

MICROE SYSTEMS

Solution Overview

Industry

High Tech Manufacturing

Scenario

MicroE needed to enhance and customize the functionality of their Microsoft Great Plains eEnterprise system to streamline three key business processes: purchasing, delivery tracking, and returns and repairs.

Company Profile

MicroE Systems produces the world's most advanced optical encoders and most precise motion systems. Founded in 1994, the company has grown to 93 people with sales of \$30 million in FY01 and offices in Tokyo, Singapore, San Jose and Zurich. Today, 75% of the world's hard drives are produced on MicroE equipment.

Benefits

The new RMA process allows a customer to have full, real-time insight into the status of their return. The efficiency of the repair process has improved dramatically, resulting in a faster response time for the customer and lower cost to MicroE. Suppliers benefit as they receive the most recent and accurate part information from the purchasing department. Employees benefit from ease of use, seamless integration, and improved efficiencies related to their jobs.

Software Used

Microsoft Great Plains eEnterprise
 General Ledger
 Payables Management
 Receivables Management
 Bank Reconciliation
 FRx Report Writer
 Sales and Purchase Order Processing
 Integration Manager
 Inventory Control
 Manufacturing and Bill of Materials
 Returns Management
 Crystal Reports Pro
 System Manager
 Forms Printer

Microsoft SQL Server

Demographic Information

Annual Revenue: \$30+ million USD
 Number of Employees: 93
 Number of Users: 18
 Number of Sites: 5

MicroE lives by the adage: Do more with less. They used that guiding philosophy as they developed their business processes. And they use technology to support the philosophy. The Microsoft Great Plains eEnterprise modules, tools, and underlying architecture have allowed MicroE to easily customize critical areas of their specialized business processes. The Microsoft Great Plains ERP suite has provided a foundation that they can continue to build on as the company grows.

MicroE is committed to the use of innovative technology and to leveraging Microsoft Great Plains tools and technologies to streamline business processes, improve productivity, provide visibility to key business metrics, and significantly improve customer satisfaction. Three areas were identified for improvement: purchasing, customer service, and internal operations.

Working with DataSys Corporation, a long-term and highly detailed project plan was established to enhance the functionality in these three areas. The plan—which involved customizations, modifications, and integrations—was developed and implemented in logical phases over several months. Careful planning was especially critical due to the requirements of ISO 9000 compliance.

Innovation in Purchasing

The first task was to create a custom purchase order report. A Crystal report pulled information from the Manufacturing Bills of Material onto the purchase order report. This information was crucial to MicroE's vendor relationships as an incorrect or missing BOM/Part revision level could result in a costly disaster.

The next major accomplishment was the addition of a Blanket Purchase Order to support the frequent blanket orders placed with vendors. An order entry window was created and customized using Visual Basic and integrated into the Microsoft Great Plains application. Users can schedule multiple line items by simply entering the item number and total quantity into the eEnterprise Purchase Order Entry window and clicking the custom "Create Blanket" button. Another window allows users to schedule the item over an unlimited number of due dates and business logic prevents users from scheduling an amount that differs from the total on the eEnterprise Purchase Order Entry window.

In order to comply with ISO 9000 guidelines, MicroE also needed a system for managing vendors who were approved for purchases of inventory items. An Approved Vendor List customization was implemented to manage approved vendors in the purchasing process and to manage related information within eEnterprise. The eEnterprise Purchase Order process was enhanced to only allow the procurement of inventory items from approved vendors.

Innovation in Customer Service

MicroE's customers demand on-time delivery and must see evidence of the capability to ship on time before they will design the MicroE product into their systems. If the product doesn't ship when the customer expects it, their production comes to a halt. MicroE needed to track the customer's required ship date against the promised ship date, and report on actual performance.

To provide the necessary metrics and effectively track the applicable information, DataSys and MicroE added date fields to the eEnterprise Sales Item Detail Entry window. These fields allow the Forecast Date, Customer Requested Date, and Acknowledged Date for each line item on a sales order to be tracked. Prior to the enhancement, it was impossible to obtain, compile, and publish this data.

The next task was to create a Packing List customization for entering information and printing a packing list from the Sales Order Fulfillment window. The packing list utilizes information from eEnterprise Sales Order Processing, tremendously reducing the risk of shipping a duplicate or canceled order, and allows users to enter order-specific information such as: shipper's name, product serial numbers, quantity of packages, weight, and air-bill number. The final packing list displays all of the necessary information to accompany the product to the customer's door.

Innovation in Internal Operations

MicroE had a tremendous bottleneck in the returns and repair process. To get the repair process under control, the eEnterprise Returns Management module and an RMA Process Notification customization were implemented. Three key operational deficiencies were identified: inability to track the status of a returned unit, lack of turnaround time metrics for returned units, and a lengthy repair process, due to the lack of visibility of the unit in the repair process.

Implementing the Returns Management module allowed RMA numbers to be issued to customers. Returned units could then be tracked as they arrived on the dock. This module solved a portion of the problem, with the RMA Process Notifications customization rounding out the solution.

An RMA Process Notifications customization was added to the eEnterprise RMA Entry/Update window using the eEnterprise Continuum for Visual Basic module. The seamless integration of this customization allowed users to change the status of an RMA without leaving the RMA Entry/Update window, and to transparently update fields.

MicroE thereby gained the ability to track the following metrics:

- Receipt of units within 30 days of the customer contact
- Repair turnaround time
- Failure codes for repairs
- How long the returned unit is held before receiving authorization to perform the repair
- The number of units returned by product

Ray Sansouci, President and CEO of MicroE comments, "For a small growing company like MicroE to compete in a demanding global marketplace, we need every competitive advantage we can get. Microsoft Great Plains, the foundation of our business enterprise, has given us a tremendous competitive advantage by streamlining our business processes and allowing us to get the information we need to run our business and delight our customers."