Sales Managers’ Perceptions of the Benefits of Sales Force Automation

By James E. Stoddard, Stephen W. Clopton, and Ramon A. Avila

Sales force automation (SFA), is one way a sales organization can better manage their customers and facilitate relationship marketing. This study examines the degree to which sales managers perceive that sales force automation (SFA), defined as the conversion of manual sales activities into electronic processes via the use of software and/or hardware, improves the way they do their jobs. In addition, the paper explores whether SFA implementation is seen by sales managers as having increased their performance and job satisfaction. A conceptual model relating SFA to sales managers’ job activities is proposed and tested. Results indicate that sales managers perceive that the comprehensiveness of a sales force automation system is positively related to ease of information management. Additionally, sales managers perceive that increased SFA comprehensiveness increases sales process effectiveness. The results of this study provide support for the positive potential of sales force automation. The sales managers in our sample report that SFA enhances key aspects of the job, facilitates smart selling, and contributes to overall job performance and satisfaction.

Reducing time spent with undesired activities and increasing time spent with desired activities should increase the sales manager’s effectiveness and increase sales force productivity. One way that this might be accomplished is through the implementation of a customer relationship management (CRM) system.

CRM is defined as a business strategy for selecting and managing the firm’s most valuable customer relationships (Ingram, LaForge, and Leigh, 2002). CRM technology, on the other hand, includes communication and information technology that assists sales organizations in managing sales processes with the objective of developing and maintaining long-term customer relationships (Ingram, LaForge, and Leigh, 2002). Finally, sales force automation (SFA), the conversion of manual sales activities into electronic processes via the use of software and/or hardware (Rivers and Dart 1999), is one way a sales organization can better manage their customers and facilitate relationship marketing. Therefore, SFA is a subset of CRM technology and CRM technology is a subset of CRM.

The purpose of this paper is to explore whether sales managers perceive that SFA reduces the time they allocate to undesired activities and increases the time they allocate to
desired activities. In addition, the paper seeks to determine whether SFA implementation is seen by sales managers as having increased their effectiveness and performance.

The paper begins with an overview of the literature on SFA performance benefits. Next, hypotheses are advanced and tested. Finally the results and managerial implications are presented.

**SFA Performance Benefits**

The practitioner press is replete with reports of enhanced sales organization performance resulting from the implementation of SFA. For example, Lorge (1999) reported that SFA facilitates the maintenance of customer histories, increases the ability of sales managers to track the activities of their sales people, helps sales reps sell more consultatively, and helps to attract new reps to the firm (i.e., since the firm made a large investment which differentiates it from competing firms in the labor market).

Orenstein and Leung (1997) found that the benefits of SFA included faster feedback to marketing of product problems encountered by customers, more accurate pricing and ordering processes, and the provision of a central database of customer profile information. Gentilcore (1996) reported that SFA assisted with order processing, customer service, and that sales professionals can access up-to-the-minute information whether they are on the road, in a regional or head office, or even at home. Users of SFA can also produce sales forecasts and analyze reasons for won and lost opportunities. Finally, SFA enabled sales representatives to manage their time and activities as well as their client lists, contacts, products, price lists, orders, documents, and electronic mail from remote regions.

The benefits of SFA seem to have translated into increased performance for many firms. For example, a report from Managing Office Technology (1997) indicated that sales representatives can increase their revenue an average of 20 to 30 percent with sales automation, they can gain two full days of selling time per month, and they can boost productivity by ten percent. Thetgyi (2000) reported that SFA allowed Dow Chemical to close its sales offices, cut administration costs by 50 percent, and boost sales force productivity by 32.5 percent with reduced order cycle time. Dellecave (1996) found that SFA increased the efficiency of the sales force by more than 85 percent for the 300 respondents reporting; about 80 percent said technology was making their jobs easier; and more than 90 percent expected technology to make their jobs easier in the future. Sixty-two percent of respondents said that their companies were generating more revenue because of sales technologies—particularly noteworthy since many companies were experimenting with automation for the first time.

