



Microsoft Dynamics 365 ERP Solutions for the Manufacturing Industry

**Improving Workflow Efficiencies
to Drive Rapid Growth**



Microsoft Dynamics 365 ERP Case Studies: Learn from the Experiences of Your Peers

Competition forces many manufacturers to differentiate themselves in their market. At the same time, manufacturers face many operational challenges:

- Gaining visibility into available and forecasted inventory.
- Capturing all BOM line-item costs.
- Managing inventory to fulfill customer orders quickly.
- Tracking inventory status.
- Reducing manual entry among multiple software systems.
- Improving products to control costs.
- Balancing transportation and inventory carrying costs.
- Dealing with compliance regulations.

No matter which challenges your company contends with, Western Computer can help turn them into business growth opportunities.

In this solution brief, we compiled four case studies to demonstrate how our customers leverage modern Microsoft Dynamics 365 ERP solutions and Microsoft Power BI. These technologies enable our customers to accommodate rapid growth, gain real-time insights, streamline manufacturing and inventory processes, accelerate order processing, increase production, and facilitate field services—all without adding headcount.

By learning from the experiences of our customers, you can discover ways to leverage Dynamics 365 solutions to deliver similar benefits for your company.



National Guard Products Modernizes ERP to Accommodate Rapid Growth

The Business Challenges

As National Guard Products (NGP) planned to expand its Memphis operations by opening a second manufacturing plant in Las Vegas, it was the ideal opportunity to deploy a modern ERP platform. At the time, the Memphis facility relied on a legacy ERP system that ran efficiently because the NGP team had collaborated effectively for so long.

However, many ERP processes were inside people's heads—and not in a scalable system. With Las Vegas coming online with a completely new staff, the management team felt it would be easier to start with a new ERP system at that site before transitioning the Memphis team. Specific manufacturing and warehouse functions NGP hoped to streamline included the bill of material process and inventory management. Given that NGP offers more than 20,000 products that can be customized in multiple ways, the effort to manage these functions always required a lot of manual work with Excel spreadsheets. Management wanted each BOM to tell the manufacturing team what raw materials they needed for each job and the precise process to produce the items. Improved inventory management would make sure enough raw materials were in stock to meet forecasted customer demands.

The Dynamics 365 Solution

Seizing the opportunity to deploy a modernized ERP platform, NGP decided to implement Microsoft Dynamics 365 Business Central Cloud. For help with the deployment, NGP selected Western Computer. A key tool Western Computer brought to the table was the Insight Works product configurator, which Western Computer integrated with Business Central. The manufacturing execution application is built specifically for Business Central and can handle material resource planning. This made it possible for NGP to streamline the process for the many thousands of products the company custom builds.

The Key Results

For material resource planning, NGP now runs reports in Business Central to forecast how much material the company needs to purchase to fulfill customer orders. This functionality also helps resolve supply-chain issues. NGP can keep a safe level of inventory without tying up too much capital.

NGP also appreciates the benefits of using a cloud solution like Dynamics 365. The company doesn't have to worry about server uptime, the infrastructure, and backing up the data. It's all taken care of by Microsoft, which makes life a lot easier for the IT team. If something goes wrong, NGP knows Microsoft will take care of it.

Another benefit for NGP comes from the integration of Business Central that Western Computer set up with Salesforce, the CRM platform. Western Computer configured APIs in Business Central so real-time data flows automatically between the two systems, which eliminates manual rekeying and eliminates input errors. Following the opening of the Las Vegas facility and the deployment of Business Central, NGP has continued to grow rapidly, acquiring companies in Montreal, and two other US cities. NGP is currently building a plan to migrate the legacy ERP system in Memphis and eventually bring all the new acquisitions over to Business Central.

About National Guard Products

With headquarters in Memphis, National Guard Products has manufactured custom weatherstripping and threshold products since 1935. Today, the company offers more than 20,000 products that span traditional door seals, door thresholds, gasketing, louvers, sound seals, door bottoms, flood shields, continuous geared hinges, and sliding door hardware.

