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## **ROI CASE STUDY** **IBM COGNOS TM1** **BLUE MOUNTAIN RESORTS**

### **THE BOTTOM LINE**

**Blue Mountain Resorts used IBM Cognos TM1 to reduce labor costs, eliminate excess inventory, improve reporting, and make more strategic pricing decisions.**

**ROI: 1,822%**

**Payback: 1 month**

### **THE COMPANY**

Blue Mountain Resorts is a diversified, year-round resort located northern Ontario. It is the third-busiest ski resort in Canada and sells on average 700,000 skier visits per year. In addition to ski slopes, the resort also has golf courses, mountain biking trails, gondolas, tennis courts, and conference facilities. In 2001, Intrawest, a publicly held leading North American operator and owner of resorts, purchased a 50 percent interest in Blue Mountain Resorts.

### **THE CHALLENGE**

In mid-2001, Blue Mountain began preparing for the opportunities and demands of being part of a publicly held company. Having access to more capital meant that the company would be growing as a result of both acquisitions and the construction of new facilities. Being part of a publicly-held company also meant that it would need the operational visibility required not only to report on its profitability, but also provide the levels of profitability required by the public markets. The company had numerous business lines, including lodging, conferences, skiing, golfing, and tennis. But workflows for examining its revenues or costs on either an aggregate or individual basis were lengthy and labor intensive. As a result, the company wanted to improve both the frequency and the granularity of its reporting.

### **THE STRATEGY**

In late 2001, the company evaluated a number of business intelligence and performance management systems, including Cognos, Business Objects, and several smaller, hospitality-focused solutions. IBM Cognos TM1 was selected for a number of reasons, including:

- Industry focus. IBM Cognos TM1 had modules specifically designed for not only the hospitality industry, but also lines of business within the sector.
- Anticipated cost. Blue Mountain anticipated minimal customization and a cost-effective deployment.

**TOPICS**

Finance / Accounting  
Marketing  
Operations  
Retail / Hospitality  
Business Intelligence / Analytics

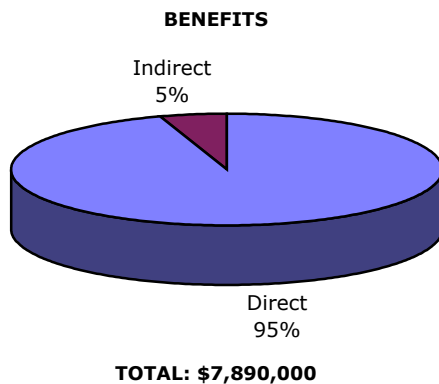
- **Performance.** During both demonstrations and an on-site proof-of-concept project, Blue Mountain became convinced that IBM Cognos TM1 could deliver the granularity and breadth of reporting functions it required.

In mid 2002, two people from Blue Mountain and an IBM Cognos TM1 consultant began a rolling deployment of IBM Cognos TM1. The company started with its lodging division, where it deployed and fine tuned the revenue analysis tool created during the proof-of-concept project. The solution was then deployed in the skiing, rental, golf, and conference room businesses. For all of these businesses, data cubes of key performance indicators were created so that line-of-business managers could combine historical data, current weather, booking information, and planned employee schedules, in order to both minimize costs while also maximizing customer service.

**KEY BENEFIT AREAS**

Adopting IBM Cognos TM1 enabled Blue Mountain to improve reporting, avoid headcount additions, reduce labor costs, and decrease inventory levels. Benefits from the solution included:

- **Avoided headcount.** IBM Cognos TM1 is used to monitor reservation volumes and guest activity levels across the entire facility on a daily basis. Reporting from the solution is used to adjust room rates, maximize capacity utilization, and assign workers to parts of the resort where they are most needed. This level of reporting is required in order to generate required rates of growth and profitability — and would have required the addition of two new administrators if the company had not deployed IBM Cognos TM1.



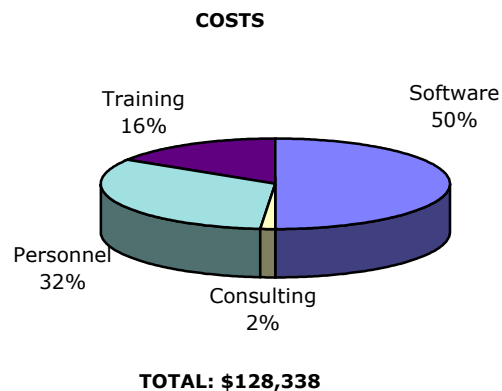
- **Reduced labor costs.** By using IBM Cognos TM1 to create 6-day forecasts that are viewable at both the departmental and company-wide level, front line managers are now able to more rapidly adjust their worker schedules according to the weather and market conditions, or move workers from one department to another, and reduce costs by \$2.5 million per year.
- **Reduced inventory levels.** IBM Cognos TM1 is used to track the freshness and rate of churn for all of the items carried in Blue Mountain's retail stores. After identifying stale and slow moving items and targeting them for discount sales, the company was able to reduce retail inventory levels. Blue Mountain also used IBM Cognos TM1 to analyze the utilization of the various ski boot sizes

that are available for rental. By purchasing more of the boots that were most frequently rented and fewer of the sizes that were rented less frequently, the company reduced inventory levels and improved customer service.

