AberdeenGroup

B2B Collaboration: Assessing the ROI of Process Integration

Business Value Research Series

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Executive Summary

Issue at Hand

Business and IT leaders are under increasing pressure to improve B2B collaboration and the underlying electronic communication capabilities of their organizations. This report: (1) looks at the key drivers for B2B collaboration in both the purchase-to-pay and order-to-cash areas, (2) shares the latest insights into corporate priorities for B2B collaboration and connectivity, and (3) provides an ROI framework to help companies and their IT organizations assess their areas of opportunity.

Benefits of B2B Collaboration

The two main process areas for collaboration are the order to cash process (customer collaboration) and the purchase to pay process (supplier collaboration).

Aberdeen research finds that electronic connectivity with suppliers and customers creates compelling results, including:

- Administrative savings
  - Lower transaction costs
  - Fewer data errors
  - Fewer invoice discrepancies
- Improvements in key performance metrics like;
  - Reduced out of stocks at customer/retail location
  - Increase in perfect order percentage
  - Reduced inventory holding costs/lower safety stock requirements
  - Faster order to cash cycle time
  - Increased customer satisfaction

Framework for B2B Maturity Level

To find the characteristics of B2B collaboration of companies that are leading the way (i.e., the Best in Class) and to help your company measure yourself against industry standards, Aberdeen conducted surveys from February to June 2006 as part of a Supplier Enablement Benchmark and a Customer Collaboration Benchmark.

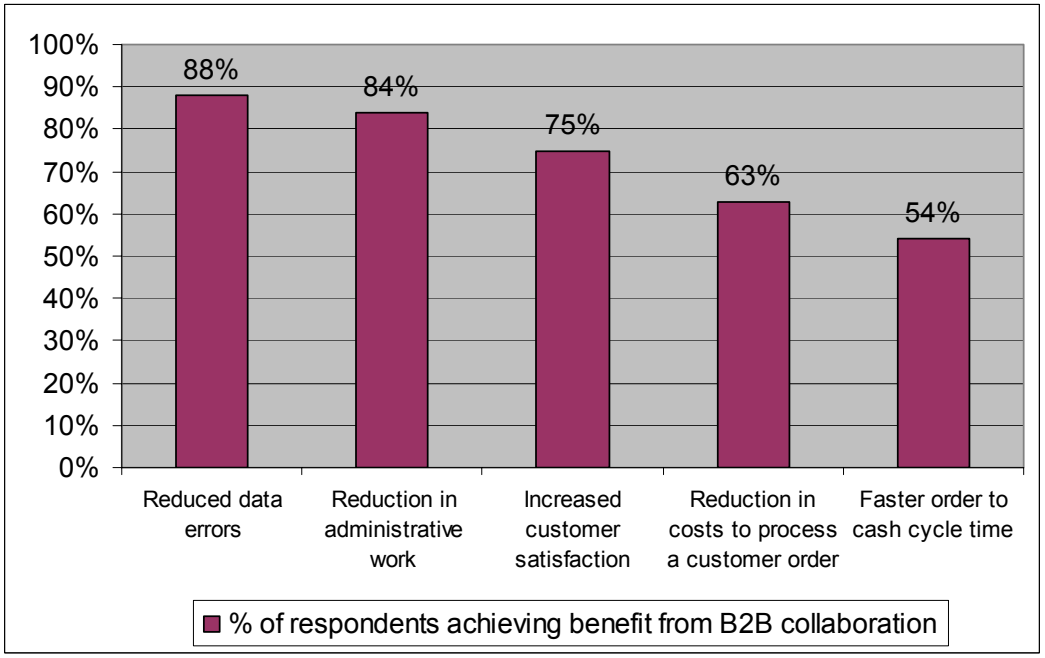
The Best in Class companies have made the most progress towards Process Collaboration, while the Industry Average companies are concentrating on scaling electronic communication, and the Laggard organizations are still using mostly phone/email/fax communication. Electronic communication involves using automated means to communicate data back and forth whereas process collaboration involves going beyond communication of data to enabling collaborative workflows through the electronic communication platform. Examples of process collaboration include forecast collaboration, design collaboration, invoice reconciliation and automation, and so on.

Enablers for B2B Collaboration

A myriad of technology enablers are available for electronic communication, and most companies will need to use multiple methods to gain electronic communication across their full business partner community. Examples of these enablers are Data-Entry Portal or Webform, EDI/XML Translation Software, Enterprise Application Integration or B2B Integration and Value-added Networks. Once the enablers for electronic communication are put in place, more advanced processes dealing with forecast collaboration, order management, supply chain event management, and so on can be deployed.

ROI Findings

Figure i Key benefits of B2B collaboration for Order to Cash Processes



Source: Aberdeen*Group*, July 2006

The most common key performance metrics that are impacted by B2B collaboration (for Order to Cash processes) are shown in Figure i. These improvements can be categorized into reducing administrative costs, increasing revenues and improving cash flow. Here are examples of improvements in each of these areas as a result of Order to Cash collaboration:

- Reduce Administrative Costs:
  - Reduce time and cost for customer setup and maintenance
  - Reduce time and cost for notifying customers of new product information
  - Reduce time and cost for receiving and managing workflow for collaborative demand planning

  - Reduce time and cost for order receipt, order fulfillment, notification, and delivery workflows

- Increase revenues:
  - Increase number of customers and channels by being easier to do business with which in turn results in increased customer satisfaction
  - Make new products available and visible for sale to customers faster
  - Reduce sales lost due to inventory shortages
  - Reduce sales lost due to customer defections (caused by delivery errors or delays)
- Improve cash flows:
  - Shorten order-to-cash cycle times resulting in improved cash flows
  - Reduce accounts receivable (DSO)
  - Reduce safety stock inventory used to overcome inadequate demand visibility

Aberdeen research finds similar benefits for Purchase to Pay collaboration. Examples of improvements include:

- Reduce expediting costs
- Reduce supplier enablement costs
- Reduce invoice processing costs
- Reduce transportation costs

Please refer to page 21 for a representative example of the ROI savings obtained by a fictional 1 billion $ revenue consumer goods manufacturer through customer and supplier B2B collaboration.

Recommendations

The key recommendations for companies in each of the categories within the maturity framework are as follows:

Category	Recommendations
Laggards	• Secure sponsor buy-in: Senior executive support (CFO, VP of Purchasing, VP of Supply Chain, VP of Sales and Marketing) is critical for funding electronic enablement projects and driving usage by suppliers and customers. • Stop the paper: Invest in more technologies such as EDI capabilities, portals, and supplier networks or marketplaces. • Set up cross-functional teams within the organization: Take a collaborative approach to trading partner enablement within the organization.

	• Educate to act: Educate your customers and suppliers on the benefits of B2B collaboration and market to them how the processes will reduce payment disputes, improve perfect order rates, etc. • Put infrastructure in place for data security: The most common reason why companies hesitate to share data with their suppliers and customers is security concerns.
Industry Average	• Like the Laggards, look to more advanced technologies such as portals and trading networks or marketplaces, especially the latter if they have an On Demand or Software as a Service (SaaS) offering. • As your company becomes more experienced with supplier collaboration, share more data with key suppliers, such as inventory level requirements and design requirements. • As your company becomes more experienced with customer collaboration, share more data with customers, such as forecast commitments, promotion and event schedules, and in-transit status events.
Best in Class	• Take advantage of your apparent technological edge to make the process more efficient. Move more supplier enablement activities away from phone, fax, and e-mail. Focus especially on invoice processing, supplier on-boarding, supplier and customer communications, and stock-out reductions. • Start looking at tools for improved order capture and management with customers, improved order promising and availability information, and web-based customer collaboration portals • Incorporate process collaboration into your technology roadmap: As your company becomes more experienced with B2B collaboration, share more planning data and implement error resolution workflows to address execution and financial settlement issues. • Investigate web-services and service-oriented architecture for enabling process collaboration. Start with smaller pilot projects rather than doing a company-wide rollout.

