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THE EFFECT OF SALES FORCE AUTOMATION ADOPTION ON JOB PERFORMANCE: THE CASE OF EAST AFRICA BOTTLING SHARE COMPANY

BY

MEHERET WOUBISHET W/AMMANUEL

ENROLMENT No: SGS/0370/2007A

JANUARY, 2017

ADDIS ABABA, ETHIOPIA

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APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies…….. Signature……...……..

Advisor ……. Signature……..

External Examiner…….…….. Signature……..……..

Internal Examiner…… Signature……..

DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Dr. Chalachew Getahun. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or full to any other higher learning institution for the purpose of earning any degree.

Name _____ Signature_____

St. Mary's University, Addis Ababa **January, 2017**

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a University advisor.

Advisor_____ Signature_____

St. Mary's University, Addis Ababa **January, 2017**

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LIST OF ACRONYMS/ABBREVIATION

BI	Behavioral Intention
CCS	Coca Cola Sabco
CRM	Customer Relationship Management
CSR	Company Sales Representative
EABSC	East Africa Bottling Share Company
ETA	Ethiopian Telecommunication Agency
ETC	Ethiopian Telecommunication Corporation
ICT	Information and Communication Technology
KPI	Key Performance Indicator
OLS	Ordinary Least Squares
PEOU	Perceived Ease of Use
PM	Performance Measurement
PU	Perceived Usefulness
SFA	Sales Force Automation
SN	Subjective Norm
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
VIF	Variable Inflation Factor

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ABSTRACT

Understanding how technology investments create business value is a research priority in today's technology-intensive world; one of these technologies is the sales force automation (SFA) technology. The role of SFA systems on building and sustaining increased performance level of sales, effective customer relationships and the fact that most SFA implementations constitute a great boosting investment for the sales organization is well documented. In spite of their critical roles, research on sales force automation applications is very limited. The purpose of this research is to investigate the effect of technology usage of SFA on the job performance of sales people; the study also considered other factors such as experience, level of education, sex and salary as determinants of the performance of the company sales representatives at EABSC. The researcher used Simple Descriptive Statistics and Multiple regression model using OLS for the estimation purpose. To do this, the study takes on a quantitative approach and used secondary data from a sample of 142 sales persons in East Africa Bottling Share Company out of which 71 were SFA users. The key performance indicator taken into consideration to measure the performance of the sales representatives was Average Daily Sales of Boxes of Coca Cola Beverages. The result shows that those CSRs using SFA scored better sales volume. Factors such as education, salary, sex of the sales person and experience also showed a positive relationship with sales people performance. This implies that SFA usage brings about better sales person performance and is recommended that EABSC continue to invest on SFA hand in hand with availing trainings on SFA usage and user support programs.

Key words: *Sales Force Automation (SFA); Sales people; Job performance; SFA usage outco*

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The study is conducted mainly to investigate the effect of Sales Force Automation (SFA) usage on job performance in the East African Bottling Share Company. Technology since its inception has revolutionized our lives; especially since the innovation of computers and smartphones the way we communicate with each other, do business, interact, work, and establish relationships have been highly transformed. One of the cornerstones of society is business. Each and every individual on the globe in one way or the other is involved in the business sector. Evidence shows that the launch of ICT and computer systems, has led business into a new era in which the daily activities are interrelated and affected by the world of artificial intelligence (Al-Khouri, 2014)

Being in the period of integrating into the global economy, competition has been on rise to take advantage of new opportunities. Thus, companies are striving for ways of gaining competitive advantage against their opponents to sustain their market lead. All of the above pressures are business drivers for companies to adopt new technologies promising better performance (Yonas Kahsey, 2015).

Amongst the technologies claiming to improve performance is Sales Force Automation (SFA). Sales Force Automation (SFA) occurs when firms computerize routine tasks or adopt technological tools to improve the efficiency or precision of sales force activities. SFA can be applied to diverse tasks like contact management, scheduling, creating sales plans, forecasting, mapping out sales routes, prospecting, making sales presentations, documenting buyer objections, retrieving product information, and configuring product specifications (Widmier, Jackson, & McCabe, 2002). Since their introduction in the 1980's SFA systems have become widely adopted in business to-business environments and are seen as a 'competitive imperative' (Morgan and Inks, 2001) that offers 'competitive parity' (Engle and Barnes, 2000).

Therefore the commonly perceived conviction is the automatic positive effects brought on by the implementation of SFA in increasing the job performance of sales people by the claims made by vendors and consultants of the number of benefits from SFA implementation without having.

The main purpose of this paper is to understand the effect of SFA adaptation on the performance of the Sales People at EABSC and provide recommendations for the company of integrating SFA if it is proven to be effective.

1.2 Statement of the Problem

The rapid growth and advances in computerized technologies in the last decade have significantly changed the everyday life of the modern sales representatives. Sales managers generally assume that supplying information technology such as sales force automation software to their salespeople will contribute to higher levels of productivity, better customer communication and enhanced customer relationships (Campbell 1998). While the relationship between information technology and sales performance remains primarily unsubstantiated, many organizations spend considerable human and financial resources in equipping their sales with information technology. Therefore, organizations need justification for these substantial investments and cannot afford to continue to invest in sales technology as a matter of blind faith alone.

The effect of information technology has captured the attention of several academics, who have studied information technology and performance/productivity. Most of these studies assessed the effects of information technology investment on productivity at the economy/industry –level (eg. Morrison and Berndt, 1990). However, the findings from these studies are mixed and sometimes contradictory as they do not account for the many intermediate and intangible benefits that are associated with information technology and consequently, in to how information technology can add value.

Research data suggest that efficiency gains are a primary motivation for investing in SFA. Erffmeyer and Johnson (2001) discovered the motivation for companies to implement SFA was improved efficiency. Harris and Pike (1996) asserted that greater operational flexibility, better sales management, enhanced customer support, higher sales-force productivity, superior customer account management and improved communications between headquarters and the field were expected outcomes from SFA implementations. Ingram, T. N., LA Forge, R. W., & Leigh, T. W. (2002) agree that many companies are turning to SFA to help them manage their customer relationships more efficiently.

Despite the insightful knowledge the information systems research and sales literature has generated, no studies have thoroughly examined the effect of information technology usage on salesperson performance. In fact, Marshall, Greg W., William C. Moncrief, and Felicia G. Lassk (1999) state that "very little research has been devoted to investigating the impact of technology on individual salesperson effectiveness" and "future research needs to be directed toward understanding the impact of technology in selling."

Therefore, as EABSC has adopted SFA in the hopes of increasing the performance of its sales people, it is important to study the actual link between the two variables so that the company will get the desired outcome from its investment on SFA. As there has been no previous study in the area of determining the impact of SFA on Job performance in the company; the result of such study would be beneficial as EABSC would be aware of the benefits retrieved from SFA then the implementation of this system will be more successful, the sales people will be more open about adopting the system. In addressing the gap between SFA adoption and its potential effect of performance, the company will benefit in laying out the proper needed ground work for the adoption of SFA so that it can bring about the needed performance improvement. Hence, the purpose of this study is to investigate if and how SFA technology helps salespeople to better perform their tasks and achieve better sales volume in EABSC.

1.3 Research Questions

At the end of this research the researcher will address the following questions

1. What is the effect of SFA usage on the Job performance of Company Sales Representatives at EABSC?
2. What is the effect of experience on the job performance of the company sales representatives at EABSC?
3. What is the effect of level of education on the job performance of the company sales representatives at EABSC?
4. What is the effect of Gender on the job performance of the company sales representatives at EABSC?
5. What is the effect of Salary on the job performance of the company sales representatives at EABSC?

1.4 Research Objectives

The objective of the study is designed as general and specific objectives of the study.

General Objective

The general objective of this paper is to investigate and address the relationship between SFA adoption and job performance.

Specific Objectives

- Investigates the effect of technology usage of SFA on the job performance of sales people at EABSC.
- Examines the effect of experience on the job performance of the company sales representatives at EABSC.
- Examines the effect of level of education on the job performance of the company sales representatives at EABSC.
- Examines the effect of Gender on the job performance of the company sales representatives at EABSC.
- Examines the effect of Salary on the job performance of the company sales representatives at EABSC.

1.5 Significance of the study

Considering the importance of implementing SFA systems that contribute to the overall productivity of an organization and the existing burdens that are leading them to fail; the findings of this paper will be valuable in proposing some possible recommendations to the problems in the study area. This research is also helpful to the management of EABSC to make further research in this area and develop strategies that can create suitable organizational mechanisms to maximize the strategic advantages of the implemented SFA system.

The paper can also be an important input for further study in the area of the problem to other researchers especially in the Ethiopian business environment. Besides to this, the research study will add considerable supplementary knowledge and skills of the researcher regarding the techniques, methods, and systems of conducting related research.

1.6. Limitations and Scope of the study

1.6.1. Scope of the Study

The scope of the research paper is that it's only confined to examining and addressing the effect of SFA technology usage on the job performance of salespeople in EABSC. The paper will not address issues related to other factors affecting SFA implementation nor will it try to elaborate these variables with other questions. Due to time, financial resource, geographical location, limited communication means and the relatively young age of the implementation of SFA system in EABSC the data gathered is of short term and does not allow to trend analysis. Other variables considered such as experience, salary, sex and education also seem to have an effect of the job performance as well. Therefore, it would be best if future studies will also investigate wider rages of factors affecting job performances in order to have a more conclusive result.

1.6.2. Limitations of the study

Perhaps the single most important limitation of this study is the single – company frame. It is limited in investigating the relationship between Information technology and sales person performance in other sales situations and industries to determine generality with independent samples from variety of sales situations. The paper lacks study in the area of the problem in the Ethiopian business environment.

- Financial performance data and information are not disclosed to external body due to the policy of the company. This limits the scope of the study not to present the effects of the factors in terms of the financial results and/or leverages.
- Due to skilled human resource shortage and financial limitation, the data collection and entry tasks were performed by the researched herself. This brought time resource scarcity.
- The knowledge and manipulating skill limitation of the researcher may hide some realities or bring misinterpretations to the overall research results.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

This section is composed of both theoretical and empirical reviews related to the Effect of Sales Force Automation Usage on sales force performance in the subject area of the study of East Africa Bottling Share Company. In addition to description of key terms, concepts and theories, the underlining variables to be measured for the research are discussed in detail. The type of review in this research is of a theory review where its scope encompassed mostly journals, Open University MBA study materials and management research websites, where the works of authors on the research subject were referenced.

5.1. The Theoretical Literature

Sales Force is the team of employees responsible for the sales on a company. They represent the company's direct contact with customers and they are the company's main resource consumers, therefore they are directly related with the company's profitability. Their impact on the company is increasing as markets become more competitive and customers are demanding more attention to their needs (Filipe, 2008).

SFA (Sales Force Automation) can essentially be described as the application of information technology to support salespeople in their selling and/or administrativeactivities (Morgan and Inks, 2001). SFA systems utilize computerized hardware, software, and telecommunications technology to capture, access, analyze, and exchange high quality information in order to improve sales force productivity and effectiveness (Jayachandran, S., S. Sharma, P. Kaufman, and P. Raman, 2005). This information generally includes transactional and profiling data about customers, market data, competitor profiles, product libraries, pricing schedules and other information (Buttle, F., L. Ang, and R. Iriana, 2006). Such rich information can support salespeople when developing long-term mutually beneficialrelationships with customers.

Sales force automation (SFA) software is a type of program that automates business tasks such as inventory control, sales processing, and tracking of customer interactions, as well as analyzing sales forecasts and performance. Businesses may have a custom version developed specifically for their needs, or choose from among the increasing number of sales automation software products. Sales automation software is sometimes called sales automation software or customer relations management (CRM) software (Serdaroglu, 2009).

