



**INFOR LN SOLUTION  
FOR WHITE GOODS AND  
OEM ENTERPRISE**

## The Client Overview

Our client is a household brand in white goods industry segment in the Middle East, unique in its class of manufacturers of an extensive range of room air conditioners, central air conditioners, refrigerators and freezers. Its high quality manufacturing and innovations have helped our client consistently cater to OEM's as well as commercial and household installations in the GCC countries. Our client currently delivers 450,000 units annually and has set up goals to expand and increase their operational levels to greater heights in the near future. Our client's infrastructure consists of two manufacturing plants and two company-owned showrooms spread across the Middle East region. A growing work force of well over 1200, and presence in 27 countries with more than 110 local dealers helps them reach their customers.

## The Business Needs

For some period it was observed that the sustained high temperatures in the Middle East region, a wide range of cooling products and sustained overall economic growth induced our client to come up with strategy to leverage this business opportunity with expanded product basket, which included more environmentally friendly products. In addition, our client expanded their export arm to encompass markets all across the GCC, North & South African regions.

To meet the escalating needs both in domestic as well as export sector, our client decided to set up sophisticated automated infrastructure with stringent international standards. This meant setting up advanced processes, systems, and forecasting/reporting infrastructure for manufacturing, procurement, supply chain management, and customer-supplier demand planning, as well as streamlining its after-sales service infrastructure to increase customer satisfaction and loyalty.

## Xoriant as the Solution Partner

Our client was in search of an enterprise consulting company which had the track record of analyzing these wide ranging infrastructure problems of fast growing enterprises in the GCC region and guiding them through the phases of analysis, architecture, software selection, implementation, user training and maintenance, while ensuring that the current operations are running as smoothly as possible.

Xoriant's functional, technical and project management capabilities and strong client references led our client to choose Xoriant as a partner in this effort. Xoriant teams recommended Infor ERP LN 6.1 as the most appropriate backbone package for our client, taking into account our client's size, growth prospects and price-to-performance superiority of Infor ERP LN. Infor ERP LN's barcode application as well as its ability to handle regulatory issues for the GCC environment, enhanced its superiority

for our client's specific situation. Xoriant's status as one of the largest implementation partners meant that our teams obtained the highest level of technology and methodology support from Infor product teams.

## Business Challenges:

Increasing costs of raw material and energy in addition to substantial changes in environment issues, consumer demands and energy needs meant that our client had to tune all the operations based on these constantly changing parameters. After detailed business analysis, Xoriant team identified the following challenges classified according to the operations areas:

### Manufacturing:

- Meeting customer specific requirements generated through sales order in a timely fashion and avoiding out of stock inventory situations which resulted in production orders
- Reducing lead time of production cycle to deliver customized products to target market
- Reducing the production order queuing time and improving the production capacity in order to meet the customer specific requests, needing a system that generates a production planning output advice
- Aligning production to confirmed orders with a flexibility to handle seasonal fluctuations based on past trends – needing a better material requirement planning (MRP) system.
- Ability to execute production orders based on alternate items advised during short supplies
- Ability to carry out inspection procedures to meet the statutory international requirements.
- Ability to flush out old items from inventory
- Ability to incorporate dynamic planning to avoid paper based alternatives

### Finance:

- Obtaining better control of the receivables as well as tracking the frequency of cash inflow and outflow without running multiple reports or by exporting data to excel or other spread sheet utility for analysis
- Ability to (1) obtain real time information of aspects pertaining to working capital and fixed assets and (2) control allocation to different expense heads, easily and speedily

### Logistics:

- Cutting down the time spent on tracking down the equipment, raw materials and finished goods based on location or status of projects within the organization.
- Ability to track this information quickly and accurately within the ERP systems.
- Need to upload the existing bar-coded data into Infor ERP LN 6.I.

- ♦ Ability to link the production line activity, finished goods and the inbound & outbound warehouse in real time and establishing accountability.
- ♦ Ability to obtain daily reports of work-in-process inventory in different stages of production.
- ♦ Ability to track the contents of the finished good shipments to different customers accurately in real-time and reconciling the data to raw material, work-in-process and finished goods inventory positions as well as the sales orders.

