

INTEGRATED ORACLE DEMANTRA WITH ASCP IMPROVES CUSTOMER SERVICE LEVEL FOR DIRECT SELLER COMPANY

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Project Highlights:

- Implemented Oracle Demantra Demand Planning solution with e-business suite for Direct Seller Company
- Improved Customer service Level by reducing the forecast error by 30% of the company's product forecasts by sales channel and product cannibalization.
- Seamless integration with Demantra and ASCP reduces the inventory position, and improves sensitivity of the safety stock planning process.
- Validating the COGS and Revenue model with One number forecast due to collaborative demand planning process
- End-to-End integration provide synchronized supply and demand information for Sales & Operation Planning
- Successfully completed deliverables on schedule, under budget with quality and total cost of ownership.

PROJECT OVERVIEW

The Pampered Chef (TPC) is a direct seller company that distributes the products to consultant, hosts and guest for customers in Domestic and International market. It is all part of a retail industry to sell cookware, stoneware, kitchenware products directly to consumer. TPC business line is growing at a rapid rate with introduction of new products every year. The business is also feeling strong competitive pressures. Business demands high service levels to customers in terms of both quick turn around times and best quality products. Use of Information Technology with strong process orientation is the mainstay of TPC's strategy to achieve higher customer satisfaction levels. TPC analyzed and decided to implement Forecasting and Materials planning to improve the inventory turn and achieve high customer satisfaction.

Demantra is an advanced Forecasting and Demand Planning Tool that helps manage their supply chain based on predicting forecast for the products. The capability is very useful for retail companies that run promotions to predict demand pattern. **ASCP** is a constrained supply chain planning tool to recommend the planned order based on supply capacity and demand. Nuous helped TPC to assess the fitment of Oracle Demantra and ASCP by getting sales history to determine inventory position.

Nuous Technologies has successfully implemented Oracle **Demantra** Demand Planning and integrated with **ASCP** (Advanced Supply Chain Planning) and **MPS/MRP** at The

Pampered Chef (TPC) Corporation. The products are sold primarily through in-home cooking demonstrations known as Cooking Shows (over 1 million are held in the United States each year). The Pampered Chef deploys a “Buy-To-Order” products strategy with a variation of “Assemble-to-Order” and “Configure-To-Order” manufacturing style wherein different product variant is assembled as per the marketing promotion and customer’s need. Each promotion kit assemblies are built from sub-assemblies and components. This case study talks in brief about the implementation details and benefits to customer derived from the implementation.

CUSTOMER PROFILE

The Pampered Chef is pioneering in the direct seller and distributor of essential kitchen tools to discover the chef in you. As part of the **Berkshire Hathaway** family of businesses, The Pampered Chef® and its sales force of independent Pampered Chef Consultants offer multipurpose kitchen tools, easy recipes that offer dramatic results and simple mealtime preparation techniques to enjoy home cooking. The Pampered Chef is deploying a sales strategy with party plan and multi level compensation to consultants that sells high quality kitchen products through in-home shows.

The founder, Doris Christopher came up with a simple plan to offer professional-quality kitchen equipment directly to the consumers through in-home cooking demonstrations performed by a sales force of “Pampered Chef Consultants.” This is a very unique sales model to show customers how the products work at places and even taste the results while capturing order. Now, there are over 60,000 Independent Pampered Chef® Consultants Worldwide serving over 12 million customers.

BUSINESS CASE AND OBJECTIVE

The supply chain operations key objective was to simplify the business for consultants and Hosts through predicting the demand for products, improve customer satisfaction through service and filling the orders on time. TPC was using a monthly forecasting process with lots of manual steps to support Operations. This process was very limited in functionality and prone to error in predicting the products demand. To align with Operations key objectives, TPC implemented Oracle Demantra Demand Planning to generate forecast and collaborate with Demand Planner and Analyst for a consensus demand. This Demand Planning (Demantra) solution was integrated with Advanced Supply Chain Planning (ASCP) to generate planned orders and net requirements to satisfy customer demand.

The two key objectives for Operations are outlined for benchmarking and measuring the success factor from Demand and Supply Planning.