Sales force automation (SFA) occurs when firms computerize routine tasks or adopt technological tools to improve the efficiency or precision of sales force activities. SFA can be applied to diverse tasks like contact management, scheduling, creating sales plans, forecasting, mapping out sales routes, prospecting, making sales presentations, documenting buyer objections, retrieving product information, and configuring product specifications (Widmier, Jackson, & McCabe, 2002).

SFA systems consist of centralized database systems that can be accessed through a modem by remote laptop, computers, mobile or modern tabs using special SFA software so that a salesperson can get constantly refreshed information regarding various aspects of the job (Parthasarathy and Sohi 1997).

2.1.1. Benefits of using SFA

SFA technology promises many benefits to sales management andsalespeople. By increasing available selling time and enhancing communication and providing faster access to relevant and timelyinformation, SFA can increase the overall quality of the sales effort (Rivers and Dart 1999). The expected end-effect is to facilitate a greaterunderstanding of the selling situation, to deliver superior customer value andto forge close mutually beneficial relationships needed to develop market relatingability for competitive advantage (Dickie 1999). In this section we present potential benefits of SFA technology that encourage companies invest in SFA technology by (Serdaroglu, 2009).

2.1.1.1 Improved Salesperson Efficiency and Productivity

One of the most important reasons companies invest in SFA is to increasethe efficiency and productivity of the sales staff (Erffmeyer and Johnson 2001). SFA systems automate time-consuming, but important, tasks such as scheduling sales appointments, sending follow-up letters and emails, tracking contacts and updating sale opportunities. Sales automation applications also enable salespeople to quickly generate estimates - and speedily turn these estimates into proposals, quotes and then orders when a deal is signed. In addition, the sales team has immediate access to order information, and can proactively alert customers to an order's arrival or delay. And, if a customer calls with a question about their order, this information is at the salesperson's fingertips, a step that saves time, improves the entire customer experience and increases the value of the sales professional in the eyes of the customer.

2.1.1.2 Improved Asset management

Asset management is about tracking which products each customer has purchased.
By knowing precisely which products customers have purchased and installed, and by tracking which competing products they are using, sales companies can broaden the view of sales opportunities.Thisallows sales representatives to get immediate access to detailed information about each purchased item, including serial number, quantity, purchase date, replacement date, and so on, providing them an insight into product renewal opportunities, and alerting them to issues their customers may be having with a particular product.

2.1.1.3 Improved Customer Relationship

Many companies are turning to SFA to help them increase customer acquisition and retention and enhance their customer relationships (Wright and Donaldson 2002).
SFA applications can help salespeople manage customer relationships more effectively across the stages of relationship initiation, maintenance, and termination (Reinartz, W., M. Krafft, and W.D. Hoyer, 2004).

At initiation stage, technology assists salespeople in their role as market sensors for trends and opportunities.

Salespeople can search databases, pull data from outside sources, and easily enter new data themselves (Marshall, Greg W., William C. Moncrief, and Felicia G. Lassk, 1999). Search engines enable salespeople to quickly access vast amounts of information at a mouse-click.

SFA allows salespeople to manage higher quality information about a greater number of customers (Ahearne, Michael, Jelinek, Ronald and Rapp, 2005). At later stages of the customer relationship management process, SFA technology can inform salespeople about the business potential of each prospect to decide which prospects to target (Ahearne et al. 2005). SFA systems give sales force quick access to timely information that can be beneficial inclosing a sale (Rivers and Dart 1999). For instance, a salesperson can convincingly contrast product benefits with the weaknesses of competitive offerings based on the market and technical knowledge provided by the system (Ahearne, Michael, Jelinek, Ronald and Rapp, 2005).

2.1.1.4 Opportunity Management

Opportunity management enables sales teams to work together to close deals faster by providing a single place for updating deal information, tracking opportunity milestones, and recording all opportunity-related interactions. With opportunity management it is possible to analyze the sales pipeline to quickly identify and eliminate any bottlenecks in the sales cycle or determine the cause of downgraded sales opportunities. It is also used to track the competition and key competitive issues on each deal to better understand competitive trends and emerging threats.

Opportunity-related data includes decision makers, partners, customer communications, and all other custom information unique to the company, gathered from leads, opportunities, contacts and all account activities.

2.1.1.5 Improved Order management

Order Management allows creating quotes, proposals, and product configuration. It minimizes sales forces' paperwork, enabling them to focus their efforts on selling, on ensuring that customers get deliveries on time, and boosting customer satisfaction and long-term loyalty. Orders' history are kept and managed within a single repository providing a useful information for the marketing strategies and selling opportunities.

With this order management capability sales managers can also see booked orders in forecasts, greatly increasing its reliability, predictability and accuracy. It also gives access to up-to-date order information allowing customers to check order statuses in real time via the customer center, or the company's website.

2.1.1.6 Manage Sales Teams and their activity

Activity management allows creating tasks and activities, schedule meetings (events), and set up activity templates for frequently or automatically assigned tasks. With Activity Management salespeople can better manage the organization's sales processes, resulting in greater control over routine activities, the elimination of redundant tasks, and adherence to internal sales processes. It allows sales managers to have immediate access to each salesperson's activities, opportunities, sales figures, customer complaints and other metrics used for measuring success and sales revenue. As a result, management can act quickly when necessary, based on real-time information.

2.1.1.7 Better Within-Team Collaboration

SFA tools can mediate the information flow and consequently improve the communication within sales teams (Brown and Jones 2005). Improved within-team communication can in return help salespeople become more efficient at synchronizing team activities. The use of tools such as e-mail newsletters and company intranets can keep salespeople informed about company policies, procedures, products, and goals (Hanover 2000).

Therefore, it is clear that SFA deployments usually bring significant changes in the way salespeople do their jobs (Speier and Venkatesh, 2002). However, without the perception of a real advantage, a sales force is less likely to accept the SFA system and wholeheartedly use the technology. Consequently, the benefits of will be diminished. To address this type of resistance, management needs to clearly demonstrate the advantage(s) (e.g., more selling time, shorter sales cycle, less paperwork) of using the SFA system over the current system (Morgan and Inks, 2001).

2.1.2 Implications of SFA for Sales Management

SFA technology brings new informational and communicational capabilities which were not available in the past. Such capabilities have a potential to change the way salespeople and sales managers do their jobs. In this section we discuss the implications of SFA implementations for sales organizations by reflecting on the general framework proposed by Tanner and his colleagues (2005).

2.1.2.1 Strategic Issues

Perhaps one of the greatest consequences of SFA deployments is seen in the way companies make strategic decisions regarding their sales forces. Sales force objectives, structure, and salesperson empowerment have to be rethought in the SFA age. In this part we will be discussing the consequences of SFA technology in strategic issues. Salespeople generally have the greatest influence in customer retention and reducing customer defection (Johnson et al. 2001). As companies across industries move from a transaction focus to a relationship, the sales function is viewed as firms' means of 'partnering' with customers (Ingram 1996; Weitz and Bradford, 1999). In this context, SFA is positioned as an enabler for the sales force's role of developing market relating capability. In the end, the role of the salesperson is defined upwards, where salespeople become more like relationship managers or strategic account managers, with a partnering perspective on the customer (Yim F.H., R.E. Anderson, and S. Swaminathan, 2004).

Clearly, the role of the selling function as informant and decision maker becomes essential (Leigh and Marshall 2001).

2.1.2.2. Sales Force Objectives

SFA systems can provide salespeople with high amounts of customer, product and competitor information; facilitate relationship selling processes and help salespeople be more 'customer oriented' (Moncrief and Marshall 2005). Salespeople conventionally sell to customers within target segments. Trying to sell to all of these customers in the same way will not be effective as some customers are simply less profitable and should be dealt with differently or dropped altogether (Dwyer, F.R., Schurr, P.H. and S. Oh, 1987). The type of relationship and the selling model used for each customer segment must balance customer value and cost (Rackham and De Vincentis, 1999). Therefore, a key goal must be to allocate available resources more effectively so that customers receive the appropriate attention, at the right cost (Zeithaml, V.A., R.T. Rust, and K.N. Lemon, 2001). SFA provides a much more complete view of customer segments and supports the salesperson in better prioritizing them. Among the new segmentation techniques made available to the individual salesperson through SFA are customer portfolio analysis, sales forecasting, activity-based costing, and customer lifetime value (Buttle 2004; Levin and Zahavi, 2001). Early sales process efforts can thus refocus from identifying potential new customers to identifying customers with greatest profitability (Shoemaker, M. E., and Johlke, M.C., 2002).

2.1.2.3 Cultural and Environmental Issues

SFA has implications for organizational culture through increased transparency of salesperson activities. Most SFA systems provide sales management with real-time access to salesperson activity and performance information. The number of sales calls per day, the amount of attention given to each customer, the position of customers in the sales cycle, and the implementation of promotional programs are made instantly available to management. This increased visibility of salesperson activities may lead to afeeling of 'big brother'-style management, eliminating any gain from the new system (Widmier, 2002; Gohmann, 2005). To help reduceconcerns about management interference in selling activities, SFA should bepositioned and used as a tool to help

improving the productivity of the salesforce, rather than as a monitoring tool for sales management.

2.1.3. SFA Technology implementation and adoption

It is a critical issue to realize that it is the sales force in the field that is ultimately responsible for accepting and making use of SFA system (Jones et al. 2002).However, successful implementation of SFA is a serious challenge forcompanies as it involves significant organizational change. Turbulence anduncertainty are likely outcomes of an SFA implementation due to thechanges in business processes, salesperson tasks and sales priorities, all ofwhich any typical SFA system brings along with (Morgan and Inks 2001).Some of the potential reasons to explain the underutilization of SFA are:natural inertia, low perceived value (costs vs. benefits), lack of support fromthe organization, personal and demographic factors, and lack of rewards tochange (Jones et al. 2002; Parthasarathy and Sohi 1997). Honeycutt and others (2005) suggest thatlack of clearly defined goals, missing communication strategy andinadequate compensation metrics are further reasons of SFA project failure. Pullig and others (2002) suggest, the organization should be responsible forcreating the 'facilitating conditions' necessary for successfulimplementation such as training, encouragement, facilitative leadership and organizational support.

2.1.4. Theoretical Framework influencing SFA Technology usage

Employee resistance to technology is one of the major risks associated with SFA implementation. In most companies, SFA efforts often never get off the ground because they encounter stiff resistance from users. (XU, Yurong, Yen, and Chaw, David C, 2002). The literature has shown that the adoption and use of SFA technologies have been less successful than originally hoped for (Blodgett, 1995; Rigby, 2002). These failures may be because a large proportion of the sales force did not adopt or adopted the technology but underutilized it.

Many Researchers have used different frameworks in the study of adopting new technological innovations. However, the most widely used theoretical framework is the Technology Acceptance Model (Davis, 1986), which presents a list of factors that lead to technology acceptance and use. TAM, introduced by Davis (1986) is an adaptation of Theory of Reasoned Action (TRA) specifically tailored for modeling user acceptance of information systems

2.1.4.1. Theory of Reasoned Action (TRA)

Fishbein and Ajzen's (1980) Theory of Reasoned Action (TRA) is an especially well-researched intention model that has proven successful in predicting and explaining behavior across a wide variety of areas. TRA is very general, "designed to explain virtually any human behavior" (Ajzen and Fishbein, 1980), and should therefore be appropriate for studying the determinants of computer usage behavior as a special case.

