NUCLEUS  
RESEARCH

ROI: 909%

Payback: 1.2 Months

# BLUE RIDGE LOHMILLER & COMPANY

ANALYST

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## THE BOTTOM LINE

Lohmiller & Company implemented Blue Ridge's supply chain planning (SCP) solution to streamline and centralize its demand forecasting processes. With Blue Ridge's dual SCP and price optimization approach, the organization was able to create an optimal procurement, pricing, and service-level strategy. The SCP implementation provided Lohmiller with new insightful data analysis tools and improved its inventory forecasts. Blue Ridge's offering increased forecasting accuracy, boosted productivity, and increased visibility across the entire organization. As a result, Lohmiller reduced inventory levels by 25 percent, cut procurement times in half, and achieved \$2.8 million in cost savings. Nucleus also found Blue Ridge's demand forecasting, collaboration, and workflow automation capabilities empowered Lohmiller to boost their service levels by 26 percent and increase customer satisfaction.

## LOHMILLER & COMPANY

Founded in 1990, Lohmiller & Company is one of the largest HVAC equipment distributors in the Rocky Mountains region with a network of over 80 dealers. The distributor specializes in residential, unitary, and applied equipment and operates over four locations in Colorado. Lohmiller offers a wide variety of HVAC parts, equipment, and services from brands like Carrier, Bryant, Totaline, Payne, and Honeywell. Nucleus conducted an in-depth interview with Lohmiller & Company to discuss the costs and benefits of the project.

Cost : Benefit  
Ratio | 1 : 12.0

## THE CHALLENGE

The organization's legacy forecasting process primarily consisted of tedious manual tasks and spreadsheet calculations. This antiquated system lacked sophistication in its analytical capabilities and only utilized historical operational data from the ERP system. Forecasting was cumbersome because the company had to coordinate with various locations, a process riddled with human error, duplicate spreadsheets, and excessive back and forth between business units. Excel spreadsheet calculations limited Lohmiller's forecasting period to only 30 days, which was a severe issue since lead times for HVAC products averaged 75 days. The procurement team was operating blindly, which led to suboptimal fill rates of about 67 percent and low customer satisfaction. It was clear that Lohmiller needed to overhaul its demand planning process and implement a designated SCP solution.

## TYPES OF BENEFITS

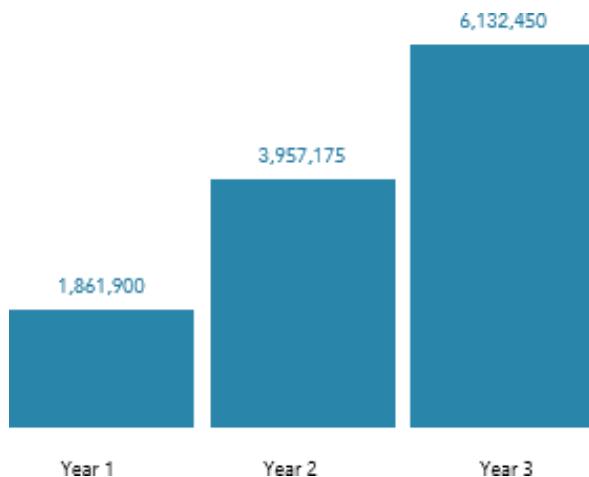


## THE STRATEGY

After management determined that it needed a new web-based SCP system, Lohmiller went through a request for proposal (RFP) process in 2020. Lohmiller considered several SCP providers such as Blue Ridge, Oracle, Demantra, NetSuite, and Infor. Ultimately, Blue Ridge was chosen to replace its legacy system due to its high usability and price-performance ratio. Due to Lohmiller's network and infrastructure, management prioritized consolidating its supply chain, operational, and financial data to conduct mass updates, utilize a multi-

echelon protocol, and optimize operations across its facilities. Mindharbor, a third-party consultant, supported the Blue Ridge deployment for the data transfer. After only 45 days, the implementation was completed in early 2021. With out-of-the-box functionalities and an intuitive user interface (UI), the onboarding process was straightforward, which consisted of two weeks of training, as no great technical expertise was required on the administration side.

## CUMULATIVE NET BENEFIT



## KEY BENEFIT AREAS

Key benefit areas seen from the Blue Ridge deployment include improved increased productivity and reduced operational costs.

