand and manage financial and operational performance.

With IBM Cognos software these companies can:

- Identify waste and intelligently cut costs.
- Align supply and demand.
- Find poor performers quickly and take action to protect profits.
- Closely watch operations and monitor controllable costs.



- Make thoughtful decisions about capital spend.
- Increase effectiveness in all departments across the organization.

Read on to learn more about how:

- **Arctic Group** streamlined a planning process that took 2 ½ months to only three weeks. Learn how they are reducing warehousing costs by checking stock levels every day and reacting more quickly to peaks and valleys in demand.
- **Blue Mountain Resort** is making better decisions on staffing, particularly for their busy call center. Read how they are also using Cognos for budgeting, managing

inventories and for detailed analysis in marketing and promotions to help increase profitability.

- **Movia** is calculating 48 different budgets easily, and recalculating them quickly when routes, fuel prices or passenger numbers change. Learn how BI is helping them analyze and optimize bus routes to provide the best level of service to passengers.
- **Port of Brisbane Corporation** is using scorecarding to monitor performance and adjust day-to-day operations to meet and exceed corporate targets. Learn how, in only eight weeks time, they implemented a system that allows them to access vast amounts of data in real time.

# Arctic Group



## Overview

Arctic Group is a trading company based in Denmark, Greenland and the Faroe Islands, which supplies a wide range of goods and services to businesses and consumers in Greenland, Iceland and the Faroe Islands. The group employs 160 people, including 20 specialist sales representatives, and operates three retail outlets and three larger timber and equipment stores in Greenland, as well as its wholesale and services businesses.

The two main challenges for Arctic Group are logistics and master data management. Managing a catalogue of 155,000 products is highly complex, and ensuring that the right products get to the right customers at the right time is crucial to the success of the business.

“To take one example, many of our customers’ orders need to be shipped from Denmark to Nuuk in Greenland – a journey of more than 4,000km,” explains Peter Freiesleben, CEO of Arctic Group. “This takes a week and a half, and more northerly destinations can take up to three weeks. In addition, from the end of November until March, the northern ports are inaccessible

due to weather conditions, so products have to be sent by air freight. The last shipments in November therefore require extra logistical planning.”

## The need for planning and business intelligence

To counteract the long lead times on new orders, Arctic Group needs to be able to plan ahead through accurate demand forecasting. If the company can predict the needs of its customers, it can ensure that the right products are available when they are required.

“We use a highly customised Microsoft Dynamics AX ERP system, which handles the mechanics of our supply chain very efficiently, but we didn’t have the tools to extract and analyse information and plan ahead,” says Freiesleben. “Instead, our planning process was based around 800 different spreadsheets – and it could take up to two and a half months to complete each year’s planning cycle.”

An equally important issue is the availability of business intelligence. However accurate a company’s planning is, unforeseen fluctuations in demand will always arise – and it is vital to be able to react quickly to

avoid over- or under-stocking. Arctic Group needed to improve its business reporting capabilities to gain more comprehensive insight into its sales, inventory, and supply chain.

## Meeting strategic objectives

“Information is what we sell,” comments Freiesleben. “The goods and services themselves are incidental. What we provide is the ability to meet customer demand – and that depends entirely on our ability to manage and analyse information. To achieve our targets – a net profit ratio of eight percent by 2016 and a minimum sales growth of ten percent per year – we needed a solution that would help us plan more effectively and amend our plans more quickly when customer needs change.”

The IT team at Arctic Group already had some experience of using IBM Cognos technologies, and suggested implementing IBM Cognos Business Intelligence version 8.3 and IBM Cognos Planning version 8.3.

## Implementation and knowledge transfer

Working with EDB Gruppen, an IBM Business Partner, the company deployed the software and began to

develop customised reporting and planning tools for the sales, logistics and finance departments.

“We have built a close and valued partnership with EDB Gruppen, and have been impressed by the skill and commitment demonstrated by their consulting team,” says Freiesleben. “We wanted our IT team to be able to develop new functionalities in Cognos without external support, and EDB Gruppen did an excellent job on training and knowledge transfer. As a result, we can manage most of our Cognos requirements in-house – although the EDB Gruppen team is always available when we need extra help.”

