

# **ST. MARY'S UNIVERSTIY**

# SCHOOL OF GRADUATE STUDIES

# **MBA PROGRAM**

# THE EFFECT OF SALES FORCE AUTOMATION ON SALES PERFORMANCE: THE CASE OF UNITED BEVERAGE SHARE COMPANY

BY

# **TESSEMA TAYE FARIS**

June, 2021

**ADDIS ABABA, ETHIOPIA** 

# THE EFFECT OF SALES FORCE AUTOMATION ON SALES PERFORMANCE: THE CASE OF UNITED BEVERAGE SHARE COMPANY

BY

# **TESSEMA TAYE FARIS**

# A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (MBA)

June 2021

**ADDIS ABEBA, ETHIOPIA** 

# SAINT MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

# THE EFFECT OF SALES FORCE AUTOMATION ON SALES PERFORMANCE: THE CASE OF UNITED BEVERAGE SHARE COMPANY

# **BY: TESSEMA TAYE FARIS**

# ENROLMENT No: SGS/0195/2011A

# **APPROVED BY BOARD OF EXAMINERS**

Dean, Graduate Studies	.Signature
Advisor	Signature
	5
External Examiner	.Signature
	2
Internal Examiner	. Signature

#### DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Dr. Yirgalem Tadele. 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

June, 2021

# **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

June, 2021

# ACKNOWLEDGEMENTS

This thesis report would not have been probable without the guidance and the help of numerous individuals who in one way or another subsidized and extended their appreciated assistance in its preparation.

First, I would like to thank the almighty GOD who has led the way for me to achieve this level of education and for the successful completion of my thesis.

I am highly thankful to my advisor, Dr. Yirgalem Gerba; without his encouragement, insight, guidance and professional expertise, the completion of this work would not have been possible.

Also, I thank my colleagues for their support and advice. My work would not have been possible without their help. I would also like to thank my friend Sahilu he is always been supportive and encouraging to me with his professional advice. Finally, my deepest thanks and appreciation to my wife Victoria Endale, for being understanding, having patience, kind, and giving full and moral support up to this stage. Thanks for your continuous encouragement and believing in me.

ACKNOWLEDGEMENTS	i
Table of Contents	ii
List of Tables	v
List of Figures	vi
LIST OF ABBREVIATIONS AND ACRONYMS	vii
Abstract	viii
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the study	1
1.2 Statement of the Problem	2
1.3 Research Questions	4
1.4 Research Objectives	4
1.4.1. General Objective	4
1.4.2. Specific objectives	4
1.5 Research Hypotheses	5
1.6 Significance of the Study	5
1.7 Limitation of the study	6
1.8 Scope of the Study	6
CHAPTER TWO: LITERATURE REVIEW	7
2.1. The Theoretical Literature	7
2.1.1 Concept of Sales Force Automation	7
2.1.1.1 Sales Performance	8
2.1.1.2 Benefits of using SFA	10
2.1.1.3 Improved Salesperson Efficiency and Productivity	
2.1.1.4 Improved Customer Relationship	

# **Table of Contents**

2.1.1.6 Perceived Usefulness and Sales Performance	
2.1.1.7 Perceived Ease-of-Use and Sales Performance	
2.1.1.8 SFA Systems Control and Sales Performance	13
2.1.1.9 Sales Force Automation and Sales Performance	14
2.1.2.10 Computer Self-Efficacy and Sales Performance	16
2.1.2. Performance measurement and Key Performance Indicators	17
2.1.3. KPI for Sales Force Activities	
2.1.4. Key Performance Measurement Indicators through SFA at UB	
2.1.5. Theoretical Framework influencing SFA Technology usage	
2.1.5.1. Critical Success Factors Theory	19
2.1.5.2. Theory of Reasoned Action (TRA)	19
2.1.5.3. The DeLone-McLean Model for Information System Success	
2.1.5.4. System-to-Value Chain Model	
2.1.5.5. Empirical Review of the study	
2.2. Conceptual Framework of the study	
CHAPTER THREE: RESEARCH METHODOLOGY	
3.1 Introduction	
3.2 Research Design and approach	
3.3 The Research Method	
3.3.1 Population of the study	
3.3.2 Procedure for Data Collection	
3.3.3 Method of data analysis	
3.4 Validity and Reliability Test	30
3.4.1. Validity Test	30
3.4.2. Reliability Test	

CHAPTER FOUR: RESULTS AND DISCUSSIONS	32
4.1. Introduction	32
4.1.1. Suitability of the Data	32
4.2. Descriptive statistics (Descriptive Analysis)	32
4.2.1.1. Average Daily Sales by User of SFA	36
4.3. Correlation and Multiple regression analysis (Inferential Analysis)	38
4.3.1. Correlation Analysis	39
4.3.1.1. Correlation Analysis between SFA usage and Average Daily Sales	39
4.3.2.2. Correlation Analysis between Perceived Ease of Use of SFA System and	
Average Daily Sales	40
4.3.3.3. Correlation Analysis between experience and Average Daily Sales	42
4.3.1.3. Correlation Analysis between education level and sales performance	42
4.3.2. Multiple Regression Analysis	43
4.3.2.1. Assumption 1- Normality test	44
4.3.2.2. Assumption 2- Multicollinearity	44
4.3.2.3. Assumption 3- Homoscedasticity (equal variance)	46
4.3.2.4. Regression Analysis Results	47
4.3. Discussion	51
CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS	53
5.1 Conclusion	53
5.2 Recommendations	54
Reference	56

# List of Tables

Table 1: Variables used in the analysis	32
Table 2: Summary Statistics of the variables used (N=80)	36
Table 3: Correlation of average daily sales of the CSRs by sex	43
Table 4: simple correlation of the variables used in the study	45
Table 5: Variable Inflation Factor (VIF)	53
Table 6 simple pair wise correlation of the variables used in the study	53
Table 7: Table 7: Test of heteroskedasticity	.54
Table 8: Regression result	. 54
Table 9: Regression result (using robust option)	55

# List of Figures

Figure 1: Proposed theoretical framework of the study	28
Figure 2: SFA usage of the CSR	37
Figure 3: Correlation of average daily sales of the CSRs by sex	.38
Figure 4: Sex of the CSRs	39
Figure 5: Average daily sale by user of SFA	40
Figure 6: Average daily sale by education level	41
Figure 7: correlation between average daily sales and salary	43

# LIST OF ABBREVIATIONS AND ACRONYMS

PU: Perceived Usefulness KPI: Key Performance Indicator CSR: Company Sales Representative **UBSC: United Beverage Share Company CRM:** Customer Relationship Management IS: Information System IT: Information Technology ETC: Ethiopian Telecommunication Corporation ICT: Information Communication Technology PM: Performance Management SFA: Sales Force Automation PEU: perceived Ease of Use OLS: Ordinary Least Square TRA: Theory of Reasoned Action TAM: Technology Acceptance Model **VIF: Variable Inflation Factor** 

#### Abstract

The purpose of this research is to investigate the effect of technology usage of SFA on the sales performance of sales people; the study also considered other factors such as Perceived ease of use SFA system, experience and education as determinants of the sales performance of the company sales representatives at united beverage Share Company. The objectives of this study was to establish how SFA usage of sales people, as Perceived ease of use SFA system, Experience of sales people and Educations of sales representative establish the moderating influence on sales performance. The research design of the study was 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 80 salespersons in United Beverage Share Company. The key performance taken into consideration was to measure the performance of the sales representative's usage of SFA. Based on the findings, the result showed that those CSRs using SFA scored better sales volume. Factors such as Perceived ease of use SFA system, education, and Experience of sales people showed a positive relationship with sales people performance. This study recommended SFA usage brings better sales performance and the management of united beverage investment in SFA technology accompanied with training and user support system to have the sales people effectively utilize them.

Key words: Sales Force Automation (SFA); Sales performance; Sales people; SFA usag

# **CHAPTER ONE: INTRODUCTION**

### 1.1 Background of the study

The study was conducted mainly to investigate the effect of Sales Force Automation (SFA) usage on sales performance in the United Beverage 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)

Twenty first century is the origin of modern-day of sales and marketing (Feeny, 1998). Business persons established advanced techniques of operating sales and subsequent fresh procedures to support the sales and matched with mass production. The quantity of produced goods and service demand is linearly increased due to population size and other factors. As a result, the competition of enterprises that manufactured homogenous products and services is becoming aggressive. This contributes to the development of sales and distribution field of study and makes open for innovative solutions.

In Ethiopia, there are more than ten beer brands are produced locally. To be a winner in 1the market, the challenge becomes very aggressive to the sales and distribution division due to the competitors who produced same products. 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 the above pressures are business drivers for companies to adopt new technologies promising better performance (Yonas Kahsey, 2015). There are various strategically techniques in the sales to be involved in the market share and win through time. 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 sales performance of sales people by the claims made by vendors and consultants of the number of benefits from SFA implementation without having.

The objective of this research is to understand the effect of sales force automation on the sales performance united beverage share company sales representatives and provide recommendations for the company of integrating SFA if it is proven to be effective. In united beverage the sales performance of a sales representatives measured by inputs and outputs KPIs called PFPE (Pay for perfect execution)

Churchill et al. (2005) conducted a meta-analysis and highlighted six major classes of the elements of sales performance. They include aptitude, skill, organizational factors, personal factors, motivation and role variables. The least associated was organizational/environmental factors while the most associated was role variables (Churchil, 1985).

