



Customer Success Story

Thirdware provides Integrated Manufacturing and Material Management Solution for a Leading Automotive Company

**THIRDWARE
SOLUTION INC.**



COMPANY

Ford Motor Company has manufacturing facilities, Sales and Service operations world wide. The operations vary from full fledged Integrated Manufacturing Facilities, to Assembly Plants and Built Up Unit Sales. The company has a well organized IT infrastructure to support the operations with Applications packages like SAP, QAD, PeopleSoft, etc and several internally developed Corporate Systems deployed on a wide variety of platforms in data centers spread across the Globe.

Charter:

To implement end-to-end QAD eB2 in Ford Malaysia covering Sales, Purchase, Costing, Material Management, Manufacturing including MRP and Financials. The Implementation also included standard interfaces to Corporate Systems.

CHALLENGE

- Implement QAD for Materials Management & Inventory of Production Parts.
- Assembly of Cars in Batches since Malaysia undertook CKD Kit based manufacturing.
- Maintaining BoM and Change in BoM for a batch when a vehicle is in the Production Line.
- Automatic consumption of parts based on the Assembly Line Work stations
- MRP Planning based on BOM by batch and Back flush consumption based on BOM by batch
- Automation of Pick List Transfer by batch for transfer of parts from warehouse to shop floor
- Generation of Supplier Schedules by batch with frequent changes to vehicle color and options
- Tracking of vehicle in the Assembly Line
- Need for Complex Financial Reports / Statements

SOLUTION

Thirdware mapped all the required functionalities of Material Management in QAD. Thirdware deployed the required functional and technical expertise to map the required functionalities in QAD. The gaps identified were customized in line with QAD Architecture.

The functional requirements of Material Management were addressed in three main areas.

Inventory Management

- All the processes of Inventory, Costing, Material Requirement Planning and Logistics were successfully mapped in QAD.
- Business requirement necessitated release of Supplier Schedules by batch in order to ensure supply materials for the respective batch at the right time. This requirement was addressed through customization based on the Work Orders based on batch wise BOM.
- Automatic Pick List Transfer program was developed which automatically transfer material by batch to the respective Locations.

Company

Ford Motor Co

Location

Ford Malaysia

Industry

Automotive

Solution

MFG/Pro Applications with Interfaces to FORD Corporate Systems

MODULES:

Sales, Purchase, Material Management, Manufacturing and Financials.

Environment

Sun Solaris





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Material Requirement Planning (MRP) by Batch.

- Functionality was incorporated to hold Bill of Material by batch. This was achieved by using standard QAD functionality of 'Alternate Structure Maintenance'.
- Assembly of cars by batches was achieved through tracking / consumption of Parts and CKD kits by batch.
- The business requirement of MRP based on batch wise Bill of Material was achieved through customization wherein Work Orders with the appropriate Bill of Material are created automatically.
- The operations involved changes to BoM even while a batch is under assembly. In order to accurately update, functionality was incorporated to automatically update the Production Work Orders with the updated Bill of Material whenever Bill of Material is updated.

Vehicle Tracking and Order to Deliver (OTD).

- In order to track the vehicle in the assembly line, Order to Delivery (OTD) Module was developed which tracks the vehicle at each station. Bar code labels were printed for VIN from QAD and vehicle is scanned through bar code scanner at each assembly station. Options were provided to record defects / problems in a car so that throughput time in fixing the defect / problem is tracked.
- Bill of Material by Batch is maintained by operation / Work Station. This was achieved through customized OTD module wherein parts are automatically consumed which otherwise needs to be manually issued against the Production Work order.
- Vehicle Tracking module built as part of OTD (Order to Deliver) module automatically processes Production Work orders which are created based on the batch wise Bill of Material.
- Change to Color / Options of the vehicle were addressed through customization where options can be changed and the history is maintained. Validations were built in to ensure change in color or options are not permitted beyond pre-defined stations. (Eg: Exterior color cannot be changed after the vehicle has moved out of the Paint Shop).

SUMMARY

- Successful implementation with all core Business functions i.e., Inventory, Costing, Planning and Material Management in QAD.
- Eliminated the need for interfaces and reducing development and maintenance costs.
- Availability of all reports on real-time without having to wait for the overnight batch processes.
- Achieved accurate inventory of parts with direct integration to General Ledger and Financial modules.

ABOUT THIRDWARE

Thirdware is a global IT services and outsourcing firm committed to helping clients utilize best of breed technologies to achieve sustainable competitive advantage. Utilizing leading edge collaboration software, Thirdware delivers an integrated suite of world class enterprise applications that are affordable, scalable and manageable.

Study prepared by Thirdware in cooperation with Ford Motor Co

