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This study is concerned with exploring how small manufacturers in North Carolina currently market their products and capabilities as well as their perception of social media in order to determine if social media could be a useful marketing strategy. Interviews were conducted with 7 manufacturers, three of whom currently use or are in the process of implementing social media. Findings indicate that the manufacturers using social media have achieved marketing successes and that there is great interest from all of the manufacturers in how social media could be applied to their business with the primary barrier to adoption being the business owner. Recommendations on how manufacturers can begin to implement social media are suggested.

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Online social networks.

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GETTING SOCIAL WITH SMALL NORTH CAROLINA MANUFACTURERS: AN  
EXPLORATION OF ATTITUDES TOWARD AND PERCEPTIONS OF SOCIAL  
MEDIA FOR MARKETING USE

by  
E. KeAnne Hoeg

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Jeffrey Pomerantz

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## **Introduction**

It is almost unthinkable for a consumer or industrial buyer to research a product or service and not utilize the Internet to aid information gathering. Even if information-gathering begins with a casual conversation with a friend or trusted resource—online or offline-- it is likely that one of the next steps will be to a search engine. For industrial buyers in particular, the days of perusing print catalogs and attending trade shows for potential suppliers are gone. The industrial buying process consists of 4 stages: Needs Awareness, Research, Consideration & Comparison, and Procurement. Industrial buyers rely heavily on online sources during all 4 of the stages with the top 3 sources being search engines, supplier websites and online catalogs (GlobalSpec, 2009; ThomasNet, 2009). If the searcher is relying upon the search engine to point them to relevant results, then it is a necessity that a business has an online identity that has been indexed by search engines and available to be returned as a result. However, for small- and medium-sized enterprises, including manufacturers, effective web exposure and emarketing is a problem.

Small businesses are structured differently from large businesses, and these differences impact their ability to market effectively. They have limited financial resources and time and lack specialist knowledge in marketing and technology. They are typically owner operated, and the owner's own core competency tends to prevail. Unless

the owner has expertise or an interest in technology and marketing, those functions suffer.

Despite claims to the contrary, manufacturing remains a robust contributor to North Carolina's Gross Domestic Product (GDP). Manufacturing creates 20% of the state's GDP, employs 15% of its workers and leads the Southeast in manufacturing's contribution to the Gross National Product (GNP) ("Manufacturing Matters", 2009). The Small Business Administration (SBA) defines manufacturers having 500 or fewer employees as small, with 2500 being the threshold for medium (2010). Using this criterion, 75% percent of North Carolina's roughly 10,000 manufacturing establishments are considered very small, employing 50 or fewer workers. Online marketing is essential to help these small manufacturers reach new markets, increase sales, retain current employees and hire new workers.

While marketing—online or offline-- may be a problem for small- and medium-sized manufacturers, the message about what will help manufacturing is clear: growth and that means sales, either domestic or even better, through exports. For years manufacturers have been focusing on bottom line improvement strategies such as lean manufacturing, ISO 9001 certification and Six Sigma to cut production costs and improve quality. While those strategies have been necessary, no matter how lean your plant floor is, you need sales in order to stay in business.

The latest trend in online marketing is for a business to be active in social media via tools such as blogs, Facebook and Twitter in addition to having a website. Indeed, social media provides another way for manufacturers to obtain exposure and connect with clients and may even be a simpler, lower-cost method of attaining visibility, especially in

search engines. Blogs, for example, often rank higher in search results than a static website and provide major boosts to the sites to which they are attached due to the frequency and amount of new content to index as well as the power of incoming links (Lodico, 2010).

Search engines are indexing and including social references from Facebook and Twitter in results as well as counting the number of times a link is shared or tweeted as an indication of trust, raising a page rank (Bouchard, 2011). Google is focusing on Twitter while Bing is focusing on Facebook. Google has stepped up its indexing of tweets, making keyword-laden tweets one of the top search results. Search engine visibility is important and has few borders: global visibility will help companies reach new markets outside of the US, creating export opportunities. Exports will be a major contributor to the economy's recovery (Vigna & Shipman, 2010).

Social media seems tailored to the core competencies of a small business and especially a business with a B2B focus. With its emphasis on authenticity and transparency, advice to corporate users to put a face to the nameless entity—the digital equivalent of small talk --social media encourages relationships. This emphasis is well-suited for the small business which finds itself better able both to form strong relationships with its customer and to adapt nimbly to customer preferences (Bentley, 2003). While small businesses often do traditional marketing poorly, they are part of a number of offline social networks that could be utilized for marketing (Gilmore, Carson & Grant, 2001). As well, with so much social media noise, it is easier to stand out by focusing on what makes you different. Small manufacturers often focus on a narrow range of products, doing one or two things very well. Social media can aid that niche

marketing. Industrial buyers are increasingly using social media during their sourcing process. They list social tools such as blogs, Twitter, Facebook and online communities as top tools during the research phase of the industrial buying process.

While the use of social media for business promotion is a hot topic, there has been little academic attention paid to it. As well, most of the case studies available for successful social media implementation involve consumer brands and products. While manufacturers produce a tangible product, they usually operate in a B2B sales environment, with a particular manufacturer part of a supply chain to another manufacturer. The B2B sales cycle differs from B2C in that it has smaller numbers of customers who spend more money as well as a longer sales cycle involving more than one decision maker; as a result, personal relationships are much more important. Though outside of academia, practicing B2B marketers argue that social media is tailored for B2B organizations. B2B marketing considers building awareness and cultivating word of mouth to be paramount, activities at which social media can excel. B2B marketing has always been about social networks; tools like Twitter and Facebook simply allow it to be done more quickly and publicly (Callahan, 2011).

Given the constraints many small manufacturers face in marketing due to a lack of resources, time and expertise but the potential appropriateness of social media, the purpose of this study is to explore whether social media would be a useful tool for small manufacturers to use to increase brand recognition, build relationships and ultimately increase sales. The research questions that this study will investigate are the following:

- What are small manufacturers' current attitudes toward and current usage of social media?

