

**EFFECT OF MOBILE WORKFORCE MANAGEMENT STRATEGIES
ON THE PERFORMANCE OF DEPOSIT MONEY BANKS
IN SOUTH- EAST, NIGERIA**

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**DEPARTMENT OF MANAGEMENT
FACULTY OF BUSINESS ADMINISTRATION
UNIVERSITY OF NIGERIA
ENUGU CAMPUS**

OCTOBER, 2017

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**BEING A THESIS SUBMITTED TO THE DEPARTMENT OF
MANAGEMENT, FACULTY OF BUSINESS ADMINISTRATION,
UNIVERSITY OF NIGERIA, ENUGU CAMPUS, IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD
OF DOCTOR OF PHLOSOPHY (Ph.D) DEGREE
IN MANAGEMENT**

SUPERVISOR: PROF. U. J. F. EWURUM

OCTOBER, 2017

DECLARATION

I, AGBO, Melletus Uchechukwu, of the Department of Management with Registration Number PG/Ph.D/07/46882 do hereby certify that the work embodied in this thesis is original and has not been submitted in part or full for any other diploma or degree of this or any other university.

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APPROVAL

This Thesis has been approved for the Department of Management, Faculty of Business Administration, University of Nigeria, Enugu Campus.

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DEDICATION

This thesis is dedicated to the Almighty God, the owner of the universe and the fountain of life for giving me the grace, wisdom, spiritual strength and courage to undertake and finish this work.

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ABSTRACT

Members of the mobile workforce and deposit money banks that employ them face a double-edged sword. On the one hand, it is desirable for mobile workers to remain as productive as possible when they are on the road. Unfortunately, life is not perfect and neither are people, so how do deposit money banks gauge whether a mobile employee is an asset or liability? On the other hand, not all venues that accommodate these workers are entirely conducive to productivity. The main objective of the study is to investigate the effect of mobile workforce management strategies on performance of deposit money banks in South East, Nigeria. The specific objectives sought were to: determine the effects of mobile technology on productivity of deposit money banks in South- East, Nigeria, establish the extent of the effect of biometric time and attendance system on deposit money banks market share in South- East, Nigeria, assess the effects of mobile applications on stakeholders' level of satisfaction of deposit money banks in South- East, Nigeria, ascertain the effect of contemporary environmental factors on the growth of deposit money banks in South- East, Nigeria and determine the relationship between the challenges of mobile workforce management strategies and the profitability of deposit money banks. The researcher adopted the survey design for the study. The population of the study is Six thousand four hundred and ten (6,410) comprised of both the senior and junior staff of the selected eleven deposit money banks in South East Nigeria. Primary and secondary sources of data were used in the course of the study. Works of other authors related to the study were reviewed. The sample size is five hundred and eleven (511) determined, using the finite population formula of Godden. The researcher adopted both parametric and non parametric techniques for data analysis. The Cronbach's Alpha coefficient yielded 0.87, indicating the reliability of the instrument. The data collected was analyzed using Spearman Pearson correlation coefficient, simple and multiple regression model. The findings indicated that: Mobile technology had positive effect on productivity of deposit money banks in South- East Nigeria ($r = 0.932$ $p > 0.05$). Biometric time and attendance system to a great extent enhanced deposit money banks' market share in South East Nigeria ($r = 0.960$, $p > 0.05$) Mobile workforce management strategies positively affected deposit money banks stakeholders' level of satisfaction ($r = 0.950$, $p > 0.05$). Contemporary environmental factors such as government regulation, economic conditions, technological advancement and workforce demographics to a great extent had a positive effect on the growth of deposit money banks. ($r = 0.962$, $p > 0.05$). There was a positive significant relationship between challenges of mobile workforce management strategies (hackers' infiltration, network failure and human error and the profitability of deposit money banks ($r = 0.981$, $p > 0.05$). The study concluded among others that mobile workforce management strategies offer deposit money banks critical improvements in growth and stakeholders' level of satisfaction. The study recommended among others that management of deposit money banks should ensure that right tools and resources are made available to mobile workers, giving them the same connectivity as office based workers.

1.1 Background of the Study

As the organization extended in many-sided quality, the test of saddling and fitting the workforce get to be distinctly necessary. The development of data superhighway breaks the obstruction of site and scene as far as workforce operation. Kalam (2015) characterizes mobile workforce as a gathering of representatives who are scattered crosswise over different physical areas and are associated with PCs, cell phones and different gadgets using the worldwide web.

Kalam (2015) states that a portion of the crucial parts of the varied work compel administration to incorporate document dealing with an advanced transmission over the web, and also a voice over web convention address or other voice sound networking. One of the critical advances in the PDA business, the blend of voice and information transmission encourages the possibility of a versatile drive. In the venture, organizations have a variety of instruments for what is known as the mobile workforce management. These apparatuses are in different classifications as indicated by what they do, for example, finance, creation taking care of, collective work, and video conferencing. There are likewise the different gatherings as per what they are and how they function. For example, an entire arrangement of cloud administrations is gone for supporting a portable workforce through programming as an administration, and foundation as administration web-conveyed seller items.

Kalam (2015) is the view that different dashboards and programming items help administrators and managers to track time and affirm installments, assign work to representatives as well as control a mobile workforce that is not concentrated in a block and real office. The fame of cloud administrations and different pointers demonstrate that the mobile workforce is expected to end up distinctly the standard in the future. As both programming and equipment developed, the data innovation industry is turning out to be fit for helping organizations to outsource various types of undertakings, not right down the road, but rather around the globe.

Kalam (2015) opines that mobile workforce management is a classification of programming and related administrations used to oversee representatives working outside the organization premises. The term is regularly utilized by field teams. Mobile workforce management is turning into a widely inclusive term moving the workplace to the field. Flexible workforce administration systems concentrate on

portable specialists and how they select and utilize mobile equipment, programming, and administrations by industry, organization measure, furthermore, obligation. Mobile workforce management systems give a worldwide picture of mobile organisation in undertaking selection including local level and significant nation – level conjectures for portable endeavor applications, venture cell phones, venture versatile brought together correspondence, portable security, undertaking portability administration. Mobile workforce administration methodologies give best – in – class investigation of all procedures identified with portable working and a focused examination of suppliers tending to the compact endeavor space, all supported by standard end client overviews and appraisals (no reference, think of one as).

Brachmann (2014) keeps up that in an all-encompassing and current perspective of mobile workforce administration incorporates a combination of Workforce administration, Project-based work administration, Maintenance and examination administration, Field based request start and Centralized work arranging and dispatch. Brachmann (2014) contends that mobile technology has turned out to be inconceivably well known in worldwide markets as of late.

Moment access to market data brings down expenses for cash exchange, and snappier fiasco reactions are a couple of the significant ways that entrance to the web – associated versatile innovations can effect on ranges with the poor framework (Branchamnn, 2014). The world has likewise turned out to be progressively dependent on working together on the internet, over the Internet and World Wide Web. Web business in its particular regard has extended in different imaginative types of cash and light of digital information issued by private market performing artists, has in somehow substituted for state-endorsed monetary certificates and financial records as a routine method for installments. Stuart (2014) reports that numerous organizations are in peril of passing up a significant opportunity for the advantages offered by mobile laborers through the enlistment of improper workers, reduced administration, and inability to give satisfactory correspondences assets.

Stuart (2014), states that mishandle resources, specifically, can have significant results on the mobile laborer, with both under and over-correspondence harming representative profitability, execution, performance, and prosperity. As the portable working wonder keeps on developing, associations must guarantee that they have an

appropriate administration set up to oversee groups of talented workers. Organizations should likewise guarantee that the right devices and assets are made accessible to versatile laborers giving them the same network from office-based specialists.

