1. Riley Dugan, hereby submit this original work as part of the requirements for the degree of Doctor of Philosophy in Business Administration.

It is entitled:
"I'd Like to Add you to my Professional Network: An Exploratory Look into the Effect of LinkedIn Usage on Sales Performance"

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“I'd Like to Add You to my Professional Network…”: An Exploratory Look into the Effect of LinkedIn Usage on Sales Performance

A dissertation submitted to the
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Abstract

The present research takes a mixed methods approach to examining the use of social media by professional salespeople. The use of social media was elicited through depth interviews conducted with 25 B2B salespeople across various industries. The results indicated that salespeople use LinkedIn as their preferred social medium, with it seen primarily as a tool to conduct pre-sales call research and to develop relationships with customers post-sale. A structural equation model was developed based upon the results of the qualitative study and existing theory in information systems and sociology, including the technology adoption model (TAM), task-technology fit theory (TTF), and social capital theory. The results revealed that salespeople believe that using LinkedIn as a research tool helps them generate new customers. Additional analyses also reveal that for salespeople in the office products industry, the use of LinkedIn for conducting pre-sales call research leads to increases in perceived efficiency (input) and effectiveness (output), and its use for developing relationships with customers leads to an increase in perceived relationship performance. Implications for theory and practice are discussed.
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Introduction

There is little doubt that social media (Web 2.0) technology has had a profound impact on the way that people communicate. Numerous definitions have been put forth for social media, but what they all share is the idea that social media is an electronic platform for individuals to interact with others with common interests and associations (Lassk, et. al, 2012). This interaction also allows for traditional “end users” of marketing communication, such as customers, to co-create content alongside the firms with whom they are communicating. As a result, social media is changing how marketers and customers communicate with one another.

The ubiquity of social media technology cannot be easily understated. It is estimated that 72% of all internet users are active on social media (Bullas 2014). Many of these individuals who use social media in their personal lives are also expecting businesses to use it as well (Kaplan & Haenlein, 2010). Consumers, and especially younger consumers, are demanding more immediate responses from business and the ability to co-create value in their role as customers, and are doing so through social media technologies such as blogs, microblogs (Twitter), and company extranets (Kaplan & Haenlein, 2010; Bristow, 2011; Lenhart, et. al 2010). Consumers are using social media not only as a research tool, but also to engage companies and other customers in conversation about the brand and their products and services (Garretson, 2008; Trainor 2012). Research suggests that future strategies and tactics in selling that do not take into account digital and social media are likely doomed to failure (Crittenden, Peterson, & Albaum, 2010). As a result, firms are attempting to hire individuals experienced in social media to
perform the traditional boundary spanning role of the salesperson (Jenkin, 2011; Rinaldo, Tapp, & Laverie, 2011).

In their role as boundary spanners (Kotler, 1984), salespeople are uniquely positioned to use social media as a business tool. Salespeople are using social media to gather information, monitor the conversations that are occurring online about their firms, and to build relationships with their customers (Lamb, 2010; Sharma & Sheth, 2010). Typical social media technologies used by salespeople include wikis, virtual meetings, document sharing, blogs, Facebook, LinkedIn, instant messaging, and Twitter (Li and Bernhoff, 2008). Firms who develop technologies for the sales industry have taken notice. For example, Salesforce.com’s “Chatter” integrates the functionality of traditional customer relationship management (CRM) systems with the features of Facebook and Twitter to increase sales (Lassk, et. al 2012). However, despite enthusiasm from customers, and the potential to leverage social media as a business tool, fewer than 9% of salespeople report that their organizations focus on the sales force’s use of social media (Agnihotri, et. al, 2012). This is especially ironic considering that researchers assert that social media should be “owned” by those parts of the organization (sales and marketing) that are closest to the customer (Andzulis, Panagopoulos, & Rapp, 2012).

An implicit assumption in business is that increasing technology use always leads to increases in performance (Ahearne, Srinivasan, & Weinstein, 2004). However, a large body of research in information technology has revealed what Brynjolfsson (1993) refers to as the “IT productivity paradox,” which asserts that the relationship between IT usage and performance is seldom linear, and not always positive. As such, many managers are reluctant to fully embrace new technologies due to worries that the costs of implementation would outweigh the benefits. This hesitation has been especially true with social media adoption, as few firms have been able
to even quantify clear success metrics. In addition to a lack of proven success metrics, senior management often lacks awareness of many of social media’s functionalities, and some are wary of ceding too much control of the conversation to the customer (Agnihotri, et. al, 2012). In short, understanding the role of social media as a business tool is still in its infancy.

However, despite management reluctance and lack of agreement in quantifying its value, scholars (Shih, 2011) have proposed that using social media as a business tool can help salespeople in eight distinct ways: 1) establishing credibility with customers 2) prospecting 3) getting your “foot in the door” 4) navigating customer organizations 5) collaborating across sales teams 6) providing customer references 7) building customer rapport, and 8) ensuring ongoing customer success with post-sales support.

The purpose of the present research is to provide an exploratory look into the effect of social media usage on individual sales performance. Factors leading to the salesperson’s adoption of social media as a business tool are proposed, as are mechanisms through which social media usage is posited to effect sales performance. Three studies attempt to provide insight into the role of social media in the selling process. In the first study, social media usage amongst sales professionals is elicited through qualitative, structured interviews with 25, B2B salespeople. In the second study, results of a factor analysis with 126 B2B salespeople reveal two distinct mechanisms –“research enhancement” and “relationship building”- which are proposed to effect sales performance. In the third study, a structural equation model of sales performance is tested with 281 B2B salespeople. More specifically, the third study examines whether LinkedIn usage has a positive impact on common sales performance metrics, such as sales efficiency (input), effectiveness (output), and perceived relationship performance.
Literature Review

Salespeople and Technology Adoption

One of the most pervasive beliefs in business is that increasing technology usage leads to corresponding increases in performance. More specifically, management often assumes that providing their employees—and salespeople specifically—with information technology will lead to higher levels of productivity and better customer relationships (Ahearne, Hughes, & Schillewaert, 2007). Yet, despite management enthusiasm toward technology usage, many firm driven technology implementations are unsuccessful. This is particularly evident with sales technology implementations. For example, research has indicated that fewer than 30% of CRM implementations are successful (Reinartz, Krafft, & Hoyer 2004). One of the primary reasons for this low success rate is that salespeople are often very reluctant to adopt new technology (Mills 1995; Parthasarathy & Sohi 1997; Sharma & Sheth 2010). Compounding this difficulty for sales managers is that many B2B salespeople operate under hybrid control systems, meaning that they have some individual control over their decision to adopt technology (Onyemah, Swain, & Hanna, 2010). Thus, many technological implementations fail simply because management cannot obtain sufficient salesperson “buy-in.”

Research on the intersection of technology usage and sales performance has primarily examined Sales Force Automation (SFA) and CRM systems. Although there are many similarities between these two technologies, they can be differentiated based upon primary usage function. SFA systems were developed to automate routine sales tasks like inputting contact information and filing expense reports (Jacobs, 2006). In short, these systems were developed to
make salespeople more efficient by allowing them to focus more of their time on customers and less time completing administrative tasks. On the other hand, CRM systems were created to help salespeople develop strategies that would theoretically lead to increases in sales effectiveness (Rigby & Ledingham 2004; Rapp, Agnihotri, & Forbes, 2008).

Many researchers have posited specific ways that technology usage can benefit sales performance. From the standpoint of sales efficiency, Moriarty and Swartz (1989) suggested that technology usage could reduce the amount of time that salespeople spend on non-selling tasks such as compiling reports and updating customer records. Further, empirical evidence suggests that the automation of routine tasks can lead to increases in sales performance (Gohmann et al. 2005; Ahearne et al. 2008). In addition to increases in efficiency, sales technology has been shown to lead to increases in effectiveness by enabling salespeople to increase their customer knowledge, share market intelligence with their colleagues, and create better sales presentations (Ko and Dennis 2004; Ahearne et al. 2008). Technology usage might also make salespeople more responsive and reliable, which should lead to corresponding increases in effectiveness (Zeithaml 1988). In addition, effective technology use might also enable salespeople to discover cross-selling opportunities and better engage in relationship selling (Ahearne, Hughes, & Schillewaert, 2007). The concept of relationship selling, which is defined as a “multi-stage process that emphasizes personalization and empathy as key ingredients in identifying prospects, developing them as customers, and keeping them satisfied (Jolson 1997, p. 75),” is closely tied to the concept of relationship performance, which has been posited to be highly correlated with technology usage. For example, Keillor and colleagues (1997) have argued that technology usage can provide a forum to better identify buyer needs and also to provide more customized
solutions. Jones and colleagues (2002) have argued that technology usage can help salespeople build stronger alliances with their customers.

However, despite evidence suggesting that technology usage leads to increases in sales performance, empirical findings are mixed. While empirical research has demonstrated a positive relationship between CRM usage and sales performance (Boulding et. al 2005), the perception that CRM implementations will categorically lead to increases in sales performance is erroneous. For example, Ahearne and colleagues (2004) showed that there is a curvilinear relationship between CRM usage and performance. Specifically, they find that CRM usage leads to increases in sales performance up to a certain point, but that additional usage results in decreases in performance. The reason for this relationship is that while information technology is designed to make people both more efficient and effective, too much technology use could mean that individuals are spending less time focused on the core aspects of their job. For example, salespeople who use CRM systems excessively may spend less time with their customers than salespeople whose technology usage is more appropriate. This echoes what Brynjofflson (1993) has referred to as the “IT productivity paradox.” In other words, technologies designed to enable increases in performance often have the opposite effect when they are poorly implemented or inappropriately utilized. This tenuous relationship between CRM usage and sales performance was corroborated by the findings of Yim and colleagues (2004), who found that implementing CRM systems had no effect on customer satisfaction, retention, or sales volume.

In short, research into sales technology usage has revealed equivocal findings. If used appropriately, technology can lead to increases in sales effectiveness and efficiency as well as relationship performance. However, technology is not a panacea that will automatically produce increases in performance if used inappropriately.
Social Media: A Brief History

It is difficult to underestimate the effect that the Web 2.0 (the “social media” web) has had on society. Scholars have defined the advent of the internet as the “Web 1.0,” (Cormode & Krishnamurthy 2008) whereas Web 2.0 can be seen as an extension of the internet to allow for web content in which the individual end user can “co-create” content along with the original author of the content. While many believe the beginning of the digital age to be a relatively recent phenomenon, the commercialization of the internet began in 1969 with the creation of CompuServe, which dominated internet dial up until the late 1980’s. The first foray into social media occurred in 1978, when two Chicago men created an online bulletin board system to post announcements to their friends. Advances in media richness led students at the University of Illinois to create Mosaic, which was the first graphical browser, in 1993. Blogging, another form of social media, was developed in 1997.

Many individuals primary exposure to social media comes in the form of social networking sites such as Facebook. However, the first social networking site, Friends Reunited, was founded in Great Britain in 1999. Three years later, Friendster, the first social networking site to gain prominence in the United States, was founded and gained a then unprecedented 3 million members within their first 3 months of operation. 2003 marked the beginning of both MySpace, which became the first social networking site to achieve mass popularity, and LinkedIn, which was started as a social networking site for business professionals. A year later, Facebook was founded by Harvard undergraduate students and would eventually surpass MySpace as the world’s most popular social networking site. In an attempt to monetize their
website, Facebook was the first social networking site to launch an advertising system, which was called Beacon. Beacon took a user’s information from external websites and created targeted advertisements on their Facebook page. While this was initially opposed by users, it soon became a commonly accepted business practice, and is now commonplace on all prominent social media sites.

The Explosion of Social Media

Even though some prominent social media sites have relatively short shelf lives (Friendster and MySpace being two well-known examples), the idea of using the internet to create and share content appears to be here to stay. Although definitions for social media are numerous, many involve this idea of creating and sharing content on an electronic platform (See Table 1).

Table 1: Definitions of Social Media used in the Sales Literature

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<th>Social Media Definition</th>
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<tr>
<td>“A platform for individuals to interact with others with common interests or associations.”</td>
<td>(Lassk et. al, 2012)</td>
</tr>
<tr>
<td>“The production, consumption, and exchange of information through online social interactions and platforms.”</td>
<td>(Marketo, 2010)</td>
</tr>
<tr>
<td>“An opportunity for companies to tell their own stories.”</td>
<td>(Ploof, 2009)</td>
</tr>
<tr>
<td>“The technological component of the communication, transaction, and relationship building functions of business which leverages the network of customers and prospects to promote value creation.”</td>
<td>(Andzulis, Panagopoulos, &amp; Rapp 2012)</td>
</tr>
<tr>
<td>“Digital content and network based interactions that are developed and maintained by and between people.”</td>
<td>(Cohen 2011)</td>
</tr>
<tr>
<td>“A group of Internet-based applications that build on the ideological and technical foundations of Web 2.0 and allow the creation and exchange of user generated content.”</td>
<td>(Kaplan &amp; Haenlein, 2010)</td>
</tr>
<tr>
<td>“Participating in social networks, which enable individuals to create and share content, communicate with one another, and build relationships.”</td>
<td>(Hennig-Thurau et. al 2010)</td>
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Examples of social media content include blogs (where readers can post comments to the author’s original post), wikis (where a community of members create content together for a common purpose), instant messaging, and various content sharing websites (such as Facebook, YouTube, and LinkedIn). The social media web has revolutionized content sharing and the way that customers interact with companies. Typically, advertisements and marketing campaigns have been firm generated, but the advent of social media has allowed customers to interact with the brand in a more personal fashion. In other words, customers now have more control over the “conversation” than has previously been the case. Research has indicated that over 50% of online shoppers interact with a company over a social media networking site such as Facebook, LinkedIn, or Twitter (Rapp, et al. 2013). Customers can pass along their own reviews of the company to other customers, and can even create content that the company can use in their own marketing campaigns, a prominent example being many of the viral videos which are often user generated and can serve as “commercials” for the company (Petrescu & Korgaonkar 2011). According to Radian 6, a marketing research firm specializing in new media, customers are more loyal to firms that use social media to adapt to their customers (Rapp et al. 2013).

The explosion of social media is evidenced by some staggering statistics. By 2012, Facebook, the most popular social media networking site, had over 850 million members, which would make the Facebook “nation” the third largest in the world. Each day, these Facebook users generate 2.7 billion “likes” or comments, and upload around 250 million photos (Hoffman & Novak, 2012). The users of YouTube, a video sharing platform, collectively view more than 4 billion videos each day. According to YouTube press statistics, more video content is uploaded to the site in one month than has been created by the 3 major television networks in the last 60
years (Bullas 2012). While it took television almost 40 years to garner 150 million users, Twitter, a popular micro-blogging website, did so in just 4 years (Agnihotri, et al. 2012).

