



A Case Study – eCommerce in the GCC Making Electronic Commerce work in the Oil Industry

Introduction

Petroleum Development Oman (PDO) is the major oil exploration and production company in the Sultanate. It accounts for more than 90% of the country's crude-oil production and nearly all of its natural-gas supply. The Company is owned by the Government of Oman (with a 60% interest), the Royal Dutch/Shell Group (34% interest), TotalFinaElf (4% interest) and Partex (2% interest). The first economic find of oil was made in 1962, and the first consignment of oil was exported in 1967.

The primary focus of OTN is its platform for delivering state-of-the-art Electronic Procurement (eProcurement) solutions across all industry sectors. At the core of the OTN system is a document exchange into which major organizations can directly connect their ERP system, which reduces the operating costs of users considerably.

Project Background

PDO went live with SAP R/3 on January 05TH 2002. Coupled with the implementation of SAP where the processes that output Request for Quotations (RFQ) and Purchase Orders (PO) to the vendors, as well as receiving Quotations and Order Acknowledgements from the Vendors community.

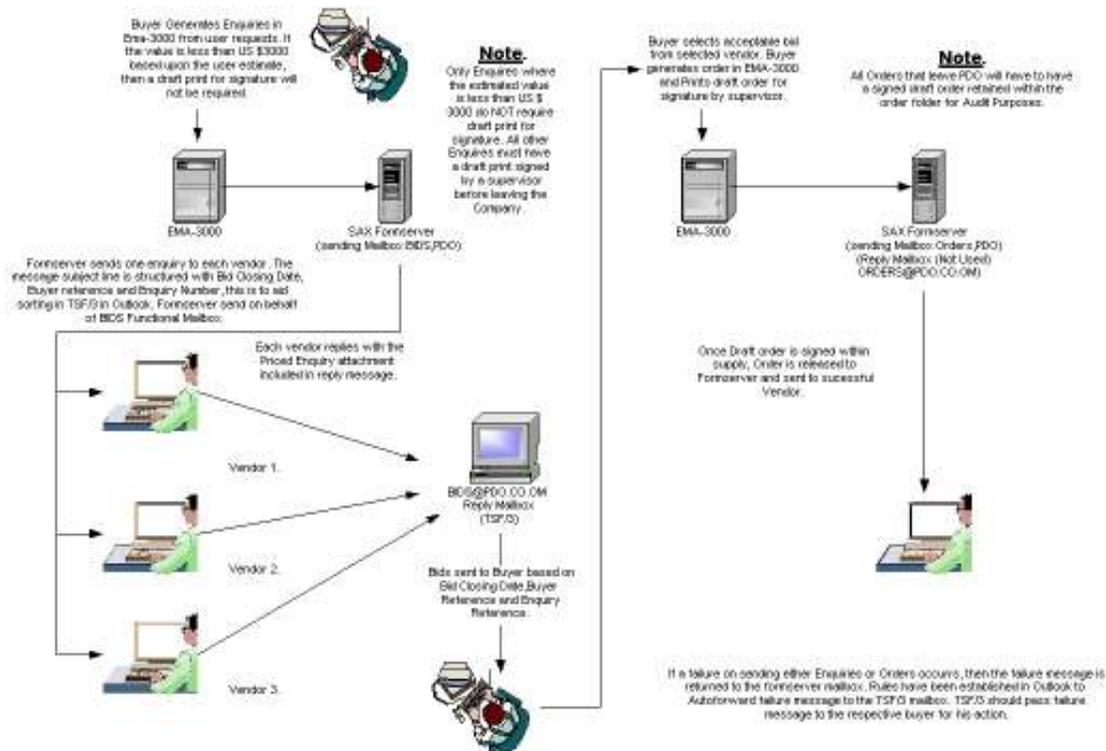
The method PDO adopted for the transmission of these processed documents was via a process called Formserver for RFQ's and MS exchange for all document transmission via email, whilst this is a very cost effective solution for PDO; it limited their goal for as much automation as possible, and was also far removed from many of PDO's e-Commerce aspirations.

With this in mind PDO began developing plans to move to eCommerce solutions as quickly as possible in 2002/2003. The first area identified within the realms of eCommerce was to communicate their processed documents to their 3,500 local and international vendors utilising the local OTN exchange. To do this PDO entered a pilot implementation of selected vendors to work with both PDO and OTN to produce an overall eCommerce structure within Oman.

On completion of the pilot project and having investigated the usual alternatives to gain connectivity, PDO felt the solutions being offered by the traditional suppliers of SCM systems and on-line marketplaces couldn't provide the one key element that they sought – namely 100% trading partner coverage, at an affordable price and with the positive conclusion of the Pilot study PDO decided that the OTN solution was the best solution available.

The Business Scenario and improvement proposal

With Formserver in place alongside EMA, PDO were able to build RFQ's in EMA. Their method of transport was via MS Outlook and then the MS Exchange Server. When going 'live' with SAP, PDO were able to continue with the Formserver solution whilst looking for a business enhancement, which was identified in the OTN solution. The following diagram shows the scenario with Formserver (both EMA and SAP).



