

**The Internet:**

**Implications for Business Practices in  
the U.S. Forest Products Industry**



# Outline

- Background and definitions
- eBusiness and business practices
- North America eBusiness forest products industry study
- Summary/Conclusions

# Most Important Market Forces Affecting Business

Pressure to reduce overall supply chain costs	58.5%
Pressure to compress total time to market/cycle time	41.0%
Pressure to collaborate more effectively with trading partners	33.2%
Unstable/unpredictable demand for products/services	22.9%
Movement toward a more global marketplace	22.0%
<b>Proliferation of the Internet</b>	<b>20.5%</b>

*(Ernst&Young 1999)*

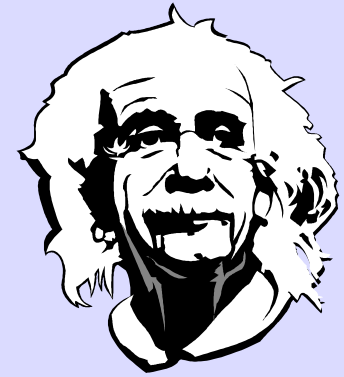
# Top Five Information Systems Issues: 1996-1999

	'99	'98	'97	'96
Integrating systems	1	1	1	1
Reengineering business processes through I/T	2	2	2	2
Connecting to vendors and/or retailers	3	5	4	3
Aligning I/S and corporate goals	4	4	3	*
<b>Developing effective strategies to leverage the Internet</b>	<b>5</b>	*	*	*

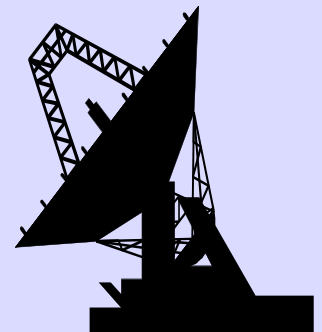
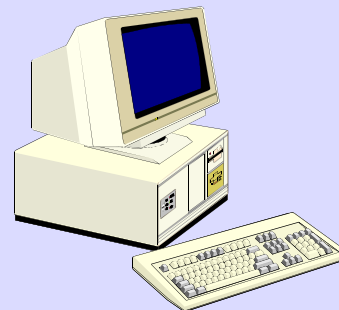
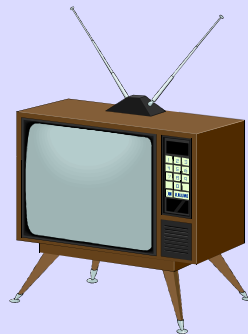
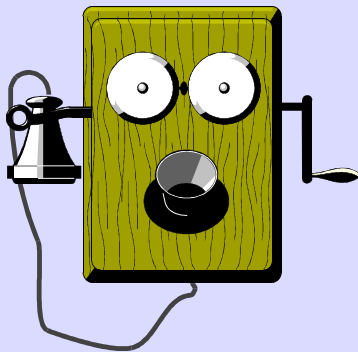
*(Ernst&Young 1999)*

# The Internet:

## Evolution?



## Revolution!



# 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).

	<b>INTERNET</b>	<b>INTRANETS</b>	<b>EXTRANETS</b>
<b>What is it?</b>	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.
<b>Access</b>	Open	Private	By agreement only
<b>Users</b>	Public	Organization members	Business partners
<b>Information</b>	General	Proprietary	Selective

# e-Marketplaces

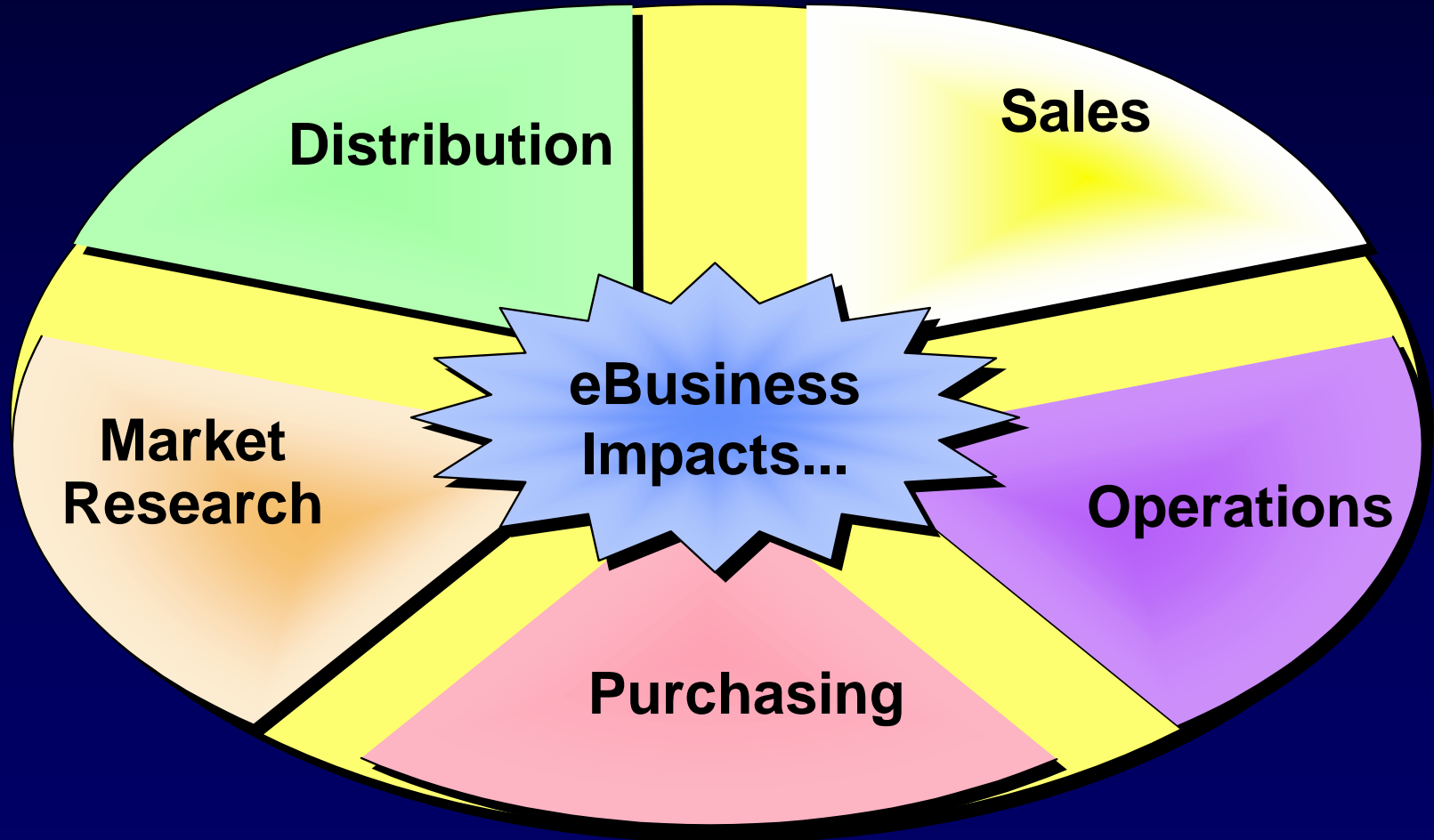
- Multiple integrated marketplace-types :
  - Business Exchange
  - Virtual Trade Show
  - Product Showcase
  - Auction
- e-Commerce services
  - Tools ( Web,Catalog,Auction,Offers,Booth)
- Additional e-Commerce Support Services
  - Community Information & Support Services
  - Research and Business Due-Diligence tools

- Business-to-business **eCommerce will grow tremendously** in the next several years, bringing significant change to most industries.
- In 1999, global business-to-business eCommerce was \$149 billion and is projected to be **\$7.3 trillion by 2004** (Gartner Group).
- Increasing **competition** and **globalization** are two factors fueling eCommerce growth.