Stuart (2014), says that the sorts of individuals who prevail inside an organization are regularly self-propelled, versatile, outgoing and autonomous. Workforce mobility has expanded naturally in recent years. Stuart (2014) said this is accordingly of mechanical development which influences representative individually or in a roundabout way. He said by-result of an evolving economy, expanding portable and remote workforces are powered by the expansion of electric systems, (remote constancy) innovation and versatile union prove by gadgets including BlackBerry Smartphone's, the Apple iPhone, and iPad. Specialists requests for a superior work-life adjust to add to the rising number of home laborers looking for adaptable work course of action. Associations need to deal with a quick move to workplaces that bolster a worldwide portable and remote workforce, making the best utilization of their aptitudes and keeping up their relationship with the association, its way of life, and objectives. With incessant business explorers taking to the skies, rails and streets in expanding numbers, field laborers, remote workers, remote branch office, and multi-site specialists require versatile venture applications to bolster existing business forms, increment profitability, lessen cost and empower them quickly react to business needs that help them stay aggressive at whatever time, anyplace.

Additionally, the ascent of the services-driven economy has acknowledged individuals in one physical area more pivotal than any other time in recent memory and a separating segment to business success. Clover and McCaulay (2006) contend that mobile innovation underpins both supervisor and the Association by preparing foreign and mobile laborers with the right devices expected to follow corporate business hone approach directions and work process necessities. Keefe (2013) says It permits them to finish this amid times that may somehow or another speak to lost efficiency transforming downtimes into uptime. Thus, they catch what might have beforehand been considered cost time to finish managerial assignments that free up individuals to concentrate on center exercises and drive income, efficiency and organization execution edge. While the pattern, towards a more workforce, offers noteworthy business openings, it additionally displays challenges as director's battle

to monitor their employees. Mobile specialists have the same commitment from on location representatives to agree on existing corporate arrangements, endorsements, and business processes. Whether it is a day trip for the firm proficient or an expanded engagement Act, a client's site business travel has for some time been perceived as a primary empowering influence to propelling client connections, including making new activities and keep up a current relationship.

Keefe (2013) opines that there are two sections to a mobile workforce administration framework. Management framework could be cloud-construct or privately introduced on a server and mobile application. Work is booked and appointed to representatives from the administration framework, and subtle elements of occupations one to the worker using an application programming in their Smartphone. The worker then finishes the employment utilizing, the application programming to record rivalry of each progression in a work process or catch any information required for the occupations, for example, photographs, standardized identification, radio recurrence distinguishing proof cams or gadgets marks. Notices and trade reports are sent back to the administration framework as the representative works through the undertaking in the field.

Mobile workforce arrangements encourage the quicker more precise exchange of data between laborers in the fields and staff in the workplace. This empowers the more fast creation of expert report and issuing of solicitations, expanding income and giving organizations a focused edge over organizations depending on the printed material. Overseeing versatile specialists adequately requests abnormal amounts of trust, regard for individual independence and close consideration regarding correspondence styles and setting. Workforce administration arrangements are progressively being utilized to settle on savvy choices to manage change which upgrades efficiency. With developments in innovation, workforce management mechanism can support and increase the business knowledge of the organizations. Haider (2013) opines that in the realm of business coherence, mobile is by all accounts on everybody's mind. All the more unequivocally, clients and merchants alike are soliciting how the multiplication from power cell phones can affect and enhance business coherence administration frameworks. Luckily, given the truth of the advancing work environment with

representatives more scattered and dependent on the cell phones for business correspondence than at any other time arrangements are bridling these devices.

Haider (2013) emphasizes that some new technology permit whoever needs ability on the system to start full occurrence report, utilizing an organization's dawn informing structures and work processes, straightforwardly from a Smartphone or tablets. Presently the full capacities of an organization's episode administration arrangements are accessible to utilize and execute on any devices. Empowering first interchanges and peacemaking in a hurry guarantees opportune and fitting reactions ought to an organization need to achieve its representatives or clients in case of an emergency or system disappointments. Mobile applications encourage the most efficient determination of any issue that may happen will do as such by attempting, into large companies correspondences stages and coordinating flawlessly with data innovation administration items and business coherence frameworks.

Haider (2013) states that the interest for access to business data and applications through mobile advances, for example, the Apple iPhone and iPad, gadgets, running Google Android and Windows 7 or utilizing Blackberry is surging as customer inclinations and conduct overflow into the business workforce. The massive development of reception of these advances far and wide has many business supervisors thinking about how to position their organizations to profit by the pattern successfully. The drive for versatility is a piece of the firm innovation motivation for most organizations today. Be that as it may, in business as opposed to the individual setting, more sorts and many-sided quality of data are required, running from access to reports and introductions to status on activities and forms, and for particular application needs to perform different business insight capacities.

Against this fast moving mobile foundation, unmistakably merely having ready access to email is significantly lacking for expanding profitability and delivering better-educated workers. The coordination of cell phones, for example, mobile workstations, tablet PCs, and cell phones, alongside their different applications and programming, make it simpler than at any other time for specialists to team up and organizations to speak with staff, clients, and merchants.

Haider (2013) states that mobile innovation permits individuals to utilize organization information and assets without being fixing to a single area. Regardless of whether the staff is venturing out to gatherings, out on deals calls, working from a customer site or home anyplace on the globe, cell phones can help them stay in contact, be profitable, and make utilization of organization assets.

Haider (2013) additionally says that handy mobile innovation gadgets can likewise change the way associations complete their organizations - new advancements prompt to better approaches for working, and new items and administrations that can be offered to clients. Versatile innovation can make the portable group more efficient, inventive, and relevant to customers. Consistently organizations are adopting more to the ways mobile innovation can be utilized to build their efficiency and prompt to more extended benefit. Haider (2013) plots a portion of the critical zones in which mobile innovation can be valuable:

Networking/Communication

Mobile innovation permits organizations to have an extraordinary level of availability between workers, merchants, and clients. Specialists can download applications on their cell phones that empower them to interface with others through web-based social networking such LinkedIn portable application, Facebook, and Twitter; or the firm can utilize local or online applications to empower coordinate correspondence with these gatherings of people in an assortment of ways. Ongoing communication with the workplace can be vital in conveying business advantages, for example, efficient utilization of staff time, enhanced client benefit, and a more prominent scope of items and administrations gave.

Haider (2013) gave cases as:

- i. Making introductions to clients, and having the capacity to download item data to their system amid the visit.
- ii. Quotations and intuitive request handling.
- iii. Checking stock levels using the workplace organize
- iv. interacting with partners while voyaging, sending and getting messages, teaming up on reactions to tenders, conveying trip reports quickly.

Development

Haider (2013) states that as a result of the intelligent way of mobile innovation, sharing data through this medium permits organizations to get quick criticism of items and administrations from clients. This speed and availability have prompted to speedier innovative work for organizations, a critical piece of remaining in front of the opposition. It has likewise prompted to item redesigns moving at the more rapid rate. Additionally, clients and customers feel as though they have a more straightforward part in an organization's advancement.

Marketing

Haider(2013) states that portable innovation has brought another measurement into promoting and advertising for organizations around the world. Potential clients now observe business commercials on phones through a wide assortment of portable advertising advances including short message administrations, versatile sites, mobile applications, quick reaction codes, intelligent voice response informing. These notices can be altered to achieve a more precise, directed crowd. Showcasing is made more efficient by this customization, and because most potential clients dependably have a cell phone convenient, their presentation to commercials is expanded (Haider 2013).