Solution Highlights

- Provides a cloud solution to alleviate internal IT team workload.
- Integrates ERP with CRM to eliminate manual rekeying and input errors between systems.
- Sets the stage for implementing modern ERP platform for other company locations.
- Utilizes product configurator to streamline manufacturing workflows.
- Provides real-time insights into inventory to resolve supply chain issues.
- Calculates true revenue and complex sales commissions.
- Connects to portal to enable customers to track orders and invoices.



V&P Scientific Manages Surging Growth by Modernizing ERP and CRM

The Business Challenges

V&P Scientific previously relied on legacy systems for both ERP and CRM. With surging growth, the systems hampered workflow efficiencies. In addition to leveraging modern cloud technologies to solve this challenge, V&P Scientific wanted to integrate ERP and CRM—so real-time data could flow automatically between the two systems. This would allow the staff to avoid rekeying information manually and create immediate visibility into the status of all business activity.

The Dynamics 365 Solution

The V&P Scientific management team decided to solve these challenges by deploying Microsoft Dynamics 365 Business Central Cloud and Dynamics 365 Sales (CRM)—supported by Microsoft Power BI for reporting. While researching solutions, the team came across Western Computer as a leading provider of Dynamics 365 solutions with an impressive track record of working with manufacturing firms. After documenting all the V&P Scientific ERP and CRM workflows, Western Computer set up Dynamics 365 Business Central to manage finance, manufacturing, and inventory. Western Computer then configured Dynamics 365 Sales to run marketing, sales, and customer service workflows.

The Key Results

With standard naming conventions, it's now easier for V&P Scientific to track inventory and capture costs on each bill of materials. This, in turn, makes it simpler to measure product margins. The Power BI reports derived from the ERP data allow managers to track inventory, sales, and costs more accurately while the documented workflows streamline the process for new employees to pick up on how to complete each manufacturing workflow.

Using a cloud solution rather than an on-premises solution also generates benefits. Across locations and home offices, V&P Scientific can conduct meetings in Microsoft Teams—just like everyone is together. They can also easily access the information in Business Central and Sales since the applications are all part of the Microsoft ecosystem. And with the integration to Power BI reports, users can pull data right from Business Central without leaving Teams.

By leveraging Business Central, V&P Scientific has reduced days outstanding on shipments to customers while variances in inventory hand-counts decreased by 10%. This helps make sure every bill of materials contains all the necessary components.

In addition, using Business Central gives the staff greater discipline around inventory, bills of materials, and the tracking of sales orders and purchase orders. This creates an environment and a structured way of managing processes the right way. In other areas of the business, V&P Scientific uses CRM to manage marketing programs while customer relationship management has improved with the transparency of all email exchanges with customers. The customer service team can track where a product or item is and access documented conversations about returned or defective products. The flexibility of CRM allows V&P Scientific to modify the user interface to develop Workflows, Entities, and Tasks specific to the business needs for complete transparency across the company.

About V&P Scientific

Since its founding in 1979, V&P Scientific, based in San Diego, has engineered innovative research equipment, including OEM and private manufacturing products. The company specializes in machining and 3D printing tools for scientific research and patented the first 96-Well Filter Manifold and the Mini-Fold Dot-Blot Hybridization Manifold. Today, V&P Scientific offers nearly 2,100 products from its 8,000 square-foot manufacturing facility.

Solution Highlights

- Automates converting quotes to sales orders.
- Accurately tracks the location of inventory.
- Captures all costs on each bill of materials to simplify measuring product margins.
- Facilitates collaboration on performance metrics for employees in different offices.
- Reduces days outstanding on shipments to customers.
- Decreases variances in inventory hand counts by 10%.
- Improves customer service by enabling visibility into customer communications and order tracking.



