



SYSPRO based Order Management System

Executive Summary:

The impact of automation in a manufacturing set-up is profound. It streamlines not just the production process but also helps optimize labor costs, reduce waste and enhance quality control. It also helps to integrate existing business units which were earlier operating in silos. This brings forth an increase in product output and has a direct impact on the revenue earned. The flip side of incorporating automation into business includes high initial costs and increased maintenance costs. Perhaps that was the reason why our client, who is in the business of selling fashion accessories for the fashion conscious sports aficionados and university students, did not have automation in place. Once a successful business they realized that in order to be competitive they had to have a system that helped all business units interact with each other and fill in the gaps caused due to lack of information.

The turning point in their business arrived when one day the management decided to invest in automation for streamlining operations. As they were a manufacturing unit, they needed to have a software development partner who would work on the backend integrating all the business functions to ensure smooth operations. They selected Mindfire Solutions from a shortlist of 4 companies. Mindfire Solutions has since then been their primary software services provider.



As our client belonged to the SME category they decided to go ahead with the SYSPRO ERP software as the backend. Mindfire created a middleware solution that would interact with SYSPRO at the backend and the ecommerce site at the front end and seamlessly integrate the orders into the production schedule.

About our Client:

Client: Manufacturer of fashion accessories

Location: USA

Industry: ecommerce and Fashion

Technologies Used:

ASP.NET, SQL Server, Ajax, SysPro, e.net



Business Situation:

Project Scope:

For a company that is into the business of designing, sourcing and selling fashion accessories (viz. handbags, scarves, hair accessories, wallets, wristlets, totes, utility bags etc.), the production process has to keep pace with consumer demand. Also with more and more consumers walking the online path for making purchases, presence of a virtual and well oiled ecommerce store is of paramount importance. This also becomes imperative given the target customer base of the company which is sports fans and university/college students. While our client was sure on adopting SYSPRO as backend, they needed dedicated software developers to integrate the ecommerce site with the SYSPRO ERP back end with a process management system. Mindfire Solutions engaged the services of a senior software developer proficient in ASP.NET technology to work on this project and help build a middleware work order system that would synchronously communicate between the SYSPRO ERP and the ecommerce site at the front end.

The Mindfire Solution:

Mindfire’s team of software engineers designed and developed an application that consisted of several modules like **Sales, Purchase, Inventory, Shipping, Manufacturing, Ticketing, Finance** and each module was further divided into sub-modules like **Customers, SalesOrder, CRM** etc. The users of the application were also divided into different categories based on the modules that they can access. A user can log in to the system using the form authentication, if the user is an authenticated user they get redirected to authorized modules.

The crux of the application is all about retrieving the data from the database and manipulating it in the UI and subsequently passing it on to the SYSPRO database.

System Architecture Diagram:

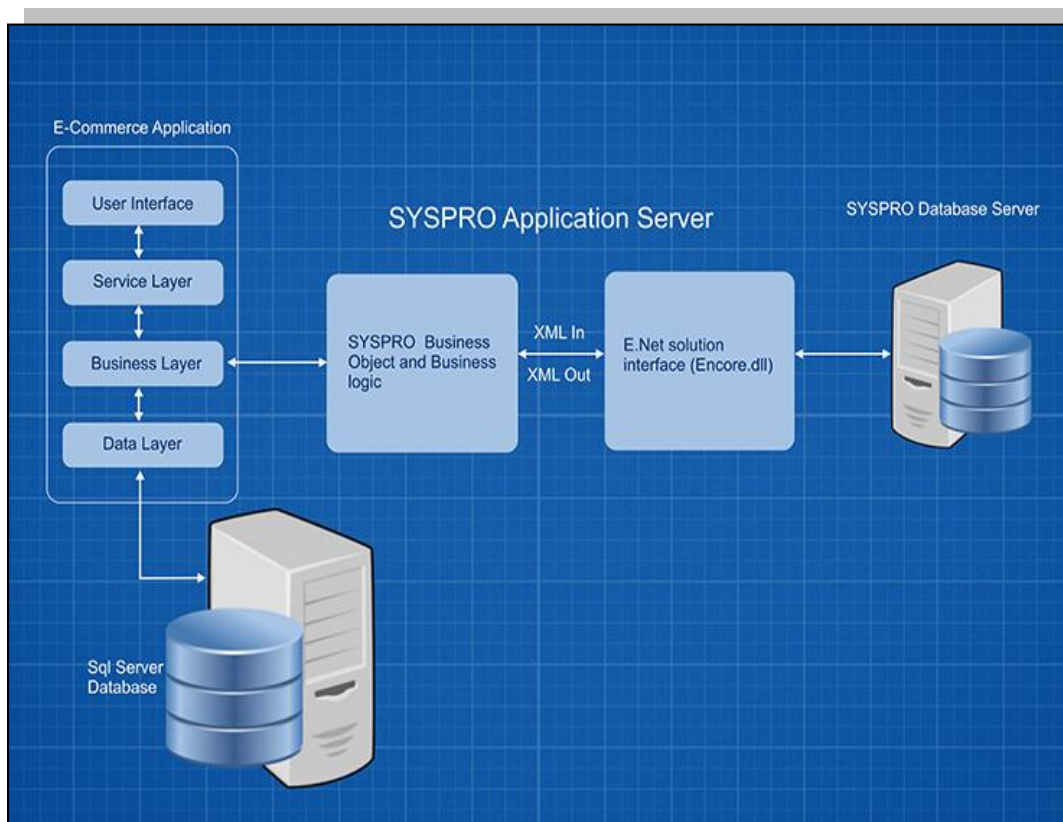


Fig 1: System architecture diagram of the SYSPRO based Order management system



How the System works?

