E-Commerce Adoption by the Primary and Secondary Hardwood Industries in West Virginia

By

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Introduction

• Digital economy and electronic market place

• Electronic Commerce or E-commerce
  – Market transactions in the electronic market place
  – Business-to-consumers
  – Business-to-business
Importance of E-Commerce

• Reduces transaction costs
• Faster and more effective communication
• Removes geographic and temporal barriers
• Gives consumers a wider range of product choices
E-commerce ➔ Global competitiveness
E-Commerce and the Forest Products Industry

- Vlosky (1999)
  - Application of internet-based technologies in the solid wood products and paper industry
  - Top 100 companies in US and Canada
  - <50% used internet
E-Commerce and the Forest Products Industry

• Pitis and Vlosky (2000)
  – Internet applications among US primary wood products exporters
  – 80% used internet
E-Commerce and the Forest Products Industry

- Shook et al. (2002)
  - Use of ebusiness in the Pacific Northwest secondary forest products industry
    - Idaho, Montana and Washington
    - 30% employed ebusiness tools
How about Wood Industries in West Virginia?
Objectives

• To assess the current status of e-commerce implementation in the primary and secondary hardwood industries of WV

• To examine factors affecting e-commerce adoption
Methodology

• Mail survey in Fall of 2007
  – 287 companies

• Information collected
  – Industry characteristics
  – E-commerce activities
  – Perceived benefits
  – Impediments/constraints
Methodology

- Relative frequencies
- Chi-square tests
Results

• 21% response rate
• n=56
E-Commerce Adoption

- Uses E-commerce: 54%
- Do Not Use E-commerce: 46%
E-commerce Adoption and Company Age

- **<20 Years**
  - Uses Ecommerce: 40%
  - Do Not Use Ecommerce: 60%

- **21-40 Years**
  - Uses Ecommerce: 50%
  - Do Not Use Ecommerce: 50%

- **>40 Years**
  - Uses Ecommerce: 60%
  - Do Not Use Ecommerce: 40%
E-commerce Adoption and Gross Sales Revenue in 2006

- Uses Ecommerce
- Do Not Use Ecommerce

% of Respondents

Revenue

- <$500,000
- >$500,000
E-commerce Adoption and Industry Type

% of Respondents

Uses Ecommerce
Do Not Use Ecommerce

Industry

Primary Industry
Secondary Industry
E-commerce Adoption and Export

% of Respondents

- Uses Ecommerce
- Do Not Use Ecommerce

Export to Other Countries?

Yes

No

% of Respondents

0%

10%

20%

30%

40%

50%

60%

70%

80%
Year of Implementation of Different E-commerce Tools

- Website
- Email
- Internet Orders
- Other Websites
- Internet Banking
- Online Purchase

% of Respondents

Year of Implementation
Perceived Benefits of E-Commerce

- Exposure to potential customers
- Service to customers
- Access to company by potential customers
- Competitiveness
Major Concerns About E-Commerce Adoption

• Not profitable
• Cost
• Information security
Plan to Use E-commerce in the Future?

- Plan to Use E-commerce: 23%
- Do Not Plan to Use E-commerce: 60%
- No Answer: 17%
Conclusions/Implications

• E-commerce adoption in West Virginia’s wood industry follows the same trend in other states

• Industries more likely to adopt e-commerce
  – Larger companies
  – Exporters

• Need to encourage companies to adopt e-commerce