In the apparel industry, Schottmiller (1996) reported that SFA increased sales revenue through a reduction on out-of-stocks, decreased markdowns/returns, more sales through line expansions and assortment changes, more time with the customer, fewer costly mistakes based on incorrect information, more accounts covered by the rep, and increased efficiency in upstream areas of both vertical and contract manufacturers.

Overall then, practitioner evidence suggests that a sales organization's use of SFA can facilitate sales manager communication with sales people and the maintenance of customer histories, increases the ability of sales managers to track the activities of sales people, helps attract new reps to the firm, provides faster feedback about customer problems, increases the timeliness of information dissemination, increases the accuracy of pricing and ordering processes, increases the sales manager's ability to produce sales forecasts, and analyze reasons for won and lost opportunities.
Based on the evidence from practitioner publications, the following section posits a conceptual framework relating SFA to sales managers' job activities. Next, sales managers' job activities are related to their ability to work smarter and their need to work harder. Finally, sales managers' ability to work smarter and need to work harder are related to their job performance and satisfaction.

**Theoretical Development**

The conceptual model proposes that a sales manager's performance and job satisfaction are contingent on their ability to work smarter rather than harder, as well as their satisfaction with SFA. In turn, the ability to work smarter rather than harder is posited to be reliant on how efficiently and effectively sales managers can accomplish various activities associated with the job. In addition, the facility by which sales managers can accomplish their job activities depends on sales managers' experience with SFA and the comprehensiveness of the organization's SFA implementation. The following sections will describe these relationships in further detail.

**Comprehensiveness of SFA**

Sales force automation systems can vary from simple (e.g., electronic organizers and other personal information management systems) to more extensive systems (e.g., computer systems and software that integrates with corporate systems). For purposes of this research SFA comprehensiveness is the breadth of SFA use, both hardware and software. The more comprehensive the SFA system is, the more it may assist sales managers with their job activities. This increased "task-technology fit" should result in increased productivity and efficiency for the sales manager (DeSanctis and Poole, 1994). For example, more comprehensive systems might be expected to complete selling tasks faster (e.g., a decreased sales cycle), at a lower cost (e.g., improved order accuracy) or with improved quality (e.g., ability to share information between departments within a company) and that new tasks (e.g., greater synergy between inside and outside sales through improved communication) might be accomplished that were not previously possible without the technology (Erffmeyer and Johnson 2001, Hunter, Perreault and Armstrong 1998, Taylor 1994, Verity 1993). Thus, the initial hypothesis states:

**H1:** The more comprehensive the SFA system, the more positive the sales manager's task outcomes.

**Experience With SFA**

Using adaptive structuration theory, DeSanctis and Poole (1994) proposed that sales managers choose which (structural) features of a sales force automation system to use (i.e., appropriation) based, in part, on their degree of knowledge and experience with the technology. As sales managers spend more time training and using their sales force automation systems, they should become more proficient with them, understanding the benefits and pitfalls of the system. Therefore, sales managers that are more experienced with SFA should be more skillful with its use which should result in more positive task outcomes (i.e., greater efficiency and higher quality).

Evidence to support this contention comes from Czaja and Sahrit (1993) who found that computer experience was negatively related to the time it took to perform data entry, file modification, and inventory management tasks and resulted in fewer data entry and inventory management errors. Stated more formally:

**H2:** As a sales manager's experience with SFA increases, s/he will have more positive task outcomes.

and:

**H3:** The task outcomes of sales managers will be more positive as their training with SFA increases.
Task Outcomes

Task outcomes, the quality and facility by which the sales manager's job activities are accomplished, are expected to be related to the sales manager’s satisfaction with SFA and their ability to work smarter rather than harder. Evidence from the trade press suggests that when comprehensive sales force automation systems are in place, sales manager's task outcomes are enhanced. In turn, better task outcomes should result in higher levels of satisfaction with the SFA system (Gentilcore, 1996, Shottmiller 1996, Orenstein and Leung 1997, Lorge 1999, Thetgyi 2000). That is:

H4: There is a positive relationship between sales managers’ task outcomes and their satisfaction with the SFA system.