Not only are individual consumers taking notice of the power of social media, but businesses are also. A recent survey revealed that around 90% of U.S. and European firms have undertaken social media initiatives, with approximately half of these integrating social media into their business strategies (Insites Consulting, 2011). While many practitioners and popular business writers recognize the potential for social media in a B2C setting, it is also becoming increasingly common in the B2B world, with 93% of marketers using social media to communicate with their customers (Holden-Bache, 2011). By 2010, the average Fortune 100 company had 20 social media accounts (Rapp, et. al 2013), and over 70% of firms are planning on increasing their use of popular social media sites such as Facebook and Twitter over the coming years (Stelzner, 2011). Market analysts expect that spending on “social software” to support marketing and sales will exceed $1 billion worldwide by the end of 2013 (Thompson, Goldman, & Mertz, 2010). In large part this growth is being driven by customers, who expect the companies they do business with to have a presence on social media (Nair, 2011; Berthon, Pitt, Plangger, & Shapiro, 2012; Trainor et al., 2013). In fact, a recent study indicated that approximately 72% of customers use social media to interact with companies (Trainor, 2012).

**Social Media and Marketing and Sales: Early Empirical Research**

Early social media research in marketing has suggested that managers perceive the importance of social media, but are unsure how to use it effectively. A 2011 survey showed that 99% of managers believed that social media would have a significant impact on their business, but two thirds had no idea how this impact would manifest itself (Safko, 2011). However,
marketing executives soon realized that social media could be utilized to build brand awareness, generate web traffic and leads, and aid in customer support programs (Baird and Parasnis, 2011; Kim & Ko, 2012; Newman, 2011; Barnes and Lescault, 2012; Dutot, 2013). Empirical evidence also suggests that social media can aid marketing efforts in other ways. Weinberg and Berger (2011) found that consumers who are a fan of a brand on Facebook or a follower on Twitter are more likely to buy or recommend that brand. Stephen and Galak (2012) found that while traditional and social media both positively affect sales that -even after adjusting for event frequency- social media’s sales elasticity is significantly greater than traditional earned media’s. In addition, they found that the conversations about a brand on social media impacts the mentions of a brand on more traditional media such as television or newsprint, particularly when the brand is not well known. Thus, social media should be seen as a complement to traditional media, not as a replacement.

While popular evidence and academic research suggests that marketing managers are beginning to embrace social media for professional purposes, sales managers have been more reluctant to begin social media initiatives. Despite the fact that salespeople often serve as “boundary spanners” for their firms, many sales managers view the use of social media for business purposes with skepticism (Agnihotri et al. 2012). Managers fear that social media cedes too much control of the “conversation” to customers who may have a negative view toward the organization (Gillin, 2009), which may in turn influence other customers. Many managers are also skeptical of social media’s success metrics, most of which don’t account for return on investment (ROI) (Agnihotri et al. 2012; Inks, Shetzsle, & Avila, 2012). Many sales practitioners recognize that a large number of “likes” and “click-throughs” don’t necessarily lead to increases in performance (Lake, 2011).
Furthermore, many B2B salespeople feel that social media is more appropriate for the B2C world because of the more rapid pace of business in that setting and the need to interact with a larger number of customers (Lager, 2009; Michaelidou, Siamagka, & Christodoulides, 2011). Given that the total value of B2B e-commerce exceeds B2B e-commerce by over 350%, the belief that social media is less appropriate for the B2B world seems misplaced (Kalapepsi, Willersdorf, & Zwillenberg, 2010). However, despite these reservations, salespeople may be the most appropriate of a firm’s employees to utilize social media. At its essence, social media is about having conversations, and salespeople interact with a firm’s customers more so than the employees of any other functional area within the firm (Jenkin, 2011; Rinaldo, Tapp, & Laverie, 2011).

Although salespeople are generally reluctant to adopt social media for professional purposes, anecdotal evidence suggests that social media usage may provide salespeople several benefits. Social media may save salespeople considerable time during the lead building and prospecting stages of the sales process (Seley & Holloway, 2008; Curtis and Giamanco, 2010). Shoemaker (2012) proposes that social media can help salespeople build trust, develop weak ties, create lifetime customer value, help identify centers of influence in the buying center, and aid in contact management. In addition, some social media tools, such as LinkedIn can be used to help maintain relationships with customers (Safko, 2011)

Despite sales practitioners’ skepticism toward adopting social media, academic research has provided some initial insight into social media’s role in the sales process. A recent special issue of the Journal of Personal Selling and Sales Management proposed ways in which social media could be used as part of the sales function. Andzulis and colleagues (2012) argued that social media should be “owned” by those functional areas within the firm that know the
customer the best, i.e. marketing and sales. While they argued that social media should not be seen as a replacement for more traditional forms of communication such as email and phones, they do contend that it can be an extremely useful way for salespeople to gather information about a customer as well as general knowledge about his company. Trainor (2012) proposed that the relationship between social media usage and sales performance may be mediated by collaborative support, arguing that an open environment in which salespeople work with their customers to co-create mutually beneficial solutions is one in which social media could have a positive impact on sales effectiveness and efficiency. Agnihotri and colleagues (2012) delineated between “push” and “pull” social media technologies. The former category includes specific social media platforms such as Facebook and LinkedIn where information is “pushed” to the customer from the firm. With pull technologies, such as blogs and wikis, the customer has more control over the content created and the sharing of information. While push technologies are more familiar to both salespeople and their customers, the opportunity to take full advantage of social media’s capabilities resides with engaging in conversation, which is easier to do with pull technologies. Rodriguez and colleagues (2012) suggested that the link between social media usage and sales performance is mediated by the management of customer relationships, meaning that social media may provide an efficient way to engage customers. While these articles proposed interesting models of social media usage effectiveness, the majority did not empirically test their models.

However, other research has provided some early evidence of the impact of social media usage on sales performance. In what is likely the most informative study to date dealing with social media usage’s impact on sales performance, Rapp and colleagues (2013) found that social media usage has a positive impact on brand performance, retailer performance within a supply
chain, and consumer retailer loyalty. However, the authors also found that social media usage is not a panacea which will immediately cure any relationship ills that a firm may have with their customer base. The authors found that social media usage further strengthens already strong relationships that a firm has with their customers, but that firms with weak customer relationships will not realize the same benefits (Rapp et al. 2013).

Inks and colleagues (2012) performed an exploratory study on the effectiveness of popular social networking sites Facebook, LinkedIn, and Twitter as professional sales tools. The authors framed their research within the “Hype Cycle” as described by the Gartner Group, a leading global information technology research firm. They concluded that the perception of social media as a business tool has entered the peak of the Hype Cycle, where there is substantial anecdotal evidence suggesting the importance of social media, but very little empirical evidence to back it up (Inks et al., 2012). While there were methodological limitations to the authors’ study - such as a lack of clear distinction in the questionnaire about the differences in usage patterns of social networking sites for business or social purposes - the results were nevertheless illuminating. For example, the authors discovered that 65% of the salespeople that they surveyed were infrequent users of LinkedIn (i.e. individuals who logged in less than twice a month). This is surprising when considering that LinkedIn is specifically designed as a business, social networking tool. The authors further divided their sample into low, medium, and heavy users of social media. They found that salespeople who used social media sparingly tended to be more experienced, as well as more successful (i.e. had a higher income). However, in measuring income, the authors did not control for experience or industry type, so their conclusions should be viewed as tentative. In using social media for specific sales tasks, such as generating leads and communicating with the customer, the authors found that the majority of the sample was unsure
about the benefits that social media could provide. This was especially pronounced amongst low
users of social media who instead of being averse to social media, are simply unaware of its
potential benefits. Finally, even amongst heavy users, the perceived benefits of social media are
tempered. Eighty seven percent of heavy users surveyed perceive that their productivity has
increased only “somewhat” or “not at all” as a result of adopting social media (Inks et. al., 2012).
This result echoes anecdotal evidence and the work of Rapp and colleagues (2013) who argue
that social media should not be seen as a panacea for all that ails business. Yet, despite the
tempered enthusiasm, over 65% of the respondents in the Inks and colleagues’ (2012) study
expect social media to be critical to the success of salespeople in the future.

Theoretical Development

Given that the present research is based upon the professional usage habits of a relatively
new technology, no existing theories known to the author specifically explore the effects of
social media usage on business performance. However, there exist theoretical models within the
Information Systems (IS) literature that explain general technology adoption and the effect of its
usage on business performance. Yet, no model explains both adoption and its effect on
performance. Thus, the theoretical development for the proposed model depicted in Figure 1 is
based upon two models in the information systems literature, the Technology Adoption Model
(TAM) and the Task-Technology Fit (TTF) Model, as well as Social Capital theory, which is
popular in the behavioral sciences. The antecedents, mechanisms through which social media is
predicted to impact sales performance, and the subjective performance measures of the fourth
order factorial model depicted in Figure 1 are partially based upon these theories.
The model tested in Study 3 (See Figure 1) was developed based upon two initial studies which provided insight into the social media usage patterns of sales professionals. First, a qualitative study consisting of semi-structured depth interviews was conducted with 25 salespeople. Consistent with the work by Safko (2011) and Shoemaker (2012), the results revealed that LinkedIn was the preferred social medium for professional salespeople. Further, the results revealed that LinkedIn is being used for 3 distinct stages of the selling process (Prospecting, Planning for the Sales Call, and Post Sales Follow-up). Factor Analysis in Study 2 revealed that these 3 stages can be divided into two general mechanisms through which LinkedIn usage is predicted to affect sales performance, enhanced research capabilities and improved relationship development. The former is in accord with sales technology research indicating the effect of increased knowledge on performance (Ko & Dennis, 2004; Ahearne, Hughes, & Schillewaert 2007; Park et al 2010), and the latter is consistent with much of the research on SFA/CRM system usage and relationship performance (Jones et al 2002; Ahearne, Hughes, & Schillewaert 2007). These constructs fit into the framework suggested by Task-Technology Fit Theory (TTF). The magnitude of LinkedIn’s impact on performance can be partly explained by Social Capital Theory, which asserts that professional benefits accrue to those individuals who are able to develop lots of “weak” professional ties (Granovetter 1973; Hansen 1999, Levin & Cross 2004). Finally, the performance (dependent) measures for the model are common in the sales literature. The model depicted in Figure 1 shows subjective performance measures. Both subjective and objective performance measures were collected for study 3. These measures include relationship performance, input performance, and output performance. These latter two measures are often categorized in the literature as sales “efficiency” and “effectiveness,” respectively (Boles, Donthu, & Lohtia, 1995).
Numerous researchers have proposed models to explain information technology adoption. In addition to information systems, many of these models have roots in psychology and sociology, and are based on theories such as the Theory of Reasoned Action, the Theory of Planned Behavior, and various motivational theories (Venkatesh, et. al 2003). The TAM (Technology Adoption Model) takes the individual as the unit of measurement and attempts to explain technology adoption as a function of “perceived ease of use” and “usefulness”, where the
former is defined as “the belief by a user that using a particular system would be free of effort (Davis, 1989, p.320)” and the latter as “the belief that using a system will increase the individual’s performance (Davis, 1989, p.320).” The TAM model has been shown to be both highly predictive of usage behavior while still maintaining parsimony (Yousafzai, Foxall, & Pallister, 2007).

Research has indicated that TAM is most predictive when taking into consideration adoption behavior that is volitional (Lee & Lehto, 2012). In other words, technology implementations that are initiated from management make perceived ease of use and usefulness less relevant, as employees adopt technology simply because they are told to do so. Social media adoption is typically the choice of the individual user, as firms –and their managers- have yet to understand how to monetize the technology. Thus, the TAM is especially relevant for explaining social media adoption in a professional setting.

While the TAM has been examined through the lens of a diverse and numerous set of technologies including email (Adams et al., 1992), internet technology (McElroy et al., 2007), and virtual communities (Teo, et. al., 2003), only recently has it been used to explain social media adoption. McGowan and colleagues (2012) studied factors influencing physicians adoption of social media technology and found that the main factors influencing adoption were perceived ease of use and usefulness, which is predicted by the TAM. In another study, Lee and Lehto (2012) applied the TAM to YouTube adoption in a professional setting, and found that perceived usefulness was a significant factor leading to YouTube adoption, whereas perceived ease of use was not. The authors concluded that since many users already used YouTube in their personal lives, perceived ease of use was less relevant because they were already familiar with the technology and didn’t require “ramp-up” time which is often associated with the adoption of
any work-place technology. However, despite this finding, others have found that perceived ease of use is a more important predictor of social media adoption than perceived usefulness in a professional setting (Kwon & Wen, 2010; Cheung & Vogel, 2013).

For salespeople who are often reluctant to adopt technology (Sharma & Sheth, 2010), a useful and easy to use technology like social media may alleviate many of the fears they have toward the technology. Social media has been proposed to help salespeople at numerous points in the sales process, and is a flexible technology that can be used as both a communication and research tool (Shih, 2011). In addition, social media, which is used by salespeople in their personal lives, is a much more “user friendly” technology than tools such as SFA systems, which are designed specifically for business purposes. Research has shown that younger and less experienced employees adopt workplace technology differently – and more willingly- than older and more experienced employees (Morris & Venkatesh 2000; Venkatesh & Morris 2000), which is especially relevant when talking about a technology such as social media, whose initial adopters have tended to be younger people.

Despite its usefulness in explaining the conditions leading to technology adoption, TAM, like many other models of technology adoption, falls short of testing the linkage between usage and performance, which limits its utility as an overarching model in academic sales research, where the purpose of many studies is to assess the impact of different variables on sales efficiency (input) and effectiveness (output).

*Task-Technology Fit Theory*

A model from the information systems literature that does test the linkage between usage and performance is Task-Technology Fit (TTF) theory. The TTF theory proposes that for an
information technology to have a positive impact on performance, the technology not only must be utilized, but must also be a good fit with the task that it performs (Goodhue & Thompson, 1995). The TTF model looks at the intersection of task requirements and technology capabilities, and argues that performance increases occur when these two align. In other words, technologies (such as hardware, software, or databases) that are used outside of their narrow, specific purpose, or which are ill-conceived, will not lead to gains in performance. In the context of this model, performance relates to any combination of improved efficiency or effectiveness, which makes it especially relevant for sales research (Goodhue & Thompson, 1995).

Recent research on the TTF model has examined it in the context of social media usage. Lu and Yang (2013) extended the TTF model to account for social media usage, and demonstrated that social-technology fit should be accounted for when examining a social media technology. Socio-technology fit refers to “the degree to which technology assists an individual in fulfilling his social needs” (Lu & Yang, 2013, pg. 4). Lu and Yang (2013) assert that all social media technologies are primarily used for the same tasks, but that the differentiating element leading to the usage decision is how well the task supports the user’s social needs. The authors found that the socio-technology fit was a more important predictor of usage intention and subsequent performance than was task-technology fit.