Source: Aberdeen*Group*, July 2006

Companies that have moved to process collaboration with suppliers and customers report that they have been able to speed up their planning and execution cycles and can reshape and react to demand much faster than before. By exchanging richer information more quickly with trading partners, enterprises are able to make more accurate plans and better midcourse corrections while improving cash-to-cash cycles. They are also able to improve customer service performance and increase revenue.

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Chapter One: Issue at Hand

Business and IT leaders are under increasing pressure to improve B2B collaboration and the underlying electronic communication capabilities of their organizations. In Aberdeen's 2006 supplier enablement benchmark of 120 companies, 69% of respondents say their companies' emphasis on electronic enablement has increased over the past three years, and only 4% say that it has decreased. In Aberdeen's 2006 customer collaboration benchmark of 65 companies, 80% of the respondents say their companies' emphasis on customer collaboration has increased over the past three years and only 2% say that it has decreased.

Trading partner collaborative processes are critical in today's environment of highly competitive local demand and increasingly global supply, which requires faster and more automated processes. In addition, most companies' supply chains are becoming increasingly distributed with complexity in processes between business partners on both the supply side and the demand side. Buyers are providing stricter order fulfillment requirements to their suppliers, as well as on-going pressure to reduce costs. Electronically connecting and collaborating with these partners is vital to thriving in this complex, demanding environment.

The two main process areas for collaboration are the order to cash process (customer collaboration) and the purchase to pay process (supplier collaboration).

Aberdeen research finds that electronic connectivity with suppliers and customers creates compelling results, including:

- Administrative savings
  - Lower transaction costs
  - Fewer data errors
  - Fewer invoice discrepancies
- Improvements in key performance metrics
  - Reduced out of stocks at customer/retail location
  - Increase in perfect order percentage
  - Reduced inventory holding costs/lower safety stock requirements
  - Faster order to cash cycle time
  - Increased customer satisfaction

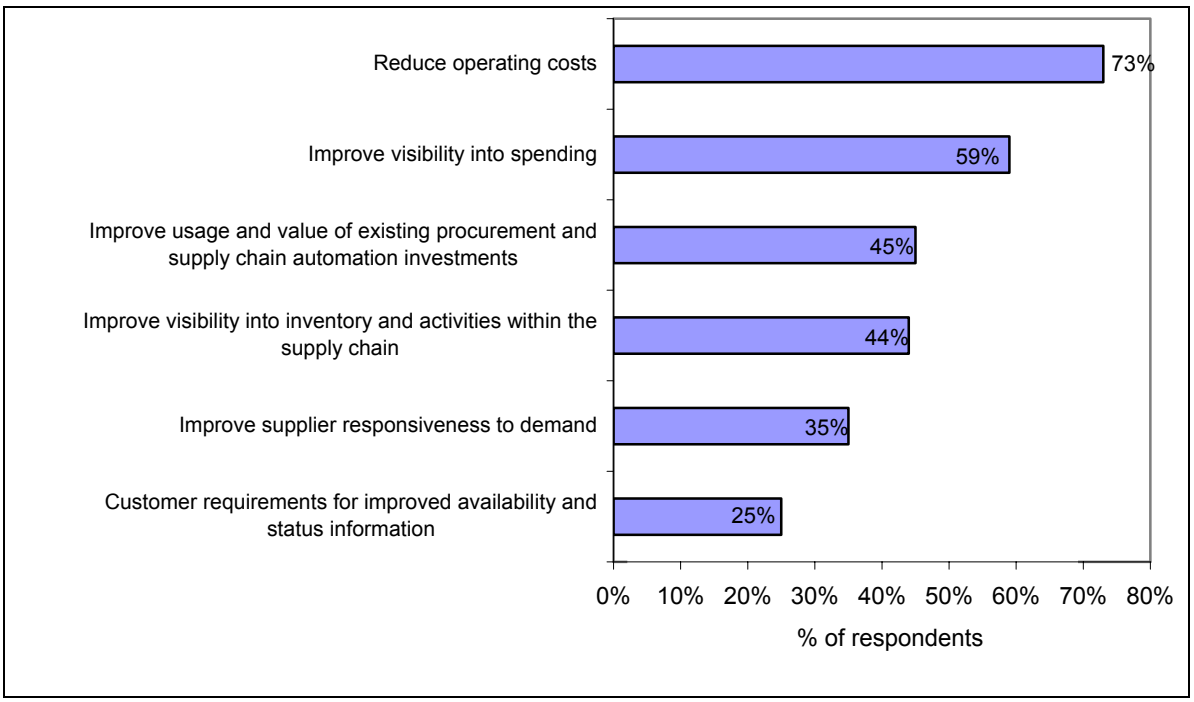
This report: (1) looks at the key drivers for B2B collaboration in both the purchase-to-pay and order-to-cash areas, (2) shares the latest insights into corporate priorities for B2B collaboration and connectivity, and (3) provides an ROI framework to help companies and their IT organizations assess their areas of opportunity.

Why Enterprises Are Making B2B Collaboration a Priority

Companies are launching B2B collaboration initiatives for purchase to pay processes to reduce operating costs and improve visibility into their spending with suppliers (Figure

1). Companies are also keenly focused on improving the usage and value of the technology their companies have already invested in for trading partner collaboration.

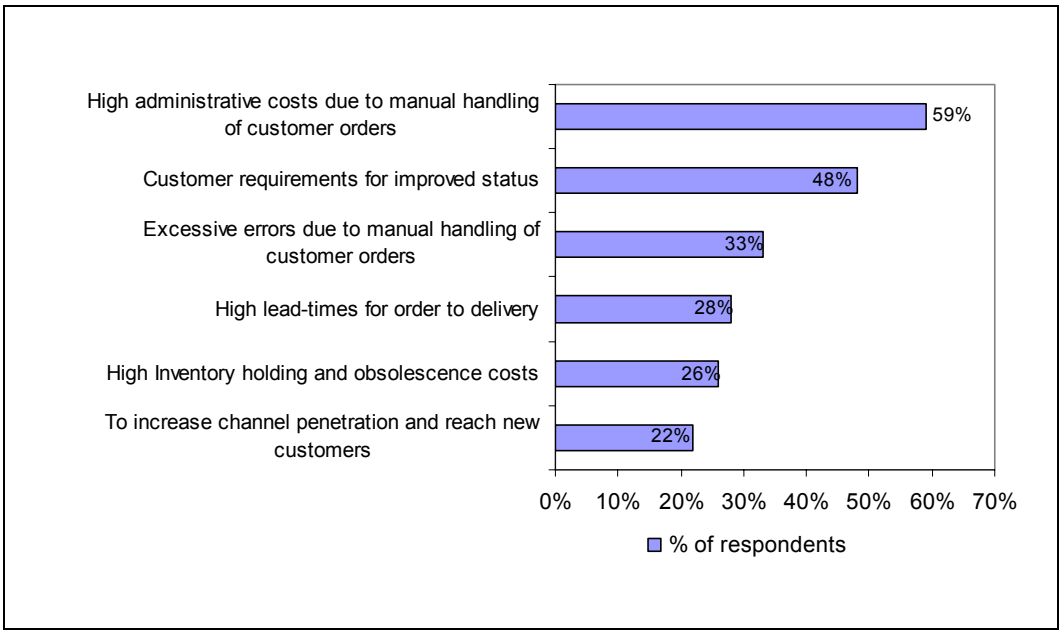
Figure 1: Key Pressures for Improved Supplier B2B Collaboration



Source: Aberdeen*Group*, July 2006

For order to cash processes, companies are launching B2B collaboration initiatives to reduce high administrative costs and meet customer requirements for more timely status information (Figure 2). Companies are also keenly focused on reducing the errors for order processing, reducing high inventory holding costs, and reducing days sales outstanding.

