BRING YOUR OWN DEVICE AND EMPLOYEE PRODUCTIVITY: A CASE STUDY OF EQUITY BANK

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DECLARATION

I hereby declare that this research proposal is my original work; it has not been presented to any other institution of higher learning for academic purposes.

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D61/85585/2016

Signed ……………………………   Date. …………………………………..

This proposal has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I would like to dedicate this research to my family especially my dear wife Lindah Seth, son Alden Monda and my lovely daughter Arianna Moige. I sincerely thank you for your support and encouragement during the research period. I will forever be indebted to you may God richly bless you.

ABSTRACT

Anecdotal evidence shows that Bring Your Own Device has made great headway into banks in Kenya and that these devices have presented those charged with IT security on how to appropriately embrace the new phenomenon gracefully. The study aimed at establishing the effect of bring your own device on employee productivity at Equity Bank, the extent to which employees of equity bank are using bring your own device, the challenges of using these devices, the determinants of using bring your own device and the relationship between the usage of bring your own device and productivity of employee. The study was guided by technology-organization-environment, framework theory and theory of acceptance and use of technology. The study used descriptive survey method. The study target population will be all 80 officers at Equity Bank Ltd Head office. Primary data was used. The Primary data was collected using structured questionnaires. The descriptive statistics was used to analyse the data such as mode, mean and frequencies tabular analysis. BYOD research will show the positive impact of pursuing the BYOD strategy for work engagement. Work engagement is a critical factor that employers must keep in mind since it is linked to role or job satisfaction and performance in several studies conducted. This research indicates that BYOD has a positive impact on work engagement, for the equity bank. BYOD explains that more than 15% work engagement variation and should be categorized as an influencer of work engagement. Even though most employees are not familiar with the term BYOD, use of personal devices at the work place is common. Employees' continue to walk in with their laptops, smart phones, iPads and other personally owned computing devices. The employees cite productivity and convenience as the biggest drivers of BYOD. This hasn't escaped the attention of the bank, as they site high responsiveness and increased motivation from the employees. The study recommends that the use of personal devices at workplaces has been found to positively influence the productivity of employees. In this regard, organizations should strive to ensure that the employees use the devices in a safe and appropriate manner. This research recommends installation of security measures such as anti-virus software in the corporate connections due to the high number of users who connect to the networks. The researchers in future should critically research on the negative side of BYOD when adopted. This research focused on employee productivity, but it would be very interesting to see the influence of BYOD on employee exhaustion and talent attraction and retention.

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Technological changes in big business computing space sometimes have been driven by change in employees' behavior which in turn highly influences the overall organizational behavior. Earlier organizations provided computers to their employees which were mostly microcomputers and or laptops (Musarurwa *et al.,* 2017). The desire for flexibility and mobility by tele-workers and mobile workforce has led to employees carrying and using their personal mobile devices to complete their work while away from office. This concept of mobility and flexibility has been enhanced by introduction of a new concept in the work environment known as Bring Your Own Device (BYOD)

Bringing your device is increasingly popular worldwide. For example, a survey by Mphahlele (2016) indicated that around 38% of the international workforce in 2015 used individual devices for official functions. This growth of Bring Your Own Device is creating doubts in the minds of managers. It has become common practice for an employee to position themselves at the top of the workstation provided by the company to also own a personal smartphone, tablet and laptop; it also happens to use all these gadgets in a complementary way. Personal computers and laptops are used to generate information; while tablets consume information and smart phones to communicate this information.

This study will be based on Technology-organization-environment (TOE) framework theory and (TAUT) Theory of acceptance and use of technology. The theory is extensively used in information technology and in this research study the theory will be used to explain the extent to which users or consumer of technology accepts technology. This theory helps in assessing

success rate of enterprise mobility and BYOD in the organization (Venkatesh & Zhang, 2010). The theory also will help in assessing the performance expectancy and social influence on an organizational culture. The second theory underpinning this research paper was the theory of technology organization-environment (TOE). The TOE framework influences technology adoption in an organization (Baker, 2012). Enterprise mobility and BYOD adoption in organizations could be guided by the theory in implementation and adoption by the users. The theory assesses the technological, organizational and environmental context. TOE framework is appropriate for technology adoption in organizations operations.

1.1.1 Bring Your Own Device

It is a theory where organization lets employees to bond their individual devices like laptops, mobiles and tablets to corporate system for easier access of business and collaborative applications within the organization or remotely (Lydon, 2014). Equity bank has embraced Bring Your Own Device and therefore this study will determine the effect of Bring Your Own Device on employee productivity. The driving idea behind BYOD adoption is that organization benefit by saving capital costs as they no longer have to offer employees with computing devices..

Employees use their mobile devices to carry out businesses related activities or access enterprise/organizational data and applications. According to Macleod (2017) BYOD has enhanced flexibility as employees can use their personal devices to access organization applications with ease. The BYOD hype is probably the single most discussed issue in technology in the past five years and has been as a result of employees push to bring their own devices (BYOD) to work and the need to access intranet data such as email, Customer Relationship Management, Enterprise Resource Planning and other corporate relevance.

Bringing your device to Kenya has been driven by high competitors in the mobile telecommunications sector that has seen its market leader Safaricom collaborate with several companies to boost the demand for devices and their subscribers in 3G networks. This movement saw him selling smartphones at costs below the market average. These devices have found their means into the workplace Mphahlele (2016). BYOD is implemented even if it is not fully approved by organization management. BYOD raises other concerns, including cost, and although it is considered a possible cost-cost operation for most companies, there are monetary risks that must be taken into account when implementing the program. It involves an increase in infrastructure, support and security expense (Ross, 2013). Privacy is also an important and valid aim mostly to employees. There is aim to recover all data and information from the company if the staff resigns or is dismissed (Mbalanya, 2013). A common feature of organizations is to educate employees and have them sign their BYOD forms that describe what staff can and cannot do on their devices. It is logical that the organization wants your data and, as such, there must be a valid policy that regulates the way in which said data will be recovered from the laptop

1.1.2 **Employee Productivity**

It is an evaluation of the efficiency of staffs (McNeese-Smith, 2016). Productivity is described in terms of an human capital production during a given period of time. Samnani and Singh (2014) noted that employee productivity its synthetic measure of the quantity and quality in usage of resources. The productivity of a given worker is evaluated with an average for staff that performs similar jobs. As a result of the success, any company depends on the productivity of its workforce;, therefore, employee productivity is a significant tool for businesses. According to Bhatti and Qureshi (2010), leading their own tendency makes employees more productive. Because employees are working on devices that they have and are used to using, they are likely

to use them more often. Mobile devices are, by definition, so if an employee takes notes at a meeting, reviews documents, during a trip or prepares the agenda for the next day while watching television, he can do more than one way that does not affect significantly in your personal time as if you were working from a desktop computer.

1.1.3 Equity Bank Kenya

Equity Bank was founded as an Equity Building Society in October 1984 and was initially a mortgage lender. The logo of the company, to improve life, seeks safety and the progress of their dreams (Bank, 2016). The overwhelming majority of Africans have been excluded from access to financial resources. In 1993, the transformation of equity became a fast-growing microfinance and became a commercial bank. Currently, Equity Bank has more than 8 million customers, which makes it the largest bank in Africa. The business model and visionary leadership of Equity Bank continued to garner local, regional and global awards and recognitions. Large volume Equity model (Bank, 2016). The model is also studied in the United States. Equity Bank provides the delivery infrastructure, which reduces the rate of return of any social investment. The six areas of social interest includes; education and leadership development; financial education and access; agriculture, health and innovation. The reputation as the most favorable bank for people is firmly rooted. Safaricom, Telkom and Yu have developed mobile money platforms unprecedented in terms of size, convenience and efficiency (Bank, 2016). The bank has demystified the banking activity of the Armati rich with the trust of the people of East Africa as the greatest resource, always seek easy and friendly, fast and convenient.

1.2 Research Problem

Companies ask their employees to be more productive thanks to technological advances (Hommel, 2013). This requires considerable flexibility in the information technology (IT) policy that allows the safe use of personal devices and mobile devices in a work capacity to increase employee productivity and generate a vital competitive benefit. BYOD cannot be ignored because most organizations have generated a large part of their workforce, they are tech savvy people and well-informed personalities, willing to explore and test new technologies as they come out. However, the BYOD initiative must be effective, especially since additional investments are needed to support the use of personal devices in a corporate environment.

