Araştırma Makalesi

ANALYZING THE LINK BETWEEN SALES TECHNOLOGY USE AND SALES PERFORMANCE[*]

SATIŞ TEKNOLOJİSİ KULLANIMI VE SATIŞ PERFORMANSI ARASINDAKİ BAĞLANTININ ANALİZİ

Aslı KUŞÇU[**]

Abstract

Firms invest billions of dollars in sales technologies in the form of order tracking and CRM systems, sales automation tools, or smartphones and tablets to enable their sales workforce to access, analyze, and communicate information about products, sales calls or orders, sales, accounts or competitors more easily, and to improve sales effectiveness and efficiency and thus, to generate a superior customer experience. However, the results regarding the link between technology use and overall salesperson performance is mixed. Thus, there is a need for a better understanding of how technology impacts performance of the salespeople. This study tries to demonstrate this link with data from direct selling organizations. Results indicate that salespeople mainly use sales technologies to analyze data and that sales technology use influences internal administrative performance, sales performance, and customer relationship building performance; i.e. all aspects of salesperson performance. Customer orientation, training and perceived ease-of-use of the sales technology enhance this relationship. On the other hand, expertise of the salesperson was found to display no influence.

Keywords: Technology Use, Sales Performance, Internal Administrative Performance, Customer Relationship Building Performance

JEL Codes: 033, L25, M31, M39

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Öz

Firmalar, satış ekiplerinin ürünler, satışlar, ürün talepleri, müşteriler veya rakipler hakkında bilgiye ulaşması, analiz etmesi ve iletişim kurması ve de dolayısı ile satış etkinliğini ve verimliliğini arttırmak ve üstün bir müşteri deneyimi oluşturmak için satış takip, müşteri ilişkileri yönetimi, satış otomasyon araçları, akıllı telefonlar ve tabletler şeklindeki satış teknolojilerine milyarlarca dolar yatırım yapmaktadır. Ancak, literatürde teknoloji kullanımı ile genel satış performansı arasındaki bağlantıya ilişkin sonuçlar karışıktır. Bu sebeple, teknolojinin satış elemanlarının performansını nasıl etkilediğinin daha iyi anlaşılması ihtiyacı ortaya çıkmaktadır. Bu çalışma, bu bağlantıyı doğrudan satış organizasyonlarından gelen verilerle göstermeye çalışmaktadır. Sonuçlar, satış elemanlarının çoğunlukla verileri analiz etmek için satış teknolojilerini kullandığını ve satış teknolojisi kullanımının iç yönetim performansını, satış performansını ve müşteri ilişkileri yönetimi performansını, kısaca satış performansının tüm yönlerini, etkilediğini göstermektedir. Müşteri odaklılık, satış teknolojisi ile ilgili verilen eğitim ve algılanan kullanım kolaylığının bu ilişkiyi geliştirdiği; ancak satış elemanının uzmanlığının etkisinin olmadığı görülmüştür.

Anahtar Kelimeler: Teknoloji Kullanımı, Satış Performansı, İç İdari Performans, Müşteri İlişkileri Oluşturma Performansı

JEL Kodları: 033, L25, M31, M39

1. INTRODUCTION

The sales workforce has been viewed as an important part of the organizational strategy and competitiveness by senior executives (Cron, Baldauf, Leigh & Grossenbacher, 2014). Not only is the influence of the sales function on corporate performance well documented (Panagopoulos & Avlonitis, 2010), but also research on sales management reveals that selling still should be regarded as a viable activity within the company to generate and exchange value with the customers (Hartmann, Wieland & Vargo, 2018). Sales employees are the ones in contact with the customer and without them satisfying the customers there will not be any returns in terms of relationships or profits. Nonetheless, though both academics and practitioners acknowledge the importance of sales function within the organization and there have been accumulated knowledge on the field, sales management is still one of the neglected topics within the marketing literature and there is still a vast amount of areas that need to be examined (Geiger & Guenzi, 2009). Hence, understanding the factors that drive sales performance and how these vary across different contexts is essential for both managers and researchers in sales and marketing. In line with this perspective, there have been many factors suggested in the literature that influence sales performance (Churchill, Ford, Hartley, & Walker, 1985) nonetheless, as one of the latest topics that generated interest in both academic and practitioner world is the usage of sales technology tools (Honeycutt, 2005). This paper aims to investigate the impact of sales technology.