**Sales:**

- ♦ Cutting down the delivery delays to the customers caused by long lead time taken for procurement of raw materials of natural origin, which resulted in delay of manufacturing finished goods by 3 to 6 months.
- ♦ Ability to accurately forecast and budget the resources for large projects for residential and commercial establishments, which involved installing air handling units (AHU's) and air cooling systems
- ♦ Ability to speed up the accounts receivable cycles by tracking the customer credit situation in real time.

**Purchase:**

- ♦ Ability to link the finished goods item identification numbers (assigned by our client) with the serial numbers of the underlying purchased goods (assigned by our client's vendor) to be able to track the warranty.

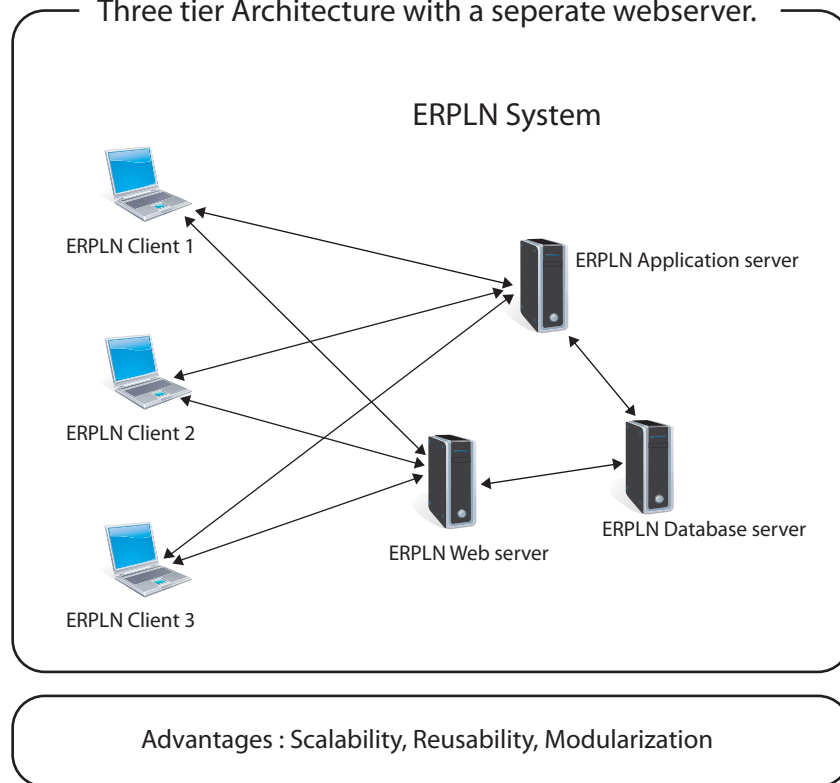
**Service:**

- ♦ Automating a completely manual process for tracking annual maintenance contracts as well as generation, tracking and handling of service requests, including tracking the financial aspects of customer service.

## Xoriant's contributions in the engagement

Xoriant's functional teams interviewed key stake holders in our client's sales, purchase, manufacturing, services, warehouse, finance and barcode applications. Xoriant's team came up with a business and systems solution, which was accepted by management. A detailed project scope, goals, implementation schedule were finalized after conducting a thorough survey of needs and expectations of key users. Milestone plan involved functional specifications, detailed technical specifications, implementation plan, user training, data conversion, data security and testing. Plan for continuous status review meetings was also chalked to ensure that all the stake holders are involved at every step.

Three tier Architecture with a seperate webservice.



