eBusiness in the Forest Products Industry: A Comparison of the United States & Canada

Richard Vlosky
Associate Professor
Forest Products Marketing

Olivian Pitis
Marketing Analyst

LSU AgCenter
Research & Extension
- **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.
• 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.
A survey of senior executives of U.S. based businesses with revenues of at least $1 billion showed 87 percent of the companies now use the Internet for business purposes (Deloitte & Touche 1998).

Of these, 98 percent use the Internet to provide information about their business and 69 percent reportedly sell products or services via the Internet.
The Study

• In 1998, eBusiness was researched in the context of the forest products industry in the United States and Canada.

• Both solid and pulp/paper companies were surveyed.

• This presentation is on the solid wood industry.
Objectives

• Examine the current and future uses of eBusiness in the solid wood industry.

• Identify how the industry is investing in and leveraging eBusiness.

• Compare the United States & Canada.
Results

All Respondents
Responses by Geographic Region

(overall response rate=18%)

- **North/Central US**: 36 companies (17% of respondents)
- **South US**: 64 companies (30% of respondents)
- **West US**: 34 companies (16% of respondents)
- **West Canada**: 15 companies (7% of respondents)
- **Central Canada**: 1 company (0.05% of respondents)
- **East Canada**: 22 companies (10% of respondents)
Respondent Major Product Categories - Pulp and Paper

<table>
<thead>
<tr>
<th>Product Category</th>
<th>US</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market pulp</td>
<td>12%</td>
<td>38%</td>
</tr>
<tr>
<td>Printing paper</td>
<td>10%</td>
<td>29%</td>
</tr>
<tr>
<td>Specialty paper</td>
<td>9%</td>
<td>23%</td>
</tr>
<tr>
<td>Packaging products</td>
<td>9%</td>
<td>18%</td>
</tr>
<tr>
<td>Office/commercial paper</td>
<td>8%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Respondent Major Product Categories - Solid Wood

- **Lumber**:
  - US: 74%
  - Canada: 69%

- **Plywood**:
  - US: 20%
  - Canada: 21%

- **Particleboard**:
  - US: 10%
  - Canada: 17%

- **OSB**:
  - US: 8%
  - Canada: 13%

- **Treated products**:
  - US: 12%
  - Canada: 4%

- **Engineered lumber**:
  - US: 8%
  - Canada: 13%

Percent of total respondents from each country (multiple responses possible)
Currently Use the Internet (1998) by Company Size

Percent of Respondents by Sales Category

- Less Than $10 Mill.: 24%
- $10-$49 Million: 43%
- $50-$99 Million: 53%
- $100-$499 Mill.: 53%
- $500-$999 Mill.: 38%
- >$1 Billion: 64%
All Respondents

Planned Use of the Internet in the Next Year (1999)
By Company Size

Percent of Respondents by Sales Category

- Less Than $10 Million: 19%
- $10-$49 Million: 58%
- $50-$99 Million: 60%
- $100-$499 Million: 56%
- $500-$999 Million: 82%
- >$1 Billion: 100%
Results

United States & Canada
Solid Wood Manufacturers
<table>
<thead>
<tr>
<th>Revenue Range</th>
<th>US (n=142)</th>
<th>Canada (n=38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10 Million</td>
<td>30%</td>
<td>17%</td>
</tr>
<tr>
<td>$10-$49 Million</td>
<td>36%</td>
<td>29%</td>
</tr>
<tr>
<td>$50-$99 Million</td>
<td>18%</td>
<td>25%</td>
</tr>
<tr>
<td>$100-$249 Million</td>
<td>7%</td>
<td>17%</td>
</tr>
<tr>
<td>$250-$499 Million</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>$500 Million - $1 Bill.</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Distribution of Respondent Companies by Spending in Information Technologies in 1997

- **Less than $1 Million**
  - US (n=142): 97%
  - Canada (n=38): 86%

- **$1-$9 Million**
  - US (n=142): 2%
  - Canada (n=38): 14%

- **$10-$49 Million**
  - US (n=142): 0%
  - Canada (n=38): 1%

Percentage of respondents from each country.
Perceived Benefits of Reaching Customers via the Internet

Scale: 1=strongly disagree to 5=strongly agree

- Is a competitive advantage: US (n=142) 3.4, Canada (n=38) 3.5
- Will attract new customers: US (n=142) 3.5, Canada (n=38) 3.5
- Will make the company more responsive to customers: US (n=142) 3.2, Canada (n=38) 3.3
Perceived Benefits of Reaching Customers via the Internet

