Forest Products Industry in a Digital Age: A Look at E-Commerce and Social Media

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Abstract

The business of marketing, promotions in particular, has changed substantially during the past decade. Physical means of promotion (e.g., newspapers, magazines, radio, billboards) have seen a decline, and the use of social media as a marketing tool has increased significantly. While a number of studies regarding the use of social media among Fortune 500 companies have been conducted, very limited information is available regarding social media use in the US forest products industry. This article presents part one of a two-part series and addresses the first three of the following five objectives: (1) identify the type(s) of e-commerce and social media tools forest products companies use, (2) identify and describe the reasons a company chooses to use or not use social media as a marketing tool, (3) identify and describe perceptions held about social media as a marketing tool, (4) examine factors affecting the use of social media marketing in the forest products industry, and (5) examine the effectiveness of social media marketing. The study included a questionnaire that was mailed to US forest products manufacturers in late 2013. Results show that close to 58 percent of respondents currently use some form of social media. The most common social media tool implemented was Facebook. Increasing company exposure and branding were cited as the most important reasons for using social media. Security of sensitive information and the cost of implementing a social media marketing strategy were the top concerns about adopting social media. The information collected from this study can be used in assisting the forest products industry in understanding the social media marketing world and developing an effective social media marketing strategy.

Marketing, and subsequently selling, as a discipline and art is changing at a pace never before observed. According to a study done by the Advice Interactive Group (2013), physical means of promotion (e.g., newspapers, magazines, radio, billboards) have seen a decline since 2011, and the trend is predicted to continue. In 2011, newspapers were used 20 percent of the time for marketing purposes, and by 2013 that number had declined to 17.8 percent. It is predicted that by 2015 newspaper marketing will decline to 15 percent of the marketing portfolio for US businesses. Technological advancements have played a huge role in this trend. The Internet has become an important tool during the past two decades. It has changed the way we obtain information, the way we communicate, and even the way we conduct business (Montague 2011).

E-commerce, which is defined as the sharing of business information, the maintaining of business relationships, and the conducting of business transactions by means of telecommunications networks (Zwass 1996), has become integrated into the everyday life of US consumer culture. It has become so much of a business that certain industries, such as books, music, and movies, have physical stores as a secondary method of sales. One could go as far as to say that physical markets are no longer necessary for producers and consumers to interact (Arano 2008). This has led to pressure...
for companies to merge their sales into the online world (Durfee and Chen 2002).

Since the commercial introduction of the Internet, there have been numerous studies that have examined information technology (IT) and e-commerce adoption in the forest products industry. Vlosky and Gazo (1996) were among the first to look at IT interest in the forest products industry. A series of further studies by Vlosky et al. looked at e-commerce use in various sectors of the forest products industry (Vlosky and Westbrook 2002, Vlosky et al. 2002, Vlosky and Smith 2003). E-commerce adoption by the forest products industry in specific geographical regions also has been examined (Shook et al. 2002, Arano 2008, Montague and Wiedenbeck 2012). However, with the exception of the pulp and paper industry, research has shown that IT adoption in forest products firms has been below the manufacturing sector average (Hewitt et al. 2011).

The Internet, arguably the greatest communication tool ever invented, has led to rapid change in the marketing environment with technology advances (Chase and Knebl 2011). As a result, industries have had to transform how they plan and implement their marketing messages to fit the growing demands of evolving communication technology (Grainger 2010).

One of the most widespread contemporary marketing tools that has emerged as a result of the rise of the digital market is social media. Social media–based exposure depends on the strength of social networks. Boyd and Ellison (2008) classify a social media network as a Web-based service site that allows individuals to (1) construct a public or semipublic profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.

Social media can help promote brands, drive more traffic to Web sites, and provide useful information to customers. The forest products industry has thrived on communicating with and strengthening bonds within a specifically defined community (Koenig 2009). Facebook and Twitter, as well as other social media sites, provide businesses the mechanism needed to further develop social relationships with their customers (Montague 2011). These close relationships were harder to cultivate with multiple customers before the introduction of the Internet and social media. There is an opportunity for the forest products industry to benefit from the enhanced relationships these tools create. With the fate of the proposed hardwood checkoff program (also known as the commodity research and promotion program administered by the US Department of Agriculture [USDA]) uncertain, the hardwood industry lacks a broad and coordinated promotional campaign. For thousands of small hardwood companies, social media marketing offers a heretofore absent opportunity to reach vast numbers of customers and potential customers.