Haider Survey report (2013) demonstrates that:

- i. 97% of mobile endorsers read short message benefits within 15 minutes of getting it; 84% react inside 60 minutes.
- ii. Average crusade reaction rates are commonly 12 - 15% (rather than post office based mail which midpoints 2 - 3%); a few organizations are seeing response rates as high as 60%.
- iii. Mobile is not only for youngsters and twenty now and then; prime buyers in the 35 - 44 and 45 - 54 age sections are likewise solidly grasping the utilization of Mobile
- iv. While 65%of email is spam,
- v. A current review by Compete.com (2015) demonstrates that just about 40% of buyers are to a significant degree Intrigued by getting portable coupons for a wide assortment of administrations/buys.

In this way, one of the essential achievement components for any mobile workforce management technique is the capacity to address time robbery. Biometric-based time and participation framework wipe out the most critical wellspring of time burglary known as mate punching, the act of one specialist checking in or out for another. Biometrics is the exploration of measuring physical and behavioral attributes that remarkably recognize people. Specific gadgets caught These components finger, iris, facial or vascular pictures, hand geometry, voice or mark progression and changed over using complex calculations into accurate portrayals or formats. Biometrics offers associations a more broad scope of immediate and circuitous time, cost and operational advantages than option time and participation techniques. Biometrics likewise enhances worker assurance and fulfillment by expanding trust in the finance work through the predictable utilization of private and fair-minded timekeeping. Be that as it may, a few variables impact and impede successfully, Mobile workforce administration on the execution of cash store banks. In this review, the scientist plans to explore these variables.

1.2 Statement of Problem

Individuals from the mobile workforce and the establishment that utilizes them confront a twofold edged sword. From one viewpoint, it is attractive for mobile laborers to stay as profitable as conceivable when they are out on the toll road. Tragically, life is not impeccable, nor are individuals, so how do associations gauge whether a free representative is an advantage or risk? In the workplace, agents are checked efficiently by the hours put in a day and contrasted it with their result. In the field, nonetheless, company advantages are the mobile workforce-experts, conveyance staff, advertiser, and deals constraint being out of the workplace implies far away and out of psyche or driving their supervisors insane. Then again, not all settings that oblige these laborers are entirely helpful for efficiency. Besides, programmers directing "sniff out" unsecured portable workstations, Smartphone and other handheld gadgets being used at workplaces, libraries, eateries, banks and different areas, making exceptional safeguards necessary if information security is to be kept up out in the open spots. Similarly, as the portable workforce is developing greater consistently, programmers are getting to be distinctly more quick-witted and more efficient in their mission to invade the operations of the company

Dealing with a mobile workforce can be troublesome. An absence of permeability of worker areas outside the workplace, printing and circulating employment packs and lost or fragmented printed material can prompt delays in issuing solicitations and reports. How can these difficulties be handled? Is mobile workforce administration procedures working the way it ought to work in the keeping money area? Is it changing the business operation, driving advancement and making openings or complex management and depleting authoritative assets? In what capacity can associations augment the esteem they get from the general population enabled with portability? At the point when representatives are given to work remotely or more adaptable through the versatile course of action, it is reasonable that supervisors are once in a while doubtful of their productivity. These issues above roused this study.

1.3 Objectives of the Study

The main objective of the study is to investigate the effect of mobile workforce management strategies on the performance of deposit money banks in South East, Nigeria while the specific objectives are to:

- i. determine the extent technological affect the growth productivity of deposit money banks.
- ii. establish the extent of the effect of biometric and attendance time on market share of deposit money banks.
- iii. assess the effect of mobile workforce management strategies on stakeholders' level of satisfaction of deposits money banks.
- iv. Identify the factors that influence mobile workforce on the growth of deposit money banks.
- v. ascertain factors that hinder effective mobile workforce management strategies on the profitability of deposit money banks.

1.4 Research Questions

The following research questions were formulated:

- i. To what extent does technological growth affect the productivity of deposit money banks?
- ii. To what extent does biometric attendance time affect the market share of deposit money banks?

- iii. To what extent does mobile workforce management strategies affect stakeholders' level of satisfaction of deposit money banks?
- iv. What are the factors that influence mobile workforce on the growth of deposit money banks?
- v. What are the factors that hinder effective mobile workforce management strategies on profitability deposit money banks?

1.5 Research Hypotheses

The following research hypotheses were formulated:

- i. Technological growth significantly affects the level of productivity in selected deposit money banks.
- ii. Biometric and attendance time to a great extent affect the market share of deposit money banks.
- iii. Mobile workforce management strategies significantly affect stakeholders satisfaction.
- iv. Government regulations, economic conditions, technological advancement and workforce demographics to a great extent positively influence mobile workforce on the growth of deposit money banks.
- v. Network failure, hackers, and mental workload hinder effective mobile workforce management strategies on profitability deposit money banks.

1.6 Significance of the Study

This study will be of immense benefits to researchers, stakeholders, management practitioners, and students. The study is relevant in the services sectors, especially in the banking sector which did not have any holistic work encompassing constructs of mobile workforce management strategies. The study will enlighten and broaden the awareness of the management of money deposit banks on different mobile workforce management strategies which will definitely increase banks performance. The study will add to the existing knowledge in the field of mobile workforce management strategies.

1.7 Scope of the Study

The study focused on the effect of mobile workforce management strategies on the performance of deposit money banks in the South East, Nigeria. Contextually, on the area of scope, the study covers the key variables like, technological growth, biometric

and attendance time, mobile workforce management strategies, factors that influence mobile workforce management strategies and factors that hinder effective mobile workforce management strategies. In terms of geographical scope, the study is confined to 11 money deposit banks operating in the South East, Nigeria. These 11 money deposit banks include the following: First Bank of Nigeria, Union Bank of Nigeria, United Bank for Africa, Ecobank Nigeria, Diamond Bank Plc, Zenith Bank, Fidelity Bank of Nigeria, Guaranty Trust Bank, Access Bank Nigeria, Heritage bank Nigeria, and Unity Bank Nigeria. The choice of these selected money deposit banks was based on their size, coverage, market share, management capability and public confidence. The study covers all relevant concepts of mobile workforce management strategies. The study used the following motivational theories that support mobile workforce management: Mc Clelland's Need for Achievement Theory, Expectancy Theory, Job Characteristics Theory, Theory X and Y, Theory of Task-Technology Fit and Technology Acceptance Model. The time scope covers from 2010-2016.

1.8 Limitations of the Study

The study had limitations such as the attitude of the respondents, mobility, cost and others relating to the design. The limitations are exposed below; attempts made to reduce the impact on the final result are also highlighted here.

The attitude of the Respondents: The staff of the selected 11 money deposit banks in the South East, Nigeria and other sources of data were not all willing to divulge strategic information.

Methodological Constraints: It should also be noted that the survey research design had the limitation that some respondents are resistant to give answers to be probed. Persuasions were resorted to, and the covering letter also helped. The oral interview has the limitation that the interview situation may change; this was minimized by the researcher doing most of the field work. The research instrument has the limitation that it is structured and may compel some respondents to give answers they do not fully endorse or agree with. To minimize the alleged , the interview schedule was designed although it contained some questions, some respondents found it difficult to analyze.