Figure 2: Key Pressures for Improved Customer B2B Collaboration



Source: Aberdeen*Group*, July 2006

Key Challenges to Enabling B2B Collaboration

Companies continue to struggle to connect electronically to the majority of their trading partners, though progress is being made.

While large enterprises strongly prefer using EDI, small and midsize organizations still depend chiefly on phone, fax, and e-mail to communicate with trading partners. The top barriers to widespread B2B integration remain the lack of IT resources, infrastructure, and budgets at many small and midsize organizations to support and sustain electronic enablement initiatives.

Companies report that customer resistance to process collaboration is one of the top barriers they face. Presence of too many messaging standards, insufficient internal knowledge about new customer collaboration technologies and services, and cost of the technology solutions are also cited as barriers while launching customer collaboration initiatives.

The good news is that progress is being made on both customer and supplier collaboration. For instance, the average e-procurement deployment now has 29% of suppliers electronically enabled, up from 17% in 2004. Moreover, companies are sharing more data with suppliers, including product/sales activities, release schedules, and manufacturing plans.

Companies most proficient at supplier enablement have 65% to 100% of their transactions issued and received electronically, and they are quicker in "on-boarding" a supplier: an average of 15 days vs. 37 days for all respondents. The IT organizations at these com-

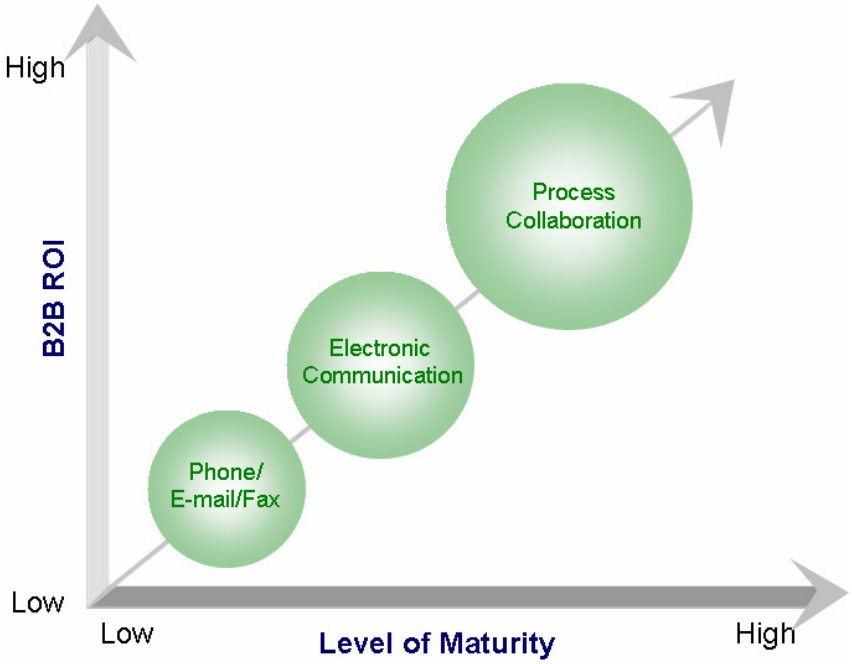
panies are playing an important role in this process through technology selection, vendor selection, piloting, trading partner enablement, and support.

Chapter Two: Assessing Your B2B Collaboration Maturity

Companies that have moved to process collaboration with suppliers and customers report that they have been able to speed up their planning and execution cycles and can reshape and react to demand much faster than before. By exchanging richer information more quickly with trading partners, enterprises can make more accurate plans and better mid-course corrections while improving cash-to-cash cycles. They also can improve customer service performance and enhance revenues.

Companies are at different stages of maturity in their B2B collaboration capabilities (Figure 3). Companies need to make a concerted effort within their IT organizations as well as the line of businesses to move from one maturity level to the other. The hard work pays off through increased levels of ROI and an overall improvement in corporate competitiveness.

Figure 3: Level of Maturity and B2B ROI



Source: Aberdeen*Group*, July 2006

Maturity Framework

To determine your company's B2B collaboration maturity level, see how your company ranks in each of the categories in Table 1. Aberdeen research shows that in each category about 20% of companies have best-in-class maturity levels, 50% are industry average,

and 30% are laggards. Survey respondents in each of the three maturity framework categories – Laggard, Industry Average, or Best in Class — exhibit different characteristics in five key categories: ***process*** (consistency across the enterprise); ***organization*** (corporate focus/philosophy, level of collaboration among stakeholders); ***knowledge*** (visibility into and timing of results); ***technology*** (scope of automation and productivity tools); and ***measurement*** (frequency of measuring performance).

Table 1: Maturity Model for B2B Collaboration

	Laggards	Industry Average	Best-In-Class
Process	Enablement approaches and processes vary by department	Enablement approaches and processes are standardized at business-unit level	Enablement approaches and processes are optimized across the company and partner community
Organization	Procurement leads trading partner enablement efforts with suppliers; finance and IT play secondary roles	Procurement (suppliers) or marketing (customers) leads trading partner enablement efforts; finance, IT, and supply chain organizations play secondary roles	Enablement is a collaborative effort among key functions (procurement, marketing, supply chain, logistics, IT); finance plays more of a secondary role
Knowledge	More than 90% of all transactions happen through phone/fax/email	20-65% of all transactions happen through electronic messaging	More than 65% of all transactions happen through electronic messaging
Information Sharing	Information sharing is limited to basic order requests and some product attributes, pricing, and dates – due to lack of process collaboration capabilities. The frequency of information sharing is usually weekly or monthly (for example MRP runs once a week to provide supplier material requirements).	More detailed and timely information is shared, including design attributes, forecasts, inventory levels, point of sale information, etc. The frequency of information sharing is usually weekly or monthly.	In addition to more detailed and timely information, any exceptions are rapidly propagated to the trading partners as soon as they happen.
Workflow	Workflows limited to basic information sharing with no visibility and exception workflows	Workflows involve not only information sharing but some limited visibility to events but no exception workflows	Workflows involve information sharing, detailed visibility into events, and exception workflows built into the business process
Technology	Phone, fax, email	Limited use of EDI over a private network; use of portal for a portion of suppliers; catalog management tools for order management with customers	For large-volume suppliers EDI over VAN is used. Electronic messaging, including EDI or XML over the Internet, is used for mid-size companies; smaller trading partners use supplier portals or webforms. Web-services and service-oriented architecture is used to enable process collaboration as part of pilot initiatives.

