

E-BUSINESS FUNDAMENTALS

TOPIC 5 - SUPPLY CHAIN MANAGEMENT



INTRODUCTION TO LECTURE 6

- Topics covered:
 - Creating value via the supply chain
 - Benefits of using web technologies in supply chain management
 - Materials tracking technologies
 - Ultimate consumer orientation
 - Building and maintaining trust

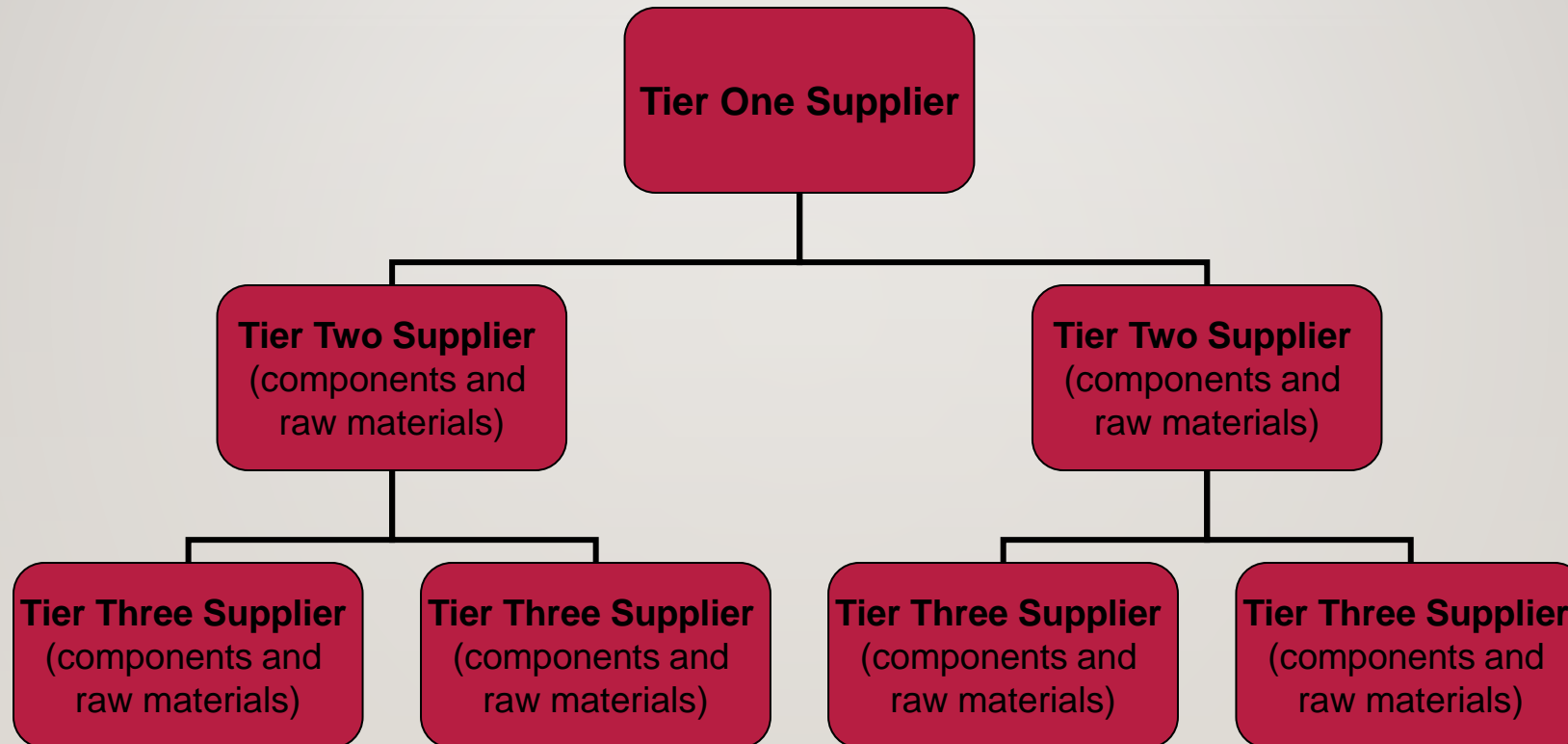
SUPPLY CHAIN

- “The network of suppliers, transportation firms and brokers that combine to provide a material or service to a business or customer”

SUPPLY CHAIN MANAGEMENT

- “The process of taking an active role in working with suppliers and other participants in the supply chain to improve products and processes”

SUPPLY ALLIANCES



KEY FACTORS IN SUCCESSFUL SUPPLY CHAIN MANAGEMENT

- Clear communications
- Quick responses to these communications
- Ability to reduce costs and increase value of the product or service to the customer