TRA is a widely studied model from social psychology which is concerned with the determinants of consciously intended behaviors (Ajzen and Fishbein, 1980). According to TRA, a person's performance of a specified behavior is determined by his or her **behavioral intention (BI)** to perform the behavior, which is jointly determined by the person's **attitude (A)** - which is the negative or positive feelings about performing a target behavior and **subjective norm (SN)-** which refers to the person's perception that most people who are important to him/her think he/she should or should not perform the behavior in question(Fishbein and Ajzen, 1975).

According to TRA, a person's attitude toward a behavior is determined by his or her **beliefs** about consequences of performing the behavior **(**defined as the individual's subjective probability that performing the target behavior will result in consequence)and the **evaluation** of these consequences (which refers to "an implicit evaluative response" to the consequence) (Fishbein and Ajzen, 1975).A particularly helpful aspect of TRA from an Information System perspective is its assertion that any other factors that influence behavior do so on1y indirectly by influencing Attitude, Subjective Norm or their relative weights.

2.1.4.2. Technology Acceptance Model (TAM)

Davis (1986) introduced an adaptation of TRA, the Technology Acceptance Model (TAM), which is specifically meant to exp1ain computer usage behavior. TAM uses TRA as a theoretical basis for specifying the causal1inkages between two key beliefs: perceived usefulness and perceived ease of use; and users' attitudes, intentions and actual computer adoption behavior. TAM is considerab1y less general than TRA, designed to apply only to computer usage behavior, but because it incorporates findings from over a decade of Information Science research, it may be especially well suited for modeling computer acceptance.

Davis in his study goes on to explain that(Davis Fred D., 1989) ideally one would like a model that is helpful not only for prediction but also for explanation, so that researchers and practitioners can identify why a particular system may be unacceptable and pursue appropriate corrective steps.

TAM posits that two particular beliefs; perceived usefulness and perceived ease of use are of primary relevance for computer acceptance behaviors.

Perceived usefulness (PU) is defined as the prospective user‘s subjective probability (belief) that using a specific application system will increase his or her job performance within an organizational context. **Perceived ease of use (PEOU)** refers to the degree to which the prospective user expects the target system to be free of effort (Davis Fred D., 1989).

Davis suggested that using an information system is directly determined by the behavioral intention to use it, which is in turn influenced by the users’ attitudes toward using the system. Attitude and perceived usefulness are also affected by the perceived ease of use. The Attitude-Behavioral Intention relationship represented in TAM implies that, all else being equal, people form intentions to perform behaviors toward which they have positive affect.

The study stated that the PU-BI relationship is based on the idea that, within organizational settings, people form intentions toward behaviors they believe will increase their job performance over and above whatever positive or negative feelings may be evoked toward the behavior.

2.1.5. Role of ICT in the service sector of Ethiopia

Information communication technology (ICT) has been acknowledged by the government of Ethiopia as enabler for development, economic growth, and alleviator of poverty. ICT infrastructure development in Ethiopia is still at its infant stage though the government has started an aggressive move in promoting the sector for further public and community use. While the contribution of the service sector to the economy has been growing (comprising about 41%) the impact of its ICT sector remained relatively small – the ICT sector contributes less 2% to the overall Ethiopian economy (Lishan Adam, 2010).

The ICT sector in Ethiopia is shaped by sector regulation that was approved in 1996 to create a single national operator. The national ICT policy that governs the ICT sector was drafted in 2005. The policy vision was to attain "…the social and economic well being of people of Ethiopia through the explanation of the opportunities created by ICT for rapid and sustainable socio-economic development." In the effort to implement the ICT policy the government has launched series of high profile project.

Various government institutes also launched several applications – including a national web portal. The reframe of the communication sector began by separating the regulator and the operational function through the establishment of regulator entity, the Ethiopian telecommunication agency (ETA) by proclamation 49/1996, and a commercial entity the Ethiopian Telecommunication Corporation (ETC) by Regulation 10/1996. Before 1996, the Ethiopian Telecommunication Authority had acted both as a provider of communication services and the regulator of the sector in its 13 years of operation (1997-2010).

The Ethiopia government has the development of information and communications technology (ECT) as one of its strategic priorities. The endorsed and currently enforced ICT policy is a demonstration of its commitment to the development of ICT both as an industry and as an enabler of socio – economic transformation. The government of Ethiopia is creating favorable environment to enhance the exploitation of ICTs for accelerated socio-economic development by elaboration and Ethiopia ICT development Agency (EICTDA), and the now ministry of communication and information technology (MCIT) which is responsible to coordinate and supervise the planning and information implementation of communication and information technology development intuitive and ICT policies.

2.1.6. Effect of SFA technology usage on Sales performance

Many companies implement sales technology in their sales forces in hopes of enhancing productivity, communication, knowledge management and customer relationships; however, there is little empirical evidence that this is true. What we do know is that large sums of money are being invested in sales force technology while firms conduct little actual evaluation of the outcomes of their investments (Erffmeyer& Johnson, 2001). Yet, organizations need justification for these substantial investments and cannot afford to continue to invest in sales technology as a matter of blind faith alone.

Earl D. Honeycutt Jr. investigates the acceptance of sales technology tools by salespeople. Knowledgeable salespeople are able to use the information and knowledge to practice adaptive selling, improve performance, and enhance their firm's competitive advantage in the marketplace. They propose and test a model linking technology acceptance to adaptive selling and job performance of field salespeople. The results provide evidence that behavioral intentions to use technology positively affect salesperson performance through enhanced propensity to practice adaptive selling.

2.1.6.1. Performance measurement and Key Performance Indicators

Performance measurement (PM) is considered to be one of the most important topics and techniques discussed in the field of business management.First, the literature defines the term "**performance**" as the ability of an entity, such as a person, a group or organization, to make results in relation to specific and determined objectives (Laitnen, 2002; Lebas and Euske, 2004). To put it another way, the performance concept refers to the measurable achievements produced (Phillips, Davies and Mouthinho, 1999). Second, the term **"measurement"** indicates the ability and processes used to quantify and control specific activities and events (Morgan, 2004).

According to the study by (Phillips, 2015) tracking performance is a vital way for service providers to ensure their businesses are moving in the right direction. To measure and improve performance, management needs to track the right key performance indicators (KPIs).
A **performance indicator** or **key performance indicator** (**KPI**) is a type of performance measurement. KPIs evaluate the success of an organization or of a particular activity in which it engages. Often success is simply the repeated, periodic achievement of some levels of operational goal (e.g. zero defects, 10/10 customer satisfaction, etc.), and sometimes success is defined in terms of making progress toward strategic goals (Phillips, 2015).

Accordingly, choosing the right KPIs requires a good understanding of what is important to the organization and its customers through assessing the present state of the business, and its key activities. 'What is important' often depends on the department measuring the performance. These assessments often lead to the identification of potential improvements, so performance indicators are routinely associated with 'performance improvement' initiatives (Phillips, 2015). Therefore while selecting relevant key performance indictors' factors such as strategic objective, timing of activity and the current situation in the company's development curve should be taken into consideration.

Some of the characteristics of KPI state that, the indicators are determined by management personnel and must be aligned with the organization's objectives, it must be designed so that it is easy to understand and specifically designed for each employee.

Because KPIs are expected performance by the organization they must be designed to balance the evaluation of each employee (Phillips, 2015).

2.1.6.2. KPI for Sales Force Activities

Sales department plays one of the most important roles in a business. It decides directly to gain how much sales revenue per year of the company. Attracting and retaining customers are two main functions of a sales department. It is also for the number one objective of it. But for gaining a competitive edge the main objective for the sales team should be the improvement of the customer satisfaction which can be obtained by taking into consideration of aspects such as fast delivery of products, order picking service and quick response to customer request (Tanner, J.F. and S. Shipp, 2015).

2.1.6.3. Key Performance measurement Indicators through SFA at EABSC

In EABSC the key performance indicator for the sales team which focuses on a final goal of maximizing sales while harvesting a reasonable profit is average daily sales volume of sales people. This same matrix will be used during the course of research design and result analysis.
Average daily sales volume is the average of the quantity of number of products sold in the normal operation of the company in a specified period. The EABSC takes the average daily sales volume of boxes of coca cola beverages the company sales representatives for each month as their key performance indicator in accordance with their monthly sales target.

2.2 Empirical Review of the study

Research data suggest that efficiency gains are a primary motivation for investing in SFA. Erffmeyer and Johnson (2001) interviewed informants at 40 US manufacturers and service firms to discover their motivations for implementing SFA. The primary motivation was improved efficiency. Harris and Pike (1996) asserted that greater operational flexibility, better sales management, enhanced customer support, higher sales-force productivity, superior customer account management and improved communications between headquarters and the field were expected outcomes from SFA implementations. Ingram and others (2002) agree that many companies are turning to SFA to help them manage their customer relationships more efficiently.

Wright and Donaldson (2002) identified four 'quite strategic' objectives for sales information systems applications – increased customer retention (mean score of 6.1 on a 7-point importance scale), enhanced customer relationships (6.1), increase customer acquisition (5.7) and integration to contact management (5.5).

In an early study, Cronin and Davenport (1990) found a number of hard and soft outcomes were achieved from SFA implementation in organizations. The harder outcomes were enhanced quality of customer communications, better time management, and improved knowledge management. Softer outcomes were classified as structural (rationalization of order processing, development of a 'virtual office' held on laptops), motivational (lower sales force attrition, improved image, better stress control) and cultural (the creation of an extended 'invisible college' of salespeople).

Erffmeyer and Johnson (2001) identified improved access to information (60% of the sample), improved communication with customers (65%), a more efficient sales force (27%) and faster revenue generation (16%) as realized benefits from SFA. Wright and Donaldson (2002) found that the biggest impact of sales information systems was in developing mailing lists, producing sales reports, contact management and sales cycle tracking.

Engle and Barnes's (2000) investigation found a clear relationship between SFA adoption and salesperson performance. They computed that 16.4% of the variance in sales was explained by the use of SFA systems, but that the SFA project had a payback period at six to seven years.

Ahearne and Schillewaert (2001) also found that use of SFA was associated with improvements in reps' selling skills, knowledge and performance. Their research found positive correlations between SFA implementation and sales reps' market knowledge, technical knowledge, targeting skills, adaptive selling and call productivity. Essentially sales reps with SFA support became more adaptable and productive. Sales reps' use of SFA accounted for a small, yet significant portion (7%) of their sales performance.

In a later study, Ahearne and others (2004) obtained objective measures of technology usage and performance. They found a curvilinear relationship between SFA usage, as measured by reps' accessing of SFA screens over a three month period, and salesperson performance, as measured by sales against quota. The worst performing reps either had very little or a large amount of interaction with the SFA software. It has been observed that SFA adoption is a two-stage process (Parthasarathy and Sohi, 1997). First the organization decides whether to adopt the technology; second, the sales-force decides whether to use the technology. A number of researchers have attempted to 'forward understanding of sales force acceptance of SFA' (Morgan and Inks, 2001).

As noted by Ahearn and others (2004), much of the research on this particular question has focused on technology adoption, rather than technology usage. One of the earliest studies was conducted by Keillor (1997) who found that there was considerable variance amongst salespeople in their attitude towards the use of SFA technologies. They found that younger sales reps were more positively inclined towards technology adoption. Ko and Dennis (2004) also suggest that SFA systems tend to store formal knowledge about products, customers, markets and competitors, and are therefore more likely to be of value to newer sales reps.

Robinson, Marshall and Stamps (2005) combined the Technology Acceptance Model (TAM) (Davis 1986; Davis 1989) with the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980) to identify the relationship between perceived usefulness, perceived ease of use, attitude towards using technology, and intention to use the technology. In addition, they tested the relationship between technology acceptance, adaptive selling practice, and job performance of field sales people. Analysis indicated that the attitude towards using technology is positively related to perceived usefulness and perceived ease of use, and the more positive the attitude toward using technology, the higher the intention to use the technology. Jones *et al*'s (2002) longitudinal study examined actual usage of SFA technology also employed TAM and TRA.