Source: Aberdeen*Group*, July 2006

Enablers for Electronic Communication

To understand how best to improve the maturity of your B2B collaboration practices, it is important to understand first the various enablers for electronic communication. Electronic communication is the foundation for all B2B collaboration and every company that wants to move up the maturity ladder needs to focus on this stage first. It is critical to have a strong foundation in this area before moving into the more complex collaboration phase. Organizations that fail to do this will find that collaboration becomes almost impossible to scale out across a large section of suppliers or customers. Without an effective electronic backbone for communication, collaborative processes become intensely manual in nature and can only be sustained across a handful of business partners.

A myriad of technology enablers are available for electronic communication, and most companies will need to use multiple methods to gain electronic communication across their full business partner community. A first step is to categorize trading partners into high-volume, mid-volume and low-volume partners. The high-volume partners (or strategic component supplier/high dollar revenue suppliers) typically need full EDI or B2B integration capabilities. The mid-volume trading partners ideally need system-to-system connections, but these partners typically resist full electronic connectivity because of cost and IT resource concerns and sometimes must be served via a portal. The low-volume partners require lower-cost methods of connectivity that leverage the Internet and, in some cases, phone/fax/email suffices. Table 2 outlines the most common electronic communication enablers.

Table 2: Electronic Communication Enablers

Methods	Benefits of Approach
Data-Entry Portal or Webform	No IT support required by trading partner other than Web browser access.
EDI/XML Translation Software	Enables system-to-system connectivity, reducing labor costs and data errors. Wide availability of stand-alone solutions.
In-network EDI/XML Translation Service	Value-added network or Internet messaging service provider performs translation and transformation and maintains message maps on its network, minimizing the hub and trading partners' IT requirements.
Value-added Network	Highly secure transmission over private network protects data privacy and ensures message delivery.
EAI or B2B Integration	Enterprise application integration tools and B2B integration platforms provide advanced business process management or human workflow management capabilities along with message translation and transformation.
Messaging Appliance	Network-aware box deployed by hub to its trading partners. Contains pre-configured and updatable translation and transformation capabilities. Business users can often implement without IT support.

Internet Messaging	Lower message transmission costs (cost of Internet access, related technology, and ongoing IT oversight); message encryption technology provides good level of security.
Industry B2B Exchange or Integration Hub	B2B exchanges or industry portals may already have connections to your trading partner community and provide secure transmission via the Internet. Integration hubs from on-demand solution providers may also have pre-established connections.

Source: **Aberdeen***Group*, July 2006

Enablers for Process Collaboration

Once a company has a foundation for exchanging electronic information with its suppliers and customers, it can move to scale out collaboration across both order-to-cash and purchase-to-pay processes.

Order to Cash Collaboration

Examples of order-to-cash processes for which process collaboration can occur are:

a) **Forecast collaboration and replenishment:**

This process involves the exchange of forecasts and marketing event plans with customers and coming to a collaborative view of anticipated demand. Customers should be able to influence the forecasts based on their marketing plans and end customer demand. In a consumer goods environment, retailers' daily point of sale information and promotional fliers and other advertising plans are important inputs to the forecasting process for the medium to long term as well as to drive the replenishment process for the very near term (e.g., 1-3 days).

b) **Order management collaboration:**

This process manages the life cycle of an order through the order capture process to the end fulfillment. It involves interfacing to the trading partner ERP and logistics systems. For instance, in the telecommunications sector, order management involves a unified process for different products like mobile, DSL, VOIP through the various order states like channels, order entry, product and contract validation, provisioning, switching, and billing.

c) **Trade promotions and marketing collaboration:**

This process involves sharing trade promotions by manufacturers to the retailers to negotiate on pricing and gross margins. Retailers typically have their own modeling tools for pricing as well. Consumer goods companies sometimes allow retailers to input their prices for the purpose of having a more accurate promotion plan.

d) **Invoice reconciliation and automation collaboration:**

This process shares electronic invoices (e.g., via an ANSI X.12 810 or EDIFACT INVOIC message) with customers and automates the process of payment along with exception management and automated credit handling.

e) **Inventory management collaboration:**

This process shares sales and inventory level information to enable a supplier to manage inventory replenishment on behalf of a customer. The collaborative process enables the supplier and customer to determine safety stock targets based on demand and supply, as well as the service level requirements from the customer. For example, consumer goods companies often must support inventory management collaboration (often called vendor managed inventory) with retailers.

f) **Transportation management collaboration:**

This process helps companies streamline the transporting of goods from manufacturing facilities and distribution warehouses to customer stores or warehouses. Companies typically collaborate on transportation mode and carrier choices, service levels, and pickup and delivery timing. As large customers continue to implement tighter oversight on their inbound transportation processes, the manufacturers and distributors serving them must be able to exchange a richer set of shipment information and collaborate electronically to execute against customer-approved shipment plans.

Purchase to Pay Collaboration

Examples of purchase-to-pay processes for which electronic communication and collaboration can occur are:

a) **Forecast collaboration:**

This process involves communicating forecasts from a buyer to its suppliers. The suppliers then provide commitments to these forecasts in a time-phased manner. For example, in many industries an ANSI X.12 830 or EDIFACT DELFOR message signal is used to share projected sales for the time-period agreed upon by the supplier and the company.

b) **Design collaboration:**

This process involves collaborating on product design (typically for complex and long lead-time products) between a company and its suppliers. For example, government defense contractors often must be heavily involved in design collaboration with several thousands of suppliers.

c) **Supplier-managed inventory collaboration:**

Often used by high tech, industrial, and component manufacturers to shift the task of inventory management to their suppliers. Rather than issue purchase orders to its suppliers, a manufacturer can use EDI or a supplier portal to share on-hand inventory levels, forecasts, current and future production schedules, and order commitments with its suppliers. Using this data, the suppliers determine how and when to ship to the manufacturer to ensure that inventory at the manufacturing location remains within the agreed-upon minimum/maximum levels.

d) Capacity and material collaboration:

In environments where capacity and material are constrained, companies seek to share on-going availability and constraint information to ensure that their suppliers can meet order requirements in a timely manner.