Additional research has also attempted to combine the TAM with the TTF model to better explain the factors leading to technology adoption and subsequent performance outcomes (Dishaw & Strong, 1999). While there is significant overlap between the two models, in that both intend to explain IT usage, they focus on different ends of the outcome chain (adoption versus performance outcome), as mentioned previously. However, research has shown that integrating the two models leads to a higher proportion of variance explained (Dishaw & Strong, 1999).
Social Capital Theory

According to Burt (1992), firms possess three different forms of capital. The first two, financial and human capital, are both tangible and are defined as the amount of financial resources a firm possesses and the aggregate talents and abilities of their employees, respectively. The third type of capital is called social capital, and is defined as the “goodwill that is engendered by the fabric of social relations and that can be mobilized to facilitate action (Adler & Kwon, 2002, p. 17).” More succinctly, social capital can be conceived as the tangible benefits that accrue from a network of intangible social relationships. For salespeople, possessing a large reservoir of social capital can mean the difference between professional success and failure. In a profession where very few leads turn into customers, and where developing long term relationships is necessary in establishing customer lifetime value, fostering a diverse and strong network of contacts is a professional necessity.

Social capital accrues in a social network, which consists of two elements, actors and relational ties (Wasserman & Faust, 1994). A relational tie links actors together through information sharing (Flaherty, et. al 2012), and the benefits of information sharing occur in the form of access, timing, and referrals, all of which are especially relevant for salespeople (Burt, 1992). To take maximum advantage of social capital, a network should be constructed that leads to both efficiency and effectiveness, where efficiency refers to reaching the maximum number of people with one contact, and where effectiveness concerns the total number of people reached through all contacts (Burt, 1992).

While having strong network ties is beneficial for developing personal relationships, research has indicated that -for business purposes- weak ties are more advantageous than strong
ties (Hansen 1999, Levin & Cross 2004). This seemingly counter-intuitive argument is based on the fact that weak ties, which are defined as “loose connections between people who may share useful information or new ideas and perspectives (Granovetter 1982, p..),” are less costly to maintain than strong ties (Hansen 1999). Weak ties are valuable because they often bridge the gap between members of disparate social networks. For example, strong ties are usually maintained by people in a dense, social network. These individuals all tend to know one another very well, thus other members of the network aren’t needed for referrals. Weak ties typically connect people from a broad, diverse range of backgrounds who are very outward looking (Williams 2006). For salespeople, maintaining a strong network of weak ties can be extremely important in gaining referrals. Weak ties outside of a salesperson’s dense social network will possess unique indirect contacts (Ustuner & Godes, 2006; Shoemaker, 2012). In addition, research suggests that useful weak tie contacts tend to have resources that are superior to the individual seeking information (Constant, Sproull, & Kiesler 1996). More succinctly, useful weak ties are those that can provide information (i.e. provide a referral) that a salesperson would not have had otherwise.

Research on social capital suggests that social network connections provide numerous tangible benefits. A strong social network provides access to a broader set of information, and improves it quality, relevance, and timeliness (Coleman, 1988). Social capital has also been shown to influence career success (Gabbay & Zuckerman, 1998; Podolny & Baron, 1997), compensation (Bellieveau, O’Reilly, & Wade, 1996; Burt 1997), assist workers in finding jobs (Granovetter, 1973, 1995; Obukhova & Lan, 2013), and create a larger pool of job applicants for firms (Fernandez, Castilla, & Moore, 2000).
Developing social capital within a social network is aided by the use of social media. Research has shown that social capital can be developed in online communities (Chiu, Hsu, & Wang 2006) and on social networking sites (Steinfield, Ellison, & Lampe, 2008). Evidence suggests that social networking cites contribute to the development of weak ties which, as discussed earlier, are ideal for generating referrals (Donath & Boyd 2004, Ellison, Steinfeld, & Lampe, 2007). Social media is a low-cost way for individuals to connect over geographically and temporally distant space. Social networking sites such as Facebook, LinkedIn, and Twitter reduce the effort and cost of maintaining relationships, and have increased the rate at which salespeople are able to generate contacts (Ferrell, Gonzalez-Padron, & Ferrell, 2010). These sites can enhance existing offline relationships, and are especially welcomed by younger salespeople (Ferrell, Gonzalez-Padron, & Ferrell, 2010).

Salespeople can use social media to develop a large social network which they can tap for referrals and information on prospects. In addition, social media enables salespeople to develop “maintained” social capital, which refers to the ability of individuals to maintain social capital as one progresses through career changes (Ellison, Steinfeld, & Lampe, 2007). This is especially relevant for those salespeople who may be promoted, change territories, or even leave the firm. Keeping in touch with customers post-sale via social media is an effective way for salespeople to develop their reservoir of social capital.

Antecedents Influencing Social Media Adoption

Despite a general tendency to view technology with skepticism (Agnihotri et al, 2012), salespeople may nevertheless voluntarily adopt social media for professional purposes for a variety of reasons. For one, many salespeople use social media in their personal lives.
Inevitably, this would reduce “ramp-up” time to learn the technology, and ease fears that the technology would be difficult to use. This idea relates to the TAM, which asserts that perceived ease of use and usefulness are the main drivers of technology adoption (Davis 1989). In other words, salespeople already familiar with social media from their personal lives will perceive that the technology is easy to use and will be better able to grasp the benefits that it provides. However, one question that this research will attempt to answer is whether there are particular salespeople who are more likely to adopt social media? While evidence suggests that younger salespeople (Zablah, Bellenger, & Johnston 2004) are more comfortable using technology, on a broader level what dispositional characteristics are likely to lead a salesperson to adopt social media? One dispositional trait that is posited to lead to an increase in social media adoption is an individual’s level of technology orientation. Individuals high in technology orientation are not only more comfortable using technology, but are more likely to see how different technologies can be linked together, and are typically “early adopters” of technology (Hunter & Perreault, 2006).

In addition to technology orientation, other dispositional characteristics may positively affect whether a salesperson adopts social media for professional purposes. Evidence suggests that salespeople who practice adaptive selling may be more likely to adopt technology for professional purposes (Ahearne, et. al 2008; Rapp, Agnihotri, & Forbes, 2008). Salespeople who practice adaptive selling recognize that no single sales presentation style works for every customer. As such, they recognize that utilizing technology can aid them in adapting their sales presentations to a particular customer. For example, existing sales technologies such as CRM and SFA systems, which essentially function as large databases of customer information, provide salespeople the opportunity to bring individualized information into the sales presentation. In
addition, adaptive salespeople may be able to recognize particular customers—industry types—for whom using technology would be advantageous. For example, interacting with a customer from a technology or design firm through social media may be more appropriate than interacting with a customer from a more “traditional” industry through the same medium. Adaptive salespeople may also be more likely to recognize when a specific technology fits the purpose for which it is intended or—conversely—are better able to adapt the technology for their particular purposes.

Possessing large amounts of social capital has been shown to be professionally valuable (Gabbay & Zuckerman, 1998; Podolny & Baron, 1997; Bellieveau, O’Reilly, & Wade, 1996; Burt 1997, Granovetter, 1973, 1995; Obukhova & Lan, 2013), but are there certain individuals with dispositions that make them more likely to accumulate social capital? One dispositional trait that may be highly correlated with the accumulation of social capital is customer orientation.

Salespeople with a high level of customer orientation offer the product or service that is the best fit for the customer’s needs, regardless of whether the offering provides the highest margin to the salesperson. Salespeople with high levels of customer orientation recognize that professional success is predicated on developing a lifetime relationship with the customer that will result in repeat business. Thus, sales tactics that aim to maximize the utility for the salesperson without regard for the customer are shortsighted and provide little lifetime value. By treating the customer as a partner, salespeople are likely to develop a large reservoir of social capital. Research has indicated that salespeople with a high degree of customer orientation are more likely to have higher levels of performance than salespeople lower in customer orientation (For a review, see Jaramillo, et al. 2007). More specifically, customer orientation has been shown to increase relationship performance, customer satisfaction, and loyalty (Gillis et al., 1998;
Pettijohn et al. 2008). These factors are likely to result in an increase in referrals due to the strong nature of the salesperson-customer relationship. In short, customers are more likely to refer salespeople with whom they have a strong relationship. A salesperson with a high level of customer orientation recognizes that the ties they develop with their customers are vital to developing social capital that will lead to professional success.

*Technology Orientation*

Salespeople perform their essential job functions in a selling environment that is constantly evolving. The era of transactional selling, in which a customer sells a product or service to a customer without differentiating the offering or the approach, is largely over. Instead, successful salespeople must act as “expert consultants” to their customers, and provide differentiated, customized solutions to obtain repeat business. Technology enables salespeople to provide customized solutions to their customers due to its ability to access, analyze, and communicate information (Hunter & Perreault, 2006). Salespeople who have a higher degree of “technology orientation” are able to leverage technology for professional success by building sales volume and establishing profitable, long term relationships.

Hunter and Perreault (2006) define sales technology orientation as the “salesperson’s propensity and analytical skills for using a portfolio of firm provided information technologies relevant to the sales role.” While most sales technology adoptions occur at the firm level (SFA or CRM systems, for example), the concept of technology orientation is especially relevant when salespeople have the discretion to adopt a particular technology.

Research has found that adopting technology helps salespeople form alliances with their customers (Jones, Sundaram, & Chin, 2002). Technology usage can improve sales performance
through effective use of information for planning the sales call (Hunter & Perreault, 2006), and increasing the use of sales technology enhances knowledge attainment, which also positively affects performance (Ko and Dennis, 2004; Rapp, Agnihotri, & Forbes, 2008).

Despite research demonstrating the benefits of sales technology, salespeople are often the least willing of a firm’s employees to embrace technology (Sharma & Sheth, 2010). Evidence suggests that technology adoption can be a polarizing issue (Edison & Geissler, 2003), with salespeople who have an affinity for technology characterized as “technology optimists,” and those averse to technology considered “technology pessimists (Modahl 1999).” Typically, salespeople regarded as technology pessimists will resist technologies that reduce their control over the sales interaction, alter their compensation, or reduce their role within the firm (Sharma & Sheth, 2010). However, most of the sales technologies that have been examined previously are more “all-encompassing” such as SFA and CRM systems, and usage is mandated by the firm. Since social media adoption is likely volitional in most firms, many of these concerns are less relevant. Further, by providing the customer the opportunity to co-create content, social media removes the element of salesperson control from the sales process. While this might be viewed as negative by many salespeople, those with a high technology orientation may recognize that social media, which helps to facilitate communication, is an ideal tool to build a strong relationship with customers.

Based upon the previous research, the following is proposed:

**H1**: Salespeople with a high (low) technology orientation will be more (less) likely to adopt social media as a professional selling tool.
Adaptive Selling

Traditional advertising and promotion communicates messages to a large segment of consumers, often without differentiating the message for a particular target. However, personal selling is a communication vehicle that can be adapted to a specific customer’s needs, because salespeople are in a position to do “market research” on each one of their potential customers.

Adaptive selling is one of the oldest and most empirically tested constructs within the sales literature. It is defined as “the altering of sales behaviors during a customer interaction or across customer interactions based on perceived information about the nature of the selling situation” (Weitz, Sujan, & Sujan, 1986). More succinctly, it argues that no one sales tactic works for every customer. Salespeople typically interact with customers more than do any other firm employees, and these interactions allow the salesperson to continually adapt their product offerings and tactics to a customer’s unique needs (Chai, Zhao, & Babin, 2012).

Adaptive selling has been shown to have a positive, direct effect on a salesperson’s financial performance (for a review, see Franke & Park, 2006). The benefits of practicing adaptive selling are particularly salient when a salesperson has a diverse set of customers with different needs and communication styles (Spiro & Weitz, 1990). For instance, research has shown that individuals process information differently depending on the medium through which the information is communicated, and have different communication styles. The communication style paradigm often used by salespeople is the “Social Style Matrix,” which divides customers into 4 categories based upon their assertiveness and expressiveness (Snavely, 1981). Different communication styles require the salesperson to adapt accordingly. For example, a salesperson would not want to spend a lot of time building rapport with a customer who is highly assertive, as these individuals typically want to “get down to business,” whereas customers who are
amiable and expressive typically like to develop a relationship before listening to the sales presentation. While there is overlap between characteristics associated with the different communication styles, adaptable salespeople are able to successfully determine the preferred communication styles of their customers.

Spiro and Weitz (1990) identified 5 personal characteristics that make a salesperson more likely to practice adaptive selling. Of particular relevance to the current study is “being an opener,” which is defined as the degree to which an individual is pre-disposed to open up or elicit information from other people (Miller, Berg, & Archer, 1983). Social media can be a forum where people provide information that they would feel uncomfortable providing in face to face meetings. Therefore, adaptive salespeople may be more likely to use social media as a professional tool because it provides the salesperson a less obtrusive way to obtain information from their customers. For example, less expressive customers may be unlikely to use face to face meeting time with the salesperson to develop rapport or to provide a thorough description of their needs. A salesperson conducting research on their customer via a social media site such as LinkedIn or a company blog may uncover valuable information about a customer that they can use to more effectively gain “buy-in” during the sales presentation.

While there are no studies known to the author that examine the link between social media usage and adaptive selling, existing research on technology adoption shows a direct relationship between the use of sales technology and adaptive selling (Ahearne, et. al 2008; Rapp, Agnihotri, & Forbes, 2008). Ahearne and colleagues (2008) found that the use of sales force automation software increased a salesperson’s perception of their adaptability. Further, Rapp and colleagues (2008) found that the use of a CRM (Customer Relationship Management) System increased a salesperson’s willingness to engage in adaptive selling. This last finding is
particularly intriguing, as CRM systems are becoming increasingly imbued with social networking capabilities (Trainor 2012, Wang, Dugan, & Sojka, 2013). Therefore, salespeople who are already using other forms of social media to adapt to their customers will be better positioned to take advantage of this next generation of CRM systems.

Therefore, on the basis of prior research on technology adoption and adaptive selling, the following hypothesis is proposed:

**H2**: Salespeople with a high (low) level of adaptive selling will be more (less) likely to adopt social media as a professional selling tool.