In addition to increased satisfaction with the SFA system and the sales job, positive task outcomes are proposed to have a positive impact on a sales manager's ability to work smarter, while reducing their need to work harder. Working smarter rather than harder implies that sales managers possess the requisite knowledge and information about customers so that they can assist their sales people in selecting the correct selling strategy for a given selling situation (Spiro and Weitz, 1990, Sujan, Weitz and Kumar, 1994). With regard to information acquisition, Gentilcore (1996) reported that SFA assisted sales organizations with order processing, customer service, and that sales professionals can access up-to-the-minute information whether they are on the road, in a regional or head office, or even at home. Therefore:

H5: There is a positive relationship between sales managers’ task outcomes and their ability to work smarter.

Finally, Dellecave (1996) found that SFA increased the efficiency of the sales organization by more than 85 percent for the 300 respondents reporting; about 80 percent said technology was making their jobs easier; and more than 90 percent expected technology to make their jobs easier in the future. Stated more formally:

H6: There is a negative relationship between sales managers’ task outcomes and their necessity to work harder.

Satisfaction With SFA

Sales managers who are satisfied with their SFA systems should perceive the SFA system as a facilitator of performance since the SFA system improves the ability of the sales manager to collect information necessary to serve customers and to more efficiently perform administrative tasks. Therefore, it is hypothesized that:

H7: Sales manager satisfaction with SFA is positively related to working smarter.

H8: Sales manager satisfaction with SFA is positively related to job performance.

Performance Benefits

SFA allows sales managers to better monitor the behavior of their sales force. Therefore, sales managers are able to focus on leading indicators of sales person performance such as time and territory management, closing rates, amount of time spent with customers, customer satisfaction (i.e., working smarter), rather than lagging indicators of sales performance such as sales revenue. Increasing sales managers' ability to focus on leading indicators of sales person performance allows the sales managers to take preemptive action before poor results are obtained. Therefore, sales managers will not have to engage in extensive mopping up operations (working harder). As a result, job performance should increase.

H9: Sales manager’s ability to work smart is positively related to job performance.

H10: Sales manager’s necessity to work hard is negatively related to job performance.
Job Satisfaction

The logic behind the notion that a sales manager job performance leads to satisfaction with the job is that the sales manager is able to compare his/her actual job performance with expected job performance when estimating rewards. Then the manager is able to form positive or negative feelings based on this discrepancy. Bagozzi (1980) was the first in marketing to apply the causal modeling technique to delineate the positive directional relationship between a sales professional's job performance and job satisfaction. This result has been supported by other sales research (e.g., Behrman and Perreault 1984).

H11: Sales manager's job performance is positively related to their job satisfaction.

Figure 1 presents the conceptual model.

Research Method

The hypothesized relationships were tested on a broad cross-sectional sample of sales managers. The following sections will discuss the questionnaire and the data collection procedure.

Survey Questionnaire

Questions included in the survey were compiled from a number of sources. The questionnaire first asked respondents whether or not they used SFA. If not, respondents were asked to indicate their reasons for not using SFA. Users were then asked to indicate how long they had used SFA, what type of hardware and software they used, the degree of training they received, and their level of satisfaction with SFA. Users were also asked to evaluate whether certain aspects of their job had improved as a result of using SFA.
Additional items queried respondents as to how helpful SFA has been in facilitating the selling function. The following section will discuss the measures used in the study.

**Measures**

**Comprehensiveness of SFA** was measured as the breadth of SFA implementation summing all of the software and hardware components included in the respondent’s system. This measure was adapted from Hunter, Perreault and Armstrong (1998).

A sales manager's **experience with SFA** and **SFA training** were assessed via two questions, one asking how long (years, months) the sales manager had used SFA., and the other asking how much training (months, days, hours) s/he had with SFA.