Anecdotal evidence shows that BYODs have made great headway into banks in Kenya and that these devices have presented those charged with IT security on how to appropriately embrace the new phenomenon gracefully (Parsons & Adhikar, 2016). Equity bank is not unique to this trend. A challenge nevertheless arises because unlike with desktops computers, the ICT department has minimal visibility of these portable devices (Kamau, 2013). As such, unmonitored numerous information security challenges emerge such as the possibility of data loss through device loss, classified files being copied on to the devices local storage, lack of adequate security measures on these devices, out of date antivirus programs, amongst others. Hence, this study would like establish the challenges experienced at Equity Bank Limited as while using BOYD.

The studies related to Bring Your Own Device were made locally and internationally, Ross (2013) studied the implementation of "bring your device" from the teachers of a suburban high school. The study found that individual practice with innovation and lesson scheduling for student-centered education is a more important gauge of effective implementation of BYOD than teaching or practice of age. The common obstacles to the accurate implementation of BYOD

were time, impartiality and student participation. Loose et al. (2013) studied the determinants of the adoption of Bring Your Own Device (BYOD) from the perspective of future human capital. The study established that the performance expectation of a BYOD service has the most significant effect on the intention to use this service. In addition, the study found that the attractiveness of the employer with a BYOD service is assessed more by younger participants than by older men and older women than by men. In addition, Parsons and Adhikar (2016) studied the perceptions of teachers, students and parents to take their devices to high school.

At a local level, Kamau (2013) while studying presented the phenomena of their device between the balancing of productivity and the security of company data, has established that the term BYOD seems too new for most of the employees and that the management has not including the concept. He also discovered that the implementation of BYOD had not been adopted as much as in Western countries and industries. Arwa (2014) also conducted a study on the adoption of bringing its own device to improve the provision of customer service in commercial Kenya. The study found that 100% of micro bankers apply BYOD in their daily work activities. The bank allowed them to use only their smartphones. Mbalanya (2013) has studied bringing his own device and the security of company information technology. The study indicated that over ninety percent of NSE companies permit BYOD in one way or another. It was also shown that more than half of the organizations studied allowed over 50% of staff to use their individual devices for work activities. It was also discovered that most companies were not ready for BYOD. Most had no specific BYOD counter measures, and instead relied on old security infrastructures that may not be suitable for mobile tools.

Therefore, there have been few studies in Kenya on Bring Your Own Device and employee productivity. This makes an appropriate way to plug the gap that other researchers have left. The

study will focus on the effect of bring your own device adoption on employee productivity; a case of Equity Bank which will lead to the question; what is the effect of bring your own device adoption on employee productivity at Equity Bank?

1.3 Overall Objective

This general objective of the study is to establish the effect of bring your own device on employee productivity at Equity Bank. Specifically the study seeks to establish:

  i. The extent to which employees of equity bank are using bring your own device

  ii. The challenges of using these devices

  iii. The determinants of using bring your own device

  iv. The relationship between the usage of bring your own device and productivity of employee

1.4 Value of the study

This study is very significant to various stakeholders within the bank and economy at large. The Equity Bank is currently leasing lap top computers to some line managers in Head office. This study will be useful in determining whether to continue leasing or allow the employees to come with their devices but instead invest in available security system software. This information will also offer much needed help for all banks and not only Equity in their pursuit for increased of employee productivity as they compete with seasoned micro finance companies in the industry. The study will also generate new knowledge by giving a multidimensional view on the effect of bring your own device adoption on employee productivity and contribute to academic research that it is supposed to serve.

This research study aims to benefit organizations domineered by knowledge workers and where information/data is the key asset. This study will show the working of a knowledge worker, their preferences, and the kind of technological working environment they prefer. Likewise, employees are at the center of this BYOD study and this document aims to clearly show just how they stand to benefit even more, how their privacy can be assured, how costs can be shared as well as train them on the potential ways they are likely to expose their organizations to security risks and how this can be mitigated.

Solution providers also stand to benefit from this study as it unearths immense opportunities where they can lake in millions of dollars by providing secure platforms that would seamlessly yet securely integrate the personal devices to the organization ICT infrastructure. This could be fronted in terms of applications, storage solutions, unified communication or data security solutions.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The plan of this section is offer an assessment of previous studies on Bringing Your Own Device and employee productivity. The chapter is categorized into several parts. The first section reviews the theories of Bringing Your Own Device. The second section reviews the empirical literature on the effect Bringing Your Own Device on employee profitability. The third reviews the various determinants of employee productivity in the context of Bringing Your Own Device. A conceptual framework is also provided and the chapter concludes by having a summary of some of the reviewed literature.

2.2 Theoretical Review

The study is based on two theories: TOE and TAUAT.

2.2.1 Technology-Organization-Environment (TOE) Framework.

The TOE framework was founded by Tornatzky and Fleischer in 1990 for the organizational adoption based on the theory of the Contingency of Organizations. The TOE framework theory states that an effective organization must be a structure consistent with its environmental needs (Venkatesh and Zhang, 2010). In this context, three key contexts that influence employee productivity were: technology, organization and environment, hence the name "TOES". It focuses on how technological features can affect employee productivity. The quality of human resources and the amount of centralization, the complexity of human resources and the amount of resources available to employees (Samnani, Y Singh, 2014). Finally, in the TOE framework theory, the external environmental context is the area in which an organization carries out its activity. The theory applies to the BYOD case, ie there is a productivity of employees in which

the technological context is applied to internal and external technologies. The environment analyzes the size and structure of the sector. Understanding the organization and the environment when a new technology is essential for a successful adoption of this technology

2.2.2 Theory of Acceptance and Use of Technology

The theory aims to illuminate the intentions of an information system as well as its subsequent behavior (Ross, 2013). The theory holds that four key constructs, namely the expectation of return, the expectation of effort, the social influence and the facilitation conditions, are postulated by gender, age, experience and voluntary use of them to moderate the effect of the four important constructs on the use of intention and behavior (Gonçalves, 2017). The theory was developed through a revision and consolidation of the constructs of eight models. These models are: reasoned action theory, technology acceptance model, motivational modeling, planned behavior theory, PC usage model, innovation dissemination theory and social cognitive theory. When it comes to BYOD, the increase in productivity (yield of hope), ease of use (hope of effort), status symbol (social influence) and the low cost of mobile devices (facilitation conditions) have led to the phenomenon BYOD of employees who bring their devices to work-related tasks.

2.2.3 Innovations Diffusion theory

Innovations Diffusion theory is a mature theoretical framework developed in 1960 by Everett Rogers. An idea of how to accelerate or slow down the speed of diffusion of innovation (Parsons, & Adhikar, 2016). Rogers, one of the most influential researchers in the field of ideas: the perceived attributes of innovation, the delimited social system, the channels of communication and time. In relation to the perceived attributes, Rogers found five key categories: relative advantage, compatibility, complexity, reliability and observability. Over time, other acceptance

researchers have expanded these attributes to include: demonstration of result, image, and voluntariness. According to Bhatti and Qureshi (2010) Innovation Diffusion Theory, the introduction of an innovation replaces or modifies an existing practice. Innovations in organizations often fail because employees feel overburdened with work and, therefore, most innovations are considered "simply something else to do". Therefore, technological innovations in organizations could improve both work and work, expand personalization or lighten the workload (Bhatti and Qureshi, 2010). Think of this as the principle of "building a better mousetrap". However, the theory states that initiating technology-based reforms means that the employee must learn how to incorporate the new technology into office practices. Therefore, continuous professional development is essential for employee participation. Therefore, according to the theory, the introduction of BYOD is not sufficient to improve employee productivity. One of the main criticisms of the theory of diffusion of innovations is that adoption is mainly seen as a dichotomous result. However, adoption with respect to the non-adoptive approach does not completely address the issue of technology adoption (Loose, & Weeger, 2013). The theory will be played in this study where it was prepared as an opportunity for further development. The division of attributes offers a very clear way to consider change and the way forward as a decision-making process for innovation. These two need more exploration and the need to look for more support reviews that use these ideas (McNeese-Smith, 2016).

2.3 Bring Your Own Device (BYOD)

Bring your device (BYOD) refers to a commercial policy that adopts iPad, smartphone and laptop to access the company, such as e-mails, databases and documents (Mokaya, Y Kipyegon, 2016). IT consumerization has the potential to access e-mail, social networks and the Internet. The ease of access to these tools, customers now want to bring these tools to their work station.

