

**Maximizing Value from SAP  
with Supply Chain  
Collaboration in Software-as-a-  
Service Model**

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## Executive Overview

Many leading corporations have made substantial investments in SAP technology to improve supply chain performance with suppliers, customers, distributors, retailers and other trading partners. Realizing the maximum value from these SAP investments requires full participation from all trading partners to obtain from them the accurate and timely information required by SAP and to communicate to them the decisions that need to be executed across the supply chain.

Unfortunately, many executives underestimate the inherent challenges and risks associated with supply chain collaboration with trading partners. They attempt to achieve supply chain collaboration using a traditional, on-premise software deployment model, which is time-consuming, expensive, difficult to maintain, and high risk. Several leading corporations that rely on SAP are enjoying the benefits of a Software-as-a-Service (SaaS) approach to supply chain collaboration resulting in faster time-to-value, lower total cost of ownership, reduced resource requirements and lower risk. These SAP customers are maximizing the value from their SAP investment using supply chain collaboration in a software-as-a-service model to accelerate and expand their Return-On-Investment.

The paper also provides some specific examples where companies that rely on SAP such as IBM, and Hitachi GST have implemented successful collaborative, shared supply chain processes using a Software-as-a-Service model.

*This white paper highlights some of the risks and challenges associated with establishing collaborative, shared supply chain processes across all trading partners and it describes approaches that leading companies have used successfully to address and mitigate these risks.*

## Issues and Challenges Implementing and Maintaining Supply Chain Collaboration

Many companies are deploying and maintaining collaborative, shared supply chain processes with the objective of achieving lower costs and improving customer service levels. While these are very realistic goals, there are significant challenges and risks associated with implementing a supply chain collaboration solution that extends SAP-enabled internal supply chain processes with 100% of their external trading partners. Supply chain executives as well as their IT counterparts should be prepared to address the following top issues:

## **1. Wide diversity of technology and skills across supply chain trading partners**

A wide variety of process and technical capabilities exist across trading partners on a global basis. A minority of trading partners have the IT expertise and resources necessary to support advanced company-to-company integration technologies such as EDI or XML, while the majority of collaboration is still being conducted using manual methods such as phone, faxes, and email. Although SAP has achieved a leadership position in the market for supply chain software, less than 15% of installed supply chain software is from SAP. Trading partners have multiple back-end systems, a variety of supported data formats and protocols, and disparate business processes. Any supply chain collaboration solution must be flexible enough to deal with the vast array of technologies, supported processes, and level of sophistication and business readiness that exists across trading partners. For example, any solution must be able to deal at the same time with automated standards-based-company-to-company integration as well as web-enabled interactions and everything in between. Regardless of capabilities, it is essential that all trading partners must participate in all the relevant collaborative, shared supply chain processes.

## **2. Longer time-to-implement and time-to-value, higher maintenance efforts and higher Total Cost of Ownership (TCO)**

Implementing and maintaining supply chain collaboration with trading partners often takes longer and costs more than many companies anticipate because there are fundamental differences from deploying and maintaining internal applications.

Causes of unexpected costs and effort include:

- Establishing and managing the infrastructure necessary to support company-to-company collaboration. Specialized monitoring software, application management software, and security software must be deployed along with trained operations staff to support and maintain the infrastructure.
- Establishing and managing the necessary technologies to support any-to-any trading partner connectivity and data mapping. Despite the proliferation of integration standards such as RosettaNet and EDI, only a small subset of companies have standardized on them. This results in the need to manage a multitude of divergent data formats and connectivity protocols.

- Establishing and managing the multi-company user role and access model necessary to ensure information security across all external trading partners. Delegated and federated user and role management become critical.

Organizing the right mix of in-house and external expertise with the complete skill set necessary to succeed often takes several months, delaying solution implementation and roll out and increasing costs. Up-front project planning, technology selection, and architecture design add additional months in the deployment cycle.

### **3. Trading Partner On-boarding**

Trading partner on-boarding involves more than just deploying a software integration technology and then telling trading partners to jump on board. Critical to success is deploying an on-boarding environment and portal, and establishing a global communications and on-boarding deployment methodology. This should allow trading partners the ability to self-test message mapping and interconnectivity, access a 24x7 help desk, obtain solution and deployment status information, request and receive user accounts and roles, and access training and knowledge base information that allows them to effectively use the solution.