The PDO Contracting and Procurement guidelines stated that all RFQ's would be sent out using the Formserver environment, therefore all documentation for quotations would be sent out electronically. However, RFQ responses will be handled based upon the estimated value of the quotations.

1). All RFQ's with an estimated value of up to and including US\$ 3,000 were to be received back into the PDO Virtual Bid Box, monitored by the custodian of the Bid Box (using Folders) until such time as the Bid Closing date was reached. The custodian would then forward all bids received to the Buyer who would then make the evaluation (Minimum 3 competitive quotations).

2). All RFQ's with an estimated Value between US\$ 3,000 and US\$ 50,000 were still using the sealed bid process. The Tender Board rules and regulations where applied here."

Note

Changes that were applied since going with SAP.

- a) All RFQ's are generated in SAP.
- b) Value was increased from US\$ 3,000 to US\$ 130,000 for the virtual bid box.
- c) All RFQ responses for Quotes up to US\$ 130,000 were received into Virtual Bid Box (electronically). A separate tender box is maintained for the Minor Tender Board.

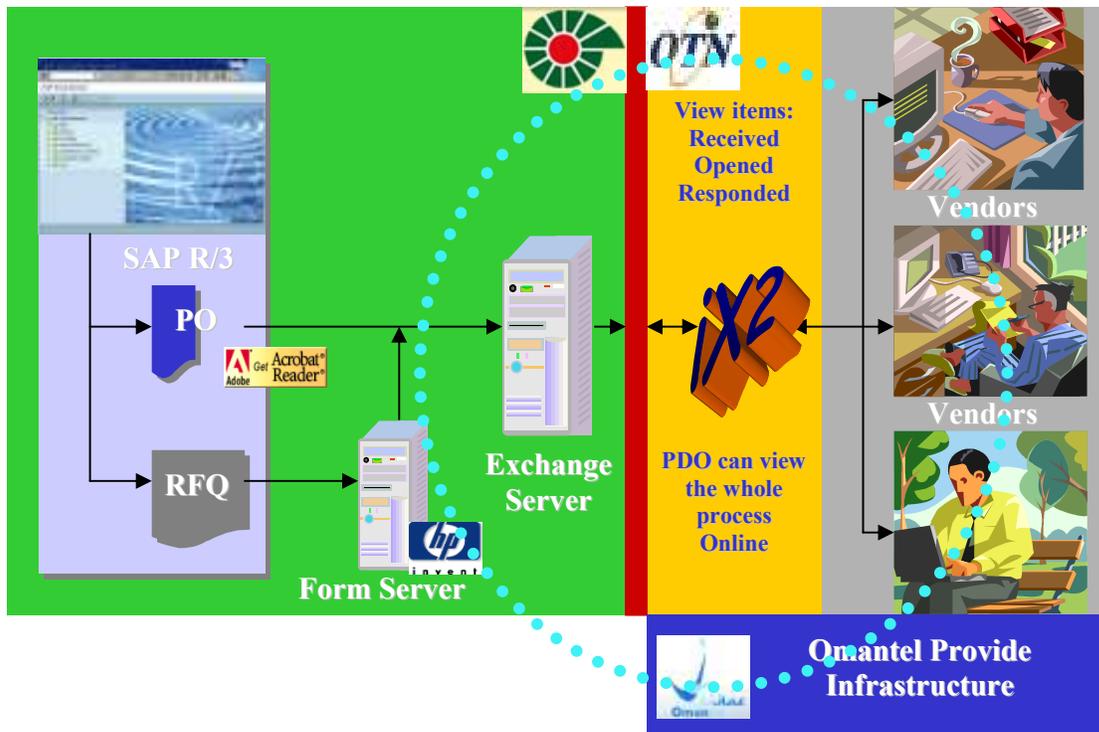
OTN Business Improvement Project

This project has allowed PDO to make significant improvements to their business processes. The biggest impact for PDO is that they are now able to **track and trace** their RFQ's going out to the vendor. Similarly vendors are also able to track their response to PDO, not just that it has been received, but by who and when.

Now with the new system, PDO have all but plugged the controls issue and will be able to keep statistics on Vendors such as; when they respond, how they respond, no bids etc.

This business improvement alone makes a solid business case for PDO. See the following diagram.

**Purchase Order & RFQ Processing.
The Business Solution to the Problem**



An additional key benefit of this process was that the actual business process remained unchanged allowing for continuity with PDO.

- a) The RFQ Estimated Value triggers where the response comes to within the exchange.
- b) Each PDO Buyer has his own logon to the exchange and will be responsible for his own workload.
- c) Bid Closing Dates will be the key to when the bids are opened within the exchange, up until that point the buyers will only be able to see that bids have been received from various vendors, not the actual bid itself (this protects both the buyer and the vendor).
- d) Where the value of the bid is up to and including US\$ 130,000 the Procurement Organisation of PDO have the ability to handle and evaluate quotations without seeking minor tender board approval. PDO has plans to incorporate the Tender Board process into it ever evolving e-Procurement Strategy.
- e) Formserver has ceased to exist as the following now applies (see diagram below).