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This has made many companies to prefer and accept the BYOD surroundings. The companies must develop a BYOD surrounding that responds to users' needs and adequately guarantees the environment (Mphahlele, 2016).

The increased sophistication of phones and computing devices coupled with their falling prices has made mobile devices highly accessible and affordable to the common man (Lydon, 2014). Unlike in the past, it is now easy to obtain a smart-phone, tablet, laptop at an affordable cost. Bring Your Own Device is prevalent in more organizations today. This technology has created a work shift in organizations that requires attention. Employees have high expectations of freedom in organization to choose the type of device to use when working, seamless delivery of content and information. As more and more companies embrace BYOD, the demand for employees' flexibility and better working ways has led to upsurge of mobile device at workplaces and more than never technology is expected to keep up with the changes. This directly affects employee's performance (Macleod, 2017). According to Ross (2013) Firms have also come to realize the importance of BYOD in increasing employee productivity, increasing work flexibility, reducing the cost of IT expenditure and in retaining the best talent.

According to Macleod (2017), BYOD has been used in various companies in all sectors. Besides, it is more common in service-oriented organizations, like banks, advertising companies and public relations organizations. The Technology-based firms like Internet service and telecommunications providers have seen a growing trend in employees. In fact, some telecommunications companies purchase these devices for their staff. The functions within companies that have found the greatest increase in BYOD use like marketing, advertising, customer management departments and executive management. The idea of BYOD is based on the phenomena that "work is no longer a place to go and then part, but a continuous activity

(Mbalanya, 2013)". The corporate environment has reason why organizations have been opting to implement this "BYOD" approach, which is based on smartphone, tablet and Internet technology. Employees require flexibility and system availability to work anytime and from anywhere.

According to Mokaya, and Kipyegon (2016), there are various benefits associated with the use of BYOD in organization. Some of the benefits include firstly, allowing employees to bring their own devices improves employee morale. By giving employees the freedom to bring their own devices, they gain more control over their computing environment thus making them happy. They can also work from home and have the option of working flexible hours instead of the traditional nine to five hours. This approach helps a company to recruit and retain the best and brightest professionals in the industry. Secondly, the concept of BYOD help improve organizational and employees productivity. The ability for employees to easily switch from personal applications such as music, photos, social media and email, to corporate applications and systems, allows employees to work away from home on weekends and late into the night (Musarurwa, & Cilliers, 2017). Employees also become more productive and efficient because corporate data and information is readily available to them on their mobile devices. Efficiency is further advanced because the employees are more familiar and comfortable using the functionality of the devices they own.

2.3.1 Challenges of Using BYOD

BYOD presents its risks that must be disclosed intact in the bank. By virtue of their mobility, the devices used in BYOD can be easily archived and, if they are not encrypted. This information can expose client's data and privacy data that may destroy the company's reputation and trust.

Intellectual secrets and trade secrets can also be exposed to a company's competitive advantage. When using BYOD adoption in an organization, it focuses on privacy and data security. A study conducted by Gonçalves (2017) showed that 93% of personal tablets that connect to company data did not install any security software; the report also notes that 84% of smartphones have been linked to modern mobile devices are a good target for potential attackers because of the very nature of the operating systems that run them. These are two of the most important reasons for this topic of financial and personal support. Most users assume that their devices are safe and few perform the additional step for installing security software (Mphahlele, 2016). The effect of these threats can be determined by the resources or properties that are affected by the threat. For instance, assets include personal data, corporate intellectual property, classified information, financial assets, availability of services and reputation.

Malware attacks are a major concern when BYOD is implemented in all organizations. The malicious software is designed to damage a computer, take control of it, and spy on user activities. Most users do not know the functionality and capabilities of the applications they install. Mobile applications usually require certain permissions during installation. These permissions include the request for access to the contents of the address book and wireless transmissions (Musarurwa, & Cilliers, 2017). Some applications collect and publish personal information and position that are often used in social networks and expose the user to various security and privacy issues**.**

2.3.2 Determinants of using BYOD

Global IT organizations have worked to develop standardized standards for their service offerings. Both the hardware and software components and support services have been limited to a predefined IT service catalog. These measures have been taken to avoid the security problem

and cannot be guaranteed (Gonçalves, 2017). However, the changing nature of product and service offerings has changed the practice hence; employees need to be flexible to be more productive. However, to address the balance between usability and security, firms must take a series of phrase. Some choose extreme approaches, like individual devices in the corporate network, which can be protected by the BYOD policy which offers flexibility for users by applying company policies and adopting best practices. Some of the factors that determine the use of BYOD in an organization include: Employee education has a vital effect on the successful implementation of the BYOD strategy. Policies are vital, but training on corporate policies is more essential. Companies will not succeed if the administration does not teach workers how they are or cannot use their individual devices for business. Train workers on which files they can and cannot access their devices. If the organization does not offer full training and refresher courses to workers, it will lose sight of the rules and procedures and a data breach will be unavoidable. Workers will continue to request the use of individual mobile devices at the workplace. Most companies should consider the decision to grant these requests or provide an appropriate, modern and company-controlled device. Policy for the implementation of the program the age of the employee must be taken into account when evaluating the implementation of BYOD. Mobile devices are like a Pandora box, full of free personal and business data for a criminal, once they have access to data (Musarurwa, & Cilliers, 2017). Therefore, the use of a mobile device is the result of other threats, since there is no total control over the device, which can create serious problems for organizations. The impact can be disastrous. Therefore, companies must understand their human resources and billing level before adopting the strategy. This will reduce losses in terms of company information and exposure to other risks.

2.4 Employee Productivity

It is an assessment of human capital efficiency. In addition, Productivity can be assessed in terms of a given period. It's a more competitive advantage since the production costs of your product and services are lesser. Productivity does not mean that more is produced; Few people can also be used to produce more. The outcomes are often expressed as tangible (products) or intangible (services) for an internal or external customer, but not always. They can be in terms of financial results, effect on public life and know what outcomes are stated in terms of financial and time cost, quality, quantity or time (McNamara 2009).

Gauging productivity means defining the amount of time an average employer needs to produce a certain level of production. A direct relationship with the benefits of a company. An employer fills his staff with the ability to manage a worker's skills during the initial job interview. However, there are several factors at work (Lake, 2000). Tierney (2009), states that, perhaps, none of the resources used for productivity in organizations is examined closely as human resources. Many of the activities involved in human resources. Payment, assessment work planning and compensation are human resource activities directly related to productivity. Voon (2011 noted that controls labor costs and increases productivity by establishing clearer links between payment and performance. The growing concerns about productivity and meeting clients needs have sparked renewed interest in ways to meet customer expectations and increase productivity

2.5 BYOD and Employee Productivity

On average, BYOD can save businesses money and help employees become more productive. BYOD is the most effective way to implement BYOD in a more strategic way. Various studies

