

Ruaha Catholic University Faculty of Business, Economics and Management Sciences Ruaha Journal of Business, Economics and Management eISSN 2507-79945 Vol 3, December, 2020

### CONTRIBUTION OF INFORMATION COMMUNICATION TECHNOLOGY TO BUSINESS DEPARTMENT PERFORMANCE IN TELECOMMUNICATION INDUSTRY: A CASE OF HALOTEL IN IRINGA REGION

Prof Alex Juma Ochumbo Professor- Ruaha Catholic University &

Victoria Munisi Iringa University, Iringa

(Corresponding author: ochumboalex@gmail.com)

### ABSTRACT

With the spread of ICT and its entering into work environment, the world is witness to a close relationship of employment of ICT and performance and also better and faster achievement to organizational goals. This study aimed at assessing the contribution of information technology to business department performance in telecommunication industry, by taking Halotel Iringa region as a case. The specific objectives were to describe the contribution of ICT on the performance of Business Department in customer care effectiveness, inventory management and training.

The study adopted a descriptive research methodology with a survey of total of 128 and applied a stratified random sampling technique to select a sample size of 108 respondents. Questionnaires were used as the main data collection method. Statistical Package for Social Sciences (SPSS) version 20 software program was used to analyze the data.

The study findings showed that Information and communication Technology (ICT) had greater impact on Business Department Performance in terms of customer care effectiveness, inventory management and training thereby affecting departmental performance in terms of cost minimization, simplified

business activities, decision making , effective information dissemination and proper time utilization. The study concluded that contribution of ICT at Halotel is used more as administration tool rather than the operation tool hence lack direct impact to customers. However, more research should be done in other sectors to see whether these findings are similar in different industries.

The study suggested that Halotel should focus on training its staff on effective management and use of ICT system, Government should set policy which will influence the use of ICT in its institutions and improve its existing systems, also the academicians should conduct more research for developing new theories which will have a direct link between ICT and performance. The study recommended that Information and communication Technology (ICT) systems should be well implemented since it forms a platform for ease of evaluating risk in which the organizations invest a lot of money in managing business activities.

Key words: ICT, Business, Telecommunication Industry, Business Customer Care System (BCCS)

### **1.0 Introduction**

The Business Department plays a vital role in promoting the business and mission of an organization. It serves as the face of Halotel Company, coordinating and producing all materials representing the business. It is the Business Department's job to reach out to prospective, customers, investors and the community, and create an overarching image that represents Telecommunication Company in a positive light.

The use of Information Communication Technology allowed has Telecommunication Company to develop new and cheaper ways of reaching new markets, offering customers the opportunity of buying goods and services whenever they want and often at reduced cost, whilst also enhancing the level of The Information Communication Technology (ICT) is customer service. considered the driving force behind the long unprecedented economic growth period of the last decade. It provides the infrastructure for economic development helps to create the knowledge society, contributed to innovation and creates value for the economy. More importantly, it brought the world closer together by improving the dissemination of knowledge, accelerating research, stimulating innovation and facilitating collaboration (Anderson, 2010).

ICT includes all technical means that are used for handling information and facilitating communication, including computers, network hardware, communication lines and all the necessary software. In other words, ICT is comprised of information technology, telephony, electronic media, and all types of process and transfer of audio and video signals, and all control and managing functions based on network technologies (Celebic, 2011).

Based on the above definition, ICT is the technology that supports activities involving information. Such activities include gathering, processing, storing and presenting data. Increasingly, these activities also involve collaboration and communication. Information and Communications Technology (ICT) provides businesses with avenues that allow them to remain competitive in local and global economies.

The line ministry, the Ministry of Communications, Science and Technology, provides a policy guide. Policy guides include the National ICT Policy of 2003, and the National Telecommunications Policy of 1997. The legal framework is provided by the Tanzania Communications Act of 1993, the Tanzania Broadcasting Services Act of 1993, the Tanzania Communications Regulatory

Authority Act of 2003, and the Universal Communications Service Access Act of 2006.

Given the dynamic nature of the telecommunications sector, these policies, legal provisions and regulations require regular review to accommodate new services and a changing business environment. For example, the Tanzania ICT Policy lacks provisions for electronic money transactions and electronic transactions in government business. In terms of the regulatory environment, the sector has regulations for broadband, consumer protection, content licensing importation and distribution, installation and maintenance, interconnections, numbering and electronic address, radio communication, spectrum, tariffs and quality of service (Diyamett, 2010).

**Halotel (Viettel Tanzania Limited)** is a mobile communications company, providing voice, messaging, data, money transfer service through Halopesa and converged services in Tanzania. Viettel launched service in Vietnam in 2004 and started oversees investment in 2007 by investing in Cambodia. In 2014, July Viettel signed the memorandum of understanding with Tanzania to start the Telecommunication services by using Halotel as its Branding name.

Halotel is owned by Viettel Group, which is the state-owned mobile operator from Vietnam and invested over \$1 Billion into the country. Viettel Group currently operates in ten (10) countries which include Lumittel – Burundi, Nexttel – Cameroon, Movitel – Mozambique, Natcom – Haiti, Bitel – Peru, Metfone – Cambodia, Unitel – Laos, Telemor – East Timor, Halotel – Tanzania and Viettel – Vietnam CITATION Tra16 \l 1033 (Hung, 2016).