1. **Forecasting and Materials Planning** – Improve service by significantly enhancing the accuracy of the company’s product forecasts, as well as, the sensitivity of the safety stock planning process by mid August.

2. **Service** - Continue to improve the service to the company's Guests, Hosts and Consultants by improving picking accuracy, reducing damage in shipping, maintaining a 48 hour turn on orders and improving DC inventory accuracy by year end.

The key business drivers for the implementation include:

3. Need to significantly reduce the turn around time for responding to customers' requests for TPC products without comparable increase in workforce.
4. Effective categorization of sales channels and predicts demand for each channel to support sales & operation planning.
5. Reduce the finished goods inventory to hedge against the vagaries of demand for different finished products.
6. Faster and better means of information transfer between Finance, Sales & Marketing, Production Planning, Warehouse and Purchase Department.
7. What-if analysis for different combination of demands, material resources and human resources.
8. Handling lumpy demand, seasonality and promotion during the forecast cycle

Business Objective

The client needed professionally qualified consulting services to help them implement Demantra Demand Planning and Advanced Supply Chain Planning (ASCP) solution integrated with Oracle Financials 11i and Data-warehouse. This integrated solution offers total end-to-end ownership of the implementation phases and project management. That is where Nuous came in with highly skilled and experienced team of consultants and project managers to help the client achieve

Objectives set for this implementation:

- Generate statistical Forecast to handle lumpy demand for various sales channel and end products to support revenue model
- Effectively handling New Product Introduction and Promotion Forecast
- Reduce the Supply Chain Planning Cycle Time for quick response to customer's requirements.
- Simulate plan and save multiple scenarios of different capacities, different demands and different supplies.
- Generate reports in order to support Forecast accuracy, inventory and sales & operation planning
- Communicate the most profitable and feasible plan to the respective process owners for their actions without any delay and error.
- Tighter integration within TPC Supply Chain and Financial Applications 11i
- Extraction of Sales history transactional data from the Legacy Systems
- Single instance for Web enable Demantra and ASCP
- Project Planning and Change management system

TPC Supply Chain Process:

TPC has 4 operating companies in domestic and international market. The forecasting process relies upon the basic inputs, supply chain network and shipping methods to distribute the products to customer.

The supply chain network is an integral part of an effective distribution requirements planning. TPC employs a “Buy-To-Order” (BTO) strategy where most of the manufacturing operations are outsourced to supplier. There are two Distribution centers, HQF in USA and EDC in UK receives and ships products directly to customers. HQF DC is meeting the requirements for USA and CAN countries, while EDC fulfills UK and GER end customer requirements. So, the lead time from supplier and distributing end products is very critical in this supply chain. The products are transported via various shipping methods from Supplier to Warehouse (DC) and between DC located in USA and UK. Finally, the products are picked, packed and fulfilled to meet a desired service level within 48 hours.

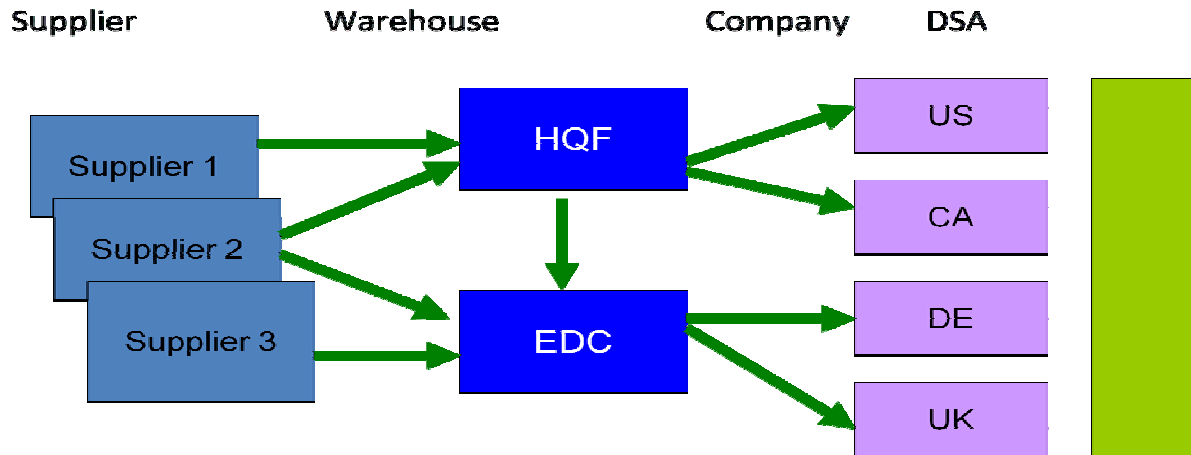
The real time picking and replenishment signal for the BTO and ATO sequence pulls the inventory into production to support direct staging of confirmed components. The packing sequence and user defined picking configuration can be pre-assigned to streamline shipping in the warehouse.