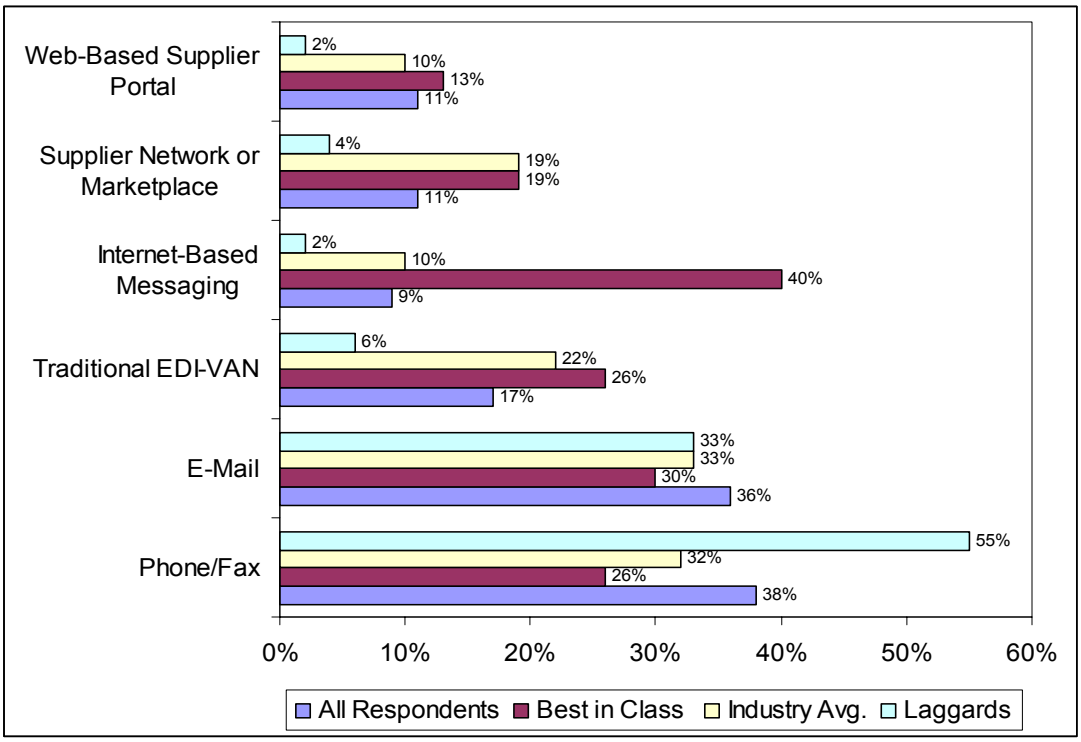
Aberdeen research finds that collaboration is rapidly becoming mandatory to remain competitive. Two-thirds of companies say they do some level of inventory collaboration with customers, 45% do forecast collaboration with at least some customers, and a third collaborate on product catalog and specifications content.

Putting the Framework into Action

To find which companies are leading the way (i.e., the Best in Class), we asked respondents as part of an Aberdeen Supplier Enablement report in 2006 for the percentage of all transactions received or issued electronically. Companies landing in the Best in Class category (the top 20% of our respondent pool) have at least 65% of their transactions transmitted electronically, while Laggard companies (the bottom 20%) have no more than 5%. Industry Average firms fall in between the two other groups.

Figure 4 shows the preferred methods for communicating to suppliers for these categories. Companies should look to identifying their current status with respect to their own communication methods and identify where they need to go to attain best-in-class status. Despite the well-documented costs and errors incurred with sending orders and demand signals via phone, fax, and e-mail, these methods remain the most popular means for supplier communication. However, Best in Class companies tell a different story. Their most preferred medium is Internet-based messaging, followed by e-mail, phone/fax, and EDI. Laggards are still likely to prefer phones, fax communications, and e-mail.

Figure 4: Preferred Communications Methods with Suppliers

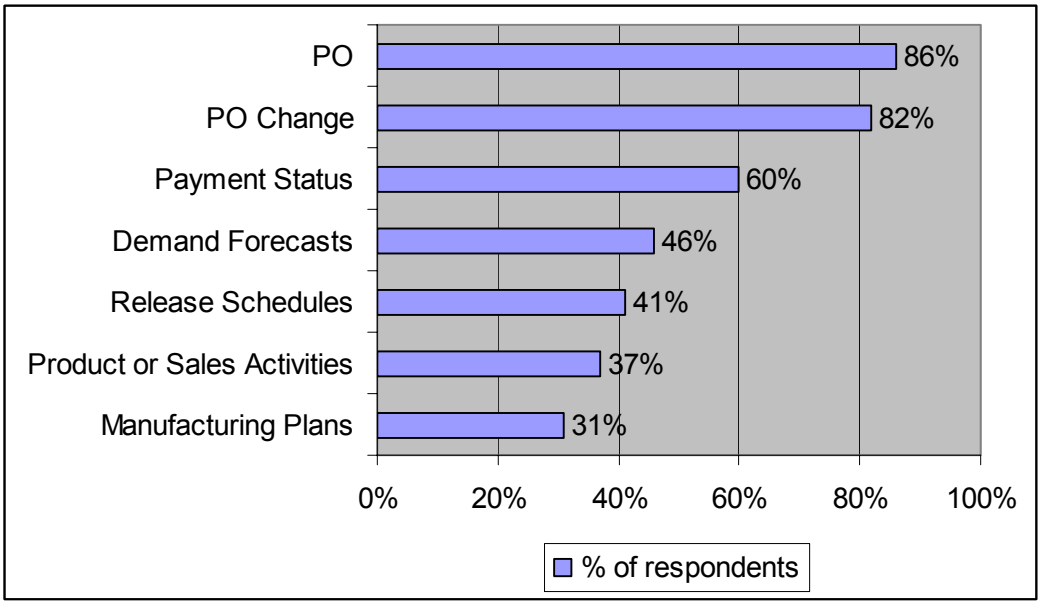


Source: Aberdeen*Group*, July 2006

Phone, fax, and e-mail may be easiest to use, but among Industry Average and Best in Class companies, Internet-based methods of communicating and doing business with suppliers are taking hold, especially Internet-based messaging, which includes electronic data interchange (EDI-INT AS1 or AS2 protocols), EDI over secure FTP, and Web services. These firms are also gravitating to supplier networks and marketplaces, while making efficient use of traditional EDI over a value added network (VAN).

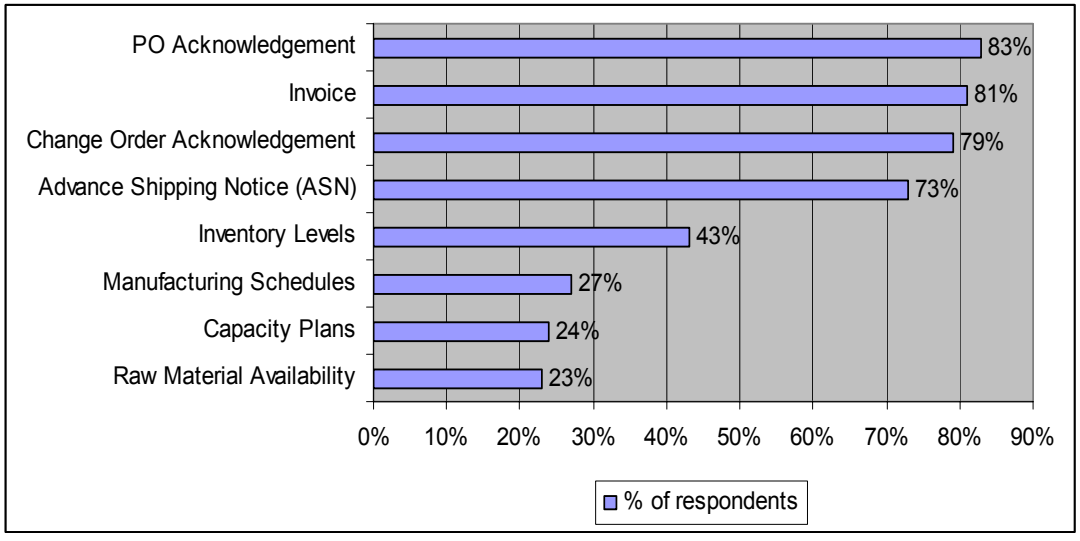
Best in Class companies lead the way in the percentage of transactions received electronically. They share more information electronically with suppliers than Industry Average and Laggard firms share, especially critical transaction information such as purchase orders and payment status (Figure 5). And their suppliers are more likely to share electronic information such as purchase order acknowledgements, advance shipping notices (ASNs), and invoices. In addition, some, but not most, of the Best in Class are more willing to share even some of their more sensitive information, such as manufacturing plans and release schedules (Figure 6).

