

Internet Business Opportunities in the Forest Products Industry



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The Internet:

Evolution?



Revolution!









What am I Going to Talk About?

- eBusiness and Business Practices
- What's Going on in the Forest Sector??
- Strategies
- Some Final Thoughts

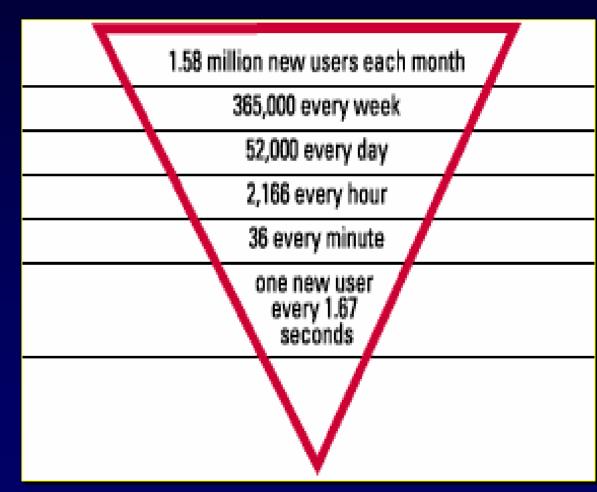
Most Important Market Forces Affecting Business

Pressure to reduce overall supply chain costs	59%
Pressure to compress total time to market/cycle time	41%
Pressure to collaborate more effectively with trading partners	33%
Unstable/unpredictable demand for products/services	23%
Movement toward a more global marketplace	22%
Proliferation of the Internet	21%

(Ernst & Young)

Internet Growth

- No slow down in sight
- 180 million people in
 U.S. are on-line
- Growing faster outside the U.S.



Top 10 Computer-Using Countries in 2001

RANK	COUNTRY	COMPUTERS (MILLIONS)	% SHARE
1	UNITED STATES	164.1	28%
2 —	JAPAN	49.9	9%
3	GERMANY	30.6	5%
4	UNITED KINGDOM	26.0	5%
5	FRANCE	21.8	4%
6	ITALY	17.5	3%
7	CANADA	16.0	3%
8	CHINA	15.9	3%
9	AUSTRALIA	10.6	2%
10	SOUTH KOREA	10.6	2%

(Marketer Global Report)



Digital Africa

























Tokyo PC Users Group



DNetAsia THE INTERNET & TECHNOLOGY HUB OF ASIA

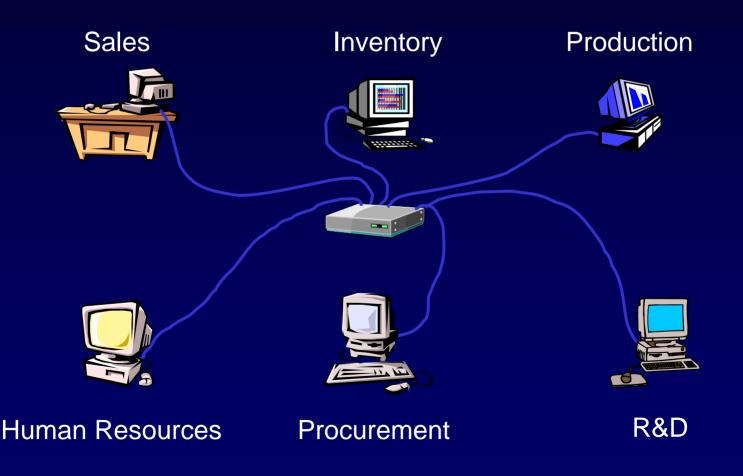
What is eBusiness?

- eBusiness is the application of Internet-based technologies for conducting business.
- It includes eCommerce, the actual transaction activities as well as other business oriented applications such as logistics, order entry, information sharing and transmission of information between exchange partners.

What is eBusiness?

- First and foremost about business, not technology.
- Technology facilitates eBusiness.
- Challenge is managing the changes in business strategies and internal corporate processes.
- Can include intra-company networks (intranets) and Internet linkages with customers or suppliers (extranets).

