

SUPPLY CHAIN TECHNOLOGY SPECIAL

CIOReview

OCTOBER · 13 · 2015

CIOREVIEW.COM

Company of the Month



Mushtaq Merchant,
President
Task Performance Group

Source Intelligence

Bringing Transparency to
the Supply Chain

CEO

OF THE YEAR

Jess F. Kraus,
CEO & Co-Founder

\$ 15US



SE 80

CIO REVIEW
44790, S Grimmer Blvd.
#202, Fremont, CA-94538

Task Performance Group Faster Order Processing to Increase Profitability

By Judy Christin

It is more than three decades since, Electronic Data Interchange (EDI) pulled off the most significant upheaval in B2B e-commerce arena. In this backdrop, with his penchant to be ahead of the technology learning curve, Mushtaq Merchant, President at Task Performance Group, could comprehend the need for a product that helps customers to compete in the B2B e-commerce space. “In early 1999, we transitioned from a consulting company to a product development company by combining innovative technologies with stringent EDI to produce flexible B2B e-Commerce software integration solutions called MegaXML,” says Mushtaq Merchant, President at Task Performance Group (TPG).

MegaXML is a fully customizable software platform that offers efficient B2B eCommerce EDI and XML Integration, and automation solutions for supply chain management. In the wake of supply chain management undergoing a major shift to cloud-based solutions, “we have overhauled our MegaXML product to take advantage of Microsoft Azure Cloud platform and moved our datacenters to Azure cloud providing all our customers with exponential security and scalability along with business continuity,” states Merchant.

Designed on the open standard-based software architecture, MegaXML is offered as software as a service, allowing TPG to build customized integration solutions for each client. For most products available in the market, the customer has to adapt to the product, whereas at TPG, “since MegaXML is designed using XML we can analyze and adapt the customer’s supply chain business rules right at the start of the customization process,” says Merchant. Every EDI and EDI for

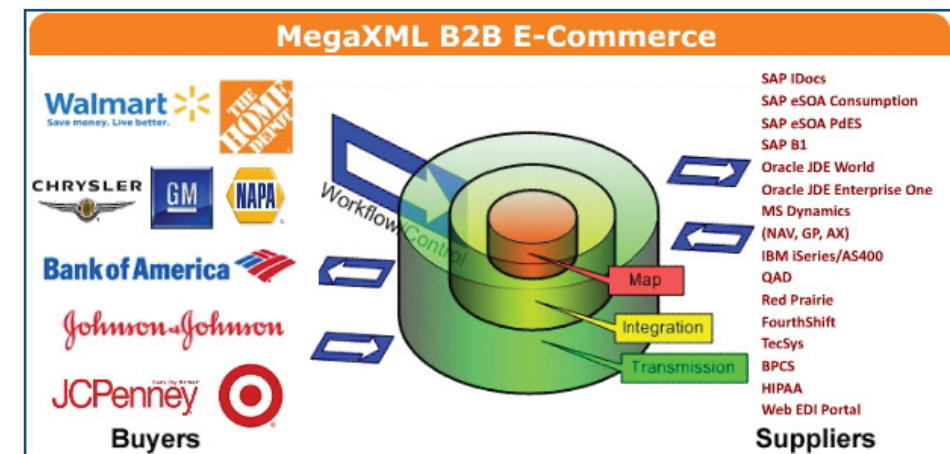
Administration, Commerce and Transport, (EDIFACT) message, and transactions that enter MegaXML, is completely translated into XML.

Real-Time Integration with SAP

“By using the right technologies, we have transformed the stringent EDI pipe and made it flexible to enable easy adaption of customers’ business rules for customized solutions,” explains Merchant. MegaXML brings in manifold benefits on the automation side eliminating multiple touch points, and thereby minimizing the need for frequent human interventions. For instance, for a customer who wanted a real-time order processing system, TPG’s MegaXML B2B E-commerce real-time order processing with SAP proved to be an extremely efficient solution. “When a buyer orders a product, the EDI process in our system sends out the buyer’s purchase details—part number, the price, and the number of parts to the SAP system and extracts the order execution part of it from SAP and returns that to the buyer. Within two seconds an order number assigned from SAP is delivered to the buyer,” adds Merchant.

For this rapid response, TPG has powerful multiple servers readily available. By allocating batteries of servers in Cloud, the orders are in queue for a minimum time prior to processing. Additionally, multiple-servers orchestrating the order processing facilitate processing continuity in the event of server malfunctioning. MegaXML utilizes the Multi-server round robin technique of load balancing and fault-tolerance by provisioning multiple, redundant servers. This technique provides extreme scalability, availability, and business continuity. Business continuity planning requires processes, procedures, and measures to ensure that business operations can continue without interruption.

