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Social Media Use in the Wood Products Industry: Impact on the Consumer Purchasing Process



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Abstract

Numerous studies have investigated the impact social media has had on business performance. However, until recently, there has been limited research regarding social media in the U.S. wood products industry. In 2013, a mail survey was conducted to investigate the use of social media as a marketing tool and to examine the factors affecting its use in the wood products industry. Although this research yielded valuable information, the consumer side of social media use was not studied. Thus, a follow-up study was conducted in 2017 through an online survey to determine how social media marketing impacts the decision-making process of wood products consumers. The survey also examined how respondents use social media to gather information about natural resources and related activities. The top three natural resource activities that respondents used social media to gather information about were (1) natural resource recreation, (2) natural resource disaster preparedness, and (3) natural resource related hobbies. Out of 928 respondents, 58% indicated using social media to gather information before purchasing wood products. The top three social media outlets used for gathering data were Facebook, YouTube, and Twitter. Respondents also listed having information available on the internet and having prior knowledge or awareness of the brand as important factors that influenced their decision to purchase a wood product.

Keywords: marketing, social media, wood products, purchasing decision-making process, natural resources

1 Introduction

The introduction of social media has changed society in numerous ways (Tardanico 2012, Olsen & Christensen 2015, Baskaran et al. 2017, Phoon 2017). One of the most substantial changes has been in the way people communicate. Social media platforms have emerged as dominant digital communication channels that allow

consumers to gather and share information, interact with corporations and other consumers, and evaluate brands they are considering purchasing or have purchased (Qualman 2010, Chappuis et al. 2011, Hudson et al. 2016). This is a very important because consumer involvement through social media is a key element in marketing (Hajli 2014).

Marketing communications using social media have been used by companies around the world to communicate with customers without any restrictions in time, place or medium (Kim & Ko 2012). The ability to communicate freely about products, brands and companies has fostered the sense of belonging among consumers through interpersonal interactions and dialogue (Baird & Parasnis 2011, Kim & Drumwright 2016). These activities produce word-of-mouth (WOM) and aid in the consumer purchasing decision process.

Viral marketing, consumers' electronic word-of-mouth (eWOM) on social media sites, can spread exponentially

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and allow transmission of messages to thousands and even millions (Vilpponen et al. 2006, Gunawan & Huarng 2015). Because of this, social media sites can be an important factor that influences consumers' purchasing decisions (Gunawan & Huarng 2015). Studies of the impact of social media on consumer purchasing behavior have indicated that trust in vendors is a critical factor that needs to be developed via social media communications to affect on-line purchases (Hajli 2014). The perceived usefulness of a potential vendor's social networking sites also has a large influence on purchase intentions and behavior (Hajli 2014).

With the increased use of social media in all aspects of everyday life and the continuing change in its use for business purposes, it is important to analyze the effects of social media on business strategies. Since the commercial introduction of the internet, there have been numerous studies that have examined the internet and digital, social media and mobile marketing. These studies have shown that the internet has the potential to help consumers by making search easier and choice better (Lamberton & Stephen 2016). However, in terms of the wood products industry, adoption of technology has been slow compared to other industries. Unfortunately, research of technology and internet use in the wood industry has been at a similar pace. Vlosky & Gazo (1996) were among the first to look at Information Technology (IT) interest in the wood products industry. A series of subsequent studies by Vlosky et al. (2002) looked at e-commerce use in various sectors of the wood products industry (Vlosky & Westbrook 2002, Vlosky et al. 2002, Vlosky & Smith 2003). E-commerce adoption by the wood products industry in specific geographical regions also has been researched (Shook et al. 2002, Arano 2008, Montague & Wiedenbeck 2012). With regard to social media use in the wood products industry, Montague et al. (2016) and Gazal et al. (2016) recently examined social media use among the wood products sector. However, all of these papers specifically examined the manufacturing sector of wood products; studies of consumer use of social media to gather information about wood products before purchasing are lacking.

As discussed earlier, social media plays an important role in society and commerce, and the role it has in the wood products industry has expanded substantially during the last decade. However, key questions remain unanswered. This study expands on previous research

conducted on social media use by the wood products industry. As opposed to the earlier study, the main goal of this study is to provide an overview of consumer use of social media when making wood product purchasing decisions. To fully understand how consumers use social media during the wood product purchasing process, this study: (1) identified the type(s) of social media sites/apps used in the wood product purchasing process, (2) identified and described how and why consumers use social media, (3) identified and described the perceptions held about social media and traditional media, (4) identified and described key factors that influence and motivate consumers to buy wood products on social media and (5) examined the effectiveness of social media during the wood purchasing decision process.

This information is needed by businesses that are concerned about how consumers use social media platforms to gather information about wood products. It gives a fundamental layout of current social media consumer trends as well as consumer attitudes and perceptions about using social media while researching a product. The information gathered from this study can be valuable to companies that already have a social media presence as well as those wishing to incorporate social media into their company's marketing strategy. This research is not only beneficial to the wood products industry, but to any business interested in learning about the role of social media in the product purchasing decision making process.