**Implementation Phase:**

Xoriant team took up the task by initially migrating our client’s base ERP platform to Infor ERP LN 6.1 while ensuring that the old system ran smoothly during the migration phase before the cutover to the new system. Our team performed detailed gap analysis between the current processes for manufacturing, warehousing and shipping and the much more advanced corresponding processes included in Infor LN 6.1, and presented the analysis and presented the analysis to the stakeholders including the management, key users and IT staff members. In some cases, a major shift in the core processes and hence the system implementation was chosen. In some other cases, some other cases, minimal changes were envisaged, especially where there were custom processes and feeder systems interfacing with the ERP system were involved. All these plans were carefully documented in the form of a working document, which was continuously updated as iterations were made during the implementation phase.

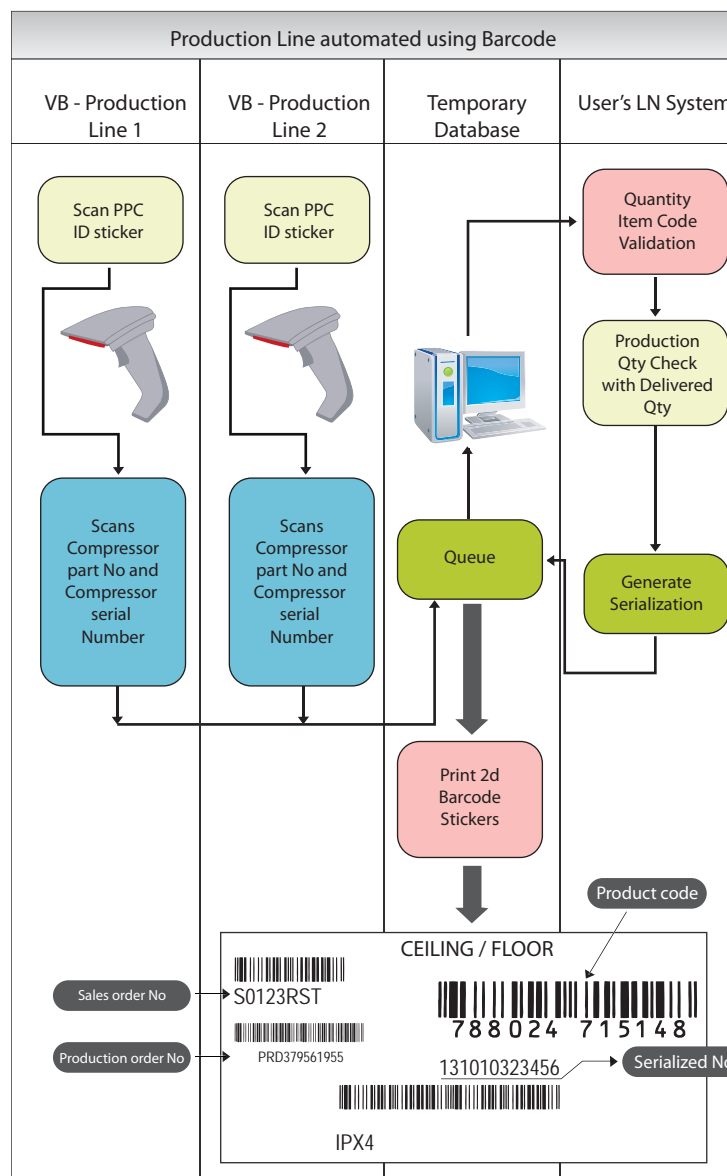
Implementation details for each of the operational divisions were as follows:

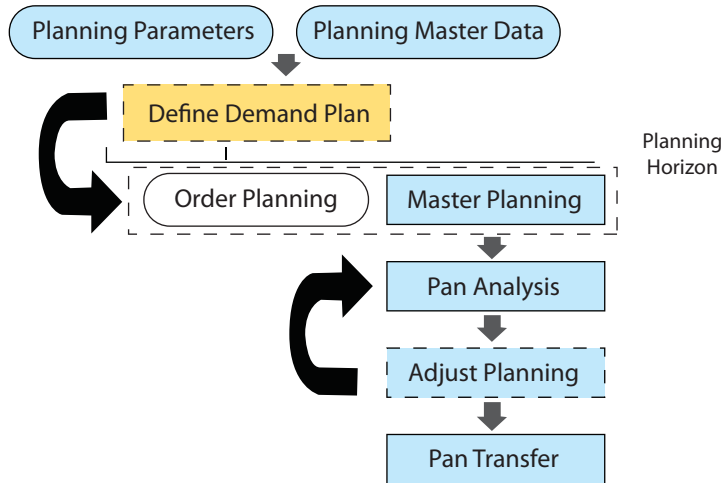
**Manufacturing:**

- Manufacturing strategy “Assemble to Order” was implemented, resulting in reduced lead