Product Structure:

There are more than 3000 products distributed from HQF distribution center to domestic market and EDC distribution center (DC) to international market. Marketing and Promotion department always offer sales promotion periodically to create excitement and generate the sales lead for the existing and new products. The kit items are configured as super starter kit, business starter kit, booster kits for consultant as Configure-To-Order (CTO) in the warehouse. These items are created as a parent item with child items as end products, audio CD, video and paper works.

The physical product movement and information flow are high lighted in the block diagram.

TPC Supply Chain Process



Lumpy Demand:

Sales history, which describes each sale made at each location. Specifically this includes the items sold and the quantity of those items, in each sale. The sales history for booking, shipping with receipt date, requested date, and actual quantities are extracted from the transactional systems and loaded into the Data Warehouse repository. The booking sales history represents the total customer demand. So, the booking history data are further transformed to generate sales by various sales channels.

It is experienced that large number of orders are entered by consultants during the last week of the month. This is driven by monthly promotion, waiting for outside and guest orders, payment of commission, and last day of the month constraint. These factors create a lumpy demand in the last week of the month.

Sales Channel:

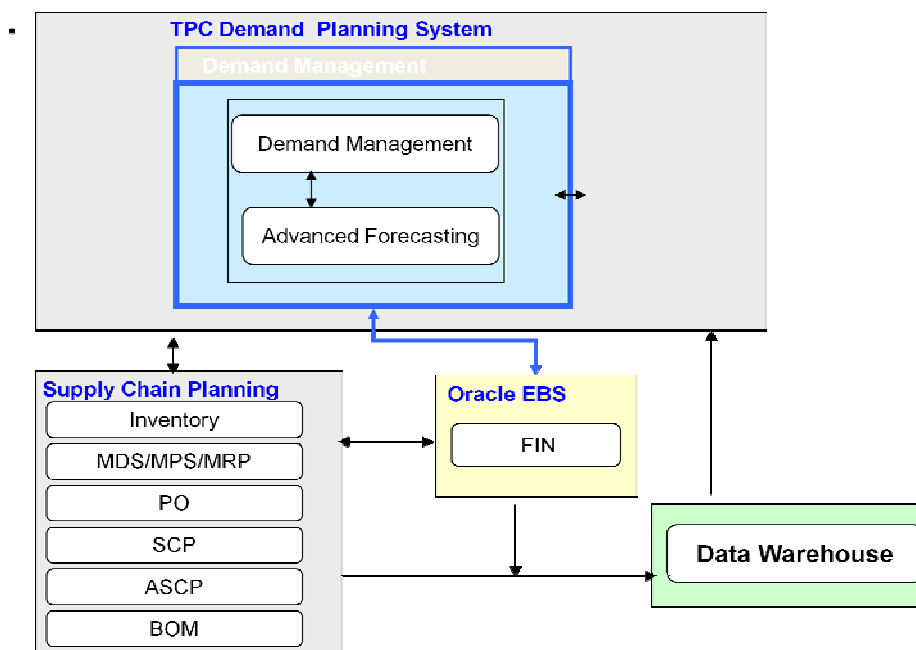
There are 3 key sales channel (Consultant, Host and Guest) to sell product directly to the customer. There are total 13 sub channels categorized for each channel based on domestic and international location, show type and promotion calendar events. It is an important hierarchy to aggregate forecast for reporting and making adjustment at the channel level. The channels are derived from the show groups and show type which contributed significantly to revenue.