have been conducted on the impact that BYOD has on employee productivity. Globally, Emery (2012) conducted a review of the literature published between 2007 and 2012 to examine four categories: policy creation, data security, user education, and Mobile learning that are essential in BYOD. The study indicated that there are more fundamental concerns with management and solution.
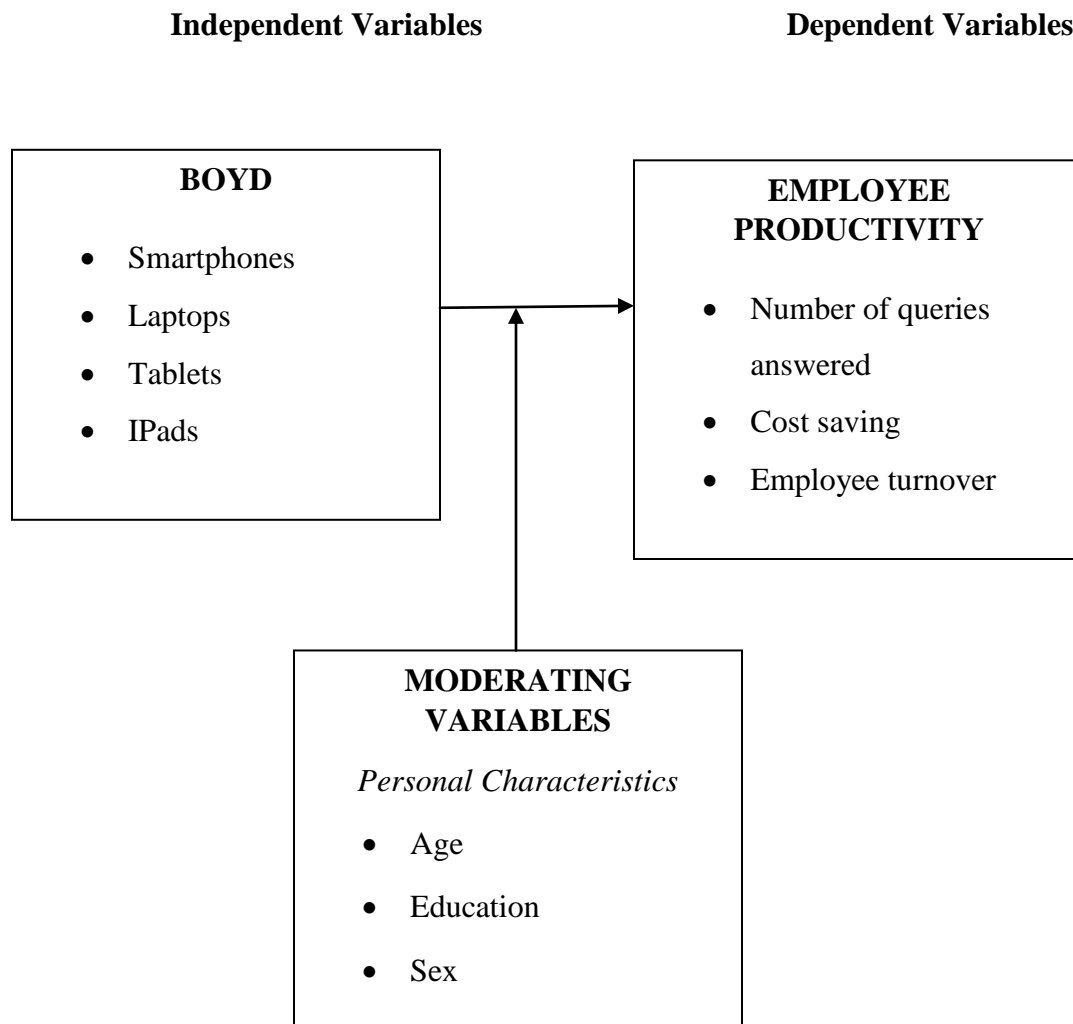
Asparuhov (2015) conducted a study on the risks that these devices are being delivered to organizations, how to protect the company. The results of the study indicated that there are many risks for companies, caused by the use of personal mobile devices. Afreen (2014) conducted a study on how the concept of BYOD can be useful in the education sector, especially in higher education. It was also found that personal devices are used mainly for educational purposes as for private purposes (Gonçalves, 2017). There are also many BYOD policies available for organizations and educational institutes. Most educational institutions have allowed some form of BYOD on their campus mainly through the control of access to the network (NAC) without implementing any BYOD policy.

Locally, Mbalanya (2013) conducted a study to know to what extent BYOD has been adopted in organizations, the benefits that accompany it, the threats associated with BYOD and the countermeasures that have been implemented. Kamau (2013) conducted a study to discover how organizations can achieve a balance between BYOD and the security of corporate data. The study used the design of exploratory cases. Questionnaire and in-depth interviews. BYOD may be too new for employees; it is a practice that has been working for quite some time. Arwa (2014) conducted a study to understand the extent to which BYOD has been adopted in Kenya Commercial Bank. Structured questionnaire in the Nairobi region.

2.6 Summary of Literature

BYOD has become a symbol of maturation in computing which has been embraced widely around the globe . Locally, the same vigor is lacking and has been embraced in very little and careful steps. The literature review has clearly shown just how beneficial and productive BYOD can be; increasing motivation and satisfaction hence reducing recruitment costs. This would post remarkable improvement in   employee productivity. This implies that the local banking industry can leverage on BYOD to stay abreast of competition through excellent customer service delivery.

2.7 Conceptual Framework

Independent Variables   **Dependent Variables**

BOYD	**EMPLOYEE PRODUCTIVITY**
• Smartphones • Laptops • Tablets • IPads	• Number of queries answered • Cost saving • Employee turnover

MODERATING VARIABLES

Personal Characteristics

• Age

• Education

• Sex

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section described the research design, study population of study, sample, and place of the study, research methods, research method, data collection methods, types, and sources of data, data collection procedures.

3.2 Research Design

The study used descriptive survey method. This method was selected because of the collection of quantitative data which was important to this study. This method was the most appropriate for collecting information that brought out the BYOD phenomenon and the impact it has on employee productivity at the chosen firms. The method was suitable for describing the BYOD situation within a banking institution.

3.3 Population

The study focused on all human capital hired by Equity Bank Ltd and specifically in the Head office in Nairobi. The study target population will be all 80 officers at Equity Bank Ltd Head office. A census of the entire population will be conducted. A Census was most suitable due to small number of departments in the Equity Bank Ltd Head Quarter and the character of the data collected. Another aspect that chains a census having been done was that only one IT manager in charge of IT, from each department.

3.4 Data Collection

Primary data was used. The Primary data was collected using structured questionnaires. Some of the questionnaires required a "Yes/No" response while others required to be ranked using ordinal or nominal scales. The questionnaires were delivered to the IT managers in various departments

at the Equity Bank Limited Head Quarters. These individuals were in the best position to provide data concerning the use and management of mobile devices in their respective firms.

3.5 Data Analysis

The data collected was then be edited for completeness, coded and entries fed into the SPSS computer package. This ensured that the collected data is uniformly entered, accurate, consistent with other information, properly arranged to simplify the coding and tabulation process and complete. The descriptive statistics was used to analyse the data such as mode, mean and frequencies tabular analysis using average which were used to identify the influence of BYOD on employee productivity. The regression model adopted to check the relationship between of BYOD and employee productivity.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

$$Y = \text{employee productivity}$$

$$X_1 = \text{BYOD}$$

$$X_2 = \text{Personal Characteristics}$$

$$\beta_0 = \text{the intercept term (constant)}$$

ε is the random error term accounting for all other variables that influence employee productivity but not captured in the model.

3.6 Summary of the Methodology

Objectives	Data and Information to be Collected	Questionnaire	Analysis to be Done
Extent to which employees of equity bank are using bring your own device	Primary data	Section B	Descriptive statistics
Challenges of using these devices	Primary data	Section D	Descriptive statistics
Determinants of using bring your own device	Primary data	Section C	Descriptive statistics
Relationship between the usage of bring your own device and productivity of employee	Primary data	Section E	Regression Analysis

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discussion of the researchers from the analyzed data. The objective of the research was to determine the effect of bringing the device to the productivity of employees in Equity Bank. The data used for the study were collected through questionnaires composed of open and closed sources and secondary sources. The statistical software package for Social Sciences was used for data analysis. The results of the research were presented in graphs and tables.

4.1.1 Response Rate

The results on response rate were presented on the table below.

Table 1: Response Rate

Questionnaires	Frequency	Percent (%)
Response	74	93.02
Non-response	6	6.98
Total	**80**	**100**

The study targeted respondents were 80 but the researcher got back 74 fully completed and returned questionnaires filled and this resulted in a response rate of 93%. This response rate was considered satisfactory for making conclusions for the study as it acted as a representative. According to Mugenda and Mugenda (1999), a response rate of 50% is considered adequate for analysis and reporting.

4.2 Background Information

The respondents chosen for the research were the ones considered to be knowledgeable about the

extent of application of Bring Your Own Device and its influence on customer service delivered by the Equity bank to its customers.

The study investigated some background information including: gender, period of service in this organization, position, department, age and education level.

