

**NUCLEUS
RESEARCH**

RESEARCH NOTE D19

ROI ANALYSIS YOU CAN TRUST™

ROI Case Study: Microsoft BI Superior Propane

THE BOTTOM LINE

Superior Propane used the Microsoft business intelligence platform to rapidly develop a cost-effective reporting tool and data mart for replacing numerous legacy systems. The company has achieved a positive ROI by eliminating the costs associated with supporting legacy systems on multiple platforms.

ROI: 206%

Payback: 6 months

THE COMPANY

Superior Propane, a wholly owned subsidiary of Superior Plus, Inc., is Canada's largest and only national marketer of propane and related products and services. With a staff of 1800 at 55 market centers and 103 satellite and storage yards, Superior services approximately 300,000 customers. Lines of business include commercial, industrial, residential, agricultural, and automotive applications. In addition, the company provides appliance sales, installations, inspections, and service programs for both propane and natural gas equipment.

THE CHALLENGE

In 2001, Superior merged with ICG Propane, in line with the growth strategy of the Superior Plus Income Fund. With the integration of the two companies, Superior inherited several legacy systems for financial reporting and operations management. This infrastructure had the following limitations:

- High support costs. Each legacy system functioned on a different platform, and maintaining multiple systems required full-time personnel and contractors.
- Limited reporting functionality. The existing systems had limited reporting and archival capabilities and were unable to fulfill the company's need for ad hoc querying for audit purposes.
- Limited internal skills. Only a few IT personnel had the skills necessary for extracting data from these legacy applications, hence increasing the business risk of maintaining these systems internally. If these employees left the organization, other users in the company could lose access to data from the applications.

Superior Propane needed an open solution that possessed strong capabilities for consolidated financial reporting, required less support, and offered the flexibility needed to add data marts as the need arose over time.

THE STRATEGY

In the last quarter of 2001, Superior Propane began searching for a solution that met its needs. The company considered both off-the-shelf applications and custom-built solutions. It also evaluated

offerings from J.D. Edwards, Microsoft, and Cognos as well as customized applications offered by local consulting firms.

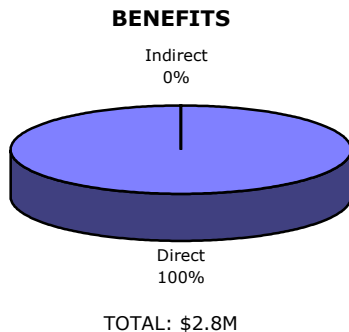
In the beginning of 2002, the company finally chose Microsoft's business intelligence platform for the following reasons:

- Microsoft SQL Server provided an open platform that would accommodate data migration from existing systems as well as the development of future applications.
- The Microsoft XP-based solution, which used Excel and Access for reporting and querying, would require minimal user training because of existing familiarity with the desktop software.

In February 2002, Superior Propane started to develop the solution using a team of consultants from Quadrus and a group of internal developers and finance personnel. The project was divided into three stages:

- Transferring data from legacy sources to a single database server
- Retiring two of the legacy systems
- Building the financial data mart

In November 2002, the solution was rolled out to users in the finance department as well as a few power users in other departments. The solution was available as a data archive through which users could access data from the retired PeopleSoft application or current operational and financial data in JDE World. Users received a 30-minute training session that demonstrated how to use functionality, such as pivot tables, within XP tools such as Microsoft Excel and Access.