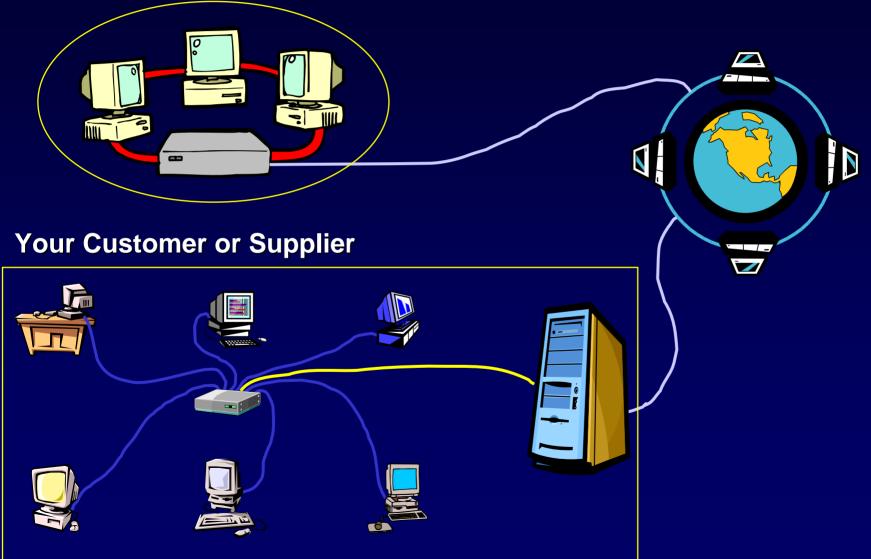
An Intranet Network (self-contained in a company)



(From Michael & Punches 2000)

An Extranet (letting partners in...selectively!)

Your Company



(From Michael & Punches 2000)

	INTERNET	INTRANETS	EXTRANETS
What is it?	The information superhighway.	The use of Internet technology within a company or organization.	A network that uses the Internet to link company Intranets in order to enhance business-to- business relationships.
Access	Open	Private	By agreement only
Users	Public	Organization members	Business partners
Information	General	Proprietary	Selective

eBusiness Can Impact the Whole Company eBusiness Can Impact the Whole Value Chain

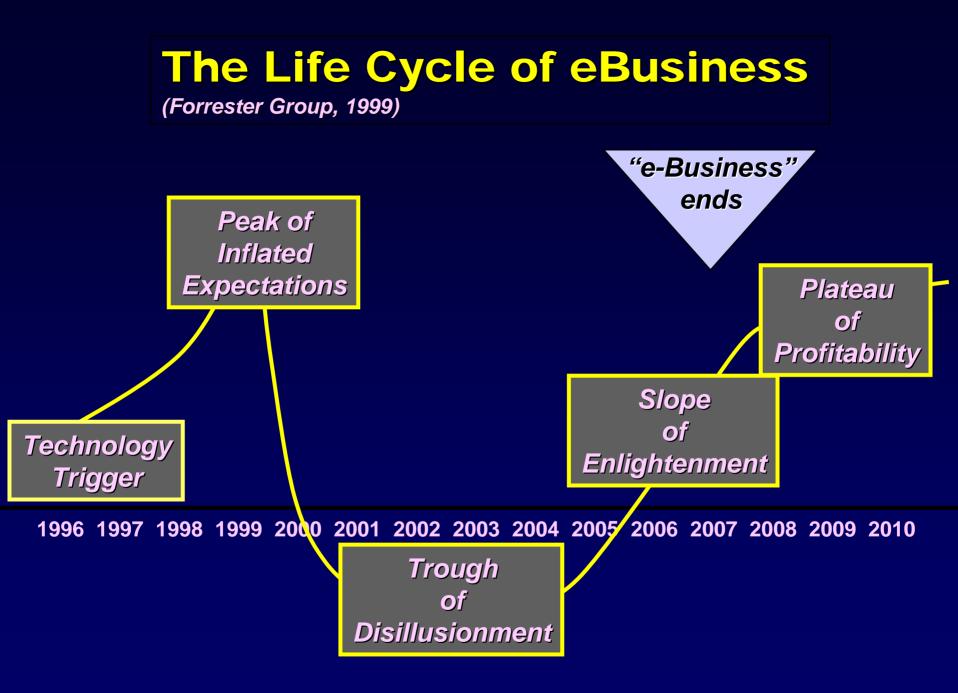
Company Activities

Back Office			Market Research		
Human Resource Management			Finance		
Technology Development			Distribution		
Procurement			Information Systems		
Pre-Sale Activities	Inbound Materials Logistics	Operations	Outbound Logistics	Marketing and Sales	Post-Sale Service

