The New Integration Mandate -
Creating Real-Time Customer Visibility Networks

August 2005

INTRODUCTION

The power and complexity of real-time supply chain integration dominates the public discourse surrounding business-to-business (B2B) initiatives. Companies such as Wal-Mart and Cisco Systems are champions for supplier integration, demonstrating the competitive margin advantages that can be gained from creating a fluid, dynamic and transparent ecosystem of business partners.

Emerging from this beehive of supplier-based collaboration is a new mandate for companies looking to compete in a global marketplace – a mandate for real-time customer integration. Having the best product or service is no longer good enough. Now, having the best information – both from a visibility and accuracy standpoint – can be a decisive differentiator in a vendor/customer relationship. By making critical business information available on demand, and in a secure, reliable manner, companies are creating a level of customer service and relationship that makes them easier to do business with, and a vendor of choice among peers.

The Need for Customer-Driven Integration

In many industries, especially manufacturing, products and services that were once purchased because of their innovation and market-leading position have become commodities to be bought and sold based predominantly on price and availability. With all things being equal, the differentiation between one manufacturer and another often comes from the overall ease of doing business with them, which includes time and cost savings that can be derived from sophisticated information sharing processes.

According to research firm *AberdeenGroup*, "Speed and flexibility are at the heart of competitiveness for mid-size manufacturers as reducing cost is important but is not a long-term differentiator. The classic silo view of order to delivery (order management, manufacturing, purchasing, warehousing and transportation) is being replaced by processes that are focused on meeting the customer's unique requirements and doing it in a fraction of previous timeframes."[1]

More than anything, companies want to buy from vendors that are easy to do business with and offer a compelling overall value proposition. If transacting business is inefficient or unreliable, the relationship will sour and customers will look elsewhere. One way that companies are gaining the confidence of their customers is by proving how savvy they are when it comes to real-time business process integration. By demonstrating that they have the capability to entangle their business processes with their customers in real time, companies can:

- **Expand business with current customers** - adding the ability to rapidly (and painlessly) support with previously unsupported protocols and standards improves a company's ability to meet the needs of customers for real-time information and opens the door to new business opportunities. Companies will send more business to vendors that have demonstrated the ability support technologies that improve efficiencies and reduce partner management costs.

- **Better retain customers** – a tighter coupling between a company and its customers means improved visibility into demand and better alignment of resources. It changes the customer relationship from reactive support to

---

[1] "The Mid-Size Manufacturer Order-to-Delivery Benchmark Report: The Need for Speed," Copyright © 2005, *Aberdeen Group, Inc.*, Jane Biddle and Chris Jones, March 2005.

proactive collaboration. The business relationship becomes co-dependant, and the intermingling of processes from one company to another makes it less likely that business decisions will be made solely on variables such as raw product or service costs without consideration being given to the overall value of the business relationship.

- **Obtain new customers** – the ability to integrate with a customer's systems and processes is increasingly a key competitive differentiator. By being able to support multiple protocols, standards and data formats, the ramp-up process for working with a new vendor will be more efficient and cost effective for the customer. It also demonstrates a commitment to higher levels of customer service than many competitors can currently offer.

- **Develop deeper levels of cost analysis** – in addition to building a unique competitive differentiator and providing heightened service, integrating with customers at a system-to-system level can provide new insights into the health and profitability of the business. For example, tight customer integration provides the ability to track costs related to serving a customer down to individual processes. Knowing the true costs and benefits of serving a customer can help companies identify business improvement opportunities and trouble spots.

Creating a Customer-Driven Information Visibility Network

Many of the same methodologies, systems and services developed for the creation and management of real-time Supplier Visibility Networks can be utilized in order to integrate processes with customers.[2] However, for customer-driven integration activities, there is an increased focus on flexibility, reliability and ease of integration. Standards and protocols are often dictated by the customer, not the vendor. Customer-driven Visibility Networks must be based on an application-independent platform that supports multiple business process standards, and is able to meet a wide variety of problem resolution service level agreements (SLAs).