Deploying IBM Cognos TM1 also had broader business benefits, including better pricing and more frequent reporting. Blue Mountain was able to improve its pricing of guest rooms and conference facilities because the managers of these businesses were able to combine current bookings, weather conditions, and market conditions to set prices that would maximize room utilization without lowering margins. Additionally, line-of-business managers now create reports as often as they want, and sometimes daily, so that they minimize costs and maximize revenues according to current conditions. A number of these broader business benefits — combined with other initiatives such as facilities expansion — improved the profitability of these businesses and Blue Mountain as a whole. While Blue Mountain was not able to attribute the improved financial performance to these IBM Cognos TM1-specific benefits, Nucleus found that they were a significant driver.

### **KEY COST AREAS**

Key costs for the deployment were software, personnel, training, and consulting. Blue Mountain Resorts deployed IBM Cognos TM1 with a rolling deployment that took five months and included the hospitality, retail, ski, golf, and food and beverage departments. One employee worked with one consultant from an IBM Cognos TM1 partner throughout the deployment and the solution was deployed on existing server space. During the deployment, 10 employees received formal IBM Cognos TM1 training.



### **LESSONS LEARNED**

Focusing on the most strategically important reporting issues early in the deployment was key to the success of the project. One of the most difficult parts of the hospitality business is the pricing of rooms at a level that maximizes both capacity utilization and gross margin. When a business can't gauge its current booking or demands, it is in danger of charging either too little or too much for its guest rooms and conference rooms. The first IBM Cognos TM1 deployments enabled managers in the lodging and conference room businesses to readily

address the pricing trade off between maximizing revenue and maximizing utilization. In the months following the deployment both revenues and margins increased for these business lines, primarily as the result of IBM Cognos TM1. Although many factors including the deployment contributed to this, the use of IBM Cognos TM1 to improve such an important part of Blue Mountain's business gave both the deployment and IBM Cognos TM1 credibility and momentum. When the deployment was then extended to other lines of business within Blue Mountain, other managers readily adopted it, and in many cases eagerly anticipated its deployment so they could improve their own profitability.

### **CALCULATING THE ROI**

Nucleus calculated the costs of software, personnel, training, and consulting over a three-year period to calculate Blue Mountain's total investment in IBM Cognos TM1.

Direct benefits calculated included reductions to labor costs and avoided headcount additions. Indirect benefits included both lower retail inventory levels and avoided ski-boot purchases. The benefit of lower inventory levels was based on Blue Mountain's weighted average cost of capital.

*Nucleus Research is a global provider of investigative technology research and advisory services. Building on its unique ROI case study approach, for nearly a decade Nucleus Research has delivered insight and analysis on the true value of technology and strategies for maximizing current investments and exploiting new technology opportunities. For more information or a list of services, visit [NucleusResearch.com](http://NucleusResearch.com), call +1-781-416-2900, or e-mail [info@NucleusResearch.com](mailto:info@NucleusResearch.com).*

# DETAILED FINANCIAL ANALYSIS

## BLUE MOUNTAIN RESORTS

### SUMMARY

Project:	<b>IBM Cognos TM1</b>
Annual return on investment (ROI)	<b>1822%</b>
Payback period (years)	<b>0.05</b>
Net present value (NPV)	<b>2,930,272</b>
Average yearly cost of ownership	<b>42,779</b>

<b>ANNUAL BENEFITS</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Direct	0	2,500,000	2,500,000	2,500,000
Indirect	0	130,000	130,000	130,000
<b>Total Benefits Per Period</b>	0	2,630,000	2,630,000	2,630,000

<b>DEPRECIATED ASSETS</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Software	40,000	0	0	0
Hardware	0	0	0	0
<b>Total Per Period</b>	40,000	0	0	0

<b>DEPRECIATION SCHEDULE</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Software	0	8,000	8,000	8,000
Hardware	0	0	0	0
<b>Total Per Period</b>	0	8,000	8,000	8,000

<b>EXPENSED COSTS</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Software	0	8,000	8,000	8,000
Hardware	0	0	0	0
Consulting	2,000	0	0	0
Personnel	41,538	0	0	0
Training	20,800	0	0	0
Other	0	0	0	0
<b>Total Per Period</b>	64,338	8,000	8,000	8,000

<b>FINANCIAL ANALYSIS</b>	<b>Pre-start</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Net cash flow before taxes	(104,338)	2,622,000	2,622,000	2,622,000
Net cash flow after taxes	(72,169)	1,315,000	1,315,000	1,315,000
<b>Annual ROI - direct and indirect benefits</b>				<b>1822%</b>
Annual ROI - direct benefits only				1732%
Net present value (NPV)				2,930,272
<b>Payback (years)</b>				<b>0.05</b>
Average annual cost of ownership				42,779
3-year IRR				1822%

### FINANCIAL ASSUMPTIONS

All government taxes	50%
Discount rate	15%