4.2.1 Gender Distribution

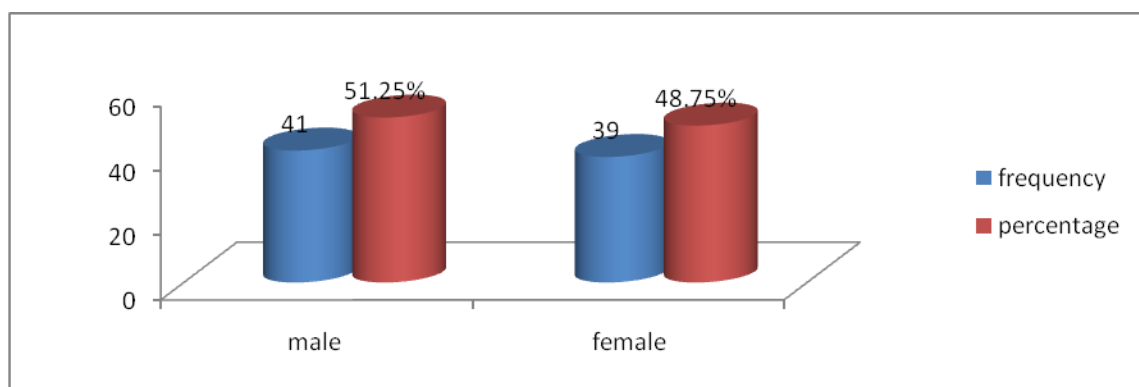The results on the gender distribution were presented on the figure below.

Figure 4.1: Gender Distribution

The findings was that 51.25% of the respondents were male while 48.75% were female. This indicates that the distribution in terms of gender was fairly distributed.

4.2.2 Period of service in this organization

The findings on the distribution in terms of Period of service in this organization were presented on the table below.
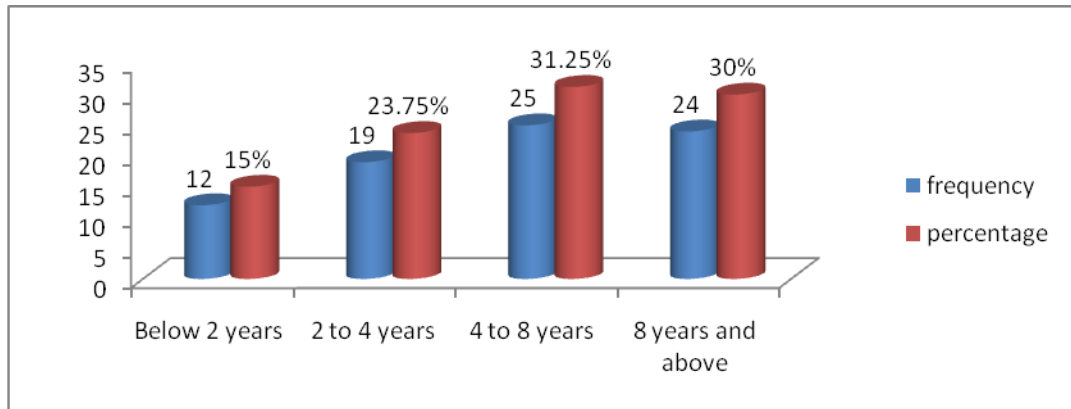
Figure 4.2: Period of service in this organization

According to the findings 31.25% had worked with Equity bank for a period between 4 to 8 years, 30% had worked for 8 years and above, 23.75% had worked for a period between 2 to 4 years while on 5% had worked for less than 2 years.

4.2.3 Position

The study also investigated the distribution of respondents in terms of position held in the organization.
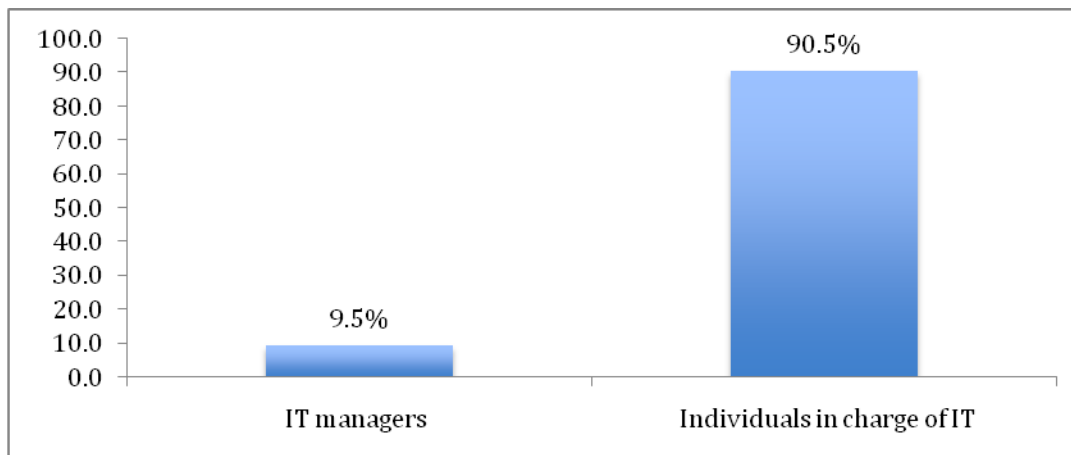

Figure 4.3: Position

From the figure above shows that 90.5% of the respondents were individuals in charge of IT while 9.5% were IT managers.

4.2.4 Age Distribution

The findings on age range are presented on the figure below.

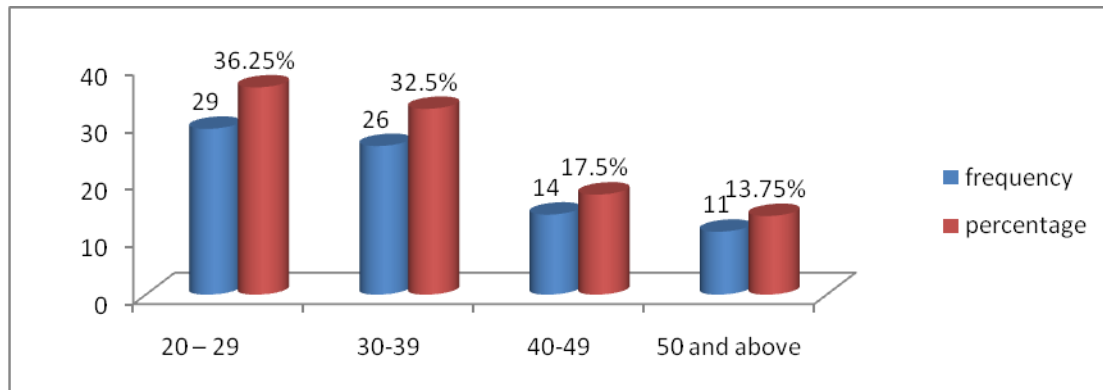**Figure 4.4: Age Distribution**

36.25% of the respondents indicates that they were aged between 20 and 29, 32.5 were aged between 30-39, 17.5% were aged between 40-49 while 13.75% were 50 years and above. This implies that there was a fair distribution in terms of age range.

4.2.5 Education level

The findings on Level of Education are presented on the figure below.
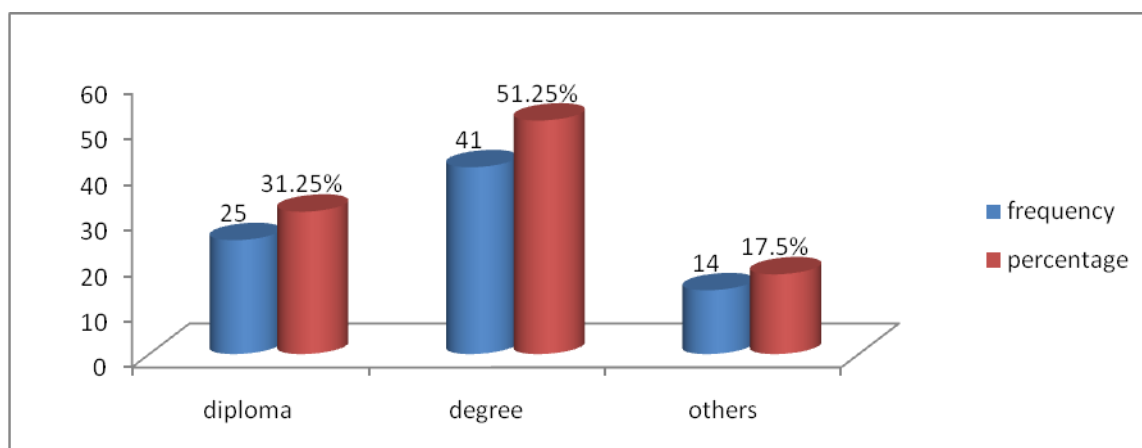

Figure 4.5: Education level

Majority (51.24%) of the respondents were of degree level, 31.25 were diploma holders while 17.5% were above the degree level. This implies that there was a fair distribution in terms of education level.