In this study, sales force performance will be measured in relation to the use of SFA which is determined by usage, net benefits as key indicators on sales performance. Use is calculated by the frequency of visits made to the site as well as the number of executed transactions. The overall benefits are evidenced by cost saving, expanded market share, time saving and incremental sales.

#### **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 United beverage 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 sales performance in the

company; the result of such study would be beneficial as united beverage share company 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 usage 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 achieve better sales volume in United beverage share company.

# **1.3 Research Questions**

The study sought to answer the following questions:

- 1. What is the effect of SFA usage on the sales performance of Company Sales Representatives at United Beverage share company?
- 2. To what extent does perceived ease of use of SFA system influence sales performance?
- 3. What is the effect of SFA usage experience on the sales performance of the company sales representatives at United Beverage share company?
- 4. What is the relationship between level of education and sales performance of the Company sales representative at united beverage share company?

# **1.4 Research Objectives**

### **1.4.1. General Objective**

The objective of this study was to examine the effect of SFA system usage on sales performance in united beverage Share Company.

### **1.4.2.** Specific objectives

- 1. Investigates the effect of technology usage of SFA on the sales performance of sales people at United Beverage
- To determine the extent to which perceived ease of use of SFA system influence sales performance

- 3. Examines the effect of SFA usage experience on the sales performance of the company sales representatives at United Beverage.
- 4. Studies the effect of level of education on the sales performance of the company sales representatives at United Beverage.

## **1.5 Research Hypotheses**

- 1. H2 :2 There is a positive linear relationship between SFA usage by the sales people and sales performance.
- 2. H1:1 There is a positive linear relationship between perceived ease of use of SFA system has effect on sales performance
- 3. H3: There is a positive linear relationship between SFA usage experience of the sales people and sales performance
- 4. H3:3There is a positive linear relationship between Education level of salespeople on sales performance

## 1.6 Significance of the Study

Bearing in mind that the importance of implementing SFA systems The study will expect to offer useful direction to sales and marketing specialists that contribute to the overall productivity of an organization and the existing burdens that are leading them to fail; the findings of this study will have multiple valuable benefits in proposing some possible recommendations to the problems in the study area. This research will also helpful to the management of United Beverage Share Company 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. Moreover, the study will provide an opportunity for other researchers to apply the theoretical knowledge and sales performance.

The study will 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 if the study can meet all its objective accordingly.

## 1.7 Limitation of the study

This study examined the relationship among character traits, sales people towards sale force automation. Moreover, it was also not known how and whether personality traits change over time and affect sales peoples 'visit in sales activities inversely.

The research paper experience a few constraints in the area of the problem in the Ethiopian business environment such as ,Due to skilled human resource shortage and financial limitation, the data collection and entry tasks were performed by the researcher himself. This brought time resource scarcity, The information and operating skill limitation of the researcher may hide some realities or bring misinterpretations to the overall research results and 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.

### **1.8 Scope of the Study**

The study examined the effect of sales force automation (SFA) on the performance of the sales only in United Beverage share company.

Due to time, financial resource, geographical location, limited communication means and the relatively young age of the implementation of SFA system in united beverage Share Company the data gathered is of short term and does not allow to trend analysis. The paper was not addressed issues related to other factors affecting SFA implementation nor will it try to elaborate these variables with other questions.

Additional variables such Perceived ease of use SFA, education, experience of SFA users and relationship of SFA system will also seem to have an effect of the sales performance as well. Therefore, it will be best if future studies will also investigate wider rages of factors affecting sales performances in order to have a more convincing result.

#### **CHAPTER TWO: LITERATURE REVIEW**

Literature review chapter summarizes the background and context for the research problem.

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 United Beverage Share Company. In addition to explanation 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 incorporated mostly journals, Open University MBA study materials and management research websites, where the works of authors on the research subject were referenced.

#### **2.1.** The Theoretical Literature

The theoretical literature of 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).

#### **2.1.1 Concept of Sales Force Automation**

Sales Force Automation (SFA) can essentially be described as the application of information technology to support salespeople in their selling and/or administrative activities (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 beneficial relationships 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).

SFA can fundamentally be defined as the use or presentation of technology to enable Salesforce in their marketing / selling and administrative undertakings (Morgan and Inks 2011). SFA systems employ computerized telecommunications technology, hardware and software to capture, analyze, access and interchange great value data for the purposes of increasing sales people's efficiency and usefulness (Jayachandran et al. 2005). This data normally comprises transactional and reporting information around clients, competitor profiles, product libraries, market data, pricing schedules and other data (Buttle et al. 2006). With rich data as such one can back Salesforce when increasing long-term reciprocally constructive associations with clients.

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).

#### **2.1.1.1 Sales Performance**

Selling comprises of an extensive amount of monotonous day to day activities, such as ordering promotional material, submitting call reports and accounting for expenses, which is generally done or most of the time executed by the Salesforce itself. Such responsibilities are compulsory for proper monitoring and directing of Salesforce, bearing in mind the fact that most Salesforce work outside office and from their homes. SFA technologies do automate a great deal of these clerical tasks and thus decrease the time Salesforce use on administrative undertakings (Buehrer et al., 2005; Moriarty and Swartz, 1989). In detail, such effectiveness has been the unequivocal drive of majority of sales automation software applications (Hunter and Perreault, 2006). Furthermore, SFA can back team-selling by harmonizing and coordinating team actions (Widmier et al., 2002). SFA implements enable information flow and increase communication of a salesforce (Brown and Jones, 2005) and also help Salesforce turn out to be more effective at coordinating team activities and setting business meetings.

Operative salesforce assisted by technology ought in exchange to grow sales. SFA assists Salesforce advance their practical familiarity in respect to their brands and their capability to compare and evaluate their product's position against competitor brands (Ahearne et al. 2007). While Salesforce have superior discernment into their trades and brands, they are also in an improved point to prove higher levels of awareness and proficiency.

Going on the other hand, teaching and improvement constitutes a large part of the salesman work (Ahearne et al. 2007). A Salesforce devotes considerable volume of his time at teaching courses to advance his or her selling skills and tactics. Contemporary technologies such as cloud computing, or the SFA in particular, make it probable to share at internet training sittings at one's own suitability and at nearly no charge. Collectively, SFA can simplify a Salesforce's clerical problem and expedite well effective internal procedures of a sales team. Consequently, one of the main assurances of SFA technology is the time freed for individual sales job by automating monotonous tasks and day to day activities (Ahearne et al. 2008; Honeycutt et al. Going on the other hand, teaching and improvement constitutes a large part of the salesman work (Ahearne et al. 2007). A Salesforce devotes considerable volume of his time at teaching courses to advance his or her selling skills and tactics. Contemporary technologies such as cloud computing, or the SFA in particular, make it probable to share at internet training sittings at one's own suitability and at nearly no charge. Collectively, SFA can simplify a Salesforce's clerical problem and expedite well effective internal procedures of a sales team. Consequently, one of the main assurances of SFA technology is the time freed for individual sales job by automating monotonous tasks and day to day activities (Ahearne et al. 2008; Honeycutt et al. 2005). Through decreasing, the total downtime in a Salesforce's typical day and enhancing call programs; SFA supports Salesforce appropriate more sales calls into a given time frame (Ahearne et al. 2005). Salesforce are conscious that the added sales calls they can do, the higher the prospect to accomplish the sales targets in that case (Ahearne et al. 2007). Undeniably, no matter how stylish technological implements get, customer-vendor interactions still rely greatly on aggregate face-to-face visits, relationship building and problem resolving. In this study it is derived from the literature review that Salesforce performance is evaluated in terms of use (number of site visits and number of transactions executed), user satisfaction (repeat purchases and repeat visits) and net benefits (cost savings, expanded markets, incremental additional sales and time savings) as key

indicators of performance (Goldenberg 2006; Moncrief et al. 1991; Moriarty and Swartz 1989; Rivers and Dart 2009).

### 2.1.1.2 Benefits of using SFA

SFA technology promises many benefits to sales management and sales people. By increasing available selling time and enhancing communication and providing faster access to relevant and timely information, SFA can increase the overall quality of the sales effort (Rivers and Dart 1999). The expected end-effect is to facilitate a greater understanding of the selling situation, to deliver superior customer value and to forge close mutually beneficial relationships needed to develop market relating ability 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).

### 2.1.1.3 Improved Salesperson Efficiency and Productivity

One of the most important reasons companies invest in SFA is to increase the 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.

### 2.1.1.4 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).

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

Researchers in marketing have demonstrated that authoritative practices influence the discernments and practices of boundary spanners (Singh et al. 2006). The study characterizes encouraging environments as the degree to which a Salesforce trusts that he or she has been given the tools and the outer backing to utilize SFA technology. Spending in facilitating conditions such as help lines, tutorials, training sessions and technical maintenance hints the significance the business intends on SFA technology and bolster Salesforce that by embracing sales technology is valuable (Hunter and Perreault, 2006). As such facilitating conditions allow workers to procure the abilities, they have to keep on being profitable individuals of the association, regardless of the innovation being put in place (Johnson and Bharadwaj 2005; Zablah et al. 2004). In place of these explanations, nearly all forms of dignified, Company-established SFA backing is always seen as a necessary component for the actual application of SFA (Pullig et al., 2002; Morgan and Inks, 2011).