Companies that implement services and technologies to proactively support the integration needs of their customers benefit from:

---

[2] For more information on supplier integration networks, see the Viacore paper, "Visibility in the Age of the New OEM: 'Original Ecosystem Manager.'" Available online at: http://www.viacore.net/about_businesstone/white_papers.php

- **A reduction of errors in data sent to customers.** Typically, information that is not shared in real-time or is manually entered through portals, spreadsheets and faxes can have error rates from five to 20 percent. The consequences from receiving "bad" data can be quite significant for customers. For example, a customer may be required to re-run its manufacturing resource planning batches if it determines that the data given to it is full of errors, which could result in significant delays in decision making, causing disruptions in manufacturing schedules. By sharing business process information with customers via a real-time, system-to-system network, companies can reduce their data error rates from as high as 30 percent to as low as one percent in less than a month. This generates an increased level of stability, reliability and dependability and reduces the amount of time required to fix data errors for both the vendor and the customer.

  "Whereas implementing changes throughout an extended enterprise used to take three weeks or maybe three months to communication from end-to-end, to remain competitive they must be shared with all the members of an ecosystem in three hours, three minutes or maybe even three seconds."

- **A consistent customer experience.** By creating a customer integration model that is based on proven methodologies and an open architecture, companies can provide reliable service on-demand, regardless of the customer's location, hours of operation or integration requirements.

- **Focused internal resources on core strategic innovation rather than contextual infrastructure maintenance.** If the company chooses to out-task the development and management of its Visibility Network to a third-party provider, it will effectively remove the burden of building the Visibility Network and ongoing management of customer connections. It also reduces the amount of maintenance time required to administer the constant changes inherent in dynamic B2B infrastructures, enabling the IT team to focus on creating new technology-based services for customers and engineering strategic business process improvements.

- **Scaleable solutions that provide cost reductions for all B2B integration efforts.** The move to a single integration platform that supports multiple standards, protocols and applications provides a significant cost savings over individual, customized integration efforts. In addition, as the network expands to incorporate new business processes from a variety of customers,

the company can use established methodologies created at the onset of the implementation to reduce the time required to establish and test a connection with a customer. These methodologies also reduce the amount of process map reconfiguration necessary when a client makes changes to its business processes.

A Customer-Driven Visibility Network Scenario

The best way to demonstrate how a Customer-driven Visibility Network can create a competitive differentiator is to examine a scenario for a company in the technology industry. In this sample case study, one of the company's highest-volume customers requested support for three real-time business processes to monitor a product being assembled overseas. The processes were:

- Notify Work Order – which shared information from the customer to the manufacturer

- Work in Progress (WIP) – which shared information from the manufacturer to the customer

- Advance Ship Notice – which shared information from the manufacturer to the customer

In addition, the customer demanded a two to four hour resolution time SLA on all document or process exceptions.

The challenges the company faced when developing an integration strategy to support these customer requirements included:

- Lack of a B2B gateway capable of supporting the standards required for these processes

- Limited in-house expertise to implement the desired business processes

- Insufficient IT resources to meet the resolution times mandated by the customer

- A need for activity progress and metrics visibility, both at the corporate and factory IT level

- Difficulty in identifying and allocating B2B integration costs

- High cost of supporting multiple standards, protocols and data formats
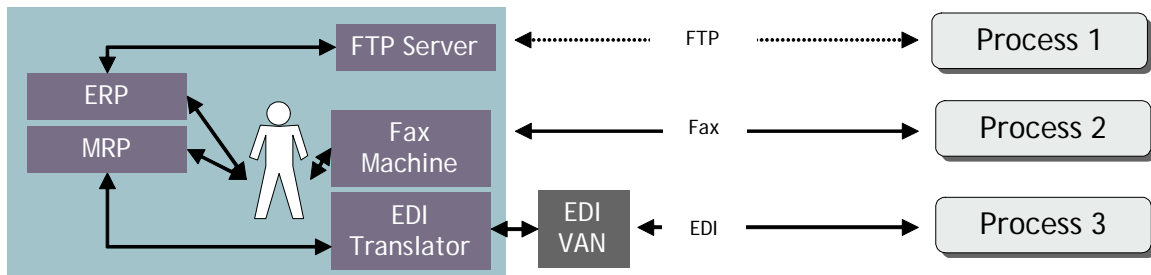
Previous Customer Integration Model

Developing the Customer-Driven Integration Solution

Based on the specific customer integration model required, the company evaluated a variety of solutions from third-party vendors. The final model combined best-in-class software and services from IBM and Viacore, which were able to work together seamlessly within the Customer Visibility Network.

- The company selected Viacore as its application independent Customer Visibility Network service provider to integrate the Notify of Work Order, WIP Status, and Advance Ship Notice processes from its back-end applications (ERP/MRP) to its customer's back-end applications and manage to the mandated SLAs.