Value Chain Activities

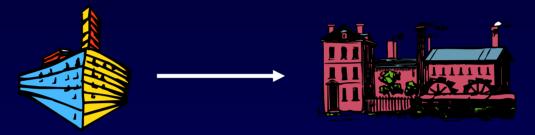






The Forest Products Industry

is Business-to-Business (B2B)



As opposed to

Business-to-Consumer (B2C)

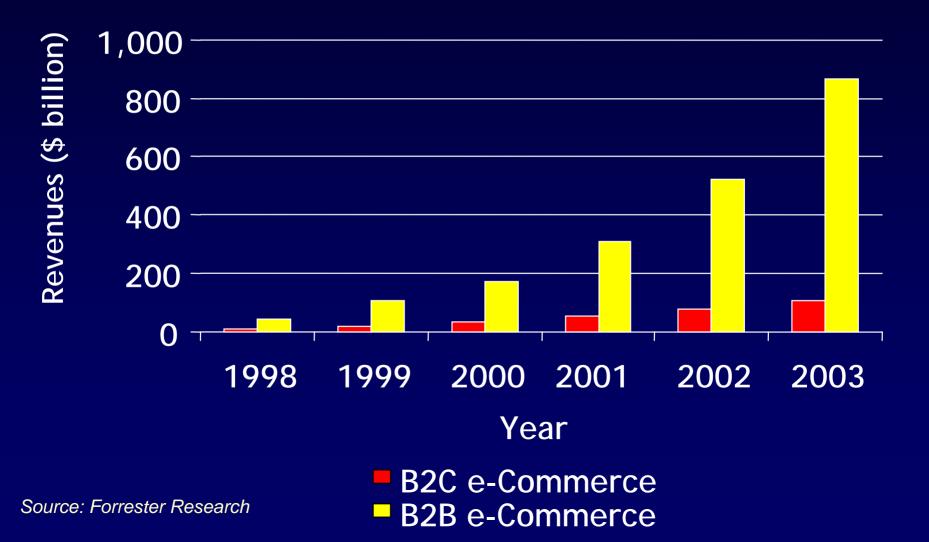




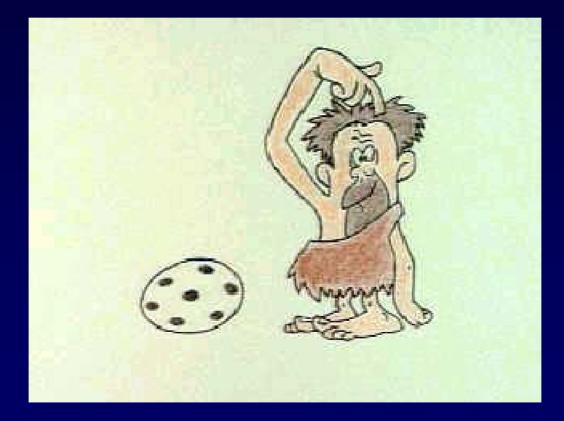
 Business-to-business eCommerce will grow tremendously in the next several years, bringing significant change to most industries.

 Increasing competition and globalization are two factors fueling business-to-business eCommerce growth.

B2B eCommerce: The iceberg below the tip!



What's Going On in the Forest Products Industry???