Heathrow Scientific Runs ERP in the Cloud to Accelerate Order Processing and Increase Product Output Without Adding Headcount

The Business Challenges

As the Dynamics NAV solution at Heathrow Scientific approached end-of-support status, the management team knew it was time to modernize the company's ERP platform. There were also plans to potentially grow through an acquisition: Management wanted to be ready in advance. With the aging ERP system, management was also concerned about cybersecurity. Another key capability they sought in a new platform would be enhanced support for integrations with third-party applications and EDI connections with vendors, partners, and customers. Gaining tight integration among these various applications would reduce manual data entry. However, the biggest driver in needing a new ERP platform was finding a way to streamline the customizing of ERP processes.

The Dynamics 365 Solution

Heathrow Scientific identified Microsoft Dynamics 365 Business Central Cloud as the ideal solution for taking on these challenges. For help with the deployment, the internal project team turned to Western Computer, which was highly recommended by the managed services provider supporting the Heathrow Scientific IT infrastructure. The deployment of Business Central went smoothly with no downtime. Western Computer executed the cutover during a weekend and managed the migration of all the master data files to ensure Heathrow Scientific could pick, pack, and ship as usual on the next business day.

The Key Results

A key benefit Heathrow Scientific realized includes improved data accuracy. Dynamics 365 Business Central Cloud eliminates many manual data entry processes, and with more accurate data, Heathrow Scientific no longer conducts time-consuming manual reviews of sales, purchasing, and production orders. And for third-party software solutions, such as EDI, Business Central streamlines building and maintaining the connections.

Microsoft Power BI, which Western Computer connected to Business Central, has improved the company's reporting capabilities with improved visibility into inventory. This allows managers to make real-time decisions on placing orders with supply chain vendors. Heathrow Scientific also gets sales orders out the door faster and generates more revenue while meeting customer needs.

The Power BI integration has also helped generate KPI reports for managing sales targets, revenue targets, on-time order processing, pick and pack processes, and deliveries. Analyzing the KPIs and the automated processes have allowed Heathrow Scientific company to decrease order processing time by 20% while increasing output capacity by 15% without any additional headcount.

Another improvement comes from 365ContainerImport by Western Computer, a shipping container module that provides visibility into supply chain products from international vendors. At the same time, the customer service team benefits from Business Central by reducing order errors and eliminating manual processes to verify orders have the right dollar value and quantities, and if there are any duplicates. If an error occurs, Business Central automatically alerts the service team.

Other benefits include cost savings since the cloud deployment eliminates expensive upgrades compared to an on-premises solution. In addition, running ERP in the cloud allows Heathrow Scientific to fully utilize new features and updates in Business Central (released by Microsoft twice each year) along with smoother integrations with third-party software vendors.

About Heathrow Scientific

Founded in 1996, Heathrow Scientific is a global manufacturer of lab equipment used in life science and clinical applications as well as academic and government research. The company makes new and better ways of lab work possible by supplying everyday equipment that solves problems, improves productivity, and saves space.

Solution Highlights

- Streamlines building and maintaining connections with third-party solutions and EDI partners.
- Decreases order processing time by 20%.
- Increases output capacity by 15% without adding headcount.
- Generates reports on KPIs to evaluate company performance in all areas.
- Improves data accuracy by eliminating manual data-input processes.
- Provides visibility into inventory availability for customers placing orders.
- Automates identification of customer orders with incorrect information.



Western Precooling Systems Gains New Efficiencies, Live Insights, and Mobile Field Service on a Unified ERP Platform

The Business Challenges

The fast-paced supply chain at Western Precooling Systems serves customers in the agriculture and food industry. The organization manages multiple entities and a high volume of data across many cooling sites, internal inventory and equipment, perishable and high-value customer inventory, field service maintenance and repair, and financial operations.

After many years of using Dynamics GP and a legacy AS400 system, the systems were challenging to maintain and offered no path for improvements. Other major issues were manual workflows and the disconnected data sources that caused limited visibility across the organization. For example, field techs had to document time, parts, and notes on paper—only to have the admin team re-enter the information for management approvals.