*Customer Orientation*

Customer orientation is the belief that the marketing concept, which has been a cornerstone in marketing theory for over 60 years, can be applied at the level of the individual customer (Saxe & Weitz, 1982). Specifically, it asserts that a firm’s activities should be directed towards developing long-term customer relationships (Kotler, 1980). For the salesperson, customer orientation is defined by 1) A desire to help customers make satisfactory purchase decisions 2) Helping customers assess their needs 3) Offering products that will satisfy those needs 4) Adapting sales presentations to match customer interests, and 5) Avoiding the use of high pressure sales tactics (Saxe & Weitz, 1982).

Because of their frequent interaction with customers, salespeople are typically in the best position of any of the firm’s employees to practice customer orientation (Cross, et. al 2007). In addition, firms are recognizing that long-term profitability is dependent upon building lasting relationships with key customers. As a result, performance metrics are evolving to include not
merely revenue generated, but also measures of relationship performance (Raman, Wittmann, & Rauseo, 2006) such as customer satisfaction and retention.

In exploratory interviews with marketing managers, Ramani and Kumar (2008) found that many believed their firms needed to move away from a market segment approach towards an emphasis on the individual customer. In addition, these managers felt that customers should have greater say in how they interact with the firm, and with other customers. This enables customers to co-create value at different points in the transaction (Prahalad & Ramaswamy, 2004). These interactions are being enabled by technological change, and more specifically social media. Social media increases opportunities for firms to interact with their customers, and for firms in a supply chain to communicate with one another (Ramani & Kumar, 2008, Rapp et al 2013). The information exchanged in these interactions can be of many forms, including suggestions, product ideas, and service questions, and also praise and criticism which can influence the impact the relationships that firms have with other customers.

Research has indicated that greater IT capabilities are associated with higher customer orientation, but that this typically only occurs through mediating processes such as marketing information quality and organizational trust (Nakata & Zhu, 2006). This research has typically defined IT capabilities as the use of CRM and SFA systems, which traditionally have not had many of the same functionalities as social media platforms. However, these systems are evolving, as second generation CRM systems contain social networking functions that allow salespeople to find friends, customers, or co-workers who have a connection with a target firm (Picarille, 2004). Social media technologies reduce the effort required to exchange information, thus bringing a larger number of people into the “conversation” than has traditionally been the case (Nakata & Zhu, 2006). Firms who are using IT to interact with their customers are doing so
because they believe that marketing activities should be conducted with the customer, and not merely for the customer (Ramani & Kumar, 2008). The concept that customers should co-create value with the firm is one of the central benefits of using social media technology.

Based upon the previous research, the following hypothesis is proposed:

**H3:** Salespeople with a high (low) level of customer orientation will be more (less) likely to adopt social media as a professional selling tool.

*Age*

An individual’s age has been shown to influence their likelihood of adopting technology (Venkatesh, 2000; Parthasarathy & Sohi, 1997; Speier & Venkatesh, 2002). Although research has shown that effective use of sales technology can lead to increased productivity, and is a way for salespeople to catch up with their more experienced counterparts (Keillor, Bashaw, & Pettijohn, 1997), salespeople are often skeptical of technology because of the fear that it will alter their role within the firm or their compensation structure (Sharma & Sheth, 2010). This effect is especially pronounced for more experienced salespeople (Zablah, Bellenger, & Johnston 2004), who tend to have more set routines and are less likely to alter their daily behavior than less experienced salespeople (Johnson 2010). Research has also indicated that younger salespeople have a more positive view of workplace technology than do older salespeople (Morris & Venkatesh 2000; Venkatesh, Morris, & Ackerman 2000).

Based upon the previous research, the following hypothesis is proposed:

**H4:** Older (younger) salespeople will be less (more) likely to adopt social media as a professional selling tool.
Study 1: Qualitative Depth Interviews

Overview

Because existing research on the relationship between social media and sales performance is in its nascent stages, there is little guidance in the literature on how to adequately specify social media usage. In some studies, social media usage is defined as the use of a particular firm specific, social media technology such as a CRM system (Trainor, 2012), and in others usage is vaguely defined as “influence” without regard to how it may be used during different parts of the sales process (Rodriguez, Peterson, & Krishnan, 2012). Researchers have suggested that in circumstances where existing theory and empirical evidence do not adequately explain phenomena, a mixed methods approach beginning with qualitative research is appropriate (Creswell, 2007; Venkatesh, et al, 2013)

To elicit how salespeople use social media in their professional roles, a qualitative pre-test was conducted with 25 salespeople with varying levels of experience across a wide spectrum of industries in a large, Midwestern state. The pre-test was a combination of open and close ended questions. The open ended questions asked for salespeople to describe how they use social media –generally- during the following stages of the sales process: 1) Prospecting for customers 2) Planning the sales call 3) the Presentation stage 4) Overcoming objections 5) Negotiating terms of the deal, and 6) Post-sales follow up. The close ended questions asked salespeople whether they use specific forms of social media (LinkedIn, Facebook, and Twitter) for defined purposes such as sharing articles (LinkedIn), posting messages (Facebook), and posting business related tweets (Twitter). The sampling scheme was a form of non-random sampling called
theoretic sampling (Corbin and Strauss, 2008). The open ended portion of the survey was analyzed as data was collected to discover emerging themes. This approach is referred to as the constant comparative method (Creswell, 2007), and data collection is terminated once “theoretical saturation” (when no novel themes are uncovered) has been reached (Creswell, 2007; Corbin and Strauss, 2008). In the present study, theoretical saturation was reached after 25 respondents. Demographic statistics for the sample are provided below in Table 2:

Table 2: Study 1 Sample Demographics

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>16 Male, 9 Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Years Sales Experience</td>
<td>Mean 10.04 Years; Range 1(Min) - 40(Max)</td>
</tr>
<tr>
<td>Respondents by Industry Type</td>
<td></td>
</tr>
<tr>
<td>Manufacturing, 4; Financial Services, 6;</td>
<td></td>
</tr>
<tr>
<td>Promotion and Advertising, 3; IT, 5;</td>
<td></td>
</tr>
<tr>
<td>Healthcare, 1; Other, 6</td>
<td></td>
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</tbody>
</table>

Results

The results demonstrate that salespeople are familiar with social media technologies. Table 3 shows the proportion of respondents who use particular forms of social media in their role as sales professionals.

Table 3: Proportion of Respondents Using Social Media for Professional Purposes

<table>
<thead>
<tr>
<th>Social Media</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>LinkedIn (ind.)</td>
<td>22/25</td>
</tr>
<tr>
<td>Facebook (firm)</td>
<td>8/25</td>
</tr>
<tr>
<td>Twitter (ind.)</td>
<td>5/25</td>
</tr>
</tbody>
</table>
The results show that LinkedIn is by far the most popular form of social media for sales professionals. On LinkedIn, a user creates a profile where they can upload their educational history, work history, professional skills, and any endorsements from fellow “connections.” This “electronic resume” is superior to a traditional resume or business card because it can be updated in real time, and provides more individualized information than can be typically found on a company website (Shoemaker 2012). For business professionals, one of the key selling points for LinkedIn is the ability for users to make connections not just with their friends and colleagues, but also with the friends and colleagues of people with whom they are connected. These “2nd” and “3rd” degree connections allow an individual’s extended network to expand into 10,000s of other individuals, making it ideal for professional salespeople who rely on referrals to sustain their business. According to company statistics, a person who has 200 LinkedIn connections is two connections away from 14,000 people, and 3 connections away from over 1.5 million (Shoemaker 2012). In addition to the sheer number of possible connections that LinkedIn can provide, evidence suggests that the value of a referral on LinkedIn is up to 30 times more likely to generate a response as a cold call or an email, in large part due to the high level of trust that individuals have for their online acquaintances (Shoemaker 2012). As of summer 2013, LinkedIn had over 260 million unique users, with approximately two new members joining every second (Hempel, 2013).

While salespeople may use Facebook and Twitter in their personal lives, there appears to be the belief that LinkedIn is the most “professional” form of social media and is appropriately recognized as a business tool. This is succinctly summarized by one respondent who said:

“I do not use Twitter or Facebook for business purposes.” (R-15)
Another respondent, when asked if their sales manager suggests ways that they can use social media in their role as a salesperson says that:

“*Sometimes our manager says to use Twitter, but we don’t find Twitter that useful because it’s less professional and structured.*”(R-17)

The comments here indicate a clear delineation in perceptions between different types of social media. While these comments suggest that salespeople are familiar with Facebook and Twitter, which are the two most popular social networking cites in terms of the number of users, there appears to be an understanding that these aren’t appropriate for business. However, the preponderance of respondents who use LinkedIn suggests that it is recognized as a tool that can provide substantial value in the sales process.

The sales process is typically defined as consisting of 7 stages (Dubinsky, 1980). Of these seven stages, six were assumed to be amenable to the use of social media (the one exception being obtaining commitment, i.e. closing the sale) and were included in the pre-test. As previously mentioned, the pre-test asked respondents open ended questions to identify whether they use social media (generally) in any of the six stages as indicated in Table 2. While Twitter, Facebook, YouTube, and less well known forms of social media were identified in at least one stage of the sales process, the most common form of social media was LinkedIn (see Table 3 above). The results also indicate that individuals use LinkedIn primarily before and after -but not during- the sales call (See Table 4 below).
Table 4: LinkedIn Usage during Different Stages of the Sales Process

<table>
<thead>
<tr>
<th>Sales Process Stage</th>
<th>Proportion of Respondents Using LinkedIn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prospecting for Customers</td>
<td>16/25</td>
</tr>
<tr>
<td>Planning for the Sales Call</td>
<td>6/25</td>
</tr>
<tr>
<td>Presentation</td>
<td>0/25</td>
</tr>
<tr>
<td>Handling Objections</td>
<td>1/25</td>
</tr>
<tr>
<td>Negotiating Terms of the Deal</td>
<td>1/25</td>
</tr>
<tr>
<td>Post Sales Follow Up</td>
<td>9/25</td>
</tr>
</tbody>
</table>

**Prospecting:**

Of the seven stages of the sales cycle, the first is prospecting, which is the process by which salespeople search for new customers (Moncrief & Marshall, 2005). Typical methods of prospecting include referrals, networking, bird-dogging, and cold-canvasing, amongst others. Of the seven stages of the sales process, prospecting may be the most important, and the most difficult. Some have argued that less than half the time a salesperson spends prospecting is productive, with the rest wasted on leads with very little chance of becoming customers (Poppel, 1983; Jolson & Wotruba, 1992). In order to identify prospects, a salesperson should take into account the following, 1) whether the prospect has the need to buy, 2) whether the prospect has the authority to buy, and 3) whether the prospect would be receptive to contact by the salesperson (Jolson and Wotruba, 1992).

Despite the importance of prospecting, few salespeople enjoy doing it (Jolson and Wotruba, 1992), and many potential salespeople avoid the profession because of it (Moncrief and Marshall, 2005). Traditionally, prospecting has been a time consuming and costly endeavor.
for the salesperson and the firm. For example, salespeople may spend hours making multiple calls to a single prospect who may never turn out to be a customer. However, the development of sales technology is changing the way that salespeople are engaging in prospecting. In short, salespeople are using LinkedIn as a way to prospect for customers. Social media technologies, and specifically LinkedIn, allow the salesperson to engage in networking and find referrals through connections in a cost effective and efficient fashion (Shoemaker, 2012). In addition, referrals through LinkedIn enable salespeople to better determine their prospect’s role within the organization and whether they have the authority to buy. In addition, LinkedIn enables salespeople to learn about their prospect’s interests and educational and work backgrounds, which helps to develop rapport in the approach stage. As a result, salespeople are able to make contact with more potential prospects, and are able to better qualify those prospects due to referrals from people in their extended networks and the information provided on their LinkedIn pages.

The results suggest that salespeople use LinkedIn as a way to determine who they may know in a prospect’s social network. Respondents described their usage of LinkedIn in the following comments:

“I utilize LinkedIn extensively to find names of contacts inside of target companies that I am either currently working with or potential new targets.” (R-25)

“I use LinkedIn to create what we call feed lists. This is a list of names that I can give to clients to be introduced to people I know that they know.” (R-15)

Pre-Approach/Planning the Sales Call:

Once a lead turns into a prospect, salespeople use LinkedIn as a way to find out more about the prospect and his company. The pre-approach stage is defined as all post-prospecting activities prior to the visit with the prospect (Moncrief and Marshall, 2005). During this stage of
the sales process, salespeople are gathering information about their prospects prior to the sales call. Information such as a prospect’s hobbies, educational background, and attitude towards the salesperson’s company and products, as well information about the buying process and decision makers within the target firm, are usually uncovered at this stage of the process. In addition, salespeople use this stage of the sales process to see where the salesperson fits within their organization’s hierarchy, and to find out information on the prospect’s competitors.

As indicated in the comments below, salespeople use LinkedIn as a way to do research on their prospects and their company prior to the sales call. Because a large amount of information is stored in a convenient and easily accessible place, using LinkedIn is an efficient and effective mechanism for planning the sales call.

“I generally try to look up their LinkedIn profile to find out more about them and the company where they work.” (R-15)

“LinkedIn helps to provide information about prospects that you may not normally have to help with your sales call.” (R-20)

As indicated in Table 4 above, salespeople do not find a practical use for LinkedIn during the middle 3 stages of the sales process. These stages - the presentation stage, handling objections, and negotiating the terms of the deal - are those stages of the sales process in which direct contact with the customer is typically required. As a result, using LinkedIn during these stages would be inappropriate, given that social media is a way to connect with people virtually.

Post-Sales Follow Up:

The value that LinkedIn brings during the pre-approach and prospecting stages is also evident in post-sales follow up. At this stage of the sales process, salespeople are attempting to develop relationships with their customers, and are using LinkedIn as a way to provide
information and to assess customers’ changing needs: The follow up with the customer post-sale is often the most under-appreciated part of the sales process. At this stage of the sales process, salespeople follow up with their customers to make sure that the product is performing according to specification and that all promises have been delivered upon (Moncrief and Marshall, 2005). The transition from an era of transactional selling to one of relationship building has made this stage of the sales process extremely important (Schurr, 1987). Relationship selling “involves securing, developing, and maintaining long term relationships with profitable customers (Johnston and Marshall, 2005, p. 5).” This development has scholars arguing that post sales follow up has evolved into customer relationship maintenance, where salespeople are now managing all aspects of the ongoing business relationship with the customer. (Moncrief & Marshall, 2005).

The evolution of sales technology has transformed how salespeople are able to follow up with their customers. Previously, salespeople would often follow up with customers through a phone call, and if they wanted to assess their customer’s changing needs or develop a relationship, they would typically be required to visit with the customer (Moncrief and Marshall, 2005). LinkedIn provides salespeople the opportunity to “connect” with their customers after the sale, and efficiently monitor their customers’ changing needs. In addition, LinkedIn is a way for salespeople to send their customers information on new products and services, as well as articles and other information that is of interest to the customer.