Telecommunication industries can use ICT to increase the capacity to gather information regarding sales, distributions and training of its staff and also store and retrieve in timely manner and the reduce the operation costs as well as increasing its efficiency and effectiveness of the business functions. It is an effective tool that can be used for streaming the sales functions of the Business Department. This can be achieved by creating an elaborate and relevant database. The data that an effective ICT system can have can include customer management, customer care, inventory and sales management, product management, guarantee management, distribution channel management and elearning for the purpose of training staff. By using this data the Business Department can make contributions towards strategy formation within the telecommunication industry. In Halotel Tanzania ICT is used to manage all activities which are done by the Business department. Those activities include the inventory management, Customer care systems, training of staff through E-Learning system and staff evaluations through the system which is known as Business Customer Care System (BCCS) for computers and in mobile phones as Mobile Business Customer Care System (MBCCS) CITATION Tra16 \l 1033 (Hung, 2016).

Hence, Halotel is the best place to conduct this study as it applies the use of ICT to control all activities relating to Business through the use of the system known as Business Customer Care system (BCCS) although it is not the only system used to control the business activities but also the Finance System (ERP) and the Inventory Management system.

There is no doubt that the introduction and implementation of information technology within the Business department of companies is a complex matter and that the requirements for the implementation and the contribution of the technology differ according to the nature of the company's Business management strategies and of the technology. According to Reddington (2009) the use of Information and Communication Technology could establish more virtual customer relationships within the organization thus enabling it to provide strategic value. Through social networking, it can also improve employee voice.

The consequence of not knowing the contribution of ICT on the Performance of Business department leads to less emphasis by management on the use of ICT and the proper management of Information and Communication Technology systems in telecommunication companies. The study findings contribute to increase use of ICT in controlling the Business activities through the use of Information and Communication Technology systems and ICT policy formulation in telecommunication companies.

The study specifically aimed;

- (i) To examine the contribution of ICT on the performance of Business Department in customer care effectiveness.
- (ii) To determine the contribution of ICT on the performance of Business Department in Inventory Management.
- (iii) To find out the contribution of ICT on the performance of Business Department in training.

# 2. Literature Review 2.1Theoretical Literature Review

This research study was guided by the Information System theories which have been selected as they relate to the study. These theories include **Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA).** 

### **Technology Acceptance Model (TAM)**

The technology acceptance model (TAM) is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, notably: Perceived usefulness, this was defined by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance". Perceived ease-of-use, Davis defined this as "the degree to which a person believes that using a particular system would be free from effort" (Davis 1989).

### Theory of Reasoned Action (TRA)

Theory of reasoned action (TRA) was developed to examine the relationship between attitudes and behavior. There are two main concepts in TRA: "principles of compatibility" and the concept of "behavioral intention". Principles of compatibility specify that in order to predict a specific behavior directed to a specific target in a given context and time, specific attitudes that correspond to the specific target, time and context should be assessed. The concept of behavior intention states that an individual's motivation to engage in a behavior is defined by the attitudes that influence the behavior. Behavior intention indicates how much effort an individual would like to commit to perform such behavior. Higher commitment is more likely to mean that behavior would be performed.

Behavior intention is determined by attitudes and subjective norms. An attitude refers to an individual's perception (either favorable or unfavorable) toward specific behavior (Werner 2004). 'Subjective norm 'refers to the individual's subjective judgment regarding others' preference and support for a behavior (Werner 2004).

TRA was criticized for neglecting the importance of social factors that in real life could be a determinant for individual behavior (Werner 2004). Social

factors mean all the influences of the environment surrounding the individual (such as norms) which may influence the individual behavior.

### Why Technology Acceptance Model and Theory of Reasoned Action?

These theories were used as when users perceive that a new information technology tool can help them to finish work efficiently, their perceived usefulness toward it will be higher. That is, the higher a product usefulness perception is, the higher adoption of it is. On top of that when users have high perceived ease of use of a product; they will have a positive attitude to adopt it. Therefore, perceived usefulness and perceived ease of use are assumed as external variables to influence users' acceptance behavior on an information technology tool, and perceived ease of use will influence perceived usefulness (Davis, 1986).

Additionally, users' attitude and perceived usefulness will positively affect their behavior intention and further affect users' acceptance. Perceived usefulness and perceived ease of use will influence users' attitude, and behavioral intention will be influenced by of perceived usefulness and perceived ease of use (Davis, 1989). When subjective norm causes affection to certain users, such as peer or social pressure, it will urge them to perform a certain behavior. When users' subjective norm to adopt a certain behavior becomes more positive, the influence on their behavioral intention will be more intensive.

Furthermore, the theory was used to explain why the Halotel organization as the case study has adopted the ICT and how the employees consider the technology in performance of their duties; the usefulness and ease of use both affect the business Department and Individual performance.

### 2.2. Empirical Literature Review

This dealt with similar studies which have been conducted by several different researchers from different perspectives and approaches.

### 2.2.1Contribution of ICT in Customer Care Effectiveness

Kabanda (2014) in the study done at Harare – Zimbabwe, the researcher aimed at finding out the impacts of ICTs on customer service excellence. The researcher states that the diffusion and adoption of ICT innovations permeate through a social system that positively affects customer satisfaction and support customer service excellence. The three discourses with respect to information

systems innovation are discussed in the context of Zimbabwe with particular reference to diffusion, and the transformative nature of ICT interventions. The methodology used is a mixed method approach, where the quantitative approach was used in assessing the ICT usage patterns and indicators in Zimbabwe. The research used the quantitative approach on Info density covering 18 countries in East and Southern Africa for the period 2000 to 2012, and for Africa in comparison with the rest of the world from 2005 to 2014. The qualitative approach was used in the analysis of online query handling facilities at the Zimbabwe Open University (ZOU) website. Through a random sampling technique a total of 42,349 views were collected through the ZOU website on addressing frequently asked questions as a way to improve customer service excellence. The ICT development index in Zimbabwe has grown steadily from the year 2000 to 2012, where Zimbabwe experienced one of the highest mobile density increases from 2007 to 2012 due to the enabling environment created by the Government of Zimbabwe. The infrastructural facilities for ICTs are now sound in Zimbabwe. However, the gap is on the application and effective utilization of ICTs to improve on customer service excellence with some innovation CITATION Gab14 \1 1033 (Kabanda, 2014).