They found that 3 variables explained salesperson intention to use the technology – perceived usefulness of the new system, attitude towards the technology and its perceived compatibility with the current system. However, actual use of the technology was shown to be strongly associated with the personal innovativeness of the sales person, attitude towards the technology and facilitating conditions. Ahearne's (2001) results reinforce the importance of perceived usefulness and ease of use as the main drivers of technology adoption in the sales force setting.

Other researchers have offered different explanations for variance is sales person adoption of SFA. Buehrer and others (2005) found that reps adopted SFA not only because of its promised 'efficiency' but also because they 'had to'. Reps also reported that they would be more likely to use SFA if there was continuous or on-demand training. Erffmeyer and Johnson (2001) and Gohmann and others (2005) both identify improved productivity as a reason for SFA adoption by reps. Other researchers, however, have pointed out the negative outcomes for salespeople of adopting SFA. Rangarajan, (2004) find that salespeople adopting SFA experience strong and stressful feelings of role ambiguity and role conflict. Speier and Venkatesh (2002) found that if the fit between SFA tools and reps' roles is poor, the tools may fall into disuse.

2.3. Intended Contributions (synthesis)

Sales technology is an integral tool for enhancing customer-related information management and knowledge development. Knowledgeable salespeople are able to use the information and knowledge to improve performance, and enhance their firm's competitive advantage in the marketplace. SFA is characterized by, and defined as, the application of information technology to support the sales function (Engle and Barnes, 2000).

The use of Sales Force Automation (SFA) systems is becoming widespread. More and more firms in every industry are investing significant sums in SFA technologies with the goal of improving the performance of their sales forces (Honeycutt 2005). Consequently, a growing body of academic research focuses on this issue. Main areas of interest have been the adoption of SFA at individual level (Avlonitis and Panagopoulos 2005; Speier and Venkatesh 2002) and technology implementation in selling organizations (Erffmeyer and Johnson 2001; Parthasarathy and Sohi 1997; Rivers and Dart 1999) and performance effect of SFA on salespersons (Schillewaert and Ahearne 2001).

However, Research on sales force automation applications is very limited, in spite of the critical role of SFA systems on building and sustaining effective customer relationships and increasing performance level of sales (Speier&Venkatesh, 2002).

Although anecdotal evidence supports a connection between sales force technology adoption and greater sales performance, much of the empirical research concerning this relationship is inconclusive (Erffmeyer & Johnson, 2001).

An assumption in SFA adoption studies is that, more adoption of SFA will always improve sales performance. This research contributes to the stream of studies that question the implicit assumption that increased technology use will always improve sales performance by analyzing the effect of SFA on the average daily sales volume performance of the company sales representatives who use SFA by comparing it with those who do not.

The result of this study provides empirical data gathered from the East Africa Bottling Share Company (EABSC), thus extending the knowledge of previous researches by stating a conclusive statement of the critical role played by SFA in increasing performance.

The implications of the literature review to my topic is that it has laid the concepts and theoretical reviews of Sales Force Automation by beginning to define what sales force is which in my study is termed as Company Sales Representative, it has then gone to define and explain Sales Force Automation, the benefits it brings to the company which employs it and to its sales force. It then goes on to discuss the implication of SFA on the company's strategic issues, sales force objectives, cultural and environmental issues. The literature has also looked on the implementation of SFA technology and its adoption by giving theoretical framework that influence SFA technology usage. The Role of ICT in service sector in Ethiopia has also been discussed. Furthermore, the Effect of SFA on the performance of Sales Force has been discussed by putting light on the performance measurement tools for the accomplishment of sales people by giving focus on how the EABSC measures the performance of its Sales Representatives.

I expect this literature to provide practical guidance to sales and marketing practitioners on critical areas such as key sales processes supported by IT, type and quality of IT assets, specification of appropriate SFA-use, and its outcomes. The intended contributions of this research are threefold:

First, it is argued that SFA-use should be conceptualized. Tapping the job-related tasks achieved by employing the system along organizationally relevant dimensions (Doll and Torkzadeh 1998), we can better distinguish salespeople in terms of their SFA-use behavior.

Then, SFA-use construct is inserted into an operational selling context by linking it to its antecedent variables and salesperson performance. This way, more light is shed up on the process through which SFA impacts the bottom line users. Therefore, the second contribution lies in better explaining the relationship between SFA-use behavior and salesperson performance.

The third contribution derives from the antecedents driving our SFA-use construct. By applying well established antecedents of SFA-adoption to explain our SFA-use construct, more precise recommendations are made to practitioners in order to stimulate SFA-use in the desired manner.

In sum, the research approach can offer substantial insights on how SFA use impacts salesperson performance and which factors drive that way of usage, which in turn helps firms maximizing their return on SFA-technology investments. It also creates an understanding of how the performance of the Sales Force (Company Sales Representatives) is measured to understand the effect of SFA by drawing attention to the measurement system employed at EABSC.

The issue that hasn't been given enough attention is the proper way of introducing SFA system into a company so that its users have a positive attitude towards it by giving first hand training and a briefing about its benefits. The negative implication that SFA brings due to the additional knowledge the Sales People now have to learn could end up making them feel as if they were being replaced by a system or the fact that their supervisors can now control and oversee their every move are also matters that haven't been given enough consideration. The above issues have not been discussed in detailed due to the reason that they fall outside of the margin that the study intends to focus on which is purely the performance of Sales Force affected by their usage of SFA.

The study locates itself with in the literature reviewed by linking usage of SFA and its effect of the performance of Sales Force (Company Sales Representatives). The benefits of using SFA, key performance indicators that measure the performance of Sales Force are among the literature reviews that justify the importance of the research.

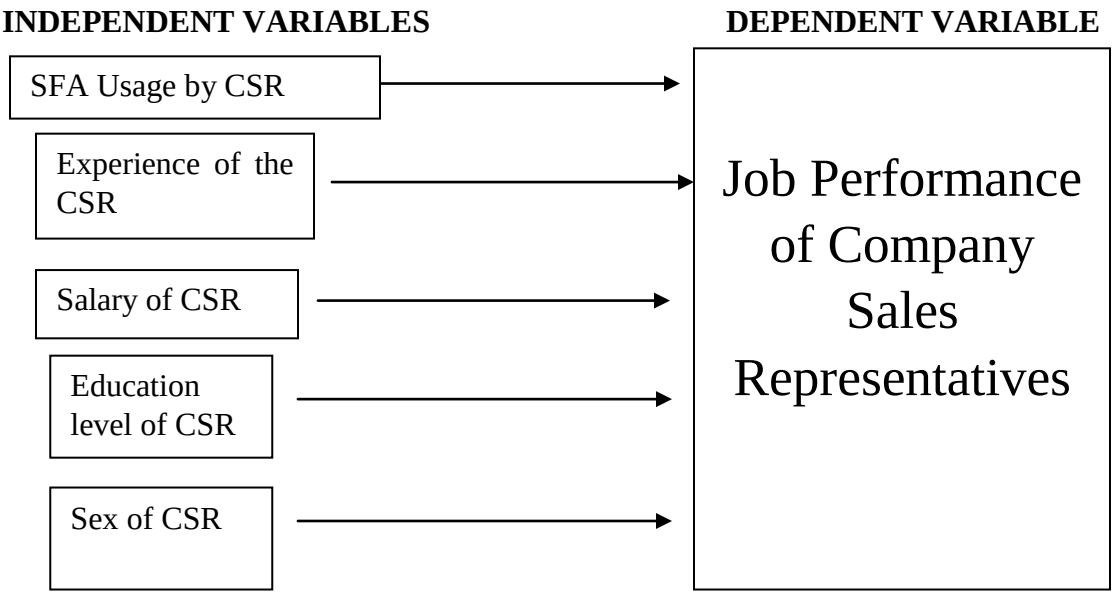
2.4. Conceptual framework and Research Hypotheses

2.4.1 Conceptual framework

The review of relevant literature (Robinson, Marshall and Stamps, (2005) indicate that Intention to use the SFA technology. Furthermore, higher usage of SFA technology improves the overall performance of sales people (Erffmeyer and Johnson, 2001). Therefore, the following conceptual framework is developed.

The conceptual framework for the study is presented in Figure 1. Though the primary focus of this study is on the mediating relational mechanisms linking salesperson SFA usage and salesperson performance; antecedents and Indicators involved in this relationship have been examined. Therefore, the dependent variable is Job performance and the independent variable is SFA usage. The study has also used three more independent variables which are namely Salary, Level of Education (whether a diploma/degree level) and Experience.

Figure 1: Proposed theoretical framework of the study



Source: Own Cause-effect Diagram

2.4.2. Research Hypotheses

For the above theoretical discussions on the effect of SFA usage on the job performance of sales people, to answer the research problems the following hypothetical statements have been developed. The hypotheses referred directly the main factors stated in the conceptual framework.

H1: There is a positive linear relationship between SFA usage by the sales people and job performance.

H2: There is a positive linear relationship between experience of the sales people and job performance

H3: There is a positive linear relationship between education level of the sales people and job performance.

H4: There is a positive linear relationship between salary of the sales people and job performance.

H5: There is a positive linear relationship between gender of the sales people and job performance.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design and Approach

The study used a research design method which contained quantitative approach that was chosen to retrieve objective, measurable and quantifiable data to explain the particular phenomenon and questions surrounding the relationship between sales performance and SFA usage, education level, gender of the CSRs, the years of experience and salary.

The quantitative research design method is conducted by using secondary data which is collected from the data base of EABSC. The data was chosen because it provided information regarding all variables used for the study such as the company sales representative's average daily sales volume, whether they use SFA or not, their education level, salary, experience and gender.

The researcher has chosen both simple descriptive statistics and econometrics model. For the simple descriptive statistics mean and percentage are used. The Econometric model of multivariate regression is also used and is estimated using Ordinary Least Squares (OLS) estimation method.

3.2 The Research Method

Research Methods are the specific procedures, tools or techniques of gathering and analyzing data, or is the actual activity which produces data and analysis.

In this section we will see the sampling techniques & measurement, data collection procedures, techniques and instruments, data analysis techniques and the empirical and estimation model.

3.2.1 Sampling Techniques

The area of the study focuses on the effect of SFA usage on sales people's performance, hence the target population of this research is the Company's Sales Representative (CSR); the data base provides complete information for 142 sales representatives found in Addis Ababa Plant. Thus, the sample size used in this study is 142.While conducting this research, all the population of 142 mentioned above will be taken into consideration, as the population size is not big and it is manageable to get all the information.

3.2.2 Procedure for Data Collection

After receiving permission to conduct this research by taking EABSC as a case study from the Human Resource Department of the organization, pertinent information such as list of employees categorized on places of work, position, focus of activities and other relevant details were secured from the function.

The primary goal of this study is to examine the relationship between SFA technology usage (independent variable) and job performance of sales people (dependent variable). To collect the pertinent information required to answer this question, the source of data chosen for the study is a secondary data from the data base of the East Africa Share Company. The data provides information about sales representatives including among others: their sales volume, usage of SFA, education, salary and experience. This secondary data was retrieved from the sales performance of the CSRs based on their volume of sales.

3.2.3 Data Analysis Techniques

The primary goal of the Coca Cola Company is maximization of sales while harvesting a reasonable profit. The key performance indicator of the sales representative is tracked by his/her contribution towards this goal.