# Internet Business Applications

- Advertising and promoting
- Sales and purchases (eCommerce)
- Customer support
- Supplier and customer contacts
- Marketing research
- Public relations

# eBusiness Impacts the Whole Company



# eBusiness Can Impact the Whole Value Chain

## Support Activities

**Firm Infrastructure**

**Human Resource Management**

**Technology Development**

**Procurement**

**Inbound  
Logistics**

**Operations**

**Outbound  
Logistics**

**Marketing  
and  
Sales**

**Service**

## Primary Activities

# eBusiness in International Markets spans differences in:

```
graph TD; A[eBusiness in International Markets spans differences in:] --> B[Geography]; A --> C[Economies]; A --> D[Politics/Law]; A --> E[Cultures]; A --> F[Markets];
```

**Geography**

**Economies**

**Politics/  
Law**

**Cultures**

**Markets**

**The Internet & eBusiness in the  
Forest Products Industry  
in The United States**

# The Study

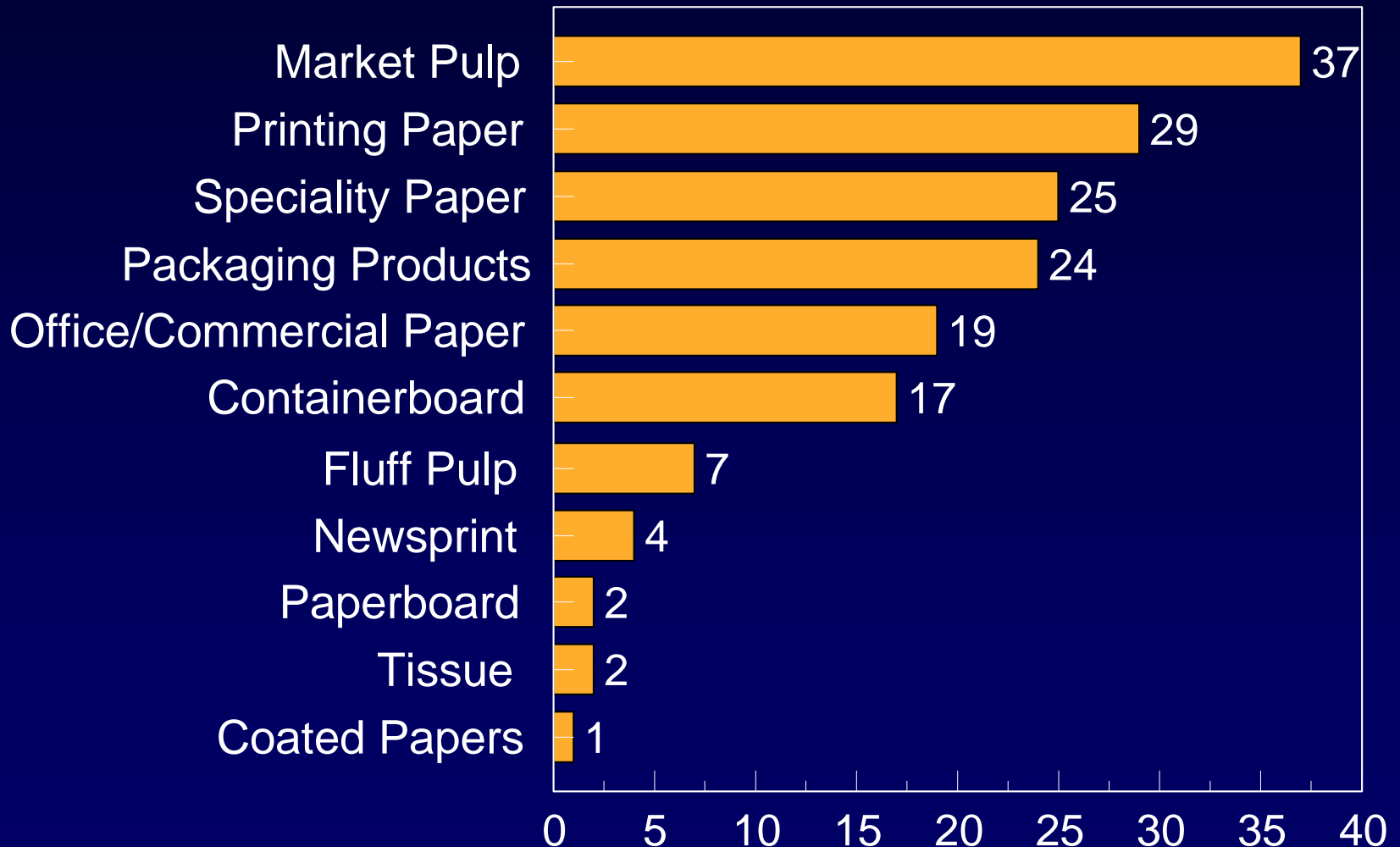
- In 2000, eBusiness was studied in the context of the forest products industry in the United States.
- One thousand solid wood products and 300 pulp and paper companies were surveyed.

# Objectives

- Examine the current and future uses of eBusiness in the industry.
- Identify how the forest products industry is investing in and leveraging eBusiness.