Scale: 1=strongly disagree to 5=strongly agree

- *is a superior way of doing business*
  - US (n=142): 2.9
  - Canada (n=38): 3.3

- *will increase customer retention*
  - US (n=142): 3.0
  - Canada (n=38): 2.6

- Will increase shareholder value
  - US (n=142): 2.9
  - Canada (n=38): 2.9

- Will lower SG&A costs
  - US (n=142): 2.9
  - Canada (n=38): 2.9

* - difference is statistically significant for alpha=5%
Internet Capabilities in 1998?

US
- Yes: 54%
- No: 46%

Canada
- Yes: 73%
- No: 27%

Percentage of respondents from each country
If Not, Plan Internet Capabilities in the Future?

Percentage of respondents from each country:

US
- Yes: 34%
- No: 66%

Canada
- Yes: 69%
- No: 31%
When Internet Capabilities Were First Developed

Percentage of respondents from each country

<table>
<thead>
<tr>
<th>Year</th>
<th>US (n=76)</th>
<th>Canada (n=28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>31%</td>
<td>56%</td>
</tr>
<tr>
<td>1997</td>
<td>32%</td>
<td>25%</td>
</tr>
<tr>
<td>1996</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>1995</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>1994</td>
<td>9%</td>
<td>3%</td>
</tr>
</tbody>
</table>
When Extranet Capabilities Were First Developed

Not Extranet capable

US (n=76)  
Canada (n=28)

1998
- US: 6%
- Canada: 13%

1997
- US: 2%
- Canada: 0%

1996
- US: 3%
- Canada: 0%

1995 and earlier
- US: 2%
- Canada: 6%

Percentage of respondents from each country
Investment Made to Date on Internet/Extranet Applications

<table>
<thead>
<tr>
<th>Category</th>
<th>US (n=76)</th>
<th>Canada (n=28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $10,000</td>
<td>67%</td>
<td>31%</td>
</tr>
<tr>
<td>$10,000-$49,999</td>
<td>21%</td>
<td>56%</td>
</tr>
<tr>
<td>$50,000-$99,999</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>$100,000-$249,999</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>$250,000-$1 Million</td>
<td>4%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Percentage of respondents from each country

US (n=76) vs Canada (n=28)
Reason for Implementing Internet and/or Extranet Capabilities

Scale: 1=strongly disagree to 5=strongly agree

- **part of corporate strategy**: US (n=76) - 3.3, Canada (n=28) - 3.5
- **retain customers**: US (n=76) - 3.2, Canada (n=28) - 3.3
- **customer request**: US (n=76) - 2.8, Canada (n=28) - 2.9
- **increase accuracy of data**: US (n=76) - 2.9, Canada (n=28) - 2.8
- **reduce errors**: US (n=76) - 2.8, Canada (n=28) - 2.9
Reason for Implementing Internet and/or Extranet Capabilities

Scale: 1=strongly disagree to 5=strongly agree

- * reduce cycle time: 2.7 (US) 3.3 (Canada)
- create a cost saving: 2.6 (US) 2.9 (Canada)
- implement JIT inventory management: 2.5 (US) 2.6 (Canada)
- improve cash flow: 2.6 (US) 2.2 (Canada)

* difference is statistically significant for alpha=5%
eBusiness Applications: 1998 and Planned in 1999

- Customer Contacts: 24% (US), 21% (Canada)
- Marketing: 24% (US), 21% (Canada)
- Vendor Contacts: 18% (US), 16% (Canada)
- Product/Price Inquiry: 16% (US), 16% (Canada)
- Product Promotion: 29% (US), 29% (Canada)
- Sales: 20% (US), 18% (Canada)
- Purchases: 18% (US), 18% (Canada)
- Shipping Notices: 15% (US), 8% (Canada)
- Order Tracking: 14% (US), 13% (Canada)
- Order Status: 13% (US), 13% (Canada)
- Inventory Mgt.: 18% (US), 11% (Canada)
- Internet EDI: 13% (US), 13% (Canada)
- Logistics: 9% (US), 8% (Canada)

Percentage of respondents from each country: US (n=142), Canada (n=38)
Is your company where it wants to be in implementing Internet capabilities?

