Opportunities for Quick Response Product and Service Suppliers:
The Wood Products Industry

Working Paper #5
Louisiana Forest Products Laboratory
Louisiana State University Agricultural Center

Richard P. Vlosky
Assistant Professor
Forest Products Marketing
Louisiana Forest Products Laboratory
Louisiana State University Agricultural Center
Quick Response Products and Service Suppliers

Overview

As one component of a major research project conducted at Pennsylvania State University in 1993, 104 suppliers of Quick Response (EDI and Automatic Identification) products and services were surveyed to identify the general level of participation in the wood products and home center industries. Thirty-one companies (30%) responded to the survey representing $1.2 billion in 1992 sales. As the wood product/home center business channel continues to implement EDI and bar code based inventory management linkages, the sales potential for product and service providers will increase commensurately.
Electronic Data Interchange Products and Service Suppliers

Figure 1.

EDI Product & Service Supplier Locations
By Region
(20 Respondents with 1,743 Locations)

There are many EDI product and service providers capable of servicing the wood product and home center industries. The twenty respondents are well distributed throughout North America and have in-field service technicians and sales persons strategically located in every region surveyed allowing for prompt service to customers.
Electronic Data Interchange Products and Service Suppliers

EDI Products and Services Offered

Figure 2.

Which EDI products or services did your company sell in 1992.

<table>
<thead>
<tr>
<th>Service</th>
<th>Number of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDI Software</td>
<td>16</td>
</tr>
<tr>
<td>VAN Services</td>
<td>7</td>
</tr>
<tr>
<td>Data Collection</td>
<td>3</td>
</tr>
<tr>
<td>Consulting Services</td>
<td>2</td>
</tr>
<tr>
<td>EDI Integration</td>
<td>2</td>
</tr>
<tr>
<td>EDI Hardware</td>
<td>2</td>
</tr>
</tbody>
</table>

As seen in figure 2, respondent companies offer a wide range of products and services necessary to implement EDI. There are many companies that are capable of providing these products and services to serve the home center and wood products industries.
Respondent EDI software providers have developed packages that operate with a variety of operating systems. DOS, which is most prevalent, allows for software to be run on personal computers either as stand alone EDI terminals or as front-end interfaces to mainframe or mid-range computers. EDI software packages are being developed to run in Microsoft Windows paralleling the popularity of this operating system.
Electronic Data Interchange Products and Service Suppliers

Involvement in the Home Center and Wood Products Industries

Figure 4.

Fifty-five percent and eighty-five percent of EDI product vendor respondents currently or plan to sell to the wood products and home center industries, respectively, by 1995. There is possible bias in these responses, i.e., companies that sell to the wood products or home center industries might have been more apt to respond to the survey. Nevertheless, the current and projected level of participation by EDI vendors is significant indicating an awareness of the sales opportunities in these customer bases.
The average percentages of sales by EDI vendor respondents in figure 5 are further evidence of possible bias in which companies responded to the survey. The companies that did respond show a significant commitment to serving the wood products and home center retailer customer bases.
Figure 6.

**To which home center companies did your company supply EDI products or services to in 1992?**

- Lowes Cos. Inc. - 7 responses
- Home Depot - 7 responses
- Builder's Square - 5 responses
- HomeBase - 2 responses

The home center chains listed in figure 6 are leaders in implementation of EDI in the home center industry. These four companies alone account for $15.0 billion in 1992 sales or 16% of the entire home center industry in 1992.
Adoption of EDI in the wood products industry is progressing slowly for three primary reasons. First, many home center customers are also only beginning to implement EDI with suppliers; second, most home centers are not as adamant in their demanding suppliers to adopt EDI as they are in requiring UPC bar coding of products at the piece level and; third, wood products producers are leery of being leaders in implementing EDI and would prefer to take a wait-and-see attitude.
Electronic Data Interchange Products and Service Suppliers

Reasons to Target the Wood Products and Home Center Industries

Tables 1 and 2 show the mean scores regarding EDI product and service supplier motivations to target the home center and wood products industries. The following 5-point scale indicating varying levels of agreement was used.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neither disagree nor agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Reasons To Target The Home Center Industry

Our company decided to target the home center industry in order to...

<table>
<thead>
<tr>
<th>Reason</th>
<th>Unweighted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>position the company for the future.</td>
<td>3.8</td>
</tr>
<tr>
<td>expand our customer base.</td>
<td>3.7</td>
</tr>
<tr>
<td>respond to customer requests.</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Table 2. Reasons To Target The Wood Products Industry

Our company decided to target the wood products industry in order to...

<table>
<thead>
<tr>
<th>Reason</th>
<th>Unweighted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>expand our customer base.</td>
<td>4.2</td>
</tr>
<tr>
<td>position the company for the future.</td>
<td>3.8</td>
</tr>
<tr>
<td>respond to customer requests.</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Tables 1 and 2 show that EDI product and service suppliers target the home center and wood products industry primarily for customer base expansion and positioning the company for the future. This indicates that EDI product and service providers anticipate sales growth.
potential in these two industries.
Automatic Identification Products and Service Suppliers

Figure 8.