“I connect on LinkedIn, share articles that I think would be of interest, etc.” (R-9)

“..I would suggest relevant articles for them to read, so they knew I was in tune with their industry.” (R-7)

“if I’m following their company on LinkedIn and there’s an update on their product/service or something with their company, I sometimes use that as a reference to show them that I am paying attention to their world.” (R-13)
The results indicate that LinkedIn is the preferred social media for professional salespeople. Given that it is specifically designed as a business tool, this result is not surprising. Salespeople use LinkedIn to “bookend” the seven stage selling process. In other words, salespeople appear to use LinkedIn to help prospect for customers and to plan the sales call (done, obviously, before commitment is obtained), and also as a way to follow up with the customer post-sale.

**Study 2: Factor Analysis**

Once the various stages of the sales process through which LinkedIn usage is proposed to affect sales performance had been developed, the next stage of the research was to develop scale items to specifically elicit how salespeople were using LinkedIn during the three stages of the sales process described in Study 1. A total of 29 items (see Appendix A for a complete list of the original items) were developed for the three stages of the selling process. The items were generated based off of the information gathered in the pre-test, and a review of the literature on the 7 stages of the sales process (Dubinsky 1980, Moncrief and Marshall, 2005; Castleberry & Tanner 2011).

The proposed scale items were then administered to 126 salespeople across a wide spectrum of industries. The sample ($M_{age} = 36.44$, $M_{experience} = 11.02$ years) was comprised of 79 males and 47 females, and respondents represented a diverse set of roles within their respective organizational hierarchies (sales representatives, sales managers, and sales executives). Demographic characteristics of the sample are listed in Table 5 below:
Table 5: Study 2 Sample Demographics

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>79 Male, 46 Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Mean 11.02 years; 1(Min) - 41(Max)</td>
</tr>
<tr>
<td>Years Sales Experience</td>
<td>Manufacturing, 18; Financial Services, 20; Promotion and Advertising, 14; IT, 10; Healthcare, 8; Food and Beverage, 8; Real Estate, 8; Transportation, 11; Other, 5</td>
</tr>
<tr>
<td>Respondents by Industry Type</td>
<td></td>
</tr>
</tbody>
</table>

The data was tested for its suitability for factor analysis through a Kaiser-Meyer-Olkin (KMO) test and Bartlett’s Test of Sphericity (BTS). The results, KMO =.927 and BTS(sig.) =.000 suggested that the data was suitable for factor analysis. In addition, the 4.34 subject/variable ratio (126/29) is in line with previous recommendations for performing factor analysis (Kline 1979).

An examination of the Eigen Values indicated that a three factor structure fit the data. However, an examination of the scree plot and a test of parallel analysis revealed that a two factor structure was a more appropriate fit for the data. The third factor (Eigen Value = 1.085) only explained an additional 3.74% of the total variance, so the model was re-run to be constrained to two factors. Items which loaded on more than one factor, or which had communalities below 0.6 were then eliminated from the scale for the purposes of parsimony. The final 18 scale items and their associated loadings are displayed in Table 6 below.

An examination of the items that loaded on the two factors revealed that LinkedIn is used for two distinct, purposes. The first factor, which is comprised of items from the prospecting and planning the sales call stages of the sales process, indicates that LinkedIn is used as a research...
tool to not only uncover prospects, but also to provide information on the prospect’s company, background, and other personal interests (Coefficient alpha = .955). The second factor is comprised of items from the post-sales follow up stage of the sales process, and indicates that LinkedIn is being used as way for a salesperson to provide customer service, and to develop a customer relationship after the sale (Coefficient Alpha = .946).

The two factor model makes conceptual sense. While prospecting and planning for the sales call are two distinct stages of the sales process, the activities involved in both stages revolve around conducting research. Individuals who are using LinkedIn as a way to determine who within their social network knows a targeted lead are also using it to perform research on the lead once they become a prospect.

Based off of the results from the factor analysis, the following hypotheses are proposed:

**H5a**: Salespeople who use LinkedIn will do so for the purpose of conducting research on prospects prior to a sale.

**H5b**: Salespeople who use LinkedIn will do so for the purpose of developing relationships with customers.
Table 6: Final Items in the Two Factor Model with Associated Loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading (Research)</th>
<th>Factor Loading (Relationship)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you use LinkedIn to find information on your prospect's educational background?</td>
<td>.967</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to find information on your prospect's interests (hobbies)?</td>
<td>.910</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to find out what product attributes might be important to your prospect?</td>
<td>.893</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to determine centers of influence?</td>
<td>.860</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to determine where you prospect fits within the organizational structure?</td>
<td>.852</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to find information on the size of your prospect's company?</td>
<td>.808</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to qualify leads?</td>
<td>.790</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to find information on the industry that your prospect's company is in?</td>
<td>.744</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to determine if the lead has the authority to buy?</td>
<td>.741</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to search for leads by looking at your friends' lists of friends?</td>
<td>.723</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to find new prospects?</td>
<td>.718</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to assess post-sales, customer satisfaction?</td>
<td>.964</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn as a forum in which to resolve customer complaints?</td>
<td>.906</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to &quot;up-sell&quot; your customers for future sales transactions?</td>
<td>.877</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to offer your customers expert advice?</td>
<td>.832</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to follow up with your customers after the sale?</td>
<td>.748</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to assess your customers' changing needs?</td>
<td>.729</td>
<td></td>
</tr>
<tr>
<td>How often do you use LinkedIn to send your customers information on new products?</td>
<td>.707</td>
<td></td>
</tr>
</tbody>
</table>

Measures

The next stage in the present research was to define the measures for the various constructs within the model, as well as the subjective and objective performance measures.
Antecedent Measures

The various antecedent measures are all taken from existing, validated scales in the sales literature. The adaptive selling measure is taken from Rapp, Agnihotri, and Forbes (2008) shortened four item scale (please see Appendix A for a complete list of measures). The scale measures a salesperson’s willingness to adapt their sales approach depending upon the customer. It is predicted that salespeople who practice higher levels of adaptive selling will be more likely to adopt LinkedIn as a business tool, perceiving it as a way to help them customize their sales approach to a particular customer.

The customer orientation measure was adapted from Thomas, Soutar, and Ryan’s (2001) shortened SOCO (Sales Orientation, Customer Orientation) scale. That scale is a 10-item measure which looks at both a salesperson’s sales orientation and their customer orientation. Since the sales orientation portion of their scale assesses a fundamentally different dimension (items include “do you try to sell as much as you can, rather than satisfying customers” and “do you find it necessary to stretch the truth in your sales presentations”) than customer orientation, the items included here are the 5 customer orientation items. It is predicted that salespeople who practice customer orientation will be more likely to use social media because it may allow them to better understand their customers’ needs.

Sales technology orientation has been measured at both the level of the firm and the individual salesperson (Hunter & Perreault, 2006). Since the current research is interested in individual salespeople’s willingness to adopt technology, Hunter and Perreault’s (2006) scale is used. It is predicted that salespeople with higher levels of technology orientation will be more likely to adopt social media as a business tool.
Social Media (LinkedIn) usage will be measured with a 4 item scale to determine the frequency that the salesperson uses LinkedIn. The items are “How often do you login to LinkedIn?” “How much time do you spend using LinkedIn?” “How often do you update your profile on LinkedIn?” and “How often do you read articles on LinkedIn?” It is proposed that salespeople may be heavy users of LinkedIn, yet still not use it effectively (as a research or relationship development tool). This is in accord with the productivity paradox, which asserts that technology usage is not a panacea which will solve all of a firm’s problems based upon mere usage (Brynjolfsson 1993).

**Objective Performance Measures**

Sales performance has been measured in numerous ways, and there isn’t consensus within the field as to the “correct” way to measure it (Bagozzi 1978; Weitz, 1978; Bagozzi, 1980; Churchill, et. al; 1985). However, most measures of sales performance can be divided into two general categories, output measures (level of sales, quota attainment) or input measures (number of calls, time utilization) which in the sales literature are often termed sales “effectiveness” and “efficiency,” respectively (Boles, Donthu, & Lohtia, 1995). Sales output typically measures the contribution of the individual salesperson to valued organizational outcomes such as total sales or market share (Churchill, et. al 1990). While output is often the most common measurement category in the sales literature, input measures are becoming increasingly common, in large part because many companies are evaluating salespeople on how efficiently they use their time (Boles, Donthu, & Lohtia, 1995).

For the current study, the appropriate output measure is percentage of sales quota. This helps control for a variety of factors which would influence overall sales performance, including
experience, customers served, and territories worked. More specifically, more experienced salespeople often have higher quotas as a result of being assigned to better territories and more lucrative customers. The input measure used in the current study will be based off of the output measure. Specifically, the input measure will examine how effective the salesperson is given the amount of hours that they log per week. Often, sales input and output are highly correlated, such that salespeople who make the best use of their time (input) often generate the most revenue (highest sales). However, this is not always the case, as highly effective salespeople may not use their time efficiently (i.e. it takes them a longer than average time to obtain commitment). Thus, in measuring sales performance, it is important to use these two complementary, but distinct, measures.

**H6a:** Salespeople who use LinkedIn for the purpose of conducting research will generate higher input than salespeople who do not.

**H6b:** Salespeople who use LinkedIn for the purpose of conducting research will generate higher output than salespeople who do not.

**H7a:** Salespeople who use LinkedIn for the purpose of developing relationships will generate higher input than salespeople who do not.

**H7b:** Salespeople who use LinkedIn for the purpose of developing relationships will generate higher output than salespeople who do not.

**Subjective Performance Measures**

In addition to the objective measures of performance described above, respondents were asked to describe their performance relative to their peers on 14 items measured on a 7-point Likert Scale (1 = Much worse than average, 7 = much better than average). Items included the following: “Compared to your peers, how would you rate your 1) total sales volume 2) sales by customer classification 3) gross margin by product line (See Appendix A for a complete listing of items). Scholars have suggested that subjective and objective performance measures, while
conceptually related, are distinct constructs (Rich et al. 1999; Levin, Hansen, & Laverie 2012). Others have argued that an examination of the two different types of measures provides a more holistic picture of sales performance (Clarke, Flaherty, & Mottner 2001). Nevertheless, studies have shown that self-reported measures of sales performance are generally accurate indicators of objective performance (Churchill et al. 1985; Rich et al. 1999). The present study will attempt to determine whether salespeople who use LinkedIn as a research and relationship building tool will perceive themselves as generating more output than those salespeople who do not.

The salespeople in the sample were also asked to provide a gauge of their relationship performance. Relationship performance assesses the salesperson’s perception of their relationship with their customers. Not surprisingly, salespeople are often the most likely of a firm’s employees to develop relationships with customers (Weitz & Bradford, 1999; Cannon & Perreault, 1999). In the era of relationship selling, developing relationships with customers is requisite for sales success (Jayachandran, et al. 2005) These relationships tend to develop over time, as weak initial relationships strengthen during the maturation state of the salesperson-customer relationship (Jap, 2001). As a result, many firms are adopting customer satisfaction measures -in addition to traditional efficiency and effectiveness measures- in their evaluations of sales forces (Jap, 2001).

Research has indicated that technology usage can affect relationship performance. Sales force automation software (SFA) was shown to improve relationship initiation and performance by improving the quantity and quality of sales calls (Moutot & Bascoul, 2008). In essence, the use of SFA systems helps to reduce ineffective sales calls, which in terms strengthens relationships with customers by enabling salespeople to better focus on meeting the needs of their most profitable customers. In addition, the use of SFA systems has been shown to aid in
prospecting, and lead salespeople to perceive they are providing enhanced service to their customers (Erffmeyer & Johnson, 2001). Furthermore, CRM systems have been shown to help salespeople initiate and maintain relationships, and to improve customization of the salesperson-customer relationship (Jayachandran, et al. 2005; Reinartz, Krafft, & Hoyer, 2004). Given that the primary intent of social media networks is to develop friendships and build relationships, relationship performance should be enhanced when salespeople use LinkedIn for the purpose of developing post-sales relationships with customers.

The three item, 9 point Likert Scale used in this study asked salespeople to what extent they have met customer expectations and ideals, and to gauge how satisfied/dissatisfied their customers were overall. Although many measures of relationship performance rely on assessments from the salesperson’s manager or largest customers (Ahearne et al. 2008; Rapp et al. 2013), the literature supports using salesperson self-assessments of relationship performance (Park et al. 2010; Trainor et al 2013).

Thus, based upon the preceding, the following hypothesis is proposed:

**H8a:** Salespeople who use LinkedIn for the purposes of conducting pre-sales call research will have a higher level of perceived relationship performance than salespeople who do not.

**H8b:** Salespeople who use LinkedIn for the purposes of developing relationships with customers will have a higher level of perceived relationship performance than salespeople who do not.

Research has also shown that high levels of relationship performance lead to an increase in sales output (Park, et al. 2010; Rodriguez, Peterson, & Krishnan 2012). Since building relationships with customers leads to increased customer lifetime value (CLV), this enables salespeople to build volume through repeat sales. In addition, Ahearne and colleagues (2008)
found that the technology usage-output performance relationship (SFA/CRM usage-output performance, specifically) was mediated by enhanced customer service and attention to a customer’s personal details, which are both strong proxies for relationship performance. IT acceptance was also found to affect output performance through the ability of a salesperson to increase their targeting ability, or in other words the ability to focus on their most important customers (Ahearne, Hughes, & Schillewaert 2007). In a 3 level model involving suppliers, retailers, and consumers, Rapp and colleagues (2013) found that a retailer’s use of social media affected sales performance through a mediation chain involving consumer-retailer loyalty, which is predicated on developing strong relationships with customers. Finally, in one of the first studies to examine the relationship between social media usage and sales performance measures, Rodriguez and colleagues (2012) found that social media usage affects output based performance, but only through relationship performance.

**H9a:** Perceived relationship performance will have a positive effect on sales input.

**H9b:** Perceived relationship performance will have a positive effect on sales output.

Finally, although they are two, distinct measures of performance, sales input and output are often highly correlated (Churchill et al 1985). As stated above, salespeople who use their time efficiently (input) often generate higher revenue (output). Thus, the following hypothesis is proposed:

**H10:** A Salesperson’s level of input performance will be positively related to their level of output performance.
Study 3: Full Structural Model

Procedure

Four, large companies were solicited for participation in the present study. Company A is a large, national B2B provider of supplies to the dental industry. Company A has customers ranging in size from sole proprietors (one dental office) to large institutional clients. Salespeople from Company A routinely engage in prospecting as part of their job. Company B is a large, multinational provider of business solutions centered on digital office systems. Company B serves clients of all sizes across numerous industries ranging from manufacturing and finance to government and education. Salespeople in Company B also routinely engage in prospecting as part of their job. Company C is a large, multinational manufacturer of customized, interior wall coverings whose salespeople routinely engage in prospecting as part of their job. Company D is a large, national provider of sales training, whose salespeople also engage in prospecting.