time to manufacture final product. Intermediate basic product sub-assemblies were made in advance

- In-process and final inspection quality procedures were properly mapped during the assembly operations according to International standards
- Production planning reports were generated through Infor ERP LN 6.1, resulting in reduced production order cycle time to manage huge production load. Close fit barcode integration was achieved to automate the entire production activity, with an ability to track every minute details like manufacturer part no, production order no, sales order no, serial no of finish goods, etc,





- Customized solution for real-time plan changes at mass level was also introduced. This helped the planner to update the special demand field into the system for various items with a click of button. A Microsoft Excel integrated solution was developed to upload and modify the plan of finished products (details in the embedded object below)

Item Master Plan (Current View: Plan Item, Scenario, Period, Channel)

Plan Item: KER18FCCA 18K KET Cool (RECIP)

Scenario: ACS Test Scenario Forecast Time Fence

Time Fence: 12/06/2009 Forecast Time Fence: 12/05/2009 CPT Horizon: 12/06/2009 On Hand 16.00

Order Horizon: 12/06/2009 Planning Horizon: 12/06/2009 Planner

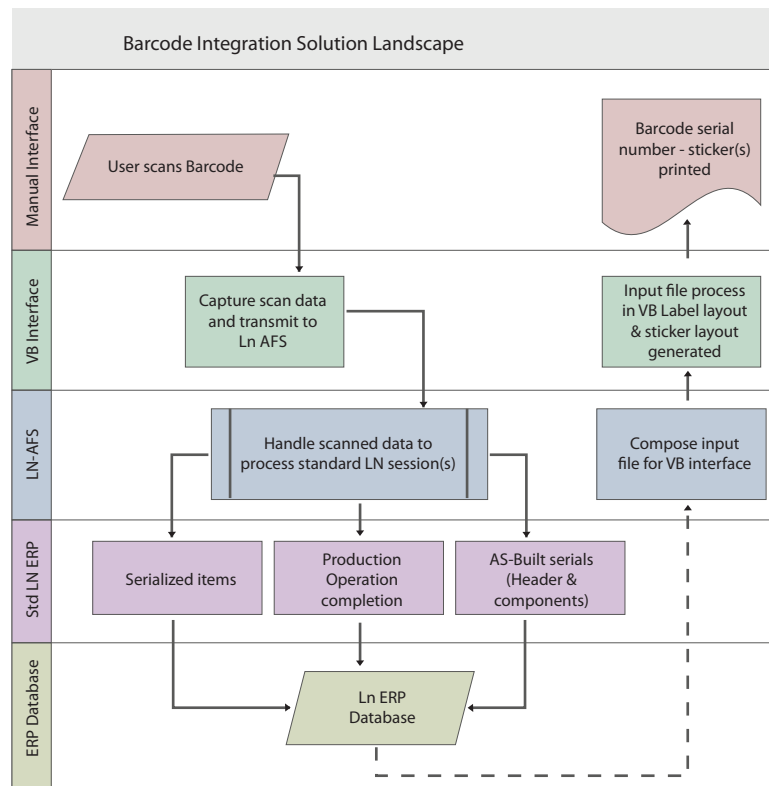
Period	22	23	24	25	26
End Date	30-11-2009	15-12-2009	31-12-2009	15-01-2009	31-01-2009
Demand Forecast	0.0000	0.0000	0.0000	0.0000	0.0000
Extra Demand	0.0000	0.0000	0.0000	0.0000	0.0000
Special Demand	0.0000	0.0000	0.0000	0.0000	0.0000
Noncons. Forecast	0.0000	0.0000	0.0000	0.0000	0.0000
Independent Demand	0.0000	202.0000	0.0000	-45.0000	0.0000
Dependent Demand	0.0000	0.0000	0.0000	0.0000	0.0000
Production Plan	0.0000	0.0000	0.0000	0.0000	0.0000
Production Orders	0.0000	9.0000	0.0000	0.0000	0.0000
Distribution Orders	0.0000	0.0000	0.0000	0.0000	0.0000
Purchase Plan	0.0000	0.0000	0.0000	0.0000	0.0000
Purchase Orders	0.0000	0.0000	0.0000	0.0000	0.0000
Actual Receipts	15.0000	1.0000	1.0000	1.0000	1.0000
Projected Inventory	0.0000	-177.0000	-177.0000	-132.0000	-132.0000
Inventory Plan	0.0000	0.0000	0.0000	0.0000	0.0000