This study is related to this study as both studies focus on knowing how ICT contributes to Customer service excellence in Zimbabwe but the study is more related to impacts of ICTs while focus relate to the performance of Business Department.

Towo (2015) in the study done at Moshi – Tanzania, the study centered on understanding the determinants of customers' satisfaction particularly Uchumi Commercial Bank Limited in Moshi Municipality, Tanzania. A cross sectional research design was deployed where data were collected by using interviews and questionnaire to a sample of 55 respondents obtained conveniently. Factors revealed to influence customer satisfaction levels significantly include; timeliness (ability to deliver service timely), reliability (performance of service facilities, goods, and staff), staff competence (skills, expertise and professionalism with which the service is executed), staff attitude (politeness and friendliness), look and feel (appearance, comfort of environment, facilities and staff). Based on these findings it is recommended that, there is a need to increase coverage area, improving reliability and use of modern technology to improve service delivery and maintain customer satisfaction.

The study is related to this study as both studies discuss the Customer satisfactions but did not explain how ICT can help in getting the customer satisfaction and also did not discuss how ICT leads to performance of Business Department.

### 2.2.2Contribution of ICT in Inventory Management

Kithinji (2015) in the study done at Nairobi – Kenya, The study revealed that Information technology in inventory management acts as a tool for enhancing efficiency and cost reduction. Some supermarkets that have implemented IT in inventory management have succeeded while others have failed. The study sought to determine the impact of information technology on inventory management in supermarkets in Nairobi. The study used questionnaires as the research instruments. The target population were 314 Supermarkets where out of that 136 were used as sample, also the study used Descriptive Research design and stratified random sampling techniques. The study had a response rate of 70%. Data analysis was done using descriptive statistics and regression analysis.

The study concluded that vendor managed inventory systems and warehouse management systems were implemented to a greater extent by supermarkets in Nairobi. Supermarkets should invest more in modern technologies for example information communication technology in order to achieve integration, minimize communication costs, enhance efficiency and increase sharing of information which will eventually lead to improved performance. The regression results reviewed that IT adoption in inventory management was positively related to performance of supermarkets in Nairobi. The study recommended that the supermarkets in Kenya should invest in modern technologies in order to integrate their supply chain management systems. This would minimize communication costs and increase sharing of information leading to improved efficiency and performance of supermarkets in Kenya.

The study is related to this study as both studies discuss the contribution of ICT to inventory management while also the study revealed that the adoption of IT in inventory management is positively related to performance of Nairobi supermarket.

Namusonge (2014) in the study done at Jomo Kenyatta University of Agriculture and Technology, Nairobi – Kenya, where as the general objective

was to find out factors affecting warehousing management. The specific objective was; to determine the effect of information technology on warehouse management.

The researcher used descriptive research design taking Jomo Kenyatta University of Agriculture and Technology as a case for this study. The target population was 930 and a sample size of 50. The sampling design adopted was stratified random sampling. Data collection was done by use of questionnaires and informal interviews.

Majority of respondents (75%) noted that the organization had managed to implement warehouse management system.

The study recommends continued investment and training in information technology and adoption of better information sharing tools.

The study is related to this study as both studies need to know the impact of ICT to inventory management. The study aimed to determine the effect of information technology on warehouse management but did not discuss the contribution of ICT to performance.

### 2.2.3Contribution of ICT in Training

Galandari (2012) in the study done at Tehran – Iran, The researcher states that with spread of ICT and its entering into work environment, the world is witness to close relationship between employment of ICT and performance improvement and also better and faster achievement to organizational goals.

Statistical population of the study consists of export firms of Tehran city. The study adopted descriptive survey design and quantitative research where in total, 250 questionnaires were distributed to employees of these firms and at last 230 ones were used for final analysis; results of data analysis using structural equation method show that in export firms of Tehran city, ICT has a significant effect on export performance. But this effect varies depending on way of using ICT. Using ICT for searching information only influences dimension of performance in international markets but has no effects on new market knowledge dimension. Also using ICT for sales activities does not influence these two dimensions and finally there is a significant relationship between using ICT for communicational development and both dimensions of export performance.

Results of the study showed that it is better to use ICT as a facilitator in first instance and after creation of face to face contacts; in next step was used as a means with high capability to support interactions between parties.

This study is related to this study as both studies focuses on knowing how ICT contributes to the performance but the study did not show how training of individuals on the use ICT will improve the performance of staff that use ICT.

Masese (2013), in his study done in Dar Es Salaam – Tanzania on the banking sector across the globe is embracing ICT technologies and using as part of business strategy for expansion, revenue increase, extension of customer network and creating competitive advantage among banking institutions .The study had an effort to investigate the impacts and challenges of ICT adoption in the Tanzanian banks. The population is forty eight respondents; four managers were selected from twelve banks and out of the 48 questionnaires distributed, 42 were collected that is 87.5% response, purposive sampling was used and the data collected was analyzed using SPSS, the researcher employed use of mean and standard deviation.

The study found out that there is a need for bankers to educate public in the use of online banking products, invest more into ICT infrastructure and the government to reduce tax of ICT gadgets. This study recommends that individual technologies need to be investigated, impact of adopting other individual technologies, profitability and performance issues should also be investigated to open up and clear the way for policy and business decisions (Masese, 2013).

