



Chapter Four

Business-to-Business eCommerce

Objectives

In this lesson, you will learn about:

- ↗ How to Strengthen, Improve, and Increase Business Partnerships
- ↗ Supply Chain Management
- ↗ Electronic data interchange (EDI)
- ↗ Case Study

The single biggest opportunity that Internet technologies provide to improve business-to-business partnerships is for the transformation of interorganizational relationships. Companies can dramatically cut costs of operations and production, improve their business processes, and deliver more value to the market with Internet-commerce enhanced business partnerships.



How to Strengthen, Improve, and Increase Business Partnerships

Internetworked organizations can operate as a virtual company to deliver the whole product to the customer, while each is still a business entity with a focus on its core competencies. This literally transforms the relationship from supplier/customer to business partnerships, as companies collaborate on the same level of the value chain. For example, Nike does not manufacture a single pair of shoes, but rather engages manufacturers as production partners so that Nike can focus on its core competence of marketing and distribution. Production partners invest in research and development to deliver new shoes based on the market insights Nike shares with them. Information becomes the bargaining position of internetworked organizations, and eCommerce is a natural platform for exchanging this kind of data.

Supply chain management: (SCM) is the virtual integration of the partners on the supply and process chains. SCM ensures that raw materials get to the manufacturer and ultimately, the product to the consumer. The following are a few terms related to SCM:

Supplier management - reduces the number of suppliers and get them to become partners in business in a win/win relationship.

Inventory management - shortens the order-ship-bill cycle by electronically linking them, allowing the reduction of inventory levels, improved inventory turns, and eliminate out-of-stock occurrences

Distribution management - moves documents related to shipping (bills of lading, purchase orders, advanced ship notices, and manifest claims) into an electronic mode, allowing improved resource planning.

Channel management- quickly disseminate information about changing operational conditions to trading partners. Technical, product, and pricing information that once were required repeated telephone calls can now be posted to electronic bulletin boards, allowing instant access.

Payment management - links the company, suppliers and distributors so that payments can be sent and received electronically, eliminating thousands of labor hours per week.



Financial management - enables global companies to manage their money in various foreign exchange accounts.

Sales force productivity - improves the communication and flow of information among the sales, customer, and production functions, creating greater access to market intelligence and competitor information.

Ravi Kalakota and Andrew Whinston, Frontiers of Electronic Commerce, 1996

New Relationships

New kinds of relationships are possible with business-to-business eCommerce. They provide new incentives and business models for what were once strictly buying and selling relationships. Some of the newest types of relationships are:

Automation - automating the information exchange that occurs between parties usually through EDI or new web-based technologies

Collaboration - sharing information and knowledge for mutual benefit. All of the participants can be partners as competitors. (HP and Canon)

Coopetition - a new term for creating a market of exchange (both information and transactions) where many users and vendors who often compete can participate. (Travelocity, Lufthansa Cargo Shipping Plan.)

Critical Tools and Issues

We will now review some EDI benefits, challenges, issues and security requirements.

EDI (Electronic Data Interchange)

EDI is a fast and dependable way to exchange business documents using computer-to-computer communication between different companies. Literally, EDI are the standards that convert the format of a transmitted document into the format of a receiver's computer.

Benefits of EDI include

- Reduced paper-based systems
- Improved problem resolution
- Improved customer service



- Expanded customer/supplier base

Historically, EDI has been used to improve only discrete processes such as automating the accounts payable function or the funds transfer process. The new focus for EDI, in electronic commerce, is bridging the external and internal business processes which will enable companies to improve their productivity on a scale never seen before. Companies can now enter orders, purchase, do accounts payable, transfer funds, link to suppliers - distributors - customers - banks - and transportation.

Using the Internet as an EDI communication channel could reduce the cost of setting up an EDI relationship and increase the possible trading partners because it is a low cost network and so many companies are already hooked up to the Internet.

Why didn't EDI catch on?

Early systems were proprietary and expensive, establishing both barriers to entry and switching barriers. Only the biggest companies could participate in computer-to-computer communication..

Internet technologies could alleviate this situation by enabling a new paradigm for EDI. Aside from reducing costs, an open or interactive EDI allows customers and suppliers to complete the entire business transaction point-to-point, which is a radical departure from the hub and spoke structure of old EDI systems.

