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## Navico

### Marine Electronics Supplier Sees Advances in Manufacturing IT with New ERP Solution

*When Navico, a worldwide supplier of marine electronics, moved its Lowrance and other acquired brands into one operating unit, the resulting migration of business and product data exposed the limitations of its older enterprise resource planning (ERP) system database and capabilities. The company decided to replace the ERP system with one that it could roll out rapidly and tailor to its business processes with minimal impact. Navico engaged Infor, a global business software company, to implement Infor™ ERP SyteLine™ 8 with Microsoft® SQL Server® 2005 on the Windows® operating system. By using the Infor solution, Navico implemented the first phase in just 24 weeks, including financials, logistics, shipping inventory, warehousing, customer service, and order management. SyteLine 8 delivered rich, built-in functionality with less customization, shorter implementation times, and fewer IT resources.*

### Situation

In September 2006, Navico was established through the merger of two important international players in marine electronics: Simrad Yachting and Lowrance Electronics. When the marine electronics division of Brunswick New Technologies was added in March 2007, Navico, which has about 2,500 employees globally, truly became a "house of brands"—including the B&G, Eagle, MX Marine, Lowrance, Navman, Northstar, and Simrad brands. All of them are manufactured and distributed under the Navico umbrella in the Americas, Europe, and Asia Pacific (APAC) regions.

> ❝ **Due to the ineffectiveness of our old ERP system and the lack of an adequate database platform, we spent more time managing data than we spent managing our business.** ❞
>
> **Drew Farris**
> Director of IT
> Navico Corporation

The Americas region's headquarters are in Tulsa, Oklahoma, with offices in Nashua, New Hampshire, and Torrance, California. Its main manufacturing facility is in Ensenada, Mexico, and it has other manufacturing facilities in the United Kingdom and New Zealand.

For Navico, the Lowrance brand represents the majority of the Americas operation. For nearly 50 years, Lowrance has been a world leader in marine electronics. Navico sells approximately 1 million Lowrance products each year.

As part of the acquisition of Lowrance Electronics, Navico inherited a MANMAN® enterprise resource planning (ERP) system. Originally deployed in 1982, this ERP system was now outdated and deficient, and it did not provide the flexibility and scalability needed to support ERP information requirements at Navico. For example, the system did not provide actionable data, lacked the means to update workflows conveniently, and was not supportable.

#### Lack of Actionable Data

When Navico moved Lowrance and other brands—including B&G, Simrad, and Northstar—into one operating unit under this ERP environment, its deficiencies resulted in an unsuccessful migration of business and product data that was not sustainable. Many of the pitfalls of migrating to the old ERP system were due to its outmoded flat file database. The lack of an integrated data management platform for migration led to significant limitations and deficiencies in data conversion and data cleanliness.

For example, the part numbers for one brand were represented as 16 characters maximum. However, the old ERP system only supports 12-character part numbers and this threshold cannot be changed. This meant that the 16-character part numbers had to be truncated. This data limitation prevented accurate analysis and reporting of that brand's part numbers.

For Navico, it is essential to have actionable data to run the business both from an ERP viewpoint and from a data perspective. Most importantly, Navico requires accurate, automated reporting of new product development costs.

#### Inability to Perform In-Process Workflow Improvements

With the MANMAN ERP system, it was very difficult to change how the business was run. Its older, inflexible technology did not allow changes to be made to business workflows in order to implement process improvements.

The system did not permit even small changes to be made to improve customer responsiveness. For instance, the customer service workflow could not be modified so that a simple message box will pop up on a call center representative's screen each time a customer calls to order a high-definition fish finder. This message box could

be used, for example, to remind the representative to see if the customer also wants to purchase broadband radar.

For Navico, having the flexibility to make process improvements on an "as needed" basis is essential to running the business efficiently.

### Limited Supportability and Reliability

Finally, the ERP system used outdated, unreliable technologies. The hardware and infrastructure that it was built to run on was no longer supported, and the technical expertise needed to provide system support was also dwindling. In fact, over the last 27 years, this system had been so heavily modified that it could no longer be supported or upgraded.

As a result of these deficiencies, the company began evaluating leading ERP vendors to find a software solution to replace the ERP system and then deploy the new solution throughout the enterprise.

## Solution

Navico decided to act quickly to replace its ERP system with a new solution that was configurable and would require only limited technical changes for implementation. The goal was to deploy the new ERP system consistently, first in the Americas region and then throughout the entire enterprise.

> " **Customer service is what makes the Lowrance brand great. We had to ensure that our customers were not affected by the challenges with the old ERP system and our migration to Infor ERP SyteLine 8.** "
>
> **Drew Farris**
> Director of IT
> Navico Corporation

The company investigated SAP and other alternative ERP solutions. However, because its APAC region has been running Infor™ ERP SyteLine™ for the last 10 years, Navico gave the Infor solution a preferential look. After a thorough evaluation, it determined that Infor ERP SyteLine was the best solution—in part, because the experience gained in the New Zealand and Australia SyteLine deployments could be applied to the Americas region. The APAC region also agreed to provide development support when needed.

Navico engaged Infor, a worldwide business software company, to implement Infor ERP SyteLine 8 with Microsoft SQL Server® 2005 data management software. Infor ERP SyteLine manufacturing software aligns supply with demand and supports the business and operational challenges of manufacturers. SyteLine 8 is a dynamic ERP solution that encompasses manufacturers' needs end-to-end, and it is extensible without requiring additional coding. It runs on the Microsoft platform with SQL Server 2005, the Windows Server® 2003 operating system, and Microsoft .NET technology. With SyteLine 8, companies can increase customer satisfaction, plan and schedule orders, improve forecasting speed and accuracy, automate error-prone manual steps, deliver orders on time, reduce inventory levels, and minimize shortages.