Additionally, to ease the analysis process all Quotations can be uploaded in an Excel spreadsheet and can be further uploaded to SAP to allow for automated evaluation.



This project has allowed for changes to take place to the Manual of Authorities; due to the ability of PDO to remove various control issues. These have only come about since the inception of the Digital Data Exchange environment.

Roll Out

To ensure a quality roll-out in a professional and efficient manner in many areas were considered and planned for, in essence the main areas considered were:

- Training and testing
- 24/7 client 'hotline'
- On-line client 'help desk'
- Community Management - Dedicated Community Managers were allocated to individual industry sectors to ensure a smooth roll out
- On-going up-grades to the functionality
- Assistance with and Management of Trading Partners own Supply Chain
- E-commerce advice and guidance
- Business Process Management assistance

OTN managed the majority of the above for PDO.

OTN's CEO, Hosam Al-Jamali points out that the solution was delivered to PDO in under six months. "The PDO trading community receiving invitations for free awareness and training sessions, the pricing is agreed in a way which means that members choose the cost of each document sent themselves, by the pre-payment of messaging, or as in the case of SME's who simply pay in arrears for usage with no membership fee charged at all".

Hosam continued, "Without our OmaniCentre facility (a state of the art facility in Muscat which showcases numerous other e-commerce applications, and contains a 60-seat auditorium), we could not have helped PDO go 'live' so quickly and on time.



What the users say

Graham R. Smith (Ph.D.) (PDO's Contracting & Procurement SAP Asset Manager) says "A major problem area for us was document tracking, we had a substantial amount of time being wasted on tracking who had received RFQ's and in some instances disgruntled suppliers were complaining to the Oil and Gas Ministry. With the OTN exchange we have the means to check at every stage, not just if a document was sent or received, but which individual within PDO and the vendor were handling the documents, with a full on-line audit trail and automated archiving being available. The use of the system has already proved the original business case to be right. PDO is gaining considerably in many areas. Our suppliers are no different from any large organisation. We have a core 10% who are large Corporates themselves, but the key is the SME's who make up the balance. The OTN system has provided PDO with the means of ensuring a level 'playing field' for all, and provides benefits for all, at a cost that is commensurate with usage.

V. Murali of Oman Oilfield Industry Supplies & Services LLC, one of PDO's major suppliers says; "We did a study of the benefits we gain from using the system and there were many, but like a number of organizations we also wanted to see whether there was a true cost saving to be made, and there is! Our findings were that we can reduce our costs on average by 20% and in some instances by as much as 50%".

Benefits & Options

With the OTN solution, PDO is now able to track all movement of their documents through out the supply chain process. The benefit being that it allows for a fully auditable and transparent supply chain reducing potential down time for your business due to non-delivery of products as a result of a lack of intelligence in the supply chain process. It reduces any opportunity to reduce significantly the risk to buyers accused of abusing the supply chain process by providing complete transparency.

Furthermore, organisations today are looking at more and more ways of driving costs down from everyday purchasing, and there is a lot to be saved. However, most time spent by the purchasing department is on contacting the same suppliers every time a purchase of a product / service is to be made. Thus, organisations are considering solutions that help make the job of the purchasing department more efficient, effective and time saving. Time spent in the organisation's purchasing department on redundant activity can now be spent more effectively to "Strategically Source" the products / services. These efforts can now be spent to get better prices, best product quality and most of all a better supplier relationship.

OTN provides organisation's with an e-procurement solution that streamlines the overall procurement process, and saves the purchasing department of all the redundant activity of getting suppliers information, contacting each supplier for the quotation and thereafter preparing comparison charts for evaluating the quotations.

- Considerable procurement process Improvements.
- Potential for automation of agreements.
- E-registration



- Trace and Track of Orders becomes automated
- Remove complaints from Vendors not getting PO and RFQ's
- Opportunity to Increase RFQ values from sealed bid process. (Due to added security and transparency)
- Digitize the SCM environment
- High internal productivity

Summary

By using the OTN Internet-based common information structure, companies can now exchange data such as Request for Quotations, Purchase Orders etc in real time and develop instantaneous decision-support systems within their own environment using the data available from the exchange in a format acceptable to their own back end. Unlike the traditional supply chain, this was often merely a bundle of warehouse and transport-management system applications, the Web-centric supply-chain increases profitability by allowing companies to respond immediately to market forces and customer demands.

Companies are seeing the huge potential for improved efficiency and cost savings afforded by the Internet and exchanges in particular the profound impact on their supply-chain performance. But only the forward-thinking executives and visionary organizations that grab these opportunities first will gain the greatest advantages.

Organisations such as PDO are witnessing a revolution in their procurement processes and decision makers within these organisations are now taking advantage of this service to continue to remain competitive and see immediate returns on their investment.

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