From a variety of SFA deployment research studies user care has been proven to be a key component for constant use of SFA-technology (Mathieson 1991; Buehrer et al. 2005; Schillewaert et al. 2005; Jones et al. 2002). Nonmonetary costs will be reduced by facilitating

conditions such as the vagueness and strain connected with the deployment of a new system by facilitation of the learning progression (Rangarajan et al. 2005, Parthasarathy and Sohi 2007). Sales force that get sufficient preparing and backing can apply data innovation all the more adequately to particular work issues and along these lines accomplish better execution (Ahearne et al. 2005). This thus enables improved potentials of the technology's effectiveness by workers (Landry et al. 2005; Pullig et al. 2002). Moreover, supposed level of convenience of care services is confidently linked to (PEU) perceived ease of use (Robinson et al. 2005a). Through probing for assistance with the concrete use of technology, from companies with acceptable user help, workers become more skilled users and diminish the compulsory effort to use technology for sales (Schillewaert et al. 2005).

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

As indicated by the anticipation hypothesis (Ahearne et al., 2004), inside hierarchical settings, individuals assess the outcomes of their conduct as far as potential prizes, and they construct their decision of conduct in light of the attractive quality of the prizes. Salesforce commonly have a reasonable volume of independence in execution of their businesses and are under continuous pressure to accomplish as their assessment and reward are frequently and directly related to their performance. Subsequently, —Salesforce will choose to use or not use a technology tool to the extent they believe it will help them accomplish their job-related goals, enhance their performance, and achieve desired rewards! (Robinson et al. 2005b). Selling field research, perceived usefulness of SFA technology is validated as a platform of SFA-use in many instances (Avlonitis and Panagopoulos 2005; Rangarajan et al. 2005; Robinson et al. 2005a; Schillewaert et al. 2005). It is argued in this study that employing SFA to enable client relationships and in-house harmonization jobs should propel Salesforce performance. If Salesforce approve of this proposition, they definitely should be persuaded to use SFA in both situations.

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

Workers' opinions of a technology's user-friendliness determine their purposes to embrace or adopt that technology (Saga and Zmud, 2004). Innovation theory proposes that the level that an advancement is seen as moderately hard to comprehend and utilize would influence the rate of its selection (Rogers, 2005).

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

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

#### **2.1.1.8 SFA Systems Control and Sales Performance**

Though the aforesaid variables can be said to be authenticated already as determinants of SFA practice in the present works of research, this study identifies *supervisory SFA-control* 

(Shervani and Challagalla, 2006) as an imperative though not verified precursor grounded on the understandings of this qualitative work. The influence of sales heads'management alignment on SFA acceptance cannot be said to be tested yet: Organization emphasizes on prospects on Sales force that are subjective due to the presented technology. Such study should clearly and prudently contemplate the role of technology in observing performance, offering strategic direction, crucial tasks functions tackled by head of sales (Tanner & Shipp, 2005).

Deriving from several works of research supervisor response, conduct and control orientations have been revealed as straight outlooks, learnings and conduct of Sales force. Head of sales appraise Sales force mainly on outputs, but also on approaches, their marketing practices and also managerial standards and ethos (Anderson and Oliver 1987; Jaworski 1998; Tyagi 1982). This conduct of control systems sanctions leaders with a pronounced deal of control over the business of selling process (Anderson and Oliver 1987). Subsequently, the study defines supervisor-SFA-control to be the degree in which a leader (1) stipulates the undertakings he or she wants Salesforce to execute by use of the SFA system, (2) Manages to ensure if they are carrying out those undertakings, and (3) apprises them on the basis of if they are gathering his or her targets or expectations.

#### **2.1.1.9 Sales Force Automation and Sales Performance**

Sales associations expect that business power ventures utilization of SFA advancements will prompt expanded viability and proficiency in overseeing different offering undertakings, which ought to consequently mean better deals execution (Jones et al. 2002; Widmier et al. 2002). Stable with business desires, leaders and sales managers belief that industry revolution devices will be appreciated in the performance of their selling jobs (Buehrer et al. 2005; Engle and Barnes 2010).

Be that as it may, neither all duties are similarly vital in a Sales force's employment, nor do they similarly affect Sales force execution (Tripoli, 2008). Sales force need to convey their endeavors shrewdly with a specific end goal to accomplish results. The SFA effect on accomplishment will be contingent on upon the attainment and magnitude of the undertakings and procedures it bolsters (Barua et al. 2005). Hence, the study proposes in the theoretical framework that SFA influences Sales force projects performance in a two-pronged

contrivance. It is expected that the SFA-use magnitudes will have characteristic effects on Sales results.

SFA technologies support sales accomplishments openly facing the client and can support Salesforce manage their client dealings alongside the sales phase, this is from client acquisition to upkeep, proficiently and efficiently. Foremost, SFA can be a precisely supportive tool to apprehend client requirements and sales prospects. Because of its stockpiling, recovery, and system limits, IT can possibly empower and encourage data procurement, spread, and use (Huber, 1991). Today, Sales force has broad access to information (such as past shipments to wholesalers, retail location deals, shopper purchasing propensities, and item execution qualities). Through the support of SFA systems, Salesforce will translate such obtainable data into great useful information about a bigger number of clients, items and contenders (Tanner et al. 2005). Case in point, a business delegate can seek internet information or the web based data for client and organization-based data, hence enhancing his or her comprehension of desired client wants.

Subsequently, SFA will support Salesforce present to the client with precise judgement. Planning and directing apparatuses empower deals delegates to viably deal with their time, set up arrangements precisely, and take part in week after week arranging. Improved planning helps Salesforce assign his stretch across customers optimally and safeguard that every customer obtains the required Salesforce consideration (Ahearne et al. 2005). More to this, technology can show a momentous part in closing a sales deal. Salesforce are generally commended to gather information about the client to support adaptation to a particular sales environment (Spiro and Weitz, 1990) also to design for the communications with the consumer (Sujan et al. 2004).

The SFA databases and presentations regularly have abilities that permit deals delegates to preserve point by point registers about customers and historical deals and sales. Using client buy account and inclinations, Salesforce can modify expositions to adjust to particular purchasing wants and create superior personalized sales meetings (Ahearne et al. 2008). Revising the customer past way beforehand the real up close and personal deals call improves a Salesforce's capacity to choose the proper deals technique and to figure out which items to underline amid the business call taking into account the client's beforehand expressed

inclinations (Hunter and Perreault, 2006). This material evidence can in turn be used to mounting of suggestions and propositions that poise deal targets with client goals (Hunter and Perreault, 2007). Sales statement that business innovation makes transaction calls more professionals (Marshall et al. 2009). In adding to backing the consumer connection lifespan, SFA systems do similarly propel the proficiency of monotonous clerical jobs and advance transactions in the business. It is expected that deploying SFA to execute the business oriented activities will have an influence on Salesforce performance,

In adding to backing the consumer connection lifespan, SFA systems do similarly propel the proficiency of monotonous clerical jobs and advance transactions in the business. It is expected that deploying SFA to execute the business oriented activities will have an influence on Salesforce performance, however not in a direct express way.

# 2.1.2.10 Computer Self-Efficacy and Sales Performance

Compeau and Higgins (2005) describe computer self-efficacy as —an individual 's perceptions of his/her ability to use computer (software) in the accomplishment of a task. Venkatesh and Davis (2006) classify computer self-efficacy as an precursor of perceived ease of use (PEU), with the justification that a individual uses his or her intellect of overall computer aptitudes as an anchor to evaluate the viability of a computer system, even though the user has slight or no understanding about the ease of use of a particular system. Normally, minor scores on computer self-efficacy lead to more undesirable personal opinions about the technology as a subject matter (Venkatesh, 2010).

Merely a minor fraction of Salesforce contemplates of themselves as knowledgeable technology experts, and the huge mainstream of workers has little or no skill (Petersen, 2007). Resistance of technology is a possible barrier to sales people approval of sales automation (Buehrer et al.2005). If Salesforce senses that they are not proficient of working with an SFA system, their enthusiasm to do so will be significantly be condensed (Morgan and Inks, 2011). Therefore, computer self-efficacy is anticipated to be a key individual strength in clarifying SFA-use comportment (Schillewaert et al. 2005; Speier and Venkatesh, 2002).

#### **2.1.2.** 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 indicators "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.

17

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

# 2.1.3. 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).

# 2.1.4. Key Performance Measurement Indicators through SFA at UB

In United beverage the key performance indicator for the sales team which focuses on a final objective of maximizing sales while generating 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 united beverage takes the average daily sales volume of cases of beer the company sales representatives for each month as their key performance indicator in accordance with their monthly sales target.

# 2.1.5. 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.

#### **2.1.5.1.** Critical Success Factors Theory

This theory originated within the industry of management of data systems. Then was later relocated to the sphere of commercial strategy analysis. There it's employed in alternative ways, such as the various colleges of development that may exist therein space (Jemison, 1981; Grunert, in press; Mintzberg, 1990a). Mostly, one will differentiate between crucial success factors as an industry characteristic, as a designing tool, and as a market narrative. The concept there are a couple of factors that are pivotal for the attainment of the corporate, with which all factors are often determined, as 1st presented by Daniel (1961) then later in the main carefully as with Rockart (1979) Bullen & amp; Rockart, 1981) within the framework of planning management and data systems. Discovering that prime management seldom used management data systems, they reasoned that such systems should be structured consistent with the data desires of the managers, so as to establish leaders' data desires and link them to the management of data system, they invented the word crucial success issue. Crucial success issues are, consistent with Bullen and Rockart," the restricted range of areas during which acceptable outcomes can guarantee productive competitive outputs for the distinct, divisions or business. Crucial success issues are the rare but important areas wherever 'plans should go right' for the business to prosper and for the director's objectives to be accomplished"(Bullen & amp; Rockart, 1981). Rockart's idea of crucial success factors is clearly impressed by the difficulty strategy. The encompassing setting is expected to hold sure elementary needs and restrictions, dangers and prospects, so that companies should support their approach, abilities and means, so as to realize victory. Not any business, consistent with Rockart, will start to grow a method, for it to fail to produce satisfactory consideration regarding the primary elements that underlie achievement within the trade. This offers the principle for creating that the idea of management data systems.