#### **Simple Web access**

The IBM Cognos solution gives key users access to a wide range of planning and reporting tools via a simple Web portal, with real-time dashboards that are designed to provide important information at a glance. With the help of powerful analysis tools, users can drill down through business information to assess operations at the level of individual employees, and assign actions to improve performance.

“It’s easy to be a manager today,” comments Freiesleben. “Cognos provides all the information we need to make good business decisions

quickly. In future, we are hoping to broaden access to the business intelligence tools so that even more of our employees can benefit.”

#### **Enhanced planning and inventory management**

With IBM Cognos Planning, Arctic Group was able to complete its most recent annual planning cycle within just three weeks – 70 percent faster than the spreadsheet-based process. With a single integrated planning platform, administrative workload is significantly reduced and there is much less chance of error.

The IBM Cognos Business Intelligence platform helps the company to check stock levels every day, so it can react much more quickly to sudden peaks and troughs in demand. As a result, customer orders can be fulfilled more efficiently, and there is less chance of over-stocking – helping to reduce warehousing costs.

Peter Freiesleben concludes: “People in Greenland, Iceland and the Faroes often live in remote communities and depend on us for essential supplies – so it is vitally important for our business to deliver the right products at the right time. EDB Gruppen and IBM Cognos have enabled us to build a platform for business planning and analysis that will ultimately deliver better service and better value to our customers.”

*“EDB Gruppen and IBM Cognos have enabled us to build a platform for business planning and analysis that will ultimately deliver better service and better value to our customers.”*

*Peter Freiesleben, CEO, Arctic Group*

# Blue Mountain



## Overview

Blue Mountain is Ontario's largest mountain resort, located just 2 hours north of Toronto, and 11 km west of Collingwood. The resort is a 4-season recreational and conference facility destination. During the winter season, more than 1 million visitors enjoy 34 ski and snowboard trails, and four terrain parks serviced by 12 lifts. In the summer months, the nationally ranked Monterra Golf course welcomes golfers to enjoy its spectacular layout.

These outdoor-based attractions are complemented by slope-side accommodations with approximately 1,000 rooms comprising of the Blue Mountain Inn, eight condominium developments, Historic Snowbridge Mountain Homes, and the luxurious suites of the Village at Blue. To meet the guests' needs in this wide range of activities, Blue Mountain employs over 1,600 employees peak season, including some 400 fulltime year-round staffers.

## Challenges faced

With 13 different lines of business, including restaurants, ticketing, call centers, and lodging, Blue Mountain needed a comprehensive software

package to run traditional budgeting, consolidation, reporting, and forecasting, as well as performance analysis on revenues trends, especially daily sales.

The company also faced two further complicating factors. With multiple lines of business, the software package they selected had to be able to draw on many different types of applications and data sources. The BI solution had to be easy to install and maintain, because at that time Blue Mountain only had three IT staffers and did not have any one employee dedicated fulltime to maintaining the system at the time.

Blue Mountain was in a bind because their existing system was not robust enough to handle all of the company's data input. Also, because that system was not automated, it increased the time IT spent waiting for reports from disparate data sources.

Blue Mountain needed a software solution that would reduce the stress on its IT staff by being easy to maintain and making it easier for users to obtain information for themselves. After an extensive review, Blue Mountain's IT Director, John Gowers, selected a

performance management solution from Cognos, an IBM company. A complete application that streamlines the performance management process and includes planning, budgeting, forecasting, reporting, and analysis capabilities, IBM Cognos TM1 leverages on-line analytical processing (OLAP) technology. This capability enables users to view and understand large sets of complex business data quickly. Analysts, managers, and executives can view data across multiple dimensions and drill down into the specific data underlying those summaries.

## Strategy followed

In a controlled rollout, Gowers introduced the Cognos software to each line of business, one at a time, when each seasonal business opened. In each case, Gowers started by configuring the financial applications based on previous expectations from the old system. If he faced an anomaly between his expectations and the actual numbers, he dug down into the data to reconcile the apparent incongruity. It took approximately one to three weeks to roll the solution out to each line of business.