Twenty-three key **task outcomes** resulting from the use of SFA were gleaned from the trade press, and while not exhaustive, are considered reasonably comprehensive (Gentilcore 1996, Schottmiller 1996, Orenstein and Leung 1997, Lorge 1999). In constructing the list of specific task outcomes, the interest was in capturing aspects of four categories of task outcomes we believed SFA could facilitate. Thus, task outcomes that were believed to be logically related to potential enhancements to (1) information accuracy, (2) information management, (3) sales process efficiency, and (4) sales process effectiveness were included.

The information accuracy construct includes task outcomes that allow for more precise management of account relationships (e.g., accurate pricing, order placement, sales forecasts, returns and allowances and other costly mistakes). The ease of information management construct consists of task outcomes that streamline the sales process (e.g., better time and territory management, enhanced productivity, spending more time with customers, handling more accounts, lower cost of leads, lower cost of sales). The sales process efficiency construct includes task outcomes that are enhanced by the success of the sales process (e.g., improved closing rates, improved customer retention, improved customer satisfaction, increased sales revenue). These items were measured using a seven point Likert scale anchored by “Very Helpful” (7) and “Not Very Helpful” (1).

**Job experience** was measured by asking sales manager's directly how long they have been in professional sales. A sales manager's **satisfaction with SFA** was measured by a seven point Likert scale anchored by “Very Satisfied” (7) and “Not Very Satisfied” (1).

Sales manager's assessment of **working hard and smart** was measured by a scale adapted from Sujan (1986). Working smart was assessed by two questions asking about the effectiveness of the organization’s approaches and the number of different approaches that they used before and after the use of SFA. Working hard was measured by two questions that asked about the number of hours worked per week and how hard the sales manager worked, again before and after the use of SFA. All four question responses were seven-point scales.

**Sales performance** was assessed using several self-report measures. Each of these measures asked the respondent to compare their performance after using SFA to their pre-SFA performance. Seven-point categorical scales were used to measure sales volume increases (decreases), selling time gained (lost), and productivity increases (decreases). For example, the mid-point of the sales volume scale was “no change,” and the end-points were “decreased...
more than 20 percent” and “increased more than 20 percent.”

Finally, job satisfaction was measured by asking sales managers how satisfied they were with their jobs. This measure was also a seven point Likert scale anchored by "Very Satisfied" (7) and "Not Very Satisfied" (1).

Data Collection Procedure

The survey was sent to the sales managers of 200 companies identified from the 2002 Harris Infosource, the Indiana Industrial Directory published in cooperation with the Indiana Chamber of Commerce. Three graduate students called all 200 companies and told them the survey was on the way and asked for their cooperation. One hundred forty six sales manager surveys were returned. The high response rate is attributed to two factors: first the graduate students’ telephone calls alerted the participants to the survey and allowed students to answer the managers’ questions. Second, the issues surrounding SFA are clearly timely and relevant to sales managers.

Descriptive Statistics

Table 1 shows the descriptive statistics of the sales managers included in the study. As can be seen in the table, as a group sales managers averaged 43 years of age, had just over 15 years of sales experience, and averaged almost 3 years of college.

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std. Dev.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Experience</td>
<td>15.57 years</td>
<td>1</td>
<td>37</td>
<td>8.28</td>
<td>143</td>
</tr>
<tr>
<td>Age</td>
<td>43.25 years</td>
<td>24</td>
<td>65</td>
<td>8.52</td>
<td>145</td>
</tr>
<tr>
<td>Education</td>
<td>2.86 Some College</td>
<td>High School</td>
<td>Graduate School</td>
<td>-----</td>
<td>145</td>
</tr>
</tbody>
</table>

An overwhelming 67 percent of sales managers reported that they were in the NAICS manufacturing sector, while almost 8 percent were in the service industry, 5 percent finance and insurance, and 4 percent in professional, scientific and technical services. The other 16 percent of respondents were spread across a wide array of NAICS categories.