#### 2.1.5.2. Theory of Reasoned Action (TRA)

Fishbein and Ajzen"s (1980) Theory of Reasoned Action (TRA) is an especially wellresearched 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 persons performance of a specified behavior is determined by his or her behavioral intention (BI) to perform the behavior, which is jointly determined by the persons 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 only indirectly by influencing Attitude, Subjective Norm or their relative weights.

#### 2.1.5.3. The DeLone-McLean Model for Information System Success

The DeLone-McLean model for IS success, asserts that information quality and system quality, discretely and conjointly, controls user satisfaction and usage. It also hypothesizes use and user satisfaction to be mutually symbiotic, and supposes them to be straight underlying factors of specific influence, which should also have some managerial influence.

DeLone and McLean (2002) illustrate system quality as preferred features of the information system itself, and information quality as preferred features of the information byproduct. Extra tangible, they combine four scales as depicted by Bailey-Pearson (1983) as instrument of system quality (integration of the system, convenience of access, response time and flexibility of the system) and nine scales into information quality (relevance, precision, currency, accuracy, timeliness, reliability, conciseness, format and completeness).

By highlighting three potential meanings, Seddon (2007) claims that the DeLone-McLean model is vague in the sense that one element of it, use, has. These criticisms of implication two and implication three denote to the discrepancy between a variance ideal and a procedure ideal (Mohr, 1982). Short of going into the particulars of this discrepancy, it is clear that even

though IS use as a procedure is supposed to top to specific influence and structural influence, it is not essential to repute it as a distinct event to be quantified (use vs. non-use), as inferred by procedure models (Mohr, 1982). In this study use is interpreted as the amount of use, which may be measured as one degree of IS success.

DeLone and McLean (2002) describe specific influence as "an indication that an information system has given a user a better understanding of the decision context, has improved his or her decision making productivity, has produced a change in user activity, or has changed the decision maker's perception of the importance or usefulness of the information system". Seddon (2007) redefines specific influence to mean paybacks amassing to individuals from usage.

However though equally DeLone and McLean (2002) and Seddon (2007) tacitly take as fact that specific influence is of subsidy to users.

### 2.1.5.4. System-to-Value Chain Model

To explain how IT systems create value Torkzadeh (1991) propose a System-to-Value Chain. The system-to-value chain entails of numerous system success concepts which includes attitudes, beliefs, behavior on (system-usage) and the collective and economic influences of technology. Conferring to this conceptualization, system-use is a fundamental concept that associates the underlying factors of system quality with the social and economic influences of technology. This study adopts, System-to-Value Chain'by Doll and DeLone and McLean IS Success Model. As Torkzadeh (1991) propose a \_System-to-Value Chain'to clarify how IT systems create value. Just like system-to-value chain consists of success concepts such as opinions, outlooks, conduct on system-use and the social and economic influences information Technology. Similar methodology of the system-to-value chain is advocated in the DeLone and McLean (2003) from their famous quoted \_IS Success Model '. The modernized concept offers an all-inclusive context to evaluate the support of an information system in a structural set up consequences.

#### **2.1.5.5. 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.

(Gitau G. et al 2017) examined the link between sales force automation and sales performance they g found that SFA technologies enable sales activities directly facing the customer and can help sales force manage their customer relationship along the sales cycle ,from customer acquisition to maintain ace ,efficiently and effectively First ,SFA can be a very helpful tool to understand customer needs and sales opportunities they find out that SFA has led to faster access to timely information ,SFA has lead to improved ability to deliver better value to the customers through information sharing across sales ,marketing ,and customer service employees ,SFA has lead to automated sales tasks ,the preparation for sales activities such as proposal or order forms takes less time ,SFA has lead to improved contact management capabilities ,SFA has lead to increased productivity and quality selling time ,SFA has lead to increased sales performance.

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).

The benefit of SFA seem to have translated into increased performance for many firms for example, a report from managing office Technology (1997) indicated that sales representatives can increase their revenue an average of 20 to 30 percent with sales automation, they can gain two full days of selling time per month, and they can boost productivity by ten percent.

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.

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 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 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.

## 2.2. Conceptual Framework of the study

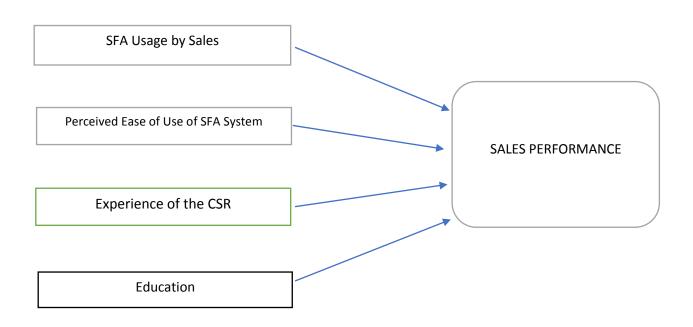
The study will investigate the relationship between the sales force automation system highlighted as the independent variables and sales performance depicted as the dependent variable

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 conceptual framework as illustrated in figures describe the underlying relationship.

# Figure 1: Proposed theoretical framework of the study

# **Independent Variables**

# **Dependent Variable**



# Source: Own cause and effect diagram

# **CHAPTER THREE: RESEARCH METHODOLOGY**

## **3.1 Introduction**

This chapter presents the methods and modalities that was used to collect data on the effect of SFA projects on the performance of the sales force in united beverage share company. It describes the type of research design that will used, the population of the research study, target population, sample size, sampling design of the research study. It further describes the data collection instruments used, procedures used in collecting the research data, research analysis and presentation of the research findings.

## **3.2 Research Design and approach**

Polity and Beck (2003) describe a research design as the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process.

The study used descriptive and explanatory research design method which contained quantitative approach that was chosen to retrieve or used to come across the main objective of the study and go through all research questions and hypothesis.

The quantitative research design method is conducted by using secondary data which is collected from the data base of united beverage Share Company. The data was chosen because it provided information regarding all variables used for the study. Quantitative research deals with numerical date or data that can be transformed in to numbers. The qualitative method presents a descriptive and non -numerical approach to collect the information in order to present understanding of the phenomenon (Bruce's L Berg, 2004).

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.

## **3.3 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 I was tried to see the sampling techniques & measurement, data collection procedures, techniques and instruments, data analysis techniques and the empirical and estimation model.

## **3.3.1 Population of the study**

The area of the study focuses on the effect of SFA usage on sales performance, the population of the study will consist of employees of united beverage share company sales and marketing department employees who are working in the position of sales.

the data base provides complete information for 80 company sales representatives and distributor sales representative. Thus, the sample size used in this study is 80. While conducting this research, all the population of 80 mentioned above will be taken into consideration, as the population size is not big and it is manageable to get all the information.

The researcher will choose to study the entire population because the size of the population in which the researcher is interested are typically very small, if the population is small, a census may be preferable, and this is because in order to produce estimates with small sampling error it may be necessary to sample a large fraction of the population.

## **3.3.2 Procedure for Data Collection**

The primary goal of this study was to examine the relationship between SFA technology usage (independent variable) and sales performance of sales people (dependent variable).

The secondary data was collected from the data base of the united beverage Share Company. It was included information that was relevant to the study and the data provides information about company sales representatives including among others: their sales volume and usage of SFA, Ease use of SFA, education and experience. The secondary sources of data were retrieved from sales performance of united beverage sales representative based on their sales volume.

## 3.3.3 Method of data analysis

Data analysis is a process of inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-

making. This study was applied the quantitative techniques. The key performance indicator of the sales representative is tracked by his/her contribution towards this goal.

The primary goal of united beverage share 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, in order to test all the hypothesis, the volume of sales of individual sales representative and distributor sales representative is used as a measurement of his/her performance. Once information was gathered from the secondary data with consideration of accuracy and reliability then analysis is made using graphs, tables, figures, percentages, mean and standard deviations.

Table 1:	Variables	used in	the ana	lysis
----------	-----------	---------	---------	-------

Objective	variables		Definition
Investigates the effect of technology usage of SFA on the sales performance of sales people at United Beverage	Dependent	Sales performance	Average daily sales of sales representative
To investigate the influence of SFA system on sales performance	Independent	Perceived ease of use SFA	Alleged simplicity of use is the level to which one thinks that the use of a system could be effort-free.
Studies the effect of level of education on the sales performance of the company sales representatives at United Beverage.	Independent	Education	It is education level of the sales representative dummy variable that takes 1 if the sales representative is BA Degree holder, 0 if he/she is Diploma Holder
Examines the effect of experience on the sales performance of the company sales representatives at United Beverage	Independent	Experience	Experience of the sales representative

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

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

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 Perceived ease of use SFA,

years of experience of the sales representative, education of SFA usage by sales.

 $\alpha$  – Is a constant term that measures the average sales volume of the sales representative who does not use SFA, who has zero years of experience, sales order management of sales representatives and efficiency of sales representative.

Average daily sales volume measures the performance of sales representative.