4.3 The Effect of Bring Your Own Device on Employee Productivity at Equity Bank

4.3.1 Use own devices at the work place

On the effect of bringing own device on employee productivity at equity bank, the study sought to establish whether or not the employees used their own devices in the bank.
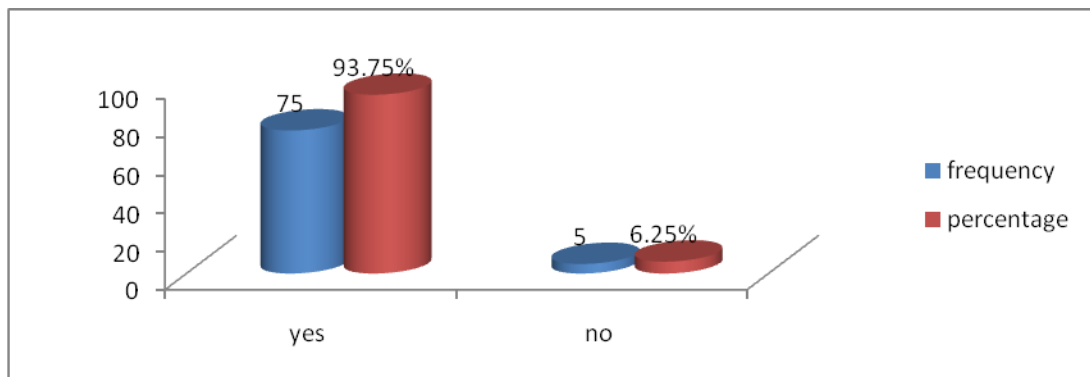
Figure 4.6: Use own devices at the work place

Based on the findings 93.75% agreed that they used their own devices in the bank while on 6.25% indicated that they did not use their own devices in the bank.

4.3.2 The kind of devices you allow on the corporate network

Based on the findings 100% of the staff in equity own smart phone, 63.6% have laptops, and 19% own tablets with only staggering 9% having IPad. However, data analysis shows that 100% of the respondents admitted using their Smartphone and 19% use their tablets to accomplish many of the key workplace tasks. This was due to its convenience and reliability. Only a few respondents indicated use of I pad (10%) and Laptop (15%) in workplace.

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The results of the higher productivity of the organizations have been adopted by BYOD. These results are in line with Emery (2012), which has increased its demand for employees. In addition, note that the popularity of remote access and existing security solutions has increased to allow remote management of mobile devices with the effect that many organizations endorse the use of their devices in their workplace

4.3.3 Allowing These Devices to Connect To the Corporate Network

Study also sought to investigate whether employees allowed these devices to connect to the corporate network. The results are as presented on the figure below.
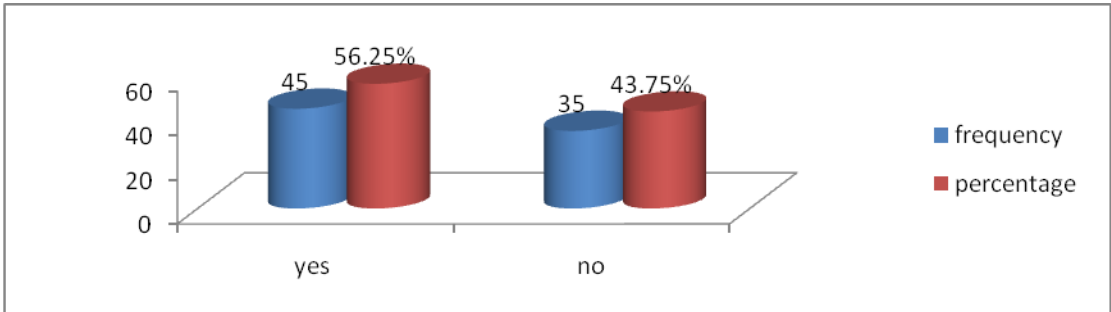
Figure 4.7: Allowing these devices to connect to the corporate network

It was found that 56.25% allowed their devices to connect to the corporate network. However, 43.75 did not allow their devices to connect to the corporate network.

4.3.4 Kind of corporate data processing and or storage allowed on these devices

The results on the kind of corporate data processing and or storage allowed on the employee's devices are presented on the figure 4.8.
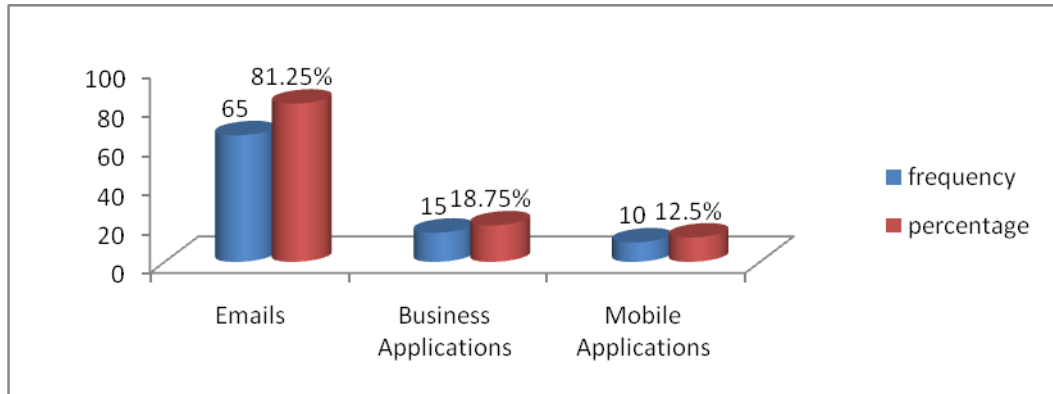
Figure 4.8: Kind of corporate data processing and or storage allowed on these devices

The findings reveal that majority of the employees (81.25%) used emails, 18.75% used the devices for business application while 12.5 used the devices for mobile application.

4.4 Determinants of Using Bring Own Device

In a 5 - point scale where: No extent=1, Little Extent = 2, Moderate Extent=3, Great Extent=4 and Very Great Extent=5, respondents were invited to indicate the extent to which they agree with the following factors on determinants of using Bring Your Own Device in the bank.

Table 4.2: Determinants of Using Bring Own Device

Factors	Mean	Standard deviation
Flexibility of working environment	3.96	1.36
Availability of BYOD	3.58	1.38
Cost of Devices	3.74	1.30
support from top management	3.62	1.35
Existing organizational policies	3.56	1.33

To a great extent respondents agreed that they used devices in workplace due to the: Flexibility of working environment (mean=3.96, SD= 1.36), BYOD Availability (mean =3.58, SD=1.38), Cost of Devices(mean=3.74, SD=1.30), support from top management(mean=3.62, SD=1.35), and Existing organizational policies (mean=3.56, SD=1.33).

4.5 Challenges of Using BYOD

The researcher also investigated the challenges faced by EQUITY bank in using BYOD. The results are presented in Table 4.3.

Table 4.3: Challenges of Using BYOD

BYOD challenges	Mean	Standard deviation
Malwares in corporate network	4.02	1.29
Hacking in corporate network	4.08	1.26
Data loss in corporate network	4.06	1.27
Virus infection in corporate network	4.11	1.18
Identity theft in corporate network	4.12	1.17
Unauthorized tethering in corporate network	4.09	1.28
Infected with malicious software	4.15	1.07
Incapability to use it due to technical issues	4.18	1.09
Identity theft	3.96	1.32

malwares in corporate network (mean= 4.02, sd=1.29), hacking in corporate network (mean=4.08 sd=1.26),data loss in corporate network (mean=4.06 , sd=1.27), virus infection in corporate network (mean= 4.11, sd= 1.17), identity theft in corporate network (mean= 4.12, sd= 1.17), unauthorized tethering in corporate network (mean= 4.09, sd= 1.28), infected with malicious software (mean= 4.15, sd=1.07), incapability to use it due to technical issues (mean=4.18, sd=1.09) and identity theft (mean= 3.96, sd= 1.32)

The results also suggest that the increased productivity of organizations has led to the adoption of BYOD among different companies with the results that the market has grown at a rapid pace. These results are in line with Emery (2012) who found that in the last decade there has been an increase in the demand of employees to choose and use their devices in the workplace. In addition, they point out that the popularity of remote access and existing security solutions has

increased to allow remote management of mobile devices, with the consequent effect that many organizations support the use of their devices in the workplace.