2 Materials and Methods

2.1 Questionnaire and Data Collection

An online survey was conducted in the fall of 2017 to collect information on social media use among U.S. consumers who purchased wood products in the last 5 years. The survey, designed by the Division of Forestry and Natural Resources at West Virginia University, was conducted by Survey Sampling International (SSI), which is a fee-for-service company that provides market research data collection services. SSI uses panel-based online surveys for data collection. Because we knew SSI had participated in earlier surveys of wood products consumers (e.g., Cai and Aguilar 2014), they were engaged to conduct this survey. SSI currently maintains about 17 million panel participants in over 90 countries (SSI 2018). An online panel is "a sample of persons who

have agreed to complete surveys via the Internet” and is selected mostly through probability sampling or in some cases through nonprobability-based recruitment (AAPOR 2007). SSI’s system for providing a sample that is representative of the target population involves using “a three-stage randomization process in matching a participant with a survey they are likely to be able to complete. First, participants are randomly selected from SSI’s panels to be invited to take a survey, and these participants are combined with others entering SSI’s Dynamix™ sampling platform after responding to online messaging. A set of profiling questions is randomly selected for them to answer (these are methodologically correct questions, never affirmation questions) and upon completion, participants are matched with a survey they are likely to be able to take, using a further element of randomization” (SSI 2018). Panel-based, online survey research has grown rapidly in the past decade and has been used in many fields to collect survey data (Callegaro et al. 2014). It also has been employed in a number of studies related to forest products marketing. For example, Thompson et al. (2006), Aguilar and Cai (2010) and Cai and Aguilar (2014) have used SSI data to look at the effects of environmental labeling consumer preferences for wood products and perceptions of consumers about corporate social responsibility in the wood products industry, respectively.

The questionnaire used in this research was comprised of three sections and had a total of 32 questions. Data collected included information on wood products purchases in the last 5 years, social media use overall, social media use related to wood products purchasing decisions and demographic characteristics. Participants were given an opportunity to provide additional comments at the end of the questionnaire. Question types in this survey were categorical (multiple choice), rating (interval, 5-point scales) and open ended.

SSI administered the questionnaire to a random sample drawn from its online panel of U.S. participants 18 years and older. Replicating the sample sizes used from the studies of Aguilar and Cai (2010) and Cai and Aguilar (2014), 1,000 observations were targeted for this study. In addition, a sample of 1,000 was targeted to achieve a 3% sampling error at 95% confidence level. SSI continued to collect responses until the targeted number of responses was met.

A total of 1,082 responses were collected from the survey. However, 154 respondents did not purchase any

wood products in the last 5 years, resulting in a total of 928 usable responses. While collecting probability-based internet panel data, such as that used in this study, is cost-effective and able to access large and diverse samples quickly (Hays et al. 2015), there are potential issues with regard to sample representativeness and nonresponse bias (Couper 2000). To address the issue of nonresponse bias, we followed the approach used by Cai and Aguilar (2014) by comparing the responses of those who completed a questionnaire and those who did not complete a questionnaire. A method for testing nonresponse bias for mail-based surveys is to test early respondents against late respondents. The basic assumption is that late respondents are a proxy for nonrespondents (Lin and Schaeffer 1995). The approach by Cai and Aguilar (2014) follows the same theory but equates the respondents who did not complete the questionnaire to nonrespondents. Responses to the question of whether respondents used social media in their purchasing decisions related to wood products were used to test for bias. The result of the Kolmogorov-Smirnov test (K-S test) indicates that the samples came from the same distribution (K-S statistic = 0.71). Thus, the responses of those who completed a questionnaire are not statistically different from those that did not complete a questionnaire regarding social media use in wood products purchasing decisions.

To address whether our sample is representative of the U.S. population, we compared the socio-demographic characteristics of our sample to US Census data. Cai and Aguilar (2014) used the same approach since response rate could not be calculated given the nature of the online panel data used. In most cases, our sample is comparable to the US Census data. For example, 50.3% of our sample is female, which is comparable to the US Census data gender results (50.8%, US Census Bureau 2016). With respect to annual household income, 57.7% of our sample reported income over \$50,000, which is comparable to US census findings (57%). With respect to race, our sample is also comparable to that of the US Census data – 73.8% of our sample are white compared to 76.9% for the US census data. Our sample is slightly more educated than the census data – about 80.4% of our sample reported having had some college education or having earned a college degree while the United States Census Bureau (2016) reported about 60.3% of the US population having the same educational attainment. This may suggest that our sample would be more likely to use the internet and social media.

2.2 Data Measures and Analysis

In addition to answering questions referencing demographics, respondents were asked to rate how important six factors were in influencing their decision to purchase a wood product using a 5-point scale anchored by 1 (not important) and 5 (very important). Respondents also were asked to rate their level of agreement with a predetermined list of five statements concerning the advantages of using social media compared to traditional media when buying wood products on a 5-point scale anchored by 1 (strongly disagree) and 5 (strongly agree.) Finally, respondents were given a list of five purchasing decision stages and asked to rank how each stage had been affected by social media on a 5-point scale anchored by 1 (least affected) and 5 (most affected). Simple descriptive statistics used for ordinal data (medians, frequency distribution of responses) were used to evaluate responses to each question and *t* tests (1-sample; $\alpha = 0.05$) were conducted to determine those statements that were overall judged to be significantly different from the neutral score of 3.

The Kruskal-Wallis non-parametric, rank-based test was used to assess the likelihood that the distributions of responses to questions that used the 5-point scale were similar for different groups of respondents (based on age group, gender, education, race, etc.). The Wilcoxon scores were compared among groups for several of the significant Kruskal-Wallis tests to understand the relative importance levels assigned to a characteristic. Social media usage levels and respondent age groups are examples of the characteristics tested.