#### 4. Changes and Upgrades

Companies struggle with changing, upgrading and deploying new versions of in-house software, but the problems are magnified when the software is used by hundreds or thousands of globally dispersed supply chain trading partners. Schedules, down-time, and user acceptance testing must be coordinated globally and across time zones with all partners.

The traditional big-bang approach to upgrading creates problems in a multi-company environment because maintenance windows are not sufficient across all companies to accommodate a major upgrade.

### Resolution Plan for Key Issues

Organizations that have successfully integrated with their supply chain partners to enable collaborative, shared supply chain processes have mitigated or eliminated many of the issues and challenges previously identified. The following is a practical approach for success based on proven ways used by companies that have successfully resolved or mitigated these challenges:

#### 1. Deploy a Shared Process and Information Platform

Deploy a shared process and information platform to support the collaborative supply chain processes that need to be executed properly across 2 or more tiers of the supply chain. Use the shared platform to eliminate any latency in communicating demand or

supply changes, to identify potential problems before they occur, and to measure the processes against common metrics. The platform should also provide all partners with information transparency and visibility to potential problems that need to be resolved before there is a supply disruption. The platform should ensure clean, accurate, and timely data from any trading partner in the supply chain regardless of its point of origin.

## **2. Enable Trading Partners to Adopt the Collaborative Processes**

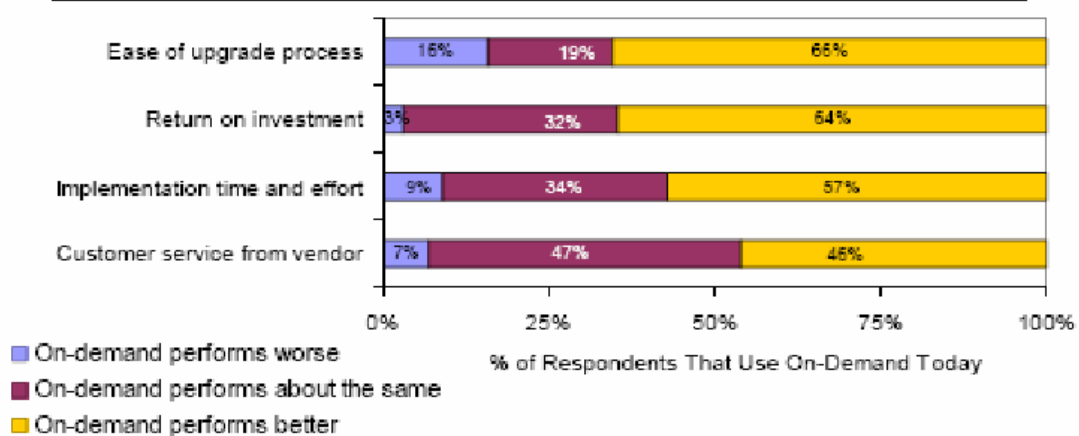
Full value cannot be achieved if trading partners cannot adopt and participate in the defined collaborative process due to technology limitations or lack of resources. An effective global partner communication, training, and on-boarding methodology are needed to ensure the timely roll-out of the end-to-end program. The project should be staffed with resources trained and experienced in these types of projects. A critical element of the shared platform above is a set of trading partner on-boarding and integration tools and technologies that allow for 100% adoption regardless of technical infrastructure and skill set of IT staff.

## **2. Adopt a Software-as-a-Service (SaaS) Approach for Deployment and On-going Management**

An experienced Supply Chain Collaboration SaaS vendor can alleviate many of the deployment and operational issues associated with integrating and on-boarding partners to a supply chain collaboration

solution. Leveraging the SaaS vendor’s expertise reduces implementation time and risk, accelerates time-to-value, lowers TCO and improves ROI. According to a recent report from the Aberdeen Group, a leading industry analyst firm, supply chain software delivered using a SaaS model outperforms the experience customers achieve with the traditional model of licensing and installing applications.