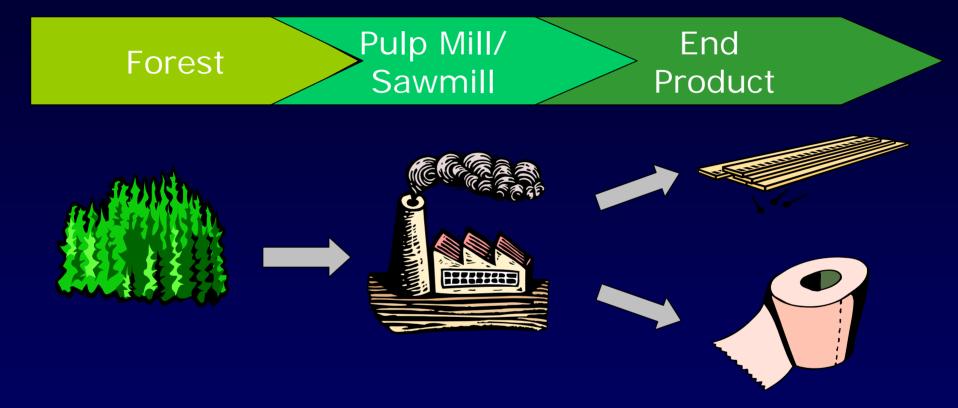
The Traditional Forest Products Value Chain

Raw Materials -Timberland - StumpageHarvesting - Timbering - Transport - Logging contractor	Primary Processing - Pulpwood - Saw timber - Logs	Merchandising - Marketing - Sales
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Information Interfaces

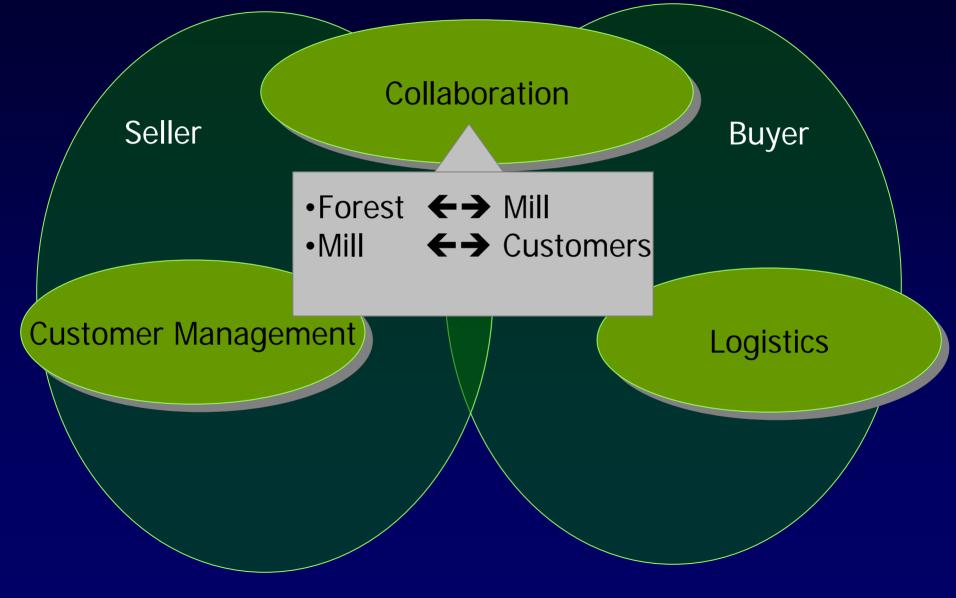
- Transport - - - -	Secondary Processing Remans Treaters Industrial Furniture Etc.	Secondary Distribution - Channels - Transport	 Consumer Builder Remodeler Retail 	Merchandising - Marketing - Sales

The Forest Products Market Chain



(Forest One 2000)

Buyer/Seller Interfaces



(Adapted from Forest One 2000)

Where is the Forest Products Industry in eBusiness Adoption?



Forest Products Sector

Develop- ment	Introduction	Growth	Maturity

Time

Where is the U.S. Forest Products Industry in eBusiness Adoption?