# Respondent Major Product Categories-Pulp & Paper

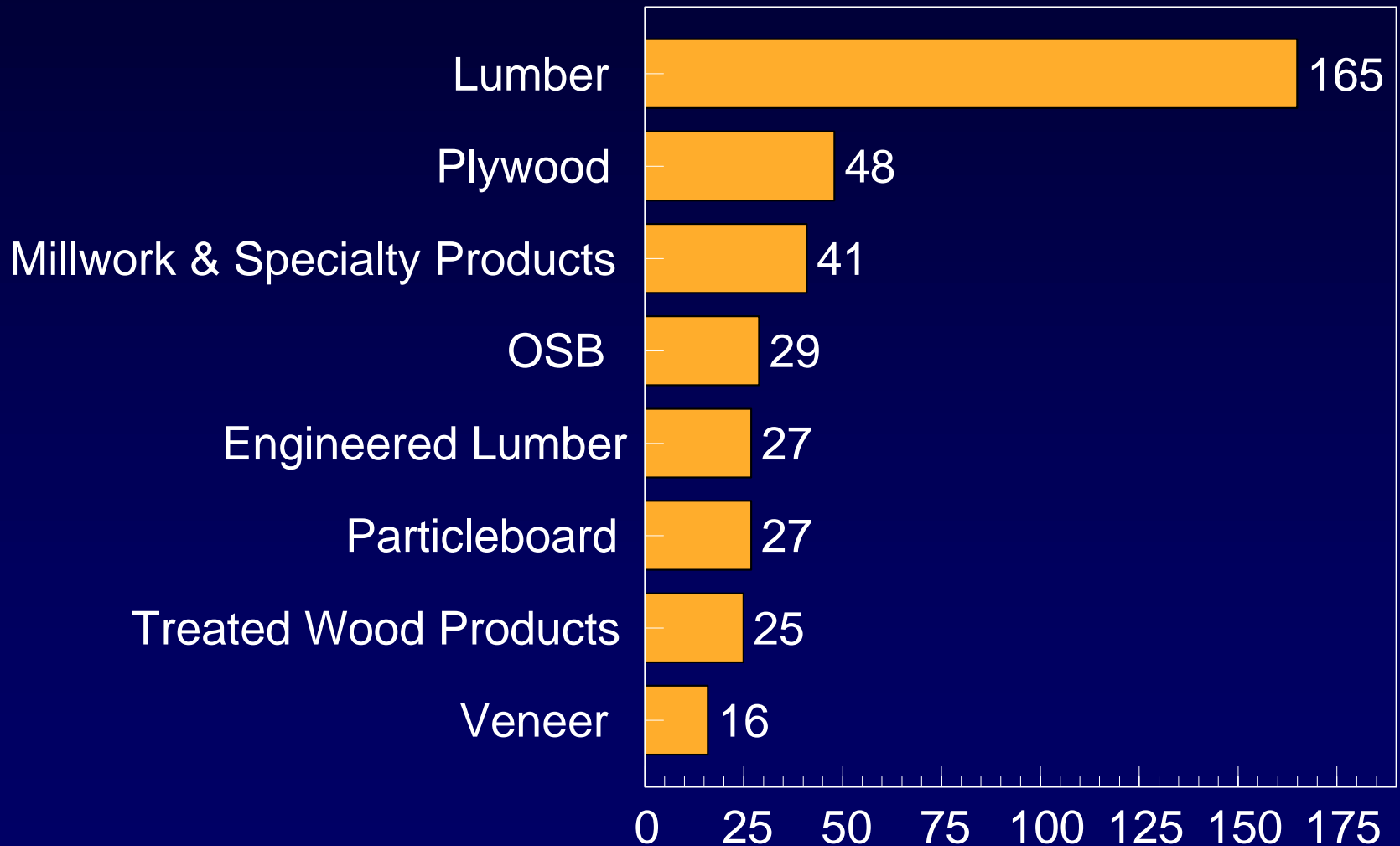
Number of Respondents  
(Multiple responses possible)



# Respondent Major Product Categories-Solid Wood

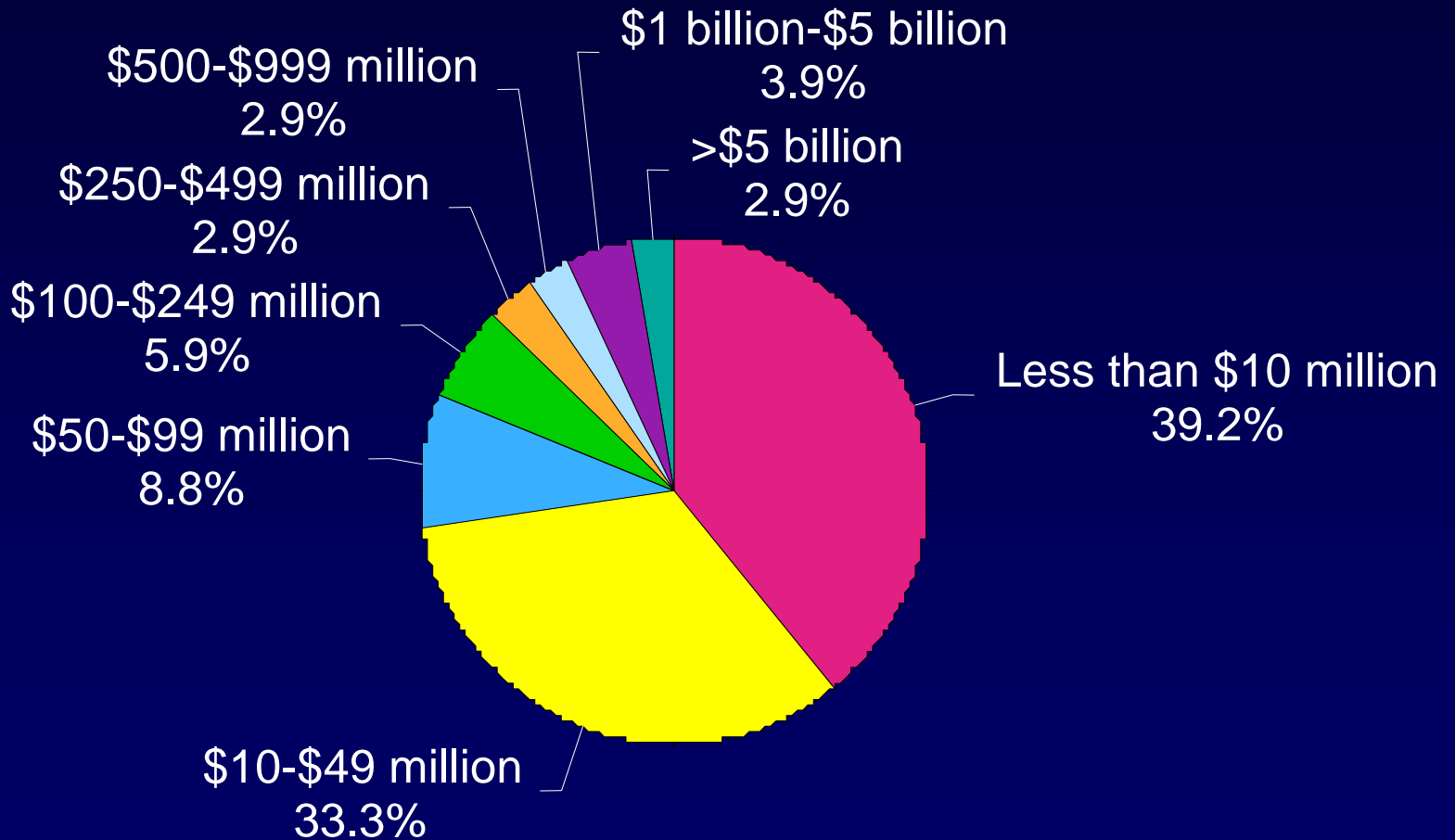
Number of Respondents

(Multiple responses possible)



