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## **ROI CASE STUDY**

### **IBM COGNOS BI COMPETENCY CENTER**

### **MARTIN'S POINT HEALTH CARE**

#### **THE BOTTOM LINE**

**Establishing a business intelligence competency center (BICC) enabled Martin's Point Health Care to significantly reduce reporting demands and improve the productivity of its data users.**

**ROI: 1,185%**

**Payback: 1 month**

**Average annual benefit: \$335,250**

#### **THE COMPANY**

Martin's Point Health Care is a not-for-profit regional health care provider which operates four health centers in Maine and New Hampshire. Martin's Point also administers the US Family Health Plan in Northern New England and New York State, as well as Medicare Advantage health plans and health management services in Maine.

#### **THE CHALLENGE**

In late 2005 Martin's Point took stock of how well it made information available to its employees. Martin's Point was a long-time user of Cognos BI and had an informatics team which that was separate from IT and dedicated solely to the creation and maintenance of static reports, as well as the fulfillment of ad-hoc report requests from data consumers. However, the informatics team wanted to overcome obstacles that limited their ability to help end users access information and use it to make decisions. These challenges included:

- Data diversity. Martin's Point collected data from seven enterprise applications, 13 business units, and 20 separate databases. Additionally, the organization operated both SQL and Oracle databases. Although the informatics team had consolidated and integrated these sources within a data warehouse, it did not have a unified approach to reporting and data publication.
- Report volumes. The informatics team published, maintained, and updated more than 300 reports. This was labor intensive, costly, and distracted the informatics team from its intended mandate of better understanding end users' business requirements and finding ways to deliver data to end users so that it could be better utilized in making operational decisions.
- Iterative analyses. Because end users had only static reports as the basis for their data analyses, they typically required custom reports — or a sequence of them — in order to make operational or financial decisions. This meant the

**TOPICS**Business Intelligence &  
AnalyticsIT Management &  
Operations

informatics team was focused on lower-order report fulfillment tasks rather than data management and better analytics.

**THE STRATEGY**

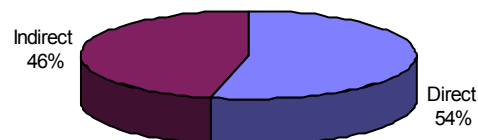
In order to have a more centralized approach to data that would enable the informatics team to focus on end users' analytical needs rather than report building, the team was restructured as a BI competency center (BICC) in late 2005. Creation of the BICC required:

- **Realignment.** The informatics team was divided into three specializations: BI tool administration, reporting, and data architecture. Job descriptions and scopes were created for each of these roles, and members of the team were each assigned a specialization. Also created were workflows that would ensure that the team did not fulfill a report request if the underlying analytical task could be completed with end-user driven functionality.
- **Recruitment.** Because the responsibilities of the informatics team were being expanded, three people were recruited for the BICC and given training in the organization's BI tools.
- **Tool creation.** The team built reports, dashboards, scorecards, and other tools that give end users a unified view of all of the organization's data, with interactive functionality.
- **Reeducation.** Members of the BICC met with the management team to inform them about the realignment of the informatics group and educate them about how end users could become more productive by using BI tools interactively and independently rather than requesting ad-hoc and customized reports.

**KEY BENEFIT AREAS**

Martin's Point was able to reduce the costs of report creation and improve the productivity of data users as the result of its BICC. Key benefits from its creation include:

- **Reduced reporting costs.** The BICC reviews every report request it receives, and whenever a request can be fulfilled with end-user functionality, a member of the team reaches out and shows requesters how they can independently complete their analytical process on their own rather than through a new report. The aggressive deployment of these end-user driven tools, high end-user adoption, and the BICC's selectivity in fulfilling report requests have reduced the team's report building load by 20 percent.

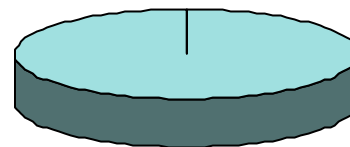
**BENEFITS****TOTAL: \$1,005,750**

- Improved productivity. Being able to independently build reports, analyze them, and perform various research tasks such as drill downs and queries means that end users spend far less time locating and manually analyzing information from various reports and databases.

### KEY COST AREAS

The only cost area for the creation of the Martin's Point BICC was an investment in

#### COSTS



Personnel  
100%

**TOTAL: \$795,825**

personnel. Over the course of a year, four members of the informatics department spent 144 hours planning various aspects of the BICC, including job descriptions, mandate, scope of responsibilities, data models, and reporting models. The team also spent time on strategic issues, such as data governance policies, a plan for master data management, and a road map of what data sources would be added to the BI platform. Creation of the BICC also required help from the HR department in the recruiting and hiring of three new people who were hired in order to fully staff the BICC.

### BEST PRACTICES

A primary driver of the success of the BICC is the dedication of separate resources to tasks related to data analysis. Unlike most organizations, which include data analysis as part of the mandate of an IT department, Martin's Point established its informatics department solely for the purpose of giving analytical data to employees. Enabling data specialists to shift toward the creation of data analysis tools such as dashboards or scorecards, and away from the maintenance of databases and architecture, enables an organization to deliver more content to end users. Even within the BICC, staff members are individually dedicated to BI tool management, reporting, or data. This enables an even deeper specialization within the BICC so that its members can provide data-related consulting and advice rather than just fulfill report requests that may or may not fulfill business requirements.

### CALCULATING THE ROI

Nucleus evaluated the costs of software, hardware, consulting, personnel, training, and other investments over a 3-year period to quantify Martin's Point's total investment in its BICC.

Direct benefits calculated included avoided consulting fees and additions to headcount that would have been required in order to fulfill the current level of

analysis that end users now accomplish on their own. Indirect benefits consisted of the improved productivity of end users, who now spend less time locating, identifying, and manipulating data in order to complete their analyses. Productivity improvements were calculated based on the average fully loaded cost of a data consumer and these savings were reduced by a correction factor in order to take into account the inefficient conversion of time saved into time spent on new tasks.

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# DETAILED FINANCIAL ANALYSIS

## MARTIN'S POINT HEALTHCARE

### SUMMARY

Project:	IBM Cognos BI competency center
Annual return on investment (ROI)	1185%
Payback period (years)	0.08
Average annual benefit	335,250
Average annual total cost of ownership	265,275

ANNUAL BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	180,000	180,000	180,000
Indirect	0	155,250	155,250	155,250
<b>Total Benefits Per Period</b>	0	335,250	335,250	335,250

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

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

EXPENSED COSTS	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Consulting	0	0	0	0
Personnel	6,075	263,250	263,250	263,250
Training	0	0	0	0
Other	0	0	0	0
<b>Total Per Period</b>	6,075	263,250	263,250	263,250

FINANCIAL ANALYSIS	Pre-start	Year 1	Year 2	Year 3
Net cash flow before taxes	(6,075)	72,000	72,000	72,000
Net cash flow after taxes	(3,038)	36,000	36,000	36,000
<b>Annual ROI - direct and indirect benefits</b>				<b>1185%</b>
Annual ROI - direct benefits only				-1370%
Net present value (NPV)				79,159
<b>Payback (years)</b>				<b>0.08</b>
Average annual cost of ownership				265,275
3-year IRR				1185%

### FINANCIAL ASSUMPTIONS

All government taxes	50%
Discount rate	15%