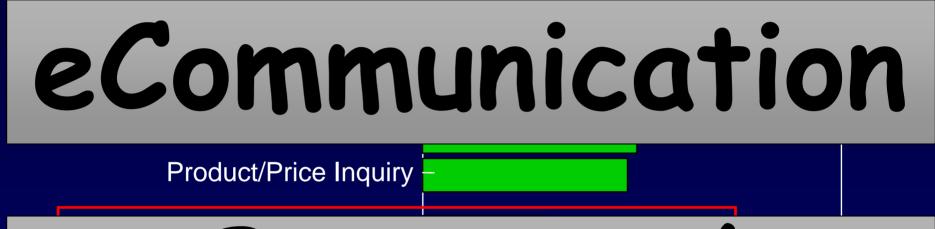
	.	Ship.	
eCommerce %	Sector	Value (\$ Billion)	(% of Shipments)
1	Transportation Equip.	\$675	20.8%
2	Electrical Equip., Appliances	\$120	19.8%
3	Leather and Allied Products	\$10	18.3%
4	Apparel	\$63	18.1%
5	Textile Products	\$33	15.0%
14	Paper	\$157	8.5%
LAST	Wood Products	\$98	3.5%

US Census March 7, 2001

Typical Internet Business Applications Being Used by the Forest Products Industry