There are still a host of issues revolving around not the technology but business. Standards and more open systems are required, which are perceived as a threat by vendors with proprietary solutions and by value-added networks.

The web-based model can include all phases of the transaction including:

- customer inquiry to supplier
- supplier system confirming availability
- customer system purchases item
- supplier system accepts purchase
- supplier system confirms purchase
- supplier system places order

Business-to-Business Challenges

- integration with legacy systems both on the supplier and customer side
- reorganization of internal processes.
- higher risk/setup expenses



- integration with additional information technology such as XPS to support online ordering

There are also a number of security issues including:

- How do I know who sent it?
- Did it arrive exactly as sent?
- Can the sender deny sending it?
- Can the receiver deny having received it?
- Can anyone else read it?
- How is tracking handled?

Business-to-Business Security requirements

- Authentication
- Integrity
- Non-repudiation - Origin & Receipt
- Confidentiality

Other management issues include 7 X 24; storage management; monitoring the system; event alerts; recovery; and network management.

Because of the economic and business relationship improvements that Internet-based EDI make possible, however, many companies have chosen to adopt an eCommerce strategy.

This chart outlines a summary of the major benefits accrued by adoption of EDI.

EDI Strategy

Businesses use EDI because it:		
Decreases Cost	Increases Speed	Improves Quality
Personnel efficiency	Throughout	Data integrity
Storage (inventory)	Collections/Cash flow	Reconciliation
Interest expense	Inventory turn	Error eliminator
Postal and telephone	Deliveries	Responsiveness
Office supplies	Automatic processing	Customer service

Human Resources

Human resources issues include:



- **New skill set requirements.** There's a need to train existing staff as well as recruit and retain new employees. In the arena of eCommerce, experienced programming staff are scarce and expensive. Outsourcing is a possible option, but there are long-term implications of cost and exposure to consider.
- **Resistance to change.** eCommerce is more than a new technology platform that requires training and adoption by users. A business-to-business strategy must be based not only on implementation of the technology, but a reengineering of all the business processes. New forms of strategic relationships direct to suppliers, distributors and customers threaten current fiefdoms of the sales force and channel managers.

Strategies to apply solutions

The following steps will give you some things to think about when you want to develop a sound business-to-business eCommerce strategy:

Identify the following information technology legacies and constraints:

- assessment of current tools and key capability gaps that will require investment in new technology (hardware and software requirements)
- human resources skills and capabilities required to develop and maintain your eCommerce tools

You must:

- Assess how much an application of an eCommerce technology might clash with this culture.
- Look at past experiences to evaluate how the current eCommerce implementation might be perceived. For example, if the company recently tried and failed to implement a client-server platform, users and other employees could perceive the attempt at implementing a web platform as doomed before it starts.

Evaluate:

- The financial and human resources available
- The level of risk you're willing to take as an organizational learning initiative

Identify opportunities to reduce costs by moving responsibility directly to customers or other users. Ensure that the opportunity



not only cuts your costs of operations, but increases convenience for your business partners as well.

Identify, evaluate and prioritize the opportunities for informing your processes and value-added information packages for your business partners. Standardizing and providing better quality, more consistent processes and outcomes

Identify areas where you can gain efficiencies through eCommerce by:

- Reducing or eliminating intermediaries that don't add value
- Reducing or eliminating paper transmission
- Speeding up production with improved collaborative tools

Identify information products you can create that can provide a new revenue stream to your company. The products must have value to your business partners

Identify and win support of:

- Finance
- Information technology
- Human resources
- Functional managers
- Key opinion makers
- A champion

Recruit a cross-functional team.

Lesson Summary

In this lesson, you have learned about the opportunities to improve and strengthen business relationships through eCommerce and to re-structure the supply chain to form an internetworked organization.

You've learned about critical tools, issues and challenges in implementing a business-to-business eCommerce strategy, including EDI, infrastructure, legacy system migration, and human resources issues.

You've reviewed some steps for planning a business-to-business strategy.

Something to think about

How does your company fit into an internetworked organization of companies that deliver a whole product solution to a customer



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set? What is your core competence? What is the single biggest efficiency you can gain with a sound business-to-business eCommerce strategy?