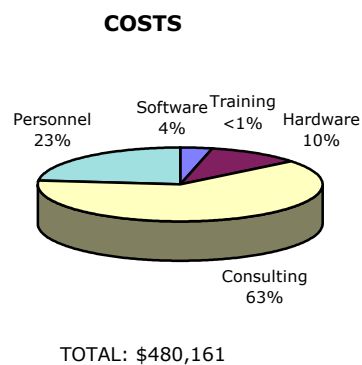
KEY BENEFIT AREAS

Using the Microsoft business intelligence platform for developing a financial reporting and querying tool has allowed Superior Propane to create financial reports faster and more easily. The company has achieved the following key returns from the new solution:

- Reduced personnel costs. Replacing its legacy systems with the Microsoft-based solution has allowed Superior Propane to eliminate the costs of contractors and internal personnel needed to maintain numerous legacy applications.
- Reduced hosting costs. Superior Propane no longer has to spend on outsourced hosting and infrastructure support for its Unix and AS/400-based legacy systems.
- Increased IT staff productivity. Users in the finance department are now able to generate their own custom and ad hoc reports without relying on IT resources.
- Improved reporting. Reports can now be generated quickly, and management has improved access to information about operational performance that was formerly unavailable.

KEY COST AREAS

The main costs associated with Superior Propane's investment in the Microsoft business intelligence solution were consulting,



personnel, hardware, and software. The costs of consulting from Quadrus formed the largest part of Superior’s investment in the solution. Personnel costs were the next largest cost area, at 23 percent. Hardware costs, reflecting Superior’s investment in a Windows server, were the third largest cost area. Software licenses for SQL Server and time spent on user training accounted for the remainder of project costs.

LESSONS LEARNED

Superior’s key deployment challenges were verifying the integrity of the data contained in its legacy applications and ensuring that data integrity was preserved during the migration of data to the new system. In addition, the project team found that it is important to have a clear understanding of its existing production and development data environments before embarking on the construction of a data mart or a business intelligence project.

Superior found that it was able to rapidly start achieving returns from its solution because of the ease of use and low training requirements associated with using Microsoft XP tools for reporting and analysis. In the future, Superior expects that rapid access to data and additional financial analytics will have a measurable impact on the productivity of business users in finance, customer service, and other departments.

CALCULATING THE ROI

Nucleus quantified the costs of software, hardware, consulting, training, and personnel over a 3-year period to calculate Superior’s total investment in the Microsoft business intelligence solution. The company’s main returns have come from direct reductions in personnel, contractor, and hosting costs associated with maintaining its former legacy systems and financial reporting infrastructure. Benefits not quantified include improved access to operational performance data provided by better reporting and analytical capabilities.

Superior Propane

SUMMARY

Project:	Superior Propane - Microsoft Business Intelligence
Annual return on investment (ROI)	206%
Payback period (years)	0.49
Net present value (NPV)	818,587
Average yearly cost of ownership	160,054

ANNUAL BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	925,800	925,800	925,800
Indirect	0	0	0	0
Total Benefits per Period	0	925,800	925,800	925,800

DEPRECIATED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	18,000	0	0	0
Hardware	0	0	0	0
Total per Period	18,000	0	0	0

DEPRECIATION SCHEDULE	Pre-start	Year 1	Year 2	Year 3
Software	0	3,600	3,600	3,600
Hardware	0	0	0	0
Total per Period	0	3,600	3,600	3,600

EXPENSED COSTS	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	50,000	0	0	0
Consulting	300,000	0	0	0
Personnel	55,911	18,563	18,563	18,563
Training	563	0	0	0
Other	0	0	0	0
Total per Period	406,473	18,563	18,563	18,563

FINANCIAL ANALYSIS	Results	Year 1	Year 2	Year 3
Net cash flow before taxes		907,238	907,238	907,238
Net cash flow after taxes		455,419	455,419	455,419
Annual ROI - direct and indirect benefits				206%
Annual ROI - direct benefits only				206%
Net present value (NPV)				818,587
Payback (years)	0.49			
Average annual cost of ownership		443,036	230,799	160,054
3-year cumulative ROI	470%			
3-year IRR	198%			

FINANCIAL ASSUMPTIONS

All government taxes	50%
Discount rate	15%

All calculations are based on Nucleus Research's independent analysis of the expected costs and benefits associated with the application profiled in the accompanying case. Financial modeling tool, format, and methodology copyright Nucleus Research, Inc. All rights reserved.