The main goals of this study were to provide an up-to-date overview of the use of e-commerce within the US forest products industry and to examine and describe the industry’s use of social media as a marketing tool. Montague and Wiedenbeck (2012) conducted a preliminary study regarding social media use in the forest products industry using Internet data on forest products producers from two northern and two southern states. This project extends the work of Montague and Wiedenbeck by looking at social media use by the forest products industry across the United States. To fully understand how the Internet and social media are being used by the US forest products industry, this study will (1) identify the type(s) of e-commerce and social media tools forest products companies use, (2) identify and describe the reasons a company chooses to use or not use social media as a marketing tool, (3) identify and describe perceptions held about social media as a marketing tool, (4) examine factors affecting the use of social media marketing in the forest products industry, and (5) examine the effectiveness of social media marketing. This article is part one of a two-part series and will address the first three objectives. Part two will address factors affecting social media adoption and social media effectiveness.

This research will be helpful to business managers who are interested in a template to use to insert their companies into the world of social media marketing. In some cases the company may want to make the leap to Web-based business in general. It also will provide a rudimentary map of the benefits, concessions, and social media options open to a company. This research will be beneficial to not only the forest products sector, but to any business looking to adopt social media as a new or larger component of their marketing mix.

**Materials and Methods**

In 2012, a preliminary study was conducted on Web strategies used by forest products businesses in four eastern states (Montague and Wiedenbeck 2012). The information obtained from this research was used as a guideline for a broader study that encompassed forest products businesses throughout the United States.

The study population consisted of primary and secondary forest products companies in the United States. A random sample of these companies was included in the survey. A target of 400 usable responses from both groups (primary and secondary combined) was set to achieve a 5 percent sampling error at a 95 percent confidence level. A 30 percent response rate was assumed, requiring at least 1,333 companies to be included in the sample. However, to improve the number of surveys returned, a total of 1,600 surveys were mailed. A 2013 directory of forest products manufacturers under the Standard Industrial Classification codes that include lumber, furniture, and other forest products were obtained from Dun & Bradstreet, the world’s leading source of commercial information including databases for businesses.

In 2013, a mail survey involving US forest product companies was produced and distributed by West Virginia University. The survey contained 29 questions and was accompanied by a cover letter explaining the survey.

**Questionnaires and data collection**

The data for this study were collected from a mail survey that was conducted during May 2013.

The Tailored Design Method of Dillman (2000) was used in developing and administering the mail survey. The questionnaire included four sections pertaining to (1) company characteristics (nine questions), (2) e-commerce (four questions), (3) social media use (eight questions), and (4) social media effectiveness (eight questions). Participants were given an opportunity to provide additional comments.
at the end of the questionnaire. Question types included categorical (multiple choice), rating (5-point scales), and open ended. Three mailings were sent to sample companies to ensure a high response rate. The initial mailings of the survey were sent in May 2013. A follow-up reminder postcard was sent 2 weeks later, and finally another copy of the survey was sent 4 weeks after the initial survey.

Of the 1,600 potential respondents, a total of 596 surveys were returned owing to undeliverable addresses, refusals, and respondents who did not qualify. The total number of usable responses was 166, which accounts for a 16.5 percent response rate.

Data measures and analysis
In addition to answering questions referencing firm characteristics, respondents were asked to rate how important 12 factors were in determining whether to adopt e-commerce using a 5-point scale anchored by 1 (not important) and 5 (very important). The responses for each of these 12 factors were submitted to a 1-sample t test to determine which, if any, of the factors were considered to be more or less important than the intermediate level of importance associated with a response of “3.” Pearson correlation analysis was conducted to help evaluate the correlation between the more important factors as indicated by the importance ratings assigned by respondents.

Respondents also were asked to rank a list of nine concerns that their company might have with adopting e-commerce on a 5-point scale anchored by 1 (not a concern) and 5 (major concern). The same scale was used to rank nine challenges companies might have using social media. To obtain a better understanding of social media usage, respondents were asked to indicate how often company social media accounts were updated on a 6-point scale anchored by “never” and “hourly.” Last, respondents were asked to rate their level of agreement with a predetermined list of 12 statements concerning social media as a marketing tool on a 5-point scale anchored by 1 (strongly disagree) and 5 (strongly agree.) Simple descriptive statistics were used to evaluate responses to each question. We conducted t tests (1-sample; \( \alpha = 0.05 \)) to determine those statements/factors that were overall judged to be significantly different from the neutral score of “3” in evaluating the responses to these questions.