- Are there barriers that exist that would prevent its adoption by small manufacturers?
- Can larger manufacturers' usage of social media be used to provide a process or guidelines for smaller manufacturer

## **Literature Review**

This literature review focuses on four areas in order to fully explore SME operations as they relate to marketing as well as current research on social media and marketing: SME marketing practices; SME technology adoption and Internet marketing; networks and networking; and social media. Networking's importance to the SME as well as the importance of word-of-mouth as a result of networking are major themes.

### *Marketing in the SME*

The characteristics of SMEs impact their ability to market. They have limited financial resources or time and lack specialist knowledge in marketing. They are often owner operated, and the owner's own core competency tends to prevail. Unless the owner has expertise in technology and marketing, those functions suffer. The owner's attitude or expertise is especially important with marketing becoming tied to technology in the case of email, websites and social media. As well, with emphasis on establishing the business and producing product, marketing is often the last competency to be obtained (Carson, 1990). As a result, small business marketing lacks the strategy, resources and focus given to it by large businesses, resulting in the perception that SMEs



market deficiently and inefficiently. Even if SMEs have an established marketing function, it is not well developed and lacks influence, especially if the business is B2B (Walsh & Lipinski, 2009).

Some researchers argue that SMEs should not be compared to large firms when their marketing practices are being evaluated and that they market in a way that reflects their capabilities, especially that of their proximity to their customer. Brooksbank, Kirby, Thompson & Taylor (2003) studied a group of UK manufacturers at two points (1987-1988 and 1997-1998) to determine marketing's impact on firm success and found that the more successful firms demonstrated that they understood and used 8 key marketing principles such as self-generated market research, competition monitoring, and focus on maintaining positive company/brand reputation. However, the fact that not all 16 key marketing principles were used by successful manufacturers led the researchers to conclude that the model of marketing used by large firms is not applicable to SMEs and that SMEs may actually be using techniques tailored for the changing business environment. Pacitto, Julien & Bizuel (2006) corroborated these findings in their study of international medium-sized manufacturers, finding that while not as robust as that in larger businesses, the manufacturers do have a definite market orientation that emphasizes the customer. These highly-social SMEs favor activities that build and maintain those relationships, making them the ultimate relationship marketers (Coviello et al., 2000; Gilmore, Carson & Grant, 2001).

Whether SME marketing is poor or merely misunderstood, research finds over and over that being market-oriented—knowing your customer and using that information to drive your product development and marketing-- is a key ingredient for success, and

this is true for manufacturing SMEs as well. The National Association of Manufacturers' (NAM) 2006 report "The Future Success of Small and Medium Manufacturers: Challenges and Policy Issues," lists marketing position and strategy, including product differentiation, customer relationships and market research as a key best practice to being a successful small-to-medium manufacturer. From a survey of 1200 manufacturers, Pelham (2000) found that market orientation had the strongest positive relationship w/ performance measures due to it enabling the manufacturer to quickly detect changes in customer preferences, fast response to negative customer feedback, creating value for customers and immediate response to competitor activities. This finding has been corroborated in other studies exploring success factors for small manufacturers (Bentley, 2003; Kim, Knotts & Jones, 2008) as well as small non-manufacturers (Berthon, Ewing & Napoli, 2008).

### *Ebusiness and Internet Marketing*

As marketing becomes increasingly inseparable from the Internet, it is important to consider SME adoption of the Internet for business. Most of the research on SMEs and Internet marketing focuses on exploring factors or theories that govern ebusiness adoption with studies grouping email marketing, websites, ecommerce and online marketing with Internet adoption in general and not as it applies to a specific business application such as marketing and establishing what connotes successful usage (Gilmore, Gallagher & Henry, 2007; Simmons, Armstrong & Durkin, 2008; Chua, Deans & Parker, 2009).

The literature appears to be converging around the term “ebusiness” to describe these Internet-enabled activities. Broadly, ebusiness refers to using the Internet and other technologies to increase business performance and success, including marketing, communications with customers, suppliers and employees. Ultimately, ebusiness should lead to better relationships, resulting in increased loyalty, profits and competitive advantage. Researchers are very enthusiastic about ebusiness’ potential, with declarations that companies cannot compete without an ebusiness strategy (Rodgers et al., 2002) to research demonstrating that SMEs using IT outperform other companies on profit (Bhardway, 2000).

While ebusiness adoption can be tied to profit performance, it is often discussed in terms of the relationships and networks it enables and the resulting competitive advantage (Zineldan, 2000; O’Donnell et al., 2002; Fillis & Wagner, 2005). Further connecting ebusiness and networks, Parker & Castleman (2009) propose using Social Network Theory along with Diffusion of Innovation Theory to explain how the SME owner/manager’s social networks contribute to adoption of ebusiness.

While researchers are enthusiastic about the benefits ebusiness can provide for SMEs, SMEs have been slower to adopt it due to the same barriers prohibiting the adoption of marketing strategy: limited resources (Ettlie, 1983; Lynn et al., 1999; Chappell et al., 2002; Darch & Lucas, 2002); owner/manager perception (Thong & Yap, 1995); sector influence (Martin and Matlay, 2001); and mistrust (Van akkeren and Cavaye, 1999; Docherty and Simpson, 2003). When they do adopt it, one of the primary drivers is to enhance customer relationships (Chappell et al., 2002). Specific studies have found that customer and market orientation impacts how SMEs adopt websites. Jones et

al. (2003) suggested that SMEs focused on their market can use their websites to maintain a competitive advantage through customer, market and technological intelligence.

While available research primarily focuses on the adoption of basic websites and other Internet technologies, research on social media and SMEs is in its infancy not surprisingly. Chua, Deans and Parker (2009) explored types of SMEs that could possibly use blogs as a marketing tool with the point being to provide a research agenda for future research. The authors apply the challenges and characteristics of SMEs to suggested uses (managing reputation; building trust; niche marketing; promoting online presence; and market intelligence) for a blog. They are doubtful about the SME's ability to use a blog for the suggested uses due to resource constraints but acknowledge that the SME could benefit from the increased traffic to their website and improved search-engine placement a blog can provide. It is interesting that they raise questions about SMEs ability to utilize blogs and other ebusiness tools and to reap any benefits when research shows that the more closely aligned with their market and customers, the more successful SMEs are.

