



Case Study

Dynamics 365 Implementation and Support Accelerates Delivery by 90% for Global Supplier



Customer Overview

Customer

A leading supplier of electric vehicle assemblies.

Profile

The company supplies electric vehicle assemblies, electrical wire harnesses, seating systems, mechanical assemblies, and plastic products to the transportation, construction equipment, industrial, and recreational vehicle markets.

Industry

Manufacturing

Services

Dynamics 365 Implementation and Support

Business Need

With an annual revenue of \$970 million and over 8,300+ employees, the supplier operates plants and offices in 25 locations globally. However, different sites used legacy ERP systems that were no longer supported and required a complete upgrade. The many customizations built over the years made them extremely rigid and difficult to work with. The reliance on several unintegrated third-party applications further impacted inventory management efficiency.

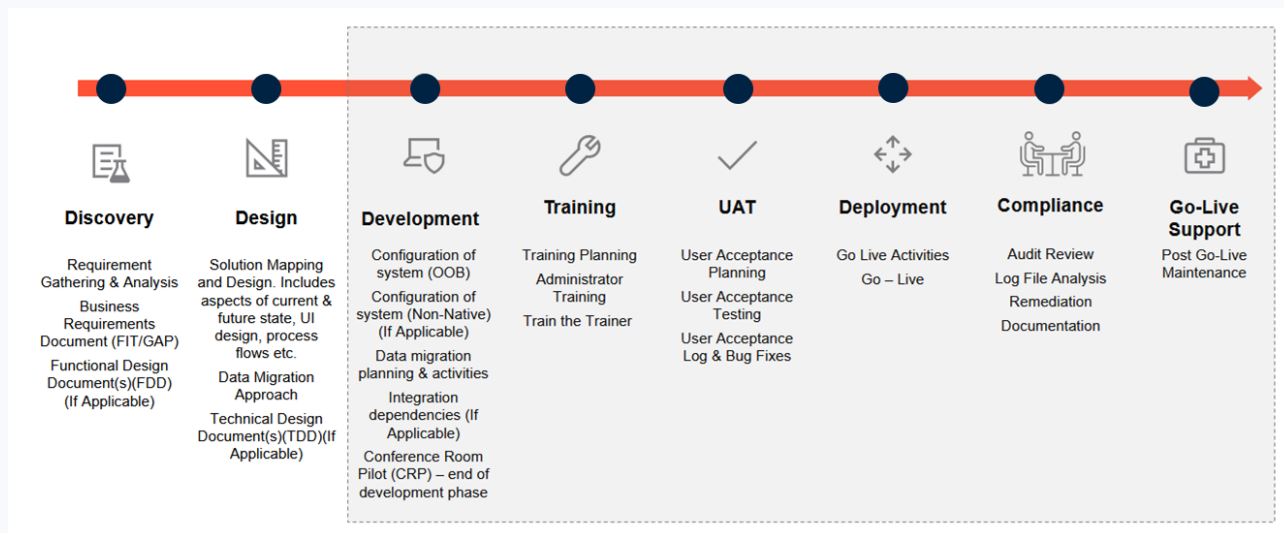
The client brought a Dynamics 365 implementation partner and roped in Synoptek to migrate data from the legacy ERP system to the new Dynamics 365 system. However, the client wasn't happy with the implementation partner's performance. Many issues delayed the project, and the team could not keep up with the pace of the business.

To improve visibility into business processes and data and ensure greater control over operations, the client engaged with Synoptek to replace its current integration partner, implement Dynamics 365 F&O, and consolidate up to 20 instances of 12 different ERPs to the new platform. This consolidation effort was critical to improving operational efficiency and data-driven decision-making.