BENEFITS OF WEB TECHNOLOGIES IN SUPPLY CHAIN MANAGEMENT






- Share information about customer demand fluctuations
- Receive rapid notification of product design changes
- Increase the speed of processing transactions
- Reduce the cost of handling transactions
- Reduce errors in entering transaction data

MATERIALS TRACKING TECHNOLOGIES

- Optical scanners and barcodes
- Integration of barcodes and EDI
- RFID (radio frequency identification device)

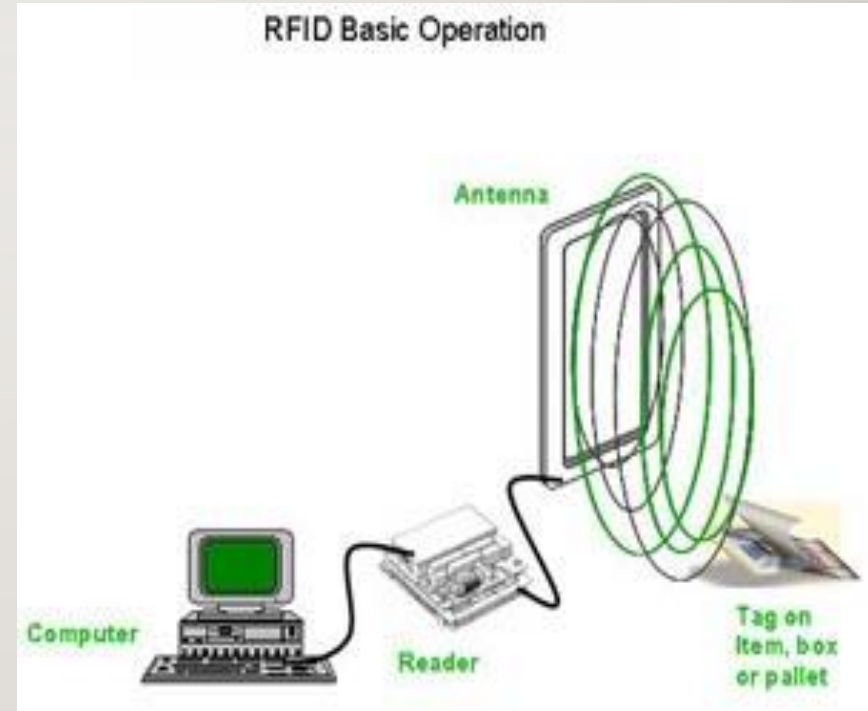
EDI AND BARCODES

- Typical barcoded shipping label
- Illustrates integration of EDI and barcodes
- Each barcoded element is a representation of segment of ASC X12 transaction set number 856
- Allows inventory flow to be managed

FROM: ABC Vendor 123 Main Street Anytown, IA 50010		TO: XYZ Company 456 Front Avenue Chicago, IL 60628	
SUPPLIER # A0000		DOC# A3 DELLOC XL 12	
PART NO. (P) 91654-010000000000		REV. LEVEL C	
		PART DESC. FIT TAPER	
QUANTITY (Q) 50000			
		PURCHASE ORDER # (R) R-0000009876000	
SERIAL NO. (SS) 12345678			
		PACKING LIST # (11K) 12345678	

HOW RFID WORKS

- Small chips used to track inventory
- RFID tag is passive and does not require power source
- Sends signal that includes information about the inventory item it is attached to



RFID VS BARCODES

Technology	<i>Bar Code</i>	<i>RFID</i>
Capability		
<i>Line of sight requirement</i>	<i>Required</i>	<i>Not required</i>
<i>Number of items that can be scanned</i>	<i>One</i>	<i>Multiple</i>
<i>Automation and accuracy</i>	<i>Manual read errors</i>	<i>Highly accurate</i>
<i>Identification</i>	<i>Only series or type</i>	<i>Unique item level</i>

ULTIMATE CONSUMER ORIENTATION

- Each member of a supply chain should always have strong customer focus
- Can be problematic with long supply chains
- Internet technologies can help by improving communications
- Ideal aids for helping to create a highly co-ordinated and effective supply chain

BUILDING AND MAINTAINING TRUST

- Trust is a major issue in forming supply chain alliances
- eCommerce technologies provide excellent ways to communicate and share information
- Offer new avenues to build trust
- Vendors can stay in contact with customers cheaply and more easily
- Instant access to comprehensive information helps to create trust

SUMMARY

- Effective supply chain management is key in providing a better service to the customer
- Web technologies can significantly enhance the effectiveness of supply chain management
- Material tracking technologies such as RFID have an important role to play
- Trust is a vital element in forming successful supply chain alliances