The Dynamics 365 Solution

To solve this challenge, Western Precooling Systems turned to Western Computer—which implemented a Microsoft Dynamics 365 solution that includes Finance and Supply Chain Management, Field Service, and Power BI—all running on the Azure cloud platform. Dynamics 365 provides centralized security management for establishing user controls and permissions by role, business unit, or other criteria.

Western Computer also used Power Automate to build workflows to eliminate human errors and establish controls such as preventing service orders from being prematurely closed and ensuring SKUs are entered properly and not duplicated. Western Computer then created automated financial processes to replace transactions posted in batches. With these capabilities, Western Cooling Systems now has real-time transactions with up-to-the-minute visibility. The internal team can easily manage the multiple business entities, and templates help create new legal entities quickly.

For the field services team, techs are completely mobile with offline capabilities to enter information on their tablets, so there's no duplicate entry required by admin staff. The field techs also save time preparing for service calls since they have access to equipment history. In addition, service order approvals are fully digital and automatically triggered upon task completion.

The Key Results

Western Precooling Systems now has a much easier and more flexible way to manage and control inventory across multiple warehouses. The staff has full traceability and can locate anything at any time—whether in a warehouse, out in the field, or on a service vehicle.

At the same time, Power BI has transformed reporting and decision-making as managers can monitor and analyze performance in real time throughout the day. That's because the performance data is consolidated in Dataverse from multiple sources and presented in interactive dashboards. Users can access the insights they need on-demand to make fast and proactive decisions.

With Dynamics 365, Western Precooling Systems has a solid foundation for future company growth. In addition to the ability to scale on demand and enjoy automatic software updates vs. more upgrades—they have found a partner in Western Computer they can depend on for ongoing improvements, support, and advisory services.

About Western Precooling Systems

Founded in 1942, Western Precooling Systems helps growers and shippers across the Western United States deliver fresh produce to their customers. Recognized as an industry leader, the company provides cooling services at more than 100 customer sites, ships products for customers, and manufacturers equipment—including the innovative HydroVac™ system.

Solution Highlights

- Optimizes mobile field service operations and processes.
- Provides real-time visibility into financial and service performance.
- Automates processes and workflows
- Accelerates field service and improves customer service.
- Enables full inventory traceability and transparency across multiple warehouses.
- Eliminates manual paper processes.
- Facilitates data-driven decisions in real time.



Empowering Businesses of Today to Become the Giants of Tomorrow

From implementation to day-to-day operations, Western Computer tailors and supports Microsoft Dynamics solutions that drive your business to success. Passion fuels our commitment while technological and industry expertise defines our craft. As your trusted advisor for today and tomorrow, we partner with you to navigate the evolving technology landscape for all things, big or small. Limitless success, no boundaries.

Through our experience of collaborating with customers for more than 30 years, we build your roadmap to success by starting with a conversation about your goals, your challenges, and how we can empower you to connect, grow and compete. With more than 180 Dynamics experts across the United States and Canada and over 500 successful implementations, you can trust us to provide the experience, knowledge, and attention you need to get where you want to be.

To learn more about how Microsoft Dynamics 365 ERP solutions can help your business, contact [Western Computer today](#).



Western Computer is Microsoft Solution Partner founded in 1987 to empower and enable businesses.

Specializing in Microsoft Dynamics 365 and Power Platform solutions, services, and support, our 180+ senior-level experts bring advanced functional and industry expertise to companies across North America. With over 35 years of ERP, CRM, and business intelligence experience—and more than 1,250 successful implementations—we deliver solutions to meet the unique needs of specialized industries and companies of all sizes.

Western Computer is a proud 2024/2025 Inner Circle Member and a three-time finalist of the Microsoft Dynamics 365 Business Central Partner of the Year. Learn more at www.westerncomputer.com