Therefore, the volume of sales of individual sales representative is used as a measurement of his/her performance. Once information is gathered from the secondary data with consideration of accuracy and reliability then analysis is made using graphs, tables, figures, percentages, mean and standard deviations. Refer table 1 for the description of the dependent and independent variables used for this analysis.

Variables Used

Table 1: Variables used in the analysis

Variable		Definition
Dependent Variable	Avg. daily sale	The average daily sales volume of the sales representative (measured in boxes of coca cola bottles)
Independent Variables	SFA user	Whether the sales representative uses SFA or not. It is a dummy variable which takes the value 1 if the sales representative uses SFA, 0 otherwise.
	Experience	Years of experience of the sales representative
	Salary	The salary of the sales representative (in Birr)
	Education	Education level of the sales representative. It is a dummy variable that takes 1 if the sales representative is BA Degree holder, 0 if he/she is Diploma Holder
	Sex	The sex of the sales representative (male/female). It is a dummy variable which takes the value 1 if the CSR is male, 0 otherwise.

Source- Researcher's own source, 2016

In the analysis, both simple descriptive statistics and econometrics model is used. For the simple descriptive statistics mean, percentage, graphs and tables are used. The Econometric model of multivariate regression is also used and is estimated using Ordinary Least Squire (OLS) estimation method.

In statistical modeling, regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis helps one understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed.

In statistics, ordinary least squares (OLS) or linear least squares is a method for estimating the unknown parameters in a linear regression model, with the goal of minimizing the sum of the squares of the differences between the observed responses in the given dataset and those predicted by a linear function of a set of explanatory variables, the smaller the differences, the better the model fits the data. The OLS estimator is consistent when the regressions are exogenous and optimal in the class of linear unbiased estimators when the errors are homoscedastic. Under these conditions, the method of OLS provides minimum-variance mean-unbiased estimation when the errors have finite variances. Under the additional assumption that the errors be normally distributed, OLS is the maximum likelihood estimator. The study made attempts to check whether these assumptions holds true and certain remedial measures were employed to solve the problem.

3.2.4 Empirical Model and Estimation Method

The dependent variable, average daily sale is a continuous variable that measures the daily sales volume of the sales representative which measures his/her performance towards the primary goal of the company that is maximization of sales while ensuring reasonable profit. Thus, the multivariate regression model estimated using the ordinary least squares (OLS) is used in the analysis.

The empirical model that describes the performance of the sales representative is given by:

$$S = \alpha_o + \beta X + \gamma i Z_i + \varepsilon_i \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

Where:

S – Is the average daily sales volume that measures the performance of sales representative,

X – Whether the sales representative uses SFA,

Z - Contains a set of independent variables that includes salary, sex, education and years of experience of the sales representative,

α – Is a constant term that measures the average sales volume of the sales representative who doesn't use SFA, who has zero years of experience, who is diploma holder and is not paid at all.

Average daily sales volume measures the performance of sales representative.

ε – Is the error term that captures the observed and unobserved factors that affect the performance of the sales representative but not included in the model.

So, the empirical model can be rewritten as follows:

$$Aver.\ daily\ sale = \alpha_o + \beta_1 SFAuser + \gamma_1 Experience + \gamma_2 Salary + \gamma_3 Education + \gamma_4 Sex + \varepsilon_i \text{------} (3)$$

3.3. Validity and Reliability Test

Key indicators of the quality of a measuring instrument are the reliability and validity of the measures. The process of developing and validating an instrument is in large part focused on reducing error in the measurement process.

3.3.1. Validity Test

The effect of SFA usage and other explanatory factors affecting job performance were suggested based on literature and consultations of some managers from the company.

For the secondary data both the internal validity which is issue of the authenticity and the extent to which the interpretation of the results of the tests are warranted for the cause and effect relationship of the SFA usage and job performance; and external validity which shows the generalizability of the relation of the dependent variable (job performance) and independent variable (SFA usage, experience, education, gender and salary) for East Africa Bottling Share Company is justified.

3.3.2. Reliability Test

To estimate the reliability of the secondary data the stability, consistency and interpreter reliability of the measure of job performance of sales people which is the average daily sales of boxes of coca cola beverage was evaluated. Reliability is a test for reproduction; hence the issue of whether if other studies using the same accepted principles and methods from this secondary data have produced the same result was evaluated. As subsequent review by independent researchers under generally accepted principles agree that the results are the same then the secondary data used passes reliability test.

CHAPTER FOUR: RESULTS AND DISCUSSIONS

This section begins with the background of the company that the study is based on and continues to present the findings and discussion of the study in achieving the objectives aimed to address. It has two main parts. The first part is devoted for exploring the data and making descriptive analysis. The second part presents the econometric results obtained based on the empirical model.

4.1 Background of the company

East African Bottling Share Company (EABSC) is a member of the Coca-Cola Sabco (CCS) companies operating in Ethiopia as a sole bottler of Coca-Cola products. EABSC was established in 1995 with a joint venture agreement between local entrepreneurs and CCS. Prior to the joint venture the company was called Ethiopian Bottling Share Company for over 35 years. Coca cola was first bottled in Ethiopia's capital Addis Ababa in 1959 by the Ethiopian Bottling Share Company, which later opened a second branch in Dire Dawa in 1965. The two plants were nationalized in 1975 and ran as public companies until 1996 when they were bought by Ethiopian entrepreneurs. With its leadership working hand in hand, the business has seen significant growth over the years. Processes and functions have been improved, resulting in considerable sales increases.

In 2001, coca cola sabco increased its shares to 61% and the company changed its name to the East African Bottling Share Company (EABSC). In 2002, it celebrated the US$6.4-million upgrade project of its Addis Ababa plant. In 2003, it saw the inauguration of the brand new 'Philipp H Gutsche Training Centre' at the Addis Ababa plant. In 2004, for the first time in its history, the EABSC registered a volume score of 'Ten Million Plus'. In 2013, it inaugurated a new PET line and massive expansion to its Dire Dawa Branch at a total cost of $70 million dollar. In 2013, it launched Route to Market Project. In 2013, it has received 30ha of land from the Bahir Dar City Administration to build its third Coca-Cola factory.

EABSC currently has around 1,200 permanent and 145 temporary employees. Moreover, the company is undergoing a huge expansion project to have 5 more plants in different parts of the country by 2020.

Currently Ethiopians enjoy a range of beverages from EABSC, including those from the Fanta group, Coca-Cola, Sprite, Schweppes, Coke Light, Bitter Lemon and Dasani Bottled Water.

Being a multi-national company operating in 9 different counties, CCS has been keen to implement SFA system. Following the approval of the Ethiopian government to install company owned VSAT (Very Small Aperture Terminal) as part of the project; EABSC has successfully implemented SFA in July, 2014 and joining the other member companies of CCS.

4.2. Descriptive statistics

Here, the summary statistics of variables indicating sales representative performance will be presented. Particularly, detail descriptions of the average daily performance and its relation with key independent variables will be made.

Table 2: Summary Statistics of the variables used (N=142)

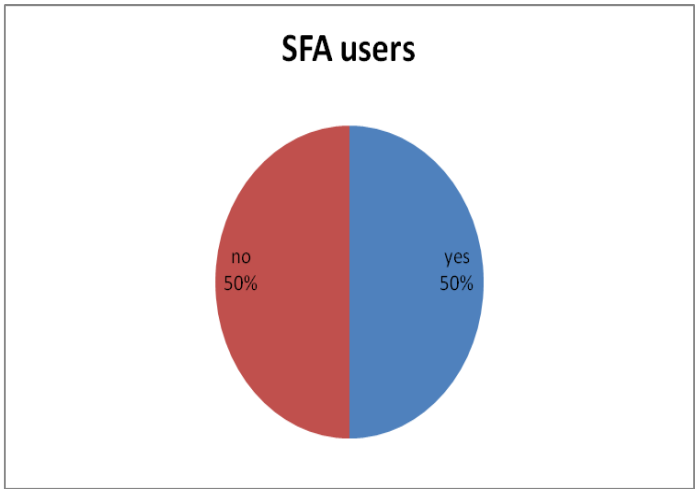
Variable	Mean	Standard Deviation	Min	Max
Average daily sale	440.7413	248.0014	32	2219.067
SFA user	0.5	0.5017	0	1
Experience	3.9627	4.5184	0.0657	33.3753
Salary	8228.704	12040.8	4000	15,520
Education	0.6197	0.4872	0	1
Sex	0.5563	0.4986	0	1

Source: Researcher's own source, 2016

The above table shows that all 142 Company Sales Representatives (CSR) were observed to test the variables of the research which are average daily sales of the CSR, SFA usage, experience, salary, sex and education.

According to the **average daily sales** observed the mean of the average daily sales of the 142 CSRs is 440.7413 boxes of coca cola bottles.

Figure 2: SFA usage of the CSR



Source: Researcher's own source, 2016

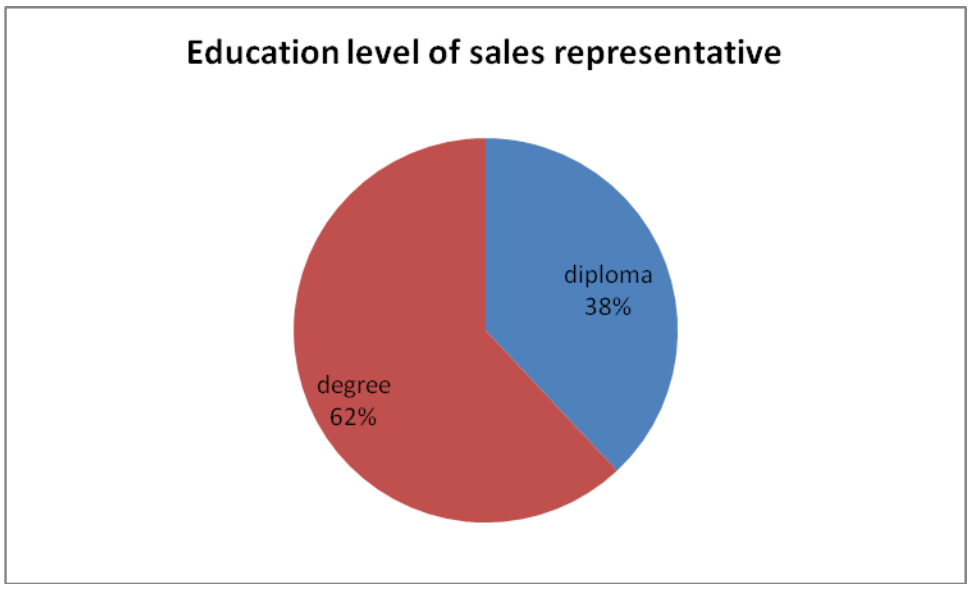
Depending on the data, the CSRs who use Sales Force Automation (SFA) are 50% of the total population considered for the study. That is out of 142 CSRs 71 use SFA.

The next variable observed is the years of **experience** of the CSRs. The mean of all the CSRs experience observed is 3.9627 years working in East Africa Bottling Share Company. Its standard deviation or variance from the mean is 4.5184. The data also shows that the Minimum of Experience is 0.0657 while the Maximum is 33.3753.

While looking at the variable **Salary**, the mean of the salary of the CSRs is 8,228.704 Birr, while the standard deviation shows a variance of 12040.8 from the mean. The Minimum and Maximum of the Salary observed are 4000 and 15,520 respectively.

The next variable observed is **Education**. While observing education, 0 was chosen to represent those who hold a diploma, while 1 represents those holding a degree in their academic performance. Accordingly, the mean of the education variable is 0.6197 which shows that more than half of the CSRs hold a degree; the standard deviation of the variable education shows that there is 0.4872 variance from the mean.