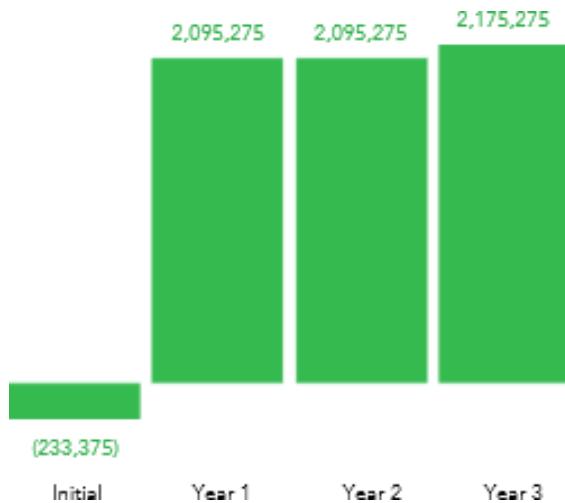
- Increased productivity. Blue Ridge breaks down data siloes by consolidating data from various sources, such as ERP, BI, and CRM systems. This provides improved organizational visibility, enabling cross-functional departments to collaborate and cut significant delays in reporting processes. The SCP platform empowered Lohmiller to effectively scale its operations and oversee its entire network by streamlining demand planning processes, such as exception management. With automated demand sensing and multi-echelon planning capabilities, users can conduct their planning efforts in half of the time. As a result, Lohmiller can now perform forecasting and purchasing more efficiently and redeploy its resources for more value-add tasks.
- Reduced operational costs. With improved forecasting accuracy and organizational visibility, users can orchestrate and optimize operations across the entire supply chain. Blue Ridge's sophisticated machine learning models incorporate seasonal classifications and demand profiling capabilities to offer demand planners an optimal course of action to manage purchase orders, lead times, and inventory levels. Equipped with better demand prediction functionality, the HVAC distributor can

efficiently allocate its resources across all its facilities and tap into previously lost revenue opportunities. Lohmiller boosted service levels to over 90 percent while simultaneously reducing its inventory rate by 29 percent, which led to an aggregated \$2.8 million in annual cost savings.

## KEY COST AREAS

The most significant cost areas of the Blue Ridge deployment were the pre-start integration and the annual subscription costs. Additional cost areas included maintenance fees and onboarding expenses associated with two weeks of training and employee time spent implementing the system.

### NET CASH FLOWS



## LESSONS LEARNED

To avoid unnecessary delays and errors during the implementation process, it is vital to have up-to-date master data. Before implementation, Lohmiller spent two months organizing data points, such as package quality, pricing, and minimum order quantities (MOQs), to successfully migrate onto the Blue Ridge SCP platform. The IT team realized spending more time on master data clean-up in advance had substantial benefits and recommends an additional month to ensure data quality.

Administrators or daily users should be actively involved in the implementation process to build out the system the way they see fit and avoid bugs and issues in the future. Domain expertise and clear objectives from employees facilitate user adoption and accelerate the time to value.

Lohmiller and Blue Ridge collaborated during the entire implementation process to address any concerns. Despite sufficient planning, going live with an SCP solution is a serious undertaking, which likely comes with some problems. The deployment process should be actively monitored and not be conducted during the holidays.

Lohmiller & Company is increasingly becoming aware of the substantial benefits of a data-driven approach to supply chain planning. This prompted management to consider integrating new capabilities and modules, such as purchase auto-approvals and price optimization.

## CALCULATING THE ROI

Nucleus Research analyzed the costs of software, personnel, professional services, and user training over a three-year period to quantify Lohmiller & Company's total investment in Blue Ridge's technology. We used a standard pricing model for the subscription costs.

Indirect quantified benefits include the time savings Lohmiller's employees have driven by streamlining demand planning processes with Blue Ridge's data centralization and automation functionality. Indirect benefits are multiplied by a correction factor to account for the inefficient transfer of time between time saved and additional time spent working.

Unquantified benefits include the increased level of confidence the procurement team is experiencing in making purchase decisions and improved customer satisfaction, which lead to more revenue.

# FINANCIAL ANALYSIS

**Annual ROI: 909% Payback**

**period: 0.1 years**

BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	2,168,000	2,168,000	2,168,000
Indirect	0	62,400	62,400	62,400
<b>Total per period</b>	<b>0</b>	<b>2,230,400</b>	<b>2,230,400</b>	<b>2,230,400</b>

COSTS - CAPITALIZED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Project consulting and personnel	0	0	0	0
<b>Total per period</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

COSTS - DEPRECIATION	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Project consulting and personnel	0	0	0	0
<b>Total per period</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

FINANCIAL ANALYSIS	Results	Year 1	Year 2	Year 3
All government taxes	45%			
Cost of capital	7.0%			
Net cash flow before taxes	(233,375)	2,095,275	2,095,275	2,175,275
Net cash flow after taxes	(128,356)	1,152,401	1,152,401	1,196,401
<b>Annual ROI - direct and indirect benefits</b>				<b>909%</b>
Annual ROI - direct benefits only				883%
Net Present Value (NPV)				2,931,826
<b>Payback period</b>				<b>0.1 years</b>
Average Annual Cost of Ownership				186,250
3-Year IRR				897%

All calculations are based on Nucleus Research's independent analysis of the expected cost and benefit associated with the solution.