Assessment of potential nonresponse bias
To address the possibility of nonresponse bias, the distribution of early respondents was compared with the distribution of late respondents based on three variables (i.e., firm size, years in business, and net revenue) using the Kolmogorov-Smirnov test (K-S test). The basic assumption is that late respondents are a proxy for nonrespondents (Lin and Schaeffer 1995). Results of the K-S tests indicate that the distribution of the early respondents with respect to firm size (K-S statistic = 0.16), years in business (K-S statistic = 0.04), and net revenue (K-S statistic = 0.15) was not statistically different from that of the late respondents.

Results and Discussion
Firm characteristics
Each respondent was asked to provide key demographic characteristics for their company. This included information on the manufacturer’s location, products made, sales, and number of employees. The information provided on employees was then used to group companies into small (1 to 19 employees), medium (20 to 99 employees), and large (100 or more employees) size classes.

Responses were provided by the companies’ presidents/ chiefs executive officers/owners (60.6%), managers (14.4%), members of the marketing department (10.6%), and other personnel (14.4%). Respondents indicated having manufacturing locations in 39 states. Just over half (50.9%) of the respondents indicated having multiple manufacturing locations. The average age of the responding companies was 51.5 years and ranged from 4 to 159 years old. Of the 165 companies that provided employee information, 13.9 percent were classified as small-sized firms, 38.8 percent were classified as medium-sized firms, and 47.3 percent were classified as large-sized firms.

Respondents were asked to identify whether their company was a primary or secondary manufacturer. Of the 158 respondents who indicated their industry classification, 51.3 percent were primary manufacturers, 36.7 percent were secondary, and 12 percent were both. Respondents also were asked to indicate whether their company made products for industrial or consumer markets. Of the 164 respondents who indicated their product category, 35.9 percent indicated their company produced industrial products, 47.6 percent produced consumer products, and 16.5 percent produced both industrial and consumer products. The majority of the respondents (65.8%) reported their company’s 2012 net sales to be over $10 million. The second part of this article series will address the impact firm characteristics have on social media adoption and social media effectiveness.

E-commerce use and importance
To understand the industry’s current e-commerce trends, company managers were asked a series of questions to determine the type of e-commerce tools used and their perceptions toward e-commerce. Respondents were given a predetermined list of e-commerce tools (Web site, e-mail, online sales, online purchases, Internet banking, online marketing, other, and none) and asked to choose all tools that were used by their company. Almost all of the respondents indicated using Web sites (96.4%) and e-mail (97%) as e-commerce tools (Fig. 1). A majority of the respondents indicated using Internet banking (59.6 %) and online marketing (50%). Only one respondent indicated not using any of the listed types of e-commerce tools.

Comparison of the responses provided by primary wood products manufacturers, secondary (value-added) wood products manufacturers, and manufacturers that are vertically integrated and produce both primary and secondary products shows usage rates for the different e-commerce tools to be similar among these industry segments.

While it seems as if the forest products industry has embraced e-commerce as a way to conduct business, it is important to note that only 27.1 percent indicated using online sales. Previous studies have found that although there is prevalent use of the Internet, Web sites, and e-mail within the forest products industry, application of other e-commerce tools (e.g., online sales and trading of wood products) has yet to be realized on a large scale (Holmes et al. 2004, Arano 2008, Hewitt et al. 2011). According to previous studies (Vlosky 1999, Arano 2008, Montague 2011), forest products companies are apprehensive to adopt...
Ratings were obtained from respondents (on a 5-point scale anchored by 1 = not important and 5 = very important) as to the importance of 12 factors in determining whether to adopt e-commerce. Based on the means of ratings assigned by respondents, increasing sales was the most important reason for adopting e-commerce (mean importance rating = 4.25), followed by greater access to the company by potential customers (4.23), and enhanced image of the company (4.19). The distribution of importance ratings given to the 12 factors by respondents is shown in Table 1. Seven of the 12 factors were given importance ratings of 4 or 5 (corresponding to “important” and “very important”) by more than 60 percent of the respondents (Table 1). Results of $t$ tests indicate that the importance assigned to 11 of the 12 factors by respondents is different (in all cases higher, or more important) from the intermediate level of importance associated with a score of 3. The only factor not judged to be of elevated importance was “lower prices for customers.” This indicates widespread recognition of the value of e-commerce in helping companies meet key strategic marketing goals.