Results

Twenty-three percent of the sales managers indicated that their firm did not currently use sales force automation. Of those, 7.6 percent indicated that SFA was too expensive (t = 3.973, p < .001), 2.1 percent said that SFA takes too long to implement (t = 1.787, p = .041), 1.4 percent said that it was too difficult to use (t = 1.436, p = .08), 4.1 percent said that it takes away from selling time (t = 2.659, p = .006), and 16.6 percent indicated that the benefits of using SFA were unclear (t = 8.899, p < .001).

Path Analysis

The hypothesized relationships were tested by using maximum likelihood path analysis with manifest variables. Path analysis with manifest variables was preferred over other approaches (e.g., latent variables) for three reasons. First, many of the measures used in the study were single-item. Second, the large number of theoretical constructs compared to the sample size would make confidence in the results of a latent variable
Finally, the focus of the present research was on the relationships between the theoretical constructs not the development and purification of measures.

For those constructs having multiple measures, one composite scale was constructed. For example, working smarter was a composite of two items which were significantly correlated ($r = .57, p < .01$). Similarly, working harder, also a two-item composite, were also significantly correlated ($r = .68, p < .01$).

The twenty-three task outcome measures were placed into four categories labeled information accuracy, ease of information management, sales process efficiency, and sales process effectiveness. The items and reliabilities of these measures are presented in Table 2.

Sales performance was composed of four measures which asked sales managers to compare their productivity, sales volume, selling time and customer relationships after implementing sales force automation, compared to before they had sales force automation ($\alpha = .82$). Finally, SFA comprehensiveness was a formative construct composed of 23 items indicating the respondents' use of various SFA software and hardware components.

After the full model was analyzed, trimmed models were computed by eliminating causal paths that were not statistically significant. Finally, model modifications were made by examining the modification indexes and adding paths when theoretically appropriate.

**Hypothesis Tests**

The final model fit results were satisfactory. For sales managers, the final model provided a reasonable fit to the data ($X^2 = 42.83, df = 31, p = .07$; Bentler's Comparative Fit Index = .9731; Bentler and Bonnet's Non-normed Index = .9609; Bentler and Bonnet's Normed Fit Index = .9115). It should be noted that a non-significant chi-square value is normally not essential in determining the acceptability of model fit. According to Hatcher (1994) the chi-square value can be considered acceptable if the ratio of chi-square to its degrees of freedom is less than 2. For the sales manager's model the $X^2/df$ ratio is 1.38.

Since the overall model provided a reasonable fit to the data, the hypothesis tests were conducted on the modified model. Several criteria were used to conduct the hypothesis tests. First, the absolute value of the path coefficients had to be greater than 2.0 to be determined to be significantly different from zero ($p < .05$). Second, the standard errors could not be abnormally small (i.e., close to zero). Third, the standardized path coefficients could not be trivial (i.e., their absolute values exceeded .05). Finally, the amount of variance of the endogenous variables explained by the independent variables ($R^2$) was relatively large (Hatcher 1994). Table 3 presents the results from the hypothesis tests.

The first hypothesis proposed that the comprehensiveness of a sales force automation system would be positively related to sales managers' task outcomes (i.e., information accuracy, ease of information management, sales process efficiency, and sales process effectiveness). This hypothesis is supported for ease of information management but not found for information accuracy and sales process efficiency.

The second hypothesis proposed that sales managers' experience with sales force automation would lead to more positive task outcomes. This hypothesis was not supported.

The third hypothesis posited that sales force automation training would be positively related to task outcomes. Hypothesis 3 was supported for ease of information management but not for information accuracy, sales process efficiency, or sales process effectiveness.

The fourth hypothesis proposed that sales managers' task outcomes would be positively related to satisfaction with sales force automation. This hypothesis was supported for ease of information management but not for information accuracy, sales process efficiency, or sales process effectiveness.