The study is related to this study as it focuses on knowing how ICT contributes to the Business activities but the study did not aim to measure the performance of individuals who use ICTs while this study will focus directly to performance of individuals using ICTs.

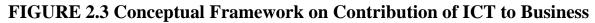
### 2.3Research Gap

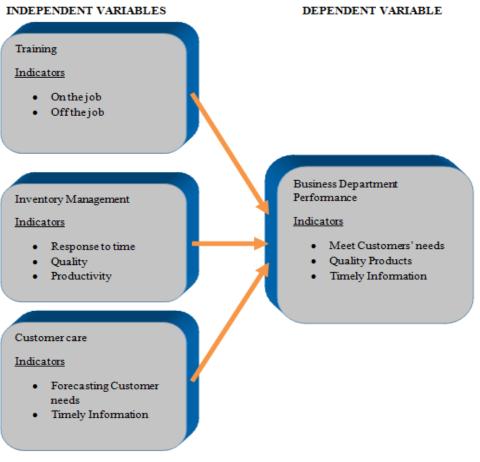
Extant literature has fairly covered the contribution of ICT on Business Department activities in Customer care (Masese,2013) training(Abernathy et al, 2000) , and inventory management (Abernathy et al, 2000) as increased efficiency, speed, enhance customer satisfaction, increased accuracy of data and improve transparency.

Despite these studies, there is a call for more studies to test earlier findings in different contexts and different economic activities in order to get a better understanding of the contribution of information communication technology to Business department performance. Also currently the use of ICT has increased compared to past years hence ICT has more impacts to Business.

#### **2.4Conceptual Framework**

It is defined as an end result of bringing together a number of related concepts to explain or give a broader understanding of the phenomenon of interest CITATION Pro08 \1 1033 (Vaughan, 2008). It may be a written or a visual presentation that explains either graphically or in a narrative form or both. The main things to be studied are the key factors, the concepts or variables and also the presumed relationships between them.





#### **Department** Performance

Source: Researcher, 2019

### **Independent Variables**

Independent variable is a variable that stands on its own and is not changed by the other variables to be measured. It is a presumed cause that identifies forces that act on something else CITATION MWa15 \l 1033 (Wagigi, 2015). In this research, the independent variables identified are employment, Training, Inventory management and Customer care. These variables have a direct impact on performance of the Business department.

### **Dependent Variables**

This refers to the effect, the results or outcome of another variable in the relation CITATION MWa15  $\1 033$  (Wagigi, 2015). Business department performance will be determined by a number of factors indicators of which some are the independent variables.

### 2.5Hypotheses of the Study

**Ha 1:** There is a significant relationship between ICT on the performance of Business department and Customer Care effectiveness at Halotel Iringa Region.

**Ha 2:** There is a significant relationship between ICT on the performance of Business department and Inventory Management at Halotel Iringa Region.

**Ha 3:** There is a significant relationship between ICT on the performance of Business department and training at Halotel Iringa Region.

According to the hypothesis set, the study results were positive as to show a clear interrelationship of the variables indicated in the conceptual framework.

### 3.0 Methodology

The study adopted a descriptive research methodology with a survey of total of 128 and applied a stratified random sampling technique to select a sample size of 108 respondents. Questionnaires were used as the main data collection method. Statistical Package for Social Science (SPSS) version 20 software program was used to analyze the data.

The research paradigm was positivist while the research approach was quantitative. The study used the descriptive research design and stratified sampling technique to select respondents. For reliability of data, cronbach alpha was 0.906, while Kaiser – Meyer Oklin of sampling adequacy was 0.884 implying the adequacy of the sample employed.

### 4.0 Findings

This section deals with analyzing, interpreting, presenting and discussing the data collected in accordance to the research objectives and their respective questions used during this study. It starts by outlining the demographic information of the respondents. The aim of this study was to assess the contributions of Information technology on the performance of Business Department in Telecommunication industry in Tanzania. Tables and figures will be used to present the findings of the study in this section.

### **4.1Information Background of Respondents**

This subsection presents the Information Background of the respondents specifically their Gender, Age, Education level, Duration in working with Halotel and specific activity of the respondents. The data were collected from the Halotel office; questionnaires were used to collect data from respondents. The ages of the respondents were grouped in intervals. The findings were as presented below:

Table 4.1 Table for gender of the respondents					
Gender	<b>Frequency Percentage</b>				
Male	65	60.2			
Female	43	39.8			
Total	108	100.0			

Table 4.2 Age of the respondents				
Age	<b>Frequency Percent</b>			
Below 16	3	2.8		
16-25	47	43.5		
26-35	55	50.9		
36-45	2	1.9		
46-55	1	0.9		
Total	108	100		

#### Table 4.3 Duration of work of Respondents

Duration of work	Frequency	Percent
Less than 6 months	18	16.7
Between 6-12 months	29	26.9
More than12 months	61	56.5
Total	108	100

Education	Frequency	Percent	
None	7	6.5	
Primary	11	10.2	
Secondary	17	15.7	
Certificate	11	10.2	
Diploma	27	25	
Degree	33	30.6	
Masters	2	1.9	
Total	108	100	

#### **Table 4.4 Academic Qualification of Respondents**

#### Table 4.5 Type of Work of Respondents

Department	Frequency	Percent
Technical team	10	9.3
Business Team	38	35.2
Assuarance team	8	7.4
Business Channel	52	48.1
Total	108	100.0

Source: Field work (2019)

The findings indicate that most of respondents were male (65 respondents) which is 60.2% and the rest were female (43 respondents) which is 39.8%. This implies that there is more male staff than there are female staffs as this is the case in other Telecommunication Companies in Tanzania. The study also reveals that majority of respondents (61 respondents) which is 56.5% have worked with Halotel for more than 12 months, this implies that they have good work experience with BCCS. The findings further reveal that majority of respondents are aged between 16-35 which is 94%. These findings indicate that majority of employees are in their middle ages and have clear expectation of Business Department performance. The finding indicates that majority of respondents are educated, have certificate and above implying that Halotel has employed qualified and competent staff.