2.3 Study Limitations

There are limitations to our work that are similar to other research employing online surveys. Although panel surveys can be administered quickly and are usually cost efficient, there are some disadvantages. Because results were obtained from an established panel, the responses may not necessarily reflect those of other U.S. consumers as recent studies based on online surveys have acknowledged biases toward “younger age, white, non-Hispanic ethnicity, literate, non-visually impaired, and persons with low time costs” (Craig et al. 2013). In addition, a survey design error failed to filter out respondents that did not purchase wood products and resulted in a lower than desired number of useable responses.

3 Results and Discussion

3.1 Demographics

Each respondent was asked to provide standard demographic information. This included information about age, race, education, income, community type, home ownership and land ownership. As stated earlier, the portion of male respondents (49.7%) and female respondents (50.3%) were almost equal. Individuals aged 30-49 years old represented the largest group of respondents (37.6%) followed by individuals in the 50-64 age group (25.5%), the 18-29 age group (25.4%) and the 65 and older age group (11.5%). When asked to indicate their race, 47.5% identified themselves as Caucasian/White, 18.3% identified as Black/African American, 15.6% identified as Asian/Pacific Islander, 1.1% identified as Native American/American Indian and 4.2% identified as “Other”.

When asked about income, 32.9% of the respondents indicated income of \$75,000 or more, 21.8% indicated income of \$50,000-\$74,000, 21.4% indicated income of less than \$30,000 and 20.9% indicated income of \$30,000-\$49,000. The majority of the respondents were college graduates (60.9%) and homeowners (69%). When asked about the community in which they resided, 48.1% indicated living in suburban areas, 32.6% indicated living in rural areas and 19.3% indicated living in urban areas. Respondents were then asked if they owned 10 or more acres of land. Only 16.9% indicated land ownership of 10 or more acres.

3.2 Wood Products Purchase/Usage

To understand current wood products purchasing and usage trends among consumers, respondents were given a predetermined list of industrial/do-it-yourself (DIY) wood products (lumber type products, pallets, panel type products, and others) and consumer wood products (furniture, flooring, cabinets, novelties, and others) and asked to indicate which of these products they had purchased during the prior 5 years. A majority (61.6%) of the respondents indicated buying lumber in the past five years (Figure 1). Panels were the next most purchased industrial/DIY product (42.1%), followed by pallets (18%) and “other” (1.3%). Some of the “other” industrial/DIY products listed were scrap wood, fence posts, garden steps and cardboard.

Consumer wood products purchases were led by furniture purchases (68% of the respondents). Flooring

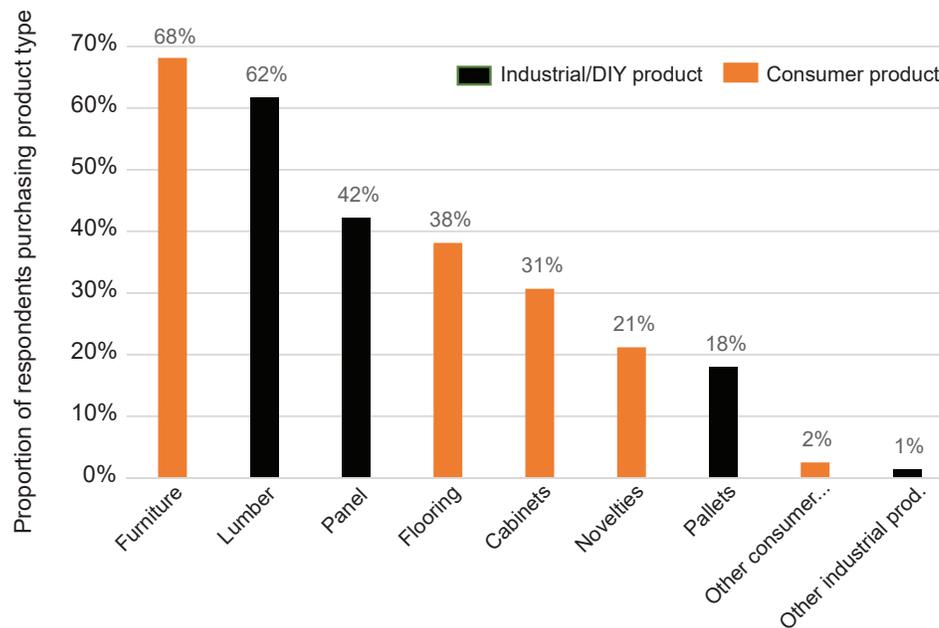


Figure 1. Proportion of respondents indicating they purchased various industrial/DIY and consumer wood products during the previous 5 years.

was the next most purchased consumer product (38%), followed by cabinets (21.1%), novelties (21.1%) and “other” (2.5 %). Some of the “other” items listed were shelving boards, doors, marine wood, bedding and trim.

In reviewing the data and comments left by the respondents it appears that some consumers have a limited view of wood products and uses. One respondent stated that “boards are just boards.” Other respondents stated “I don’t do DIY projects in wood” and “I get information I need at lumber yard(s).” This indicates that some respondents think of “wood products” as only lumber, plywood and other products that are considered primary products and do not consider furniture, cabinets and other products that are considered secondary products as “wood products”. This also may indicate a need for more consumer education and product promotion from wood products manufacturers about the many types, benefits and uses of wood products.