- The company purchased IBM's B2B Gateway software, which is scaleable and handles multiple business process standards.

- Viacore deployed its BusinessTone Customer Integration and Management solution, which not only created the project management framework for building and operating the Customer Visibility Network, but also provided ongoing support for connectivity issues, problem resolution and change management.

Within four weeks, Viacore deployed the Customer Visibility Network and completed integration and testing of all three processes to the customer's back-end applications

- Within four weeks, Viacore designed, deployed and configured the company's Customer Visibility Network, including B2B gateway and supporting infrastructure, engineered and configured the required translation maps and validation schemas, synchronized business support centers, and

completed integration and testing of all three processes to the company's customer back-end applications

- The company considers its new Customer Visibility Network to be a strategic competitive advantage and plans to extend the solution to meet the integration requirements of its top customers.
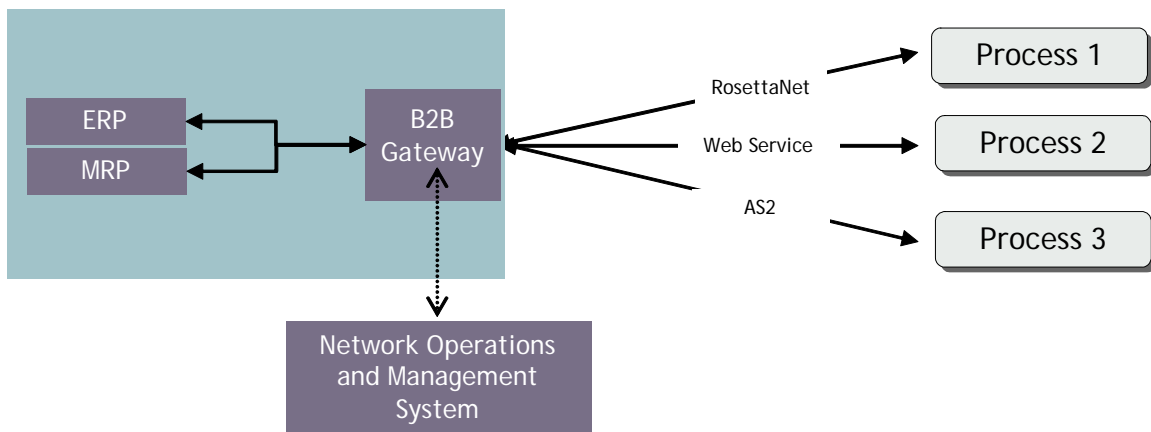
New Customer-Driven Visibility Network Model

Resulting value for the company:

- Increased customer satisfaction and revenue

- Integrated order-to-delivery processes that are visible to the customer

- Centralized management and support

- Competitive differentiation

- Reduced expenses

- Increased visibility into customer profitability

- Increased efficiencies

AberdeenGroup also believes that an integrated business processes provide strong benefits for companies. "Best-in-class end-to-end integrated order-to-delivery strategies not only produced lower lead times, they provided 30% to 100%

greater 'above average' performance results across a number of key performance metrics, versus non integrated and serialized order-to-delivery processes... Mid-size manufacturers must recognize that visibility and flexibility are becoming the keys to more strategic relationships with customers. Customers make numerous changes after the order is taken and greatly appreciate when their suppliers can adapt to those changes. They want to know the status of the order and be able to change quantity, configuration, or final destination. *Aberdeen* believes that few mid-size manufacturers have actually executed a strategy to use order change capabilities as a competitive differentiator, and there is an opportunity for those that do."[3]

Fulfilling the Mandate Can Change Customer Relationships

As companies strive to demonstrate superior customer service, market leadership and the ability to drive change within their industries, they look to their information technology teams to set a path toward greater customer integration, improved collaboration and increased profitability. The mandate for developing deep system-based entanglement with customers creates the potential for companies to not only improve the value they offer through improved service delivery, but also to recognize greater efficiencies within their own businesses. The ultimate goal is to change the value proposition of customer relationships by providing mutual benefit for a company and its customers through standardizing and automating the information sharing process. The path toward that goal is through Customer-driven Information Visibility Networks.

---

[3] "The Mid-Size Manufacturer Order-to-Delivery Benchmark Report: The Need for Speed," Copyright © 2005, *Aberdeen Group, Inc.*, Jane Biddle and Chris Jones, March 2005.