SQL Server 2005 provides data management and analysis that are enterprise-ready, highly scalable, and comprehensive. It is reliable, highly secure, manageable, economical, and fully integrated with SyteLine 8. By using SQL Server 2005, organizations can manage large, mission-critical workloads and complex business applications. They also can gain greater insight from their business information, achieve faster results, and benefit from fast, intuitive analysis and reporting capabilities that can deliver a competitive advantage. SQL Server 2005 automates, streamlines, and eliminates many routine database management tasks and provides timesaving administration tools and wizard-driven features.

This aggressive rollout of SyteLine 8 with SQL Server 2005 was performed by Navico and the Infor Professional Services team, which together performed the analysis and design. Implementation was easy and required only limited customization. The project documentation and project activity is archived in a central repository on Windows® SharePoint® Services 3.0.

In just 24 weeks, the team went live with the first phase of the SyteLine 8 implementation in Tulsa, Oklahoma. This first phase includes SyteLine 8 financials, logistics, shipping inventory, warehousing, customer service, order management, and other extended solutions. In addition, as part of the second phase, the manufacturing and materials management applications are currently being implemented in Ensenada, Mexico. These applications include:

- Infor ERP SyteLine 8
- Crystal Reports
- FRx Enterprise Standard Pack
- Quality Control Systems (QCS), including QCS In Process and QCS Supplier
- Field Service Plus
- Data Collection for FS Plus
- Doc Trak
- RMA Extension Module
- Workbench Suite

The changes that resulted from the implementation of the first phase were dramatic. SyteLine 8 with SQL Server 2005 delivered rich, built-in functionality requiring less customization, shorter implementation times, and fewer IT resources.

The system configuration for the production instance of SyteLine 8 with SQL Server 2005 is shown in the following diagram:

Navico implemented the production instance of SyteLine 8 in its data center in Ensenada, Mexico. The database servers

are clustered and connected to the file system on a storage area network. Additionally, SyteLine 8 calls for utility servers to house application components. Navico installed and maintains two redundant utility servers for failover. This production instance is accessible through the company's Multiprotocol Label Switching (MPLS)-based wide area network. Because its North American and Central American geographic dispersion includes ERP sites in Mexico, the United States, and Canada, Navico also simultaneously implemented a networking system to facilitate connectivity among these facilities.
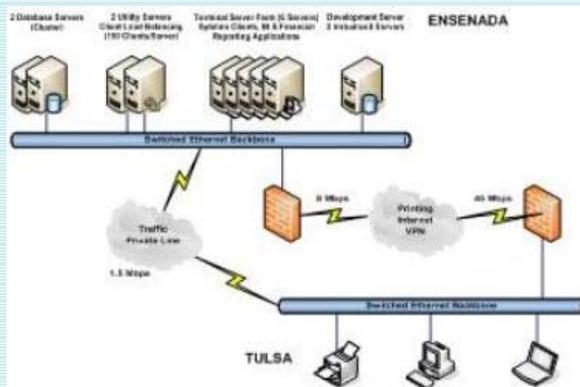
## Benefits

SyteLine 8 with SQL Server 2005 facilitates the easy retrieval of information, simplifies process improvements, delivers supportability and reliability, and reduces costs.

### Facilitates Retrieval of Information

Due to their close integration, SyteLine 8 takes full advantage of SQL Server 2005 and its toolset. For example, by using SQL Server 2005, Navico has simplified how units are built and shipped. When a customer call is received, or when an employee wants to research an issue, the unit's entire history can be traced from order to serial number just by using a filter button. This leads to increased employee productivity and customer responsiveness.

In addition, the SyteLine 8 framework uses SQL Server 2005 to make the entire system extendable and adaptable. For example, SyteLine 8 screens and business objects are stored in SQL Server databases. This means that extensions, adaptations, and personalization features such as shopping lists and wish lists can be modified in SyteLine 8 without changing the base code, so these changes can be automatically upgraded.

### Simplifies Process Improvements

IT staff can use SyteLine 8 with SQL Server 2005 to build consistent and repeatable processes by automating the steps using the event system within SyteLine 8. The event system's rules are stored as data in SQL Server, not as code. The IT costs are low and the changes are automatically upgraded. Similarly, because the SyteLine 8 screens and business objects are stored as data in SQL Server, a range of changes can be made to adapt the system to the business rather than requiring the business to fit the system. These features enhance corporate governance, embedded product licensing, complex customer service agreements, and compliance with regulatory reporting requirements.

Its advanced software architecture makes SyteLine 8 a reliable and scalable solution that is easy to implement and manage. It saves time and money by automating processes that previously required manual intervention. This reduces risks, creates a climate of continuous improvement, and gives greater return on the ERP investment.

### Delivers Supportability and Reliability

One major advantage for customers implementing SyteLine 8 on SQL Server 2005 is its optimal, native integration with the Windows Server operating system along with Microsoft Office SharePoint Server, Microsoft Office applications, and other Microsoft products. Because Windows software is widely supported by hardware businesses, customers have the flexibility to choose hardware from a variety of vendors that support Windows.

### Reduces Costs

SyteLine 8 with SQL Server 2005 running on Windows Server 2003 provides the best possible software experience and it delivers a lower total cost of ownership. This solution offers greater efficiency and accuracy across the business, and it also dramatically reduces database administration efforts and the costs related to database administration and services.

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