

# **ADOPTION OF SALES FORCE AUTOMATION SYSTEM AND SALES PERFORMANCE: THE CASE OF CONSUMER GOODS FIRMS IN NAIROBI, KENYA**

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## **ABSTRACT**

The purpose of this study was to examine influence of adoption of sales force automation system on sales performance in Kenya taking a case of consumer goods firms in Nairobi. The research design of this study was a descriptive survey research. This study targeted consumer goods firms in Nairobi, Kenya and the respondents were project managers/IT managers and Sales force of these firms, making a sample size of 250 respondents. Stratified random sampling was employed to select managers and Sales force from each of these firms and obtain a sample of 50 of the 149 firms in Nairobi representing a 30% sample size. The study relied on primary data which was collected through administering structured questionnaire comprising of closed and open-ended questions developed in line with the objectives of the study. Quantitative data collected using questionnaires was analyzed by the use of descriptive statistics, ANOVA, regression, Correlation analysis and multiple regression analysis. Content analysis was used to analyze data collected from the open ended questions. The overall conclusion from the questionnaires analysis is that the usage of SFA technology in the consumer goods firms in Kenya, along with their customers, has achieved its expected outcomes as inferred by IT Managers/Project Managers, Sales Managers and salespersons who participated in this study and who overwhelmingly appreciated this technology and its key

benefits. On the basis of regression statistics, the study found out that there is positive influence of all the independent variables on the dependent variable, though at different significant levels. Perceived usefulness and sales performance of consumer goods firms in Kenya with  $\beta=0.442$ ,  $p=0.000$ ; perceived ease of use  $\beta=0.629$ ,  $P=0.000$ ; facilitating conditions  $\beta=0.409$ ,  $p=0.000$ ; Computer self-efficacies  $\beta=0.216$ ,  $p=0.000$ . The test showed a significant association between system characteristics and sales performance of  $\chi^2=13.463$ ,  $df=249$  and  $p=0.009$ . There was significant relationship between SFA system control and sales performance of  $\chi^2=0.745$ ,  $df=249$  and  $p=0.000$ . Based on the findings, this study recommended that for companies where ongoing customer relationships are essential, management should consider adoption of sales force automation as a key driver of their business. From the analysis, this study also found out that Kenyan firms have a positive peculiar strength in embracing technologies, contrary to what external literature depicts as a global challenge. In conclusion, essential objectives of SFA such as increased speed and efficiency in performing existing sales tasks are competitive necessity in today's markets, and therefore should stay as core requirements of an SFA-implementation project.

**Key Words:** *sales force, automation system, sales performance, consumer goods firms, Nairobi, Kenya*

## **INTRODUCTION**

The automation of numerous information flows that are concerned with many processes in sales is an assurance of employing Sales Force technology (Ben Moussa, 2006). In general terms, regarding quality and time, Sales Force Automation is depicted as having positive contributions on the subject of customer information management, communication, presentation, analysis and reporting, price quotes and order processing, the promotion of products, as well as online access of inventories (Boujena et al., 2009; Wang et al., 2008).

In Kenya, Companies have the same global challenge to increase levels of automation, integrate and increase speed of business processes to be compatible with the physical supply chain (Honeycutt et al 2005). There is a developing interest for more noteworthy levels of standardization to improve the flow of information between the companies and trading counterparts, thus sales force automation (SFA).

Embracing SFA technology as a system and using it have been scrutinized in the former years (Chou, Pullins, and Senecal, 2009). Yet, according to Serdaroglu (2009), understanding how investments in SFA bring out value in business is a main concern in research in the contemporary world of technology. Rangarajan et al., (2005) empirically demonstrate that the complexity of using SFA-technology increases role conflict, which in turn has negative consequences on sales force effort and SFA adoption.

### **Critical Success Factors Theory**

This theory originated within the field of management data systems. It was later transferred to the sphere of business strategy analysis. There it's employed in alternative ways, such as the various colleges of thought that may be found therein space (Grunert, in press; Jemison, 1981; Mintzberg, 1990a). Mainly, one will distinguish between key success factors as a business characteristic, as a designing tool, and as a market description.<sup>8</sup>The concept there are a couple of factors that are decisive for the success of the corporate, which these factors are often determined, was first introduced by Daniel (1961) and later in the main careful by Rockart (1979) Bullen & Rockart, 1981) within the context of planning management data systems. Finding that prime management seldom used management data systems, they argued that such systems should be structured consistent with the data desires of the managers. so as to establish managers' data desires and link them to the management data system, they coined the term crucial success issue. Crucial success factors are, consistent with Bullen and Rockart, "the restricted range of areas during which satisfactory results can guarantee productive competitive performance for the individual, department or organization. Crucial success factors are the few key areas wherever 'things should go right' for the business to prosper and for the director's objectives to be accomplished"(Bullen & Rockart, 1981). Rockart's idea of crucial success factors is clearly impressed by the difficulty strategy. The encompassing setting is assumed to possess sure elementary needs and limitations, threats and opportunities, to those businesses should align their

strategy, skills and resources, so as to realize success. No organization, consistent with Rockart, will afford to develop a method, which fails to produce satisfactory consideration regarding the primary elements that underlie achievement within the trade. This provides the principle for creating them the idea of a management data system.