Sales orientations have first changed from transactional selling to relationship selling and then to consultative and enterprise selling, where the customer is viewed not just a recipient of the transaction but takes advantage of the salespeople's knowledge, skills and help in his/her purchase efforts (Hartmann et al., 2018). Hence, knowledge generation and dissemination has become an important aspect to create value in today's economy particularly for innovation or production but also for marketing and selling of products and services (Achrol & Kotler, 1999; Menguc, Auh & Uslu, 2013; Vargo & Lusch, 2004). Selling is defined as "the phenomenon of human-driven interaction between and within individuals/organizations in order to bring about economic exchange within a value-creation context" by Dixon and Tanner (2013, p. 10). Thereafter specifically, the human-driven interaction necessitates knowledge transaction. Further, the transaction of knowledge is not only through salespeople and customers, but it also refers to the transaction within the organization. In personal selling, it has long been known that more knowledge leads to more satisfied customers and higher performance (Menguc et al., 2013). Selling-related knowledge can be defined as "the depth and width of the knowledge base that salespeople need to size up sales situations, classify prospects, and select appropriate sales strategies for clients (Leong, Busch & John, 1989, p. 164). Selling-related knowledge covers market knowledge but also entails customer knowledge, which is the salesperson's organized, structured, and validated information and expertise and understanding about different types of customers and knowledge regarding competitors and internal processes within the organization (Hartmann et al., 2018; Verbeke, Dietz & Verwaal, 2011). Salespeople must possess selling-related knowledge to successfully communicate how their products or services meet the needs of their customers (Ofek & Sarvary, 2001), as well as to create better relationships with their customers and within company. Different technologies are used by salespeople to access, analyze, and communicate information about products, sales calls, orders, sales, accounts, competitors etc., just to be competitive within the technology-enabled and engagement-rich business environment. As a result, firms invest billions of dollars in information and communication technologies in the form of order tracking systems, CRM systems, sales automation tools, or electronic devices such as computers, smartphones or tablets to enable their sales workforce to access knowledge more easily and thus improve sales effectiveness and efficiency. Salespeople use technology mainly to be more productive and efficient, and as shown in literature using those technologies also improves satisfaction of the salespeople (Limbu, Jayachandran & Babin, 2014); nonetheless some salespeople only use technology because it is required by the management (Buehrer, Senecal & Pullins, 2005). Hence, even though many companies force their sales workforce to integrate some technology into their sales routines, the results regarding the link between technology use and salesperson performance is mixed (Buehrer et al., 2005). Williams and Plouffe (2007) argue that there have been dramatic changes within the field that deserves further study and yet scarce studies on this specific link found a small but positive influence (Ahearne & Schillewaert, 2001; Román & Rodríguez, 2015;

Sundaram, Schwarz, Jones & Chin, 2007), whereas some suggested no significant correlation at all (Engle and Barnes, 2000). Considering the high costs of implementing those technologies, investigating their influence has become a high priority in sales management research (Leigh & Marshall, 2001).

Thus, this study tries to contribute to literature firstly by providing an understanding of the link between the use of sales technology tools and sales performance with the data provided by the sales workforce of business-to-business direct selling organizations within the healthcare sector. Second, contrary to previous literature, the paper recognizes all three aspects of sales performance, as they all make up total performance of a salesperson. Third, the paper further generates an understanding on the contingency situation and sheds light on aspects that play a role in enhancing the main relationship. Finally, employing data from a diversified sample of salespeople from Europe, the paper aims to provide generalizable findings useful for businesses. With this aim, the paper is structured as follows. First, literature on sales performance and sales technology is discussed and hypotheses are proposed. Next, we present data collection and analyses, followed by the discussion about theoretical and practical implications of our findings.