The fourth hypothesis proposed that sales managers' task outcomes would be positively related to satisfaction with sales force automation. This relationship held for ease of information management. Other results were not significant.
Table 2
Task Outcome Factor Reliabilities

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
<th>Reliability</th>
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<tbody>
<tr>
<td><strong>Information Accuracy</strong></td>
<td></td>
<td>.75</td>
</tr>
<tr>
<td></td>
<td>Accurate pricing</td>
<td></td>
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<tr>
<td></td>
<td>Accurate order placement</td>
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<tr>
<td></td>
<td>Accurate sales forecasts</td>
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<tr>
<td></td>
<td>Decreased returns and allowances</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prevents costly mistakes</td>
<td></td>
</tr>
<tr>
<td><strong>Ease of Information</strong></td>
<td></td>
<td>.84</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability to access up-to-date information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability to assess customer needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability to track sales person activities</td>
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<tr>
<td></td>
<td>Ability to maintain customer history</td>
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</tr>
<tr>
<td></td>
<td>Faster feedback on customer problems</td>
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<tr>
<td></td>
<td>Ability to analyze opportunities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhances teamwork</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facilitates communication with office</td>
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</tr>
<tr>
<td><strong>Sales Process Efficiency</strong></td>
<td></td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>Better time and territory management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lowers the cost of leads</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lowers the cost of sales</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhances productivity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spend more time with customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Allows handling more accounts</td>
<td></td>
</tr>
<tr>
<td><strong>Sales Process Effectiveness</strong></td>
<td></td>
<td>.88</td>
</tr>
<tr>
<td></td>
<td>Improves closing rates</td>
<td></td>
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<tr>
<td></td>
<td>Improves customer retention</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improves customer satisfaction</td>
<td></td>
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<tr>
<td></td>
<td>Increases sales revenue</td>
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</table>
Hypothesis five proposed that sales managers' task outcomes would be positively related to their increased ability to work smarter. The results indicate that sales managers perceived that sales process effectiveness was positively related to working smarter. Hypothesis six posited that sales managers' task outcomes would be negatively related to their necessity to work harder. This relationship was supported for information accuracy.

Hypothesis seven proposed that sales managers' satisfaction with sales force automation would be positively related to working smarter. This hypothesis was supported. However, the premise that sales manager satisfaction with SFA would be positively related to job performance, hypothesis eight, was not supported.

Hypothesis nine, that sales managers' ability to work smart would be positively related to job performance, and hypothesis ten, that their necessity to work hard would be negatively related to job performance were both supported.
The final hypothesis proposed that sales managers' job performance would be positively related to their job satisfaction. Consistent with findings from previous research, this hypothesis was supported.

**Post Hoc Results**

As a result of modifying the initial conceptual model to achieve acceptable model fit, paths were added. These additional paths represent significant relationships between variables in the model not considered in the initial theoretical development. Therefore, they are considered post hoc results (see Figure 2).

For the sales managers, some of the task outcome factors were found to affect other task outcome factors. For example, sales managers perceived that ease of information management had a positive affect on information accuracy and sales process effectiveness. In addition, increased information accuracy positively impacted job performance.

**Discussion**

The premise of this paper is that sales managers can improve their performance through the use of sales force automation since SFA can facilitate communication with sales people, reduce error rates, provide faster access to timely information, and provide enhanced customer service. The results suggest that this basic thesis is correct. What follows is a discussion of the results.

**Discussion of the Results**

*Comprehensiveness of the sales force automation system* was found to be related to ease of information management for sales managers. Evidently, sales managers believed that more comprehensive SFA systems facilitate their ability to access up-to-date information, assess customer's needs, track sales people's activities, maintain customers' histories, receive faster feedback on customer problems, analyze won and lost opportunities, enhance teamwork, and facilitate communication.
Additionally, sales managers perceived that increased SFA comprehensiveness increased sales process effectiveness. Managers felt that more comprehensive SFA systems improved closing rates, customer retention, customer satisfaction, and increased sales revenue. The results from this study suggest that sales manager experience with SFA did not impact information accuracy, ease of information management, sales process efficiency, or sales process effectiveness. However, sales managers viewed SFA training as having an impact on their task outcomes. Specifically, sales managers indicated that SFA training had a positive impact on ease of information management (ability to access up-to-date information, assess customer needs, track their own activities, maintain customer history, get faster feedback on customer problems, analyze won and lost opportunities, facilitate teamwork, and communicate with the office).