An unexpected but positive by-product of rolling out the Cognos solution across the company was that Gowers was able to standardize how data was captured across the organization. As he and his staff talked to various groups about the distinctive ways departments categorized and recorded data, Gowers was able to unify the accounting methodology across the organization. Blue Mountain now has a dedicated fulltime developer to manage the reports and build the models. Data is now entered in the same way across the organization, and it has become easy for senior management to compare financial reports across departments.

#### **Benefits realized**

As in any resort, personnel staffing is a considerable chunk of Blue Mountain's operating budget. Holding this line item down is critical to the success of the organization. While staffing models are set during the budgeting process, actual levels must be adjusted daily depending on the weather, number of pre-sold tickets, hotel arrivals and departures, major conferences taking place at the resort, and historic business patterns. Based on these factors, Blue Mountain

uses IBM Cognos TM1 to determine appropriate staffing levels, which front line managers must follow. This built-in check means that if staffing levels exceed the prescribed budget constraints, the overstaffing must be cleared with an area director. As a result, this highly variable and volatile line item tends to map closely to the budgeted targets at the end of the year.

In the hospitality industry, starting off on the right foot is critical. For many guests, their first contact with Blue Mountain is through the call center. If a potential guest has to wait too long to be helped, she will go somewhere else to book the family vacation or sales conference. By helping set the proper staffing levels in the call center, IBM Cognos TM1 ensures that call center associates are not overly taxed, which allows them to greet each guest in a relaxed calm manner. Also, because the call center managers can use IBM Cognos TM1 to calculate inbound call volumes based on any number of factors—time of year, time of day, proximity to a given holiday, current resort promotions—they can be sure they are not unnecessarily overstaffed.

Not only does Blue Mountain use IBM Cognos TM1 to control staffing levels, but also to help adjust and maintain inventories from year to year. For example, taking the data from the application that runs the ski boot shop, and adding to the expected number of skiers in a given year, IBM CognosTM1 helps Blue Mountain order the right number of boots in each size. The same model extends to other inventories in its retail shops across the organization.

Although Blue Mountain has been able to push performance management out to the front lines, the company originally bought IBM Cognos TM1 to streamline its budgeting process. Like many organizations, Blue Mountain's budgeting process relied on a maddening amalgamation of spreadsheets. Often, searching for the right data was like mining for coal with an ice pick: it could be done but not without difficulty.

The IBM Cognos TM1 engine puts all of the budgeting information in one place. Once all of the data was entered, Blue Mountain had a clear estimate of what was spent at each business level,

creating a finely sliced view of each department's performance. From that base level, it was relatively easy to set forecasts for the coming year.

"I couldn't imagine budgeting and forecasting without Cognos," says Gowers. "IBM Cognos TM1 speeds up a process that was incredibly time consuming."

For the finance folks, the power and flexibility of Cognos did not stop once the budgets were done. Because the performance management software updates revenue in real time and can slice data in any number of ways, executives at Blue Mountain can compare year-to-date actual values to projected revenues and previous year's totals every day. This daily snapshot and compilation of trends allows senior managers to intervene quickly should corrective action be needed in a particular department.

Marketing is also digging into analytics. With the ability to view historical data and even perform 'what-if' analysis against daily revenue reports, the

team can focus on projects such as campaign and labor management to manage its spending more wisely.

For example, if a specific room type isn't selling as well as it had in previous years, a manager can look at which variables have remained constant and which ones have changed. IBM Cognos TM1 gives Blue Mountain the means to review the data from a variety of angles to isolate the particular variable that is a drag on sales. Armed with that information, a hotel manager can alter room rates, align them with previous year's rates, wait out a spell of bad weather, or implement a new marketing campaign featuring the affected area.

If the hotel launches a marketing campaign, Cognos can provide detailed analysis of which marketing campaigns have had the most impact in driving sales for a particular room type in a given season.