2. THEORETICAL BACKGROUND AND HYPOTHESES

Sales performance is defined as "behavior evaluated in terms of its contribution to the goals of the organization" (Johnston & Marshall, 2006). Hunter and Perreault (2007) defined key aspect of sales performance as relationship-building performance and internal-administrative performance. Relationship-building performance with customers is the externally-focused activities of the salespeople that cultivate a relationship mutually benefiting both the company and the customers. The sales perspective changed from a transactional view to a more consultative selling approach; nonetheless, the importance of strong relationships with the customers is still kept as inevitable (Hartmann et al., 2018). On the opposite, administrative performance is more internally focused and refers to the non-selling-related duties of the sales team such as submitting reports, or similar paperwork. These duties also take a big portion of the sales peoples' time and add to the overall success of the sales person. In addition to these aspects of sales performance, outcome-based measures of sales performance such as exceeding sales targets are also important indicators of a salesperson's behavioral performance and they have been incorporated into the measurement to cover all aspects of sales performance in previous studies. Hence, these three parts of sales performance cover different roles of the sales people and make up overall sales performance altogether.

There have been different aspects suggested in the literature that influence sales performance such as characteristics of the sales person, for instance emotional intelligence (Deeter-Schmelz & Sojka, 2003), personality (Barrick, Stewart & Piotrowski, 2002), external or

internal environmental factors (Churchill et al., 1985), or effort (Brown & Peterson, 1994). Among those suggested, sales teams' market-oriented knowledge processing and particularly customer knowledge creation capability has been found to be very important in sales performance from both relationship and financial perspective (Menguc et al., 2013). As the overall knowledge of the sales team in terms of the competitors, available products in the market, and prospect and current customers increases, their capabilities in generating more satisfying relationships with the customers escalates as well as their overall performance in sales activities. Sales technology refers to any technology tool that can facilitate or enable the performance of sales tasks. It can be relational database programs, inventory management systems, contact management programs, smartphones, or tablets. They collect, systematically categorize, store and analyze various data related with sales activities and salespeople use these tools to analyze, communicate, and access information about products, sales calls, orders, sales, accounts, competitors (Hunter & Perreault, 2007) and thus to increase their selling-related knowledge (Leong et al., 1989). Sales technologies not only enable sales people to perform their tasks in a timelier and less effort consuming way (Rapp, Agnihotri & Forbes, 2008) and increase administrative performance (Sundaram et al., 2007); but they also particularly are used by the sales team to generate, analyze and distribute knowledge from and to the customers and among salespeople and company (Speier & Venkatesh, 2002). Sales people's activities within the organization play a significant role in their overall performance (Bolander, Satornino, Hughes & Ferris, 2015). In this sense, sales technologies particularly enhance selling-related knowledge and as Verbeke et al. (2011) and Ahearne et al. (2008) underlined, there is a positive influence of selling-related knowledge on sales performance. Moreover, sales technology adoption also leads to an increase in various aspects of job performance among salespeople such as customer service or knowledge (Ahearne, Jones, Rapp & Mathieu, 2008; Jelinek, Ahearne, Mathieu & Schillewaert, 2006) as usage of these tools enable salespeople to be more responsive and knowledgeable and hence result in stronger relationships with the customers (Román & Rodríguez, 2015). Hunter and Perreault (2007) stated that use of sales technologies for analyzing and communicating information positively improves customer relationship management, whereas accessing information has a positive influence on internal administrative performance of the salesperson. As a result, it is believed that the use of sales technology tools such as tablets or smartphones or applications would improve all aspects of sales performance.

H1: Sales technology use positively influences **(a)** internal administrative performance, **(b)** sales performance, and **(c)** customer relationship building performance.