Percentage of respondents from each country:

**US**
- Yes: 38%
- No: 62%

**Canada**
- Yes: 50%
- No: 50%
If your company has an Internet capability, have the desired benefits been received?

Percentage of respondents from each country:

US:
- Yes: 30%
- No: 70%

Canada:
- Yes: 36%
- No: 64%
Impediments to Implementing Internet and/or Extranet Capabilities

Scale: 1=strongly disagree to 5=strongly agree

* difference is statistically significant for alpha=5%

- Lack of skilled IT staff: US (n=76) = 3.5, Canada (n=28) = 2.9
- Lack of an understanding of benefits: US = 3.1, Canada = 3.0
- Expense of development: US = 2.9, Canada = 2.9
- Inadequate application tools: US = 2.9, Canada = 2.1
- Lack of technology infrastructure: US = 3.0, Canada = 2.3
- Expense of hardware and software: US = 2.7, Canada = 2.4
- Customer resistance: US = 1.7, Canada = 1.9
The Internet Offers our Company:

Scale: 1=strongly disagree to 5=strongly agree

- greater exposure to potential customers
- increased access to industry information
- timeliness of information exchange
- greater access to my company
- enhanced image of the organization
- increased sales
- greater access to vendors
- *increased value to my customers

* difference is statistically significant for alpha=5%

US (n=76) | Canada (n=28)
---|---
greater exposure to potential customers | 3.9 | 4.4
increased access to industry information | 3.9 | 4.3
timeliness of information exchange | 3.9 | 4.1
greater access to my company | 3.8 | 4.2
enhanced image of the organization | 3.6 | 3.8
increased sales | 3.5 | 3.5
greater access to vendors | 3.5 | 3.5
*increased value to my customers | 3.3 | 3.8
Concerns about Using the Internet

Scale: 1=not a concern to 5=is a major concern

- Security of sensitive info.
  - US (n=76): 3.8
  - Canada (n=28): 4.1

- Training of personnel
  - US (n=76): 3.6
  - Canada (n=28): 3.1

- Need to change procedures
  - US (n=76): 3.5
  - Canada (n=28): 3.0

- Cost
  - US (n=76): 3.4
  - Canada (n=28): 3.1

- Availability of technical resources
  - US (n=76): 3.3
  - Canada (n=28): 3.0

- Speed of access
  - US (n=76): 3.1
  - Canada (n=28): 3.1
Concerns about Using the Internet

Scale: 1=not a concern to 5=is a major concern

- Competition can too easily track: US (n=76) 3.1, Canada (n=28) 2.8
- Loss of contact with customers: US (n=76) 3.2, Canada (n=28) 3.0
- Less contact from the sales force: US (n=76) 2.9, Canada (n=28) 2.8
- *It won't be profitable: US (n=76) 2.7, Canada (n=28) 2.3
- Need to restructure the sales dept.: US (n=76) 2.6, Canada (n=28) 2.3
- *It is a passing fad: US (n=76) 2.2, Canada (n=28) 1.7

*difference is statistically significant for alpha=5%
All Respondents

**Specific Examples of How Respondents Benefit From eBusiness**

- Faster response to customer inquiries.
- We have obtained new customers.
- 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.
- We have generated far more sales than could have been generated without an Internet presence.
- Faster, easier purchase of needed items from vendors.
All Respondents

Specific Examples of How Respondents Benefit From eBusiness

- Faster response to customer inquiries.
- We have obtained new customers.
- 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.
- We have generated far more sales than could have been generated without an Internet presence.
- Faster, easier purchase of needed items from vendors.
Specific 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 accounts by managing customer inventories on-line.
Specific 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.
- Savings on overseas long distance charges.
- Shorter lead-time.
No significant differences in perceived benefits of reaching customers via the Internet.

No significant differences in reasons for Internet implementation.

35% more Canadian respondents were Internet capable in 1998.

Of those not Internet capable in 1998, 102% more Canadian respondents planned Internet capability in 1999.

Canadian respondents were further along in where they wanted to be in Internet implementation.

More Canadian respondents feel they have received desired benefits from Internet implementation.
Overall, respondents are not using the Internet for "higher order" business practices.

U.S respondents are using the Internet for "lower order" applications with twice the frequency as Canadian respondents.

Canadian respondents perceive greater Internet advantages to their company.

Canadian respondents perceive fewer impediments to implementation.

Canadian respondents have fewer concerns about using the Internet.