## **UNDERLYING FACTORS OF SFA-USE DIMENSIONS**

### **Perceived Usefulness and Sales Performance**

As indicated by the anticipation hypothesis (Ahearne et al., 2004), inside hierarchical settings, individuals assess the outcomes of their conduct as far as potential prizes, and they construct their decision of conduct in light of the attractive quality of the prizes. Sales force usually have a fair amount of autonomy in performing their jobs and are under constant pressure to perform as their evaluation and compensation are often directly linked to their performance. Consequently, “Sales force will choose to use or not use a technology tool to the extent they believe it will help them accomplish their job-related goals, enhance their performance, and achieve desired rewards” (Robinson et al. 2005b). In sales research, perceived usefulness of SFA technology has been demonstrated as a driver of SFA-use more than once (Avlonitis and Panagopoulos 2005; Rangarajan et al. 2005; Robinson et al. 2005a; Schillewaert et al. 2005). It is argued in this thesis that using SFA to support customer relationships and internal coordination tasks should increase Salesforce performance. If Salesforce agree with this proposition, they should be inclined to use SFA in both ways.

### **Perceived Ease-of-Use and Sales Performance**

Employees’ perceptions of a technology's accessibility relate to their intentions to use that technology (Saga and Zmud, 2004). Innovation theory proposes that the degree that an advancement is seen as moderately hard to comprehend and utilize would influence the rate of its selection (Rogers, 2005).

TAM’s departure point is that, the less demanding a framework is to communicate with, the more noteworthy ought to be the client's feeling of viability (Bandura, 1982) and individual control (Lepper, 1985) in regards to his or her capacity to work the framework (Davis et al. 1989). Sales forces are among the most technophobic representative gatherings (Greenberg, 2011). They will evaluate the measure of exertion important to use a SFA instrument and will probably create uplifting dispositions toward those apparatuses where the execution advantages are not exceeded by the required exertion (Robinson et a al. 2005b). There are a few studies that influence the perceived ease-of use on SFA-adoption and use. Schillewaert et al., (2005) have shown that PEU increases adoption.

Rangarajan et al., (2005) empirically demonstrate that the complexity of using SFA-technology increases role conflict, which has in turn negative consequences on Salesforce effort and SFA-infusion. At least three studies show that PEU positively impacts attitude, which in turn has a

noteworthy effect on the aim to utilize SFA (Jones et al. 2002; Robinson et al. 2005a, 2005b). Therefore, it is expected that perceived ease-of-use will positively impact both dimensions of SFA-use. TAM posits that seen convenience has an extra instrumental effect on a Salesforce's mentality toward utilizing an innovation through its connection to perceived helpfulness (Davis et al. 1989). To the degree that expanded usability adds to improved performance, perceived convenience will directly affect perceived value. Robinson et al (2005b) give this logic: As a Salesforce sees that an innovation will be free of added exertion (or that it reduces the exertion), he/she may accept the open door to divert the unused exertion toward different errands. This will take into account achievement of more work for the same exertion, thus more noteworthy profitability (and apparently greater rewards).

### **Facilitating Conditions for SFA system Use and Sales Performance**

Marketing researchers have demonstrated that authoritative practices influence the discernments and practices of boundary spanners (Singh et al. 2006). The study characterizes encouraging conditions as the degree to which a Salesforce trusts that he or she has been given the resources and the outer backing to utilize SFA technology. Investing in facilitating conditions such as tutorials, help lines, training sessions and technical maintenance signals the importance an organization places on SFA technology and reassure Salesforce that using sales technology is beneficial (Hunter and Perreault, 2006). Such facilitating conditions enable workers to procure the abilities they have to keep on being profitable individuals of the association, even after the innovation has been put in place (Johnson and Bharadwaj 2005; Zablah et al. 2004). For these reasons, some form of formalized, organization-sponsored SFA support would seem to be a necessary ingredient for the effective implementation of SFA (Morgan and Inks, 2011; Pullig et al., 2002).