Even though most companies force sales teams to incorporate advanced technologies into their sales routine with the belief that it will improve sales and overall performance (Honeycutt, 2005; Jelinek et al., 2006); the adoption and effective usage is not always at the anticipated level (Homburg, Wieseke, & Kuehnl. 2010) and depends on various factors such

as the features of the tool (Schillewaert, Ahearne, Frambach & Moenaert, 2005), salespeople's orientation towards technology (Hunter & Perrault, 2006), as well as even peer influence (Homburg et al., 2010). Further, relying on the technology adoption literature and specifically on technology adoption model (TAM), previous research referred to the usefulness and easiness of the tool (Homburg et al., 2010; Schillewaert et al., 2005) as important factors influencing the rate of adoption. This stream of research suggests that the easier the tool is to operate and the more useful it is perceived by the sales people, the higher will be the adoption rate. Another factor that seems to have an impact was documented is the training (initial and continuous) attained on how to use the sales technology tool (Jelinek et al., 2006; Schillewaert et al., 2005). Sales employees' overall adoption and the tool's effectiveness influence sales performance (Krishnan, Groza, Groza, Peterson & Fredericks, 2014) and have been found to be highly influenced whether the salesperson was trained or not, given the fact that trainings not only provide information on how to use the technology, but they also make individuals understand how these tools will be useful in their everyday tasks. Particularly, initial training was found to have an impact on the adoption intention, where trainings that follow generate even bigger adoption rates (Jelinek et al., 2006), as long as the salesperson perceives the training to be useful. Previous research further suggests that the salesperson's experience in terms of the length of time the salesperson is with the company, along with the length of time s/he works within her/his territory directly and positively influences sales performance (Ahearne et al., 2008; Brown & Peterson, 1994; Churchill et al., 1985; Fu, 2009; Schillewaert & Ahearne, 2001; Sturman, 2003). As a matter of fact, as they gain more experience, salespeople understand their job's requirements (Kohli, Shervani & Challagalla, 1998) and are more open to utilize various tools to enhance their performance; though its effect may differ for administrative and relationship-building performance (Hunter & Perreault, 2007). Hence, with experience sales people cannot only be more open to adopt sales technologies, but they would also exploit them in a more efficient way. Another factor that may have an influence on the sales technology use and performance relationship is customer orientation of the sales people. Customer orientation is defined as "the set of beliefs that puts the customer's interest first…" (Deshpandé, Farley & Webster, 1993, p.27). Customer orientation is part of the marketing concept, when salespeople are customer rather than selling oriented and focus on the overall satisfaction of their customers to achieve long-term relationships (Saxe & Weitz, 1982). Customer orientation has been proved to affect sales performance (Jaramillo & Grisaffe, 2009), therefore it is highly expectable that it will further enhance the effectiveness of the sales technology use in generating higher performance.

Within this study, all factors discussed above will be analyzed with regards to their strength in shaping the relationship between sales technology use and sales performance. Past literature tested all as direct forces influencing sales technology tool adoption and/or performance. Nonetheless, based on the discussion above the following hypotheses were developed.

H2: The relationship between sales technology use and sales performance is improved by **(a)** the experience, **(b)** customer orientation of the sales person, **(c)** training received on sales technology, and **(d)** perceived ease of use of the sales technology.
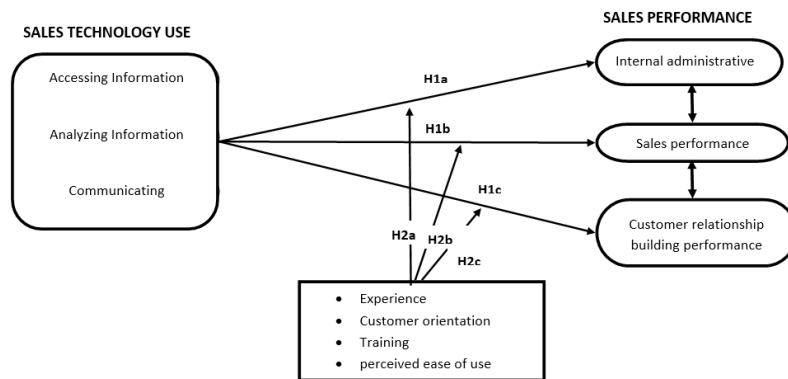