Figure 5: Data Shared by Buyers with Their Suppliers



Source: Aberdeen*Group*, July 2006

Figure 6: Data Shared by Suppliers with Their Buyers



Source: Aberdeen*Group*, July 2006

Chapter Three: Assessing the ROI

Organizations that have rallied their suppliers, distribution partners, and customers to create an electronic flow of information report that the benefits are layered like an onion. Significant productivity and administrative cost benefits can be gained from moving from phone/email/fax based communication to electronic communication (Table 3). Additional value can be gained by moving towards process collaboration (Table 4), including lead time reductions, improved customer service levels, and top line revenue growth.

The gains of electronic communication include a faster flow of information and lower transaction costs because valuable human resources are no longer being used as key punchers. Commonly quoted savings from moving to an electronic process include purchase order transaction costs reduced from $50-$100 per purchase order (for both buy and sell side orders) to under $5.

Another layer of benefits from electronic messages comes from having more complete and accurate information from trading partners. This is due not only to eliminating double data entry and the data errors that introduces, but also to being able to configure automated business rules that require valid and complete information for important data fields.

However, perhaps the most important benefit of trading partner connectivity is that it establishes a pipeline for process collaboration. Once a pipeline is created for basic purchasing transactions, that same pipeline can be expanded to share critical planning and status information. This information can include sales activity, forecasts, inventory positions, and work-in-process and shipment statuses. Moreover, this information can be shared daily or weekly (or even in real time for certain processes), versus monthly or quarterly, creating leaner and more synchronized processes.

Companies that have moved to process collaboration report that they have been able to speed up their planning and execution cycles and can reshape and react to demand much faster than before. By exchanging richer information more quickly with trading partners, enterprise hubs can make more accurate plans and better midcourse corrections.

- For instance, companies with dealer and other distribution partner networks report being able to execute micro-market promotion and pricing strategies to maximize the profit life cycle of their products.
- Similarly, retailers and manufacturers that rely on supplier excellence say they have been able to speed up order cycle times, improve the percentage of "perfect orders" they receive, and minimize inventory shortages and stock outs.

Table 3 summarizes the benefits of the electronic connectivity and the benefits it brings to a company as well as its trading partners.

Table 3: Electronic Connectivity Benefits

Improvement Area	Business Benefits for the Enterprise	Business Benefits for Trading Partners
Automate Data Exchange	• Reduced transaction processing costs • Workforce freed up from low value-add tasks • Ability to grow business without adding labor • Ability to synchronize activities despite time zone differences	• Reduced transaction processing costs • Workforce freed up from low value-add tasks • Become an easier partner for hub to do business with
Exchange Better Quality Data	• More accurate operational plans • Fewer invoice discrepancies • Less human intervention in transaction process	• Fewer penalties or deductions from hub for inaccurate or incomplete data • Increased ability to deliver perfect orders and delight end customer

Source: AberdeenGroup, July 2006

Table 4 summarizes the benefits of process collaboration and the benefits it brings to a company as well as its trading partners.

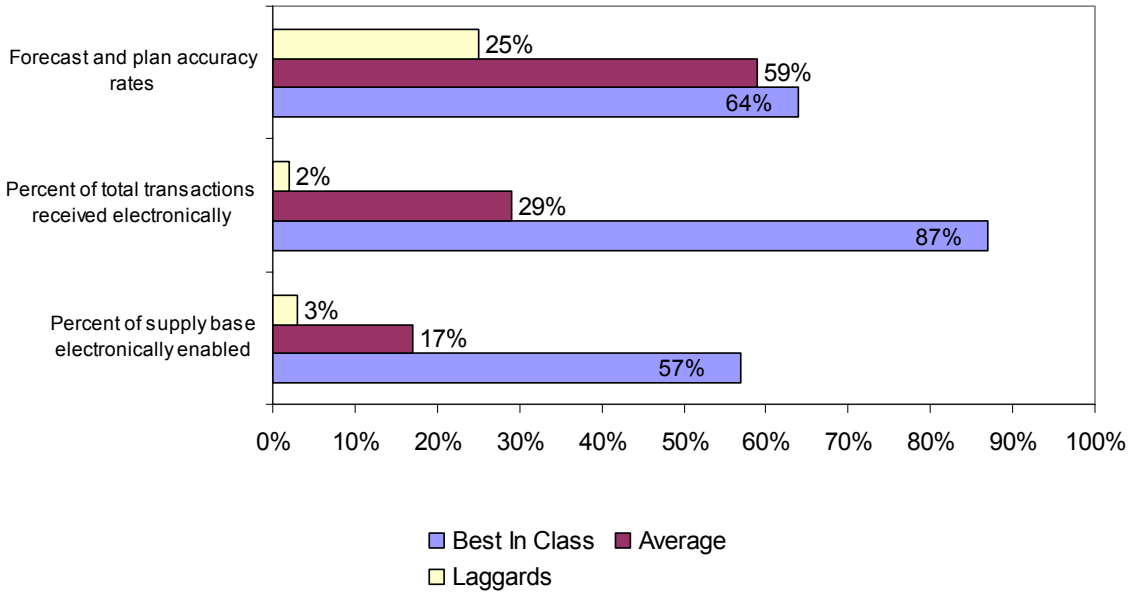
Table 4: Process Collaboration Benefits

Improvement Area	Business Benefits for the Enterprise	Business Benefits for Trading Partners
Exchange Richer Data	• Increased forecast and plan accuracy • Lower safety stock • Fewer out of stocks or materials shortages	• Increased forecast and plan accuracy • Lower on-hand and in-process inventory • Fewer lost sales
Exchange Data More Frequently	• Faster planning velocity (hours or days instead of weeks or months) • Increased visibility of execution activities to enable midcourse corrections	• Better visibility of hub business plans and real demand • Improved workload balancing and cash flow management

Source: AberdeenGroup, July 2006

The Best in Class companies have made the most progress towards Process Collaboration, while the Industry Average companies are concentrating on scaling electronic communication, and the Laggard organizations are still using mostly phone/email/fax communication. Figure 7 shows the fact that Best in Class companies have higher forecast accuracy and plan rates as compared to Industry Average and Laggards.

Figure 7: B2B Maturity Levels and Process Collaboration Expertise



Source: **Aberdeen***Group*, July 2006

To build an effective business case, the IT organization and the business stakeholders need to be able to provide some specific ROI areas. Aberdeen research indicates the following ROI opportunity areas that can be attributed to B2B collaboration. These savings are divided into savings for the Order to Cash process (Table 5) and Purchase to Pay process (Table 6).