Some of the task outcome variables were found to affect sales managers' satisfaction with SFA and the degrees to which they worked harder and smarter. Sales managers indicated that increased information accuracy (i.e., accurate pricing, order placement, sales forecasting, reduced returns and allowances, and costly mistakes) due to SFA led them to have to exert less effort on the job. Furthermore, the increased facility of information management (e.g., ability to access up-to-date information, track sales person activities, maintain customer history, get faster feedback on customer problems, and analyze opportunities) via SFA led to increased satisfaction with SFA. Finally, increased sales process effectiveness (e.g., customer retention and satisfaction) through the use of SFA improved their ability to work smarter.

Another finding of the study was that sales managers reported an inverse relationship between working harder and job performance. Specifically, sales managers reported that, even though SFA made their jobs easier, their job performance was enhanced. This relationship makes sense since the use of SFA facilitates tasks associated with the sales job, allowing sales managers to work less hard while simultaneously maintaining sales performance. To assess this contention, the sales managers were asked how much easier or more difficult sales automation made their job. They reported that SFA made their jobs easier (t = 9.057, p < .05). As a result, it seems that the use of SFA facilitated various tasks associated with the sales professionals' jobs and allowed for increased job performance. This conclusion is further supported by the positive, direct relationship found between information accuracy and job performance.

Managerial Implications

The results of this study provide tentative support for the positive potential of sales force automation. The sales managers in our sample reported that SFA enhances certain aspects of their job, allows them to sell smarter, and contributes to their overall job performance and satisfaction. Moreover, more comprehensive (i.e., more extensive and fully developed) SFA systems are positively related to some of these job outcomes. This implies that implementing fully integrated SFA systems, rather than incrementally introducing component parts of SFA, may be the preferred approach. However, our data also suggests some cautions related to SFA deployment related to the importance of SFA training, and the broader issue of sales force understanding of the role of SFA.

Previous research has revealed that firms often neglect training or conduct inadequate training when SFA systems are implemented (Erffmeyer and Johnson 2001), despite recommendations that sales professionals should be involved in the process of implementing SFA and then should be adequately trained in its use (Rasmussen 1999). Speier and Venkatesh (2002) also stress the importance of sales professionals understanding why SFA is important, and how SFA will enhance their job.
Our results support previous writing and research in this area by indicating the importance of SFA training in increasing a sales manager’s ease of information management. For sales professionals, SFA training should not be confined to just “how to,” but should also focus on developing an understanding and acceptance of how and why SFA can positively influence sales performance. This seems especially important given our finding that more comprehensive SFA systems are positively related to task outcomes.

Limitations and Future Research

While the sample for the study provides a picture of SFA’s effects on sales performance across a broad cross section of firms and industries, the sample size is relatively small and confined to respondents from one region of the United States. Thus, any generalizations should be made with that caveat in mind. Additional studies will be required to develop a more thorough understanding of the performance benefits of SFA. This study also was confined to single-item measures of certain variables, and relied on self-report measures of sales managers’ perceptions. Future research should focus on improved measures of SFA, its antecedents, and its consequences, including sales effectiveness measures such as actual dollar sales volume increases.

This study is an initial attempt to examine the relationship of SFA to sales performance. Future studies could productively focus more attention on the potential customer benefits deriving from SFA. Lastly, with respect to issues of training, comprehensiveness, and sales professionals’ satisfaction with SFA, studies relying on longitudinal panel data would be a potentially productive approach to examining the evolutionary aspects of SFA implementation and usage.

References


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