Figure 3: Education level of the CSRs

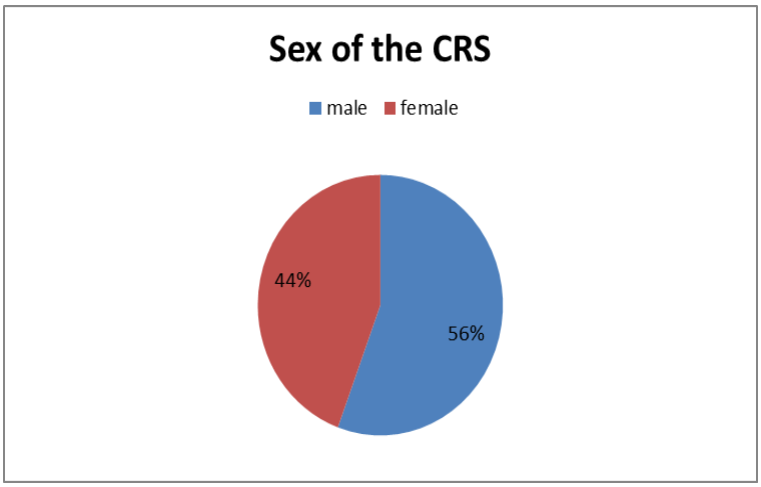


Source – Researcher's own source, 2016

From the above figure, we can see that the degree holders are 62% while the diploma holders are 38% of the CSRs.

The last variable observed is the **sex** of the CSR. While observing this variable, 0 was chosen to represent the female CSRs, while 1 represents the male. Accordingly, the mean of the variable sex is 0.5563 which shows that more than half of the CSRs are male; the standard deviation of the variable sex shows that there is 0.4986 variance from the mean.

Figure 4: Sex of the CSRs

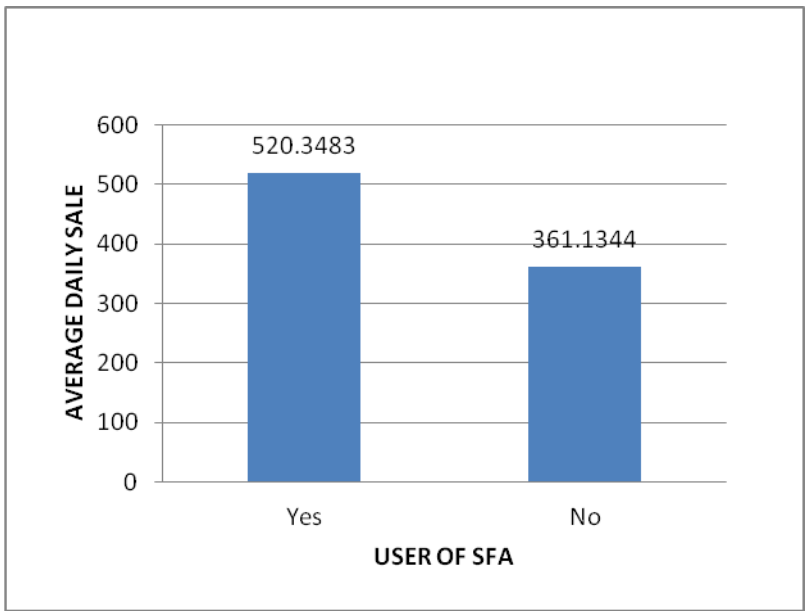


Source – Researcher's own source, 2016

Next we will see the effects of the above mentioned five variables on the performance of the Company Sales Representatives which is measured through their Average Daily Sales.

4.2.1.1. Average Daily Sales by User of SFA

Figure 5: Average daily sale by user of SFA



Source- Researcher's own source

The above graph of average daily sales by user of SFA shows the relationship between the average daily sales with the user of SFA. The graph shows two types of data. The first one shows the Average daily sales of those Company Sales Representatives who are users of SFA which is 520.3483 cases of Coca Cola Products. The second data shows the Average daily sales of the Company Sales Representatives who are not users of SFA which is 361.1344 cases of Coca Cola Products.

When interpreting the above result, it indicates that those CSRs who are using SFA have higher Average Daily Sales from those who do not use SFA. Specifically, the CSR using SFA sell 159.2139 cases of Coca Cola products more than the CSRs who do not use SFA. And because the performance of the CSR is measured by their Average Daily Sales, the fact that those who use SFA have higher Average Daily Sales shows that their performance is higher than the CSRs who are not using SFA.

Therefore, we can conclude from the above result that usage of SFA improves the performance of the CSRs through increasing their Average Daily Sales volume.

While discussing the above result of SFA improving the performance of the CSRs through increasing their Average Daily sales Volume, we can credit the following factors as being responsible.

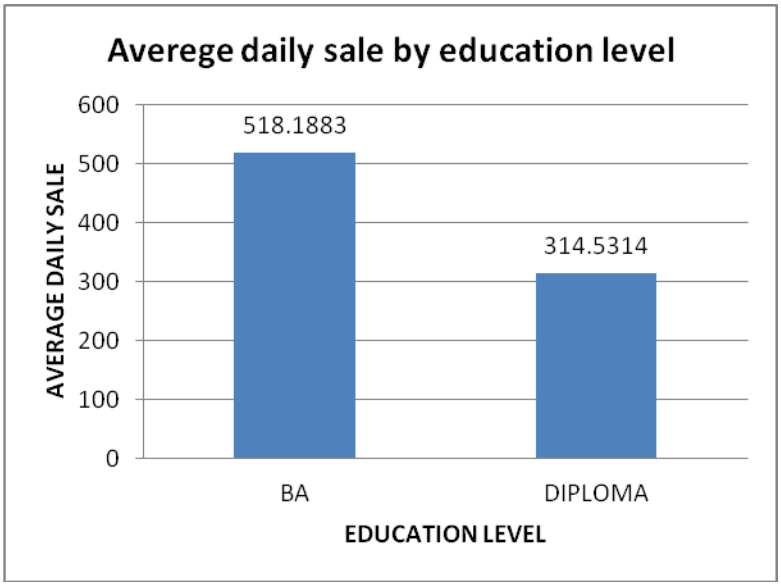
First SFA can lead to an increase in performance by providing the CSRS with the correct inventory management tool. By this, it is meant that instead of the CSRs going to the warehouse and counting stocks, it can save time and effort by providing that information on the tip of their fingers. This saved time and effort can then be transferred into performances where their salesmanship counts such as increasing their daily sales visits and collecting orders that can pay tribute to actually increasing their Average Daily Sales Volume.

SFA can also provide the CSRs with the needed information about stock availability so that they can match their sales with the available stock.

SFA is also a great tool to have customer information available. According to this customer information where all the purchasing history of a customer is available, CSRs can pitch the right selling.

4.2.1.2 Average Daily Sales by Education Level

Figure 6: Average daily sale by education level



Source – Researcher's own source, 2016

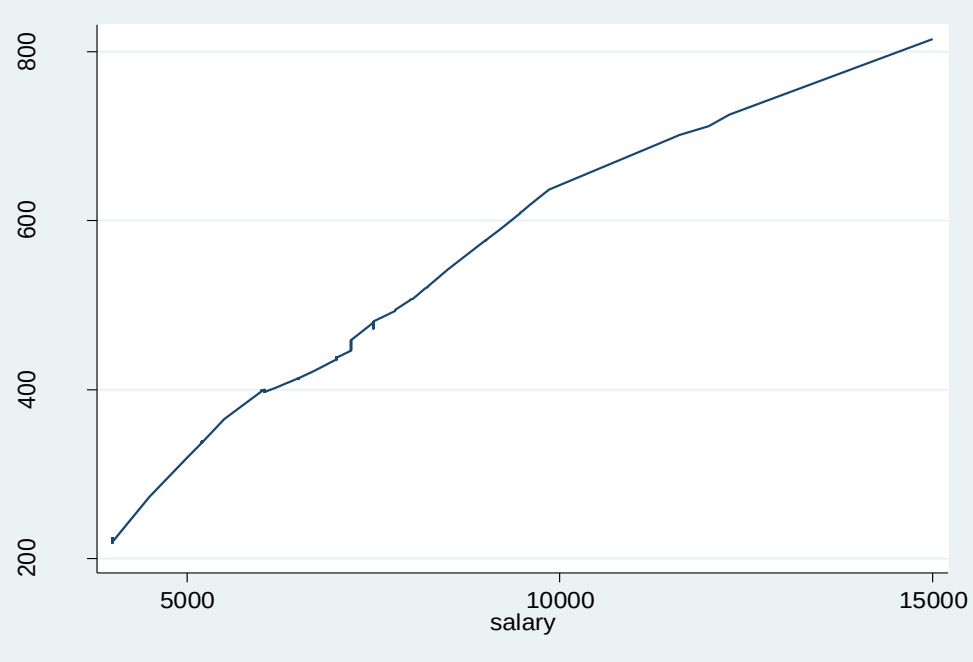
The above graph shows the relationship between the Average Daily Sale and Education Level of the CSR. The graph shows two types of data – the CSRs with BA and Diploma degree educational Level. According to the graph, the Average Daily Sales of the people who have BA degree is 518.1883 crates of Coca Cola Products while the Average Daily Sale of those CSR who have Diploma is 314.5314 crates of Coca Cola Products.

When interpreting the above result, it indicates that those CSRs who have BA level of education have higher Average Daily Sales from those who have a Diploma level of education. To be exact, the CSR using SFA sell 203.6569 cases of Coca Cola products more than the CSRs who do not use SFA. And because the performance of the CSR is measured by their Average Daily Sales, the fact that those with BA Degree have higher Average Daily Sales shows that their performance is higher than the CSRs who have a Diploma level education.

Therefore, we can conclude from the above discussion that Degree level of Education also improves the performance of the CSRs through increasing their Average Daily Sales volume.

4.2.1.3 The correlation between Average Daily Sales and Salary

Figure 7: correlation between average daily sales and salary



Source- Researcher's own source

The above graph shows the correlation between the average daily sales and salary. It can be observed that from the beginning of the initial salary increment the average daily sale of boxes of Coca Cola bottles that the CSR sold has continued to increase.

When interpreting the above results, it can be observed that the trend of the average daily sales is increasing with higher level of salary. This shows that CSRs take the increase in salary as a motivation to increase their performance and increase their average daily sales volume. Therefore, we can conclude that salary has a positive effect on the performance of the CSRs through increasing their average daily sales volume.

4.2.1.4 The correlation between Average Daily Sales and Sex

Table 3: Correlation of average daily sales of the CSRs by sex

Sex of the CSR	Average Daily sales
Male	442.80
Female	438.16

Source – Researcher's own source

With regards to the **SEX** of the CSR, the above table depicts the average daily sales of the CSR showing that females have sold 438.16 boxes of Coca Cola Bottles while male CSRs have sold 442.80 boxes of Coca Cola Bottles. From this result it can be observed that though there is minor difference in the performance of the CSRs, the gender disparity has a low effect on the average daily sales performance of the CSRs. We can interpret this result to mean that, though female CSRs have scored a relatively lower average daily sale once they have acquired their education, experience and motivation from salary, they can perform as good as their male colleagues.

4.3. Correlation and Multiple regression analysis

This section presents data analysis using linear regression model. Linear regression analysis involves identifying the relationship between a dependent variable measured on continuous scale and one or more independent variables. A model of the relationship is hypothesized, and estimates of the parameter values are used to develop an estimated regression equation. Various tests are then employed to determine if the model is satisfactory. If the model is deemed satisfactory, the estimated regression equation can be used to predict the value of the dependent variable given values for the independent variables.