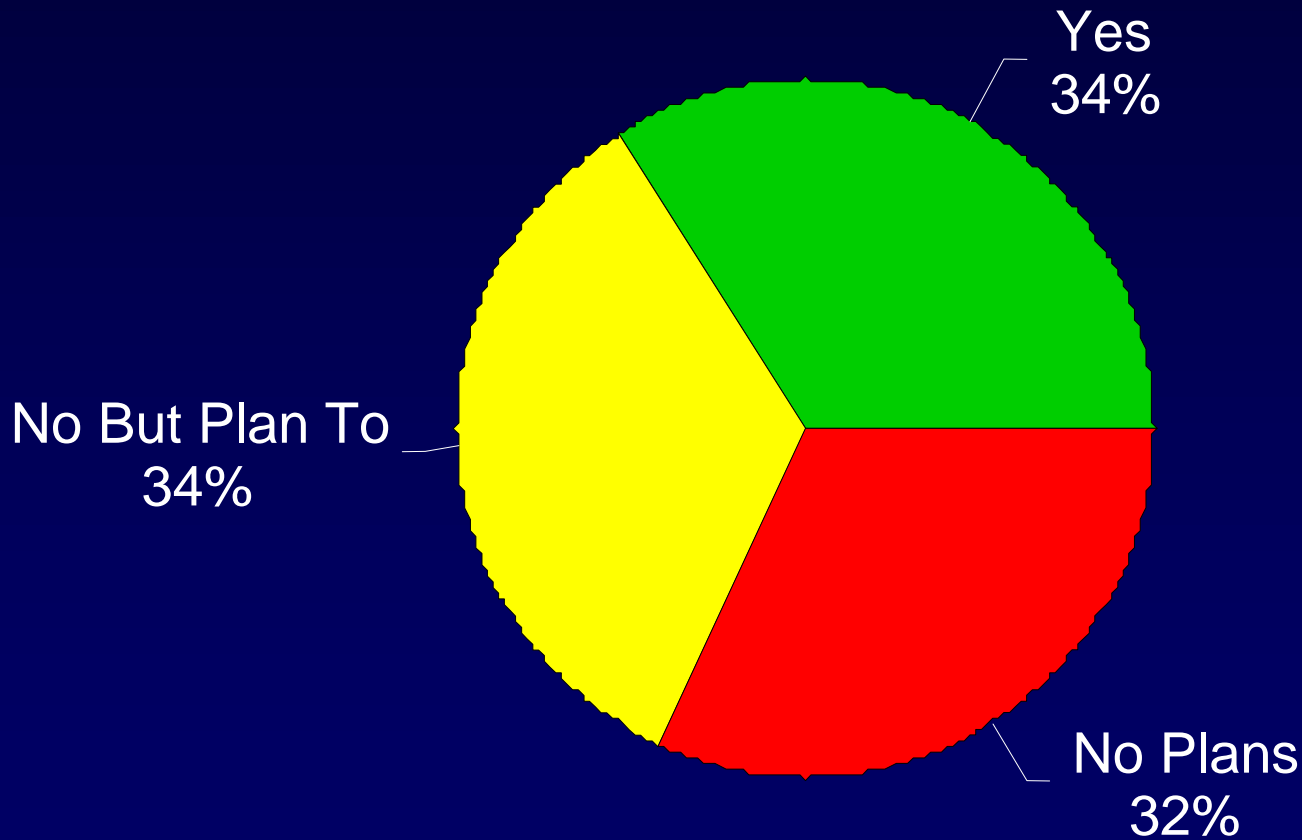
# Respondent Size 2000 Sales

(n=198)



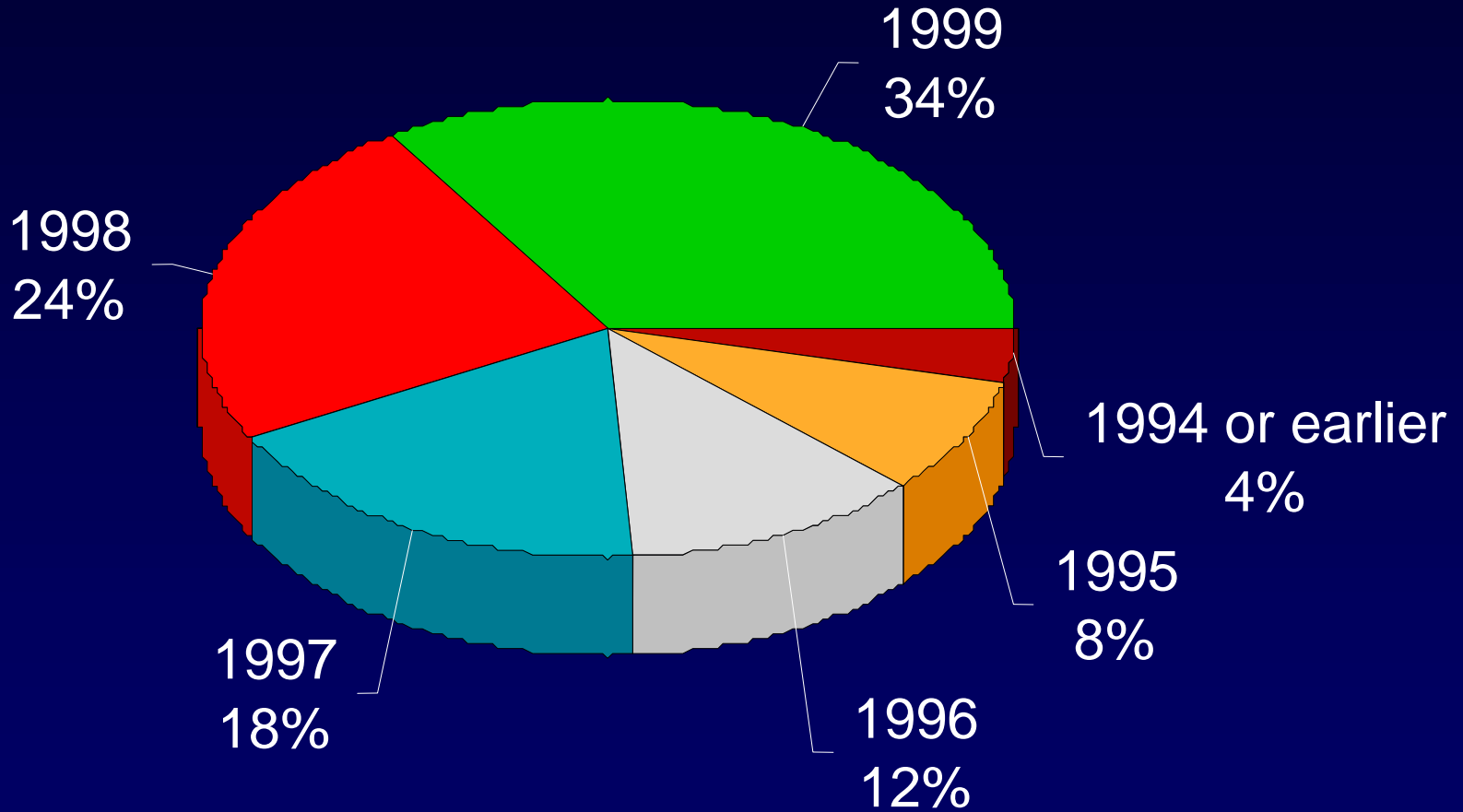
# Does Your Company Use or Plan to Use the Internet to Conduct Business?