**Finance:**

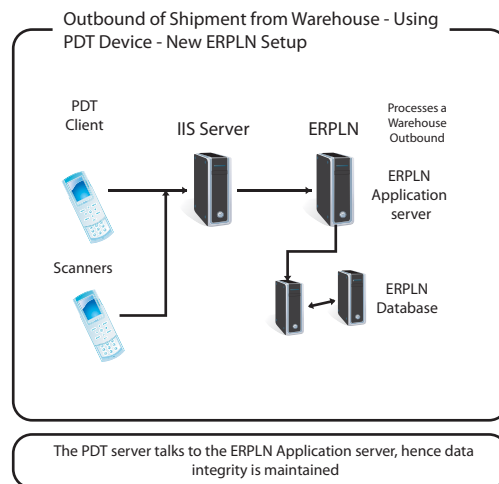
- Using Infor ERP LN’s features, an “Accounts Receivable Dashboard” was implemented, which provides a bird’s eye view into a customer profile comprising open invoices, drilldown of transactions, ageing, credit limit, contact information including complete history as well as drill down to source document. Real time analysis of possible financial risks to effectively circumvent the associated operational risks, was implemented
- Optimized and streamlined financial processes and role-based workbenches were attained, thereby reducing the cost of financial transactions.
- Multi-source valuations in different asset books was implemented using the features of Infor ERP LN 6.1

**Logistics:**

- Tight integration of barcode with Infor ERP LN helped our client to execute local as well as export orders on to PDT device through barcode scan applications
- The barcode integration module for manufacturing process was built to handle online transactions via a simple architecture that was compatible with the subsystem. The integration connectivity was Microsoft compatible with the subsystem application, slimmer and thus easily maintainable.



- The barcode integration module for warehousing process was built to handle online warehousing transactions. With the use of PDT device, the team was able to integrate directly with ERP LN via similar connectivity that was applied to the manufacturing process.
- The integration process consisted of identifying and validating items meant for placing in warehouse, identifying inbound transaction, generating inbound advices and processing of a put-away of the finished goods to the location. The location was dynamically selected by the PDT operator according to the availability of vacant slots in the warehouse stack
- Finished good counts were well handled by barcode integration using PDT device. With the renewed system during the put-away and shipping process, barcode integration (BI) logs some critical information. Using the registered logs, the counting feature could be enabled.
- Information like production, finished goods, warehouse updates were well synchronized from Infor ERP LN and made available to PDT user.



### Sales:

- A customized solution to generate forecast within LN system was developed, to capture information details related to customer order and product raw material availability. Management could monitor and generate online reports based on actual sales figures and determine the pricing policy specific to a product line
- Accurate budgeting of the project at every milestone was now possible as planning of resources and cost incurred in installing AHU's and cooling systems were well handled by Infor ERP LN
- Letter of credit functionality was developed within LN, where credit was offered to big projects and overseas customers by various financial institutions. This improved cash flow which helped

in better working capital management and minimized risk to the client.