 $\epsilon$  – 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:

Sales performance =  $\alpha o + \beta ISFAuser + \gamma 2$  Perceived ease of use SFA +  $\gamma IExperience + \gamma 2Education + \epsilon i----- (3)$ 

## 3.4 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.

## 3.4.1. Validity Test

The effect of SFA usage and other explanatory factors affecting sales 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 sales performance; and external validity which shows the generalizability of the relation of the dependent variable (sales performance) and independent variable (SFA usage, experience, sales management, and efficiency) for united beverage Share Company is justified.

# **3.4.2.** Reliability Test

To estimate the reliability of the secondary data the stability, consistency and interpreter reliability of the measure of sales performance of sales people which is the average daily sales of cases of ANBESSA beer will be 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 will have produce the same result will be evaluated. As subsequent review by independent researchers under generally accepted principles agree that the results are the same then the secondary data will be used passes reliability test.

# **CHAPTER FOUR: RESULTS AND DISCUSSIONS**

# 4.1. Introduction

The broad objective of this study was to evaluate the effect of SFA on sales performance in the case of united beverage share company. To achieve this objective, each specific objective was set and corresponding hypotheses formulated. The chapter presents preliminary findings of the study on the basis of which further analyses will be undertaken to test the study hypotheses

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.

# 4.1.1. Suitability of the Data

The study establishes suitability of the data by examining the response rate for the respondents, reliability test, validity test, test of normality, test of regression assumption. The findings are discussed in the subsequent sections.

# 4.2. Descriptive statistics (Descriptive Analysis)

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

Variable	Mean	Standard Deviation	Min	Max
Average daily sales	440.7413	248.0014	32	2219.067
SFA user	0.5	0.5017	0	1
Experience	3.9627	4.5184	0.0657	33.3753
perceived ease of use	1.325	0.2785	1	2.5
Education	0.6197	0.4872	0	1

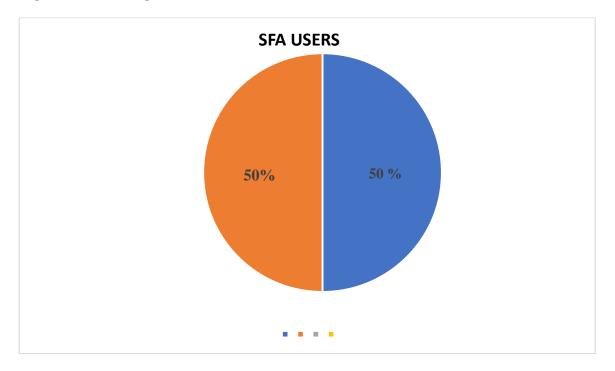
 Table 2: Summary Statistics of the variables used (N=80)

## Source: Researcher's own source, 2021

The above table shows that all 80 Company Sales Representatives (CSR) were observed to test the variables of the research which are average daily sales of the CSR, SFA usage, experience, perceived ease use and education.

According to the **average daily sales** observed the mean of the average daily sales of the 80 company sales representatives is 440.7413 Cases of Anbessa beer.

Figure 2: SFA usage of the CSR



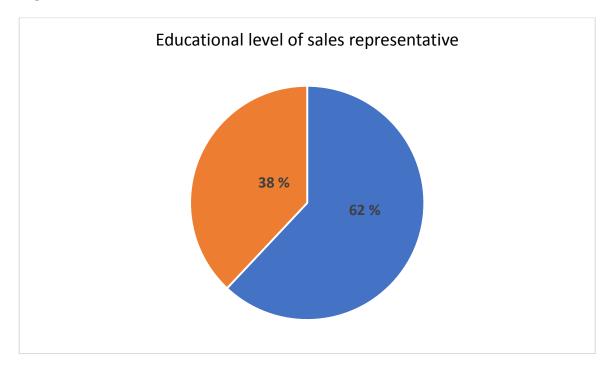
Source: Researcher's own source, 2021

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 80 CSRs 40 use SFA.

The next variable observed is the years of **experience** of the CSRs. The mean of all the CSRs experience observed is 1.567 years working in united Beverage 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.

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, 2021

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

The other variable observed is perceived ease of use of the CSR. Accordingly, the mean of the variable perceived ease 0f use is 1.325 and the standard deviation of the variable is 0.2785 shows that there is 1.0465 variance from the mean.

Next, we were 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

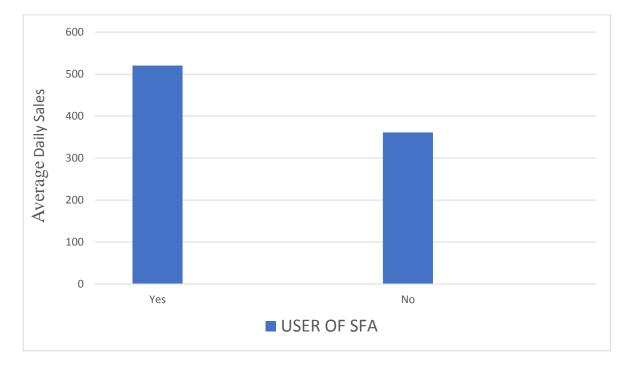


Figure 5: Average daily sale by user of SFA

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 Anbessa Beer 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 Anbessa Beer 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 Anbessa Beer 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.

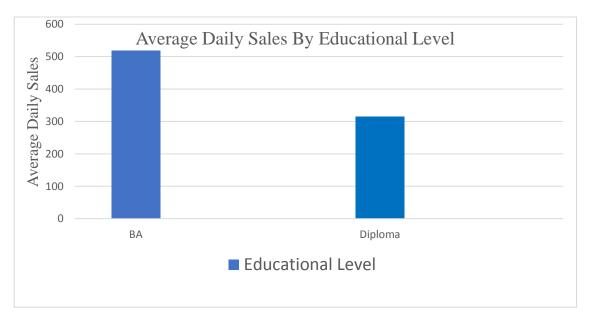
Source- Researcher's own source

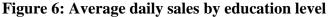
While discussing the above result of SFA improving the performance of the CSRs through increasing their Average Daily sales Volume, we can credit the following factors as being responsible.

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 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.





Source – Researcher's own source, 2021

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 Anbessa Beer Products while the Average Daily Sale of those CSR who have Diploma is 314.5314 crates of Anbessa Beer 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 Anbessa Beer 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.

4.3. Correlation and Multiple regression analysis (Inferential 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

	Average Daily sales	SFA User	Experience	perceived ease of use	Education
Average Daily Sales	1.0000				
SFA User	0.3221	1.0000			
Experience	0.1879	0.1824	1.0000		
Perceived ease of use	0.3161	0.1588	0.1031	1.0000	
Education	0.4001	0.3191	0.2403	0.1755	1.0000

#### Table 4 simple correlation of the variables used in the study

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 sales 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 salespeople and sales 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 salespeople) 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 Perceived Ease of Use of SFA System and Average Daily Sales

The second objective for this study was to determine the extent to which perceived ease of use of SFA system Affects sales performance. Workers' observations of an IT firm accessibility

narrate to their purposes to use that IT system (Saga and Zmud 1994). Invention theory recommends that the amount that an advancement is seen as generally hard to comprehend and utilize would influence the rate of its selection (Rogers 1995). Sales representatives are classified as technophobic worker bunches (Greenberg 2004). As they will evaluate the measure of exertion required to exploit an SFA implement and will possibly cultivate helpful outlooks toward those implements when the output paybacks are not overshadowed by the vital exertion (Robinson et al. 2005b). The CSRs were requested to indicate their level of agreement with the statements relating to perceived ease of use.

# H2: There is a significant positive relationship between Perceived Ease of Use of SFA System and Average Daily Sales on sales performance

The findings revealed that on average the CSRs were convinced that the perceived ease of use of SFA adoption is aimed at influencing their performance in united Beverage. This was especially the case in relation to SFA system being clear and understandable, SFA system is easy to use and getting the SFA system to do what I want it to do is easy, respectively.

The findings seemed to support the argument by Schillewaert et al., (2005) who show that PEU rises acceptance. Rangarajan et al., (2005) experimentally validate that the difficulty of using SFA-system escalates role conflict, which has in turn adverse concerns on sales people effort and SFA-acceptance. It is pointed out three studies show that PEU positively influences approach, which in turn has a substantial influence on purpose of using SFA. It is pointed out three studies show that PEU positively influences approach, which in turn has a substantial influences approach, which in turn has a substantial influence approach.

The findings depict that perceived ease of use would lead to an increase in sales performance by factor of 0.629 with P value of 0.000. At 5% level of significance and 95% level of confidence this is statistically significant as the P-Value is lower than 0.05. The study accepted the alternate hypothesis therefore implying that Perceived ease of use of SFA system has influence on sales performance of SFA system has influence on sales performance. From these statistics, the study concludes that there is significant positive relationship between perceived usefulness and sales performance in United Beverage share company.

## 4.3.3.3. 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%.

# H3: There is a significant positive relationship between Experience of the sales people and sales 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 sales performance of the sales people) and the independent variable Experience. Hence, we accept the second hypothesis **H3**.

## **Evidence from previous Studies**

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

# H4: There is a significant positive relationship between education level of the sales people and sales 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 **H4**.

#### **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

#### **4.3.2.** 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= Perceived ease of use of the sales person, Z3= Education level of sales person, and the dependent variable, S = Average Daily Sales Volume which measures sales 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, multicollinearity and homoscedasticity and are discussed using STATA. Model summary of the regression result standardized and unstandardized  $\beta$ coefficients 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 perceived ease of use) are found to have a symmetric distribution at their level forms. Thus, it is not important to transform them into other forms to ensure their normality.