**Figure 1: On-Demand SCM Outperforms Traditional “License and Install” Applications in Key Areas**



In addition to a robust trading partner integration and supply chain collaboration software, a SaaS provider must provide the following required services to reduce deployment timeframes:

- Rigorous application deployment and upgrade processes that leverage pre-configured industry templates, best practices, and tools developed

based on extensive experience deploying supply chain collaboration solutions.

- Optimized hardware and infrastructure that maximize performance and availability while minimizing costs.
- Robust customer service portal that provides service level agreement reporting, access to training and knowledge bases, and incident resolution and escalation.
- Auditable security and data retention policies that ensure data is protected and maintained in regulatory compliance.
- Systems management infrastructure distributed across the Internet that ensures availability and performance for all trading partners regardless of their location and level of technical sophistication.

## Success Stories

While many companies have just started their journey towards establishing collaborative, shared supply chain processes, others embraced this strategy early using a SaaS delivery and operating model. The following provides several examples of companies that have experienced success in rapidly integrating their in-house SAP technology with a SaaS delivered supply chain collaboration solution, reducing their TCO and accelerating ROI from these investments.

### **IBM Corporation**

With one of the largest and most complex supply chains in the world, IBM spends \$41 billion annually on orders for more than two billion component parts a year, working with 33,000 suppliers and 45,000 trading partners. While IBM has long focused on creating and building an integrated, end-to-end supply chain and has invested heavily in SAP software, it wanted to establish new levels of supply chain collaboration. To achieve their on-demand goals, IBM needed to extend the integration of business processes to include multiple tiers of the supply chain. In the past, IBM relied on suppliers' and partners' reports and management systems for visibility into its own supply chain.

After extended analysis, IBM identified specific pain points in two key areas: synchronization of demand/supply and visibility into Tier 2 and 3 suppliers and contract manufacturers. IBM decided to use a SaaS approach to deliver a supply chain collaboration platform to support the IBM global manufacturing sites and divisions, and to provide visibility and control across multiple tiers of suppliers. The solution synchronizes demand and supply information across partners, tracks supplier commitments, monitors supplier inventory levels, triggers replenishment cycles and helps to ensure continuity of supply. IBM and its suppliers now have a consolidated view of customer demand, available supply and potential imbalances across 85 percent of IBM's manufacturing procurement expenditures.

Using the SaaS approach, IBM has experienced solution uptime of greater than 99.9% and has realized TCO reductions in excess of 50%. For example, the solution provides an automated test harness for trading partner on-boarding requiring no IBM resource for integration testing. The result is that hundreds of trading partners using 39 different types of RosettaNet and other XMLbased transactions have successfully on-boarded to date. The solution allows IBM to focus on capturing more customers and working more effectively with suppliers, by eliminating the need to manage the technology and provide operations for the supply chain collaboration solution.

#### **Hitachi Global Storage Technologies**

Hitachi Global Storage Technologies (GST), a leading global disk drive manufacturer, was created in 2003 through the combination of Hitachi and IBM's storage technology business. Hitachi GST manufactures disk drives at nine plants located in seven countries in North America and Asia. The company embarked on several cross-company initiatives to improve its supply chain and procurement processes and to increase inventory visibility across the new combined business entity. Hitachi, a large SAP customer, decided to use a SaaS approach for its supply chain collaboration initiatives to create a global electronic hub. The hub provides a single face to suppliers for customers, distributors, as well as both direct and indirect procurement transactions and data integration. Using a SaaS approach, Hitachi GST went live with their first business release in four months and realized a 35%

reduction in IT costs associated with operating and managing the solution. The hub driven process improvements have resulted in a 50% reduction in manual procurement processes, a 60% improvement in forecast to commit cycle times, and a 2 to 3 day reduction in inventory days of supply.

## About E2open

### **E2open Drives Business Performance Improvement**

E2open is the supply chain performance management leader, delivering visibility, control and bottom-line performance across your global extended supply chain. E2open's strategic Multi-Enterprise Platform improves profitability and increases business value on multiple levels, by enabling you to align customer demand with product supply for increased revenues, higher margins, and greater cash flow.

### **Delivering Bottom-Line Results**

E2open delivers on business cases of \$5M to over \$400M, with an average of \$15M, and cash payback in 12 to 18 months.

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