Permission to survey the salespeople was provided at the Vice President level at all 4 companies. Participation was not restricted to salespeople of a particular experience level within a firm, thus participants—in all 4 companies—ranged in professional sales experience from one to over 40 years. After permission was granted, a link to the survey was sent to the sales representatives of the companies. 2 regions from Company A participated in the study, with both regions located in the Southwest. At company B, one region, also located in the Southwest, participated. At company C, participation was obtained at the national level. At company D, permission was also obtained at the national level (although this resulted in an N of 4 salespeople). For participation in the study, respondents were told that they could choose to
receive a detailed report of the results. A demographic breakdown of the respondents is presented in Table 7 below:

### Table 7: Demographic Characteristics of Company Respondents

<table>
<thead>
<tr>
<th></th>
<th>Company A</th>
<th>Company B</th>
<th>Company C</th>
<th>Company D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong># of Respondents</strong></td>
<td>53</td>
<td>32</td>
<td>65</td>
<td>4</td>
</tr>
<tr>
<td><strong>Gender Breakdown</strong></td>
<td>42 Male, 11 Female</td>
<td>20 male, 12 female</td>
<td>25 Male, 40 Women</td>
<td>3 Male, 1 Female</td>
</tr>
<tr>
<td><strong>Average Age</strong></td>
<td>43.7</td>
<td>38.53</td>
<td>48.85</td>
<td>49.25</td>
</tr>
<tr>
<td><strong>Average Experience</strong></td>
<td>17.76</td>
<td>13.88</td>
<td>20</td>
<td>20.75</td>
</tr>
</tbody>
</table>

To increase the number of respondents, additional salespeople were recruited from Northeast Ohio. Sales students at a large, public university in Northeast Ohio were awarded course extra credit for each salesperson they could find to complete the survey. This resulted in an additional 127 respondents from a variety of industries including heavy manufacturing, health and fitness sales, and financial services. The demographic breakdown for these additional respondents is presented in Table 8 below:

### Table 8: Additional Respondents recruited from Northeastern Ohio

<table>
<thead>
<tr>
<th></th>
<th>Additional Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong># of Respondents</strong></td>
<td>127</td>
</tr>
<tr>
<td><strong>Gender Breakdown</strong></td>
<td>75 Male, 50 Female*</td>
</tr>
<tr>
<td><strong>Average Age</strong></td>
<td>41.88</td>
</tr>
<tr>
<td><strong>Average Experience</strong></td>
<td>15.38</td>
</tr>
</tbody>
</table>

*Note: 2 respondents didn’t identify their gender

Objective performance data was obtained for companies A, C, and D. This data included both output (annual sales for Company A; percentage of quota for Company B) and input (quota per tome allocated for Company B) measures. The respondents that were recruited by the sales
students represented 55 different industries, and sponsorship of the survey was not obtained at the executive level. Thus, obtaining objective performance data for this portion of the sample was not feasible. However, their questionnaires were identical to the ones provided to the salespeople at Companies A-C.

**Exploratory Factor Analysis**

Despite the fact that many of the scales used in the present study have been validated extensively within the sales literature, all items for the various constructs and subjective performance measures were subjected to exploratory factor analysis for the purposes of parsing scales. Items were extracted using the maximum likelihood method, and constructs were subjected to Oblimin Rotation.

Analysis of the Eigen Values and the scree plot revealed that an eight factor structure was appropriate for the data. However, examination of the scales’ coefficient alphas indicated that the items for adaptive selling did not display a high level of internal consistency. Further examination of the scale’s items show that two of the items adapt1 “I use a set sales approach” and adapt4 “I find it difficult to adapt my presentation style to certain customers” are negatively worded, which likely accounted for their low factor loadings. Because the original, shortened scale consisted of only 4 items, the elimination of 2 items from the scale made the construct untenable for confirmatory factor analysis. Thus, the adaptive selling scale was eliminated from further analysis.

Of additional note, the scales for enhanced research and relationship development were further parsed from Study 2 to provide better model fit. Specifically, items res5 “How often do you use LinkedIn to determine if the lead has the authority to buy?” res6 “How often do you use
LinkedIn to determine centers of influence?” and res11 “How often do you use LinkedIn to find information on your prospect’s interests?” all had loadings below 0.6, and were eliminated before the constructs were subjected to confirmatory factor analysis (CFA).

Descriptive Statistics

Selected Descriptive Statistics for the constructs are displayed in Table 9 below. In addition, Cronbach’s alphas and construct intercorrelations are also presented. Evaluation of the Cronbach’s alphas reveals that all constructs display a sufficient level of internal consistency (> .70) (Nunnally 1978). Further, differences in means tests between the salespeople at companies A-C and those recruited by the college students did not show any significant differences on the LinkedIn constructs as well as the subjective performance measures.

Table 9: Descriptive Statistics, Reliabilities, and Construct Intercorrelations

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cust. Orientation</td>
<td>8.59</td>
<td>1.02</td>
<td>.910</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tech. Orientation</td>
<td>5.50</td>
<td>1.30</td>
<td>.831</td>
<td>.177</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usage</td>
<td>3.21</td>
<td>1.81</td>
<td>.893</td>
<td>.073</td>
<td>.316</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research</td>
<td>2.67</td>
<td>1.91</td>
<td>.952</td>
<td>.046</td>
<td>.281</td>
<td>.836</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Development</td>
<td>1.58</td>
<td>1.17</td>
<td>.927</td>
<td>.042</td>
<td>.219</td>
<td>.495</td>
<td>.637</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>5.28</td>
<td>1.21</td>
<td>.922</td>
<td>.107</td>
<td>.011</td>
<td>.000</td>
<td>.005</td>
<td>-.018</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input</td>
<td>5.10</td>
<td>1.22</td>
<td>.780</td>
<td>.160</td>
<td>.027</td>
<td>-.083</td>
<td>-.039</td>
<td>-.016</td>
<td>.932</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Rel. Perf</td>
<td>7.78</td>
<td>1.15</td>
<td>.910</td>
<td>.278</td>
<td>.081</td>
<td>-.066</td>
<td>.003</td>
<td>-.034</td>
<td>.335</td>
<td>.370</td>
<td>1</td>
</tr>
</tbody>
</table>

Confirmatory Factor Analysis

The data were analyzed according to the procedures suggested by Anderson and Gerbing (1988). After the initial exploratory factor analysis, a confirmatory factor analysis (CFA) was conducted to test the adequacy of the measurement model. In addition, convergent and
discriminant validity were assessed according to the procedures recommended by Fornell and Larcker (1981).

The hypothesized measurement model yielded an adequate fit to the data. While the chi-squared value ($\chi^2(566) = 1054.07, p < .001$) suggests that the model was not a particularly good fit to the data, there is significant debate in the literature about the appropriate measures of fit for a given data set (Hunter & Perreault, 2006). The chi squared statistic is particularly sensitive to smaller samples sizes, and thus more robust measures are recommended for samples of the size used in this particular study. The comparative fit index (CFI) is one such fit statistic that has been identified as being robust given smaller sample sizes (Bentler, 1990), with a CFI measure > .90 being indicative of good model fit. The CFI for the present model was 0.938. The Root Mean Square Error of Approximation (RMSEA) is an additional measure of model fit that is sensitive to the number of parameters (i.e. complexity) of the model (Browne & Cudeck, 1993; Byrne, 2010). Researchers have suggested that values of this measure that < .05 provide evidence of good fit, with measures between ranging from .05 to 0.8 providing evidence of mediocre fit (Browne and Cudeck, 1993). The RMSEA for the present model was .056.

To improve the fit of the model, post hoc analyses related to the observed items’ error terms were performed. Specifically, error terms of substantively similar items were correlated to provide better model fit. Some researchers have argued against correlating error terms associated with observed items, due to a concern with “over-fitting” a model that makes substantive results difficult to replicate (Wheaton 1997; Byrne 2010). However, others have argued that forcing error terms of items of related content to be uncorrelated is unrealistic given “real” data (Bentler & Chou 1987).
Error terms were selected based off of the size of their modification index (MI), which is the amount that the chi square value would decrease if the two error terms in question were correlated. Particular attention was paid to whether the content of the items was substantively meaningful. Thus, error terms with high modification indices, but whose content was not substantively similar, were not correlated. The error terms associated with the items in Table 10 were correlated, which provided a model with a substantially better fit ($\chi^2 = 973.87$, CFI = .953, RMSEA = .049) than the previous model.

**Table 10: Items with Correlated Error Terms**

<table>
<thead>
<tr>
<th>Items Whose Error Terms were Correlated</th>
<th>Modification Index</th>
</tr>
</thead>
</table>
| 1. How often do you use LinkedIn to find information on the size of your prospect’s company?  
2. How often do you use LinkedIn to find information on the industry that your prospect’s company is in? | 33.025 |
| 1. How often do you use LinkedIn do you use LinkedIn to assess post sales customer satisfaction?  
2. How often do you use LinkedIn as a forum in which to resolve customer complaints? | 31.058 |
| 1. How often do you use LinkedIn do you use LinkedIn to find information on your prospect’s educational background?  
2. How often do you use LinkedIn to find out what product attributes might be important to your prospect? | 19.407 |

To assess convergent validity, the item factor loadings were examined to see whether they loaded significantly on their respective constructs. All items exhibited highly significant loadings ($p < .001$), which provides evidence of convergent validity (Anderson & Gerbing, 1988). To assess discriminant validity, the amount of variance extracted from a particular construct was compared to the squared correlations among any two constructs. In order to determine the discriminant validity of measurement model, the variance extracted from all
constructs should exceed the squared correlation between any two constructs (Fornell & Larcker 1981). The average variance extracted (AVE) for each of the constructs in the present model is displayed in Table 11 below:

<table>
<thead>
<tr>
<th>Construct</th>
<th>Average Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Orientation</td>
<td>.83</td>
</tr>
<tr>
<td>Technology Orientation</td>
<td>.75</td>
</tr>
<tr>
<td>LinkedIn Usage</td>
<td>.80</td>
</tr>
<tr>
<td>Research</td>
<td>.82</td>
</tr>
<tr>
<td>Relationship Development</td>
<td>.84</td>
</tr>
<tr>
<td>Output</td>
<td>.78</td>
</tr>
<tr>
<td>Input</td>
<td>.68</td>
</tr>
<tr>
<td>Relationship Performance</td>
<td>.87</td>
</tr>
</tbody>
</table>

The table shows that each of the eight constructs in the measurement model possesses a high level of average variance extracted. However, examination of the squared correlations between the constructs revealed that the squared correlation between “output” and “input” equals 0.868, which exceeds the AVE for both output and input. However, considering that the exploratory factor analysis revealed that many of the input and output items loaded on the same factor, this result is not surprising. Nevertheless, given that the literature -and sales managers- treat the activities that comprise these two constructs as separate for evaluating the performance of salespeople, the two will be treated as separate constructs in the present study. Considering that the squared correlations between the other constructs are substantially lower than the AVE for each of the constructs displayed in Table 11, the model displays adequate discriminant validity.
The final step in the model fitting process was to test for the presence of common method bias. Since all constructs were measured from the same source, there is a risk that the correlations between the independent and dependent variables are inflated (Rapp et. al, 2008). To test for common method bias, a Harmon’s one factor test was utilized (Griffith & Lusch 2007). The Harmon’s one factor test treats each item measured by the same source as indicators of one, underlying latent construct. The fit of the one construct model ($\chi^2 = 5585.478$ (598); CFI = .374; RMSEA = .174) displayed a substantially worse fit than the hypothesized model ($\chi^2 = 973.87$ (564); CFI = .953; RMSEA = .049), demonstrating that common methods bias is not an inherent problem in this study.

**Structural Model Results**

The derivation of the structural model was based off of the hypotheses displayed in Figure 1. The structural model with subjective performance metrics demonstrated adequate fit ($\chi^2 = 1120.561$, CFI = .936, RMSEA = .055).

In the exploratory factor analyses, the shortened, 4 item adaptive selling scale (Rapp et. al 2008) was found to be an unstable measure that was not suitable for confirmatory factor analysis. Therefore, H2, that adaptive selling positively influences LinkedIn usage, is rejected. H1 stated that technology orientation would positively influence LinkedIn usage. The results ($\beta = .541$, $p < .001$) support this hypothesis. H3 stated that customer orientation would have a positive effect on LinkedIn usage. However, the results ($\beta = .032$, $p = .799$) fail to confirm this hypothesis. The final hypothesized antecedent to LinkedIn usage was a salesperson’s age. Interestingly, the results did not show a significant, inverse relationship between age and LinkedIn adoption ($\beta = .001$, $p = .930$). Thus, H4 is rejected.
The second order of the model stated that salespeople would use LinkedIn as a way to conduct research prior to the sales call (H5a) and to develop relationships with customers after a sale has been made (H5b). Both of these hypotheses (H5a $\beta = .743, p < .001$ and H5b $\beta = .348, p < .001$) are confirmed.

The third order of the model stated that research and relationship development would positively influence input performance, output performance, and relationship performance. Research does not have a significant effect on input performance (H6a: $\beta = .009, p = .928$), output performance (H6b: $\beta = -.069, p = .318$) or relationship performance (H8a: $\beta = .145, p = .119$). Relationship development does not have a significant effect on input performance (H7a: $\beta = .032, p = .656$), output performance (H7b: $\beta = -.043, p = .397$), or relationship performance (H8b: $\beta = -.040, p = .563$).

Finally, the fourth order of the model examined the relationship between the subjective dependent variables. Specifically, the model predicted positive relationships between relationship performance and input performance (H9a), input performance and output performance (H10), and relationship performance and output performance (H9b). The results supported H9a ($\beta = .369, p < .001$) and H10 ($\beta = .1098, p < .001$), but not H9b ($\beta = -.005, p = .934$).
Objective Performance Results

A second model was derived ($\chi^2 = 1126.537$, CFI = .936, RMSEA = .055) to test the relationship between the LinkedIn usage mechanisms research and relationship development) and objective input performance and objective output performance. An objective input performance measure, which measured how efficiently the salespeople obtained their percentage of quota, was obtained only for the salespeople from Company C, which resulted in a usable
sample of 39. Objective output performance was a standardized measure for the salespeople in both Company A (2013 revenue performance data) and Company C (a logarithmic function of percentage of quota). As some salespeople who were surveyed did not provide identifying information other than the firm that they worked for, this resulted in a usable sample of 78 sales representatives.