The paucity of materials: The concept of mobile workforce management strategies is relatively new. Much research has not been carried out on mobile workforce management strategies, and this made it difficult in the sourcing of relevant materials for the study. However, the above limitations did not substantially affect the final result of the study. The inbuilt mechanisms of the balanced oral interview and a high degree of involvement of the researcher helped in achieving the result despite the limitations. Any errors of omission or commission (if any) that may affect the accuracy of this thesis work are entirely those of the researcher.

1.9 Operational Definition of Terms

Cloud computing: This is the type of internet-based computing that provides shared computer processing resources and data to computers and other devices on demand.

Construct: Construct is defined as an abstract concept that is purposefully created to represent a collection of concrete forms of behavior. Within the behavioral sciences, they describe inter alia, attitude, management style and problem-solving as being important. This is also the view adopted the term in this thesis.

Human Capital: Human capital represents the skills, talents, and knowledge of employees and that none of these intangible assets have a value that can be measured separately or independently. However, human capital has the ability to mobilize and sustain the process of change required to execute the organization's strategy and thereby adding considerable value.

Knowledge Worker: Knowledge worker is defined as individuals who through their unique knowledge and skills generate new knowledge that creates a competitive advantage for employers. The efforts of knowledge workers are classified as intangible assets and represent knowledge-based activities such as market intelligence product pipeline, networks, branch values and customer relationships.

Management Strategies: Management strategies are courses of actions organizations use to achieve primary objectives. It refers to all the activities that lead to the identification of the goals and plans of the organization and is concerned with relating opportunities in the larger environment.

Mobile Workforce Management Strategy: Mobile Workforce Management Strategy is a category of software and related services used to manage employees working outside the company premises; the term is often used in reference to field teams.

Workforce Management Technology: This encompasses all the activities needed to maintain a productive workforce. It addresses a critical business requirement by aligning Human Resources activities to organizational business goals. The objective is to provide strategic insight into the strength of the workforce to determine where change is needed and to positively impact the bottom line.

Workforce Management: Workforce management encompasses all the activities required to maintain a productive workforce recently, the concept of workforce management has begun to evaluate workforce optimization. Specifically, workforce management includes:

- i. Payroll and benefits.
- ii. Self-service time and attendance talent acquisition, management learning, performance management, forecasting, and scheduling.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter center on the review of relevant literature, literature pertinent to the study is necessary to give direction and appraisal of efforts already made in the area. This chapter is presented in the following outline: Conceptual framework, Theoretical framework. The empirical review followed strictly the objectives of the study and has the following sub-sections: to determine the extent of effect of technological growth on productivity of money deposit banks, to examine the magnitude of the impact of biometric time and attendance system on market share of money deposit banks, to identify the effect of mobile workforce management strategies on stakeholders' level of satisfaction of money deposit banks, to ascertain factors that influence mobile workforce on the growth of money deposit banks, to highlight factors that hinder effective mobile workforce management strategies on profitability of money deposit banks.

2.2 Conceptual Framework

2.2.1 Concept of Mobile Workforce Management

Jones (2006) says mobile specialists as the individuals who work no less than 10 hours for each week from home, their essential work environment, for instance, on business trips, in the field, voyaging or on client's premises and utilize online PC associations while doing so. This definition has all the earmarks of being steady, with few changes clear in the course of recent years.

Inside this definition, there are five unmistakable sorts of the mobile laborer;

- i. On-site movers are people who take a shot at the site, yet move around inside it, e.g., security specialists and data innovation professionals.
- ii. Pendulums-exchange is other working at two settled areas, e.g., the business' office and a customer's office or a home office.
- iii. Nomads– are people working in various better places and are continually moving among them, e.g., a business operator going by numerous clients a day, Administration advisor workings at different customer destinations and architects.

- iv. Yo-yos-every so often works far from a settled area, e.g., in occupations which require business trips.
- v. Carriers-work while progressing, transporting merchandise or individuals, e.g., prepare conductors or plane stewards.

It recommends that Normads and Pendulums have the most assortment in their work area and will most much of the time be working far from the hierarchical office base. This study concentrates primarily on the Pendulums and Nomads, as they are destined to be subject to utilizing innovation for doing their day to day work.

Kalam (2015) states that a mobile workforce alludes to a gathering of representatives who are scattered crosswise over the different physical area and are associated with PCs, cell phones, and various gadgets through the worldwide web. A segment of the essential parts of the mobile workforce incorporate document dealing with an advanced transmission over the web, and also a voice over web convention or other voice and sound systems administration. One of the colossal advances in the Smartphone business, the mix of voice and information transmission, encourages the possibility of a talented workforce. A mobile laborer is a worker who can be compelling and efficient at playing out their work paying little heed to their area. This is accomplished using remote devotion, portable PCs, and cell phones.

Kalam (2015) states that organizations have various instruments for mobile workforce administration. These apparatuses are in different classes as indicated by what they do, for example, finance, creation taking care of, community-oriented work, video conferencing and that's only the tip of the iceberg. For example, an entire arrangement of cloud administrations went for supporting a portable workforce through programming as administrations, stage as a management and framework as an administration web-conveyed merchant items.

Different dashboards and programming items help officials and administrators to track time and endorse installments, assign work to representatives or temporary workers and control a versatile workforce that is not brought together in a physical office. mobile workforce administration strategies is a classification of programming and related policies used to oversee representatives working outside the organization premises; the term is regularly utilized as a part of a reference to handling groups.

mobile workforce administration is turning into a full term moving the workplace to the field.

Brahmann (2014) states that mobile workforce administration strategies give a global picture of mobile organisations reception, including local level and significant national figures for portable venture applications, undertaking cell phones, venture portable bound together correspondence, mobile security, endeavor portability administration. mobile workforce administration strategies give best-in-class investigation of all procedures identified with mobile working and an aggressive examination of suppliers tending to the portable venture space, all supported by consistent end client studies and assessments. Mobile workforce management strategies concentrate on portable laborers and how they select and utilize mobile equipment, programming, and administrators by industry, organization size, and risk.

2.1.2 Mobile Workers are Increasing Faster than Home Workers

Universal Data Corporation (2014) Survey predicts that the development of mobile specialist will be essentially more prominent than the expansion in representatives telecommuting in spite of the across the board selection of flexible working practices. This forecast mirrors the expansive scope of voice video and information benefits that are presently accessible to client, for example, code division different get to, worldwide framework for portable correspondence, remote neighborhood, advanced endorser line and gadgets (individual computerized colleague, PCs, and other custom-made gadgets) which make taking a shot at the move conceivable.

Bachmann express that was home working has neglected to bring more remarkable efficiency; there are high trusts in mobile operation. The family extends, for instance, found that Danish employees who rotated between areas were exceedingly gainful, while changeless and close perpetual telecommuters were less profitable than Office specialists. The primary explanation behind the telecommuters' poor execution was the separation that they encountered because of diminished social and casual communication with partners and inadequate access to intra-organization data streams.

Employees who have voice, video and information benefits that bolster casual correspondence, and additionally broadband and remote innovation, are prepared to conquer these obstructions and are probably going to be more beneficial. Also, the individuals who can take a shot at the move can be more proficient with their time. Cisco's Survey Report (2014) demonstrates that

- i. The increment in mobile working is not constrained to the conventional markets of Asia, the United States, and Western Europe. In Latin America, Central and Eastern Europe, Middle East, Africa and Russia, where portable infiltration surpasses settled lined entrance, data and correspondence innovation spending is additionally expanding making a prolific domain for versatile working practices.
- ii. Mobile and remote correspondences utilizing broadband advances and voice video and information administrations are set to increment by worldwide increases in versatile working. With this organizations must guarantee that they receive prepare structures, new assets and management systems that make portable working productively on the off chance that they are to profit by expanded efficiency.