## **4.3.2.2.** Assumption 2- Multicollinearity

In an attempt to check if the dataset encounter problem of multicollinearity, both the variance of inflation factors (VIF) which shows by how much does the variance of a single  $\beta$  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 multicollinearity.

When there is a perfect linear relationship among the predictors, the estimates for a regression model cannot be uniquely computed. The term collinearity implies that two variables are near perfect linear combinations of one another. When more than two variables are involved it is often called Multicollinearity, although the two terms are often used interchangeably. Multicollinearity is a test that evaluates whether the independent variables are highly correlated. The primary concern is that as the degree of Multicollinearity increases, the regression model estimates of the coefficients become unstable and the standard errors for the coefficients can get wildly inflated.

The variance inflation factor (VIF) was used to evaluate the level of correlation between variables and to estimate how much the variance of a coefficient was inflated because of linear dependence with other predictors. As a rule of thumb if any of the VIF are greater than 10 (greater than 5 when conservative) then there is a probability of a problem with

Multicollinearity and is harmful to the study (Newbert, 2008). Tolerance, defined as 1/VIF, is used by many researchers to check on the degree of collinearity. A tolerance value lower than 0.1 is comparable to a VIF of 10. It means that the variable could be considered as a linear combination of other independent variables (Newbert, 2008). The results for tests of Multicollinearity were as

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 multicollinearity (Gujarati, 2004).

Variables	VIF	1/VIF
SFA user	1.15	0.8667
perceived ease of use	1.954	0.5117
Education	1.18	0.8479
Experience	1.11	0.9034
Mean VIF	1.11	

 Table 5: Variable Inflation Factor (VIF)

Source- Researcher's own source, 2021

	Average Daily Sales	SFA Users	Experience	Perceived ease of use	Education	Sales
Average Daily Sales	1.0000					
SFA Users	0.3221	1.0000				
Experience	0.1879	0.1824	1.0000			
Perceived ease of use	0.3161	0.1588	0.1031	1.0000		
Education	0.4001	0.3191	0.2403	0.1755	1.0000	
Sales	0.0166	0.0992	0.1323	0.0299	0.0572	1.0000

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

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 sales. 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

Chi 2 (1) = 45.12

Proh > chi 2 = 0.0000

Source-Researchers own source

# 4.3.2.4. Regression Analysis Results

# Table 8: regression result

Independent	Coefficient	t- value	P- Value		
SFA Users	92.2143	2.35	0.02	14.71766	169.711
Experience	3.1032	0.73	0.468	-5.326019	11.53234
Perceived ease of	0.22	2.928	0.003	0.0016483	0.0078043
Education	146.8909	3.6	0	66.19363	227.5882
Constant	243.2335	6.08	0	164.0998	322.3672
N = 80					
F(5, 136)=9.51					
R-squared = 0.6580					

Note: Standard error in parenthesis

Source- Researcher's own source, 2021

Independent	Coefficient	t- value	P- Value			
Variable				[95% Conf. Interval]		
SFA Users	92.2143	2.35	0.02	14.71766	169.711	
	(39.18801)					
Experience	3.1032	0.73	0.468	-5.326019	11.53234	
	(4.2624)					
Perceived ease of	0.629	2.928	0.05	0.0016483	0.0078043	
use	(0.0015565)					
Education	146.8909	3.6	0	66.19363	227.5882	
	(40.80643)					
Constant	243.2335	6.08	0	164.0998	322.3672	
	(40.0158)					
N = 80						
F (5, 136) = 9.51						
Prob> F = 0.0000						
R-squared = 0.6580						

 Table 9: Regression result (using robust option)

Note: Robust standard error in parenthesis

Source- Researcher's own source, 2021

Aver daily sale =  $\alpha o + \beta 1SFAuser + \gamma 1Experience + \gamma 2percived ease of use + \gamma 3Education + \varepsilon i------(3)$ 

=243.2335 + 92.2143 SFA user+ 3.1032 Experience + 0.629 perceived ease of use + 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 **perceived ease of use**; its p-value is 0.005 this shows that the samples and the results drawn for the variable 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  $\leq 0.01$ .

The t-value of the above table shows that out of the variables observed SFA usage, education and perceived ease of use have higher significance levels which have numerical level of 2.35, 3.60 and 2.928 respectively. These numbers are higher than 1.96 which is the bar level of measure the significance of the variable's validity. However, the variables experience has a 0.81 t-value – even though their t-value is less than 1.96 the level of significance is still considered to have a positive inclination.

Based on the p-value and t statistics in the above regression table the coefficients associated with SFA user, perceived ease of use and education shows that these variables significantly and positively affect the average daily sales of the CSR. The coefficient associated with experience 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 Anbessa Beer 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 Anbessa Beer. Similarly, the findings depict that perceived ease of use would lead to

an increase in sales performance by factor of 0.629 with P value of 0.000. At 5% level of significance and 95% level of confidence this is statistically significant as the P-Value is lower than 0.05. The study fails to reject the alternate hypothesis therefore implying that Perceived ease of use of SFA system has influence on sales performance of SFA system has influence on sales performance. Though experience has 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 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 Anbessa Beer 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.

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 United Beverage share company. 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 United Beverage Share Company 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 Anbessa Beer Distributers warehouse. This feature would provide the sales force who use SFA with the information of all available stock at hand in the warehouse 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 representative's performance by tracking the time and motion they start their work by just accessing SFA.

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.

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)

# **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 sales performance. It investigates the effect of technology usage of SFA on the sales performance of sales people at united beverage share company and examines whether factors such as years of experience, level of education (whether the CSR has a degree or diploma), perceived ease use of SFA can be taken as other variables affecting the performance of the company sales representatives at United beverage share company. 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 perceived ease of SFA and level of education. Though it shows a positive inclination, the level of experience of the sales people does not have a statistically significant positive effect on average daily sales volume.

This study provides a conclusive clarification 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.

Feasibly the single most important limitation of this study is the solo – company frame. It would be exciting to study the relationship between Information technology and salesperson performance in other sales situations and industries to determine generalization. Hence future research should study the generalization of the findings through testing these research questions with independent samples from variation of sales situations

## **5.2 Recommendations**

The study first contribution is the task-based dimension of SFA usage. Salesforce classically use part or a segment of the existing SFA system (Donaldson and Wright 2004) this contrast considerably in their choice of SFA system to embrace. Hence, evaluating use with contemplative measures which may not satisfactorily capture the whole choice of SFA use. Moreover, SFA-usage seems to be more an abstract concept which means diverse things to diverse persons. By dimensional approach SFA can be more precisely be distinguished by users from each other as crucial.

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 result of this study SFA brings about an increase in the daily average sales volume performance of the sales representative at UBSC, 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, 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, perceived ease use of the system and years of experience show better performance, thus it is recommended that United beverage share company should invest more on providing its sales people with the needed level of education, perceived ease use of system 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.
- As any study action, the work has certain impediments. Firstly, the study picked a single company business information gathering exertion. Including sales representatives from United Beverage share company. organizations would add to the generalizability of the outcomes.

In order to determine generality, future studies should investigate wider ranges of factors on the sales 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. While this is a broadly acknowledged practice among analysts in the business implementation area, target execution information would be helpful for accepting the discoveries. The management of United beverage share company should do future studies to develop strategies that can create suitable organizational mechanisms to maximize the strategic advantages of the implemented SFA system.

## Reference

- Ahearne, M. and Schillewaert, N. (2001). The acceptance of information technology in the sales force. eBusiness Research Center, Working paper 10–2000, Penn State University.
- Ahearne, M., D.E. Hughes, and N. Schillewaert (2007), "Why Sales Reps Should Welcome Information Technology: Measuring the Impact of CRM-Based IT on Sales Effectiveness," International Journal of Research in Marketing, 24 (4), 336-349.
- Ahearne, M., Gruen, T.W. and Jarvis, C.B. (2009). —If Looks Could Sell: Moderation and Mediation of the Attractiveness Effect on Salesperson Performance, *International Journal of Research in Marketing*, 16 (4), 269-284.
- Ahearne, M., Hughes, D.E. and Schillewaert, N. (2007). —Why Sales Reps Should Welcome Information Technology: Measuring the Impact of CRM-Based IT on Sales Effectiveness, *International Journal of Research in Marketing*, 24 (4), 336-349.
- Ahearne, M., Jelinek, R. and Rapp, A. (2005). —Moving Beyond the Direct Effect of SFA Adoption on Salesperson Performance: Training and Support as Key Moderating Factors, *Industrial Marketing Management*, 34 (4), 379-388.
  Bohling, T., Bowman, D., LaValle, S., Mittal, V., Narayandas, D., Ramani, G., & Varadarajan, R. (2014). CRM implementation effectiveness issues and insights. *Journal of Service Research*, 9(2), 184-194.
- Ahearne, M., Jones, E., Rapp, A. and Mathieu, J. (2008). —High Touch through High Tech: The Impact of Salesperson Technology Usage on Sales Performance via Mediating Mechanisms, *Management Science*, 54 (4), 671–685.
- Ahearne, M., N. Srinivasan, and L. Weinstein (2004). Effect of Technology on Sales Performance: Progressing from Technology Acceptance to Technology Usage and Consequence. Journal of Personal Selling & Sales Management, 24, 4, 297 - 310.
- Ahearne, M., Ronald, J., and Adam, R. (2005). Moving beyond the direct effect of SFA adoption on Sales force performance: training and support as key moderating

factors *Industrial Marketing Management, Volume* 34, Issue 4, May 2005, Pages 379-388.