Percent of Respondents



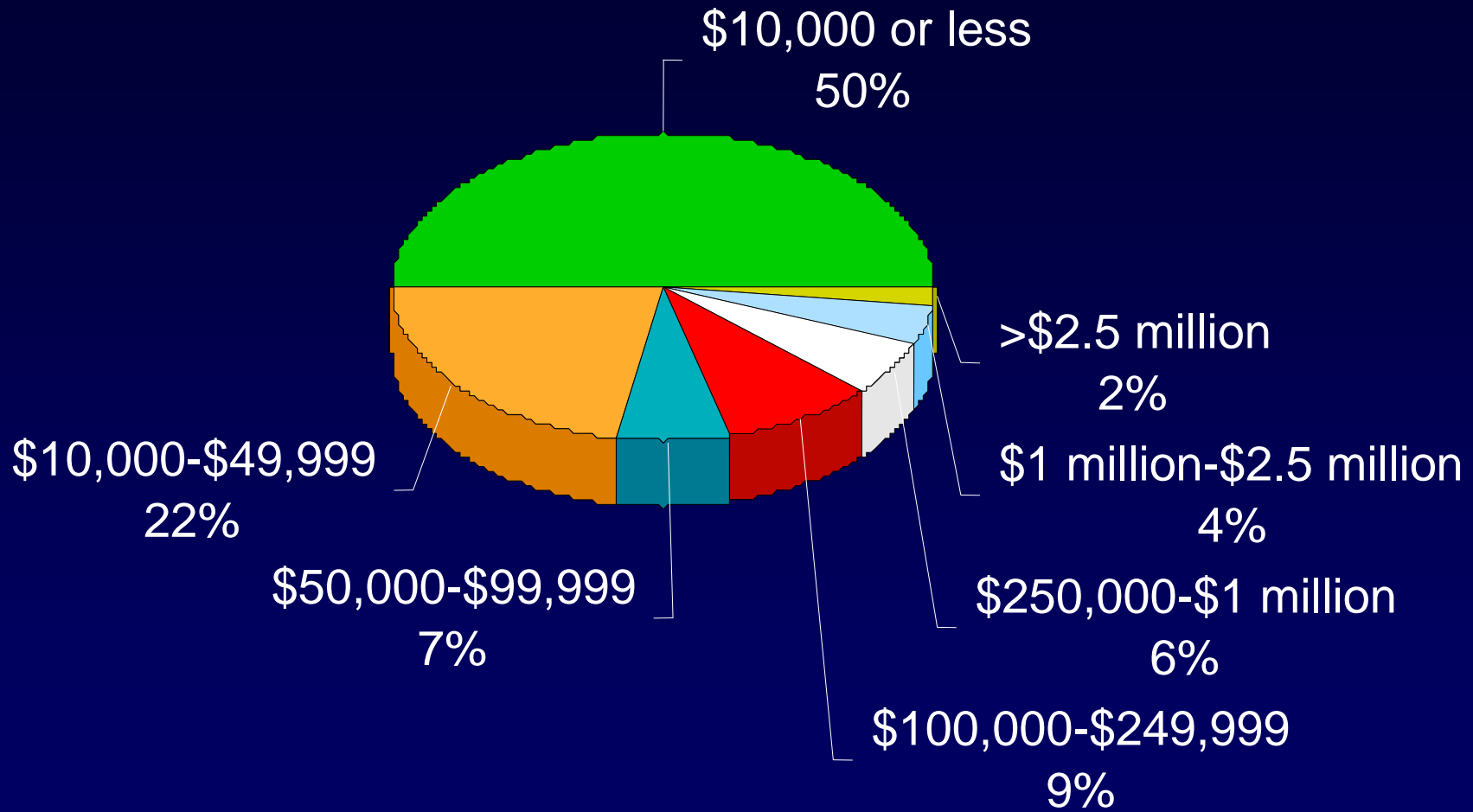
Highly Correlated to Company Size

# When Web Site Was Developed Percent of Respondents



**No Correlation to Company Size**

# Investment Made to Date on Internet/Web Site Percent of Respondents



**Highly Correlated to Company Size**

# Reasons for Implementing Internet Capabilities Ranked

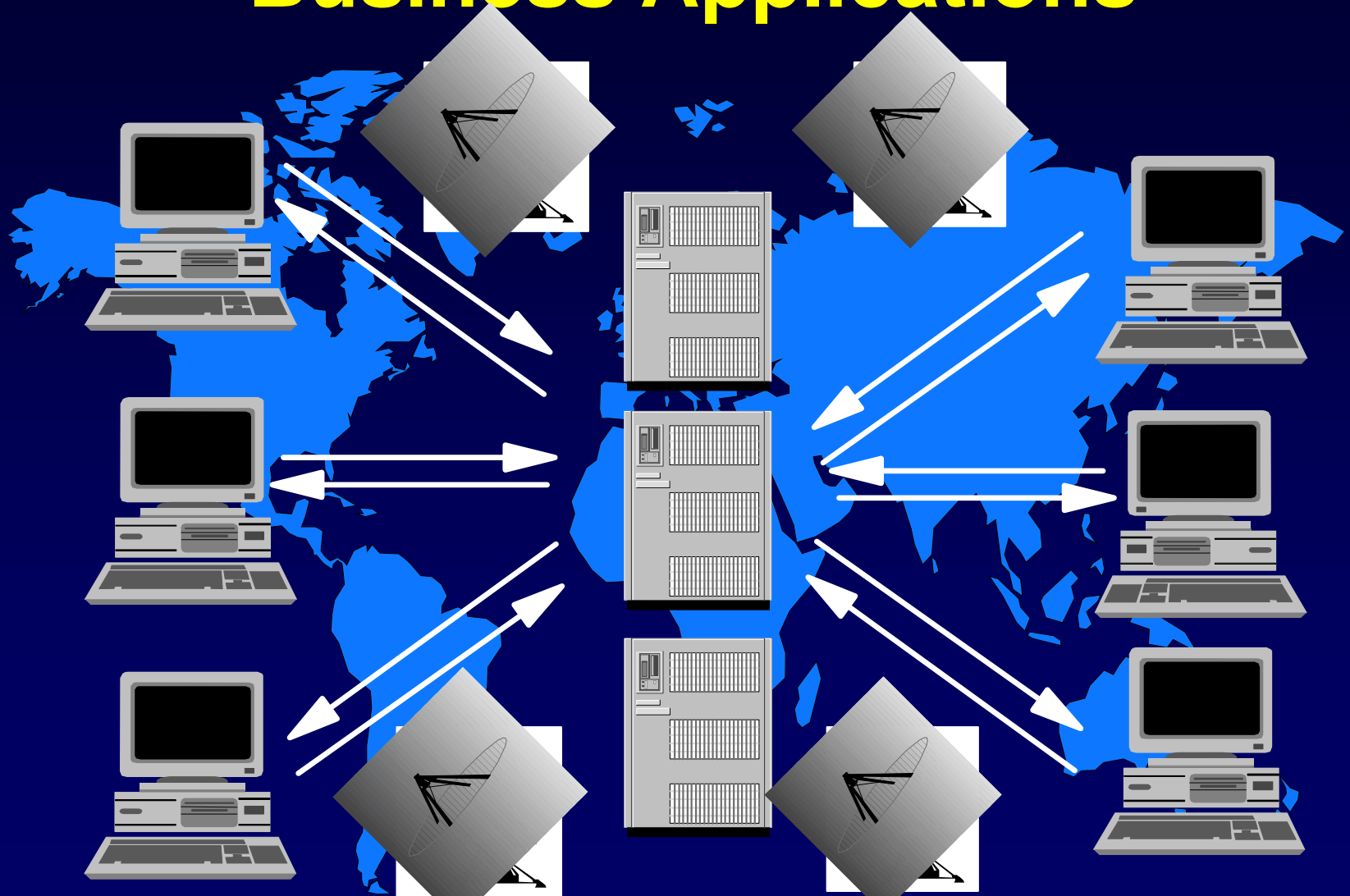
1. part of corporate strategy
2. retain customers
3. customer request
4. increase accuracy of data
5. reduce errors
6. reduce cycle time
7. create a cost saving
8. implement JIT inventory

# The Internet Offers our Company:

Scale: 1=strongly disagree to 5=strongly agree

Timeliness of information exchange	3.7
Greater exposure to potential customers	3.6
Greater access to vendors	3.5
Enhanced image of my organization	3.5
Increased sales for my company	3.3