### **4.2Analysis of Objectives**

The analysis was done on Halotel respondents. The analysis was based on the relationship of the outcomes that is Business Department performance. The Business department performance can be seen on effective time utilization, cost

minimization, good decision making, efficiency in business activities like production of quality products and effective information dissemination.

### **4.3Summary of Findings**

From the findings, the respondents are from different departments but all in one way or another uses the Business Customer Care System (BCCS) in their daily task assignments. These respondents constantly use BCCS as they deliver service and therefore well placed to assess the contribution of ICT to Business Department performance. They are also best positioned to understand the extent of the usage of ICT in BCCS in Halotel Company and its effect on their work.

The study determined the extent to which ICT contributes to the performance of Business Department. The respondents were instructed to respond to the statement on 5 point Likert scale and indicate they agree with statement that is: 1=Strong Disagree, 2=Disagree, 3= Neutral , 4=Agree, 5=Strong Agree. The findings revel that ICT is used to great extent by the Halotel Company to get good performance in customer care effectiveness, inventory management and training .

### 4.3.1 Contribution of ICT in Customer Care Management and Business Department Performance

Customer Care Management is a term that refers to practices, strategies and technologies that companies use to manage and analyze customer interactions and data throughout the customer life cycle, with the goal of improving business relationships with customers, assisting in customer retention and driving sales growth. Business Customer Care Systems (BCCS) is designed to compile information on customers across different channels and points of contact between the customer and Halotel Company. BCCSs also give customer facing staff detailed information on customers' personal information, purchase history, buying preferences and concerns.

Further analysis was done using the weighted mean as shown in table 4.6

Table 4.6: Weighted Mean for Customer Care Effectiveness			
Dimension	Weighted Mean		
Customer care process	3.85		

Ruaha Journal of Business, Economics and Management Sciences Vol. 3, December, 2020

Forecasting customer needs	4.06
Decreased time spent on customer care services	3.91
Company decision on customer needs	3.91
Promotes competitive advantage	3.84
Customer care Improvement	3.85
Improved dissemination of information	3.62
Source: Field work (2019)	

As seen in Table 4.6, all dimensions (customer care process, forecasting customer needs, decreased time spent on customer care services, company decision on customer needs, promotes competitive advantage, customer care Improvement and improved dissemination of information) have weighted mean above neutral point (3). This shows that ICT have improved the performance in Customer care effectiveness.

Hence, from these findings, the Halotel employees showed that the use of ICT in customer care effectiveness has improved the Business Department performance. Due to correlation results it shows that customer care improvement and improvement on dissemination of information did not have the direct relationship bwith the Business Department performance in terms of customer care effectiveness.

### 4.3.2 Contribution of ICT in Inventory Management and Business Department Performance

Inventory management is the supervision of inventory and stock items. A component of inventory management in BCCS supervises the flow of goods from manufacturers to warehouses and from these warehouses to point of sale and customers. A key function of inventory management is to keep a detailed record of each new or returned product as it enters or leaves a warehouse and point of sale.

Further analysis was done using the weighted mean as shown in table 4.7

<b>1</b> able 4.7: Weighted Mean for Inventory Management				
Dimension	Weighted Mean			
Improved data input system	3.94			
Decreased Paper work	4.09			
Decrease time spent in inputting data	3.82			
Increased goods management	3.38			
Decision on stock in and out	3.79			
Effective in meting company goals	3.87			
Improved inventory management process	4.07			

Table 4.7. Weighted Mean for Inventory Management

Ruaha Journal of Business, economics and Management Sciences Vol. 3, December, 2020

Source: Field work (2019)

As seen in Table 4.7, all dimensions (improved data input system, decreased Paper work, decrease time spent in inputting data, increased goods management, decision on stock in and out, effective in meting company goals and Improved inventory management process) have weighted mean above neutral point (3). This shows that ICT have improved the performance in inventory management.

Therefore, for these findings, the Halotel employees showed that the use of ICT in inventory management has enhanced the Business Department performance. Due to correlation results it shows that inventory management process and improvement on dissemination of information on inventory management did not have the direct relationship bwith the Business Department performance in terms of inventory management.

### 4.3.3 Contribution of ICT in Training and Business Department Performance

Training as one of the ways for acquiring business skills and improving the performance of Business Department the findings reveals high positive of each independent variable Training (improved training process, decreased time spent on training, decreased training expenses, decision on when training is necessary, decision on who to be trained, improved training need process, forecasting staffing need) and Business Department Performance and the significance of each of the variable.

ICT did not cause the direct relationship between Business Department performance and improving training need process as it has .103 coefficients and forecasting staffing training need as it has .047 and improvement on dissemination of information as it has .307 coefficient, and these variables correlate at 0.01 significant levels 2-tailed with 99% confidence level.

Further analysis was done using the weighted mean as shown in table 4.8

Tuble not weighted mean for framming			
Dimension	Weighted Mean		
Improved training process	3.68		
Decreased time spent on training	3.74		
Decreased training expenses	3.93		
Decision on when training is necessary	3.79		
Decision on who to be trained	3.84		

Table 4.8: Weighted Mean for Training

Ruaha Journal of Business, Economics and Management Sciences Vol. 3, December, 2020

Improved training need process	4.13	
Forecasting staffing training need	3.99	
Source: Field work (2019)		

As seen in Table 4.4, all dimensions (improved training process, decreased time spent on training, decreased training expenses, decision on when training is necessary, decision on who to be trained, improved training need process and forecasting staffing training need) have weighted mean above neutral point (3). This shows that ICT have improved the performance in training process.