3.3 Social Media Use

To determine social media use among consumers, each respondent was asked to indicate whether they used social media. They then were given a predetermined list of social media sites/types and asked to select all those used. A majority of respondents (88.1%) use social

media. Facebook, YouTube, Twitter, photo sharing sites and LinkedIn were listed as the top five social media sites/types used by the respondents (Figure 2). Of note, LinkedIn is the only site for which the usage by the youngest age group (those ages 18-29) is lower than for the three older age groups. LinkedIn focuses on professional information, encouraging users to create abbreviated curriculum vitae and establishing professional connections (Skeels and Grudin 2009), something likely less utilized by the youngest age group. Geo-location sites, Myspace, forum sites, blog sites and “other” sites were listed as the five least used social media sites/types. Other social media research shows similar results when looking at the most popular U.S. sites/types (Montague et. al 2016, Chaffey 2016). According to Chaffey (2016), social media networks are so well established that there are now a core “top 5” social networks which stay on the most popular list year after year. Facebook is, without question, the most popular site in the U.S. and worldwide, with YouTube the second most popular site (Nadeem et al. 2015, The Statistics Portal 2018).

To gain an understanding of current consumer social media trends, respondents were asked a series of questions to determine the reasons for social media use, types of activities conducted on social media and the

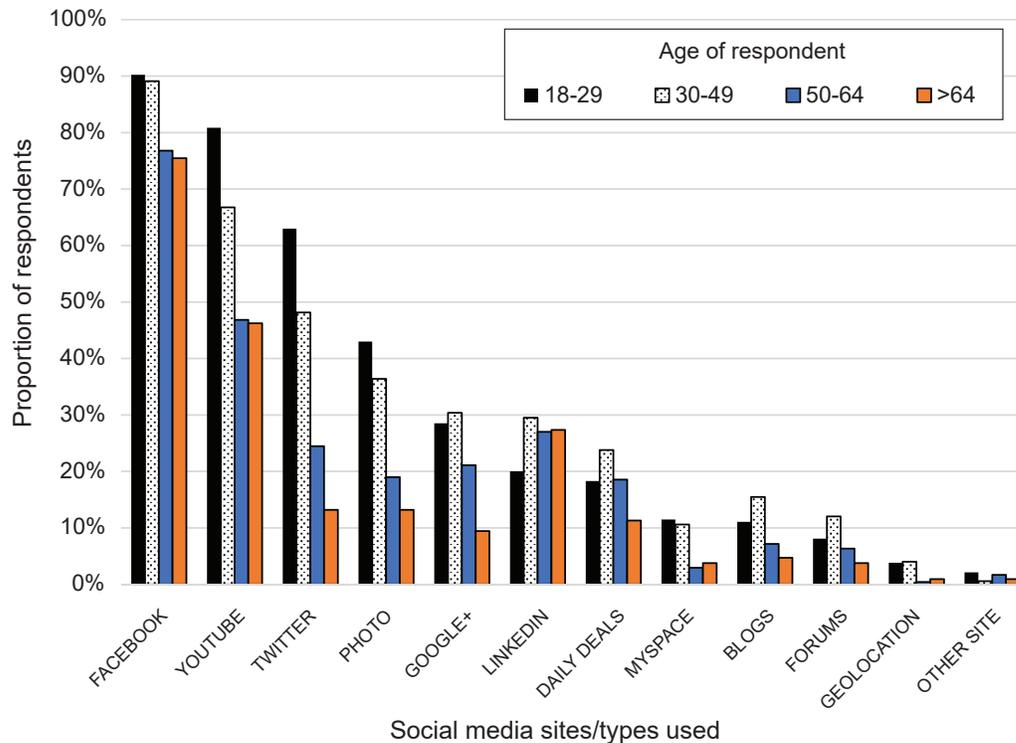


Figure 2.--Proportion of responding consumers in different age groups indicating they used the listed social media sites/types.

amount of time spent on social media and using mass media. Respondents were given three separate predetermined lists to describe their reasons for social media use and their social media activities and were asked to select all that applied. The top three reasons for using social media were (1) to network with friends, (2) for entertainment purposes, and (3) to gather information (Figure 3). Interaction with peers is a fundamental human act, and studies agree that peers are the primary agents of socialization, even before family members (Shim 1996, Köhler et al. 2011, Wang et al. 2012). Of the predetermined list of activities given, respondents indicated that "liking" photos or other content related to products, sharing product contents (photo, videos, etc.) and commenting on personal experiences with products were the top three activities they participated in as social media users.

In this research we thought it relevant to also examine respondent use of social media to gather information about other natural resources and related activities, since these usage characteristics might provide insights on where wood products vendors might place advertisements to receive maximum exposure. Respondents were given a predetermined list of natural resource re-

lated activities and asked to select all that applied. The top three natural resource activities that respondents used social media to gather information about were (1) natural resource recreation, (2) natural resource disaster preparedness, and (3) natural resource related hobbies (Figure 4). Although gathering information about natural resource recreation was listed as the top activity, it should be noted that using social media to gather information about natural disasters has increased substantially in the past decade (Gao et al. 2011, Imran et al. 2013, Luna & Pennock 2018). In recent years, Facebook, Twitter, and other social media sites have been used to spread news about casualties and damages, donation efforts and alerts and to share multimedia information such as videos and photos during the California wildfires and the hurricanes that impacted the southeastern U.S. (Hughes & Palen 2009).