Figure 1. Conceptual Model

3. METHODOLOGY

Study participants were selected among salespeople from Turkey, Belgium, France, Germany, Italy, and Sweden, working for medical device companies and selling products directly to hospitals. Medical device companies were selected as the unit of analysis because medical industry is a highly information and data intensive and also a highly competitive industry. As a result, companies incorporate a broad array of technology tools into their sales strategy. For example, using applications on human anatomy or on sales tracking are encouraged by the management to increase knowledge and consequently sales efficiency and excellence. A convenience sampling approach was employed and because of the geographical distribution of the salespeople, all respondents were approached via an online questionnaire.

The items used in the study were borrowed and/or adopted from existing scales. Items measuring all aspects of sales performance (i.e. internal administrative, sales performance and customer relationship performance) ranged from 'needs improvement' (1) to 'outstanding' (7) (Hunter & Perreault, 2007; Behrman & Perreault, 1982). Items regarding sales technology use ranged from 'frequent' (1) to 'infrequent' (7) (Hunter & Perreault, 2007). Finally, items measuring customer orientation of the salespeople (Saxe & Weitz, 1982), and perceived ease of use (Davis, 1989; Davis & Venkatesh, 1996) were measured by seven-point Likert scales ranging from "strongly disagree" (1) to "strongly agree" (7). Experience was measured by two open-ended questions that were used by Schillewaert and Ahearne (2001).

Respondents initially were given the definition of sales technology and were asked to indicate and evaluate the sales technology tool they were using. Following this, they answered the rest of the questionnaire and provided answers on whether they attained any training on how to use the sales technology tool. Among the tools that were mentioned by the respondents, mobile applications to track the overall sales and customer history were dominantly mentioned (78%), followed by applications providing detailed information on human body (22%).

4. RESULTS

Of the 128 questionnaires delivered, respondents returned 95 (74%). After the data were cleaned, among the meaningful 83 responses, there were 57 male (68.7%) and 26 female (31.3%) respondents. The mean age was 35.9 with a standard deviation of 10.7 with almost half having a college degree (49%). The distribution of the respondents in terms of country are as follows: Turkey (21.7%), Belgium (15.7%), France (14.5%), Germany (18.1%), Italy (16.9%), and Sweden (13.3%). The results show that salespeople use sales technology most frequently to analyze (60%), followed by to access (40%), and to communicate information (20%).

The measurement model revealed a significant fit with χ^2=659.630 and df=332; p=0.01; CFI=0.917, IFI= 0.928, RMSEA=0.059. The smallest t-value of the loadings was 11.434. All estimates were above or very close to the recommended level of 0.7. The composite reliability estimates as evidence of convergent validity were also acceptable. When AVE values are compared to the squared correlation estimates, the cfa model also displays discriminant validity with the AVE's being higher than the squared correlation estimates (Hair, Black, Babin & Anderson, 2010). Also, all correlations between constructs are less than I0.7I which is again a sign for discriminant validity (Bagozzi, Yi & Phillips, 1991). Table 1 lists the items, cfa and reliability results.