In contrast, Constantinides (2008) suggests that SMEs could use social media for more efficient and less costly marketing as well as enabling them to understand the voice of the target market. Through their case study examination of a small group of UK SMEs using online social networks, Harris & Rae (2009) conclude that while usage is in its infancy, they are the future of marketing for small businesses because they allow businesses to engage with customers, something customers are growing to expect, in a relatively low-cost manner. Gilmore, Gallagher & Henry (2007) point out that the SME lack of specialty skills coupled with the need and often desire to learn new skills can

contribute to the in-house adoption of Internet marketing, demonstrating that human resource constraints need not be insurmountable.

### *Social Networks and Networking*

Small businesses are very social, and their owner/managers have very active networks, being highly influenced by family, friends and other businesses when making decisions. SMEs utilize their networks as a resource that makes up for the lack of resources inherent to the SME (BarNir & Smith, 2002; Butler et al., 2007; Gibbs et al., 2007). Gilmore, Carson & Grant (2001) consider networking to be a core marketing competency for a SME, noting that the SME's approach to networking mirrors their overall approach to marketing: loose, spontaneous and informal.

Much of the research on SMEs and networking involves the ability to create alliances between one or more SMEs that allows them to share resources, reduce costs and increase strength, resulting in a competitive advantage for all involved (BarNir & Smith, 2002). Interestingly, there has been less research on the use of these networks for marketing and obtaining clients in contrast to the primary focus in social media on obtaining clients. However, the little research that exists suggests that SMEs are using their networks to create customer opportunities and are aware of the marketing potential of networks. Studied SMEs cite obtaining market research on trends, keeping up with competitors, building vital relationships and the awareness of the influence of personal characteristics on their networking success (Gilmore, Carson & Grant, 2001; Ellis, 2010).

In fact, marketing and networking appear to be related. Gilmore, Carson and Rocks (2006) found that there was a link between the high level of SME networking and the extent of marketing done and overall marketing sophistication. This outcome could be due to the fact that SMEs can use networks to obtain information and resources, improving their own competency in marketing and understanding of marketing's importance to the company's success. Networking can be used for proactive marketing and is compatible with the characteristics of SMEs. There has been research on which type of tie—strong or weak—is more effective and beneficial. Granovetter's seminal 1973 study *The Strength of Weak Ties* found that weak ties are a necessity to expose an individual to sources of new information whereas strong ties make that individual unlikely to learn new information or opinions. A few researchers have examined tie strength and outcomes among SMEs that network with mixed findings. BarNir and Smith (2002) found that the number of interfirm alliances SMEs made was tied to the strength of ties in the owner's network. Conversely, Watson (2006) found that weak ties were more important in influencing the ability of networks to contribute to SME survival and growth.

While most of the research focuses around face-to-face networking, there has been little research on the Internet-enabled networking. Haythornthwaite (2002) found that weak ties can be enhanced by computer-mediated communication (CMC) while latent ties (ties that have not been activated) can be activated by CMC, especially if it is a common, established means of communication (e.g. a tool such as Facebook or Twitter) established by others. New media, if it enables communication among ties previous unable to communicate, will nurture weak ties, allow latent ties to activate and encourage weak ties to become strong. Boase (2008) found that Americans are comfortable using a variety of communication technologies to maintain various ties. Specifically including Internet technologies along

with face-to-face communication as part of the entire media ecology of networking methods, Ellis (2010) found that business owners utilized online networks to create customer opportunities through establishing links with many weak ties as well as to learn from other practitioners, suggesting that online networks can provide a way to fill a resource or knowledge gap just as offline networking can.

Interestingly, manufacturers' participation in networking is mixed. Dean, Holmes and Smith (1997) discovered that Australian manufacturers participated less in networking as well as perceiving more inhibiting factors than service firms. Fewer manufacturers saw any benefit to networking, and their greatest concern with networking was information disclosure, suggesting that trust will be a major issue in cultivating networks. For these manufacturers, age mattered: younger manufacturing companies (1-5 years) were much more enthusiastic about networking, a finding that may have relevance for manufacturers' attitudes toward and adoption of online social networks and social media. This study maybe be an outlier or influenced by culture because other studies focusing entirely on manufacturers in the United States or including them in the sample demonstrate that manufacturers network actively and purposefully (BarNir and Smith, 2002; Gilmore, Carson & Rocks, 2006).

#### *Online Social Networks & Social Media*

Online social networks such as Twitter, Facebook, YouTube and LinkedIn have become increasingly pervasive in everyday conversation, especially as targets for marketing. Twitter has over 200 million registered accounts and averages of 140 million tweets a day (Barnett, 2011). Facebook reportedly has more than 500 million active users (Facebook

Statistics, 2011). In March 2011, LinkedIn achieved its 100 millionth user and of the industries represented, manufacturing is 3<sup>rd</sup> at 10% (Qualman). With such large numbers, it is no wonder that companies want to utilize social media for marketing with perceived benefits such as understanding customer sentiment, building customer relationships and enhanced customer service.

According to Stelzner's "2011 Social Media Marketing Industry Report", Facebook, Twitter, LinkedIn and blogs are the top four social media tools used for marketing. This survey of more than 3300 marketers revealed that 93% are using social media for marketing with 90% saying social media is important. Small business owners with more than 2 employees (66% of the responses) were more likely to strongly agree about social media's importance for their business. The benefits cited are substantial: 88% indicated social media has generated more business exposure. Two-thirds indicate a rise in search engine rankings and more than 50% found that social media generated qualified leads. Consistently, the study proved that SMEs reaped the greatest benefit from their social media efforts with 48% achieving improved sales and 89.2% reporting greater exposure and awareness. Interestingly the survey shows little support for forums, suggesting that branded forums may suffer in comparison with established media such as Twitter, Facebook and LinkedIn.

While much content exists in trade publications about the ability to use social media for marketing, there has been relatively little academic attention, which is not a surprise given that social media is still in its infancy. What research exists, however, confirms the ability of social media to match or even exceed the SME's reasons for and outcomes of use of offline social networks. Early research focused on why people were using social media. Java, Song, Finin and Tseng (2007) concluded in their study of Twitter that one of the primary intentions in Tweeting is to share information, and their categorization of users included information sources as well as information seekers.