4.6 BYOD and Productivity

Data from the bank tally on productivity and it has emerged as the greatest motivation behind embracing BYOD. All respondents agreed that irrespective of how one frame the individual benefits, all of them end up aiding into the productivity of the employee in one way or another. Convenience for instance means that the employee is flexible and can almost literally work from anywhere, including at home, after working hours, while in traffic and all this goes to enhance their output.

Based on the benefits of BYOD for employers, the reduced costs of purchasing new devices and acquiring technology for organizations, the advantage of upgrading new devices by using the latest and greatest hardware productivity and user satisfaction due to the use of the device itself.

4.5 Regression Analysis

Model Analysis

In this study, a multiple regression analysis was performed to evaluate the influence between the predictive variables. The research used a social science statistical package (SPSS V 21.0) to encode, insert and calculate multiple regression measurements.

Model Summary

The model summary is presented in the table below

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.71	0.51	. 5098	0.08

Source; Research findings, 2017

Coefficient of determination was used to evaluate fit of the model. The adjusted R2, also known as the coefficient of multiple determinations, is the percentage of variance in the dependent employee described univocally or jointly by the independent variables. The model had an adjusted average coefficient of determination (R2) of 0.5098 and this implied that 50.98% of changes in employee productivity is explained by the variable variables studied.

Analysis of Variance

ANOVA technique was used to test the model significance. The findings are tabulated in table below.

Table 4.5 : Summary of One-Way ANOVA Outcomes.

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	6.76	1	6.76	2.18	.0021[b]
	Residual	1164.22	72	14.74		
	Total	91.27	73			

Critical value = 2.03

Source; Research findings, 2017

From the static ANOVA, the study established that the regression model had a level of significance of 0.21%, which indicates that the data were ideal to draw conclusions about the parameters of the population since the value of significance (value p) was less than 5%. The calculated value was above the critical value (2.18> 2.03), an indication that both BYOD and personal characteristics have a significant effect on the performance of the organization. The level of significance was less than 0.05, which indicates that the model was significant.

Coefficients

The coefficient table was adopted to determine the study model. The findings are presented in the table below.

Table 4.6 : Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.42	0.50		2.84	0.006
	BYOD	0.46	0.16	0.47	2.87	0.03
	Personal Characteristics	0.41	0.152	0.408	2.69	0.041

Source; Research findings, 2017

Predictors: (Constant), BYOD and Personal Characteristics

Dependent Variable: employee productivity

As per the SPSS generated output as presented in table above, the equation becomes:

$$Y=1.484+0.651X1+0.571X2+\varepsilon$$

The regression equation above has established that holding BYOD and Personal Characteristics constant, other factors influencing employee productivity will be at 1.42. The results also show

that taking all other independent variables at zero, a unit change in reverse BYOD would lead to an increase in employee productivity by a factor of 0.46, On the other hand, the findings also show that unit change in Personal Characteristics while holding the other factors constant would lead to an increase in employee productivity by a factor of 0.41.

Table 4.7: Coefficients

On further study of predictors on the coefficient table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.42	0.50		2.84	0.006
	Smartphones	0.56	01.61	0.47	2.87	0.03
	Laptops	0.23	0.12	0.34	2.43	0.00
	Tablets	0.12	0.56	0.23	2.33	0.001
	IPads	0.10	0.27	0.408	2.69	0.041
	Age	0.23	0.23	0.44	3.4	0.00
	Education	0.47	1.25	0.213	2.67	0.003
	Sex	0.33	0.81	0.22	2.45	0.001

Source; Research findings, 2017

Predictors: (Constant), smartphones, laptops, tablets, Ipads, age, education, and sex

Dependent Variable: employee productivity

As per the SPSS generated output as presented in table above, the equation becomes:

$Y = 1.42 + 0.56X_1 + 0.23X_2 + 0.12X_3 + 0.10X_4 + 0.23X_5 + 0.47X_6 + 0.33X_7 + \varepsilon$

The regression equation above has established that holding the predictor variables constant, the employee productivity would remain at 1.42 units. The results displayed above also revealed the following: (1) a rise in the use of smartphones by one unit would result to a corresponding increase in employee productivity by a factor of 0.56, provided all other variables are held at zero, (2) a unit increase in the use of smartphones by employees would result to a 23% improvement in their productivity, if all other factors are constant, (3) a unit increase in the usage of tablets among employees would culminate in a 12% increase in their productivity levels if all other influential variables are kept constant, (4) a unit increase in Ipad use would contribute to improvement of employees' productivity by a factor of 0.1, (5) an unit increment in employee's age would result to a improvement in the employee's productivity by 47%, and (6) a unit increase in the employee's education level would lead to a increase in their productivity by 33%.

Discussion of the Findings

Coefficient of determination was used to evaluate the fit of the model. The adjusted R2, also referred to as the coefficient of multiple determinations, is the percentage (%) of variance in the dependent employee explained univocally by the independent variables. The model had a calculated average coefficient of determination (R2) of 0.5098 and that implied that 50.98% of changes in employee productivity are clarified by the independent variables under study.

From the ANOVA statics, the calculated value was greater than the critical value (2.18> 2.03) an indication that both BYOD and Personal Characteristics have a significant effect on organizational performance. The significance value was less than 0.05 indicating that the model was significant.

The previous regression equation established that BYOD and constant personal characteristics, other factors that affect employee productivity will be 1.42. this means that their other variables that influence employee productivity have not been considered in the study model.

The results indicated that BYOD is a system that allows and facilitates communication within a stock bank and can use mobility applications, wireless technology to allow communication and access to information, as well as commercial transactions of any device, from any , of any person, at any time

The study established that the point of mobility solutions, such as mobile email, is mainly based on basic communications and productivity improvements. As a result, the BYOD trend will promote new business models, reduce costs, attract and retain talented people, and improve productivity, collaboration and customer experience

CHAPTER FIVE : SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

A discussion of the findings reported in chapter four above, conclusions of the study drawn, recommendations made as well as suggested areas for further research are talked about in this chapter.

5.2 Summary of Findings

The overarching objective of this study was to establish the impact of BYOD and Personal Characteristics on employee productivity by focusing on the case of Equity Bank personnel. BYOD was conceptualized as smartphones, laptops, tablets, and Ipads while Personal Characteristics were measured using age, education, and sex. In achieving this, the research was guided by three goals namely; (1) to determine the extent to which employees at equity bank use their devices, (2) challenges faced using the devices, and (3) the relationship between BYOD and employee productivity. Through a series of statistical analyses, a number of key findings were revealed. The study found that a majority (more than 90%)of employees working at Equity Bank use their personal devices at the workplace. In this regard, the study found that the kind of personal devices owned by the employees are varied and encompass electronic gadgets such as smart phones, laptops, tablets, and Ipads. Smartphones were found to be the most used device by the employees at the workplace. A number of key factors that motivate the use of the devices by employees were also identified. These included flexible working environment, affordability of the devices, favorable corporate policies, and easy accessibility. Of all these factors, this study found that the flexibility of the working environment was the most influential factor. As pertains to the manner in which the employees use the devices at the workplace, more than half of them used the devices mostly for sending and receiving emails.

In regard to the challenges facing the use of personal devices by employees a number of problems were identified. These challenges comprised of (1) malwares obtained from unsecured corporate networks, (2) hacking, (3) data loss, (4) identity theft, (5) unauthorized tethering while on the corporate network, and (6) technical difficulties. Although, these problems were found to affect the employees to a great extent the technical difficulties were established to be the most frequent and biggest challenge.

In assessing the third research objective, this study found that BYOD and Personal Characteristics influenced employee productivity in a positive way. A unit increment in usage of smartphones, laptops, tablets, and Ipads among employees resulted to a corresponding increase in their productivity. Additionally, in regard to Personal Characteristics, the more educated or older an employee is, it was found that their productivity would increase as well.

5.3 Conclusion

This research has demonstrated the effect of the pursuit of BYOD strategy for a human capital engagement. Job involvement is one of the major elements to keep in mind for employers because it is linked to satisfaction and performance in various researches. This research shows that BYOD has a positive influence on the work commitment, according to the stock bank. With this research you can conclude that the influence of BYOD will be an effective and efficient communication and an important factor for work involvement. Effective communication and the efficiency of one of the most important factors in maintaining the effect of this stress will increase the importance of the development of the activity and the reduction of stress. Therefore, this leads to focused and motivated factors.