The correlation between the subjective and objective measures was \( r = -0.078, p = 0.637, N = 39 \) for input performance and \( r = 0.184, p = 0.106, N = 78 \) for output performance, which demonstrates an unusually poor relationship between subjective and objective performance measurements (Churchill et al 1985).

The relationship between research and objective input performance (\( \beta = -0.067, p = 0.621 \)) and output performance (\( \beta = 0.032, p = 0.429 \)) were both insignificant. The relationship between relationship development and objective input performance (\( \beta = -0.079, p = 0.565 \)) and relationship development and output performance (\( \beta = -0.071, p = 0.083 \)) were also insignificant.

**Additional Analyses**

Although the fit for the hypothesized model was satisfactory, many of the hypothesized relationships were not confirmed. As a result, additional analyses were performed to gain a better understanding the relationship between LinkedIn usage and sales performance.

A post hoc model was fit which tested the direct relationship between LinkedIn usage and the various subjective performance metrics. The fit of this model was satisfactory (\( \chi^2 = 1120.568, CFI = .936, \text{RMSEA} = .055 \)), and the relationship between LinkedIn usage and output performance was marginally significant (\( \beta = 0.178, p = 0.079 \)). This result suggests that LinkedIn
may be used successfully by salespeople in ways that are different from performing research on a customer prior to a sales call, or developing a relationship with an existing customer.

In addition, separate univariate regression analyses on a subjective performance measure of new account generation ("how well do you generate new accounts relative to your peers") showed that the LinkedIn usage mechanisms of research ($\beta = .155, t(275) = 3.241, p = .001$) and relationship development ($\beta = .147, t(275) =1.903, p = .058$) have a statistically significant effect on the perceived ability to generate new sales accounts. However, when controlling for LinkedIn usage, the effects of research and relationship development on the ability to generate new accounts is not statistically significant.

Finally, additional regressions were run on the subjective performance measures for Company B, the large multinational provider of office products. Salespeople at Company B are encouraged to use social media, and specifically LinkedIn. Univariate regression analysis revealed that research had a significant, positive effect on both perceived input performance ($\beta = .245, t(31)= 2.019, p = .052$) and output performance ($\beta = .260, t(31) = 2.042, p = .050$). Relationship Development had marginally significant, positive effects on relationship performance ($\beta = .293, t(31) =1.705, p = .099$), input performance ($\beta = .323, t(31) = 1.796, p = .083$), and output performance ($\beta = .332, t(275) = 1.750, p = .090$). However, when controlling for LinkedIn usage, the relationship between relationship development and relationship performance becomes statistically significant (relationship development: $\beta = .489, t(31) = 2.452, p = .020$); (usage: $\beta = -.281, t(31) = -1.775, p = .086$). This latter result provides evidence of the productivity paradox, which is the belief that the mere use of a technology may not result in performance increases, and may actually negatively affect performance when used inappropriately.
Discussion

The fact that many of the hypotheses were not confirmed may be due to the fact that existing theory which details technology adoption amongst salespeople does so for systems that are complex and more “all-encompassing” than social media. For example, SFA and CRM systems impact more stages of the selling process than does social media. If a firm were to adopt one of these technologies, usage would be compulsory. Thus, salespeople with a high degree of customer orientation, or who practice adaptive selling, would be those within the firm who could successfully leverage these technologies to provide value to their customers. In short, these salespeople would be making the best of what many technophobic salespeople view as a “bad situation.” However, since adoption of social media technology such as LinkedIn is typically volitional, salespeople who –when compelled- might normally see the connection between technology usage and providing exemplary service to their customers may lack sufficient motivation when adoption is voluntary.

The Technology Adoption Model (TAM) has as its antecedents to adoption “ease of use” and “perceived usefulness” While ease of use should be associated with social media (since many salespeople use it in their personal lives), it appears that many salespeople have yet to fully grasp how social media, and specifically LinkedIn, can be useful to them in the context of performing the sales function. Given that there is still uncertainty in the academic and practitioner communities concerning the viability of many social media success metrics, this belief is not surprising. The task technology fit (TTF) model argues that for a technology to improve performance, it must fit the task for which it is being used. The present research argued
that LinkedIn could be used as a tool to enhance pre-sales call research and to develop relationships with existing customers. The low mean value for the composite LinkedIn usage measure reveals that many salespeople surveyed are not using LinkedIn at all, which suggests that they do not understand how to take full advantage of its capabilities.

Regardless, the finding that adaptive selling and customer orientation do not have a significant effect on LinkedIn usage (as hypothesized) is somewhat surprising. The results of the factor analysis for the shortened, 4 item scale adaptive scales demonstrated that the scale possessed an unacceptably low coefficient alpha. The likely reason for this result is that two of the items, “I use a set sales approach” and “I find it difficult to adapt my presentation style for certain customers” are negatively worded. As a result, testing any relationship between this construct and LinkedIn usage was not appropriate. Going forward, future research might find it more insightful to use the full scale (Spiro & Weitz 1990). Similarly, scholars have argued that the emotional intelligence scale developed by Kidwell and colleagues (2008; 2011) provides a richer understanding of a salesperson’s ability to understand and adapt to their customers and therefore assessing salespeople’s emotional intelligence might present a more reliable index of adaptive selling.

The insignificant relationship between customer orientation and LinkedIn usage is likely due to the fact that all salespeople, regardless of their use of social media, believe they have the best interests of their customer in mind when engaged in the sales function. In fact, examination of the mean for the composite of this scale (M =8.59 on a 1-9 Likert scale anchored at 1 = strongly disagree, 9 = strongly agree) reveals that the salespeople surveyed overwhelmingly believe that they place their customers’ best interests ahead of their own desire to make a quick and profitable sale. A more illuminating measure would have been to have the respondent’s sales
manager or largest customers assess the relationship performance of the salesperson. However, given time and resource limitations, this was not feasible.

The significant, positive relationship between technology orientation and LinkedIn usage is not surprising. As discussed earlier, salespeople are often the most reluctant of a firm’s employees to adopt technology (Sharma & Sheth 2010). Therefore, those salespeople who would adopt LinkedIn voluntarily would likely have a high degree of comfort with, and affect toward, technology. However, the finding that age has a non-significant effect on LinkedIn usage is quite surprising, given the substantial amount of evidence that younger individuals are more likely than older individuals to adopt social media (Morris & Venkatesh 2000; Venkatesh & Morris 2000). One reason for this non-significant finding may be that LinkedIn is perceived as being in a fundamentally different category than other, more popular forms of social media such as Facebook and Twitter. Since LinkedIn is specifically designed for business professionals, characteristics such as informality that may keep older individuals away from Facebook and Twitter are not relevant for LinkedIn. An examination of the correlations between age and the various LinkedIn usage items reveal some interesting patterns. While two of the items, “How often do you login to LinkedIn?” \( r(268) = -.116, p = .057 \) and “How often do you update your profile on LinkedIn?” \( r(268) = -.153, p = .012 \) had marginally significant, and significant, inverse correlations with age (as predicted by hypothesis), a third item “How often do you read articles on LinkedIn?” had a marginally significant, positive correlation with age \( r(268) = .081, p = .184 \), suggesting that older salespeople are actually more likely than younger salespeople to use LinkedIn in this manner.

While it was not surprising to find that salespeople who use LinkedIn extensively use it for the purposes elucidated in the qualitative portion of the study -namely to do research on
customers prior to the sales call and to develop relationships with existing customers- it is surprising that these factors did not lead to any overall increases in perceived or objective sales performance, with the exception of salespeople in Company B. Upon examination, this result may be due to the very evolution in sales over the last two decades. More specifically, as salespeople have moved from a transactional based approach to one based more upon developing relationships, revenue generation (and hence performance) is predicated on long existing relationships. As social media, and LinkedIn specifically, is a relatively recent phenomena, many salespeople in the sample may be serving customers whom they have had prior to the advent and popularization of social media. As a result, these salespeople may not see the need to adopt LinkedIn for professional purposes, as their sales success has been “locked-in” for a period of many years. Conversely, salespeople at Company B frequently generate new accounts as a result of selling products that are ubiquitous in the business world. In short, salespeople at Company B are what popular press writers refer to as “hunters,” or individuals who focus on generating new customers instead of simply serving existing ones. Conversely, salespeople at companies A and C are primarily “farmers,” meaning salespeople whose role is to serve existing customers. Thus, while salespeople at Company B see LinkedIn as a tool to develop relationships with existing customers, these salespeople also believe LinkedIn can help them gather information on prospects prior to a sales call. It is possible that the benefits of LinkedIn primarily accrue to businesses that have a client portfolio of new and existing customers. It should also be noted that the use of social media at Company B is championed at the executive level, which could account for their higher usage patterns than the other salespeople surveyed as part of this research.

One finding from the present research that is particularly interesting is the significant, positive relationship between the use of LinkedIn as a research tool and the perceived ability to
generate new customers. This makes intuitive sense, as many of the usage functions of LinkedIn relate to discovering information about a prospect’s educational background, interests, and authority to buy. This information is typically uncovered before a prospect becomes a customer. Thus, knowing this information in advance of the sales call would help build rapport, and ultimately increase the likelihood of winning the account. Conversely, while there is not a significant relationship between LinkedIn usage and the other subjective performance measures, this can be understood as the “other side of the coin” of the previous finding. As alluded to above, most of the subjective performance items relate to outcomes that are not specifically associated with new customers, but rather refer to metrics that relate to current and continuing customers. As such, LinkedIn, which many of the respondents view as a tool to initiate new relationships, is less relevant. Since the objective performance measures examined overall performance (percentage of quota in the case of Company C, and 2013 revenue performance for Company A) and not new account generation specifically, much of the research benefit of LinkedIn likely got “washed out.”

Another finding of note is the positive, marginally significant relationship between LinkedIn usage and subjective outcome performance. While the productivity paradox (Brynjolffson 1993) argues that the mere use of a technology does not automatically lead to increases in performance, the result suggests that salespeople may be using LinkedIn for purposes other than conducting pre-call research or developing relationships with customers. However, since the model testing phase of this research did not ask respondents to provide additional, open-ended insight into ways that they are using LinkedIn, uncovering these additional uses must be commended to future research.
Finally, the difference in the perceptions of LinkedIn’s effectiveness amongst the various firms is quite interesting. In short, these perceptions form a continuum from very positive to very negative. At Company B, the national provider of office and business solutions, the use of LinkedIn as a research and relationship development tool is perceived to have a positive impact on various subjective performance measures such as relationship, input, and output performance. At Company A, the national provider of supplies to the dental and veterinary industries, LinkedIn is perceived as having little effect on perceived performance. Further, at Company C, the large provider of custom wall coverings and installations, the usage of LinkedIn as a research and relationship development tool had a negative perceived impact on subjective performance. This last finding is particularly interesting, as it suggests a firm-wide skepticism toward social media, and specifically LinkedIn. While salespeople at this firm routinely engage in prospecting and relationship development as part of their essential job functions, many don’t view LinkedIn as an effective business tool. In fact, the findings suggest that they feel using LinkedIn as a professional sales tool may actually harm performance. This may be related to a comment made by one of the respondents in the qualitative study, who mentioned that certain forms of social media, such as Twitter and Facebook, aren’t perceived as “professional” at his firm. While LinkedIn is specifically designed as a business tool, it is certainly possible that it is being “lumped in” amongst other, more popular forms of social media that are designed for non-business specific purposes.

In short, the inconsistent results from the current study are likely attributable to a variety of factors. However, one of the overriding issues was the inability to collect a large enough sample from a single company for Study 3. In total, salespeople from 48 companies were represented in the sample. Given the previous assertion that management support is likely critical
for adoption of LinkedIn as a professional sales tool, the wide breadth of industries represented would almost certainly lead to inconsistent results, as usage is championed at some firms (Company B) and discouraged at others (Company C). In addition, social media usage may even be prohibited at certain firms, particularly those that are in the health care industry who fear being in violation of HIPAA privacy and disclosure laws. Ideally, then, future research on this topic should consider data collection from either a single firm or a subset of small firms where LinkedIn usage is championed.

**Implications**

An interesting implication of the present study is the finding that few salespeople recognize the value of using Facebook and Twitter for professional purposes. Considerable anecdotal evidence from the business world suggests that Facebook and Twitter are having a profound impact on the way that firms communicate with their customers (Holden-Bache 2011; Trainor 2012). Yet the results from the qualitative portion of this research suggest that few salespeople recognize the professional value of these two social media technologies. The general tenor of these comments suggest that many salespeople believe that these technologies are "unprofessional" and worry about their customers’ reactions should they attempt to communicate with them using these technologies. What may be especially surprising about this result is that the average respondent in the qualitative study was 35 years old. Therefore, it is likely that many of the respondents in the study were personally familiar with these forms of social media, which is supported by the finding that 56 and 32 percent of the sample had a Facebook and Twitter account, respectively. While academic research on popular forms of social media used in business is relatively scant, that which exists primarily examines the effects of Facebook and Twitter. There are no empirical studies known to the author which examine the effect of
LinkedIn on business performance, which is ironic given that the express purpose of LinkedIn is to serve as a “professional” form of social media. Perhaps this is due to LinkedIn having fewer subscribers than these two more popular forms of social media, or perhaps scholars feel that LinkedIn’s positive effect on business performance is “self-evident.” Ere regardless, the results of the present study suggest that LinkedIn is having a positive effect on business performance through the generation of new accounts, although overall subjective assessments of its efficacy for salespeople is muted. However, managers should be aware that social media sites that receive the most press coverage, such as Twitter and Facebook, may not be the most useful for professional purposes.

Another implication from the present study is that it appears many salespeople are not using social media for its intended purpose of having a “conversation” with customers. The results from the qualitative study indicate that social media, and specifically LinkedIn, is being used as a research tool to gather information on prospects prior to the sales call. Social media is regarded as a “pull” technology, where initial information requests come from the customer (Agnihotri et al 2012). Further, despite the fact that many salespeople are using LinkedIn as a way to follow-up with their customers after a sale, much of the information flow is “pushed” out from the salesperson. For example, salespeople mention they are using LinkedIn to provide information (such as information on new product lines and upcoming deals) to their customers, but aren’t necessarily using it to listen to what their customers “are saying”. This finding could be due to many factors. Customers (and salespeople) may be more comfortable exchanging private information either over the phone or in-person. LinkedIn, with its millions of members worldwide, may give salespeople and their customers the impression that sensitive information exchanged over its platform would not be private. Conversely, despite the “social” nature of
LinkedIn, many salespeople may believe that using it to have a conversation with a customer is 
not as personal as a phone call or an in-person visit. Ironically, there is also the possibility that 
salespeople and their customers don’t view social media as being as efficient of a communication 
medium as the telephone. While information shared over LinkedIn may occur in a piecemeal 
fashion, with messages and their responses transmitted over a period of days, a quick phone call 
could bring closure to a conversation within 10 minutes. Managers should understand that mere 
implementation of social media is not a panacea for what ails the firm’s relationships with 
customers. Firms utilizing social media should be cognizant of how their customers wish to 
communicate with them. Unlike SFA or CRM system implementations, well planned social 
media initiatives need buy in not only from the sales force, but also from buyers.