Zhao and Rosson's 2009 study of Twitter motivations corroborated the previous findings of using Twitter as a source of information, suggesting that users find value in its ability to provide real-time, up-to-the-minute information, feedback and trends. While the main point of their analysis was to speculate on Twitter's ability to influence workplace communication, it is interesting to note that one of their interviews mentioned Twitter's ability to provide connections to future opportunities. The interviewed users cited as one of their reasons for Tweeting the opportunity to reach unknown beneficiaries, directly tying into Granovetter's theory of weak ties. The motivation to seek information is not limited to Twitter users: Bonds-Raacke and Raacke (2010) identified information seeking and sharing as one of the user motivations for users of Facebook and MySpace.

More recent research has begun to focus on the network aspects of social media and its great potential for influencing purchases (usually consumer goods) through word-of-mouth (WOM) with research finding that WOM not only flourishes on social media but also effectively challenges and even exceeds the impact of traditional marketing. Word of mouth is essentially information conveyed from one person to another via their social networks and heavily influences purchasing decisions. Positive word-of-mouth is considered the gold standard in marketing, but it is very difficult for a company to influence it. Word-of-mouth utilizing the Internet is called eWom and has been studied on websites, blogs and review sites, with researchers concluding that while it may be less personal than face-to-face, it is more powerful because of its immediacy, reach and accessibility (Hennig-Thurau et al., 2004).

Though focused on consumer brands, Jansen, Zhang, Sobel and Chowdury's 2009 study of tweets about brands found that 19% of tweets mentioned an organization or brand with 20% of those tweets expressing a discernible sentiment about that company, product or service, leading them to conclude that Twitter is a viable area for an organization to focus on

for marketing and to influence eWom. Their study also corroborated earlier studies of Twitter that concluded that Twitter users are using it to serve information—both information seeking and providing information.

Research shows that members of a social network will be influenced not only by the members of their own network but also that of members connected to other networks (Hill et al., 2006). Trusov, Bucklin and Pauvels (2009) found that word-of-mouth referrals have a strong impact on new customer acquisition on an anonymous online social network and that it was more effective than traditional marketing. Rui, Liu and Whington (2010) found that eWom on Twitter influenced movie box office revenue, suggesting that Twitter is a natural environment to express purchase intent. More closely tied to my own research interest, Fauser, Wiedenhoffer and Lorenz (2011) explored the influence of social media on high-involvement purchase decisions and concluded that the social web can be used to influence purchase decisions throughout the entire process. While Twitter and other microblogging platforms are excellent for post-purchase communication, blogs and online social networks are useful throughout the entire purchase decision process and are considered to be the most influential due to providing quality information (blogs) and connectivity (social networks).

## **Methodology**

Since the purpose of this study was to explore small manufacturer's attitudes towards social media, the principal researcher decided to conduct interviews with a small number of manufacturers across North Carolina. Following data collection, the principal researcher used the participants' answers to perform qualitative content analysis to identify "core consistencies and meanings" (Patton, 2002, p.453).

In order to obtain relevant subjects for the study, the principal researcher used stratified purposive sampling in order to study a small subset of the larger group of small NC manufacturers (Babbie, 2002). The principal researcher began obtaining the sample by querying Dun & Bradstreet's Selectory Business Database using the following criterion:

- State: NC because the study is limited to North Carolina manufacturers
- MSA (Metro Region): Raleigh-Cary, Durham and Rocky Mount in order to reduce the number of manufacturers to a manageable size
- Number of employees: 10-99 in order to identify small manufacturers. While the Small Business Administration uses a larger number (500) for its definition of small, the majority of North Carolina manufacturers have fewer than 100 employees.
- Sales: \$1million-\$10million
- NAICS (North American Industry Classification System) Code: Manufacturing is coded as 3x, allowing the query to return only manufacturers.
- Type of Ownership: Single Location. It is necessary to identify manufacturers that are headquartered in the state instead of being a branch or subsidiary of a larger company out-of-state or out-of-country since headquartered companies will have control over their marketing functions. While a branch firm located in NC may meet the other criteria, the decision-making for marketing may be located in the out-of-state corporate office.

- **Subsidiary Status:** Non-Subsidiary because a subsidiary is a corporation that is controlled by another corporation through stock ownership. As a result, a subsidiary may have less control over decision making.

This query returned 424 companies. The principal researcher contacted 20 manufacturers via phone or email to invite their participation. Via telephone, the principal investigator then conducted semi-structured interviews with 7 subjects who work for small manufacturers in North Carolina. For the purposes of this study, the subjects were either directly responsible for marketing or top-level decision-makers within the organization who could discuss the manufacturer's approach to marketing since previous research in this area found that small manufacturers may not have a defined marketing function.

## **Results**

Seven employees of small manufacturers in North Carolina were interviewed to assess their marketing practices as well as their attitudes toward and perceptions of social media. The seven manufacturers represent different manufacturing sub-sectors as defined by NAICS code and reflect many of the different types of manufacturing performed across North Carolina: contract wire manufacturer, laboratory safety device manufacturer, office furniture manufacturer, consumer housing product manufacturer, two machine shops/fabricators and one plastics molder. While their responses to the general marketing practice questions conform to established research on marketing in small enterprises, the questions on social media elicited some surprising answers.

Of the 7 manufacturers interviewed, 2 currently utilize social media for marketing, 4 do not and 1 is in the process of implementing several social media accounts.

**TABLE 1 Manufacturers in sample with company size and social media usage**

<b>Manufacturer</b>	<b>Size</b>	<b>Social Media</b>
Plastic molder	30	No
Metal fabricator	23	No
Metal fabricator	10	Yes
Laboratory safety devices	40	Yes
Office furniture	20	Yes, in process
Luxury home furnishings	9	No
Contract wire manufacturer	50	No

### *Marketing*

**TABLE 2 Marketing methods by manufacturer and social media usage**

<b>Manufacturer</b>	<b>Marketing Methods</b>	<b>Social Media</b>
Plastic molder	webpage, bough keywords, listed on ThomasNet, newspapers, Plastics News, Plastics Engineering, WOM	No
Metal fabricator	brochure, not much print, updating content on website and have other improvements planned	No
Metal fabricator	website, email newsletters, email signatures with social	Yes

	links, YouTube, Twitter, LinkedIn, fliers, blog, buy ad in NC State bball program—may try ad in football program in fall; also ECU program, Word of Mouth, Flickr	
Laboratory safety devices	website, trade shows—lead generation; pharmaceutical online (kind of like ThomasNet); retain current clients	Yes
Office furniture	independent reps; print; “sophisticated” website; office supply catalogs for Staples, Office Max, etc., face-to-face	Yes, in process
Luxury home furnishings	direct to homeowners, contractors and remodelers—have catalog on website, website	No
Contract wire manufacturer	website, 2-sided pictorial of equipment, no print	No

Out of the 7 interviews, only 1 reported being part of a defined marketing group.