Relative Frequency

Customer Contacts

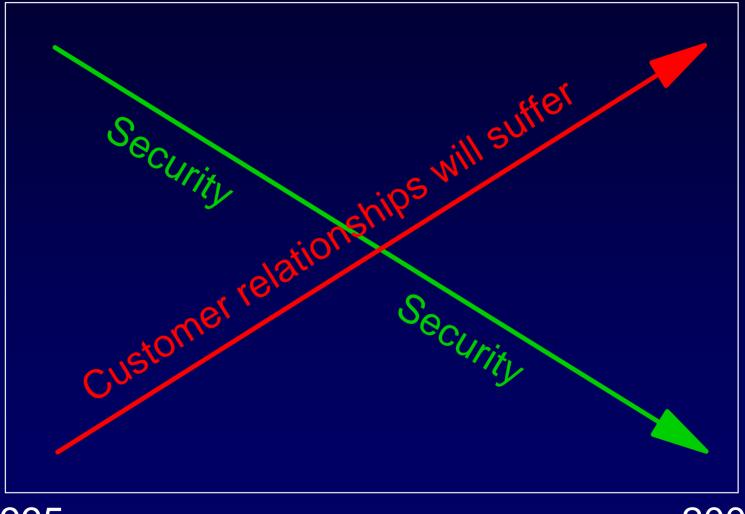


eBusiness/ eCommerce

Logistics

U.S. Wood Products Industry

#1 Concerns about Using the Internet

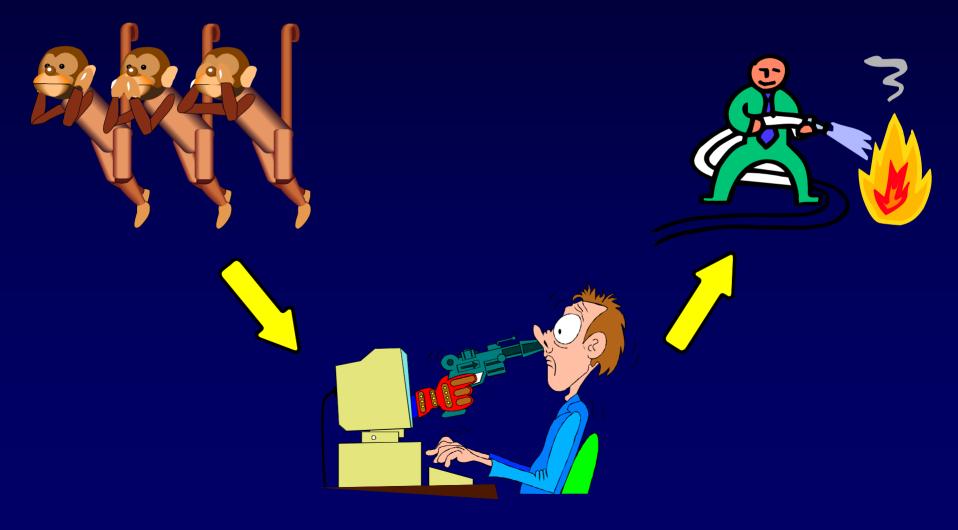








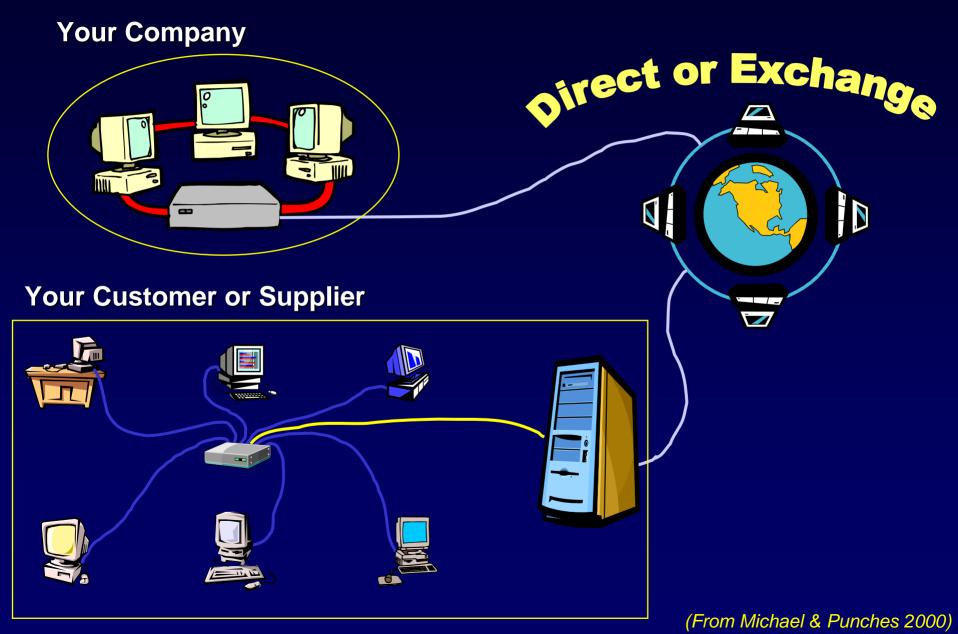
Information Technology Reactive industry

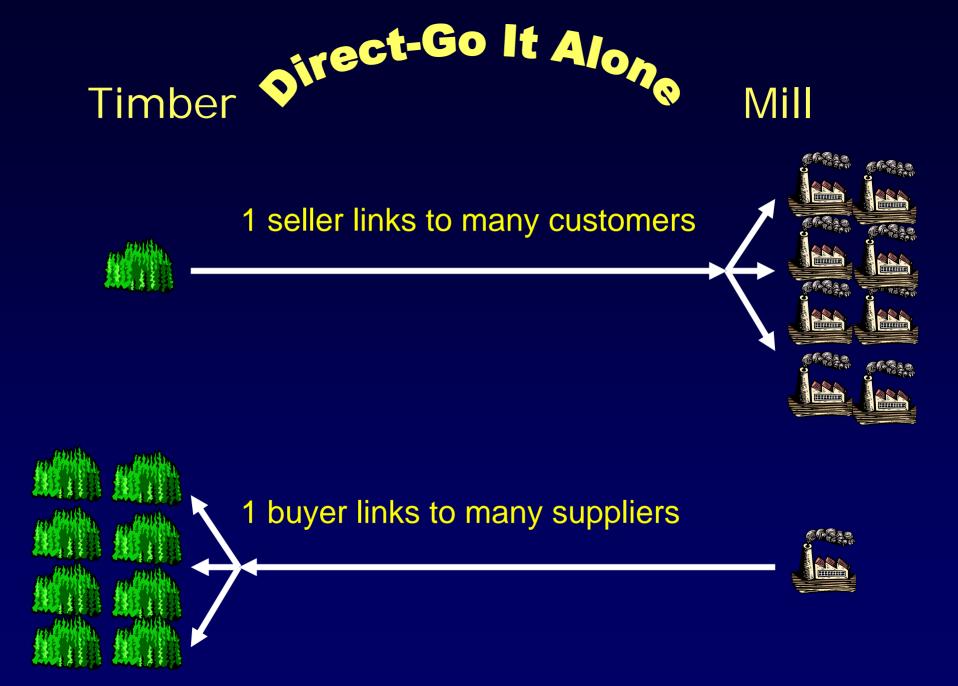


eBusiness Implementation/Success Matrix

Ĺ	7		
High eAdoption depth, strategic)	 premature inefficient anxious impulsive inordinate costs IS at risk e-trust loss 	 match between IS a strategic adoption optimal combination success 	
	 dinosaurs traditionalists survival at risk resistant to change denial 	 untapped resource high potential to lo corporate IS e-expension 	se
L	Low eKno	wledge	High
	(depth,	breadth)	(Vlosky 2000)