Demantra Integration with ASCP:

After a systematic process analysis TPC decided that moving from Make-to-Stock (MTS) to Buy-to-Order (BTO), Configure-to-Order (CTO) and Assemble-to-Order (ATO) was the effective solution. Implementing BTO, CTO and ATO means all flexibility (and risk) is supported by Semi Finished Stock and production of Semi Finished Stock is anticipated production. In this case supplier capacity and planning for safety stock is more critical. Moving to BTO, CTO and ATO environment requires accurate and predictable planning of all the resources, lead time and local demand. TPC was using Unconstrained Planning (MPS/MRP) for their material and resources planning. Implementing Constrained Based Planning was the obvious choices to automate the process of BTO planning and scheduling. Planning Engine requires and uses the snapshot of existing transaction data for generating the most feasible and profitable long term plan with short term schedules.

Considering the business requirement, existing transaction system and integration issues Nuous suggested interfacing local forecast from Demantra to Oracle ASCP for creating planned orders. A pilot implementation was done for few set of products and resources with EBS. All the Business requirements were met in this phase. TPC was convinced with the fitment of Oracle Demantra and ASCP in a single instance. All the planners were trained and briefed about this new tool. Then complete implementation was done including UAT and user training.

Demantra Integration to EBS



CHALLENGES

- A very first Assessment and Implementation of Oracle Demantra integrated with ASCP Hub and Spoke Planning Feature.
- Building the initial Model due to data complexities and sales model
- Seamless integration of Oracle Demantra and ASCP with Oracle Supply Chain modules such as Inventory, BOM, Purchasing, Order Management and Financials Family of Oracle Applications.
- Fine tuning of Planning and scheduling parameters as value of Oracle ASCP MSC and MSO profile options.
- Changing Business Priorities to accommodate Production and manage resource constraints
- Environment challenges during installation and limited support from IT resources to correct the problem
- Shared resources for multiple projects
- Lack of Data Integrity in the source system lead to develop custom programs for sales channel and Product sales summary
- Integration of Demantra to EBS suite was quite a challenge due to functional bug and needed extra resources to develop workaround
- Increased time for testing the product
- Diversified service offerings and proven skills including product installation, implementation and customization, application development, database administration, and ERP-implementation project management was required.
- Implementing best practices and methodologies to establish a mutually beneficial relationship.

NUOUS SOLUTION

Overview

- Nuous conducted a full-scale study and documented existing processes, to be processes, operations and business process flows of TPC.
- All the business requirements were ranked as Mandatory and Nice-to-Have to check the overall fitment between business requirements and Oracle Demantra and ASCP capabilities.
- An assessment study and pilot was conducted to show the fitment and Gaps of Oracle Demantra and ASCP for each business requirement.
- Major features of Oracle Demantra were exploited to offer a best-fit solution with a user friendly collaborative user interface.
- Oracle Demantra and ASCP implementation was done as per Oracle Corporation's Application Implementation Methodology (AIMS Version 3.01) with suitable project management organization.
- Technical and functional consultants were deployed onsite to manage the changes effectively.

- Technical and functional setups for Oracle Demantra and ASCP were clearly identified and separated so as to reduce interdependency to achieve the best possible implementation cycle time.
- Few customizations were introduced to accommodate some business requirements and make the overall application more user-friendly and maintainable.
- Each activity of the project were carefully planned following best practices of project management and executed with minutest precision not to disturb Client operations.

Nuous's responsibilities included:

- Strategy, design and development of the data conversion programs
- Defining the minimum required data to use the existing Oracle Data Model
- Analyzed the Sales Channel and recommend the most effective channels for Forecasting
- Develop time dependent data series to support business requirements
- Development of the interfaces with Data warehouse and integration with Oracle 11i applications
- Development and Support for Conference Room Pilots
- Implementation of the integrated Demantra and ASCP application
- Support for Production Go-Live
- Training the super user

