Participants were asked to rate the importance of 31 training needs subjects on a 5-point scale, going from “not a training need for the company currently” (1) to “a very important need for our company” (5). Results are listed in Table 3. Those instances where significant differences existed between the two states are marked with an asterisk.


table2

Training need Minneapolis Virginia Average Rank Average Rank
Process improvement 3.92 1 3.93 2
Plant maintenance 3.13 4 3.24 4
Marketing & promotion 3.03 4 3.05 4
Total Quality Management 3.15 5 2.70 13
Production management 3.12 6 2.77 11
Lean manufacturing 3.19 7 2.40 22
Product costing 3.08 8 2.78 8
General problem solving 3.09 9 2.73 11
Sales abilities 3.07 10 3.05 2
Marketing 3.07 10 2.83 4
General problem solving 3.07 10 2.83 4
Leadership 2.98 13 2.70 12
Strategic management 2.86 14 2.63 16
Inventory control 2.85 15 2.73 10
Business planning 2.84 16 2.81 7
Product development 2.78 17 2.12 24
Product promotion 2.73 18 2.69 14
Product distribution 2.75 17 2.41 21
Plant financial needs 2.73 18 2.51 20
Finding/market information 2.75 21 2.41 6
Public relations 2.69 22 2.57 18
Branding 2.64 23 2.38 25
Leadership 2.55 24 2.53 19
E-commerce 2.36 25 2.26 27
Clean production technologies 2.30 26 2.18 22
“green” business practices 2.30 26 2.18 22
ORDB 2.26 27 2.12 24
Environmental certification 2.27 22 2.12 24
Wood drying issues 2.15 30 2.36 23
Intermediate training 2.70 19 2.36 24

Table 3: Importance rating of training needs for respondents companies (1=not a training need; 5=very important training need)

Following up on training needs, companies were inquired about the functional area that presented the most important training need. They were provided with a list of 5 functional areas. Results are summarized in Figure 1.

Figure 1: Functional area with greatest training need

Participants were asked about their current providers of training. "Private industry," "trade associations," and "consultants" were the most common providers of training (Figure 2). Universities was the least common response


table2

Table 2: Participants' type of business and size.

Category Companies % Companies %
--- Company Type ---
Primary manufacturer 18 24.7% 31 30.7%
Secondary manufacturer 49 69.5% 95 90.7%
Distributor 5 6.8% 12 11.9%
--- Company Size ---
Small companies (25 or less employees) 46 54.8% 47 46.5%
Medium and large companies (>25 employees) 33 45.2% 51 50.5%

Table 1: Participants' type of business and size.

Results

We were interested in learning what external influences most affect forest products industries. Respondents were asked to rate a list of external business factors according to their effect on their businesses. Results are listed in (Table 2). The highest-rated items were "housing market," "transportation costs," "energy costs," "changing customer demand," and "business closures."

Materials and Methods

During May-July of 2012, a web survey was conducted concurrently in Minnesota and Virginia to assess the educational needs of the Forest Products Industry. In total, 73 companies participated in Minnesota and 101 in Virginia. Participants belonged to many subsectors, ranging from lumber manufacturers and distributors, to secondary manufacturers, such as producers of kitchen cabinets and millwork. Following the survey, 19 companies (10 in Minnesota, 9 in Virginia) were personally interviewed to verify and expand on the results from the survey. Responses were grouped and coded. Company demographics are summarized in Table 1.

Conclusions

Major training needs reported by participants were quality and process control, process improvement, maintenance, sales, marketing, and process improvement; although there were differences in response between regions and with company size. Somewhat surprisingly, environmentally-friendly business practices, such as green building or environmental certification, were rated low in the scale. When asked the single most important area for training, response was consistent, manufacturing operations and marketing and sales were the preferred subject areas. For as training delivery method, companies prefer personal visits and short courses. On-line courses were rated high only in Virginia.

Summary of interview responses. Answers were categorized.

Area to be covered in training manual

Other (please specify)

Logistics and shipping

Procurement of raw materials

Marketing/sales

Marketing

Technology transfer

Quality and process control

General management skills

Lean manufacturing

Manufacturing technology

Human resource management

Financial management

Organizational structure

Marketing

Insurance companies

Other

Figure 2: Organizations providing training

In order to gather more in-depth information and to verify results from the survey, interviews were conducted with executives at forest products firms. Responses were grouped and coded. The most common answers are summarized in Table 4.

Figure 3: Breakdown of business issues that have impacted the forest products industry.

Key findings include that factors that have impacted firms since the start of the recession (2008) were similar between states and included the housing market, transportation costs, energy costs and changing customer demand. Training needs differed by state, size and type of firm. In Virginia, participants felt that being customer focused, flexible, diversified and having good financial management were the key issues. In Minnesota, companies believed having high quality products, good customer relationships, being "lean," controlling costs and being flexible were their factors for success.