In many SFA adoption studies user support has been shown to be a key element for continual use of SFA-technology (Buehrer et al. 2005; Jones et al. 2002; Mathieson 1991; Schillewaert et al. 2005). Facilitating conditions can reduce nonmonetary costs such as the uncertainty and stress associated with the introduction of the new system by easing the learning process (Parthasarathy and Sohi 2007, Rangarajan et al. 2005). Sales force that get sufficient preparing and backing can apply data innovation all the more adequately to particular work issues and along these lines accomplish better execution (Ahearne et al. 2005). This thus facilitates increased expectations of the technology's usefulness by users (Landry et al. 2005; Pullig et al. 2002). Furthermore, perceived level of availability of support services is positively related to perceived ease of use (Robinson et al. 2005a). By asking for help with the practical use of technology, from firms with adequate user assistance will become more proficient users and reduce the required effort to use the sales technology (Schillewaert et al. 2005).

## **Computer Self-Efficacy and Sales Performance**

Compeau and Higgins (2005) define computer self-efficacy as “an individual’s perceptions of his/her ability to use computer (software) in the accomplishment of a task”. Venkatesh and Davis (2006) model computer self-efficacy as an antecedent of perceived ease of use, with the argument that a person uses his or her sense of overall computer abilities as an anchor to judge the usability of a computer system, even if the user has little or no knowledge about the ease of use of a specific system. Typically, lower scores on computer self-efficacy lead to more negative individual perceptions about the technology in question (Venkatesh, 2010).

Only a small percentage of Sales force consider themselves as experienced technology users, and the vast majority has little to no experience (Petersen, 2007). Fear of technology is a likely impediment to sales force acceptance of automation (Buehrer et al. 2005). If a Salesforce feels that he or she is not capable of using the SFA system, his or her motivation to do so will be greatly reduced (Morgan and Inks, 2011). Thus, computer self-efficacy is proposed to be an important personal characteristic in explaining SFA-use behavior ( and Venkatesh, 2002; Schillewaert et al. 2005).

## **RESEARCH METHODOLOGY**

### **Research Design**

The research design was a correlational design utilizing cross-sectional survey methodology and included a number of survey instruments. Cross-sectional surveys are studies aimed at determining the frequency (or level) of a particular attribute, such as a specific exposure, disease or any other health-related event, in a defined population at a particular point in time. This design also corresponds to what Bryman describes as Cross-sectional research design that aims at getting data from multiple cases at a given point in time so as to analyse relationships across a number of variables of interest (Bryman, 2004). This study was based on such a design because; its quantification characteristic helps in consistent benchmarking (Bryman, 2004). However, cross-sectional studies usually lack internal validity (Bryman, 2004) and this study tried to respond to this concern through the qualitative component of this study. In this study therefore, the qualitative data was used to enrich the descriptions generated by, and or from the quantitative data and thus build the picture of solid waste management in the study area, better. In doing so, aspects of a phenomenological study design to research were employed to guide qualitative data collection and analysis.

### **Target Population**

The target population was the Consumer Goods Firms in Nairobi that are using SFA systems from the 149 in the Kenya Association of Manufacturers directory. The target population was considered appropriate for the type of objectives of this study, the homogeneity of the

population, as it enabled the researcher to describe the state of affairs as they exist without manipulation of variables which was the aim of the study, Cynthia (2014).

### **Sampling Design**

After identifying the target population, stratified random sampling was used to select the sample size of the study. According to Dessel (2013), a sample size of 20% is considered as a good response rate, while a 30% sample size is considered to be very good. In his work, Shi (2014) concludes that stratified sampling ensures samples which are more representative than that of simple random sampling thereby improving the accuracy of parameter estimation. Dividing a population into homogenous strata may reduce the variance of an estimator of a population mean or total. Barnett (1974). The advantages of stratified sampling can be summarized as follows: (1) Improved overall precision – creation of strata that are more homogeneous internally than the population as a whole reduces the variance of the population estimates; (2) Easier Administration – Stratification may make a survey much easier to administer; (3) Greater information yield – parameters can be estimated for the strata themselves, which may be very important. There were two types of strata:

1. The population of 149 companies will be divided into eight sub sectors and a number of representative companies will be picked depending on the number of companies in that sub sector:
  - i. Alcohol & Spirits – 6 companies
  - ii. Bakers and Millers – 6 companies
  - iii. Cocoa, Sugar & Chocolate – 6 companies
  - iv. Dairy products – 6 companies
  - v. Juices, waters & carbonated drinks – 8 companies
  - vi. Slaughtering and preservation of meat – 6 companies
  - vii. Tobacco – 6 Companies
  - viii. Vegetable oils – 6 Companies

The eight sub sectors produced a sample size of 50 companies which is 30% of the population.

2. The sample size of 50 companies was stratified further into three groups of respondents. These were Project Managers or IT Managers, Sales Managers and Salesforce of these firms. The researcher collected data from 1 IT Manager, 1 Sales Manager and 3 sales force personnel from each of the 50 companies making a total of 250 respondents.