**Auto I.D. Product & Service Supplier Locations**

By Region
(12 Respondents with 247 Locations)

- Western US 34.0%
- Eastern Canada 7.7%
- Central Canada 2.0%
- Western Canada 7.7%
- South US 20.6%
- N. Central US 11.7%
- N. East US 16.2%

Automatic Identification (Auto I.D) companies that sell bar code based inventory management products and services are also distributed throughout North America and are strategically located in each region to service the customer base.
Automatic Identification Products and Service Suppliers

Bar Code Based Inventory Management Products and Services Offered

Figure 9.

Which inventory management products or services did your company sell in 1992?

- Scanners: 10
- Handheld Data Collection Devices: 9
- Inventory Mgt. Software: 6
- Large Format Label Printers: 5
- Large Format Label Software: 5
- Large Format Bar Code Applicators: 4
- Consulting: 3
- Systems Integration: 2
- RF Connectivity: 1
- Bar Code Readers: 1
- Long Range Scanners: 1

Number Of Responses

As seen in figure 9, respondent Auto. I.D. companies sell a wide range of products used to implement bar code based inventory management and control. As is the case with EDI, there are many companies that are capable of providing these products to facilitate bar code based inventory capabilities in the home center and wood products industries. Many companies have developed tailored applications specifically for wood products or home center applications. Inventory software in particular must be tailored for industry and company applications.
Which computer platform does your company’s inventory management software support?

Respondent inventory management software providers have developed packages that operate with a variety of operating systems. DOS, which is most prevalent, allows for software to be run on personal computers either as stand alone terminals or as front-end interfaces to mainframe or mid-range computers. Inventory management software packages are being developed to run in Microsoft Windows paralleling the popularity of this operating system.
Automatic Identification Products and Service Suppliers

Involvement in the Home Center and Wood Products Industries

Figure 11.

Eighty-three percent and fifty percent of Auto. I.D. product vendor respondents currently or plan to sell to the wood products and home center industries, respectively, by 1995. There is possibly bias in these responses, i.e., companies that sell to the wood products or home center industries might be more apt to respond to the survey. Nevertheless, the current and projected level of participation by Auto. I.D. vendors is significant indicating an awareness of the sales opportunities in these customer bases. The higher involvement in the wood products industry is attributable to a full range of products required for inventory management including printers, labels or tags, scanners, hand held data capture devices and software. The home center industry primary needs are scanners and hand held data capture devices.

Figure 12.
Average percentage of total 1992 sales to wood products and home center customers.

n=6 respondents for wood product customers
n=2 respondents for home center customers

<table>
<thead>
<tr>
<th>Wood Products</th>
<th>Home Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.6%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

The average percentages of sales by Auto. I.D. vendor respondents in figure 12 are further evidence of possible bias in which companies responded to the survey. The companies that did respond show a significant commitment to serving the wood products and home center retailer customer bases.
To which wood product sectors did your company supply Auto. I.D. products or services to in 1992?

- SW Lumber: 3 responses
- Treated Lumber: 3 responses
- OSB/Waferboard: 2 responses
- SW Plywood: 2 responses
- Particleboard: 1 response
- MDF: 1 response

Adoption of bar code based inventory systems in the wood products industry is progressing slowly for three primary reasons. First, wood products producers are leery of being leaders in implementing bar code based technology and would prefer to take a wait-and-see attitude; second, until recently, there has not been a wide selection of easy to use wood products industry tailored inventory management software to choose from and; three, there appears to be a significant lack of understanding on the part of wood products manufacturers and distribution intermediaries regarding the benefits to implementing bar code based inventory management.
Automatic Identification Products and Service Suppliers

Reasons to Target the Wood Products and Home Center Industries

Tables 3 and 4 show the mean scores asked of Auto. I.D. respondent suppliers regarding their motivations to target the home center and wood products industries. The following 5-point scale indicating varying levels of agreement was used.

<table>
<thead>
<tr>
<th></th>
<th>strongly disagree</th>
<th>neither disagree nor agree</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 3. Reasons To Target The Home Center Industry

Our company decided to target the home center industry in order to...

<table>
<thead>
<tr>
<th></th>
<th>Unweighted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>respond to customer requests.</td>
<td>3.3</td>
</tr>
<tr>
<td>expand our customer base.</td>
<td>3.3</td>
</tr>
<tr>
<td>position the company for the future.</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Table 4. Reasons To Target The Wood Products Industry

Our company decided to target the wood products industry in order to...

<table>
<thead>
<tr>
<th></th>
<th>Unweighted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>respond to customer requests.</td>
<td>4.3</td>
</tr>
<tr>
<td>expand our customer base.</td>
<td>3.8</td>
</tr>
<tr>
<td>position the company for the future.</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Tables 3 and 4 show that, contrary to EDI suppliers positioning for the future, Auto. I.D. product and service suppliers target the home center and wood products industries as a response to customer requests. This highlights the need for focused product promotion and marketing of bar code based inventory management systems particularly to the wood products industry.