Solution and Approach

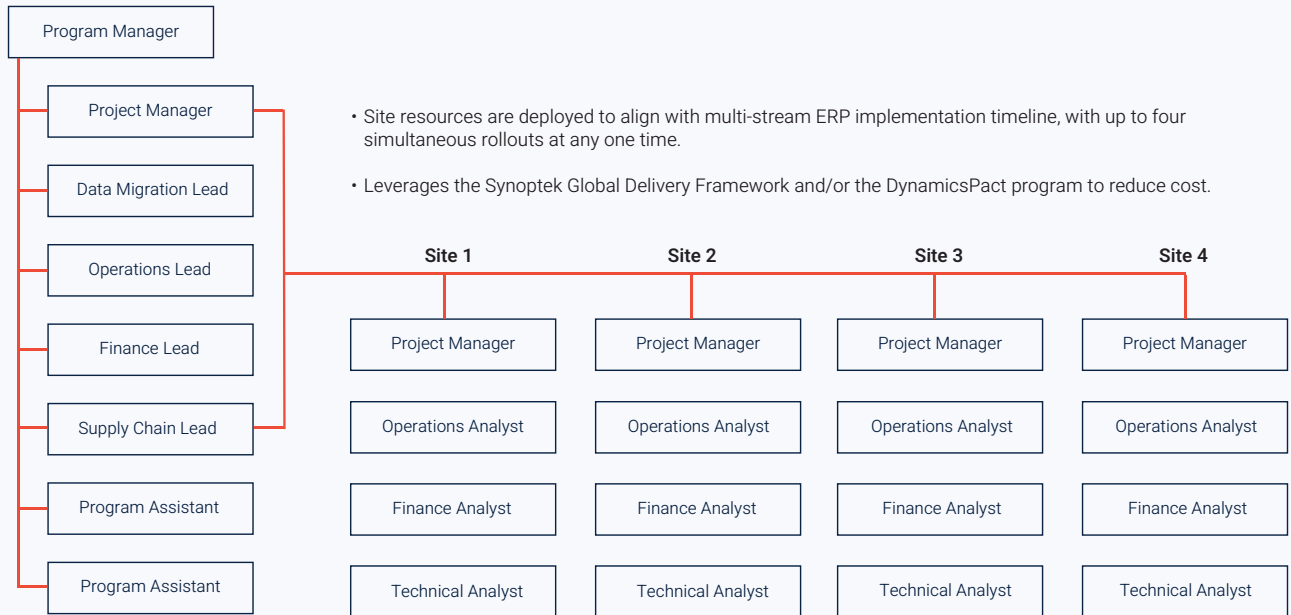
To consolidate instances into a unified Microsoft Dynamics F&O platform, Synoptek was the master integrator, responsible for executing the full implementation while overseeing all vendors and partners and ensuring seamless integration and execution.

We built a core team of consultants to lead activities of dedicated “site” teams and leveraged the framework established by the previous partner as a starting point to avoid starting from scratch. However, Synoptek’s overall objective was to build a Global design by optimizing the existing framework, which would expedite the future rollout and enable faster integration of future acquisitions. This approach allowed for greater efficiency and continuity, as it built upon existing processes and knowledge.



We collaborated closely with the client to develop a comprehensive three-year plan and roadmap for consolidating their existing systems. As part of the strategy, we initiated the rollout in Mexico, the client’s largest instance, directly contributing to revenue generation. The plan also included creating a global design to serve as a blueprint for future rollouts across other regions.

A dedicated team was assembled to ensure smooth execution, with key streams established in project management, supply chain, production, data, and business analysis. The team was led by a technical architect, with additional support from an offshore team to ensure efficient delivery and alignment across all process stages.



Business Consulting Model

The Client Executive supervised the entire program and worked closely with the management team to set the program strategy and ensure all initiative aspects were properly planned and managed. The program manager took on the day-to-day responsibilities of program execution and worked closely with functional and technical leads and extended teams to execute the plan.

We executed a multi-stream deployment model to roll out the solution across multiple locations. Our solution was centered on a robust business consulting model, including functional consulting and a clear division of responsibilities within the core team.

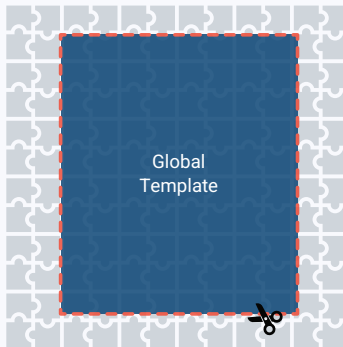
- Leadership roles were assigned based on specific work areas, with three distinct work streams to tackle the key functional areas: Supply Chain, Finance, and Production.
- Each workstream had dedicated leads that ensured the smooth execution of their respective areas.
- A separate work stream focused on integration and customization, ensuring that system adjustments or third-party integrations were handled effectively.

Project Methodology

We followed a “rinse and repeat” methodology, establishing a solid framework that could be consistently applied to the remainder of the customer’s sites. The Azure DevOps library, consisting of over 1200 user stories, served as the basis for the global template. We assimilated these user stories and created a communicable solution for everyone to understand.

01

Azure DevOps contains over 1200 user stories (puzzle pieces) that define the **solution**



02

Putting the puzzle together and carving out the subset that is applicable to ALL sites will define the **global template**

03

The global template must be translated to a set of processes to articulate the solution as a cohesive and coherent strategy

Upstream Processes

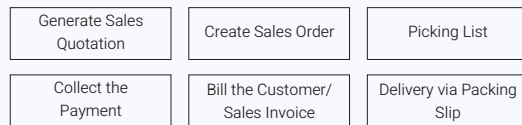
- Acquire to dispose
- Forecast to plan
- Hire to retire
- Inventory to deliver
- **Order to cash**
- Procure to pay
- Product & service lifecycle mgmt.
- Project to profit
- Prospect to quote
- Record to report

Plan to Produce

- Define production strategies
- Plan production operations
- Run production operations
- Outsource production orders
- Control production quality
- Track production costs

Downstream Processes

- Acquire to dispose
- Case to resolution
- Forecast to plan
- Hire to retire
- Inventory to deliver
- Order to cash
- Procure to pay
- Product and service lifecycle management
- Record to report
- Service to cash



04

Process maps enable communication and are the basis for understanding and buy-in

Our team managed third-party vendors and oversaw integrations across multiple systems. We were also tasked with migrating legacy data, ensuring critical information was seamlessly transferred to the new system without disruption. With a global template and a clear strategy, we successfully rolled out the multi-stream ERP solution.