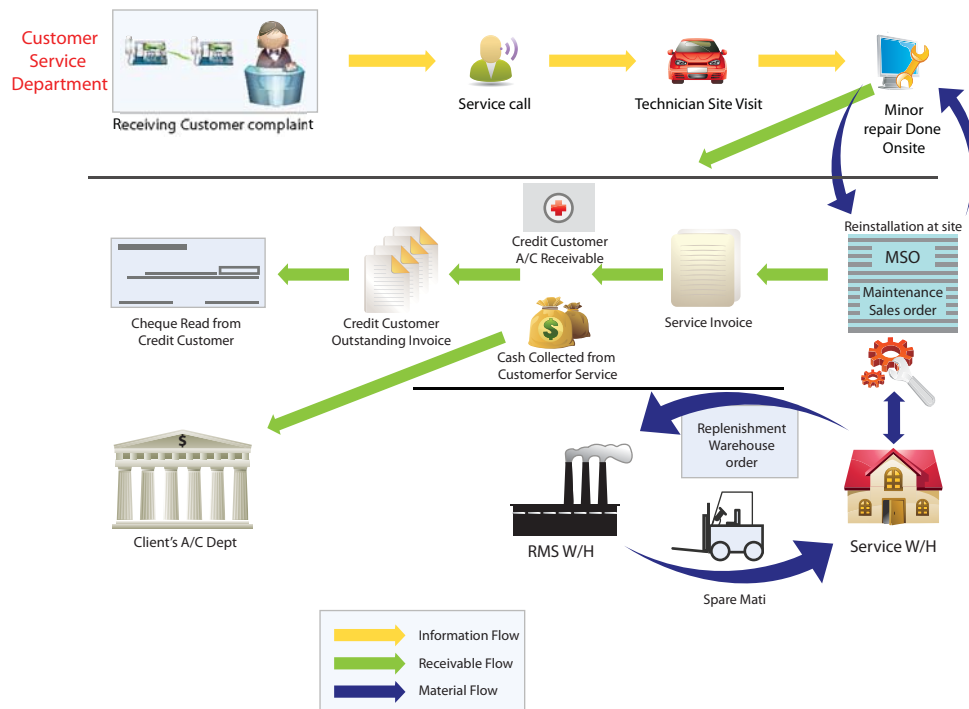
### Purchase

- Suppliers manufactured part number (MPN) for serialized purchase items was mapped and integrated within barcode application. This validated compatibility of parts while generating serialized number for finished goods

### Service

- Service call management functionality was entirely implemented in the LN system. Complete details from registration of call to closure of complaint were well handled. The system would trace every call of customer based on customer tag which had details of customer contact, product and date of purchase. Service quotation and service invoice were generated based on complaint call and spare parts consumed. This helped the Customer Care Department to successfully close the complaints in short time by assigning the right technician to right complaint

Typical Service call to Cash Solution Landscape is shown below:



## Benefits to Client

- Improved operational efficiency by at least 50%
- 80% logistics improvement, error reduction and reduced inventory losses due to effective barcode integration
- Increased information availability to enable better decision making
- Easier integration of business process with various partners
- Improved productivity through better sales order handling and better procurement operations
- Greater visibility for sales quotation, procurement, delivery cost through LN's planning functionalities
- Ability to control dispatches to the customers who have an invalid letter of credit through inbuilt controlled system available within LN.
- Increased customer satisfaction through prompt handling of after sales service through LN. Increased AMC contracts due to proactive system of handling complaints
- Higher availability of spare parts due to better inventory control
- Better financial control due to accounting book closure being done within 4 working days after the review period.

### Client Testimonial

Xoriant's methodology was structured and comprehensive ensuring that all appropriate elements required for a successful systems implementation were considered and effectively executed. At the same time Xoriant's approach was flexible enough to take into account the specific characteristics of our business, so as to optimize the fit between our company and the Infor LN. While managing the process, Xoriant's staff displayed a high level of professionalism and attention to details.

...CIO