Respondents were then given two separate predetermined lists to indicate hours spent per week using social media sites and hours spent per week using mass media (TV, radio, magazine, newspaper, etc.) The majority of the respondents (58.9%) used social media sites approximately 6 hours or less per week. Of those respondents, 48.6% only used social media 1-3 hours a

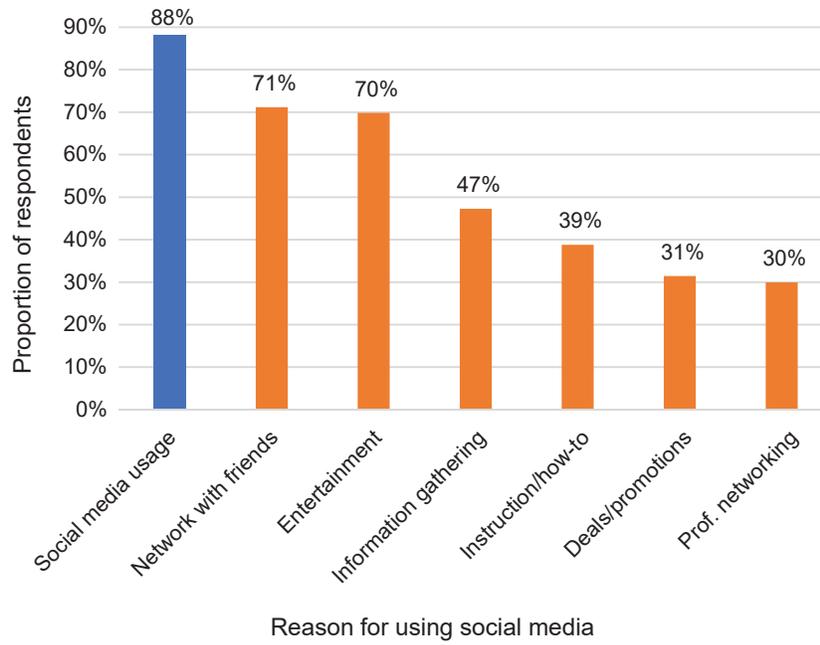


Figure 3. Percentage of respondents indicating they use social media (blue bar) and reasons cited for using social media – multiple reasons were noted by many respondents so the totals sum to more than 100%.

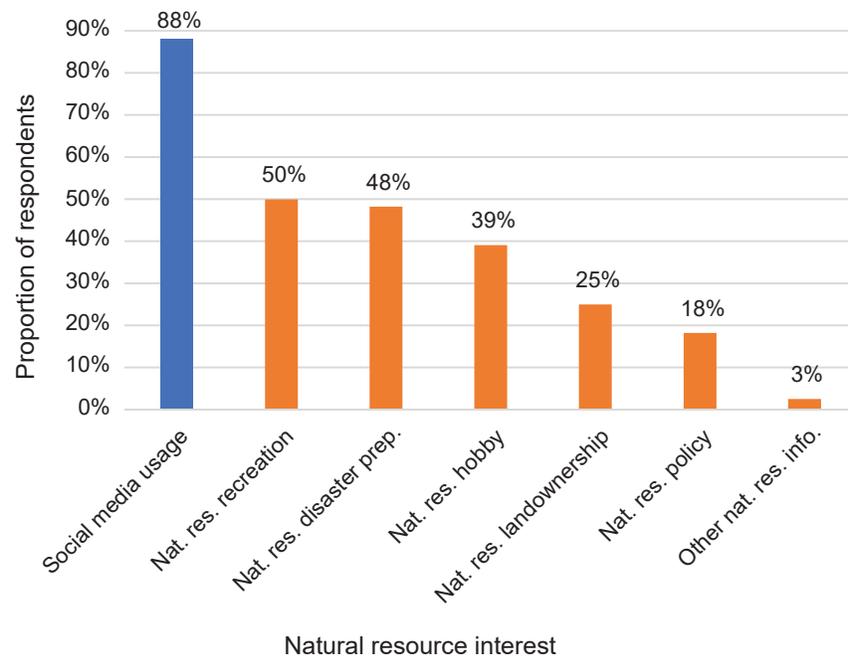


Figure 4. Use of social media related to natural resource interests.

week. In contrast, 57.3% of the respondents used mass media 7 hours or more per week. Of those respondents, 45.3% used mass media 10 hours or more. Results from Kruskal-Wallis rank sum tests showed significant differences among age groups in terms of the number of hours per week in which the respondents viewed social media/mass media. The two younger age groups (18-29 and 30-49) indicated substantially higher participation in social media and the two older age groups (50-64 and >64) indicated substantially higher participation in mass media.

3.4 Purchasing Decision Process

Studies show that social media is a very powerful tool in product marketing and creating brand awareness and is becoming increasingly more important for consumer decisions (Bronner & de Hoog 2014). However, the wood products industry has been slow to adopt new technology and embrace social media (Montague et al. 2016). To better understand how consumers find information about wood products, respondents were asked a series of questions about their wood product purchasing decision process. Respondents were first asked whether they had used social media to gather information about wood products. A majority (54.4%) indicated using social media to gather information about wood products. Some of the reasons listed for not using social media were “unaware it was an option”, “I use other sites”, and “I had no need to.”