BENEFITS TO THE CLIENT

Collaborative Demand Planning

- Process to Consensus Demand Planning (One Number Forecast) with Collaborator Workbench
- Better, faster decision making = Improved Operational Planning & Financial Management
- Transparency to all Sales Channel and Seasonal Promotion = higher ROI on Regular Sales to Consultant, Host and Guests
- Process Improvement = Collaborative Demand Plan integrated with core corporate processes
- Data Integrity = all data captured at source, integrating with E-Business suite and Controls (SOX compliance)
- Visibility = Granular Data by Sales Channel improves Demand Visibility
- Best Fit = Use statistical model to pick the best fit to the Demand
- Synchronized and seamless business flow = Integrate with Data Warehouse, ASCP (E-Business Suite)
- S&OP Process = Forecast Override to manage the forecasting consensus process Forecast Horizon for 18 months
- Interfacing Demantra Local Forecast visibility in ASCP and MPS/MRP

- Planners are able to identify the need for additional resources and plan for them in advance to avoid last minute surprises.

Improved Forecast Accuracy

- Flexibility to Business = On Demand Forecast Management
- Forecast Accuracy = Inventory reduction and better operational planning efficiency
- One System = Significantly less error potential
- Measure Forecast Error for all items by any lag, Precise forecast improves confidence and reduce the forecast error by Product Family and ABC Class

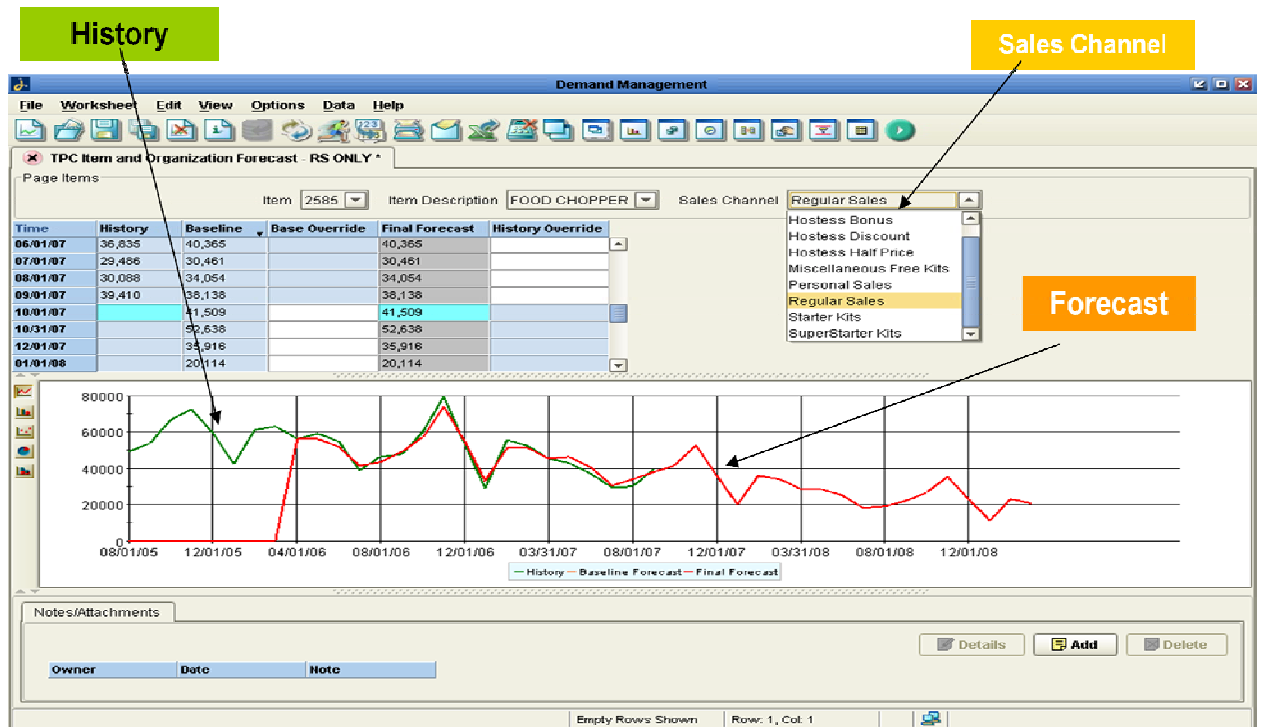
ACHIEVEMENTS

This was to be accomplished in a tight schedule and budget, which required Nuous to leverage its partnership capabilities and rich experience in delivering quality output, maintaining high team productivity through professional project management. The forecast error for Class A and Class B items was reduced over 30% by sales channel. The service level is improving day by day significantly by enhancing the accuracy of the company's product forecasts, as well as, the sensitivity of the safety stock planning process.