The other 6 indicated that there was not a defined marketing function within the company and that often, marketing was part of multiple employees’ responsibilities due to the size and needs of the company in terms of versatility and the lack of people resources to devote to one specific function. One interviewee reported that they had tried several formal marketing structures—both internal and external—and that none had worked. Two interviewees noted that in prior years, they had more formalized marketing functions but as they had lost employees due to attrition or the economy, they had not replaced those functions; instead other employees had absorbed those responsibilities.

One subject indicated that as the owner and president of the company, marketing fell in his area of responsibility.

When asked to describe marketing within the company, half of the respondents chose words or phrases that denoted the difficulty they had in marketing the company: “haphazardly,” “not enough strategic planning,” “challenging” and “when the time comes” due to the enormous difference in customers. One respondent selected “targeted,” but his definition was unsophisticated, indicating they might read about a certain company’s need and then approach them. One respondent used “multifaceted” to describe his company’s marketing, suggesting more marketing sophistication and one of the only responses not verging on negative.

Almost unanimously, all of the respondents defined their company’s primary marketing goal as being to diversify and grow their customer base along with a secondary goal of increasing awareness of their brand. While they have similar marketing goals, their marketing methods differ greatly. All of the companies have a website and rely on the website heavily with only 2 of them using print marketing. Online marketing is prominent with the website being the home of any brochures they create. Three respondents mentioned keywords and SEO, with two currently purchasing keywords and the other saying that SEO is possibly the next improvement to their website. Two of the manufacturers utilize industrial directory sites like ThomasNet. Interestingly the manufacturers currently utilizing social media or in the process of utilizing social media had the widest variety of marketing methods. In addition to their website and social media, they used print, ads, trade shows and email. While my research found nothing to correlate social media and diversity of marketing methods, this diversity may denote

these manufacturers' more sophisticated market orientation; market orientation is considered to be a crucial for success for small enterprises.

When it came to disclosing what methods had been most successful, 4 indicated that relationships/networking had been the most successful, whether it was relationships with vendors, word-of-mouth or a sales process emphasizing highly personal selling. Only one respondent indicated that the company's website had been the most successful method due to the effort they had put into it but explained it by noting that they succeed by not making a product available in any store but being something their customers would search for on the Internet. Similarly, one other respondent said that the online directory ThomasNet had been the most successful for his company, with it generating 3-4 inquiries per week as users searched on certain terms.

The primary influence on how the manufacturers marketed is varied. Three respondents identified the owner as the primary influencer. One respondent—the owner of the company-- indicated the end user provided the primary influence. One manufacturer relied on evidence to determine what works while another relied upon himself and the fabricators who work for his father's company for input. Only one respondent did not identify an individual, revealing that time is their primary influence and that they market as they have the opportunity.

The majority of the manufacturers use the Internet to find out information about their competitors along with word-of-mouth. Surprisingly, three revealed a lack of concern about their competitors with responses ranging from "they won't make or lose us money" to "there's a lot of work to go around." While the latter is a shocking statement in this economy, the statement is supported by data: the fabricated metal manufacturing



sub-sector is the 4<sup>th</sup> highest contributor to manufacturing's overall contribution to NC's GDP (NC State University IES, 2011). While the source of new product ideas ranges from owners to customers to technology, there is a strong sense of innovation. For example, two respondents believe that success lies in identifying and partnering with start-ups to establish lucrative relationships from the beginning. Another manufacturer indicated that they keep up with technology and what new machines are capable of and then "let their minds run" to determine what new ideas are possible. Similarly, another manufacturer studies new technology to think about how it will impact future furniture needs.

### *Networks and Networking*

Surprisingly, the respondents participate in fewer business and professional networks than I anticipated. Only three mentioned being currently active in business and trade associations and revealed that their motivations were competitive intelligence, business development and product awareness as well as finding out important information on standards such as green standards that the company then incorporated into their products. Of the three currently active in business and professional networks such as the Society for Plastics Engineers, American Chemical Society, American Industrial Hygiene Association, International Facility Management Association, American Marketing Association, International Society for Pharmaceutical Engineering, and Business and International Furniture Manufacturer's Association, only one definitively uses networks to market, utilizing advertising opportunities, websites, trade shows and

mail lists acquired from associations. However, two of the three that do network utilize or are in the process of utilizing social media.

Of the 4 that do not currently participate in business and professional networks, two did not see any return for time and money previously invested; another cannot find one that he likes and the last one cannot participate due to time constraints due to his commute to his place of work.

### *Social Media*

When queried about social media tools/sites such as Facebook, Twitter, blogs, YouTube, and LinkedIn, all 7 indicated that they were aware of them. Their perception of social media was surprisingly positive. Only 1 of the respondents was dismissive, declaring “we don’t have customers on Twitter and Facebook.” Another respondent thinks social media is great for connecting with people but “isn’t 100% sure of the value for business.” The most effusive response came from the manufacturer in the process of implementing social media: business owners “better embrace it” because interaction with the client is critical and social media allows you to get real time, real feedback.