Table 5: ROI Framework for B2B Collaboration – Order to Cash

ROI Type	ROI Opportunity	Technology Enablers
Reduce Administrative Costs	Reduce time and cost for customer setup and maintenance	Set up infrastructure for electronic customer onboarding
Reduce Administrative Costs	Reduce time and cost for notifying customers of new product information	Electronic catalogs or product catalog information sent electronically via messages
Reduce Administrative Costs	Reduce time and cost for receiving and managing workflow for collaborative demand planning	Set up forecast collaboration process and technology enablers
Reduce Administrative Costs	Reduce time and cost for order receipt ,order fulfillment, notification and delivery workflows	Set up electronic order capture system
Increase Revenues	Increase number of customers and channels by being easier to do business with which in turn results in increased customer satisfaction	Set up tools for improved order promising and status information
Increase Revenues	Make new products available and visible for sale to customers faster	Electronic catalogs or product catalog information sent electronically via messages
Increase Revenues	Reduce sales lost due to inventory shortages	Set up forecast collaboration process and technology enablers
Increase Revenues	Reduce sales lost due to customer defections (caused by delivery errors or delays)	Set up electronic order capture systems
Improve Cash Flows	Shorten order-to-cash cycle times resulting in improved cash flows	Set up tools for improved order promising and status information
Improve Cash Flow	Reduce accounts receivable	Set up electronic invoicing and reconciliation system
Improve Cash Flows	Reduce safety stock inventory used to overcome inadequate demand visibility	Set up inventory optimization solutions

Source: **Aberdeen*Group***, July 2006

Table 6: ROI Framework for B2B Collaboration – Procure to Pay

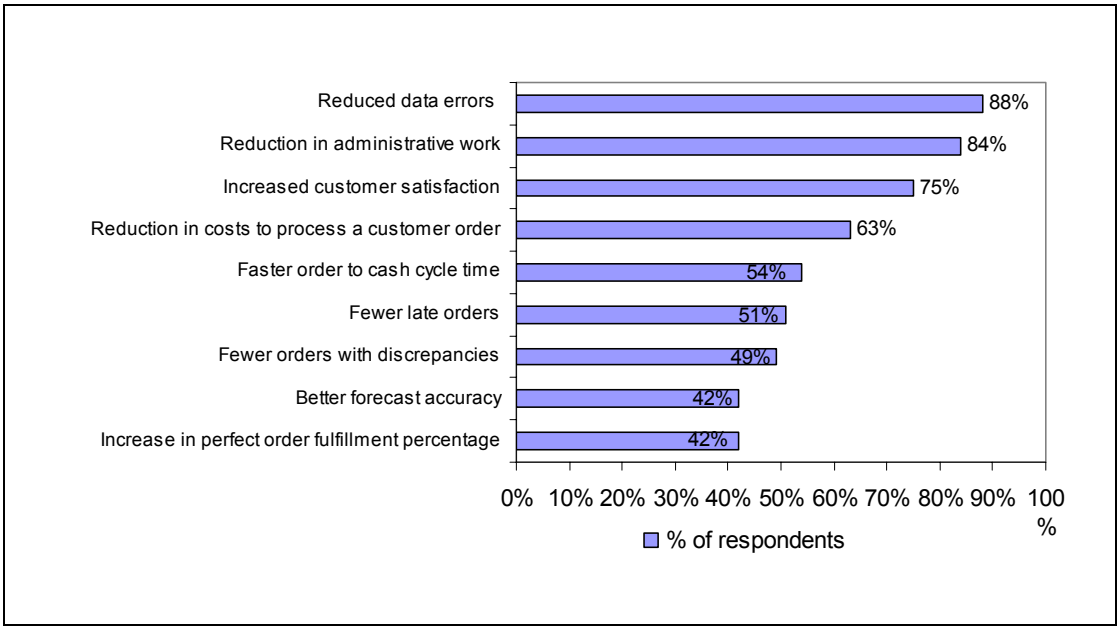
ROI Type	ROI Opportunity	Technology
Reduce Administrative Costs	Reduce time and cost for new supplier setup and maintenance	Set up infrastructure for electronic supplier onboarding
Reduce Administrative Costs	Reduce time and cost for entering and maintaining product information from suppliers	Electronic catalogs or product catalog information sent electronically via messages
Reduce Administrative Costs	Reduce time and cost for sending collaborative demand planning information to suppliers	Set up forecast collaboration process and technology enablers
Reduce Administrative Costs	Reduce time and cost for processing and issuing purchase orders to suppliers	Set up electronic order processing systems
Reduce Administrative Costs	Reduce time and cost for inbound status monitoring and receiving workflows	Visibility tools for improved order management and order and shipment visibility
Reduce Administrative Costs	Reduce time and cost for invoice processing	Set up electronic invoicing, reconciliation, and payment systems

Source: **Aberdeen***Group*, July 2006

Based on an Aberdeen Customer Collaboration benchmark in 2006, Figure 8 shows the percentage of respondents who have obtained the above benefits.

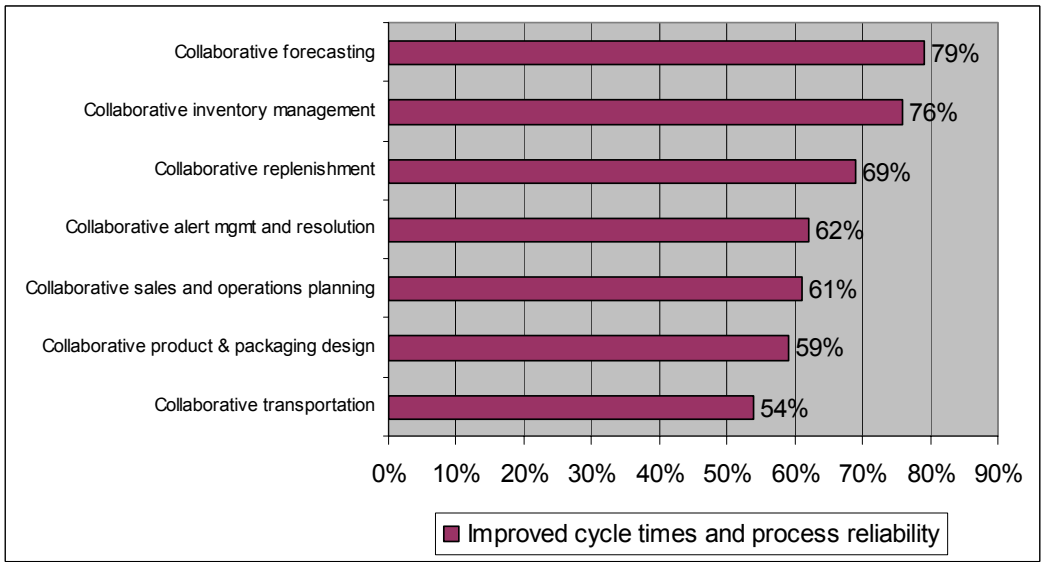
Improved cycle times and process reliability are among the key improvements that are obtained from the B2B collaboration processes with trading partners on the supply side (Figure 9). Forecasting and inventory management collaboration are the areas where trading partners are finding the greatest improvement.

Figure 8: Benefits Obtained through Customer Collaboration



Source: Aberdeen*Group*, July 2006

Figure 9: B2B Supplier Collaboration Benefits with Trading Partners



Source: Aberdeen*Group*, July 2006

ROI Example

In order to provide readers a tangible example of the ROI that is expected from B2B collaboration initiatives (supplier and customer), Aberdeen has assessed a fictional consumer goods manufacturer whose annual revenue is $1 billion USD. Table 7 shows the various items in the income statement that are impacted by B2B collaboration. Below are the key assumptions used for this example:

- Potential revenue – indicates the lost revenue due to stockouts, delays and other areas that can be improved due to better collaboration technologies. Due to the collaboration, it is assumed that there are reductions in stockouts and reduction in order processing delays. In addition, there are reduction in invoice deductions and discounts/markdowns.
- Cost of goods sold – due to the increased revenue, there is a slight increase in cost of goods sold.
- Gross profit – there is a 2.3% increase in gross profit after the implementation of B2B collaboration technologies mainly due to increased potential revenue.
- Operating expenses – due to the reduction in administrative costs, the operating expenses are reduced. Due to the reduction in inventory and receivables, the operating expenses are impacted as well.
- Net profit – there is an 11.7% increase in net profit due to increase in potential revenue and reduction in operating expenses.