4.3.1. Correlation Analysis

Table 4 simple correlation of the variables used in the study

	Average daily sale	SFA user	Experience	Salary	Education	Sex
Average daily sale	1.0000					
SFAuser	0.3221	1.0000				
Experience	0.1879	0.1824	1.0000			
Salary	0.3161	0.1588	0.1031	1.0000		
Education	0.4001	0.3191	0.2403	0.1755	1.0000	
Sex	0.0166	0.0992	0.1323	0.0299	0.0572	1.0000

Source – Researcher's own source

Correlation and regression analysis are related in the sense that both deal with relationships among variables. The correlation coefficient is a measure of linear association between two variables. Values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear sense; a correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense, and a correlation coefficient of 0 indicates that there is no linear relationship between the two variables.

4.3.1.1. Correlation Analysis between SFA usage and Average Daily Sales

The result of the simple correlation test between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable SFA usage is stated to have a 0.3221 correlation coefficient. Accordingly it indicates that SFA user and Average Daily Sales have a positive linear relationship which also means that SFA usage of the CSRs positively affects their average daily sales performance by 32%.

H1: There is a significant positive relationship between SFA usage by the sales people and job performance.

Based on the result obtained from the simple correlation, there is a positive relation between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable SFA usage. Hence, we accept the first hypothesis **H1**.

Evidence from previous Studies

The researcher tried to evidence the positive relationship of SFA usage and Average Daily Sales Volume (which measures job performance) from previous studies. Since the method employed by the researcher is different from the previous studies, it was not possible to compare relation directly using correlation coefficients. Only the relation between the outcome and predicting variable in previous researches are shown.

- Engle and Barnes's (2000) investigation found a clear relationship between SFA adoption and salesperson performance. They computed that 16.4% of the variance in sales was explained by the use of SFA systems.
- Ahearne and Schillewaert (2001) also found that use of SFA was associated with improvements in reps' selling skills, knowledge and performance. Their research found positive correlations between SFA implementation and sales reps' market knowledge, technical knowledge, targeting skills, adaptive selling and call productivity. Essentially sales reps with SFA support became more adaptable and productive. Sales reps' use of SFA accounted for a small, yet significant portion (7%) of their sales performance.

Hence the researcher concluded that, the result of the present study is consistent with the results of previous studies.

4.3.2.2. Correlation Analysis between experience and Average Daily Sales

The result of the simple correlation test between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable experience is stated to have a 0.1879 correlation coefficient. Which indicates that experience and average daily sales have a positive linear relationship which also means that years of experience

gained in sales positively affects the average daily sales performance of the CSRs at the moderate level of 19%.

H2: There is a significant positive relationship between Experience of the sales people and job performance.

Based on the result obtained from the simple correlation, there is a moderate yet positive relation between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable Experience. Hence, we accept the second hypothesis **H2**.

Evidence from previous Studies

- From a study on the correlation of job experience and job performance, it has been shown that for all levels of job experience and for both low and high complexity jobs the correlation between job experience and job performance is positive. The correlation between job experience and job performance was found to be moderated by two variables: length of experience and job complexity. The highest correlations were obtained in populations with low mean levels of job experience and for jobs that place low levels of cognitive demands on employees. Results appear to be consistent with the causal model of job performance proposed by Schmidt, Hunter, and Outerbridge (1986)

Hence, the result of this study is also supported by the findings of the above researches

4.3.1.3. Correlation Analysis between education level and job performance

The result of the simple correlation test between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable education is stated to have a 0.4001 correlation coefficient. Which indicates that education and average daily sales have a positive linear relationship which also means that years of experience gained in sales positively affects the average daily sales performance of the CSRs at the moderate level of 40%. When interpreting the result it shows that the more CSRs are upgrading their educational level to BA degree the more inclined they are to gain better Average Daily Sales volume.

H3: There is a significant positive relationship between education level of the sales people and job performance.

Based on the result obtained from the simple correlation, there is a moderate yet positive relation between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable Education. Hence, we accept the third hypothesis **H3**.

Evidence from previous Studies

- The study by the title "How broadly does education contribute to job performance?" looks at the effects of education level on job performance. It provides a meta-analysis on the relationships between education level and 9 dimensions of job behaviors representing task, citizenship, and counterproductive performance. Results here show that, in addition to positively influencing core task performance, education level is also positively related to creativity and citizenship behaviors and negatively related to on-the-job substance use and absenteeism (Feldman, 2004).

Hence, the result of this study is also supported by the findings of the above researches

4.3.1.4. Correlation Analysis between salary and job performance

The result of the simple correlation test between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable salary is stated to have a 0.3161 1 correlation coefficient. Which indicates that salary and average daily sales have a positive linear relationship which also means that level of salary gained in sales positively affects the average daily sales performance of the CSRs at the moderate level of 32%. This means that with the increase of Salary the CSRs are more motivated to improve on their Average Daily Sales volume.

H4: There is a significant positive relationship between salary of the sales people and job performance.

Based on the result obtained from the simple correlation, there is a moderate yet positive relation between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable Salary. Hence, we accept the fourth hypothesis **H4**.

Evidence from previous Studies

- Generally, wage rate and productivity are directly related. High productivity can be obtained by better payment since the workers produce more output. Investment in equipment and training increases productivity considerably since it enables to pay much higher wages and achieve lower costs (Vonderembse and White, 2005)
- From a study by the title "Analysis of the factors affecting productivity" using Non-Parametric Regression Method, it was found that labor productivity was a function of financial inputs and showed that financial performances and sales are positively related to labor productivity. That is as the financial support and sales increase the labor productivity of firms also increase (Nuray, 2010)

Hence, the result of this study is also supported by the findings of the above researches.

4.3.1.5. Correlation Analysis between gender and job performance

The result of the simple correlation test between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable gender is stated to have a 0.1666 correlation coefficient. This indicates that gender and average daily sales have a positive linear relationship; which also means that the gender of the sales people positively affects their average daily sales performance at the minor level of 17%. When interpreting the result it shows that the male CSRs are slightly more inclined to gain better average daily sales volume.

H5: There is a significant positive relationship between gender of the sales people and job performance.

Based on the result obtained from the simple correlation, there is a minor yet moderately positive relation between the dependent variable Average Daily Sales Volume (which measures the job performance of the sales people) and the independent variable Gender. Hence, we accept the fifth hypothesis **H5**.

Evidence from previous Studies

- From Kidder's study of the influence of Gender on the Performance of Organizational Citizenship Behaviors, it is indicated that though female CSRs have scored a relatively lower productivity once they have acquired their education, experience and motivation from salary, they can perform as good as their male colleagues. The overall organizational working environment creates a climate of trust and teamwork, value employee input as well as output, and support employees as internal customers with diverse needs, the organization achieve consistent quality and productivity (Kidder, 2005)

Hence, the result of this study is also supported by the findings of the above researches

4.3.2. Multiple Regression Analysis

To find out the linear relation of one dependent variable with more than one independent variables, linear multiple regressions is used. To develop the regression line formula the dependent and the independent variables are denoted as **(X= Whether the sales person uses SFA or not, Z1= Experience of the sales person, Z2= Salary level of the sales person, Z3= Education level of sales person, Z4=Gender of the sales person)** and the dependent variable, **S = Average Daily Sales Volume** which measures Job Performance.

On the process of developing the equation of multiple regression, the researcher conducted the three assumptions that have to be fulfilled before testing multiple linear regression which are the assumption of normality, multicoliniarity and homoscedasticity and are discussed using STATA. Model summary of the regression result, standardized and unstandardized βcoefficients have been presented to find out all the necessary relationships between the dependent variables and independent variables.

4.3.2.1. Assumption 1- Normality test

The ladder-of-power variable transformation technique - a preliminary univariate data analysis to find out the kind of variable transformation that is likely to work best to meet the normality assumption is conducted. Using this procedure, all the continuous variables used in the model (Average daily sell¸ years of experience and salary) are found to have a symmetric distribution at their level forms. Thus¸ it is not important to transform them in to other forms to ensure their normality.

4.3.2.2. Assumption 2- Multicoliniarity

In an attempt to check if the dataset encounter problem of multicolinearity, both the variance of inflation factors (VIF) which shows by how much does the variance of a single β goes up due to the correlations across explanatory variables as well as the simple pair wise correlation matrix are conducted and presented in table 4 and table 6. The result from both tests revealed that there is no serious problem of multicolinearity.

The VIF for all of the variables is less than two and the simple pair wise correlation is less than 0.8 and does not violate the assumption of no multicolinearity (Gujarati, 2004).

Table 5: Variable Inflation Factor (VIF)

Variable	VIF	1/VIF
SFA user	1.15	0.8667
Education	1.18	0.8479
Experience	1.11	0.9034
Salary	1.05	0.9541
Sex	1.04	0.9626
Mean VIF	1.11	

Source- Researcher's own source, 2016

Table 6 simple pair wise correlation of the variables used in the study

	Average daily sale	SFA user	Experience	Salary	Education	Sex
Average daily sale	1.0000					
SFAuser	0.3221	1.0000				
Experience	0.1879	0.1824	1.0000			
Salary	0.3161	0.1588	0.1031	1.0000		
Education	0.4001	0.3191	0.2403	0.1755	1.0000	
Sex	0.0166	0.0992	0.1323	0.0299	0.0572	1.0000

Source – Researcher's own source

4.3.2.3. Assumption 3- Homoscedasticity (equal variance)

As far as the hetroskedasticity problem is concerned, the Cook-Weisberg test is carried out using fitted of Average Daily sells. The Cook-Weisberg test shows the presence of heteroskedasticity as the calculated Chi-squared value is greater than the tabulated value at all significant level and the test rejected the assumption of homoscedasticity (constant variance of the error term). Thus, to be on the safer side, estimation is made using the robust option (Huber/White/Sandwich procedure) available in STATA.

Table 7: Test of heteroskedasticity

Cook – Weisberg test on the fitted value of averaged daily sales of the CSRs HO: Constant Variance
Chi 2(1) = 45.12 Prob > chi 2 = 0.0000 HO is rejected

Source-Researchers own source

4.3.2.4. Regression Analysis Results

Table 8: regression result

Independent variables	Coefficient	t-value	P-value	[95% Conf. Interval]	
SFA user	92.2143 (39.18801)	2.35	0.02	14.71766	169.711
Experience	3.1032 (4.2624)	0.73	0.468	-5.326019	11.53234
Salary	0.0047263 (0.0015565)	3.04	0.003	0.0016483	0.0078043
Education	146.8909 (40.80643)	3.6	0	66.19363	227.5882
Sex	16.503 (37.4219)	0.44	0.066	-57.5011	90.507
Constant	243.2335 (40.0158)	6.08	0	164.0998	322.3672
N = 142					
F(5, 136) = 9.51 Prob> F = 0.0000					
R-squared = 0.6580					

Note: Standard error in parenthesis

Source- Researcher's own source, 2016

Table 9: Regression result (using robust option)

Independent variables	Coefficient	t-value	P-value	[95% Conf. Interval]	
SFA user	92.2143 (36.50334)	2.35	0.02	14.71766	169.711
Experience	3.1032 (4.711115)	0.73	0.468	-5.326019	11.53234
Salary	0.0047263 (0.0019153)	3.04	0.003	0.0016483	0.0078043
Education	146.8909 (27.17672)	3.6	0.00	66.19363	227.5882
Sex	16.503 (37.62869)	0.44	0.066	-57.5011	90.507
Constant	243.2335 (31.19862)	6.08	0.00	164.0998	322.3672
N = 142					
F(5, 136) = 9.51 Prob> F = 0.0000					
R-squared = 0.6580					

Note: Robust standard error in parenthesis

Source- Researcher's own source, 2016

$$Aver\ daily\ sale = \alpha_o + \beta_1 SFAuser + \gamma_1 Experience + \gamma_2 Salary + \gamma_3 Education + \gamma_4 Sex + \varepsilon_i \text{------- (3)}$$

=243.2335 + 92.2143 SFA user+ 3.1032 Experience + 0.0047263 Salary+ 16.5030 Sex+ 146.8909 Education

The p- value refers to the level of significance of the likelihood that the sample chosen are not representative of the population. The lower the significance level, the more confident we can be to replicate the results.