Therefore, for these findings, the Halotel employees showed that the use of ICT in inventory management has enhanced the Business Department performance. Due to correlation results it shows that Improving training need process, improvement on dissemination of information and improvement on dissemination of information and improvement on the direct relationship with the Business Department performance in terms of training.

#### **4.4Test of Hypotheses**

The results from the Table 4.9 below indicate high positive relationship of each independent variable (Customer care Effectiveness, Inventory Management and Training) and the significance of each of the variable in relation to dependent variable. As shown, all the variables had positive correlations with overall satisfaction. These variables were tested by Pearson correlation where Customer care effectiveness at.760 coefficients, Inventory Management .762 coefficients and Training .697 all these variables correlate with overall satisfaction at 0.01 significant level 2-tailed with 99% confidence level.

The result from correlation indicates that there is positive relationship between 'Independent Variables (Customer care effectiveness, Inventory Management and Training) and Dependent variable (Overall Satisfaction).

Correlations					
		Customer care effectiveness	Inventory Management	Training	Overall Satisfaction
Customer	Pearson Correlation	1	.708**	.645**	.760**
care	Sig. (2-tailed)		.000	.000	.000
effectiveness	Ν	108	108	108	108
Inventory	Pearson Correlation	.708**	1	.536**	.762**
Management	Sig. (2-tailed)	.000		.000	.000
C	Ν	108	108	108	108
	Pearson Correlation	.645**	.536**	1	.697**
Training	Sig. (2-tailed)	.000	.000		.000
	Ν	108	108	108	108
Overall Satisfaction	Pearson Correlation	.760**	.762**	.697**	1
	Sig. (2-tailed)	.000	.000	.000	
	Ν	108	108	108	108
**. Correlation	n is significant at	t the 0.01 level	(2-tailed).		

### Table 4.9: Correlation results

Source: Field data, 2019 via SPSS v20

Further analysis was done using regression in order to determine the relationship between independent variables (Customer care Effectiveness, Inventory Management and Training) and the dependent variable (Overall satisfaction) as it is described in the regression table below:

### Table 4.10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.854ª	.729	.722	2.433

a. Predictors: (Constant), Training, Inventory Management, Customer care effectiveness

Source: Field data, 2019 via SPSS v20

The table of interest is the model summary above. This table (4.10 provides the R and R-Square value. The R value is .854 which represents high correlation and indicates high degree of correlation. The R-Square indicates how much of dependent variable can be explained by independent variables.

In this case, R-Square is .729 which means the independent variables explain 72% of the variation with the dependent variable which is high. The standard error of estimate for model was 2.433.

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1660.223	3	553.408	93.466	.000 <sup>b</sup>
1	Residual	615.777	104	5.921		
	Total	2276.000	107			

 Table 4.11: Anova<sup>a</sup>

a. Dependent Variable: Overall Satisfaction

b. Predictors: (Constant), Training, Inventory Management, Customer care effectiveness

**Source:** Field data, 2019 via SPSS v20

The table 4.11 is the ANOVA table which indicates that the regression model predicts the outcome variable significantly well. Here, p < 0.000, which is less than 0.05, and indicates that, overall, the model applied can statistically significant predict the outcome variable of relationship between dependent and independent Variables.

Model		Unstandardized Coefficients		Standardized Coefficients	4	Sia
		В	Std. Error	Beta	l	Sig.
1	(Constant)	1.066	1.617		.659	.511
	Customer care effectiveness	.245	.070	.284	3.524	.001
	Inventory Management	.383	.070	.400	5.473	.000
	Training	.319	.072	.300	4.440	.000

### Table 4.12:Coefficient<sup>a</sup>

a. Dependent Variable: Overall Satisfaction **Source:** Field data, 2019 via SPSS v20

**Table 4.12 above is Coefficients table** which provides information on the predictor variable. This gives us the information needed to predict dependent variables from independent variable. It can be seen that the three predictors (Customer care Effectiveness, Inventory management and Training) contribute significantly to the model by p<005 hence they are accepted and have a significant impact on dependent Variable (Overall Satisfaction).

The equation for the regression analysis using the Coefficients<sup>a</sup> from Table 4.12 is as follows:

 $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2$ 

Y= 1.066+0.245X<sub>1</sub>+0.383X<sub>2</sub>+0.319X<sub>3</sub>+ EMBED Equation.3

Whereby:

b<sub>o</sub>= Constant or intercept

X= Independent variables

X<sub>1</sub>= Customer Care Effectiveness

X<sub>2</sub>= Inventory Management

X<sub>3</sub>= Training

Y= Overall Satisfaction

### **4.5Discussion of the Findings**

This sub part deals with the discussions on the facts findings in relation to the research questions and objectives. All these facts mostly are concerning with the focus on factors that are the results of ICT contribution to Business Department performance.

## 4.5.1 BCCS in Customer Care Management and Business Department Performance

Customer Care Management is the most important and fundamental function of Business Department. An effective Customer Care Management leads to proper customer management. This in turn can contribute to proper Customer care process, Forecasting Customer needs, Decreased time spent on customer care services, to help Company decision on customer needs, Promotes competitive advantage, Customer care Improvement and Improved dissemination of information. This is however reliant to the Business Department having complete information about the nature, demands, and the economic status of their customers.