The ecommerce application designed and developed by Mindfire Solutions takes in input from the SQL server database and manipulates it in the User interface. This data is then received by the SYSPRO Application server which helps integrate the ecommerce application with SYSPRO.

The SYSPRO ERP at the backend consists of a number of Business objects and commands and several methods to play with the Business object. We use the various Business objects to Query/Retrieve/Build Sales, Purchase or Product in the application. A business object only understands XML. It receives its requests via XML and returns the results in the same way. So we use Xml serialization to pass the data to the SYSPRO.

The e.net solution interface contained within the SYSPRO application server enables the ecommerce application to access data stored in SYSPRO database without having to compromise the data security and integrity. The modified data as received from the ecommerce application is again stored in the SQL Server database.

Features of the Application:

Sales Module:

The sales module is used to create a sales order, Query sales order, Create customer, Query customer, allocate Sales order to customer, Check /Change the order status of the sales order and to process the changed order status of sales order.

Purchase Module:

The Purchase module is used to create a Purchase order, Query purchase order, Change the price of the product, Analyze the difference in price of same product by different supplier, Select/Change hologram for product, Create/Edit/Receive vessel to offshore product.

Shipping Module:

Shipping module is used for shipping related activities such as moving an order to shipping status and to check the status of the shipping.

Finance Module:

The Finance module is used for financing the Raw Material, Shipping etc. This is done by approving or rejecting the product.

Inventory Module:

Inventory module is used for inventory management, to search a product based on Stock code, Description, Color or size of the product, and to get the details of a stock code like Item details, Location details, Movements details, Shipping details and Raw material details and to get the product list based on stockroom location. It also includes inspection like RMA review, Receipt Inspection, Salvage Inspection and cycle counts of raw materials and finished goods.

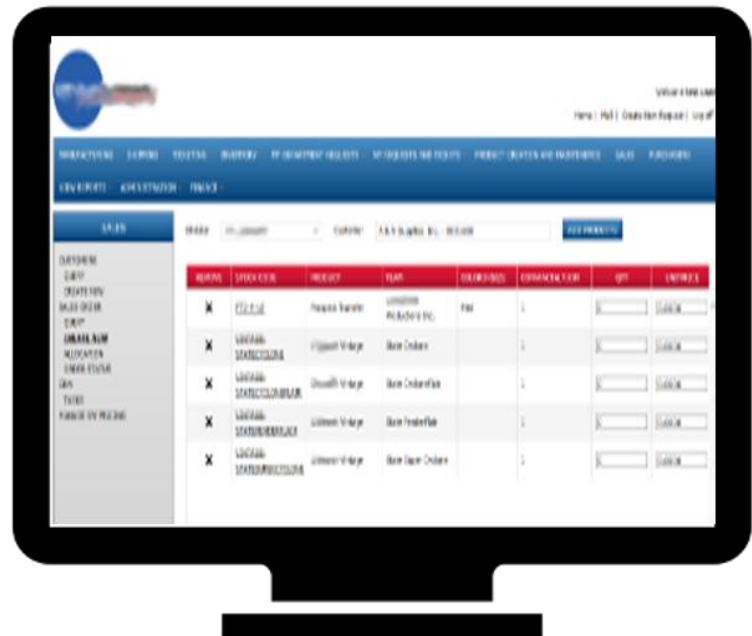


Fig 2: Screenshot showing the various modules of the SYSPRO based order management system

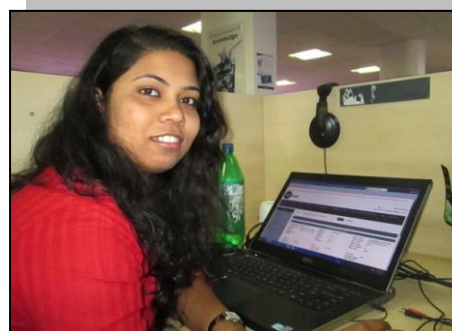


Customer Benefits and Future Relationship:

From a company that changed gears from manual to automation; our client found that, thanks to automation, information was accessible to all. This helped our client to better manage the customer demands and production schedule. An ecommerce site helped to gain traction from customers who largely rely on ecommerce sites for making purchases. It also helped branding through both online and offline channels. As for Mindfire Solutions, we are their primary software services provider and help in adding new features and maintaining their ecommerce site. The client has been extremely cooperative ever since they started working with us and communicate their needs on a regular basis. Use of agile methodologies and indigenous project status reporting tools ensured that there was transparency and clear communication between both the sides. The client was extremely happy with the team's in-depth technical knowledge and attention to the minutest details in all key areas. Thus, this project continues to be a very fulfilling work experience and presents a gamut of learning opportunities for both Mindfire and the client.

Ipsita Mishra, Senior Software Developer at Mindfire Solutions says,

"I am thrilled to have been associated with this project. Not only do I have a sound working knowledge of the SYSPRO ERP software, I have also learned how SME companies can benefit greatly by having robust a IT system in the backend."



Founded in 1999, Mindfire Solutions is an award-winning provider of software development and testing services to the global market with 650+ talented software engineers at 3 centers in India. For its people and its work, Mindfire has won coveted international awards such as Deloitte Technology Fast50 India Award 2013 and 2014, Dun & Bradstreet Fastest Growing SME 2013 Award, Red Herring Top 100 Asia Award and Zinnov GSPR 2014. Mindfire has been recognized with ISO 9001:2008 and ISO 27001:2005 certification, is a continuous member of NASSCOM, and has established a strong track record of 2000+ projects successfully delivered for 500+ technology clients.

© 2015 Mindfire Solutions | www.mindfiresolutions.com

Need help to create an ecommerce site? Reach out to us here:

Phone: 1-248-686-1424

Web: www.mindfiresolutions.com

Email: sales@mindfiresolutions.com