Table 7: ROI Opportunity from Customer and Supplier B2B Collaboration from a Income Statement Viewpoint

B2B Collaboration Value $1 Billion Consumer Goods Manufacturer	Before (in million $)		After (in million $)		Impact	
Potential Revenue		$ 1,070.0		$ 1,070.0		
Lost Sales Due to Stockouts	$ 40.0		$ 30.0		-25.0%	$ (10.0)
Lost Sales Due to Order Processing Delays	$ 10.0		$ 8.0		-20.0%	$ (2.0)
Lost Revenue Due to Invoice Deductions	$ 10.0		$ 7.5		-25.0%	$ (2.5)
Lost Revenue Due to Discounts/Markdowns	$ 10.0		$ 9.0		-10.0%	$ (1.0)
Revenue		$ 1,000.0		$ 1,015.5	1.6%	$ 15.5
Cost of Goods Sold		$ 470.0		$ 473.3	0.7%	$ 3.3
Rework & excessive costs due to errors in orders, etc.	$ 4.7		$ 2.4		-50.0%	$ (2.4)
Cost Sales Increase for fewer stockouts and order delays	$ -		$ 5.6			$ 5.6
Gross Profit		$ 530.0		$ 542.2	2.3%	$ 12.2
Operating Expenses		$ 356.4		$ 353.5	-0.8%	$ (2.9)
Order Mgt, AR, AP, Pur Labor	$ 3.6		$ 2.4		-33.0%	$ (1.2)
Interest Expense (Funding Inventory)	$ 8.7		$ 7.9		-9.5%	$ (0.8)
Interest Expense (Funding Receivables)	$ 8.6		$ 7.7		-10.0%	$ (0.9)
Income Before Taxes		$ 173.6		$ 188.7	8.7%	$ 15.1
Net Profit		$ 129.1		$ 144.2	11.7%	$ 15.1

Source: AberdeenGroup, July 2006

Chapter Four: Recommendations for Action

As the Best in Class companies that we benchmarked have pointed out, having a successful trading partner enablement program requires more than merely the tools; it needs these key ingredients:

- Senior executive support (e.g., CIO and CFO), , especially for funding electronic enablement projects
- A collaborative, enterprise-wide approach involving key functions: procurement, IT, supply chain, finance, sales, manufacturing and logistics; and
- Standardized approaches across the company or the key business units involved in supplier enablement.

Here are our recommendations for supplier and customer collaboration for enterprises in each of the three groups within Aberdeen's competitive framework. Refer back to Table 1 for the definition of each group and to determine what category your company falls into.

Laggard Steps to Success

- To wean your company off phone, fax, and e-mail in communicating with trading partners, look to more advanced technologies such as EDI capabilities, portals, and supplier networks or marketplaces, especially if key trading partners are willing to accommodate that switch.
- Take a collaborative approach to trading partner enablement within the organization. Successful electronic communication and collaboration requires the support and enthusiasm of IT, finance, procurement, customer support, sales, and supply chain.
- Educate your customers and suppliers on the benefits of B2B collaboration if you face resistance from them for enabling more collaborative technologies.
- Put infrastructure in place for data security. The most common reason why companies hesitate to share data with their suppliers and customers is security concerns. In order to resolve these concerns, invest in data security technology for B2B collaboration data.

Industry Average Steps to Success

Industry Average companies employ a mix of electronic communication and some basic process collaboration like order processing, invoice automation and so on. The steps that Industry Average companies need to take in order to reach the next level in the maturity framework are:

- Like the Laggards, look to more advanced technologies such as portals and trading networks or marketplaces, especially the latter if they have an On Demand or Software as a Service (SaaS) offering, since that can spare you the time and cost of developing them in-house. Look to EDI if much of your trading partner base uses it and intends to use it for the foreseeable future.
- As your company becomes more experienced with supplier collaboration, share more data with key suppliers, such as purchase order and payment information, which will help make shipments move more quickly and easily and improve performance.
- As your company becomes more experienced with customer collaboration, share more data with customers, such as forecast commitments, promotion and event schedules, in-transit status events, etc. Also encourage customers to share more data such as demand forecasts, point of sale information, and promotion and event schedules.
- Most firms in our study that outsource or plan to outsource partner enablement ranked in the Industry Average in performance. To improve performance, use the 80/20 rule and outsource the electronic enablement of the 80% of partners who are not strategic to free up internal resources to focus on enabling higher order collaboration with the 20% of partners who are more strategic.

Best in Class Steps to Success

Best in Class companies employ process collaboration including forecast collaboration, order management, and so on. These companies have made the most progress in having better key performance indicators like forecast accuracy and plan accuracy rates. Next steps for Best in Class companies to achieve even more strategic benefits from B2B collaboration should include:

- Take advantage of your apparent technological edge to make the process more efficient. Move more supplier enablement activities away from phone, fax, and e-mail. Focus especially on invoice processing, supplier on-boarding, supplier and customer communications, and stock-out reductions.
- Start looking at tools for improved order capture and management with customers, trade promotion management, improved order promising and availability information, and web-based customer collaboration portals. In other words, try to move upwards in the ROI curve and incorporate more process collaboration activities.
- Incorporate process collaboration into your technology roadmap: As your company becomes more experienced with B2B collaboration, share more planning data and implement resolution workflows to address execution and financial settlement issues.
- Investigate web-services and service-oriented architecture for enabling process collaboration. Start by doing smaller pilot projects rather than doing a company-wide rollout.

Author Profile

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Nari Viswanathan is Research Director in Aberdeen Group's Supply Chain & Logistics Practice. Nari specializes in order to delivery and S&OP processes. His research investigates the business strategies and technologies that drive cost reductions and productivity improvements for order to delivery processes within different industries. Nari's business process and technology expertise includes demand management, manufacturing management, and demand fulfillment.

Previous to joining Aberdeen Group, Nari was a senior product manager at i2 Technologies. Nari was involved with product marketing, roadmap and requirements management and setting product direction for three of the i2 supply chain products. Prior to that Nari was a Sr. Solution Architect within the Business Optimization Services organization in i2. Past experience includes a multi-year change management and IT enablement initiative at a large automotive manufacturer in Asia and process re-engineering of a large North American distribution network.

Nari holds a masters degree in manufacturing engineering from the University of Wisconsin-Madison and a bachelor's degree in Mechanical Engineering from the Indian Institute of Technology, Madras.

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Aberdeen delivers unbiased, primary research that helps enterprises derive tangible business value from technology-enabled solutions. Through continuous benchmarking and analysis of value chain practices, Aberdeen offers a unique mix of research, tools, and services to help Global Business Executives accomplish the following:

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Founded in 1988, Aberdeen*Group* is the technology-driven research destination of choice for the global business executive. Aberdeen*Group* has over 100,000 research members in over 36 countries around the world that both participate in and direct the most comprehensive technology-driven value chain research in the market. Through its continued fact-based research, benchmarking, and actionable analysis, Aberdeen*Group* offers global business and technology executives a unique mix of actionable research, KPIs, tools, and services.