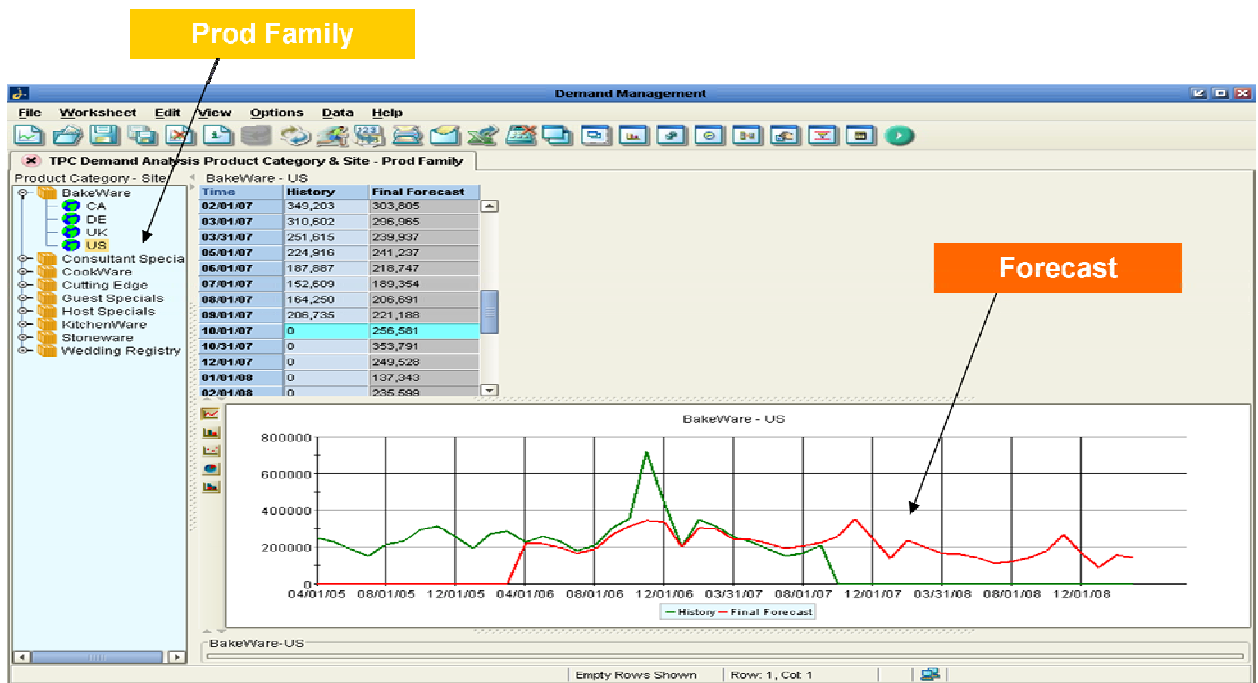
The success of this project has positioned the client to be competitive, sensitive to lumpy demand, new products, and promotion and well informed to make right decisions. This is the stepping stone for future sustaining, maintenance and enhancements. The on-demand forecast management, reducing the forecast error by 30% and one number forecast led to improving customer service level, better in operational planning efficiency, flexibility and synchronize with the financial budget.

- New Products are successfully introduced and chained from similar products
- Managed unit, promotions and kit forecast collaboratively with cross-functional team
- Successfully completed deliverables and met target dates with zero compromise on quality and total cost of ownership.
- Successful data extraction, transformation and loading from legacy systems, Data warehouse to Oracle Applications
- Effective management of Data Quality and Performance issues due to large volumes of complex data conversions such as Sales Orders, Sales Channel, and Item Master to meet the cut-over schedules
- Validating the COGS and Revenue model with One number forecast
- End-to-End integration provide synchronized information for Sales & Operation Planning

Forecast , History By Sales Channel



Forecast Aggregated by Prod Family



TPC Item & Organization (DC) Forecast for ASCP