The Emerging Profile of a Mobile Worker

Universal Data Corporation's (2014) Predictions demonstrates that inside two years, there will be 878 million mobile laborers worldwide and 90 million in Europe connected to their central corporate command by individual advanced partners, notepad PCs, and cell phones. This populace refers to more than a fourth of the worldwide workforce and is a sharp increment from the 650 million worldwide versatile laborer populace in 2004. Nontraditional markets additionally exhibit a noteworthy increase in portable working in the vicinity of 2005 and 2006, and more than 70 percent of the aggregate US workforce is required to be comprised of versatile specialists by 2015. Universal Data Corporation (2014) uncovers that the biggest number of mobile professionals are in Asia/Pacific (excluding Japan), trailed by the United States and Western Europe. Five essential drivers can communicate the portability Solution. Businesses and people get a kick out of the chance to impart moving, development increments corporate efficiency and competitiveness, well-created broadband cell phones, advances, and administrations, versatile innovation

underpins personal communication. Digital data and substance are progressively unavoidable. As per International Data Corporation (2014) male, mobile e specialist are a full-time proficient manager

- i. Women are 67 percent less inclined to be mobile laborers than men.
- ii. People with a degree level training are more than three circumstances as prone to be portable than those with an essential instruction
- iii. Managerial specialists are twice as plausible, and expert laborers are three situations as liable to be versatile as industrial and desk workers.
- iv. Full-time workers are twice as likely to be mobile than paid specialists – 42 for every penny and 26 for every penny individually. Independently employed experts will probably be mobile since they normally move to make a sale. They have a tendency to have different capacities, e.g., deals acquisition sales and conveyance.

International Data Corporation survey(2014) uncovers that 1,500 executives overall expresses that 33% of versatile laborers spend 40 percent a greater amount of their work time far from their essential workspace – which for most (88 percent) was the workplace work area. Almost half concurs that they burn through 20 for every penny to 40 for each penny far from their essential workspace. The most famous option work areas were at home far from the work area however elsewhere on the organization's site and going on business, e.g., in a plane transport or prepare.

A study of study in European mobile staff (2014) echoes this discovering, demonstrating that over 33% of mobile specialists burn through 17 hours or progressively seven days in remote areas which were normally clients of customer destinations and transitory area. Just about one half spend in the vicinity of 3 and 16 hours from their essential work environment.

International Data Corporation Survey (2014) uncovers that companies, for example, Starbucks progressively perceive the necessities of this developing business sector of mobile employees. The organization has prepared more than 3,000 United States outlets in the United Kingdom with remote devotion keeping in mind the end goal to give a predictable situation to portable specialists wherever they get themselves. Associations utilizing portable specialists can themselves profit by these

improvements, withhold work area alternatives, giving cost viability. (International Data Corporation Survey 2014) .

1. Organizations might be coincidentally selecting more male portable laborers by just offering versatile working choices for full-time and administrative positions.
2. Organizations need to consider what they can do to make mobile working open doors more available for ladies with childcare obligations. Duties incorporate extending mobile work choices to low maintenance parts and giving recompenses and innovation to laborers to stay in contact with their families while working far from home.
3. Managers who are flexible and are overseeing either office-based groups should adjust their styles to adapt to both being mobile and overseeing others in the meantime.
4. With the expansion in mobile working in impermanent areas, for example, open transport bistros and motorway administrations stations, portable specialists confront diverse issues around dealing with privacy and overseeing diversions.
5. With the greater part of mobile specialists investing noteworthy measures of energy far from the workplace utilizing staff who are dependable and self-propelled is fundamental just like the arrangement of suitable innovation and the enrollment of experienced directors who comprehend the way of the versatile working.

Javen (2014)states that mobile working is basic among vast consultancies however not somewhere else in Argentina. Portable laborers must have the right stuff to work without supervision and self-taught to meet their objectives. Portable laborers should be receptive mostly as work frequently includes working diversely which requires the capacity to adjust to change rapidly and be adaptable. Javier (2014) states that trust has an imperative impact, mobile laborers should be both dependable and trust colleagues.The predominant identity attributes for beneficial mobile specialists are laid out in the chart beneath:

Javen (2014) opines that a mobile worker has a tendency to be more outgoing than their office-based associates. They get their strength and inspiration from staying in contact with individuals and going out and meeting with customers. While we may anticipate that mobile working will bid more to loners due to its lessened contact with other individuals, the ebb and flow inquire about shows that self-observers are less inclined to be powerful in such parts as they are less at risk to stay in contact with their colleagues. Extroverts people tend to look for the organization of other individuals, and since the support of social and work systems is basic for emotional well-being, social butterflies will possibly flourish more as versatile laborers than thoughtful people.

Tough Survivor

Javen (2014) states that mobile specialists should be hearty and strong underweight. They need low levels of neuroticism and abnormal amounts of enthusiastic dependability. As per Javier (2014), emotional stability the capacity for employees to stay cool and loose and along these lines beneficial even under unpleasant conditions. Mobile workers require a level of flexibility and to be genuinely extreme disapproved because of the potential absence of support. Their eccentric condition additionally adds to worry as they can manage numerous startling occasions over the span of the working day.

In any case, interviews directed by Kandola (2007) demonstrates that Latin American interviewees report that versatile working makes it less demanding to oversee feelings, for example, outrage and dissatisfaction since they can openly convey what needs be. European and African respondents, then again, saw the test of managing sentiments of forlornness and dejection as specific trouble of the portable part.

Curious Explorer

Kandola Survey (2007) in his study shows that for the larger part of mobile working, the capacity to be imaginative and open to new thoughts is fundamental to their parts and more vital than it is for office-based laborers. In fact, mobile workers have a tendency to be pulled in to such characters halfway as a result of the capricious way of the employment and the assortment of experience that this provides. The portable workplace is an unusual one. This implies versatile specialists should be interested in new difficulties and adapt to the lessened security and sureness related to their parts.

They likewise should be prepared in utilizing new innovation and to be inventive with respect to issues solving. The greater part of interviewees trusted that openness to new innovation is basic. Norwegian respondents, specifically, unequivocally trust that work should be possible similarly paying little mind to the area, the length of they could get to the web to peruse their organization intranets, send and get email and convey by cell phone.

Independent Decision Maker

Kandola (2007) states that versatile laborers are stimulated by individuals they additionally have a tendency to keep up a free attitude. They value being trusted to work freely and more often than not appreciate the adaptability that accompanies the territory. They additionally esteem the co-operation of others. Be that as it may, they can some of the time expect co-operation from their associates without fundamentally giving it consequently as the response can struggle with their drive to stay free. This obvious clash can be invaluable to portable specialists; they don't should be a piece of a group to be upbeat the length of they can take advantage of different types of support. This free outlook may likewise imply that individuals from more collectivist societies, for example, Japan, Ecuador, Panama, Colombia, and Venezuela may not be pulled in to versatile working.

Disciplined achiever

Kandola (2007) states that carefulness and self-inspiration are more imperative variables to the accomplishment of mobile staff than office specialists. Connected to their autonomous longing to be in control and to possess their exercises, versatile laborers likewise should act naturally propelled, independent and fearless. Truth be told, versatile specialists report that their second most critical test after the work-life adjust is self-inspiration. This infers conventional parental or miniaturized scale administration styles are probably not going to be effective with versatile specialists. The mobile worker must assume individual liability for meeting their targets. The generalization of the solitary specialist or dissident does not fit the model of an effective worker. Candidates who are not versatile and adaptable in their work style, strong to overseeing negative connections open to new encounters, outgoing and ready to keep up associations with partners are probably not going to be able portable specialists.