The proof of customer satisfaction is a positive answer to the question, "Would you do it again?" For Gowers, the answer is "yes!"

*"I couldn't imagine budgeting and forecasting without Cognos. The application speeds up a process that was incredibly time consuming."*

*John Gowers, IT Director, Blue Mountain Resort*



# Movia



## Overview

Trafikselskabet Movia is the Danish public transport agency responsible for managing bus lines and local railways in the regions of Sjælland and Hovedstaden. The agency employs 300 administrative staff, while subcontractors provide the 4,000 drivers and 1,300 buses needed to operate 600 routes used by 200 million passengers per year. Movia is responsible for the finances of this entire transport network, which has an annual budget of more than 4 billion Danish kroner (550 million euros).

Movia was created as a result of a major reform of Danish local government in 2007, which reorganised 13 counties into five large regions, and reduced the total number of municipalities from 270 to just 98. Each municipality and region is responsible for subsidising the transport services that its citizens use. Movia is responsible for the buses serving all 45 municipalities and the two regions of Sjælland and Hovedstaden, as well as eight local train services.

“Movia needs to be able to provide each municipality with an individual budget for transport, as well as a budget for each region and an overall

budget – so that’s 48 separate budgets in total,” explains René Bigandt, Chief Financial Officer at Movia.

“We also need to provide a large number of financial reports throughout the year so that each municipality can understand how its budget is being affected by various factors. For example, on average, passenger fares supply around 50 percent of the funding for the bus services – but if passenger numbers drop, the municipalities need to make up the deficit. Also, fluctuations in fuel prices can make a big difference.”

The difficulty of meeting the budgeting and reporting requirements is further increased by one other important factor. The new municipalities were defined by population rather than area – so many municipalities in densely populated areas, such as those around Copenhagen, are relatively small. As a result, many of the bus routes in these areas run through more than one municipality – in some cases, crossing up to nine municipal borders.

“Calculating how much each municipality ought to pay for its share in these services is extremely complex,”

comments René Bigandt. “Moreover, when a change is made to a route or a budget in one municipality, it can affect all the others – so everything needs to be recalculated many times over. Working out all the effects manually would be impossible. We needed an IT system that could help us handle these processes effectively and deliver results fast.”

The budget is not the only challenge. The annual report is also split into 48 separate reports, based on accounts for each individual bus route built up by cost and revenue drivers and divided between the municipalities using a special financing model. This is a huge calculation task that would take weeks without the help of an IT system.

## A challenging implementation

Movia drew up a detailed list of requirements and evaluated several different software products, inviting a shortlist of vendors to present their offerings to the in-house technical team. Based on these presentations, the company decided to implement IBM Cognos Business Intelligence and IBM Cognos Planning.

“We had some problems at first because our initial implementation partner didn’t have the technical

competence to deliver the solution,” says René Bigandt. “We turned to the Cognos Denmark team for help, and they recommended EDB Gruppen.”

EDB Gruppen, an IBM Business Partner, is one of Denmark’s leading experts in the implementation of IBM Cognos solutions. Working closely with IBM Cognos consultants from Denmark and Sweden, the EDB Gruppen team developed a solution that would meet Movia’s needs.

“In the end, all parties learned a lot from the implementation,” comments René Bigandt. “The project turned out to be more complex than anybody had anticipated, so even the experts from EDB Gruppen needed to develop their competence before the solution could be delivered. We were impressed by the serious commitment shown by the EDB Gruppen team, and now regard them a highly competent full-service partner for our IBM Cognos Business Intelligence and Planning solution.”

The solution has been implemented on six HP servers at Movia’s data centre. Of these servers, two are dedicated to a test environment, enabling Movia to develop the system without affecting production. The servers run batch jobs every night to update the information in the IBM Cognos Business Intelligence system; during the day, when these processor-intensive jobs are not running, the servers can be used to perform specific analytical tasks.

### **Delivering better public service**

IBM Cognos Planning is designed to enable Movia to calculate all 48 different budgets easily, and recalculate them quickly when routes, fuel prices or passenger numbers change. As a result, each municipality and region knows exactly how much funding it needs to allocate to public transport, and can plan other public services more effectively.