- Ahearne, M., Srinivasan, N. and Weinstein, L. (2004). —Effect of Technology on Sales Performance: Progressing from Technology Acceptance to Technology Usage and Consequence, *Journal of Personal Selling and Sales Management*, 24 (4), 297-310.
- Ahearne, Michael, Jelinek, Ronald and Rapp (2005). Moving beyond the direct effect of SFA adoption on salesperson performance: Training and support as key moderating factors. Industrial Marketing Management 34, 379– 388
- Ajzen, I. (1985). —From Intention to Actions: A Theory of Planned Behavior, I in Action Control: From Cognition to Behavior, J. Kuhl and J. Beckman, eds. New York: Springer, 11-39.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, New-Jersey: Prentice-Hall.
- Al-Khouri, A.M (2014). Electronic payments Building the case for a national initiative. Advances in Social Sciences Research Journal, 1(3), 176-195.
- Anderson, E. and Oliver, R.L. (1987). —Perspectives on Behavior-Based versus Outcome-Based Sales force Control Systems, *Journal of Marketing*, 51 (4), 76-88.
- Anderson, E. and Robertson, T.S. (2005). —Inducing Multiline Salespeople to Adopt House Brands, *Journal of Marketing*, 59 (April), 16-31. Armstrong, J.S. and Overton, T. (1977). —Estimating Non-Response Bias in Mail Surveys, *Journal of* Marketing Research, 51, 71-86.
- Avlonitis, G.J. and Panagopoulos, N.G. (2005). —Underlying factors and Consequences of CRM Technology Acceptance in the Sales Force, "Industrial Marketing Management, 34 (4), 355-368.
- Avlonitis, George J., and Nikolaos G. Panagopoulos (2005). Antecedents and consequences of CRM technology acceptance in the sales force. Industrial Marketing Management, 34, 4. 355 - 368.
- Awino, B.A. (2011). The Strategy- Resource Configurations and Performance Implications in Non-governmental Organizations. Crown Research in Education 2(3):105-112.

- Ayugi, P. (2007). A Study on the Effectiveness & Efficiency of the Supply Chain in Wrigley co. E.A. University of Nairobi. Bailey, J.E. and Pearson, S.W. (1983).
  "Developing a Tool for Measuring and Analyzing Computer User Satisfaction," Management Science, Vol. 29, No. 5, pp. 530-545.
- Bandura, A. (1982). —Self-Efficacy Mechanism in Human Agency, *American Psychologist*, 37, 122-147.
- Baroudi, J.J. and Orlikowski, W.J. (1998). "A Short-Form Measure of User Information Satisfaction: A Psychometric Evaluation and Notes on Use," Journal of Management Information Systems, Vol. 4, No. 4, pp. 44-59.
- Barrick, M. and Mount, M. (1991). —The Big Five personality dimensions and job performance: A meta-analysisl. *Personnel Psychology*, 44(1), 1-26. Barua, A., Kriebel, C.H. and Mukhopadhyay, T. (2005). —Information Technology and Business Value: An Analytic and Empirical Investigation, *Information Systems Research*, 6 (1), 3-50.
- Barriers and support: An exploratory investigation II. Industrial Marketing Management, Volume 34, Issue 4, May 2005, Pages 389-398. Bullen, C.V. & Rockart, J.F. (1981).
- BenMoussa, C. (2006). Supporting the Pharmaceutical Sales Force through Mobile Information and Communication technologies: an Exploratory Investigation. Turku Centre for Computer Science. 148
- Black, T.R. (2009). Doing Quantitative Research in the Social Sciences: An Integrated Approach to Research Design, Measurement and Statistics, London: Sage. Boujena, O., Johnston, W.J. and Merunka, D.R. (2009).
- Blodgett, Mindy (1995). Vendor tries to simplify sales force automation. Computerworld, 30(1), 62.
- Boujena, O. J. (2009). The Benefits of Sales Force Automation: A Customer's Perspective. Journal of Personal Selling & Sales Management,, Vol. (XXIX), No. 2.
- Brown, S.P. and E. Jones (2005), Introduction to the Special Issue: Advancing the Field of Selling and Sales Management. Journal of Personal Selling and Sales Management, 25 (2), 103-104. 63

- Buehrer, Richard E., Senecal, Sylvain, & Pullman, Ellen Bolman (2005).Sales force technology usage: Reasons, barriers, and support. Industrial Marketing Management, 34(4), 389–398.
- Bush, Alan J., Jarvis B. Moore, and Rich Rocco (2005). "Under- standing Sales Force Automation Outcomes: A Managerial Perspective," Industrial Marketing Management, 34 (4), 369-377.
- Buttle, F. (2004). Customer Relationship Management: Concepts and Tools. Oxford: Elsevier.
- Buttle, F., Ang, L. and Iriana, R. (2006). *Sales Force Automation: Review, Critique, Research Agenda*. International Journal of Management Reviews
- Campbell, T. (2008). Beating the Sales Force Technophobia, Sales and Marketing Management. December, 68-72.
- Churchil, G. F. (1985). The Determinants of Salesforce Performance: A Meta-Analysis. Journal of Marketing Research, 12, May, 130-118.
- Colombo, G. (2004). Sales Force Automation. McGraw-Hill, New York, NY.
- Conlon, G. (2008). Plug and Play, Sales and Marketing Management, December, 64-67.
- Cronin, B., and Davenport, F., (1990). Laptops and the marketing information chain: the benefits of sales force automation. International journal of information management, 10(4), 278-287.
- Davis, F. D. (1989, September). Perceived usefulness, perceived ease of use, and user acceptance. MIS Quarterly, 13, 319–322.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989, August). User acceptance of computer technology: A comparison of two theoretical models. Management Science, 35, 982–1003.
- DeLone, W.H. and McLean, E.R. (2002). —Information Systems Success: The Quest for the Dependent Variable, *Information Systems Research* (3:1), March 2002, pp. 60-95.
- Dickie, J. (1999), Why CRM Projects Fail, CRM Journal, 1 (1).

- Doll, W.J. and G. Torkzadeh (1998), Developing a Multidimensional Measure of System-Use in an Organizational Context. Information & Management, 33 (4), 171-185.
- Donaldson, B. and Wright, G. (2004). Sales Force Automation in the UK pharmaceutical industry: why is the strategic potential of these systems not being realized in practice? International Journal of Medical Marketing, 4(3), 251–263
- Dwyer, F.R., Schurr, P.H. and S. Oh (1987), "Developing Buyer-Seller Relationships," Journal of Marketing, 51 (2), 11-27.
- Engle, R. L., & Barnes, M. L. (2000). Sales force automation usage, effectiveness, and costbenefit in Germany, England and the United States. Journal of Business & Industrial Marketing, 15(4/5), 216–241.
- Erffmeyer, R. C., & Johnson, D. A. (2001, Spring). An exploratory study of sales force automation practices: Expectations and realities. Journal of Personal Selling & Sales Management, 21, 167–175.
- Feeny, D. a. (1998). Core IS capabilities for exploiting information technology. *Sloan* management review, 9-+.
- Feldman DC, Turnley WH. (2004).How broadly does education contribute to job performance? Journal of Vocational Behavior, 64, 284–307
- Fishbein, M. and I. Ajzen (1975), Belief Attitude, Intention and Behavior, Reading: Addison-Wesley
- Frank L. Schmidt, John E. Hunter & Michael A. McDaniel (1986). Job experience correlates of job performance. Journal of applied psychology, 73, 327-330.
- Gohmann, Stephan F., Guan, Jian, Barker, Robert M., & Faulds, David J.(2005). Perceptions of sales force automation: Differences between sales force and management. Industrial Marketing Management, 34(4), 337–343.
- Goldenberg, B. (2006). Re-Engineering Sales & Marketing with Advanced Information Delivery Systems, Sales and Marketing Management, Special Supplement, S 1-31.
- Greenberg, P. (2011). CRM at the Speed of Light, Third Edition. *Essential Customer* Strategies for the 21st Century, McGraw-Hill Osborne Media.

Hanover, Dan (2000), Independents Day. Sales and Marketing Management, April, 64-68.

- Harris, Kim, & Pike, John (1996). Issues concerning adoption and use of sales force automation in the agricultural input supply sector. Agribusiness, 12(4), 317–326.
- Honeycutt, Earl D., Thelen Tanya, Thelen, Shawn T. and Hodge, Sharon K. (2005), Impediments to sales force automation. Industrial Marketing Management (34) 313-322.
- Hunter, G.K. and Perreault W.D. Jr. (2006). —Sales Technology Orientation, Information Effectiveness and Sales Performance, *Journal of Personal Selling and Sales Management*, 26 (2), 95-113.
- Hunter, G.K. and Perreault, W.D. Jr. (2007). —Making Sales Technology Effective, *Journal of Marketing*, 71 (January), 16-34.
- Ingram, Bashaw, R. E., T. N., & Keillor, B. D. (2002). Improving sales training cycle times for new trainees: An exploratory study. Industrial Marketing Management, 31, 329–338.65
- Ingram, T. (2006). Relationship Selling: Moving from Rhetoric to Reality. Journal of Business Research, 11 (Spring), , 5-14.
- Ingram, T. N., LaForge, R. W., & Leigh, T. W. (2002). Selling in the new millennium: A joint agenda. Industrial Marketing Management, 31(7), 1–9.
- Ingram, T.N. (1996), "Relationship Selling: Moving from Rhetoric to Reality," Journal of Business Research, 11 (Spring), 5-14.
- Jayachandran, S., S. Sharma, P. Kaufman, and P. Raman (2005), The Role of Relational Information Processes and Technology Use in Customer Relationship Management. Journal of Marketing, 69 (4), 177-192.
- Johnson, D. a. (2005). Digitization of Selling Activity and Sales Force Performance: An Empirical Investigation,. *Journal of the Academy of Marketing Science*, 33 (1), 3-18.
- Johnson, D., & Whitehorn, M. (1997, July). Justifying the use of portable computer technology by the sales force of a large insurance company. Service Industries Journal, 17, 507–527.