When given the same predetermined list of social media sites/types and asked to select all of the ones used as a source of information before purchasing a wood product, the top five sites/types differed slightly from those indicated for personal use. Although Facebook, YouTube, and Twitter were still listed as the top three, Google+ and photo sharing sites were listed as 4 and 5. Of the respondents that indicated using social media to gather information about wood products they were interested in purchasing, the majority stated that social media was used to gather information 2-3 times a month or less. The Kruskal-Wallis rank sum test found a significant difference among rank sums median reported social media usage rates for the different age groups and between genders. The Wilcoxon rank sums were calculated and compared to assess the differences detected among groups; respondents ages 18-49 (two youngest age groups) were substantially more likely to use social media than were respondents in the two older

age groups. Also, male respondents indicated greater usage rates for social media than females.

Ratings were obtained from respondents (on a 5-point scale anchored by 1 = not important and 5 = very important) as to the importance of six factors influencing the wood product purchasing decision. Five of the six statements were considered to be “important” or “very important” by more than 70% of consumer respondents (Table 1). Overall, brand reputation was highly rated by more respondents than the other factors for influencing wood products purchasing decisions and according to Hawkins et al. (1998), the level of involvement a consumer has with a product or brand can have a positive or negative impact on the purchasing decision process. Consumers are more likely to repurchase products or brands they have had satisfactory experiences with and avoid those that they did not (Koivumäki 2001, Nam et al. 2011, Pappas et al. 2014). It also is the inherent nature of consumers to buy products that are recommended by friends, family members and someone they know in real life or even in virtual world (Uddin et al. 2017). The factor that was considered important by a notably smaller proportion of respondents was information from mass media with only 57% of respondents rating this to be important to their purchasing decisions.

Although information from the internet was not listed as one of the top three factors influencing respondents’ decision to purchase wood products, it was still shown as a significant factor. Three of the top roles that social media had in the decision making process were listed as (1) helping in the preliminary search about a product, (2) helping in the comparison of products and (3) helping consumers find product discounts and promotions (Figure 5).

To obtain a better understanding of consumer media preference when gathering information before product purchase, consumers were given a predetermined list of other media besides social media and asked to choose all that were used to learn about wood products. Of the other media listed, television (38.8%), retail store exposure (35%) and magazines (29%) were the top three sources selected that were used to gather information before wood product purchases. Radio (13.7%), exposure at an acquaintance’s home (16.3%), newspaper (17.8%) and other media (1.4%) were the least used. Catalogs and search engines were listed as other media used. These results are not surprising seeing that there has

Table 1. Relative importance assigned by respondents to 6 factors that may influence their decision to purchase a wood product.^a

Factors influencing decision to purchase wood	Median (mode)	Proportion (%) assigning a rating of:	
		4 or 5 (important or very important)	1 or 2 (not important or minimally important)
Brand reputation	4 (5)	77	5
Previous experience	4 (4)	75	6
Information from peers, friends and family members	4 (4)	74	6
Knowledge or awareness of the brand	4 (4)	73	8
Information from the internet	4 (4)	71	7
Information from mass media	4 (4)	57	12

^a n = 505. Values are based on a 5-point scale where 1 = not important and 5 = very important. Proportions are rounded to nearest whole number.

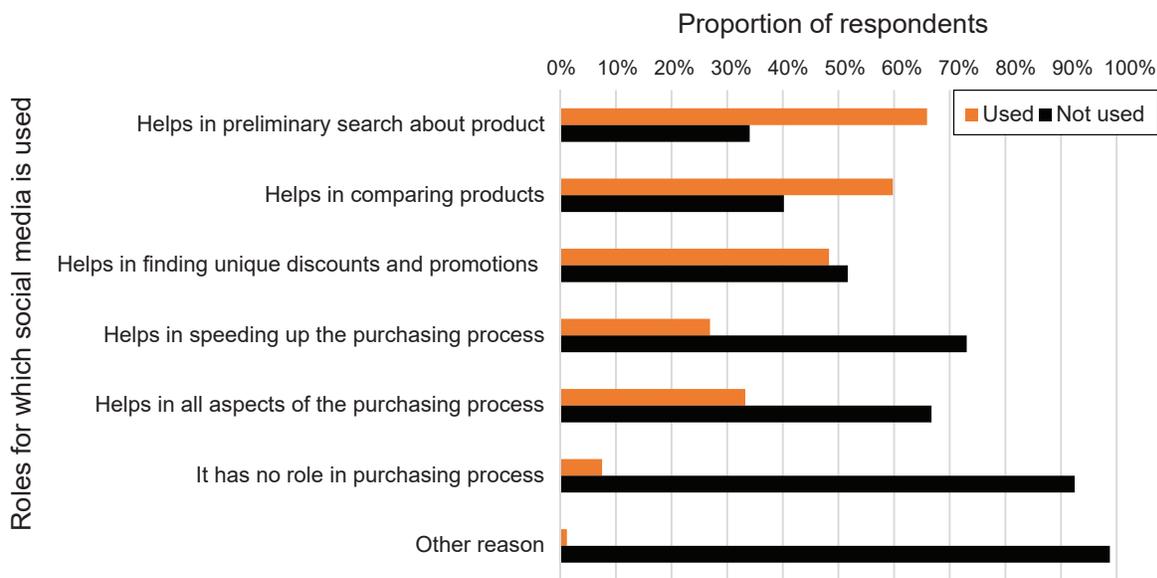


Figure 5. Proportion of respondents using social media to aid in the wood products purchasing process.

been a steady shift from print and traditional advertising to internet and social media-based advertising during the last decade.