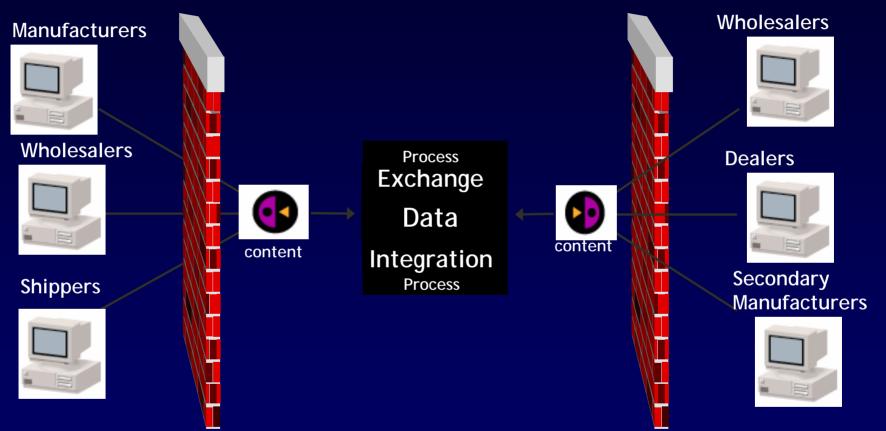
Options







Exchanges Connect Customers



- 1. Communicate Between Disparate Systems Documents, Electronic File Formats and Product Attributes
- 2. Exchange Information Between Trading Partners
- 3. Collaborate Throughout Supply Chain

Exchanges Can Create Opportunities

- Third-party exchanges (TPE) create a market space or *additional* market channel where buyers and sellers can transact and facilitate business.
- TPEs can lower transaction costs, shorten cycletime, and increase supply-chain efficiency.

Yet They Can Be Threatening

Fear they will Restructure the Value Chain

- Force Businesses "out of business"
- Realign the existing Balance of Power

Concern that they will Destroy Existing Customer Relationships

- Remove the Personal Touch
- 100% Focus on Cost Competitiveness

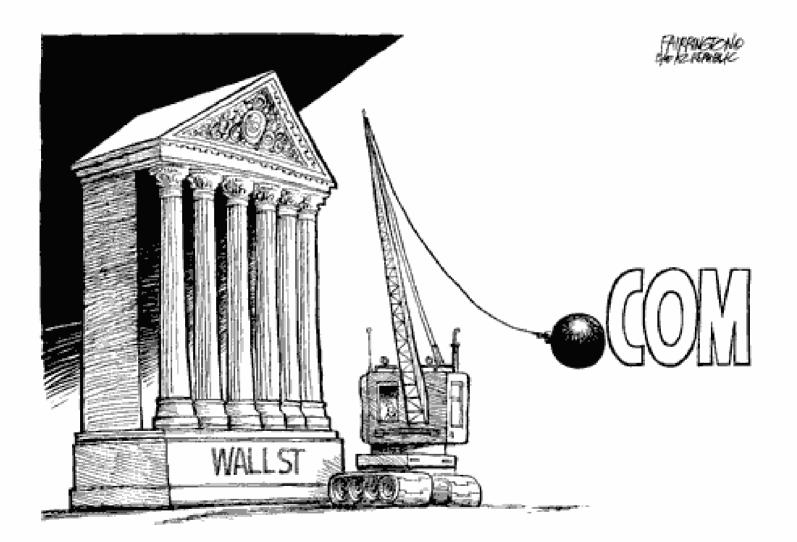
Expected to Threaten Peoples Jobs

– Machines will Replace People

Forest Industry Exchanges-1999



Coming Soon.