Kandola (2007) suggests the following strategies for managing the mobile workforce

1. When enrolling mobile specialists or choosing possibility for a portable working group, flexibility, strength, and openness to encounter must be thoroughly evaluated through meeting or appraisal focus works out.
2. Mobile work needs innovation that permits them to work in various settings and in addition group support to guarantee that they can adapt to unforeseen conditions.
3. employees are flexible, adaptable and open to new encounters, which regularly imply that they are exceptionally imaginative. Allot portable laborers to tasks which include development, preparing, new techniques and considering novel answers for issues as most will be empowered by this sort of work.

Mobile Worker Competencies

- i. Communication
- ii. Customer focus
- iii. Planning and sorting out
- iv. Flexibility and flexibility
- v. Building connections

Kandola (2007) states that laborers who are productive ought to show more grounded arranging and sorting out abilities, adaptability, versatility and relationship building aptitudes in contrast with their office-based colleagues. By contrast, they are more averse to require a viable group working aptitudes. This perception does not refute their need to work proficiently with associates, however, originates from their high drive to work viably on an autonomous basis. Unlike identity attributes which are moderately steady after some time and people, abilities can create and enhance with involvement. This implies and in addition choosing representatives with these fundamental abilities, associations advance in the versatile working skill.

Adaptability and Communication

Kandola (2007) states that the most vital part of adaptability is correspondence style. employees should be flexible in the way they start and react to interchanges. They have to make their messages more explicit than conventional messages. They

additionally need to choose the correspondence channel proper for each message and collector and have the capacity to change to option strategies where the perfect course is not accessible.

The Psychology of Effective Business Communications in Geographically Dispersed Teams

Working in broad daylight ranges presents huge difficulties for mobile specialists particularly as they have little control over the assets, for example, the web or phone get to access to them. This requires the flexibility of employee, for instance by utilizing various strategies to impart or by rebuilding arranges at short notice. One adjustment to the mobile worker workplace is the act of making the correspondence setting clear from the beginning, for instance by saying 'i am on the prepare". The other individual can then comprehend the imperatives of the call, for example, the requirement for a short call length and any confinements on topic.

Planning and Organization

Kandola study (2007) uncovers that planning is of awesome significance for proficient employees. Key planning undertakings incorporate need setting, multi-entrusting and time administration. employees view these abilities as basic for their part. The instability of the mobile working workplace makes the capacity to arrange imperative. Portable specialists must comprehend the components that are probably going to make disturbance their work and rapidly create procedures to manage such events. There are two specific types of planning ability. Firstly, there is the fundamental planning level. This may incorporate techniques, for example, making a go down of critical computerized documents required for gatherings. Secondly, the strategy of energetic advantage includes guaranteeing that they have enough assets to manage any surprising and short notice changes. In spite of the fact that arrangements must be made rapidly in case of a surprising disturbance, versatile laborers have a tendency to invest heaps of energy arranging what they would do in these sorts of circumstances. They foresee what may happen and make reinforcement arrangements accordingly. Confidentiality additionally drives versatile specialists to arrange viably.

Cisco Survey (2007) demonstrates mobile staff feels that working spaces openly can trade off classification as it's difficult to screen who may investigate your shoulder or tune in to your change.

Challenges of Mobile Workers

The Health and Well-Being of Mobile Workers

mobile laborers might be in danger of poor psychological well-being. Mental workload prompts to mental strain which can have positive and negative outcomes. Since portable laborers every now and again work alone and don't generally have the support and assets they require they are in danger of weariness and burnout. A survey by Kandola (2007) uncovers that mobile laborers miss having customary input and exhortation from associates. They think that it's harder to approach the support of individuals when they feel mental strain because of physical separation. Specifically, when versatile laborers are not ready to discuss consistently with their supervisors, it's difficult to fabricate trust and grow close strong connections. Organizations should be especially aware of the emotional wellness of portable specialists and hope to offer help assets to avoid pointless mental strain.

Kandola(2007) suggests the accompanying procedures for dealing with the mobile workforce. Mobile representatives ought to be offered methodologies to help them oversee negative feelings without an associate bolster, for example, unwinding and positive self-talk techniques. Technology must be suitable and solid. Data innovation support ought to likewise be accessible for times when there are specialized issues or disappointments. Innovation should likewise empower simple to utilize connections to portable specialists bolster systems to decrease their sentiments to dejection and isolation. The chief needs to go about as a scaffold between office-based representatives and versatile laborer. Both gatherings should be urged to convey and valued the exceptional challenges each countenance.

Kandola(2007), survey demonstrates that being with others at work substantially affects positive feelings. Positive feelings prompt to expanded objective coordinated consideration, inventiveness, liberality, work execution, and inspiration. It is essential that mobile specialists who are physically isolated from their associates don't likewise see themselves as being candidly far off. mobile specialists don't have the common support around them that office-based laborers have and rather should attempt

noteworthy endeavors in arranging and deal with their collaborations with associates' customers and others. This implies unless portable specialists are expressly in imparting their requirements for support, others are a great deal more averse to recognize and react to these prerequisites.

The most widely recognized strategies for conquering disengagement incorporate searching out partners for discussion when feeling pushed, keeping up casual systems, speaking with trusted associates every day and utilizing visit or texting tools. Mobile specialists can think that its harder than office-based laborers to make and keep up bolster arrangements inside the association, and when they encounter detachment, their execution may endure as diminished creativity. Mobile specialists could be urged to share logical data to help them to feel more associated. Cases incorporate going by each other's home workplaces or sharing photographs of spots they visit regularly. Provide correspondence innovation to empower versatile laborers to keep in contact with partners, companions, and family when they are away which could help diminish sentiments of detachment.

Kandola Survey (2007) found out that work-life balance has turned into an issue that is worthy to talk about at work. It demonstrates that supervisor is turning out to be more confident with regards to keeping up their work-life adjust with 62 for each penny trusting they have an agreeable work-life adjust contrasted with 52 percent four years prior. In spite of these general advances, versatile specialists are not profiting. Economist survey (2006), discovers that mobile laborers were as much as four circumstances more inclined to work while on yearly leave than office-based specialists. All the more particularly seventy-five percent of the Economist review respondents referred to obscuring of individual and work time as a key negative part of portable correspondences. The powerlessness to adjust work with social and family non-appearance lifted anxiety levels and lower efficiency.

Keeping up work-life balance is the most noteworthy mental difficulties revealed by interviewees from Eastern and Western Europe, the Middle East, Russia and Latin America. Investing energy far from home all the time is an essential wellspring of work-life conflict. Portable specialists frequently battle to keep up connections and fellowships as the customary contact 's difficult to build up. It is additionally troublesome for portable specialists to focus on leisure activities or individual

interests as they can't go to classes or gatherings which require customary week by week participation. Working from a home office when not voyaging expels the physical limits between work environments and family life. These imply that the employees dependably enter with the test of keeping up teach limits.

Kandola (2007) demonstrates that numerous mobile specialists especially those from the ladylike societies of Norway and Brazil revealed positive sentiments about having the chance to work adaptable around the necessities of the family. Adaptable work designs give them opportunity giving they deliberately deal with their work. They likewise expressed that it doesn't make a difference to them where they carry out their occupations the length of they take care of business.

Employees are probably going to have a positive ordeal of managing work-life balance when.