Research has shown that there are many reasons why advertisers and consumers prefer social media over traditional media (Frandsen et al. 2016, Sarikas et al. 2016, Uddin et al. 2017). Respondents that used social media to obtain information before purchasing wood products were asked about their perceptions regarding the advantages of social media compared to traditional media. Respondents generally agreed with all five statements. They believe social media provides more information and easier access to information than traditional media, it provides an effective and powerful

platform for consumers to communicate with each other and with companies, it allows them to be informed without being interrupted while doing other activities, it saves them time during the purchasing process and it provides reliable, and credible information (Figure 6). Based on 2-sided *t* tests results, all five statements were significantly different from the neutral score of 3. When asked how they viewed a wood product ad messages on social media versus traditional media, 47.7% of respondents indicated a preference for social media, 32.7% indicated that social media and traditional media were the same, 12.7% preferred traditional, 6.5% did not prefer either and .4% liked both because each medium offered something different.

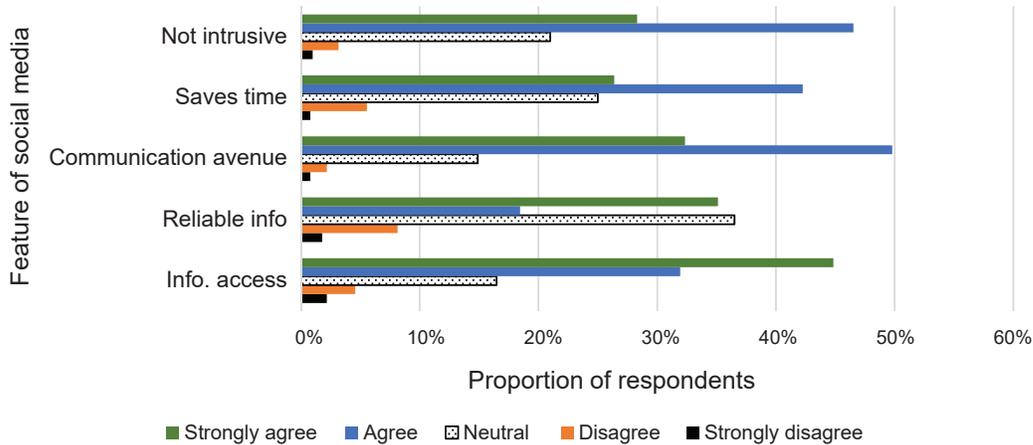


Figure 6. Level of agreement that the cited feature is an advantage of social media compared to traditional media when buying wood products.

Respondents were given a predetermined list to determine what attracted their attention within social media when looking for wood products to purchase and asked to select all that apply. "Visual elements of products/ads" was the top attribute selected. When asked to select all of the attributes that helped them remember more about wood products/advertisements seen on social media, visual elements also was selected as the top attribute from the predetermined list provided. These results support research that states websites and social media sites that have pictures, visual displays of products and are more interactive do better than those that do not (Bruner & Kumar 2000, Montague et al. 2012, Leung et al. 2015) and show the importance of providing consumers with a plethora of visual options. The ability to be able to visualize products such as furniture in one's home or office is very important to consumers. The introduction of virtual reality/augmented reality has given companies the ability to accommodate these desires. This year Ikea rolled out the "Place" App for iOS users, which gives consumers the ability to preview furniture in their home before purchasing it (Mangles 2018). Online retail sites have realized increased sales and customer loyalty through the creation of interactive and more realistic portrayal of products that have vibrant imaging and the ability to customize using virtual reality and similar applications (Esfahani 2005, Lurie & Mason 2007, Mangles 2018).

"Product videos/photos" was listed as the top attribute that attracted respondents' attention. However, when asked what motivated respondents' to purchase

wood products seen on social media this attribute was ranked as a close number two. "Positive comments from previous users" was the top motivating factor for consumers. "Reviews from friends and acquaintances" was selected as the third most motivating factor. "Changing other's opinions about the respondent through social media postings" and "desire to be like others" were listed as the least motivating factors. While WOM is widely regarded as the most influential factor impacting consumer behavior, eWOM reaches significantly more consumers (Daugherty & Hoffman 2014, Sohn 2014). Sixty-six percent of people around the world trust consumers' opinions posted online about products and services (Nielsen 2015). Understanding the implications of this is very important as wood products companies decide whether to incorporate social media into marketing strategies.