- Johnson, J.T., H.C. Barksdale, and J.S. Boles (2001), The Strategic Role of the Salesperson in Reducing Customer Defection in Business Relationships. Journal of Personal Selling and Sales Management, 21 (2), 123-134.
- Jones, E. B. (2005). The Changing Environment of Selling and Sales Management. *Journal* of Personal Selling and Sales Management, 25 (2), 105-111.
- Jones, E., A.L. Dixon, L.B. Chonko, and J.P. Cannon (2005), "Key Accounts and Team Selling," Journal of Personal Selling and Sales Management, 25 (2), 181-198.
- Jones, E., Sundaram, S., & Chin, W. (2002). Factors leading to sales force automation use: A longitudinal analysis. Journal of Personal Selling and Sales Management, 22(3), 145–156.
- Jose Filipe da Fonte Domingues (2008). Improving sales force performance through mobile applications. Unpublished Master"s thesis in informatics and computing engineering, Engineering College of Porto University.
- Kahsay Yonas S. (2015). Impact of Organizational Culture of the Achievement of Strategic Advantages of Erp (Spa). Unpublished Master's Thesis, Saint Mary University. 66
- Keillor, B. D., Bashaw, E. R., & Pettijohn, C. E. (1997). Sales force automation issues prior to implementation: The relationship between attitudes toward technology, experience and productivity. Journal of Business and Industrial Marketing, 12(3), 209–219.
- Kidder L. Deborah (2002). The influence of gender on the performance of Organizational Citizenship Behavior. Journal of Management, 28(5), 629-648.
- Ko, D. G., and A. R. Dennis (2004). Sales Force Automation and Sales Performance: Do Experience and Expertise Matter? Journal of Personal Selling and Sales Management, 24, 4. 311 - 322.
- Laitinen, E. (2002). A dynamic performance measurement system: Evidence from small Finish technology companies. Journal of management 5(2), 184-206.
- Lebas, M. and Euske, K. (2004). Business performance measurement; Theory and Practice. Cambridge University Press, UK
- Levin, N. and J. Zahavi (2001), Predictive Modeling Using Segmentation. Journal of Interactive Marketing, 15 (Spring), 2-22.

- Lishan Adam (2010). Towards evidence based ICT policy and regulation. Ethipia ICT sector performance review, 2.
- Marshall, G. W., Michaels, R. E., Stone, T. H., & Jawahar, I. M. (2001). Research in selling and sales management in the next millennium: An agenda from the AMA faculty consortium. Journal of Personal Selling and Sales Management, 21(1), 15–17.
- Marshall, Greg W., William C. Moncrief, and Felicia G. Lassk (1999). The current state of sales force activities. Industrial Marketing Management, 28, 87-98
- Moncrief, W.C. and G.W. Marshall (2005), "The Evolution of the Seven Steps of Selling," Industrial Marketing Management, 34 (1), 13-22.
- Morgan, A. J., & Inks, S. A. (2001). Technology and the sales force. Industrial Marketing Management, 30(5), 463–472. 67
- Morrison, C.J. and E.R. Berndt (1990), Assessing the productivity of Information Technology Equipment in the US Manufacturing Industries. National Bureau of Economic Research Working Paper, 33-82, January
- Nuray, T. (2010). Analysis of the Factors Affecting Productivity Using Nonparametric Regression method. 10th Global Conference on Business and Economics. Rome, Italy
- Parthasarathy, M., and R. S. Sohi (1997). Sales force automation and the adoption of technological innovations by salespeople: Theory and implications. Journal of Business and Industrial Marketing, 12, (3/4),196 - 208.
- Petersen, G.S. (1997). High Impact Sales Force Automation. Boca Raton, FL: St Lucie Press.
- Phillips, P., Davies, F., and Mountinho, L. (1999). The Interactive effects of strategic planning on hotel performance: A Neural Network Analysis. Management Decision, 37(3), 279-288.
- Pullig, C., Maxham, III, J. G., & Hair, J. F., Jr. (2002). Sales force automation systems: An exploratory examination of organizational factors associated with effective implementation and sales force productivity. Journal of Business Research, 55(5), 401–415.

- Rangarajan, D., Jones, E. and Chin, W. (2005). —Impact of Sales Force Automation on Technology-Related Stress, Effort, and Technology Usage among Salespeople, *Industrial Marketing Management*, 34, 345-354.
- Rangarajan, Deva, Jones, Eli, & Chin, Wynne (2005). Impact of sales force automation technology on salespeople. Industrial Marketing Management, 34(4), 345–354.
- Rasmusson, E. (2009). Get Plugged In: The 5 Steps to Successful Sales Force Automation. Sales and Marketing Management, 151(3), 34–40.
- Rasmusson, Erika (1999). Get plugged in: The 5 steps to successful sales force automation. Sales and Marketing Management, 151(3), 34–40.
- Reinartz, W., M. Krafft, and W.D. Hoyer (2004), The Customer Relationship Management Process: Its Measurement and Impact on Performance. Journal of Marketing Research, 41 (August), 293-305.
- Rigby, D.K., Reichheld, F.F. and Schefter, P. (2002). Avoid the four perils of CRM. Harvard Business Review, 80(2), 101–106, 108–109, 130. 68
- Rivers, M. L., & Dart, J. (1999, Spring). The acquisition and use of sales force automation by mid-sized manufacturers. Journal of Personal Selling & Sales Management, 19, 59–73.
- Robinson, Leroy Jr., Marshall, Greg W. and Stamps, Miriam B. (2005). An empirical investigation of technology acceptance in a field sales force setting. Industrial Marketing Management, 34, 407–415
- Schillewaert, N., and M. Ahearne (2001). The Effect of Information Technology on Salesperson Performance. Institute for the Study of Business Markets, The Pennsylvania State University. No. ISBM Report 5-2001.
- Schillewaert, Niels, Michael J. Ahearne, Ruud T. Frambach, and Rudy K. Moenaert (2005). The adoption of information technology in the sales force. Industrial Marketing Management, 34. 323 – 336.
- Serdagolu, M., (2006). Optimizing sales force automation use to maximize sales performance. University of Paderborn, PhD Research Proposal.
- Serdagolu, M., (2009). Sales force automation use and sales person performance. University of Paderborn, PhD. Dissertation.

- Shoemaker, M. (2011). A Framework for Examining IT-Enabled Market Relationships. Journal of Personal Selling and Sales Management, , 21(2), 177-185.
- Shoemaker, M. E., and Johlke, M.C. (2002), An examination of the antecedents of a crucial selling skill: Asking questions. Journal of Management Issues, 14, 118 131.
- Skinner, S. J. (2000) Peak performance in the sales force. Journal of Personal Selling & Sales Management, 20, 37–42.
- Speier, C., & Venkatesh, V. (2002). The hidden minefields in the adoption of sales force automation technologies. Journal of Marketing, 66(3), 98–111.
- Tanner, J. a. (2005). Sales Technology within the Salesperson's Relationships: A Research Agenda. *Industrial Marketing Management*, 34 (4), 305-312.
- Tanner, J.F. and S. Shipp (2005), Sales Technology within the Salesperson's Relationships: A Research Agenda. Industrial Marketing Management, 34 (4), 305-312. 69
- Tanner, J.F., M. Ahearne, T.W. Leigh, C.H. Mason, and W.C. Moncrief (2005), CRM in Sales-Intensive Organizations: A Review and Future Directions. Journal of Personal Selling and Sales Management, 25 (2), 170-180.
- Tripoli, A.M. (2008). —Planning and Allocating: Strategies for Managing Priorities in Complex Jobs, *European Journal of Work and Organizational Psychology*, 7 (4), 455-476.
- Vonderembse, M.A., and White, G.P. (2005). Operation Management. Singapore: Leyh Published Ltd.
- Wang, M. C. (2008). A Survey of Sale Force Automation Setting up Management Practice for Taiwan's Financial Service Industry. Unpublished paper.
- Weitz, B. and K.D. Bradford (1999), "Personal Selling and Sales Management," Journal of the Academy of Marketing Science, 27 (2), 241254.
- Widmier, Scott M., Jackson, Donald W., & Brown McCabe, Deborah (2002). Infusing technology into personal selling. Journal of Personal Selling and Sales Management, 22(3), 189–198.
- Wright, G. and Donaldson, B. (2002). Sales information systems in the UK financial services industry: an analysis of sophistication of use and perceived barriers to adoption. International Journal of Information Management, 22, 405–419.

- XU, Yurong, Yen, David C., Lin, Binshan, and Chaw, David C. (2002). Adopting customer relationship management technology. Industrial Management and Data Systems, 102 (8), 442-452
- Yim, F.H., R.E. Anderson, and S. Swaminathan (2004), Customer Relationship Management: Its Dimensions and Effect on Customer Outcomes. Journal of Personal Selling and Sales Management, 24 (4), 263-278.
- Zeithaml, V.A., R.T. Rust, and K.N. Lemon (2001), The Customer Pyramid: Creating and Serving Profitable Customers. California Management Review, 3 (4), 118-142