The findings show that BCCS has improved Customer care process, Forecasting Customer needs, Decreased time spent on customer care services, to help Company decision on customer needs, Promotes competitive advantage but not Customer care Improvement and Improved dissemination of information.

This can also be seen on the study done by Towo (2015) in the study done at Kilimanjaro – Tanzania, The study centered on understanding the determinants of customers' satisfaction particularly Uchumi Commercial Bank Limited in Moshi Municipality, Tanzania.

Findings revealed to influence customer satisfaction levels significantly include; timeliness (ability to deliver service timely), reliability (performance of service facilities, goods, and staff), staff competence (skills, expertise and professionalism with which the service is executed), staff attitude (politeness and friendliness), look and feel (appearance, comfort of environment, facilities and staff).

In this scenario, the BCCS is of little importance and any real relevance. On Administrative side regarding proper Customer care process, Forecasting Customer needs, Decreased time spent on customer care services, to help Company decision on customer needs and Promotes competitive advantage. BCCS has failed to improve the activities which have the direct link between the Business Department and the customer as to have improvement on customer care and to disseminate the necessary information to customers.

## 4.5.2 BCCS in Inventory Management and Business Department Performance

Major roles of BCCS in Inventory Management are to supervise the flow of goods from manufacturers to warehouses and from these warehouses to point of sale and customers, also to ensure goods are of good quality and are available when needed.

The findings show that BCCS has Improved data input system, Decreased Paper work, Decrease time spent in inputting data, Decreased goods management, Decision on stock in and out and Effective in meting company goals but not Improved inventory management process.

This can also be seen on the study done by Kithinji (2015) in the study done at Nairobi – Kenya, The study revealed that Information technology in inventory management acts as a tool for enhancing efficiency and cost reduction. The study showed that supermarkets should invest more in modern technologies for example information communication technology in order to achieve integration, minimize communication costs, enhance efficiency and increase sharing of information which will eventually lead to improved performance.

### 4.5.3 BCCS in Training and Business Department Performance

Training helps reduce any weak links within the company on completing basic work tasks. Providing the necessary training creates an overall knowledgeable staff and to work without constant help and supervision. The training builds the employee's confidence.

Findings shows that, BCCS has Improved training process, Decreased time spent on training, Decreased training expenses, Decision on when training is necessary, Decision on who to be trained, Improved training need process but BCCS has failed to Forecast staff needs on training.

This can also be seen on the study done by Masese (2013), in his study done in Dar Es Salaam – Tanzania on the banking sector across the globe is embracing ICT technologies and using as part of business strategy for expansion, revenue increase, extension of customer network and creating competitive advantage

among banking institutions. The study found out that there is a need for bankers to educate public in the use of online banking products, invest more into ICT infrastructure and the government to reduce tax of ICT gadgets.

Therefore, the BCCS is an important tool in training of staff at Halotel Company.

### Contributions

The results for ICT contribution to Business Department performance showed that ICT at halotel has helped in Customer care effectiveness, inventory management and training of staff. Also, with ICT the time in performing business activities was shorten, business processes were made easy, cost minimization, decision making was made easier and information access was simplified.

Customer Care Management is the most important and fundamental function of Business Department. An effective Customer Care Management leads to proper customer management. The findings show that Business Consumer Care Systems (BCCS) has improved Customer care process, Forecasting Customer needs, Decreased time spent on customer care services, to help Company decision on customer needs, Promotes competitive advantage but not Customer care Improvement and Improved dissemination of information.

Findings revealed to influence customer satisfaction levels significantly include; timeliness (ability to deliver service timely), reliability (performance of service facilities, goods, and staff), staff competence (skills, expertise and professionalism with which the service is executed), staff attitude (politeness and friendliness), look and feel (appearance, comfort of environment, facilities and staff).

Major roles of BCCS in Inventory Management are to supervise the flow of goods from manufacturers to warehouses and from these warehouses to point of sale and customers, also to ensure goods are of good quality and are available when needed. The findings show that BCCS has Improved data input system, Decreased Paper work, Decrease time spent in inputting data, Decreased goods management, Decision on stock in and out and Effective in meting company goals but not Improved inventory management process.

Training helps reduce any weak links within the company on completing basic work tasks. Providing the necessary training creates an overall knowledgeable staff and to work without constant help and supervision. The training builds the employee's confidence. Findings shows that, BCCS has Improved training process, Decreased time spent on training, Decreased training expenses, Decision on when training is necessary, Decision on who to be trained, Improved training need process but BCCS has failed to Forecast staff needs on training.

Therefore, the use of ICT systems is an important tool in training of staff at Telecommunication Company.

### **Conclusion and Recommendations**

Conclusively, for these findings BCCS has helped the Business Department performing the Administration jobs better rather than the operation jobs which have the direct impact to customers. The entire view of the role that BCCS can play in improving the efficiency and integration of Business department into more strategic role that was missing. The respondents could not establish the direct link between BCCS and its impact on daily routine work. There was lack of clarity as to the exact value of BCCS would add to organization. Neither cost saving, can strong communication nor effective customer care management be linked directly to BCCS. So even BCCS appears to have tremendous promise it has not been fully utilized according to its potential. However, more research should be done in other sectors to see whether these findings are similar in different industries.

Telecommunication companies especially in Tanzania must give attention to advance the existing products and services and innovatively develop new products and services that will meet the customers' needs and widen the customer's choice in the market through the use of ICT systems. The ICT systems keeps the clear records and provides the database for customers hence through evaluating the usage of system it is easier to identify the customer preference and then ensure the customers satisfaction which will the increase the company's profitability and timely response to the market with the use of low costs.

The study recommends that telecommunication companies should invest in use information and communication technology systems in order to improve their inventory management activities. This would minimize communication costs and increase sharing of information which leads to improved efficiency and performance of telecommunication companies.