**TABLE 3 Social media site breakdown**

<b>Manufacturer</b>	<b>Social Media</b>
Machine shop	Twitter, blog, YouTube, Flickr
Laboratory safety devices	YouTube, Facebook, Twitter, LinkedIn
Office furniture	Twitter, YouTube, Facebook

Of the three manufacturers either currently using or in the process of using social media, all use Twitter and YouTube. Two use Facebook, and one uses Flickr. Only one manufacturer has a blog. Their reasons for implementing social media are similar: to increase awareness of their company, products and capabilities. The respondent from the machine shop takes pictures and short videos of the items being fabricated and posts them to Twitter, Flickr and YouTube as well as the blog. His company's foray into social media was initiated by the challenge to market their capabilities. The office furniture manufacturer in the process of implementing social media explained that all of their products move and that being able to take and post videos of how their products work will "speak volumes." The medical device manufacturer noted that trade show attendance, a primary marketing method for them, was dropping because of the Internet, and social media became necessary to drive visits to their website and push their message. The machine shop respondent also listed making contacts he wouldn't otherwise make and the ability to do research as other reasons for using social media. Also, it's fun!

The two manufacturers currently using social media had success stories to share. The machine shop has obtained out-of-state business through the company's Twitter account; thanks to a humorous Dos and Don't video, the laboratory device manufacturer discovered that it had increased brand recognition for the company at a trade show he attended. They both take full credit for initiating their companies' social media presences but dealt with skepticism. The machine shop's owner was skeptical but has become more enthusiastic after seeing the successes. The laboratory device manufacturer confessed

that his bosses are not completely sold yet. Twitter has been less successful for him and the company executives want him to kill off the account, but he won't because it is a good way to share links and drive traffic to their website though he did not provide statistics on this outcome.

Three of the four manufacturers not using social media listed the owners and their demographic as the main reason they don't use social media with comments like "old school attitudes", "not their demographic" and "generational differences in understanding smart tools." One of the three was the president of his company and admitted that he had never thought it was appropriate. The 4th manufacturer listed resource constraints in terms of personnel and time but not financial as his primary reason for not using social media. Interestingly, 2 of the 4 manufacturers told me that they were now thinking about using social media after their interview with me.

Six of the seven manufacturers use social media in their personal lives. Five use LinkedIn and 4 use Facebook though all 4 noted that their Facebook use is sporadic. Only one has a personal Twitter account that he doesn't update often, mainly because he uses social media for work. The machine shop respondent does not have a personal Twitter account but tries to make the company account more personal because he thinks "company accounts are boring if not personalized." The furniture manufacturer in the process of implementing social media attributed his family's use of Facebook as inspiring him to use it for his business when he received a call from his mother asking about an event his daughter posted on her Facebook page that he didn't have details on yet; as a result, he started thinking about how social media could enable faster transmission of information to his sales force in the field. The only manufacturer not personally active in

social media confessed that he is ignorant of how to use it and doesn't want to embarrass himself.

**TABLE 4 Professional versus personal use of social media and how each tool is used**

<b>Manufacturer</b>	<b>Professional Social media</b>	<b>Personal social media</b>	<b>Usage/Approaches</b>
Machine shop	Twitter, blog, YouTube, Flickr	Facebook, LinkedIn	Posts and tweets pictures/videos of fabricated items; tries to make corporate accounts more personal
Machine shop		Facebook, LinkedIn	Participates in groups
Laboratory safety devices	YouTube, Facebook, Twitter, LinkedIn	LinkedIn, Twitter	Videos on YouTube as well as links and articles on Facebook, Twitter and LinkedIn to drive traffic to site.
Office furniture	YouTube, Facebook, LinkedIn	Facebook	Inspired to implement social media for business after personal experience; wants to use Twitter for getting real-time info to sales force; Facebook for interacting with customers; YouTube for demonstrating his products.
Luxury home furnishings		Facebook	Doesn't keep Facebook updated
Contract wire manufacturer		None	Embarrassed by his ignorance but his family uses Facebook
Plastics molder		LinkedIn	Personal profile

LinkedIn usage is thought-provoking. Only one of the manufacturers using social media has a company profile on LinkedIn, but it became clear that he and two others respondents were using it for marketing through their personal profiles. The other manufacturer using social media uses his LinkedIn profile to list the capabilities of his company and has linked the company's blog, Twitter and Flickr accounts to his profile. The manufacturer whose company does not use social media is personally active in several LinkedIn groups and has had success, stating he has been able to "connect and reconnect with customers." His company is currently working on projects with 2 LinkedIn connections. The manufacturer in the process of implementing social media doesn't think LinkedIn is useful for marketing and is "more for hiring and recruiting."

When asked what they thought about larger NC manufacturers such as Cree, Caterpillar and Glen Raven using social media, the overwhelming response was curiosity. Two manufacturers not using social media wondered how they did it. Commented one:

How are they doing it? How does a company like Cree use it to create excitement about their product? Cree is not a consumer product like Caterpillar is.

The other manufacturer commented that he'd love "to see what they are doing and how effective it is. See some numbers on results." One of the manufacturers currently using social media wondered how personalized the messages coming from the larger manufacturers are, stating "it's a turn off if it is not personal and two-way communication." Three other manufacturers felt that it legitimized social media usage. The manufacturer in the process of implementing social media commented, "they have marketing prowess. They have probably given it lots of forethought and study" while the other manufacturer currently using social media suggested that the larger manufacturers

could provide a good model on how to use social media for the smaller ones and that small manufacturers shouldn't be intimidated by the larger ones.

When asked what it would take for their company to begin using social media, all four manufacturers wanted more information. One of the three wanted examples and a plan, wondering how a manufacturer interacts with potential clients: "is it truly interaction or just pushing?" Another one wondered if social media could be helpful because manufacturers are starting to approach their end user as a way of increasing profits and cutting out intermediaries. By not using social media, his company "might be missing an opportunity" to get to their end user. The third was the most skeptical, stating he'd need to see results or customers demanding it and doesn't think his customers want anything other than "good parts in a timely manner." The fourth was unsure about the costs involved.

**TABLE 5 Concerns/needs voiced by manufacturers to the question what it would take to convert them to using social media in their business.**

<b>Manufacturer</b>	<b>Concerns/Needs</b>
Machine shop	Need to see results or customers demanding it
Plastics molder	Unsure about costs
Luxury home furnishings	Wondering if SM could be helpful. Manufacturers starting to get to end-user to increase sales; might be missing an opportunity
Contract wire manufacturer	Some examples and a plan on how to use it-how a manufacturer interacts with potential customers. Is it truly interaction or just pushing?