The results of the structural model suggest that many antecedents of social media usage 
are yet to be uncovered. While a salesperson’s technology orientation had the predicted effect on 
social media adoption, there was no relationship between customer orientation and LinkedIn 
usage. This implies that anecdotal evidence suggesting that social media helps salespeople 
develop closer relationships with their customers may be overstated. The hallmark of modern 
selling is developing lifelong relationship with one’s most valued customers. This would be a 
necessary component of any successful salesperson’s job description, regardless of the use of 
social media. Ironically, the manner in which salespeople can develop closer relationships with 
their customers is through using forms of social media which were not discussed in the 
qualitative portion of the study, more specifically blogs. Blogs are a convenient way for 
customers to initiate conversations with salespeople, instead of relying solely on salespeople to 
push information to them. However, many salespeople may fear that blogs are excessively risky, 
and fear losing control of the “conversation” to 3rd parties. In addition, regular blog postings
represent a more significant time commitment than managing a LinkedIn profile, and salespeople who are already wary of spending too much time on administrative, non-selling tasks might be hesitant to adopt this form of social media. Firms wishing to implement social media initiatives should make explicit the benefits of the technology while also providing more than mere lip service to the legitimate concerns that many salespeople may have toward using social media as a professional tool.

The finding that salespeople at companies A-C generally had different views concerning the efficacy of LinkedIn as a professional sales tool suggests that management has a significant opinion in shaping their sales representatives’ opinions toward social media. While research has indicated that management’s attitudes toward technology impacts sales representatives’ adoption of SFA and CRM systems (Hunter & Perreault 2006; Onyemah, Swain, & Hanna 2010; Trainor et al 2013), it is surprising that this effect manifests itself with a technology (social media) that many salespeople are already familiar with from their personal lives. Twitter and Facebook, the two most popular forms of social media, are easily adaptable to firm wide implementations, as many companies are beginning to develop their own Twitter feeds or Facebook pages. However, as a form of professional social media, LinkedIn is more “personal” in that individuals typically maintain their own accounts free from company control. Nevertheless, it appears that the opinions of management toward the efficacy of the social media technology impacts adoption rates. Thus, firms wishing to promote the use of social media for professional purposes should treat implementation in much the same way that they would for an SFA/CRM system. In other words, social media implementations should be firm directed, with focused training providing best practices.
Finally, although the current research provided some interesting insights into how LinkedIn is being used by sales professionals, the overall results from the structural model indicate that, despite anecdotal claims to the contrary, social media may be limited in its ability to improve sales performance. In other words, social media, like all sales technologies, is not a panacea that can immediately solve all the problems that plague a sales force.

The implications of the current research are significant. While anecdotal evidence suggests that social media is having a profound effect on business performance, the present research was one of the first attempts at examining the impact of social media usage, specifically LinkedIn, in the context of sales performance.

**Limitations and Future Directions**

Although the present research provided an exploratory look into the effect that LinkedIn usage has on sales performance, there are limitations which prevented the formation of more definitive conclusions. First, the present research utilized the responses of salespeople across different industries. While it was possible to standardize performance metrics for salespeople in these different industries, social media is not used equally across different industries. For example, Company B, the large office products company, encourages social media usage by their employees. However Company A, which is in the dental products industry, does not utilize social media, and specifically LinkedIn, to the extent of Company B. Ideally, the present research would have utilized a large sample from a single company, and compared the use of LinkedIn across regions or divisions. In addition, although “buy-in” was achieved from Company B to the extent that they provided respondents for the survey, objective performance data was not provided.
Another limitation of the current research is that many firms that were approached for this study mentioned that they prohibited their employees from using social media for privacy concerns. This is especially relevant for those industries that deal with sensitive information, such as firms within the medical field. In addition, some firms simply viewed social media usage to be unprofessional and discouraged employees from using it. Thus, the findings from the present study are likely not generalizable to firms within certain industries. However, it is hoped that the results presented here will provide sales managers with some insight on how to use social media – and specifically LinkedIn – for professional success.

Another limitation was that the current research did not gather customer data at either the qualitative or model testing stages. Social media is designed to enhance communication between parties, but the salespeople in the qualitative study primarily use social media to “push” information to customers or to perform research. However, no salespeople surveyed in the qualitative study mentioned that they were using social media to have a conversation with their customers about the latter’s needs. An extended qualitative study which elicited the opinions of B2B sales customers may have uncovered ways in which salespeople are using – and not using – social media effectively from the perspective of the customer. This could have strengthened the model tested in Study 3. In addition, salespeople in Study 3 were asked to assess their own relationship performance by asking them how well they served their customers relative to their peers. A more robust measure of relationship performance would have been to ask selected customers (3-4 per salesperson) about how they perceive the relationship they have with their salesperson.

In addition, the present study had only limited access to actual performance data. While previous research has shown that salespeople’s assessments of their own performance are highly
correlated with their actual performance (Churchill et al. 1985), the majority of current sales research that examines performance outcomes looks primarily at objective measures. Asking salespeople to assess their own performance also introduces the potential for common methods bias. Although the current research tested for common methods bias and found it not to be an issue, objective performance measures for all respondents would have strengthened the findings. Furthermore, the subjective performance measures asked salespeople to evaluate themselves relative to their peers. This introduces a potential confound in that respondents may define their peer group differently. For example, some may view all salespeople within their firm as their peers, whereas others may only view those salespeople who have a similar amount of professional experience as being peers. Some salespeople may even consider salespeople at other firms to be their peers. Thus, subjective performance measures become even more subjective when the basis of comparison is not clearly and explicitly defined. Additionally, having sales managers provide information pertaining to an individual salesperson’s relationship performance and customer orientation would have provided more robust and objective insight into the relationship that a salesperson has with their customers.

Finally, the results of the model are likely predictive and not causal. Further testing, specifically longitudinal testing over multiple reporting periods, would provide additional insight into the relationship between LinkedIn usage and sales performance. More specifically, since social media adoption is in its nascent stages, drawing conclusions about its effect on relationship performance in a cross-sectional study is difficult. In addition, because of this “newness”, is LinkedIn’s true impact on input and output performance manifesting itself yet?

Future research into LinkedIn usage and its effects on sales effectiveness could examine whether services such as LinkedIn Premium™ have a differential effect on sales performance.
versus the standard LinkedIn package. LinkedIn generates revenue through targeted advertisements, charging employers for access to potential job applicants, and offering a premium package which allows users to send messages to anyone on LinkedIn without a referral, obtain enhanced search results which leads to a better understanding of a customer’s role within the organizational hierarchy, and also to see who has looked at your profile. According to their 2014 10-k filing, the Premium™ business line contributed over $300 million to revenue.

LinkedIn is one of the few social media networking sites that charge for user access, but despite the fact that their Premium™ line experienced an almost 300% growth in revenue over the last two years, few sales professionals are aware of its existence.

The present research examined at which stages of the sales process LinkedIn usage was considered most appropriate. However, future research could look at the impact that the stage of the salesperson-buyer relationship has on social media usage. Are mature salesperson-buyer relationships more amendable to the use of social media? For example, mature relationships are marked by greater mutual familiarity than new or developing relationships (Dwyer, Schurr, & Oh 1987). Does the usage of social media in a business setting require a certain level of familiarity between salesperson and buyer? Conversely, are newer relationships more amenable to the use of social media? For example, as relationships develop, salespeople may have more in-person contact with their buyers, or may reduce communication in general as they are better able to anticipate the concerns of their customers without direct or indirect communication.

Additionally, what are the personal characteristics of buyers that make them more open to using social media in a professional setting? The present research examined the characteristics of salespeople that make them more likely to adopt LinkedIn and found that technology orientation has a significant influence on willingness to adopt. This would likely be the case with buyers
also. However what other personal –and organizational- factors might influence adoption of social media for business purposes? In many firms, social media campaigns are the domain of less experienced marketing staff. Would buyers, who are outside the marketing silo, be encouraged to use social media on their own? Do more horizontally structured organizations encourage greater usage of social media outside of the marketing function?

The present research focused on ways that salespeople “push” information to their customers, as respondents in the qualitative study remarked that this was the only way that they used social media in their professional roles. However, social media is ultimately designed for “pull” communication, in which information is exchanged between two parties (Agnihotri et al 2012). This raises the question of what information supplied by salespeople would be most likely to initiate a conversation and the sharing of information from a buyer?

Additional research could also examine the impact that LinkedIn usage has on salesperson trust. Salesperson “trust” (i.e. the trust that the salesperson elicits from his customers) is a well-researched construct within the sales literature (for a review, see Wood et al 2008). In addition, early social media research has indicated that customers display higher levels of trust for companies that engage with them on social media (Shoemaker 2012). Yet, would using LinkedIn to perform pre-approach background work on prospects actually lead to a decrease in salesperson trust? More specifically, would customers view a salesperson who uses LinkedIn to uncover information about them that they will use during the sales call as obtrusive?
References


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Appendix A (Scale Items)

Customer Orientation: Thomas, Soutar, and Ryan (2001)
(1 = Strongly Disagree, 9 = Strongly Agree) (*Retained items denoted by boldface and italics*)

1. I try to figure out what customer needs are.
2. A good employee has to have the customer’s best interest in mind.
3. I try to bring a customer with a problem together with a product/service that helps solve the problem.
4. I offer the product/service that is best suited to the customer’s problem.
5. I try to find out what kind of products/services will be most helpful to a customer.

(1 = Strongly Disagree, 7 = Strongly Agree) (*Retained items denoted by boldface and italics*)

1. I try to link different sales technologies so that they work together well.
2. I have always been fascinated by advances in technology.
3. Compared to others in sales, I am technology oriented.
4. I extensively use information technologies to perform my job.
5. My analytical skills explain most of my success as a salesperson.

(1 = Strongly Disagree, 7 = Strongly Agree) (*Scale not retained for confirmatory factor analysis*)

1. I use a set sales approach
2. I am very flexible in the selling approach
3. I feel confident that I can change my planned presentation when necessary
4. I find it difficult to adapt my presentation style to certain customers

LinkedIn Usage
(1 = Never, 7 = Very Often)

1. How often do you login to LinkedIn?
2. How much time do you spend using LinkedIn?
3. How often do you update your profile on LinkedIn?
4. How often do you read articles on LinkedIn?
Prospecting (*Retained Items from Study 2 Denoted by Boldface, Items used in Study 3 Denoted by Italics*)

(1 = Never, 7 = Very Often)

1. *(res1)* How often do you use LinkedIn to find new prospects?
2. *(res2)* How often do you use LinkedIn to gain referrals from other customers?
3. *(res3)* How often do you use LinkedIn to determine if a lead has a need to buy?
4. *(res4)* How often do you use LinkedIn to determine if the lead has the money to buy?
5. *(res5)* How often do you use LinkedIn to determine if the lead has the authority to buy?
6. *(res6)* How often do you use LinkedIn to determine centers of influence?
7. *(res7)* How often do you use LinkedIn to search for leads by looking at your friends' lists of friends?
8. *(res8)* How often do you use LinkedIn to qualify leads?
9. *(res9)* How often do you use LinkedIn for "buzz creation" -i.e. to send out new articles?
10. *(res10)* How often do you use LinkedIn for "buzz creation" -i.e. to send out new product information?

Planning for the Sales Call (*Retained Items Denoted by Boldface and Italics*)

(1 = Never, 7 = Very Often)

1. *(res11)* How often do you use LinkedIn to find information on your prospect's interests (hobbies)?
2. *(res12)* How often do you use LinkedIn to find information on your prospect's educational background?
3. *(res13)* How often do you use LinkedIn to find out what product attributes might be important to your prospect?
4. *(res14)* How often do you use LinkedIn to determine your prospect's attitudes towards your products?
5. *(res15)* How often do you use LinkedIn to determine where you prospect fits within the organizational structure?
6. *(res16)* How often do you use LinkedIn to find information on your prospect's competitors?
7. *(res17)* How often do you use LinkedIn to find information on your prospect's customers?
8. *(res18)* How often do you use LinkedIn to find information on the size of your prospect's company?
9. *(res19)* How often do you use LinkedIn to find information on the financial position of your prospect's company?
10. *(res20)* How often do you use LinkedIn to find information on the industry that your prospect's company is in?

Post-Sale Follow Up (*Retained Items Denoted by Boldface and Italics*)

(1 = Never, 7 = Very Often)
1. (reldelv1) How often do you use LinkedIn to follow up with your customers after the sale?

2. (reldelv2) How often do you use LinkedIn to send your customers information on new products?

3. (reldelv3) How often do you use LinkedIn to assess post-sales, customer satisfaction?

4. (reldelv4) How often do you use LinkedIn to assess your customers’ changing needs?

5. (reldelv5) How often do you use LinkedIn to build trust with your customers?

6. (reldelv6) How often do you use LinkedIn to offer your customers expert advice?

7. (reldelv7) How often do you use LinkedIn to "up-sell" your customers for future sales transactions?

8. (reldelv8) How often do you use LinkedIn to build stronger relational ties with your customers?

9. (reldelv9) How often do you use LinkedIn as a forum in which to resolve customer complaints?

Subjective Performance
(For the following questions, please rate yourself relative to your peers; 1 = Much worse than average, 7 = Much better than average) (Items used in Study 3 denoted by boldface and italics).

1. Total Sales Volume (output)

2. Sales by Product/Service (output)

3. Sales by Customer Classification (output)

4. Gross Margin by Product Line (output)

5. Number of Orders (output)

6. Average ($) of Orders (output)

7. Batting Average (Orders/Calls) (input)

8. Number of Cancelled Orders (input)

9. Percentage of Accounts Sold (input)

10. Number of New Accounts (output)

11. Number of Accounts (input)

12. Percentage of Time Spent on Non-Selling Activities (input)

13. Accuracy in Meeting Sales Forecasts (input)

Relationship Performance
(For the following questions, you will be asked to assess how you think your customers feel you have served them over the last 12 months)

1. To what extent do you believe you have met customer expectations? (1 = Much worse than expected, 9 = Much better than expected)

2. To what extent have you met customer ideals? (1 = Very far from ideal, 9 = Very close to ideal)
3. Overall, how satisfied/dissatisfied are your customers (1 = Very dissatisfied, 9 = Very Satisfied)