### **Research Instruments**

Data for this study was collected using questionnaires which were structured based on the research objectives. The questionnaires contained closed and open ended questions. Secondary data was obtained to reinforce collected data from internet, text books, brochures and journals covering the organization under study. According to Harper, Laws, and Marcus (2003), a

questionnaire is a written list of questions, either given or posted to respondents, who fill it by themselves. Information is gathered directly from people through a series of questions, many which are likely to offer the respondent some possible replies to tick. Each item in the questionnaire was developed to address a specific objective, or research question of the study. The researcher primarily selected data which was collected using the questionnaires.

### **Data Collection Procedures**

The researcher sought permission from the management of the fast moving consumer goods firms in Kenya. The researcher's next step was to get a letter from University of Nairobi as a confirmation of the purpose of the research. Two qualified field assistants were recruited and trained for 3 days to ensure accurate data collection. They were trained on introductory techniques to respondents, questionnaire interpretation, data collection techniques, data recording, basic field ethics and introduction to instrument reliability and validity concept. The collected data was processed and organized for statistical analysis. The process of data analysis involved several stages; the completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded. Descriptive analysis was employed. Inferential statistics involving percentages, mean scores and standard deviations were used to to examine the influence of SFA on the performance of the sales force in consumer goods firms in Kenya. Coding was done in computerized form, analyzed and the output interpreted in frequencies, percentages, mean scores, standard deviation and rankings.

### **RESEARCH RESULTS**

Employees' perceptions of a technology's accessibility relate to their intentions to use that technology (Saga and Zmud 1994). Innovation theory recommends that the degree that an advancement is seen as generally hard to comprehend and utilize would influence the rate of its selection (Rogers 1995). Sales representatives are among the most technophobic worker bunches (Greenberg 2004).

The findings revealed that on average the respondents were convinced that the perceived ease of use of SFA adoption is aimed at influencing the performance of the Sales force in their company. This was especially the case in relation to SFA system being clear and understandable, SFA system is easy to use and getting the SFA system to do what I want it to do is easy respectively. The findings seemed to support the argument by Schillewaert et al., (2005) who show that PEU increases adoption. Rangarajan et al., (2005) empirically demonstrate that the complexity of using SFA-technology increases role conflict, which has in turn negative consequences on salesperson effort and SFA-infusion. At least three studies show that PEU positively impacts attitude, which in turn has a significant impact on intention to use SFA.

Investing in facilitating conditions such as tutorials, help lines, training sessions and technical maintenance signals the importance an organization places on SFA technology and reassure



salespeople that using sales technology is beneficial (Hunter and Perreault, 2006). Such facilitating conditions enable employees to acquire the skills they need to continue to be productive members of the organization, even after the innovation has been deployed (Johnson and Bharadwaj 2005; Zablah et al. 2004).

The study disclosed that on average computer self-efficacy of SFA adoption is aimed at influencing the performance of the Salesforce in their company. Furthermore, according to the study, the sales teams have an interest in expanding their knowledge on work related technologies thus achieve better performance. This was followed by, colleagues who are more technology savvy motivate them to embrace the system thus achieve better performance. The salespeople consider themselves an experienced technology user thus achieve better performance. All other statements also had mean scores above 3.0. The findings support the argument by Buehrer et al., (2005) that fear of technology is a likely impediment to sales force acceptance of automation. If a salesperson feels that he or she is not capable of using the SFA system, his or her motivation to do so will be greatly reduced. Thus, computer self-efficacy is proposed to be an important personal characteristic in explaining SFA-use behavior.

## **CONCLUSIONS**

To give adequate and extensive understanding while assessing the consequences of SFA innovation's usage in the customer products firms in Kenya (deals dispersion), three elements from these organizations of viewpoint were viewed as: Project chiefs/IT Managers, Sales Managers and Salespersons. By using related global writing on SFA innovation, a gathering of key advantages were chosen to be the assessment elements in this exploration however all together not to overestimate the development of the current winning innovation in the nearby market, a neighborhood contextual analysis was acquainted with audit the neighborhood SFA embraced innovation as a stage to sifting the chose benefits criteria and to keep them inside practical reach. In light of these premises, Project Managers, Sales directors and salespersons were addressed about these advantages by utilizing focused on overviews for each of the elements affected by the utilization of SFA innovation.

## **RECOMMENDATIONS**

Based on previous results and conclusions, the following recommendations might help to enhance performance of SFA:

1. The study argues that other objectives for SFA such as increased speed and efficiency in performing existing tasks and processes are, in contrast and are a competitive necessity in today's markets, and therefore should stay as core requirements of an SFA-implementation project.
2. Sales management has a major role to play in the system acceptance process, by supporting and encouraging salespeople to use the system and providing adequate training and technical infrastructure to the sales force.

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