The manufacturers using or about to use social media provided different responses to how they would convince another manufacturer to use social media. One

said he would emphasize how easy it is to use social media and urge them to try it and get a feel for it. Also, “follow us and use us as a learning tool.” Another respondent would give them data and information about the company’s experience. The manufacturer in the process of implementing social media commented:

I would tell them about the benefit of instantaneous transmission of information. These days, you need to be able to turn on a dime and be nimble.

Moreover, his company is thriving in a volatile market because they have the ability to customize or modify their product for the customer’s needs, noting that agility is an advantage for the smaller manufacturer who can adjust more quickly than a larger one. In order to survive, small manufacturers must listen to the market and modify their manufacturing accordingly; in his opinion, social media will help that.

### *Marketing Challenges*

While the economy is certainly a challenge for the 7 manufacturers interviewed, especially for the luxury home product manufacturer, their primary marketing challenge is finding customers. One explained that they have 2 major customers and dozens of smaller ones and need to find one more, large customer to provide stability for the company but is unsure how to find that client. His company needs only one opportunity with a customer because they then develop a good relationship and become their exclusive provider; they typically obtain customers because a supplier screwed up on delivery or quality, but they don’t know how to identify such opportunities. Another manufacturer echoed this response, stating that they need to find more start-ups but can’t



easily do so. He isn't sure how social media would fit in with that: "this industry is very hands-on. You need to produce it first." The manufacturer implementing social media expressed that their primary challenge is the ability to get clear, concise information to the customer about their product and how their product can help them. They rely heavily on WOM; the problem is adding a catalyst to it to speed it up, and he thinks social media can help with that.

In addition to the challenge of finding customers, two manufacturers mentioned innovation and new product development. One of the manufacturers using social media noted they needed to develop a niche product that would help strengthen their business. The other, a manufacturer of a niche product, noted that in this economy, one of the only things they can control is what they make and sell and that they need to keep ahead of the market and produce new things.

### **Discussion**

Overall, my research corroborates previous research conducted into the marketing methods by the SME. Though the 7 interviewed manufacturers support the contention that SME marketing lacks structure and finesse, their awareness of their market, emphasis on their customers and relationships with them and goal to improve brand awareness demonstrates that they do understand and use key marketing principles, suggesting that as Brooksbank, Kirby, Thompson and Taylor (2003) conclude, SME marketing may be less understood than poorly done. The manufacturers' responses to the questions about in-person networks also support prior research on the benefits to networking: the three who do participate in networks do it for market research, building vital relationship and

keeping up with competitors. There may be a connection between social media usage and participation in networks: one of the manufacturers currently using social media and the manufacturer in the process of implementing social media actively network. The other manufacturer using social media wasn't against in-person networking; he had time constraints due to his commute to work.

All 7 manufacturers have websites, indicating they are aware of the necessity of having some sort of Internet presence. Even though all of the manufacturers used more than one method to market their business, the website was the first method mentioned in almost all cases and the primary marketing method with any marketing collateral created being placed on the website instead of printed and mailed. While all 7 manufacturers emphasized the importance of relationships to their business, only the ones using social media included in-person marketing methods along with the online methods. As well the ones using or in the process of using social media had an extremely diverse mix of marketing methods, using any method they could including print, online and in person, possibly suggesting a greater marketing sophistication than the other 5 manufacturers.

Even though only three of the manufacturers use social media to market their business, there is interest in it from all of them. Several of the interviewees asked me for my results once my research was finished, and one told me he had responded to my interview request primarily because of the topic and his curiosity how library science, manufacturing and social media fit together. As mentioned in the results, two of the manufacturers currently not using social media indicated that my interview had them thinking about it. While researchers have typically found that resource constraints hamper marketing by SMEs, the respondents indicated that resource constraints—at least

in terms of cost—were not an issue. If constraints were mentioned, it was in terms of time. The company's owners and their demographics were major influences on social media adoption, however; for the companies not using social media to adopt it, someone within the company will need to champion it and convince the owners as has been done by the two manufacturers currently using social media.

I also formed the impression that at least 2 of the manufacturers not using social media could be converted fairly easily if they received training, mentors and examples for how it could be used. For example, two of the manufacturers not using social media indicated they had a need to identify new clients but weren't sure how to go about it. They also mentioned that they especially wanted to target start-ups. There are a lot of start-ups and organizations nurturing start ups on Twitter and with a little research, it would be fairly easy to build that base.

The manufacturers provided different perceptions towards various social media platforms, especially Facebook, perceptions that could have implications on Facebook's attempt to become entrenched as a business network. One stated that Facebook was not business-oriented. Another considered Facebook to be more consumer-oriented versus his business-to-business model. However, the manufacturer in the process of implementing social media considers Facebook a must have for commercial entities, calling it "solid gold."

Even if they aren't using social media for their businesses, a majority of them are using it personally and using it to market, even if they don't acknowledge that they are. There is a clear difference in how the manufacturers perceive LinkedIn as compared to the other social media platforms. It is fascinating that most of the manufacturers are

personally on LinkedIn and consider it to be a network, yet don't consider what they do on it to be social media marketing, especially in the case of manufacturer who has connected and re-connected with clients and obtained business from it. While it may be years before the majority of manufacturers embrace social media as a viable method of marketing, it speaks to Rick Segal's belief that the line between our work and private lives is evaporating, especially due to the rise of the smart phone: how we access information is no longer dependent on whether we're being paid to do so or on our own time:

(Mobile) has changed the way we talk to business decision-makers. Being at work is no longer a place; it is a state of mind, a kind of continuing oscillation that people are making between their work life and their personal life. I think probably all three of us along the way for years have been saying at the end of the day business-to-business is person-to-person. But I think what's happened is a much more profound change, and that is we no longer contact places of business, we contact individual people (Callahan, 2011).

Ultimately, for these busy manufacturers, their perception and adoption of social media for their companies will be whether social media helps them to obtain business.

While my research comprised a very small sample and comprised only two manufacturers currently using social media, I conclude based on my interviews with the manufacturers using social media, that yes, it could help them to obtain business. At the very least, it could not hurt. The two companies currently using social media gave specific examples of relationships built and/or business obtained through social media and can provide a model for other manufacturers looking to implement social media into their marketing mix. As noted in the literature review, resource constraints in terms of personnel can be an issue for small businesses, yet the two manufacturers currently using social media have 10 and 40 employees respectively and make social media a priority,

suggesting that few marketing personnel need not be an impediment. Cost certainly would not be a constraint as monetary investment can be small due to the availability of free tools.