For real-time order processing, though multiple servers are a necessity, the data and workflow management also should be managed efficiently. The real-time order processing architecture of MegaXML utilizes Microsoft Azure SQL Database.



The Azure SQL Database maintains multiple copies of all data in different physical nodes located across fully independent physical sub-systems to mitigate outages. Availability of multiple database copies are crucial for real-time system integration with SAP in



By using the right technologies, we have transformed the stringent EDI pipe and made it flexible to enable easy adaption of customers’ business rules for customized solutions

exchanging documents. With an accurately designed SAP integration, the orders, shipping, and invoices, processed flawlessly without human interaction, increasing revenue and productivity.

360-degree Overview

As part of TPG’S customized EDI solution for supply chain, the customers are provided with a web portal that provides an instantaneous

view of the number of products shipped and the invoices generated on any particular day on a minute-to-minute basis. “The shipping department can view this web portal to find out the number of trucks bound for a particular location. Also, by analyzing the shipping notices, they can decide the required number of trucks to be lined up for moving the merchandize,” says Merchant.

For Procure to Pay, the purchasing department can ascertain the details of the trucks coming in with the merchandize to allocate space in the warehouse. “The portal gives details not only for the outgoing shipping but also for the receiving side depending on the EDI product’s use as buyer or supplier,” says Merchant. MegaXML provides a 360-degree view of each purchase order enabling the supplier’s customer service personnel to respond to buyers’ queries connecting all PO related documents with just a few clicks.

TPG has armed itself with tools to improve customer relationships. Toward this TPG has developed a digital dashboard for its operations that display information on how many servers are busy and if there is a queue building up. “Even before the customer realizes, TPG receives an updated visual every two minutes, on the activities happening in all the servers and processors to respond in real-time. “The dashboard enables us to check on the real-time information relayed to us from Microsoft Azure datacenter to detect whether a queue is building up and react proactively by

adding more servers if necessary,” says Merchant.

MegaXML Architecture and Telemetry

There is always a strong backbone behind every successful product and solution, in case of MegaXML, it is the Architecture and Telemetry. The inherent stability, flexibility, and agility of MegaXML document processing pipeline infrastructure is intrinsically attained by the reusability of a minimal number of high density and cohesive software building blocks that have been made efficient over the years by their repeated polymorphic deployments in various vertical suppliers’ markets. Implementation of customers’ supply chain business rules by MegaXML architecture, guarantees seamless customized integration with ERPs and legacy systems.

For the MegaXML Telemetry, TPG has developed various ‘bots’-that capture business intelligence at every stage of document processing that is transmitted to the digital dashboard. For faster problem analysis and resolution this allows administrator access to all pieces of information needed to diagnose the problem at a glance—no need to issue multiple queries to diagnose the root cause of any issue.

Merchant and his team believe in adopting technologies to provision quick answers to customers, based on the knowledge received from their systems to help customers with the processes that they have. TPG is concentrating on real time order processing system for the new products. In an era where prime Air—the future delivery system from Amazon is set to take wings through a drone, “The renewed challenge for us is to execute an order at a faster rate than the current two seconds time-span of processing and take the product to the next level of innovation,” says Merchant.



Mushtaq Merchant

CIOReview

The Navigator for Enterprise Solutions

SUPPLY CHAIN TECHNOLOGY SPECIAL

OCTOBER -13 - 2015 CIOREVIEW.COM

20 Most Promising Supply Chain Technology Solution Providers 2015

With the increased flow of supplies, finished goods and information, supply chain systems are becoming more sophisticated in today's competitive global marketplace. Defining and sourcing the products, identifying and vetting suppliers, maintaining quality and managing risk are all an integral part of these supply chains.

However, a multitude of challenges including poor visibility, and copious amounts of data are still hindering the seamless operation of supply chains. This demands organizations to implement a fast and qualitative solution to bring flexibility, agility and real-time visibility into their production and distribution channels. In this scenario, solutions powered with mobile, big data, and cloud are enabling the end-to-end supply chain

processes. These solutions allow enterprises to integrate electronically with their suppliers and customers to enhance efficiency and lower costs involved in the process.

In the last few months, we have analyzed hundreds of supply chain solution providers and shortlisted the companies that are at the forefront of tackling challenges in the supply chain arena. A distinguished panel comprising of CEOs, CIOs and analysts including CIOReview's editorial board has selected the final list of Supply Chain Tech Solution Providers 2015. The selection is based on the vendor's capability to offer cutting edge technologies and solutions that add value to the supply chain landscape.

We present to you CIOReview's 20 Most Promising Supply Chain Tech Solution Providers 2015.



Company:

Task Performance Group
Arlington Heights, IL
taskperformance.com

Description:

B2B E-commerce EDI/XML Azure Cloud Based
SaaS Integration with ERPs and legacy system
solutions provider

Key Person:

Mushtaq Merchant
President

Website:

www.taskperformance.com