Compared with results obtained in a survey of US hardwood sawmills in 2001 (Vlosky and Smith 2003), it seems companies now are grasping and pursuing e-commerce functionalities that go beyond information sharing and into the realm of direct sales and service. In 2001, sales ranked as only the ninth most recognized benefit of e-commerce (Vlosky and Smith 2003). The two factors that arguably are most closely related to increasing sales (the factor deemed most important overall in this study) are “greater exposure to potential customers” and “greater access to the company by potential customers,” which had the fourth and second highest mean importance ratings (Table 1); their ratings were the most highly correlated with the ratings for increasing sales (Pearson Correlation Coefficients of 0.81 and 0.76, respectively).

There may be many other reasons why companies choose not to use e-commerce tools as part of their business strategy. Respondents were also given an opportunity to indicate concerns they had with adopting e-commerce. Nine factors were posed to respondents as potential e-commerce concerns for them to rate on a 5-point scale (anchored by 1, not a concern, and 5, major concern). It was not surprising to see that security of sensitive information was rated the highest concern for companies (3.76). On a regular basis, news of hackers, viruses, and other Internet security breaches is broadcast around the world. E-commerce cost, loss of contact with customers, and the availability of technical resources were the next three most important concerns (with mean scores of 3.63, 3.42, and 3.41, respectively). One-sample $t$ test results indicated these four highest ranking concerns were statistically different (in all cases higher, or more important) than the intermediate level of importance associated with a score of 3.

A survey of pulp and paper and wood products companies conducted 15 years earlier (Vlosky 1999) indicated that...
security of sensitive information was the most important concern then, as well. In the earlier years of e-commerce and social media, training of personnel and concern about how to change established procedures to integrate e-business were the second and third most frequently cited challenges (Vlosky 1999). In the current survey, respondents were least concerned about e-commerce being a passing fad (1.64) and needing to restructure the company (2.33). In fact, these two concerns were statistically different from 3, indicating they were judged, overall, to be relatively unimportant in the decision-making process surrounding the adoption of e-commerce.

While conducting the preliminary study in 2012 (Montague and Wiedenbeck 2012), it was determined that Web content varied dramatically between forest products companies. Previous research showed that although some companies had Web sites, many were often stagnant and did not have much content. When they were asked to indicate company Web site content from a predetermined list, the majority of respondents to the 2013 survey indicated that their company Web site included product pictures (94.5%), product literature (82.3%), and customer service contact links (81.7%).

Social media use and importance

Most of the responding companies (58%) have adopted some form of social media use into their marketing strategies. Of these companies, 89.5 percent adopted social media within the last 5 years, with the peak for adoption being 2011. Respondents who use social media indicated that Facebook was the most used social media site, followed by LinkedIn (Fig. 2). It is important to note that the upsurge of social media adoption by the respondents coincides with the introduction of Facebook company pages in late 2007 (Richmond 2007). In the year after company pages were introduced, the total number of Facebook users increased by 350 percent (Blagwat and Goutam 2013). While each social media site allows users to interact with the public, each is distinctive in the services offered. LinkedIn focuses on professional information, encouraging users to create abbreviated curriculum vitae and establishing professional connections (Skeels and Grudin 2009). Facebook, on the other hand, focuses more on social connections, creating status updates on personal experiences, and sharing photos with friends. The majority (62.7%) of the companies who have used social media also have a dedicated social media person, and yet responses indicate that on average their social media sites only get updated on a monthly basis or less. Research shows that message frequency (the number of times an average person or household is exposed to a company or brand’s message) is very important in achieving consumer recall and attitude change (Zielske 1959, Batra and Ray 1986, Broussard 2000, Belch and Belch 2003, Kotler and Armstrong 2006). Research also indicates that online advertising is more likely to be seen than television advertising and that increasing the frequency of online advertising efficiently improves branding results (Broussard 2000, Belch and Belch 2003).

According to Foux (2006), social media is perceived by consumers as the most trusted source of information available. However, company involvement is important for social media to be an effective marketing tool. Maintaining fresh content on company social media sites is considered a key to being successful at engaging current customers and potential customers (Kaplan and Haenlein 2010). One of the reasons that social media campaigns fail is that companies are not fully committed to spending their time and thoughts on being actively engaged in social media marketing (Vaynerchuk 2011). One of the ways for companies to be actively involved is updating their social media accounts. This will help companies expand their influence and strengthen their relationship with their current customers. Pradiptarini (2011) also suggests that it is important to maintain the site with content that is relevant to the customers’ main interests. Regularly updating social media accounts can ensure that the content will remain relevant to customers.