Dynamics 365 Implementation

The implementation project included all aspects of solution design, project management, configuration, integration, and customization. In addition, Synoptek continued to perform data migration activities to move all the data from legacy systems to Dynamics 365.

- **BOM builder:** The client used a third-party software to collect BOM details, which are then sent to Oracle via a CSV file for BOM creation. Synoptek replicated this functionality in D365 F&SCM with a few enhancements, enabling a Structured BOM from the CSV file to be automatically imported to D365 F&SCM with one click.
- **BOM Translator:** The client used a third-party software to maintain all data related to circuits, wires, and other additional details. Additionally, the client utilized a flat BOM and route structure within Oracle. Synoptek developed a functionality that enables the conversion of the flat BOM into a structured BOM and routes it in D365 using details from the legacy system and applying detailed, complex logic, leveraging various technical parameters to ensure accuracy and efficiency.
- **AMOS Integration:** The client used a custom-built tool called "AMOS" for production order scheduling based on specific parameters like seal, terminal, capacity, resource availability, etc, and was integrated with Oracle via direct database query. Synoptek integrated D365F&SCM with "AMOS" via CSV file, where production order details are sent to AMOS from D365F&SCM in a predefined format, which AMOS uses for scheduling orders. Data is exchanged between D365 F&SCM and AMOS, wherein D365 F&SCM exports data to AMOS, and then AMOS shares the scheduled resource ID with the date and time of the Production order to D365 F&SCM.

- **AOP Integration:** The client used an on-premises application called AOP to inspect finished goods. This application integrates with Oracle to complete the last route operation and Report as a finished Production order along with label printing. Synoptek integrated AOP with D365 F&SCM to complete the previous route operation and Report as a finished Production order.
- **Warehouse Optimization:** Synoptek defined advanced warehousing processes for purchase, sales, transfer, sales return, and production operations across three central and consignment warehouses. To support these processes, we have designed a work list of mobile device menu items and menus in the Warehousing App to simplify tasks and reduce the effort required by warehouse workers. To streamline raw material picking in production, we developed a custom report that consolidates all required raw materials, allowing users to pick them in a single step, saving time and effort. In addition, we have designed ZPL labels for purchase, transfer, and production processes, along with a set of complex custom labels to meet specific shipping requirements.
- **Product Master Restructuring:** There were only two hierarchical levels—Finished Goods (FG) and Raw Materials in the previous product structure in Oracle. However, with the transition to a structured BOM, the product structure has been expanded to introduce additional levels. Now, alongside FG and Raw Materials, the hierarchy includes Level 1 Subassemblies, Level 2 Subassemblies, and potentially further layers, creating a more detailed and organized manufacturing and inventory management framework.

Managed Dynamics 365 Support

Synoptek provided Level 1 and Level 2 managed application support for the D365 and older versions of AX implementation. This included :

- Incident-based support
 - Identity/Security/Access Rights Management
 - Security role-based MACD
- Routine administrative tasks
 - Workflow/flow configuration
 - Entity configuration
 - Form configuration
- User Account/Profile Management
- Enhancements/Modifications

Business Benefits

Our methodical, framework-driven approach enabled us to manage complex tasks efficiently, ensuring smooth transitions and minimal downtime across all sites. With a dedicated core team based in the US, supported by a global offshore team, Synoptek ensured the project could scale and deliver the necessary results across all sites.

- Inventory reengineering/restructuring led to a 20% increase in production efficiency.
- Elimination of manual efforts led to 10% savings.
- The global design resulted in 20% faster rollouts for future entities.
- The unified ERP system led to 90% faster delivery of products and hence improved client commitment.
- The BOM Builder led to a 40% overall improvement in efficiency via improved product design and engineering.
- The BOM Translator led to a 25 % overall improvement in efficiency via improved data accuracy and logic for data transformations.

Because of our approach, Synoptek successfully won the next phase of the project, which involved expanding to 20 different sites over the next three years.



20% Increase in production efficiency



10% Operational savings



20% Faster rollouts



90% faster product delivery

About Synoptek

Synoptek delivers accelerated business results through advisory-led, transformative full-life-cycle systems integration and managed services. We partner with organizations worldwide to help them navigate the ever-changing business and technology landscape, build solid foundations for their business, and achieve their business goals.