IBM Cognos Business Intelligence creates and distributes financial reports for each of the stakeholders on a quarterly basis. This provides greater transparency and helps Movia work with the municipal and regional governments to decide which bus routes are most cost-effective, and whether any optimisations can be made to increase the efficiency of the service.

For analysis and optimization of the bus routes, Movia has developed a special simulation model that enables the company to calculate different scenarios with immediate response. This model makes the dialogue with the municipalities very efficient. This dialogue is very important to Movia because it is the municipalities that order and pay for the bus services.

### **Looking to the future**

In the future, Movia plans to introduce a Web portal to enable municipal and regional government users to access information from the IBM Cognos solution directly. The company will also

work on improving integration between the Business Intelligence software and other business applications such as its passenger information system and contract management system. This should help to reduce manual data processing and cut administrative costs.

“As we continue to work with EDB Gruppen to develop the IBM Cognos solution, we hope to be able to deliver vital information more rapidly and effectively to municipalities throughout Sjælland and Hovedstaden,” concludes René Bigandt. “By enabling efficient budget planning and reporting, the IBM Cognos software is ultimately helping Movia deliver value for Danish taxpayers, as well as ensuring that the public transport infrastructure is properly maintained and able to deliver a good level of service to passengers.”

*“By enabling efficient budget planning and reporting, the IBM Cognos software is ultimately helping Movia deliver value for Danish taxpayers, as well as ensuring that the public transport infrastructure is properly maintained and able to deliver a good level of service to passengers.”*

*René Bigandt,  
Chief Financial Officer, Movia*



# Port of Brisbane Corporation



## Overview

The Port of Brisbane Corporation (PBC) manages Australia's fastest-growing container port. Situated on the southern side of the mouth of the Brisbane River, PBC operates world-class cargo handling and warehouse facilities, and provides an interface between rail, road and sea transport. The corporation also manages the Manly, Scarborough and Cabbage Tree Creek boat harbors.

## Challenges faced

The corporation's primary role is to facilitate trade growth through the commercial management of an efficient and customer-focused port. To assist them with this responsibility, PBC management started looking at the Balanced Scorecard (BSC) methodology to track performance in achieving its business objectives.

When John Clifton joined the corporation in 2004, BSC existed more in theory than in practice as no electronic reporting system on KPIs (Key Performance Indicators) and PIs (Performance Indicators) was in place.

Reports were compiled in Microsoft® Excel® spreadsheets, and distributed manually.

Clifton explained "We wanted to make performance management systems accessible to the organization as a whole, and purchasing BSC software was one of my top priorities."

"We were looking for a BSC software solution that would consolidate KPIs and PIs in a simple, interactive, and user-friendly solution that would encourage both senior management and front-line employees to support the process."

The corporation was looking for a technology solution that would enable employees at all levels to monitor and improve business performance.

The BSC solution was required to streamline data collection and calculation of metrics, integrate seamlessly with the corporate IBM Cognos 8 BI platform, and be capable of extracting data from existing PBC systems such as Finance One, Aurion, MP2, Microsoft Excel, and ORACLE databases.

Furthermore, the BSC reports had to provide quick access to information in a professional format, while also allowing users to drill down on data, depending on user access privileges. Finally, the solution would have to store historical data and accommodate ad-hoc queries, in addition to the monthly, quarterly and annual reporting requirements.

## Strategy followed

Brisbane-based technology solutions provider Bistech had been working with the port for seven years, and suggested an IBM Cognos-powered BSC solution to help measure and track KPIs on an ongoing basis. Seamlessly integrated with PBC's existing IBM Cognos 8 BI platform, the BSC solution produces monthly, quarterly and annual reports and provides online analysis to decision-makers, contributing to a corporate culture of transparency, accountability and accuracy.

"When we heard PBC was looking for a performance management solution that integrates fully with existing data

sources, we suggested IBM Cognos 8 Scorecarding, a component of IBM Cognos 8 Business Intelligence software,” said Brad Culbert, Senior Consultant at Bistech.