Table 1. CFA Results

Dimension	Item	Loading	Reliability	AVE
Relationship performance with customers	Listening attentively to identify and understand the real concerns of your customers	0.724	0.907	0.8
	Working out solutions to a customer's questions or objections.	0.757		
	Working with customers to help them improve their profitability.	0.706		
	Working with buyers to develop a partnership that is profitable to both firms.	0.738		
Administrative performance	Getting required "paperwork" done.	0.765	0.925	0.8
	Addressing my administrative responsibilities in a timely manner.	0.856		
	Submitting required reports on time.	0.873		
Sales performance	Generating a high level of dollar sales.	0.934	0.828	0.7
	Exceeding sales targets and objectives. .	0.848		
	Selling high profit margin products	0.812		
Sales Technology Use	I use sales technology to access information	0.980	0.934	0.8
	I use sales technology to analyze information	0.963		
	I use sales technology to communicate information	0.938		
Customer Orientation	I try to help customers achieve their goals.	0.861	0.950	0.7
	A good salesperson has to have the customer's best interest in mind.	0.842		
	I try to influence a customer with information rather than with pressure.	0.872		
	I offer the product of mine that is best suited to the customer's problem.	0.833		
	I try to find out what kind of product would be most helpful to a customer	0.852		
	I answer a customer's questions about products as correctly as I can.	0.888		
	I try to bring a customer with a problem together with a product that helps him solve that problem.	0.866		
	I try to give customers an accurate expectation of what the product will do for them.	0.859		
	I try to figure out what a customer's needs are.	0.855		
Perceived Ease of Use	I find ……... easy to use	0,835	0,874	0,6
	My interaction with ………. is clear and understandable	0,855		
	Using ……... does not require a lot of mental effort	0,879		
	I believe that ………. is useful.	0,727		

The results of the structural model are generally consistent with the proposed model and the model fits the data (χ^2= 724.42, df=64, p=0.01; CFI=0.914; TLI=0.994; SRMR=0.17). Based on the inspection of the modification indices, some minor modifications were made on

the error terms. The results confirm that sales technology use increases all aspects of salesperson performance (Customer relationship building=0.49 p=0.01; Administrative=0.14 p=0.01; Sales=0.33 p=0.05). Therefore, H1a,b,c are all supported.

When the moderators are added to the analysis, multiple-group analyses based on the experience and training and median-split of perceived ease of use and customer orientation were employed (experience: model 1; customer orientation: model 2; training: model 3; perceived ease of use: model 4). The model fit was acceptable for all models with the path estimates significantly improving only for the ones high in customer orientation, training, and perceived ease of use. As a result, all hypotheses regarding moderation were supported except the one with salesperson's experience. Table 2 shows the path estimates of all multiple-group analyses testing moderation.

Table 2. Standardized Path Estimates

Criterion & Predictor	Model 1	Model 2	Model 3	Model 4
Sales Technology Use				
Relationship performance with customers	*	0.51	0.54	0.52
Administrative performance	*	0.21	0.2	0.17
Sales performance	*	0.34	0.35	0.4

* The estimates were not significantly different from the main model therefore they are not reported.

5. CONCLUSION AND MANAGERIAL IMPLICATIONS

Sales management is an important part of revenue generation and customer relationship management, thus requires strategic emphasis. One of the topics that raises recent interest within sales management literature is the influence of technology usage on sales performance (Ahearne et al., 2008). As technology is a major part of the business world, organizations started to implement various technologies into their work routines. As selling-related knowledge is one of the primary drivers of sales performance (Verbeke et al., 2011), previous literature hence demonstrated that use of sales technology tools also has a positive impact on sales performance (Ahearne, Srinivasan & Weinstein, 2004). Nonetheless, past studies mostly concentrated on customer relationship and/or sales performance aspects of overall sales performance and neglected that sales performance actually encompasses relationship, sales and administrative parts. Hence within this study, all three are taken into consideration and the results confirm that sales technology use increases all aspects of salesperson performance, though with different priorities. Not only sales and administrative performance, but also customer relationship building performance is enhanced by the acceptance of technology within the sales team, and the strongest impact is experienced in fact

in customer relationship building, followed by the sales performance and finally by the admistrative performance. The findings hence extend the ones by Hunter and Perreault (2006, 2007) by showing a direct relationship between sales technology and customer relationship performance, which is stronger than the one for administrative performance and by adding sales performance into the relationship and acknowledging it as the second performance aspect is influenced by the sales technology usage.