Forest Industry Exchanges Have Crashed











Where's the Value in eBusiness?

- We shifted 70% of order status phone calls to realtime Website extranets (*electronic equipment OEM*).
- Order transaction costs (*IBM/Keen Consulting*):
 - Telephone: \$25-\$50
 - EDI: \$1.25
 - Internet: \$0.30
- Incoming error rates dropped from 6% to <1% (*IBM*).
- Manual entry results in 100% more errors than Internet (*Healthcare Products Mart*).

Where's the Value in eBusiness? Forest Sector Examples

- Faster response to customer inquiries.
- Obtain new customers through Web promotion.
- Customers can look up order and shipment status on-line reducing phone calls to reps and freeing them up to handle orders rather than inquiries.
- Generate far more sales than could have been generated without the Internet.
- Faster, easier purchase of needed items from vendors.

Where's the Value in eBusiness? Forest Sector Examples

- Inventory reduction by broadcasting available stock to customers via the Internet.
- Better inventory control because of better information on inbound product locations and ETAs.
- Increased market share in large accounts by managing customer inventories on-line.
- Track all rail and truck orders for all customers and make the information accessible on a Website.

Some Thoughts on eBusiness Strategy



Websites: A Primary eCommunication Tool

Websites

- More web pages in the world than human beings
- 3 Kinds of websites:
 - Those that do not say much of anything.
 - Those that speak at you.
 - ✓ Those that **Speak To You!**

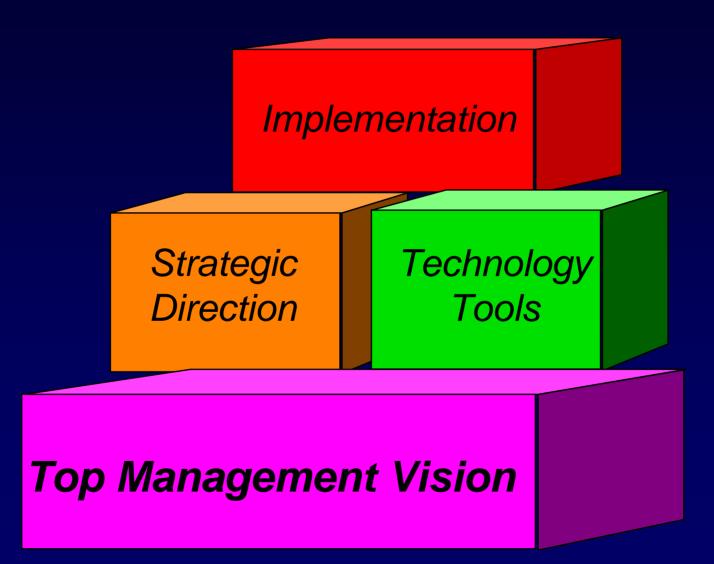
Websites

- Who is the audience? Remember the Web is "open to all".
- What are the objectives? Is intent to inform, convince, defend, etc.?
- Does the Web site achieve these objectives?
- Are materials and website interesting?
- Is the message credible and honest?
- Is there a Web-based evaluation mechanism?

eBusiness Strategy Characteristics



eBusiness Building Blocks



It's About:

Change the way we go to market...

- Optimizing position in the value chain...
 - Fundamentally rethinking business models...

Open new markets with an outside in perspective...

Link customers, markets, partners and suppliers...

Leverage core processes...

(Adapted from Poirier 2000)

• Think strategically

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- Embrace fundamental changes

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- Secure top management support
- Get educated
- Choose technology partners carefully
- Sell concept to suppliers and customers
- Just do it!

What's the Bottom Line?

 Companies seek products, processes, and technologies that add value to their offerings in an effort to become or remain competitive in the marketplace.

 eBusiness is one means for developing such a competitive advantage.

What's the Bottom Line?

- eBusiness/eCommerce has proven benefits to the forest sector as shown by years of research and real life applications.
- I strongly believe that the companies that really look at the opportunities that fit their company will benefit greatly.
- I remain optimistic and will continue to spread the eBusiness message.











Or.....



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