Increased value to my customers	3.3
A lower cost to promote my company's products	3.2
Improved service to customers	3.2
Improved competitive position for my company	3.2
Increased customer retention	3.1
Lower costs of doing business	2.9
Faster delivery	2.8
A preferred way to sell products	2.8
Lower prices to customers	2.6

# Internet Business Applications



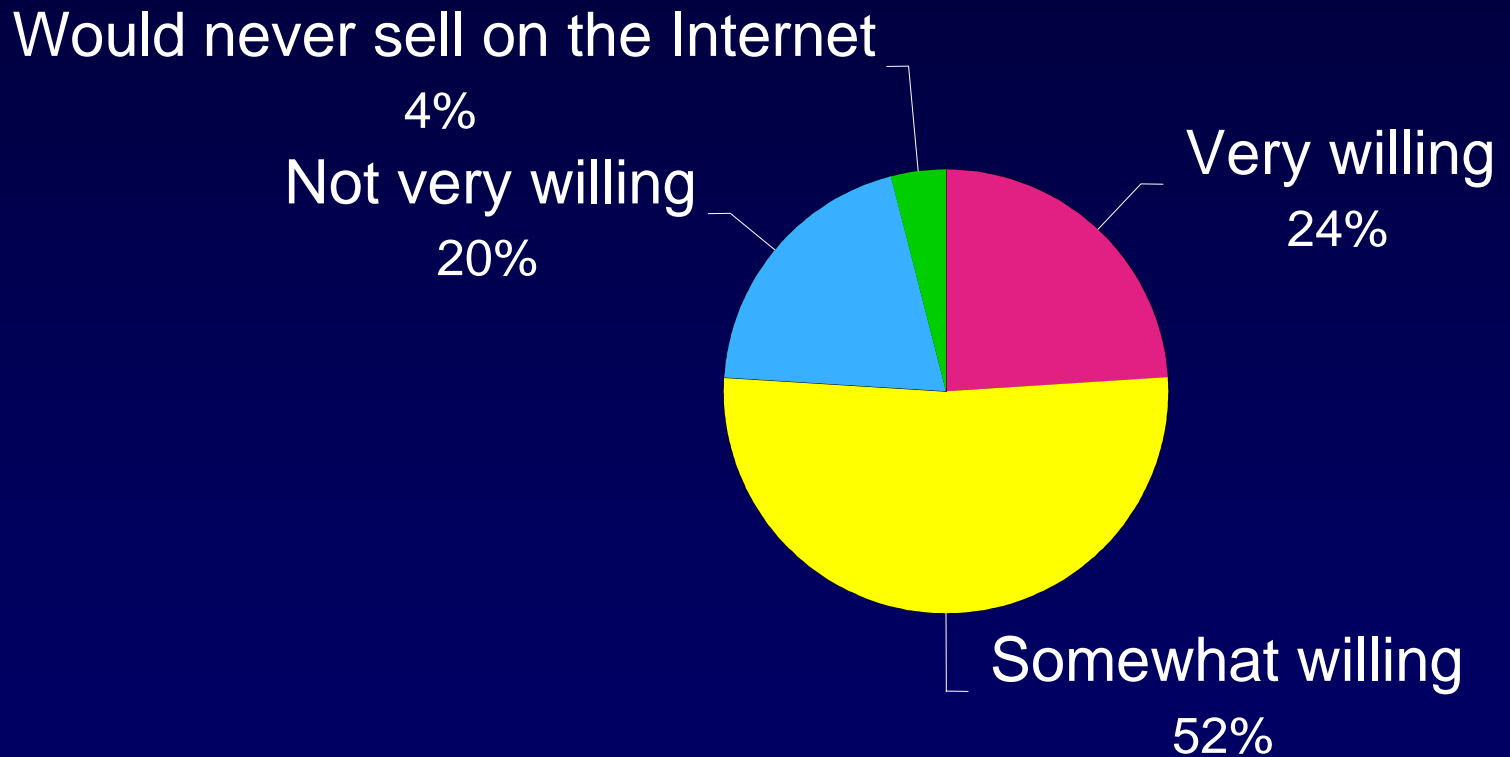
# Internet Business Applications Current & In the Next Year

Number of Respondents

(n=223)



# Willingness to Sell Products via the Internet



# Examples of How Respondents Benefit From eBusiness

- Faster response to customer inquiries.
- By advertising on a supply database we have obtained new customers.
- Customers can look up order and shipment status on-line.
- Better & quicker service for customers.
- Faster, easier purchase of needed items from vendors.