Although most of the respondents’ sites only get updated on a monthly basis, results do show that Facebook and Twitter, which are more interactive sites, get updated more often (Fig. 2). The social media options model of Weinberg and Pehlivan (2011) is based on a two-factor matrix that includes information depth and information "half-life." The model characterizes microblogs (e.g., Twitter) and social networks (e.g., Facebook) as having short information half-

Table 1.—Relative importance assigned by respondents to 12 factors that may influence their decision on whether to adopt e-commerce.a

<table>
<thead>
<tr>
<th>Reasons for adopting e-commerce</th>
<th>Mean (SD)</th>
<th>Proportion (%) assigning a rating of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 or 5 (important or very important)</td>
<td>1 (not important)</td>
</tr>
<tr>
<td>Increase sales</td>
<td>4.25 (0.98)</td>
<td>75</td>
</tr>
<tr>
<td>Greater access to the company by potential customers</td>
<td>4.23 (1.02)</td>
<td>75</td>
</tr>
<tr>
<td>Enhanced company image</td>
<td>4.19 (0.97)</td>
<td>77</td>
</tr>
<tr>
<td>Greater exposure to potential customers</td>
<td>4.19 (1.07)</td>
<td>75</td>
</tr>
<tr>
<td>Improve customer service</td>
<td>4.08 (1.00)</td>
<td>73</td>
</tr>
<tr>
<td>Improve competitiveness</td>
<td>3.94 (1.10)</td>
<td>67</td>
</tr>
<tr>
<td>Increase customer retention</td>
<td>3.86 (1.21)</td>
<td>67</td>
</tr>
<tr>
<td>Increased access to industry information</td>
<td>3.75 (1.08)</td>
<td>39</td>
</tr>
<tr>
<td>Lower cost of doing business</td>
<td>3.70 (1.18)</td>
<td>31</td>
</tr>
<tr>
<td>Greater access to vendors</td>
<td>3.55 (1.11)</td>
<td>51</td>
</tr>
<tr>
<td>Faster product and service delivery</td>
<td>3.50 (1.23)</td>
<td>48</td>
</tr>
<tr>
<td>Lower prices for customers</td>
<td>3.08 (1.25)</td>
<td>57</td>
</tr>
<tr>
<td>Overall</td>
<td>3.87 (1.15)</td>
<td>61</td>
</tr>
</tbody>
</table>

a n = 166. Values are based on a 5-point scale where 0 = not important and 5 = very important.
lives best suited to shallow and deep information content, respectively. Companies with a dedicated social media person must regard social media marketing as being as important as traditional marketing. Social media positions should be filled with individuals who are experienced and capable of handling nontraditional marketing. Having one or more people on the company’s highest level management team who are committed to integrating social media into current marketing strategies is essential for success.

The top three reasons cited by companies for using social media were (1) to increase exposure, (2) to establish branding, and (3) to improve sales (Fig. 3). Studies have shown that incorporating social media into marketing plans has its benefits (Litton et al. 2008, Kaplan and Haenlein 2010, Bruno et al. 2011). With these documented cases of success and the further evidence that social media is widely used among consumers, it was important to determine why some companies still choose not to adopt social media. A series of questions were asked to gain a better understanding of nonadopters and the social media challenges and perceptions that both nonadopters and adopters may have.

The 70 respondents (42%) who do not currently use social media were presented with a series of statements related to their nonuse of social media. Most of these companies (57%) have no plans of using social media in their marketing strategies, while close to 30 percent are investigating social media use. The rest of the respondents indicated that they either used social media in the past but it no longer met their needs (2%) or they were in the process of developing a plan (11%).

Prior research has shown that there are challenges that come with using social media. Although respondents to this survey did not identify any major challenges (mean rating of 4.0 or higher on a scale of 1 to 5 with 5 representing a major concern) when it comes to using social media, return on investment to cover costs (3.80), generating member/customer activity (3.62), having staff to manage social media sites (3.29), getting members or fans (3.27), and concerns about site security (3.21) were identified as being somewhat problematic (Fig. 4). These five challenges were found to be of elevated importance as compared with the neutral rating of 3. Although it is clear that—for better or for worse—social media is very powerful, many executives are reluctant or unable to develop strategies and allocate resources to engage effectively with social media (Kietzmann et al. 2011). Companies also have difficulty generating and/or maintaining member/customer activity on their sites and, unfortunately, many may give up before they have given their strategies a chance to be successful.