### *Recommendations for manufacturers*

As a result of my research, I propose the following recommendations for small manufacturers considering implementing social media:

- Talk to your customers. Ask them what social media sites they use and whether they use it for purposes other than personal as well as what kind of information they would be interested in seeing.
- Research. Do a Google search on how companies are using social media. There are lots of case studies on how small businesses are using social media. As well, each tool has different advantages and disadvantages depending on what you want to do. If you are interested in researching markets and clients, Twitter is well-suited for that. Facebook is useful for interacting with others and building a community. YouTube is excellent for posting videos and would be a great way to show off your facility and your products.
- Pick a platform: Decide which social platform you'd like to begin with. You don't have to start using every social platform at once, and it's better to start small to figure out what works for you, your clientele and your goals. Spend time observing how users interact on the platform before you jump in.

- Identify companies you would like to emulate. For example, the interviews highlighted that there was a fascination with how Cree used social media because they are innovative and not a consumer product manufacturer. Google the companies you identify (“Company Name Facebook” or “Company Name Twitter” are useful searches) and study how they use social media. Do they post daily? Do they post links to articles from other sources? How do they interact with other users in these platforms?
- Exchange best practices/find a mentor. Discussing social media with other manufacturers, especially those already using social media could be extremely helpful as you discover viewpoints different from your own and techniques to help you use it successfully.
- Think *outside* the box. The great thing about social media is how it allows you to market in different ways. How can you apply that power to your company? How can you make that widget meaningful? What do people who buy your widgets want in a widget? Think about what you want people to know or think about your product. Take pictures or videos and post them. Write a blog post or tweet about issues or trends in your industry or about a particular challenge you overcame in order to produce an item. Write about an interesting way in which your product is being used. For example, I talked with a manufacturer who was unaware due to being part of a supply chain that a product his company made was ultimately part of a military weapon until he was audited by the DOD to ensure his product met quality standards. That experience would have made a fascinating blog post and helped humanize this one tiny item.

- Think *inside* the box. The reality is that though social media is new and shiny right now, it in fact is not that new conceptually. Word-of-mouth and relationships are crucial for small manufacturers, and the ones I talked to considered them to be major components of their business. Social media is all about relationships and word-of-mouth. While the methods and tools are different, the desired outcomes and nuances are the same. In other words, don't be afraid: you use these techniques every day!
- Have fun. Social media is still somewhat like the Wild West. There are best practices but few hard and fast rules. Don't be afraid to make mistakes and experiment.

#### *Recommendations for service providers*

Based on the interest the manufacturers displayed toward social media, there are opportunities for organizations that provide services to these companies to add social media services and consulting to their services. Organizations like the NC State University Industrial Extension Service, the Small Business and Technology Development Center, and the state's 58 community colleges currently offer expertise in working with manufacturers to implement bottom-line solutions such as lean, Six Sigma, and ISO 9001 quality management certification. My research shows that there would be a market for social media consulting and implementation and that these organizations should consider developing such services to help the state's small manufacturers. These

organizations could also provide a hub around which these manufacturers could connect, helping them meet each other and exchange best practices.

This research comprised a very small sample of manufacturers, so it is impossible to generalize these findings to the larger population of small manufacturers across North Carolina as well as across the nation. More research needs to be done on the challenges facing small manufacturers, how they market and their attitudes towards social media in order to develop a fuller picture of whether social media would be useful. As well, more research needs to be done on the small manufacturers using social media to discover how they are using it as well as their success stories and negative experiences. Research into the practices of large manufacturers that use social media would be beneficial as well. It is clear that the smaller manufacturers consider the decisions they make to be legitimate and to carry weight, so it is possible that the lessons learned and methods of the larger manufacturers could be useful for smaller manufacturers.

## **Conclusion**

Manufacturing doesn't have a glamorous image. Yet, it is vital to our economy and has in fact led the economic recovery. Research shows that small manufactures face many marketing challenges due to their size and resource constraints; however, based on research conducted on the marketing practices of and perceptions of social media by 7 small manufacturers located in North Carolina, it is clear that social media could be an asset based on their marketing goals and challenges. Social media can help them make contacts, build relationships and ultimately obtain business.



## **Appendix 1: Interview Questions**

### Questions about the company's marketing strategy

1. Does the company have a defined marketing function?
  - a. If so, could you tell me more about its structure?
  - b. If not, why not?
2. What one word describes marketing in the company?
3. What is the primary marketing goal?
4. How does the company market itself and its products?
5. What marketing methods have been the most successful and why?
6. What or who is the primary influence on how you market?
7. How does the company find out information about the following:
  - a. Competitors
  - b. New product ideas
  - c. Customer feedback

### Questions about the company's use of networks and networking

1. Are you a member of any business or professional networks?
  - a. If so, which ones?
    - i. What are your primary reasons for networking?
    - ii. Does information obtained via your networks influence the decisions you make? If so, can you give me an example?
  - b. If not, why not?
2. What role does networking play in marketing the company?

### Questions about social media

1. Have you heard of social media and the following tools:
  - a. Facebook
  - b. Twitter
  - c. blogs
  - d. YouTube
  - e. LinkedIn
2. What is your perception of social media?
3. If the company uses social media:
  - a. What social media sites have been the most successful and why?
  - b. Can you tell me about any success stories?
  - c. Can you tell me about any negative experiences?
  - d. Why did you start using social media?
4. If the company does not use social media:
  - a. Why not?
5. Do you use social media in your personal life?
  - a. If so, which ones?
    - i. Why?
  - b. If not, why not?
6. Many companies are using social media to market their businesses, including manufacturers such as Cree, Caterpillar, and Glen Raven. What is your reaction to that information?
7. If you do not currently use social media to market the company, what would it take to change that?
  - a. If you use social media, what would you say to convince another manufacturer?
8. Does the company block or restrict Internet access, including access to social media sites, for employees?

### Overall Challenges

1. What is the primary marketing challenge facing the company?

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