With IBM Cognos 8 Scorecarding, companies can create, track and report on key BSC metrics across the organization. With an easy-to-use browser-based interface, IBM Cognos 8 Scorecarding is a dynamic and comprehensive tool for improving enterprise performance.

“Bistech not only came up with a software configuration, but they implemented a detailed proof-of-concept, demonstrating how our requirements would translate into an end-user solution. Bistech knows our company and IT systems well, so we knew we had the right partner on board to implement our BSC project,” stated Clifton.

“We chose IBM Cognos 8 Scorecarding because of its rich functionality and ease of use. Plus, with Metric Studio our BSC solution could be easily and seamlessly integrated with our existing Cognos reporting and analysis environment. This common platform is also being used to

implement other projects such as risk register management, external trade reporting, and operational efficiency reporting,” he added.

#### **Side-by-side to success**

Two Bistech consultants worked side-by-side with PBC’s IT team and a management accountant. This team structure encouraged a dynamic working relationship and allowed for better sharing of product knowledge. Business involvement throughout the implementation was a key success factor, enabling effective management of changing requirements.

The actual implementation of IBM Cognos 8 Scorecarding, including design, development and testing, took about eight weeks and was completed in late 2007.

“The roll-out was remarkably fast, as Bistech knows our business inside out,” said Clifton.

“Our key internal stakeholder described the implementation as brilliant.”

As the BSC is a business-driven process, a key challenge lay in the definition of KPIs and PIs prior to implementation. This included corporate

level metrics sourced from the 12-month Statement of Corporate Intent (SCI), which underpins the five-year Corporate Plan, to divisional level metrics measuring more day-today processes.

The management team had to define performance measures, accountability, strategic groupings, critical success factors and data collection methods, which were then translated into scorecards, metrics, targets, tolerances, groupings and ownership.

Brad Culbert explained: “Managing the cultural change is the biggest challenge for performance management, as Balanced Scorecarding results in greater accountability for employees and greater visibility across the organization. It is important that Balanced Scorecard structures closely map key corporate objectives and present realistic targets that promote continuous improvement.”

Collection of manual data was another complicating factor. Manual metrics constitute approximately 70 per cent of the Corporation’s data, and include, for example, Occupational Health & Safety reports in Microsoft Word.

Following Bistech's advice, the corporation implemented a distributed data collection process in each division. To ensure data accuracy, an approval workflow was also put in place allowing managers to confirm numbers collated by data collectors.

### **Benefits realized**

As the Port of Brisbane continues to grow, measuring and managing KPIs will be key to future success.

IBM Cognos 8 Scorecarding enables divisional and corporate managers to monitor performance and adjust day-to-day operations to meet and exceed corporate targets.

It has also increased the transparency of metric value calculations and, subsequently, reduced misinterpretation of actual results and related targets.

Metric owners, general managers, and the CEO can now directly access enormous amounts of data in

real-time, without having to wait for quarterly reports or make requests to a management accountant.

Historical data stored in the system provides detailed monthly, quarterly and annual reports for the Board of Directors.

"First responses from users, including the divisional general managers, confirmed that the solution is very user-friendly. Users were also surprised at how fast metrics are provided and how deeply the solution drills down into corporate data," said Clifton.

### **Next steps**

Currently the IBM Cognos 8 BSC solution is being rolled out to about 60 users, including 30 full-access users and 30 reporting-only users. More licenses will be added according to demand and business needs.

"We encourage our employees to work through Cognos' computer-based training and attend our in-house course to fully understand the rich functionality of IBM Cognos 8 Scorecarding," added Clifton.

*"We chose IBM Cognos 8 Scorecarding because of its rich functionality and ease of use."*

*John Clifton, Manager Finance,  
Risk & Corporate Planning,  
Port of Brisbane Corporation*

## **About IBM Cognos BI and Performance Management**

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

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3755 Riverside Drive  
Ottawa, ON, Canada K1G 4K9

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