Finally, companies that used social media were asked about their perceptions regarding the use of social media as a marketing tool. Respondents who use social media agree that it has emerged as an important marketing tool (4.04), it offers an effective way to reach new customers (4.01), and it offers an effective way to interact with new consumers (3.93). They did not agree with the statements that social media is overhyped as an effective marketing tool (2.58)—based on 1-sided t test results this statement was significantly different from the neutral score of 3 with respondents generally disagreeing with the statement. The other statements with mean ratings lower than 3 were “our company is skeptical about the effectiveness of social media” (2.84) and “social media is a central component of their company’s marketing efforts” (2.95). Analysis of the ratings for these two statements did not, however, show significance in the 1-sided t test (H_0 = 3).

Figure 2.—Frequency of site updates by users of the most commonly employed social media tools/products.
Figure 3.—Proportion of respondents using social media (n = 89) indicating they agree that their principal social media forum addresses listed company goals.

Figure 4.—Level of concern about different challenges that may arise in implementing social media based on 5-point Likert scale with 1 = “not a concern” and 5 = “a major concern” (n = 166). The error bars show the standard deviation of responses for each challenge. ROI = rate on investment.
Study limitations

Limitations apply to the results obtained from this study as is the case with mail surveys in general (Alreck 2004). The results obtained from this study were most likely received from a single representative within each responding company. Although the majority of the responses received were from owners and/or members of management, the responses may not necessarily reflect those of other decision makers in the company. The sampling method used for the survey in our study was simple random sampling and assumes that each member of the population will have an equal chance of being included in the sample. By applying simple random sampling, sampling bias is avoided, but the results can be vulnerable to sampling error because the groups (i.e., primary manufacturer, secondary manufacturer, both) in the sample selection may not reflect the makeup of the groups in the population. In addition, given the response rate of this study, one should be cautious in generalizing its findings.

Conclusions

Data on the characteristics of US forest products companies and the e-commerce/social media tools and strategies employed to remain competitive were collected through a mail-based survey conducted in 2013. The 166 respondents to the written survey provided insights into the use of e-commerce and social media as a marketing tool for forest products companies. Although e-commerce and social media use is commonplace among many businesses, limited research has been conducted on its use by the US forest products industry.

The digital revolution has changed the way people do business. E-commerce or Internet-based sales and purchasing has become an integral part of everyday life for US consumers. For modern businesses, e-commerce is much more than a tool, it is a complete business strategy (Meng 2010). Results from this study show that e-commerce has gained a significant foothold in the forest products industry. All but one respondent indicated using e-commerce as part of the company’s business strategy. Web sites, e-mail, and online supply purchases were listed as the top three e-commerce tools used. Increasing sales was listed as the most important reason companies adopted e-commerce into business strategies.

In the last decade, companies have also changed the way they interact with consumers. Direct marketing (i.e., commercials) is no longer the sole marketing tool for companies. According to Palmer and Koenig-Lewis (2009), a company’s use of social media marketing can result in a wide range of strategic and operational benefits and bridge gaps left by direct marketing. A majority of the respondents in this study use some type of social media tool and believe social media increases company exposure, assists in branding, and improves sales.

Although there may be some concerns and challenges associated with using e-commerce and social media, companies all over the world have responded to the strategic and operational benefits attributed to using this media as marketing tools. Some of these benefits include gaining insights into consumer behavior and preferences, urging consumers to share a brand’s message as word of mouth to their peers, increasing brand message exposure, and driving traffic to corporate Web sites (Palmer and Koenig-Lewis 2009, Trusov et al. 2009, Kaplan and Haenlein 2010).

How quickly and effectively the US forest products industry responds to the migration to the digital marketplace by United States and international consumers, by manufacturers of competing products made of materials other than wood, and by wood products manufacturers in other countries is likely to impact how the industry will fare in what might be called Phase 2 of the Era of Globalization. The communication reach of the Internet provides a means by which smaller and geographically limited companies should seek to grow their markets. According to the American Forest and Paper Association (2012), the industry accounts for approximately 5 percent of the total US manufacturing gross domestic product. It contributes about $175 billion in products and 900,000 jobs annually. Given the industry’s contribution to the US economy, it is important to many states, communities, and individuals that the industry embraces digital marketing promptly and strategically to remain competitive.

Acknowledgment

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Literature Cited


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