Even though most employees are not familiar with the term BYOD, use of personal devices at the work place is common. Employees' continue to walk in with their laptops, smart phones, iPads and other personally owned computing devices. The employees cite productivity and convenience as the biggest drivers of BYOD. This hasn't escaped the attention of the bank, as they site high responsiveness and increased motivation from the employees.

5.4 Recommendations

The use of personal devices at workplaces has been found to positively influence the productivity of employees. In this regard, organizations should strive to ensure that the employees use the devices in a safe and appropriate manner. Organizations can facilitate an optimized level of productivity among employees by tackling the key challenges identified in this research. This research recommends installation of security measures such as anti-virus software in the corporate connections due to the high number of users who connect to the networks. Although the use of the BYOD devices has been linked to improved employment productivity in this research, care should be taken to avoid situations where the employees are misusing the devices at the workplace. In this regard, organizations should educate their employees on the dangers of excessive use of BYOD devices at the workplace through holding conferences and seminars.

5.5 Suggestion for Future Research

There are more options to focus on with further research. This research should be interpreted as an exploratory study as there was no research done before to measure the influence of BYOD on human capital work engagement.

A larger sample size including more companies should be utilized in the future. This would not only improve the generalizability of the results but also offer deep insight on how employment

conditions and BYOD influence employees' productivity. Another suggestion would be to incorporate the different employee categories to specifically look for the differences in employee productivity between the categories identified in the diffusion of innovations theory.

The researchers in future should analyze the negative influences of BYOD. This research focused on employee productivity, but it would be amusing to see the influence of BYOD on human capital motivation, talent attraction and retention. The influence of interruptions could be further researched, because these results were very stimulating and should be researched further.

REFERENCES

Afreen, R. (2014). Bring your own device (BYOD) in higher education: opportunities and challenges. *International Journal of Emerging Trends & Technology in Computer Science*, *3*(1), 233-236.

Arwa, J. R. (2014). Adoption Of Bring Your Own Device To Enhance Customer Service Delivery In Kenya Commercial. *University of Nairobi*.

Arwa, J. R. (2014). Adoption Of Bring Your Own Device To Enhance Customer Service Delivery In Kenya Commercial.

Asparuhov, L. (2015). BYOD-Risks, Solutions and Guidelines.

Baker, J. (2012). *The technology–organization–environment framework. In Information systems theory* (pp. 231-245). Springer New York.

Bank, E. (2016). Equity Bank. Retrieved June, 10, 2016.

Bhatti, K. K., & Qureshi, T. M. (2010). Impact of employee participation on job satisfaction, employee commitment and employee productivity. *International Review of Business Research Papers*, *3*(2), 54-68.

Emery, S. (2012). Factors for consideration when developing a bring your own device (BYOD) strategy in higher education.

Gonçalves, A. P. J. (2017). Suporte à decisão para avaliação de soluções BYOD (*Doctoral dissertation*).

Hommel, T. F. W. (2013). *Bring Your Own Device: Does it Influence Work Engagement?*. Erasmus Universiteit.

Kamau, W. T. (2013). The bring your own device phenomena: Balancing productivity and corporate data security. *University of Nairobi*.

Kamau, W. T. (2013).The bring your own device phenomena: Balancing productivity and corporate data security. *University of Nairobi.*

Kariuki, P. W. (2015). Factors affecting employee turnover in the banking industry in Kenya: A case study of Imperial bank Limited (*Doctoral dissertation*, United States International University-Africa).

Loose, M., Gewald, H., & Weeger, A. (2013). *Determinants of Bring-Your-Own-Device (BYOD) Adoption from the Perspective of future Employees*. Hochschule für Angewandte Wissenschaften, Fachhochschule Neu-Ulm.

Lydon, E. (2014). *The Benefits and Threats of BYOD in a SME Enterprise: A Systematic Literature Review*.

Macleod, A. B. (2017). Student Device Use in The Classroom: An Exploration of Peel District School Board's Bring Your Own Device Policy.

Mbalanya, M. E. (2013). Bring your own device and corporate information Technology security: case of firms listed on the Nairobi Securities exchange limited. *University of Nairobi.*

Mbalanya, M. E. (2013). Bring your own device and corporate information Technology security: case of firms listed on the Nairobi Securities exchange limited. *University of Nairobi.*

McNeese-Smith, D. (2016). Increasing employee productivity, job satisfaction, and organizational commitment. *Journal of Healthcare Management*, *41*(2), 160.

Mokaya, S. O., & Kipyegon, M. J. (2016). Determinants of employee engagement in the Banking industry in Kenya; case of cooperative bank. *Journal of Human Resource Management and Labor Studies*, *2*(2), 187-200.

Mphahlele, P. (2016). *The impact of bring-your-own-device on work practices in the financial sector* (Doctoral dissertation, University of Cape Town).

Musarurwa, A., Flowerday, S., & Cilliers, L. (2017). Individual traits that determine the Bring Your Own Device information security culture: A case study of the banking sector in Zimbabwe.

Parsons, D., & Adhikar, J. (2016). Bring Your Own Device to Secondary School: The Perceptions of Teachers, Students and Parents. *Electronic Journal of e-Learning*, *14*(1), 66-80.

Ross, K. (2013). *Teacher implementation of" bring your own device" at a suburban high school serving high SES students*. Arizona State University.

Samnani, A. K., & Singh, P. (2014). Performance-enhancing compensation practices and employee productivity: The role of workplace bullying. *Human Resource Management Review*, *24*(1), 5-16.

Sen, P. K. (2012). Consumerization of information technology: Drivers, benefits and challenges for New Zealand corporates.

Venkatesh, V., & Zhang, X. (2010). Unified theory of acceptance and use of technology: US vs. China. *Journal of Global Information Technology Management*, *13*(1), 5-2

APPENDIX I: RESEARCH QUESTIONNAIRE

This questionnaire is to collect data for purely academic purposes. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

Section: A: Demographic Information

1. Indicate your Gender

    Male (   )   female   (   )

2. Indicate your period of service in this organization

    Below 2 years   (   )   2 to 4 years   (   )

    4 to 8 years   (   )   8 years and above   (   )

3. Your Position within the organization…………………………………………

4. Your Department……………………………………………………………………

5. What is your age…………………………………………………………………….

6. Indicate your education level…………………………………………………….

Section B: The Effect of Bring Your Own Device on Employee Productivity at Equity Bank

7. Do you use you use your own devices at the work place?

                    Yes [ ]   No [ ]

8. If yes, kindly tick against the kind of devices you allow on the corporate network

    Smart Phones [ ]   Laptops   [ ]   iPads [ ]   Tablets [ ]

    Others Specify……………………………………………………………………

9. Do you allow these devices to connect to the corporate network?

Yes [ ]   No [ ]

10. If yes, what kind of corporate data processing and or storage do you allow on these devices?

Emails [ ]   Business Applications [ ]   Mobile Applications [ ]

Others Specify……………………………………………………………………

Section C: What are the Determinants of Using Bring Your Own Device?

11. In a 5 - point scale where: No extent=1, Little Extent = 2, Moderate Extent=3, Great Extent=4 and Very Great Extent=5, tick to indicate the Determinants of Using Bring Your Own Device

Factors	1	2	3	4	5
Flexibility of working environment					
Availability of BYOD					
Cost of Devices					
support from top management					
Existing organizational policies					

Section D: Challenges of Using BYOD

12. In a 5 - point scale where: No extent=1, Little Extent = 2, Moderate Extent=3, Great Extent=4 and Very Great Extent=5, tick to indicate the extent to which you face the following BYOD challenges in the corporate network

BYOD challenges	1	2	3	4	5
Malwares in corporate network					
Hacking in corporate network					
Data loss in corporate network					
Virus infection in corporate network					
Identity theft in corporate network					
Unauthorized tethering in corporate network					
Infected with malicious software					
Incapability to use it due to technical issues					
Identity theft					

Section E: BYOD and Productivity. How has **BYOD** affected employee productivity?

13. How many employees have left your department in the last quarter? ....

14. Has your department saved as a result of using BYOD? Yes ( ) no ( )

15. Kindly explain…………………………..

16. How many queries did you respond to in the last quarter? ....

17. Has the quality of work improved as a result of using?   Yes ( ) no ( )

18. Generally what do you think of BYOD…………………

Your time is highly valued and appreciated. Thank you