# Examples of How Respondents Benefit From eBusiness

- We have reduced inventory by broadcasting available stock to customers via the Internet.
- Better inventory control because of better information on inbound product locations and ETAs.
- We increased market share in large developing accounts by managing customers inventory on-line.
- Faster response to customers and suppliers needs.

## Examples of How Respondents Benefit From eBusiness

- We put pictures on the Internet showing how we make our products better. Customers 1,000 miles away can take a "virtual tour" of our company and see who they are dealing with.
- Mass e-mail communications to customers and vendors has reduced our costs.
- Time saved to communicate to headquarters overseas.
- Direct sales relating from WWW exposure.
- Shorter lead-time.

# Examples of How Respondents Benefit From eBusiness

- We set up an inventory system at a customer's warehouse using the Internet.
- Insures mill spare parts inventory (categories with high rotation) by automatic re-order.
- Accessing information from suppliers greatly reduces lead-time as well as allowing better price shopping.
- Price list previously faxed at considerable expense is now on-line.

# Impediments to Implementing Internet Capabilities

Impedes MOST

- Lack of skilled IT staff
  - Lack of an understanding of benefits
  - Expense of development
  - Expense of hardware and software
- 

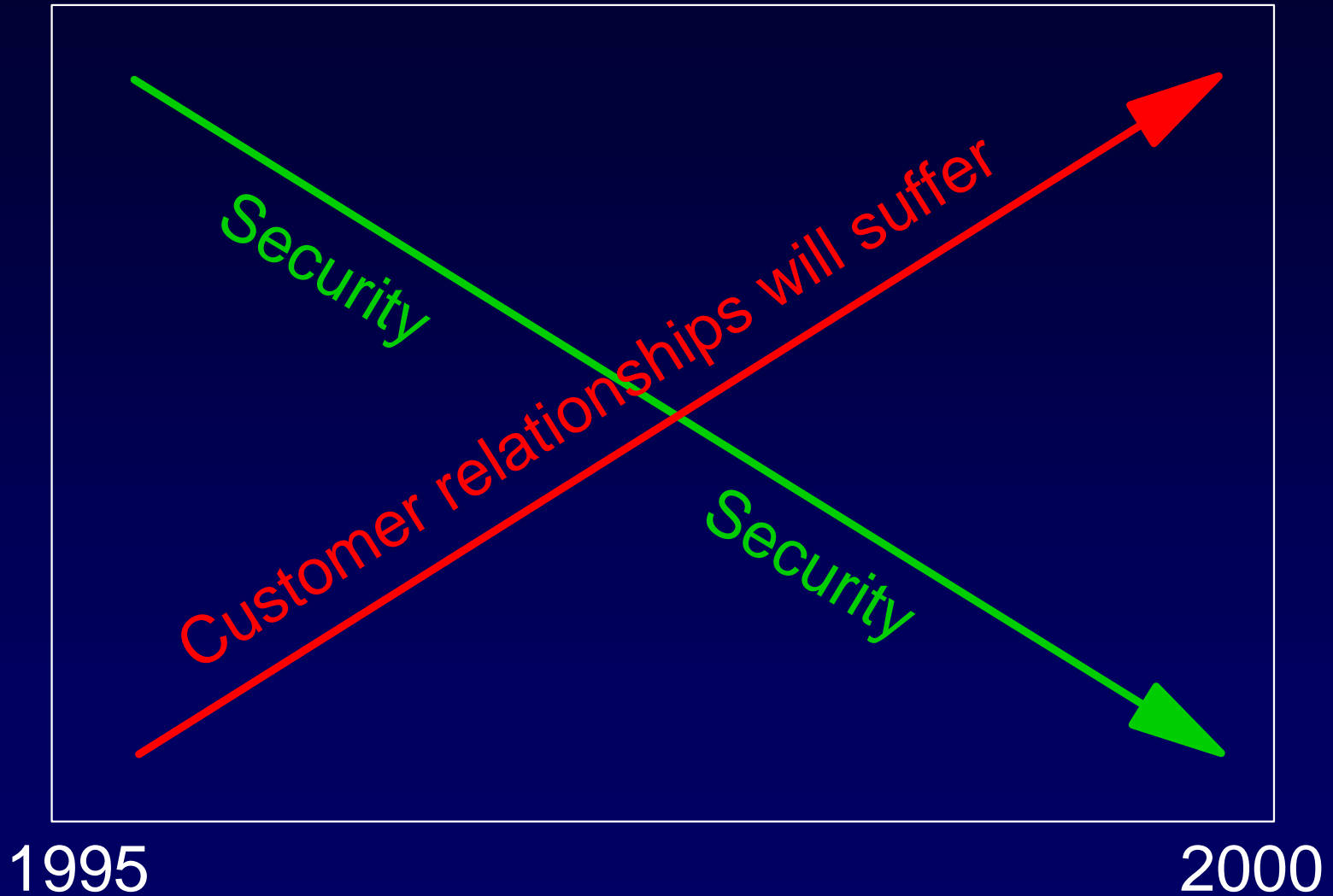
• Inadequate application tools

• Lack of technology infrastructure  
(TCP/IP, networks, firewalls, security)