Using ICT for searching information only influences dimension of performance in international markets but has no effects on new market knowledge dimension. Also using ICT for sales activities does not influence these two dimensions and finally there is a significant relationship between using ICT for communicational development and both dimensions of export performance (Galandari 2012). Due to this telecommunication companies have to invest in training its staff on the use of information and communication systems so as to ensure good performance in the national and international markets, also should educate their customers so that they can trace their use of money of their kits through the use of information and communication systems.

Telecommunication Companies in Tanzania needs to have a clear policy for selecting staff that need training known to all employees and make them part and parcel of the program. In so doing the employees will understand the importance of developing their skills and knowledge in order to cope with the environment. The Management must consider all employees to have equal chances and rights for training. ICT investment in a wide range can enable Halotel organization to make significant cost savings and productivity gains.

#### REFERENCES

- Anderson, J. (2010). *Information and Communication Technology in Education*. Unesco.
- Armstong, M. (2014). A Handbook of Human Resources Management. New. Delhi: Kogan Page Limited
- Becker. (2007). Qualitative Research Design. In Becker, *Qualitative Research Methods* . Becker.
- Brian E. Perron, H. O. (2010). Information and Communication Technology in Social work. *Advances in social work*, 15.
- Chaudhury, A. B. (2010). Statistics without tears: Populations and samples. *Industry Psychiatry Journal*, 60-65.

- Cook, S. (2008). Customer Care Excellencies: How to create an effective customer focus.London: Kogan Page Limited.
- Davis, Fred D. (1986). User Acceptance of Computer Technology. A Technology Acceptance Model for testing New End - User Information System, Cambridge.

Davis, Fred D. (1989). User Acceptance of Computer Technology. A Comparison of two Theoretical Models. Management Science, Cambridge.

- Diyamett, M. M. (2010). Tanzania ICT Sector Performance Review. *Towards Evidence-based ICT Policy and Regulation Volume Two*.
- Galandari, K. (2012) East Journal of Scientific Research. Study of the relationship of ICT for Searching Information on Sales Activities and Communicational Development with Performance in International Market Knowledge in Iranian Firms Volume 2. Tehran, Iran.
- Gorona Celebic, D. I. (2011). *Basic Concept of Information and Communication Technology Handbook.* Zagreb: Open Society for Idea Exchange.
- Hung, T. M. (2016). Viettel Profile. Viettel Profile .
- *Isote*, B. (2013). International Journal of Academic Research In Business and Social Scienciences. *Impact of Information Communication Technology on performance of Tanzania Posts Corporation (TPC).*
- Kabanda, G. (2014). International Journal of Emerging Technology and Advanced Engeneering. *The Impact of ICTs on CustomerService Excellence in Zimbabwe*.
- Kithinji, F. M. (2015). Impact of Information Technology in Inventory Management in supermarkets . Nairobi, Kenya.
- Kothari, C. r. (2004). *Research Methodology*. New Delhi: New Age International (P) Limited.
- Kothari, C. R. (2012). *Research Methodology*. New Delhi: New Age International (P) Limited.
- Manson, D. (2013). *Strong connection between ICT and business-growth activities*. Wellington, New zealand: Tatauranga Aote Aroa Publishers.
- Manuel, C. (2000). The Rise of Network Society. Oxford: Blackwell.

- Masese Chuma Bernad, B. O. (2013). Impact and Challenges of Information Communication Technology adoption in Tanzanian banking Sector. *International Journal of Academic Research In Business and Social Sciences*.
- Mcha, M. C. (2012). The use of ICT in Improving mployment Process and Procedures in the Public Service in tanzania. *Forum Report, ICT for Employment*.
- Mongare, M. E. (2014). The impact of Information Communication Technology on Inventory Control Systeam in Transportation Organisation. *European Journal of Logistic Purchasing and Supply Chain management Volume 2*
- Mutiri, J. F. (2014). Financial Resources on ICT Performance in Inventory
   Management by Freight Founders in Nairobi Kenya. International
   Journal of Academic Research in Business and Social Sciencies, Volume
   4.
- N, W. F. (2010). Improving the Management of Human Resources in the public service through information and technology. *The Africa Public Service Human Resource Management network*, 25.
- Namusonge, P. G. (2014). Role of Information Technology on Ware house Management. International journal of Academic Research in Business Social Sciencies, Volume 4.
- Otiso, K. N. (2012). Improving the Quality of Customer Service throug the ICT use in the Kenya Power Lighting Company. *Journal of Emerging Trends in Economics and Management Sciencies*.
- Owuor, S. (2004). *The use of Information Technology as a facilitator of Business Process.*
- Saunders. (2009). *REsearch Methods for Business Students*. Harlow England: Pearson Education.
- Towo N. N. (2015). International Journal of Economics, Commerce and Management. Determinants of Customer Satisfaction in Commercial Banks: A Case of Uchumi Commercial Bank Limited in Moshi Municipality, Tanzania. Kilimanjaro, Tanzania.
- Uma Kothari, M. M. (2001). *Development theory and practice*. Manchester: Palgrave Mcmillan.

- Vaughan, P. R. (2008). What is a Conceptual Framework? *Conceptual Framework* .
- Wagigi, M. (2015). *Research Proporsal Development and Report Writting*. Moshi Kilimanjaro: Safi Publishers and Training.
- Werner P. (2004) Reasoned Action and Planned Behavior Theories. *Middle Range Theories: Application to Nursing Research.*
- Yong, A. G. (2013). A biginners Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. *Totorials in Quantitative Methods for Psychology*, Vol 9 (2).