The study's findings further demonstrate that highly customer oriented and trained salespeople are more likely to experience the positive influence of sales technology usage on their sales performance. In other words, as stated in Speier and Venkatesh (2002), when salespeople become more experienced in using the sales technology tool, they will even make more use of the tool. Yet this process depends on the positive perception of the sales technology by the salesperson (Schillewaert et al., 2005). Also, results show that ease of use plays a signifcant role in making the usage of technology more effective in all sales performance aspects. Hence, although perceived ease of use is an important indicator on sales technology adoption documented in Schillerwaert et al. (2005), the findings in this study also add that it is also influential in positively shaping the relationship between usage and performance. Hence, the easier is the tool to use, the more it will be helpful for the salesperson in overachieving sales, administrative and customer relationship management targets. Moreover, although several studies confirm the effect of experience on sales performance, it was found to be ineffective in enhancing the main hypothesized relationships. This may be due to the fact that more experienced salespeople may be more reluctant and hesitant to adopt a new technology and new ones may not be aware of the benefits of using it. Robinson, Marshall and Stamps (2005) confirmed the importance of positive attitude in sales people's intention to use the technology tool, hence the insignificant result of the current study may be due to the lack of the positive attitude and knowledge of sales people in the study.

The study offers several important implications for managers of sales organizations, specifically within the healthcare sector, which is a highly dinamic and data – and technology-driven sector. Apparently, companies should still rely on sales technologies to boost sales and particularly use technologies in connection with customer relationship management. The findings show that sales technology usage improves salesperson performance regardless of the experience of the salesperson and with the help of all the information available to them through various applications and tools, salespeople can create customized solutions and serve the needs of their customers better, which most likely lead to higher customer satisfaction. Also, companies should combine technology usage with a sound customer orientation and technology training to result in higher levels of sales performance. Both issues should be integrated into the organization's orientation package especially when new employees are hired, but should be continued to support experienced employees as well. The results also support the influence of perceived ease of use of the sales technology tool. The

more easy the tool to use, the more salespeople use it to access information. As stated in Peterson, Rodriguez, and Krishnan (2011), technology enables customer-oriented companies gain in-depth knowledge on all areas of the market, which can be used to generate superior performance and advantage over the competitors. Salespeople, in their everyday routine need to access different kinds of information about various related aspects of the company such as product portfolio, prices, product specifications, qualifications, details, stocks, and most importantly competitive products. Information is a vital tool of their success and sales technologies in different forms help to generate, categorize and distribute this information; hence, as a result, even the late adoptor companies use technology tools to enhance their sales performance. Nonetheless, there are not so many empirical studies demonstrating a positive influence of sales technology adoption on sales performance to justify the adoption. Hence, this study's major contribution lies in delineating this phanomenon in detail and providing a theoretical understanding on an important and up-to-date practical problem.

6. LIMITATIONS AND FURTHER RESEARCH

The study poses several limitations. The sample is withdrawn from salespeople within the medical device sector; consequently, findings cannot be generalized in other types of selling situations. As a result, further research might generalize the findings by testing the model within different sectors. Further, there are several common method biases such as common rater effects, social desirability, or measurement context effects that exist in social science research (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). The sample size is also another limitation. SEM studies require larger samples, however MacCallum and Austin (2000)'s content analysis of over 500 articles using SEM shows that about one-fifth had sample sizes smaller than 100, thus this study is not unique in this limitation. Also, this study measures the subjective evaluation of the salespeople. Specifically, the measurement of sales performance was achieved through a subjective evaluation. Although Bommer et al. (1995) state that subjective measures can be employed over objective measures in sales performance measurement, still gathering data from the customer-side would enhance the model by incorporating the influence of sales technology use on customer satisfaction. Future research may also replicate the study accounting for management support differences and employee characteristics. For instance, Ahearne et al. (2004) proved that technology expertise level of the sales technology tool user does play a role in moderating the relationship between usage and performance. Another very promising research avenue would be to discuss the relationships between employees' commitment and organizational identification with sales technology adoption and performance. Commitment has been proved to be influential in generating sales performance (Siders, George & Dharwadkar, 2001) and further as stated in Speier and Venkatesh (2002) commitment might shape employees' attitude towards technology and

their usage. Hence, adding the employees' commitment and identification towards the company might again generate interesting findings.

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