We can see that the p-value for the variable **SFA usage** is 0.020, which means that out of the samples taken 98 out of 100 are representative of the population. This shows that the samples and the results drawn for the variable SFA usage have high level of significance.

When looking at the next variable which is **experience**, its p-value is 0.468 this shows that the samples and the results drawn for the variable Experience have low level of significance.

The next variable observed is **salary**; its p-value is 0.003 this shows that the samples and the results drawn for the variable Salary have a very high level of significance. When observing the variable level of **education**, it can be seen that its p-value shows that the samples and results drawn have a statistical significance of <= 0.01. With regards to the sex of the CSRs which is the last variable observed; its p-value is 0.6600

The t-value of the above table shows that out of the variables observed SFA usage, education and salary have higher significance levels which have numerical level of 2.35, 3.60 and 3.04 respectively. These numbers are higher than 1.96 which is the bar level of measure the significance of the variables validity. However, the variables experience and sex have a 0.81 and 0.44 t-value respectively – even though their t-value is less than 1.96 the level of significance is still considered to have a positive inclination. Still, it can be observed that the variable sex has an even lower t-value which puts its positive inclination into question.

Based on the p-value and t statistics in the above regression table the coefficients associated with SFA user, salary and education shows that these variables significantly and positively affects the average daily sales of the CSR. The coefficient associated with experience and sex shows that it has a positive direction of influence of sales performance of the CSR but its effect is not statistically significant.

The coefficient associated with the SFA user, 92.2143, shows that as compared to the non-SFA users, SFA users sell more cases of Coca-Cola on a daily basis which is higher by 92.2143 cases than the non SFA users; and it is positively and statistically significant at 5% level of significance. The coefficient associated with experience, 3.1032 indicates that, one more year of experience of the CSR increases the average daily sales performance by 3.1032 cases of coca cola. Similarly the coefficient associated with the sex of the CSR, 16.503, direct that male as compared to female CSRs, sell 16.503 boxes Coca – Cola beverage higher than their female colleagues. Though experience and sex have a positive relationship with the average daily sells of the CSR, its effect is statistically insignificant because of the lower value of the t-statistics and higher p-value.

When we look at the coefficient associated with the variable salary, it is 0.0047263 indicating an increase in the salary of the CSR by one birr increased his/her daily average sell by 0.0047263 cases of Coca Cola and it is positively and statistically significant at 1% . Moreover, coefficient associated with the variable education, 146.8909, indicates that compared to the diploma holder, the CSR who hold degree will sell 146.8909 more cases of coca cola on a daily basis and it is positively and statistically significant at 1% level of significance.

Finally the constant term = 243.23 indicates the average daily sells of the CSR who do not use SFA, who holds diploma, zero years of experience, who is female and he/she is not paid any salary.

R-squared is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination, or the coefficient of multiple determinations for multiple regressions. It is the percentage of the response variable variation that is explained by a linear model. R-squared = Explained variation / Total variation. R-squared is always between 0 and 100%. 0% indicates that the model explains none of the variability of the response data around its mean while 100% indicates that the model explains all the variability of the response data around its mean. In general, the higher the R-squared, the better the model fits the data. In this study¸ R-squared is 66% which is interpreted as the model employed explains 66% of the variation of the Average Daily sells performance of the CSRs.

The other measure of the fit of the model is the F-test. The F-test of overall significance determines whether this relationship is statistically significant. It compares a model with no predictors to the model specified. A regression model that contains no predictors is also known as an intercept-only model. The hypotheses for the F-test of the overall significance are as follows:

- Null hypothesis: The fit of the intercept-only model and your model are equal.
- Alternative hypothesis: The fit of the intercept-only model is significantly reduced compared to your model.

Since the P value for the F-test of overall significance test in table 8 is 0.000¸ we can reject the null-hypothesis and conclude that the specified model provides a better fit than the intercept-only model.

4.3. Discussion

The discussion of the result of the study provides the justification for the usage of SFA technology for the purpose of improving sales force performance in EABSC. The key performance indicator for the sales team considered for this study is their average daily sales volume. According to the finding of this research, sales people using SFA have shown significant level of performance regarding their sales volume.

This increase in the average daily sales volume performance of sales people at EABSC may be due to the various benefits of SFA. Amongst the benefits it is possible to mention inventory management as one of the features of SFA systems that would assist the sales force representatives who start their day routing at the official Coca – Cola Distributers (OCCDs) or Manual Distribution Centers (MDCs).This feature would provide the sales force who use SFA with the information of all available stocks at hand in the OCCD or MDC with types of flavor and pack so that they can easily generate orders in the market.

Using this system and the information provided by the sales representatives the sales managers can also control their sales representatives' performance by tracking the time they start their work by just accessing SFA. Using the same information the company also can track its stock flow at the OCCDS and MDCs by pack and flavor which further helps the company to make an easy forecast.

The other benefit gained from SFA usage would be assisting the sales force to have better customer relationship through its feature of customer data. This data provides updated address of customers, terms of payment, how business transactions are posted and processed to a customer account and whether complete delivery is required. It provides information on the number of customers available in one area by setting it up by route and sales call days.

Previous research findings have indicated that vendors and consultants advocate a number of benefits from SFA implementation, including accelerated cash-flow, shorter sales cycles leading to faster inventory turnover, improved customer relations, improved salesperson productivity, accurate reporting, increased sales revenue, market share growth, higher win rates, reduced cost-of-sales, more closing opportunities and improved profitability (Buttle, 2005). These hard outcomes can be complemented by softer outcomes such as less rework, more timely information, and better quality management reports (Bush et al, 2005). A research undertaken by Murat Serdaroglu suggests that the benefits of SFA appeal to its differing stakeholders; for salespeople it offers shorter sales cycles, more closing opportunities and higher win rates; for sales managers it provides improved salesperson productivity, improved customer relations, accurate reporting and reduced cost-of-sales; while for senior management it contributes accelerated cash flow, increased sales revenue, market share growth and improved profitability (Serdaroglu, 2009).

Research also suggests that efficiency gains are a primary motivation for investing in SFA. Erffmeyer and Johnson (2001) interviewed informants at 40 US manufacturers and service firms to discover their motivations for implementing SFA. The primary motivation was improved efficiency. Harris and Pike (1996) reported that greater operational flexibility, better sales management, enhanced customer support, higher sales force productivity, superior customer account management and improved communications between headquarters and the field were expected outcomes from SFA implementations. Ingram et al. (2002) agree that many companies are turning to SFA to help them manage their customer relationships more efficiently.

One of the early studies was conducted by Cronin and Davenport (1990), who were commissioned to conduct a before-and-after study to measure the benefits of SFA implementation in a single manufacturing company. They found that a number of hard and soft outcomes were achieved. The harder outcomes were enhanced quality of customer communications, better time management and improved knowledge management. Softer outcomes were classified as structural (rationalization of order processing, development of a ‘virtual office’ held on laptops), motivational (lower sales force attrition, improved image, better stress control) and cultural (the creation of an extended ‘invisible college’ of salespeople).

Ahearne and Schillewaert (2001) also found that use of SFA was associated with improvements in sales representative's performance, as well as selling skills and knowledge. They found positive correlations between SFA implementation and sales representative's market knowledge, technical knowledge, targeting skills, adaptive selling and call productivity.

An Important trend in business – to – business marketing is the shift toward enhancing customer relationship and productivity through the adoption of CRM and SFA tools. The success of a firm's relationship – building strategy depends a great deal on the behavior of its sales people (Weitz & Bradford, 1999). In fact, Weitz & Bradford (1999) discussed the need for relationship marketing approach for personal selling, whereby "selling activities are directed towards building partnerships with key business – to – business customers. This approach is labeled relationship selling. An emergent tool to enhance relationship selling is SFA systems. By improving the quality and speed information flow among the sales force, customer and organization, SFA tools can support and enhance relationship selling (Speir& Venkantesh, 2002)

For example, in the mid-1990s, shipping firms experienced poor distribution of sales related information, inconsistent sales practices, and poor communication between customers and internal marketing groups. Sales managers were often forced to rely on the sales force to get information due to the lack of information sharing (Fillon, 1995). In an attempt to overcome these problems these firms implemented SFA tools that allowed the company to increase information flow, track shipment information and assist sales managers to access critical customer information from any crucial customer information from any location. Firms experienced greater efficiency / effectiveness via SFA, as their sales force was able to spend 30% more time with customers (Fillon, 1995)

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The major purpose of this paper is to investigate and address the relationship between SFA usage and job performance. It investigates the effect of technology usage of SFA on the job performance of sales people at EABSC and examines whether factors such as years of experience, level of education (whether the CSR has a degree or diploma), sex of the CSR, level of salary can be taken as other variables affecting the performance of the company sales representatives at EABSC. This study is suggestive of the statistically significant and positive relationship between SFA technology usage and salesperson performance; it continues to show this same relationship for the other factors such as salary and level of education. Though it shows a positive inclination, the level of experience of the sales people doesn't have a statistically significant positive effect on average daily sales volume.

This study provides a conclusive explanation of the relationship between information technology and salesperson performance at the level of the individual salesperson. In addition, the data find support for the fact the information technology helps salespeople to work smarter. It seems that relying on an array of information technology tools, prompts salespeople to engage in more thorough planning behaviors and enhance their customer relationship management.

This study helps executives in improve their learning about why to adopt the SFA systems in order to gain from the benefits of improving higher levels of performance. In this way, they can increase their productivity to achieve the overall goals of organization.

Perhaps the single most important limitation of this study is the single – company frame. It would be interesting to investigate the relationship between Information technology and sales person performance in other sales situations and industries to determine generality. Hence future research should investigate the generality of the findings through testing these research questions with independent samples from variety of sales situations.

5.2 Recommendations

Understanding how technology influences organizational efficiency and effectiveness should be a research priority in today's technology-intensive world (Raman et al. 2006). Such an understanding can help organizations gain the competitive advantage they seek through their technology investments.

- Based on the findings of this study SFA brings about an increase in the daily average sales volume performance of the sales people at EABSC, thus it is recommended that the firm continue on investing significant sums in SFA technologies with the goal of improving the performance of their sales forces. However, as computers are nowadays widely available at increasingly lower prices, unless they are effectively utilized in the organization, the mere investment on technology does not represent a source of absolute competitive advantage anymore (Carr, 2003). Therefore, it is recommended that investment in SFA technology in firms should be accompanied with training and user support system to have the sales people effectively utilize them.

- The results indicates that the sales people with higher level of education, salary and years of experience show better performance, thus it is recommended that EABSC should invest more on providing its sales people with the needed level of education, salary increment and employee retention plan with the aim of motivating the sales people to increase their performance and benefit from the profits of higher sales volume. Moreover as the relationship between the sex of the CSRs and their performance hasn’t showed a major significance, it is recommended that EABSC gives equal chance for both its female and male sales people in the hiring process.

- In order to determine generality, future studies should investigate wider ranges of factors on the job performance of the company sales representatives while examining the generality of the findings through testing the variables with independent samples from variety of sales situations. The management of EABSC should do future studies to develop strategies that can create suitable organizational mechanisms to maximize the strategic advantages of the implemented SFA system.

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