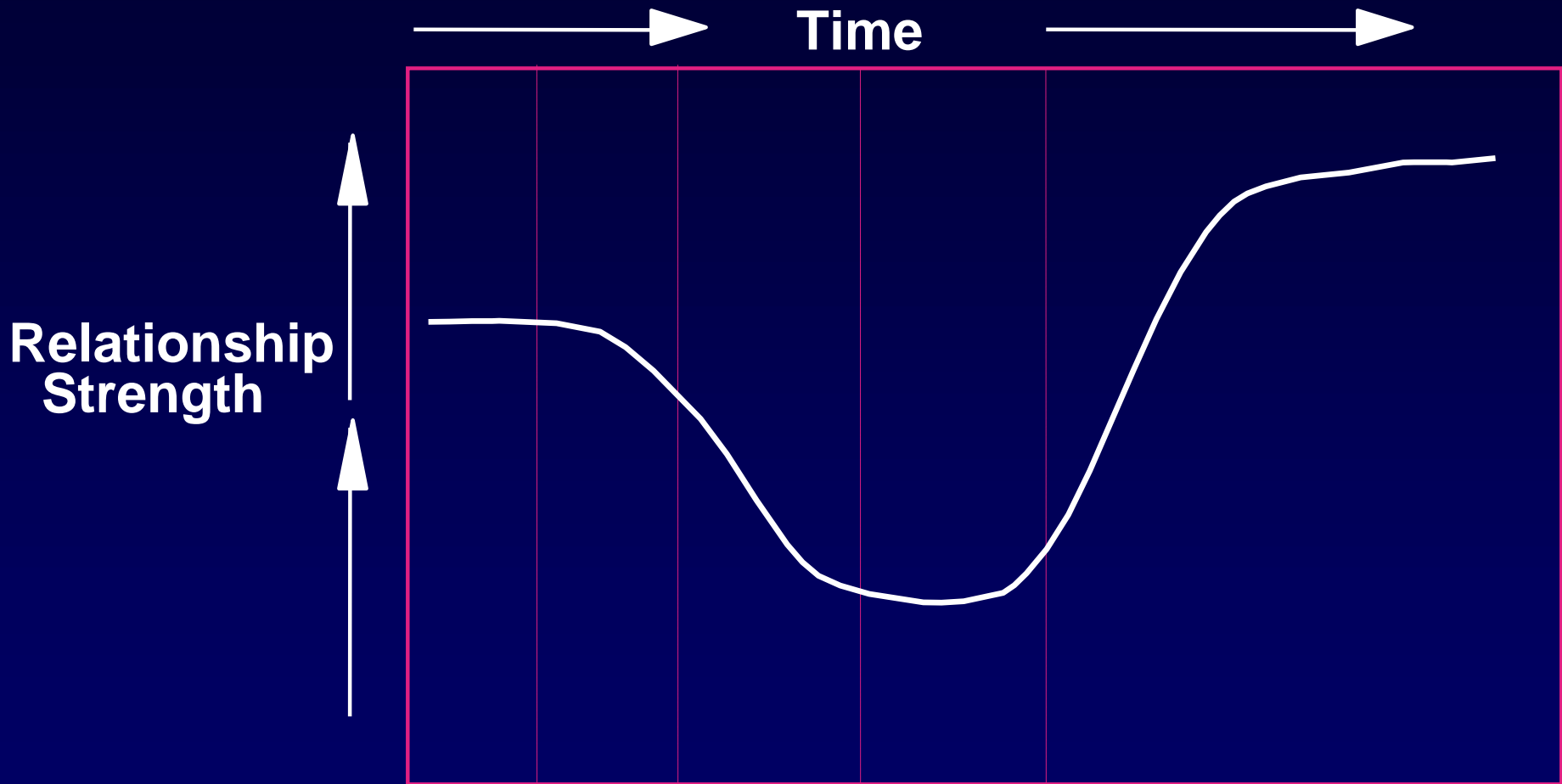
Impedes LEAST

- Customer resistance

# #1 Concerns about Using the Internet



# Internet Influences on Buyer/Supplier Relationships



*(Vlosky and Wilson, 1993)*



*Why now?*

# *Where is the Forest Products Industry in eBusiness Adoption?*

Adoption

U.S. Industry

Forest Products Sector

Develop-  
ment

Introduction

Growth

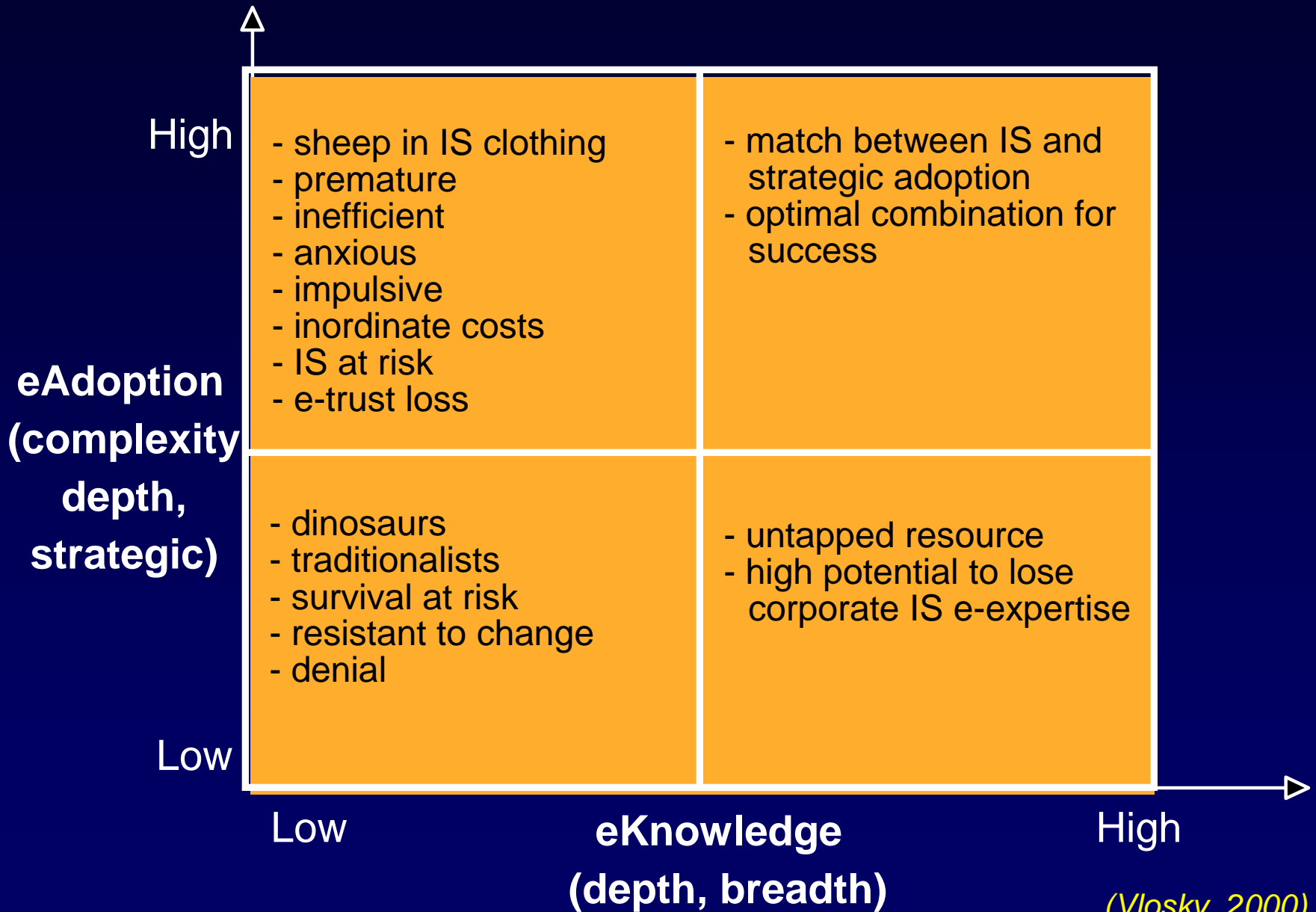
Maturity

What  
next?

Time



# eBusiness Implementation/Success Matrix



(Vlosky, 2000)

# Key Trends

- Business Market Space Will Be Ruthless
  - 10 Year Survival <30%
- Business Strategies Will Become More Dependent on Info. Technology
- IT Talent and Skills Will Drive Many Market Decisions
- Net Centric Technologies will Dominant

# 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?

- The emergence of **cyberspace** as a significant place to do business is a **fundamental shaping force** that will transform **business** and **society**.
- Internet-based technologies offer **revolutionary** tools for business development and management.

Questions

