



Case Study: Chandrani Pearls

Solution Area: Web-based ERP Solution

Client: Chandrani Pearls	Country: India
Industry: Jewellery - Retail	Status: Implementation
Solution Area: J2EE Application	

Customer Background

Chandrani Pearls the only branded Pearl Jeweller in India incorporated in 1985 at the up market area at Minto Park, Kolkata. It was Kolkata's first exclusive pearl jewellery showroom and presently it became a well-known destination for pearl jewellery in a very short period of time.

The company primarily operates in Kolkata from its registered head office at Minto Park with 47 different stores located country wide. The company has its factory at Jadavpur where ornaments are being designed, assembled and supplied to various stores against various types of item requisition that it receives from various stores.

This document enumerates all the required features and activities of the proposed solution that could address the above areas through single interface.

The Opportunity

Chandrani Pearls proposed to develop a web based ERP system where in they can automate and maintain the retail process and also manage stock of different items at different POS (point of sale). The solution would be hosted and run from Java enabled 3rd Party remote hosting service provider and would be accessed from the company's head office in Kolkata ,factory in kolkata and also from different POS situated across different geographic locations through available internet connection via web browser such as internet explorer.

The company primarily operates from its head office at Minto Park – Kolkata. The manufacturing and assembling is done at its factory located in Jadavpur. The items are being sold and distributed through two types of retail outlets – company's own shops and dealers or franchisees located all over the country. The primary operational areas of the shops (both own and dealers) are item receipt, stock maintain, item sales, preparation of sale bill, repairing bill, accepting and fulfilling orders and lastly the customer information database. The factory maintains stock of finished items, item inflow and outflow with the Patwas and the shops, head office maintains the accounts and the MIS but has the visibility of all the activities that are carried on by the factory and the shops.

Apart from this, the users of the system would also be able to maintain their accounting system in the Head Office level.

The proposed software would primarily address the areas like item wise stock position, requisition of items and consumable, billing, order booking, order repairing and returning item.

Factory level process

The company procures raw materials such as pearls, metal frames etc from various sources and those are supplied to 3rd party workers commonly referred as 'Patwa' who works exclusively for the company at the

company's factory. The 'Patwas' assembles these raw materials to finished ornaments like Necklace, Bangles, Tops etc. as per the design specifications provided to them by the company. After the finished products are received by the factory it maintains its finished goods stock and distributes to different stores at regular intervals.

Apart from the finished materials the factory also receives and maintains stock of repairable and damaged materials that it receives from the shops. These damaged materials are sent to the 'Patwas' for repair and re-work and after completion it receives from the "Patwas" and finally it is sent back to the shops from it is received.

Shop Level Process

The company has overall 47 shops or outlets located across the country. All the shops receive items from the company's central factory at Jadavpur. The daily activities at the shops involves receiving item stock from the factory, maintain its own stock of items, sale of items and billing.

Receipt of Stock

The shop sends requisition for new stock to the factory by specifying price range and required quantities. The factory in turn based on the requisition that it received from the respective shops issues items within the required range and desired quantities, this includes existing designs and newly launched items as well.

Once it receives the materials from the factory it prepares G.RN and updates the stock.

Materials Return

In case of damaged materials that the shop receives from the factory it sends back to the factory along with the materials return note. The stock gets updated according to the MRN that are being prepared during the time of any returns.

Billing

During a sale, Sale Bill is prepared at the billing counter by feeding necessary information. Apart from the item details and price, discount etc. one of the primary information it captures during billing is detailed customer information like customer name, contact details, date of birth, date of anniversary, email id, how had he/she came to know about CP etc. The mode of payment for bills can be in cash, credit card or both. Once the bill is prepared with the above said information's the billing activity gets over and the item gets deducted from the stock. These customer data are captured during the billing process in case of new customer, for old customer it is not required as the data already exists in the customer database.

Buy back facility

The respective shops also have a facility of buying back old items from its customers at 75% rate of actual price. It purchases old items from the customers and the same item is being returned to the factory.

Apart from the above process all the shops manages other general activities at a regular basis such as stock verification, generation of necessary reports, manage memberships, manage discounts, data updates from head office etc.

Servicing of old item

Apart from direct sale, the shops also accept repairable items from the customer in cases of repairs and polishing work. After receiving such items it prepares repair order and the items are sent to factory for the purpose servicing. After receiving the item from the factory the serviced item is being handed over the customer and correspondingly repair order bill is prepared and delivered to the customer.

Key Challenges:

The challenges faced during the development phases – firstly, to bring the distributed processes into a central universal solution in terms of operation at different levels. Secondly, since the existing practices were through legacy system, focus has been given on user adaptability towards the transformation of the UI into a new web-based system by applying special user controls through keyboard which overrides the browsers' default control keeping in mind the existing practice of the end-users. Special focus has been given to the POS level transactions so that the user adaptability becomes fast & simple.

Technology Specification:

Key Components:	
Application:	Web Based ERP System
Solution Components:	<ul style="list-style-type: none">• IBM e-Server• J2EE / STRUTS / Hibernate• JavaScript / AJAX• R AD as IDE• Tomcat 5.5 as App Server• MS SQL Server 2005 as DB Server• SQL Report as report server on IIS