To determine how social media had affected consumers' purchasing decision process, respondents were given five different stages in the process (Table 2) and asked to rank them (on a 5-point scale anchored by 1 = least affected and 5 = most affected). Results suggest that consumers judge social media to have the most effect on the purchase review stage and the evaluation and comparison stage of the purchasing decision process. Research shows that potential customers are more interested in the recommendations and product reviews of others than the product information of the vendor (Hajli 2014). In fact, retailers understand the importance of customer reviews and often request post purchase reviews from customers (Park et al. 2007). Some even

Table 2. Relative effect of social media on the 5 stages of the wood products purchasing process assigned by respondents.^a

Stages of the purchasing process	Median (mode)	Proportion (%) assigning a rating of:	
		4 or 5 (effective or very effective)	1 or 2 (not effective or minimally effective)
Purchase review	4 (5)	72	11
Evaluation/comparison of information	4 (4)	72	8
Exposure to product or service information	4 (5)	68	13
Search for alternatives	4 (4)	56	16
Problem recognition	4 (4)	53	20

^a n = 505. Values are based on a 5-point scale where 1 = least effective and 5 = most effective. Proportions are rounded to nearest whole number.

offer incentives for reviews. Retailers on Amazon offer products for consumers to test and review while BestBuy offer reward points for reviews.

When asked about the effectiveness of social media in the wood products purchasing process, 24.6% of respondents indicated it was very effective, 38.4% indicated it was effective, 23.4% indicated they were neutral, 12.7% indicated it was slightly effective and 1% indicated it was not effective at all (Figure 7). Kruskal-Wallis non-parametric test results indicated that males viewed social media as being more effective than females.

Finally, respondents were asked if they were likely to share comments/reviews/information with peers or friends via social media after making a wood product purchase and if they were concerned with privacy issues when using social media during wood product purchases. Most respondents indicated that they were

likely to share comments/information with peers or friends about their wood product purchase. Privacy and web security is often a concern for individuals when purchasing online. However, when asked about privacy issues when purchasing wood products using social media, 13.3% indicated being very concerned, 17.6% indicated being concerned, 20.2% indicated having some concern, 27.7% indicated being neutral on the topic and 21.2% indicated having no concern.

4 Conclusion

Data on the characteristics of US consumers and social media apps/sites used to gather information about wood products during the decision making process were collected through an online survey conducted in 2017. The 928 respondents to the online survey provided insights into the use of social media tools as an

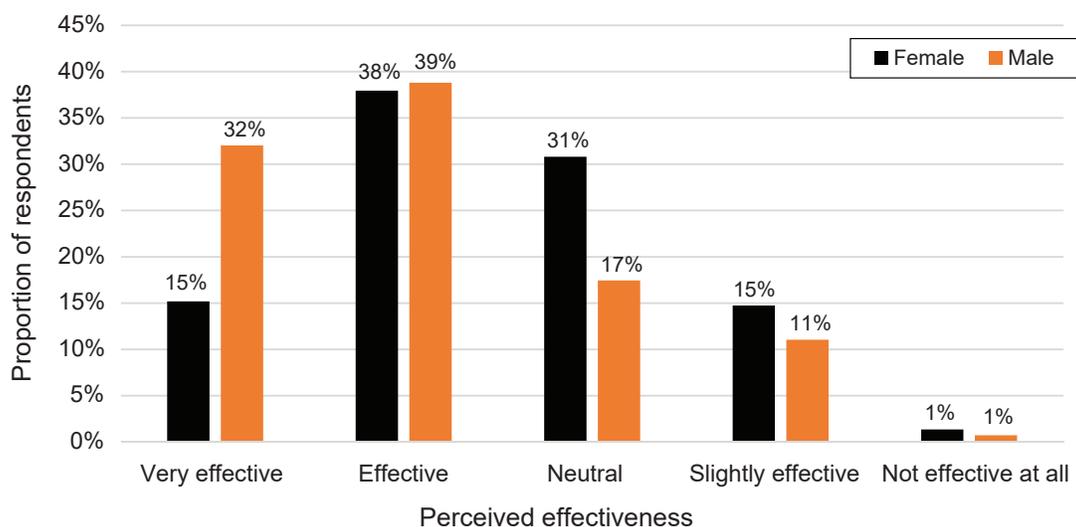


Figure 7. Consumer rankings, by gender, of the effectiveness of social media as a tool for assisting in the wood products buying process.

information gathering tool for potential forest products consumers. Although consumer use of social media to research and gather information on companies and products is commonplace in the U.S., limited research has been conducted on consumer use of social media to gather information about wood products and the benefits associated with it.

Results from this study show that respondents are beginning to embrace social media as a way to gather information about wood products. While 88.1% of the respondents indicated using social media, only 54.4% have used social media to gather information about wood products before purchasing. Many indicated being unaware that social media was an option to search for wood products information. This shows that there are opportunities available for wood products companies to capture audiences and markets through innovative marketing strategies that incorporate social media.

Understanding the various social media tools used by U.S. consumers, the information gathered through these tools and the reasons these tools are used could aid companies in developing effective marketing strategies. Based on respondents' comments, there seems to be a lack of knowledge when it comes to the wood products industry and the products the industry produces. These results also can provide information that can aid companies in effectively distributing valuable information about the industry and products.

Because advances in technology have changed the way businesses and consumers communicate, there are now many ways to market products that allow consumers to develop personal connections with products and brands. Visual displays and platforms seem to be very important to respondents in helping them in the decision making process. Because of the aesthetic attributes of wood and the numerous products created from wood, the industry is in a position to benefit from visual showcasing and storytelling on various social media applications.

According to the results of this study, there is room to increase consumer exposure and awareness of the industry and its products. As the population ages, wood products consumers will continue to shift from being traditional media users to being technology and social media dependent consumers. The US wood products industry's ability to adjust to this change will most likely determine how it will fare in terms of increasing global competitiveness.

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