1. They feel that they can be adaptable and in control of when they work
2. They have a decent association with their manager
3. They have entry to the fitting innovation for correspondence
4. They were based in a ladylike culture with a background marked by family-accommodating work plans.
5. Employers must comprehend the effect that travel and eccentric portable work can have on an individual's home life and perceive the additional anxiety this can consequently bring about.
6. Employees with tyke mind obligations will profit by an administration approach that energizes work-life adjust and advances adaptable working methodology.
7. Overworking can turn into an issue particularly on the off chance that it prompts to burnout. The aftereffects of burnout for the association incorporate expanded turnover of staff and diminished efficiency.
8. Organizations need to consider how innovation, for example, video conferencing can be made accessible to workers who invest energy far from home so they can impart all the more completely with their families.
9. Where huge time is being spent far from home, administrators ought to try to figure out if any intercession is conceivable, e.g., presenting a group rotational framework for time spent away.

10. Managers ought to focus on the whereabouts of laborers and remember that moving time zones and spending delayed periods far from home might be weight focuses for a few specialists.
11. Directors need to have their impact in setting the social hard-working attitude inside the association. Testing unnecessary working hours, displaying a sound work-life adjust and looking into the work-life adjust of colleagues are all important strategies

Management of Mobile Workers

Kandola (2007) states that the following techniques are required by mobile workers:

Recognize and Hire the Right People

Select new representatives who will perform well in organisations, organisation should evaluate applicants as indicated by the profile portrayed in the segment on 'The identity of a worker.'The Qualities illustrated in each profile competency-based meeting can be utilized. Selectors may likewise assess hopefuls on their capacity to perform reproduced undertakings that are run of the mill of portable working, for example, directing discussions on the phone, leading a video chat and working in a virtual group. At the point when people are utilized in testing conditions, for example, an outside nation, it is of specific significance to get to the possibility for the characteristics of flexibility and versatility.

Motivation

To contract perfect individuals, businesses must comprehend what motivates employees inside the organisation. Inspirations may incorporate the yearnings to be an envoy for the organization, to assemble relationships with accomplices, or to impact and consult with customers. The individuals who demonstrate unmistakable inspirations towards portable working will probably prevail in such parts

Multicultural Understanding

Kandola (2007) states that as employees every now and again work in culturally diverse groups, it is prudent to choose people with an earlier presentation to, or a decent comprehension of working in multicultural settings. These individuals will have the characteristics of social adaptability and openness to understanding, They are probably going to be more keen to and open to social contracts and focused on

adapting to a variable scope of colleagues. If determination forms neglect to mirror the one of a kind sort of versatile work, the association may choose individuals who are not appropriate to the free role. If new portable representatives have not been given a sensible see of the free part, then they may not be equipped to adapt to it, which may prompt to resulting staff maintenance challenges.

Kandola(2007)states that the following methodologies ought to be embraced:

1. The evaluation process ought to mirror the portable part and could incorporate appraisals which show a candidate's capacity to convey using various mechanical mediums. These give hopefuls significant bits of knowledge into mobile working, permitting them to deselect themselves if it is not to their preferring.
2. The appraisal handle for mobile staff ought to incorporate an assessment of self-inspiration.
3. When framing culturally diverse groups, it is imperative to create colleagues' information of different societies before they start working with partners from various communities, e.g., social mindfulness preparing, social trade, secondment, and so on.

Managers need to Equip Mobile Workers to be Road Warriors

Kandola (2007) states that a Road Warrior is a specialist who provided with the assets and bolsters that they require. mobile administrators need the accompanying center and necessary devices:

Fundamental Tools

Cell Phone

Portable PC with the remote connector.

Secure remote access to organization interior system

Simple to-get-to informing framework (for SMS, phone message email texting)

Additional Tools

- a. Easy-to-get-to sound, web, and video conferencing
- b. Personal advanced associate or cell phone
- c. Video phone
- d. Access to nearness data of partners.

- e. The single contact number for all specialized gadgets.

Employees, additionally need to have excellent data innovation abilities or have the capacity to get to superb data innovation bolster administrations at the time and place of need. A standout amongst the most widely recognized explanations behind portable specialists being incapable is an absence of innovation attitudes and support. At the point when versatile professionals have sufficient innovation and hardware, they have to carry out their employment they feel esteemed. At the point when innovation provided that makes life less complicated individuals feel that they will be more proficient.

Kandola (2007) proposes that the following strategies ought to be embraced: Ensure every staff are innovation that prepares them for their occupation and makes their versatile world less complicated. Give data innovation making to all new versatile specialists who require it, and guaranteeing suitable data innovation emotionally supportive networks are set up with a data innovation group that comprehends portable representatives' issues ought to deal with at the perfect time. Give an online gathering or Intranet website where mobile laborers can share data innovation tips, best practice and common sense data, for example, best eateries, best bistros with remote hotspots, or best lodgings with broadband associations.

Kandola study (2007), prescribes the accompanying for manager of portable specialists: Try not to be a miniaturized scale director. Directors of mobile specialists can't only depend on the ability set used to oversee office-based groups because large portions of those conventional instruments are excess. For instance, supervisors can't make casually screen advance or effectively track their subordinates whereabouts and exercises. Administrators every now and again react to this circumstance by attempting to follow versatile specialists with journal sheets and week by week refreshes, which can undermine sentiments of trust. Moreover, the review uncovers that portable specialist as often as possible faked consistency by filling in log sheets erroneously. They additionally discovered asylum from their supervisors' persistent investigation by setting their gadgets to occupy mode and guaranteeing battery disappointment or system scope issues.

DoBack off for Better Results

Kandola, (2007) review uncovers that portable specialists often revealed that extraordinary investigation prompted to expanded anxiety, the breakdown of certified relationship and de-inspiration. Techniques for observing that suit both the director and the versatile specialist are required. These techniques must bolster the versatile specialist and not issue their opportunity help inventiveness. Managers must stay away from portable laborers feel regretful about 'the adaptability inside their parts by creating unequivocal contracts and having open exchanges and surveys of which strategies are working and which are bringing on issues. The requirement for an administrator to trust is thought to be fundamental for the larger part of versatile laborers and directors from all nationalities. The larger part interviewees trusted that certainty and staying away from over-overseeing are more imperative for leaders of portable workers than supervisors of office-based specialists. Portable specialists recognize that they should be all the more trusting are troublesome for administrators and set aside the opportunity to create. Be that as it may, trust is an essential help for portable specialists.

DoFocus on Managing Individuals as Individuals

Mobile worker is a self-roused, self-sufficient, devoted, autonomous and frequently spearheading bunch. This implies supervisors must deal with their versatile workers as people; comprehend their one of a kind inspirations and how to react to them. Versatile workers' needs can incorporate acknowledgment, self-sufficiency and group sharing. Administrators should likewise know the level of contact that every portable manager requires for observing and social communication purposes. Administration needs will contrast between specialists, contingent upon position, understanding, and identity.

Do set aside the opportunity to Understand Mobile Workers' Worlds

The work style of the Nomad-shared by the administration specialists, engineers, data innovation administrators and deals officials who figure in this exploration is set apart from an assortment of workplaces, tasks, customers and distinctive groups. Specialists who trust their directors don't comprehend their one of a kind working the world feel both unsupported and suspicious about their supervisors' capacity to give any specific execution criticism.

Understanding

Mobile worker has blended perspectives about whether a decent chief needs encountered the portable work style to comprehend the weights of the part. However, all concurred that paying little mind to the wellspring of taking in a supervisor must value the worries of the ready position to give exceptional support.

Recognition

Versatile specialists get to be de-propelled when they feel their administrators don't perceive the measure of work that they do or don't see to what extent specific undertakings take to finish. Numerous versatile laborers additionally encounter disappointment when there is an abundance of work thus of directors misjudging the degree of their accessibility something which would be simpler for their chief to know about on the off chance that they were available in the workplace.

Some mobile specialists, especially those from ladylike societies extend this desire of comprehension to their family condition. These versatile professionals expect their chiefs will comprehend kid mind obligations and encourage working courses of action that bolster their family life.

1. Rust is essential and must keep running in both bearings amongst chief and colleague. Directors must surrender some control of portable laborers and permit this self-governance to increment while assuming that their versatile specialists won't exploit this position. Distinctive administration methodologies are required relying upon the identities and levels of experience that staff has similar procedures could convey worry to one individual due to saw over control and to another through saw under-administration. Directors must examine, concur and audit suitable correspondence levels on a particular premise.
2. Unless a director has an understanding of versatile working themselves or adequate correspondence with their staff, they are probably going to disparage the situational components that add to the troubles their representatives tend to face and not able to give the bolster required.

Kandola (2007)recommends that:

- a. During the employing procedure, applicants ought to look at for respectability and inspiration to decrease the probability of enrolling the individuals who may abuse expanded self-rule.
- b. In a view to creating line supervisors' trust of colleagues, they ought to be personally required in enlistment forms and also brooding look to face acceptance sessions. This practice permits directors to become more acquainted with people and to gauge their aptitudes and capacities. Once a director is sure that a worker can do work efficiently, there is to a lesser degree need to track that representative or smaller scale oversee.
- c. Managers ought to empower colleagues to deal with their workload and stress deliverables instead of exercises. Directors ought to meet routinely with portable staff to refresh themselves on advance and these gatherings ought to have a yield center.
- d. Mobile laborers change in how much they encounter difficulties, for example, imparting through innovation, dealing with their feelings, keeping up self-inspiration, keeping up work-life adjust and overseeing stress. Directors need to find where every's issues lie and give instructing and bolster where fitting.
- e. For managers to have the capacity to give precise criticism on execution, they should assemble contribution from the individuals who work with the versatile specialist and customers. A 360-degree input approach with space for open-finished remarks can guarantee that criticism is precise and meaningful. Work to comprehend portable experts' workplaces by going to their workspace or if this is impractical, by sharing photos or conveying using video conferencing innovation. Administrators need to consider how the family lives of their versatile representatives can be bolstered through adaptable working courses of action and the arrangement of a suitable innovation

Kandola (2007), states that correspondence is an important apparatus for proficient administration employees, recommends that administrators ought to embrace the accompanying strategies: Managers ought to recall that the effect of the chief and portable head communications is enhanced. To be compelling, managers must know

about the impact their conduct has on their workers or group. Despite the fact that this is the situation for all supervisors, it is primarily fundamental for the Chiefs of portable laborers since associations are probably going to the less successive. Indeed, even in office-based situations; directors think that it's hard to screen the effect they have on their groups, especially as upward input from representatives is exceptional. Notwithstanding, directors can watch responses by focusing on non-verbal communication, or by casually checking worker conduct in the workplace. Supervisors of versatile laborers can just evaluate their effect by tuning in to what representatives say. Moreover, there is a hazard that portable workers may mistakenly decipher remarks made by chiefs as the non-verbal communication which gives such a vast amount of data on the importance of the correspondence is missing. These circumstances make it extreme for Chiefs to pick up a reasonable comprehension of the effect they have on their portable group.

Most employees trust that extensive and general correspondence from their administrator is significant. As mobile workers have exclusive standards of these collaborations, and in light of the fact that they are less incessant than those between office-based representatives and don't have a tendency to have up close and personal, it is of specific significance that every single association is evident and brief, and a constructive affair for the portable specialist.

Kandola (2007) states that elements that make a collaboration active include:

- i. Giving clear directions
- ii. Spending a proper measure of time, talking about difficulties and troublesome issues when they emerge

Kandola (2013) states that mobile specialists revealed stretch created by administrators who impact terrible news to them via phone amid a profound change or who give negative criticism when it is unrealistic to talk about it inside and out. Those versatile specialists who had encountered visits from their administrators to convey awful news or who had conveyed our evaluations utilizing video conferencing had risen entirely positive about their encounters.

Most specialists perceive that correspondence is the most exceptional way that supervisors can lessen portable laborers view of remoteness and segregation.

Kandola (2007) states that half of the mobile specialists concur that they anticipate that their administrator will be in contact with them in any event week after week. The larger part anticipates that face will confront contact at any rate. Specialists additionally acknowledge visit email updates, talk, and instant messages. It is essential for managers to investigate the types of correspondence which must suit every individual from their groups. More senior employees, in any case, showed that they value the opportunity given to them by their chiefs. They depicted connections where they don't depend on their directors for support expressing they would discover more successive correspondence superfluous and along these lines upsetting. Albeit steady communication is attractive, the information demonstrates that it is recurrence as well as the quality that matters. At the point when messages are recognized, and discussions are followed up on, the versatile specialist feels bolstered.

. Kandola (2007) states that numerous mobile specialists concur that they value being given reports on the inside news being educated about occasions that are going ahead at head office and be kept insider savvy about choices that are being made. Additionally, being requested contribution on current organization issues and being given a stake in choices help portable specialists feel installed in the association. Owing to less regular contact, there is a propensity for every genuine cooperation to have a more prominent effect than it may have in a conventional setting. Administrators should be a great deal more mindful of the way they impact. Screen their correspondence propensities and keep an eye on how their messages are being gotten and interpreted. Communications were misjudged or over-translated when this is impractical to invest adequate energy examining an issue. At the point when this is the situation, an absence of follow-up correspondence can prompt to rotting negative sentiments.

Kandola (2007) recommends that Managers need to consider the most appropriate medium for conveying each message. Permit more opportunity for perusing messages with negative or passionate substance. Organize up close and personal correspondence if this were in an auspicious manner.

Managers ought to set up standard procedures for settling contracts before they form into clashes. In talented groups that don't have visit up close and personal contact, present a checkout' prepare toward the finish of telephone calls. These are a routine toward the finish of gatherings where individuals take it in swings to raise any issues that are disturbing them. Managers must know that their interchanges with versatile staff should be continuous, open and responsive. Correspondences ought to in a perfect world adjust to a contact calendar that suits both administrator and portable specialist and is interested in being occasionally evaluated.

Kandola (2007) Self-inspiration is said to be more imperative for mobile specialists than office-based laborers by most by far of versatile worker interviewees of all nationalities. Large portions of these experts report that keeping up their self-inspiration is the best test they confront. The test for Chiefs is to mediate in a way that is propelling yet not meddling and to do as such in a way that suits the person. The larger part of versatile specialists concurs that it is the employment itself that propels them. It is the supervisors' part to ensure they are getting the bolster they have to complete their work, and also they plan to. Different specialists are persuaded by acknowledgment of progress, expanded duty, and great group connections. It is essential to discover what each colleague's helpers are. Directors can assume a huge part in the inspiration of portable specialists by comprehension of their drivers and needs and unmistakably perceive great work. This acknowledgment should be shared efficiently around the group, as partners won't retain easygoing gratefulness in the way they would in an office domain.

Kandola (2007)suggests that Managers need to discover what it is that arouses diverse laborers and expect to give approaches to these necessities to be met.

Inconsistent two-way surveys, it is critical to talk about the effect of workload travel and different challenges on the portable specialists' inspiration

Publicly perceive great work.

Detachment is the principle reason that portable laborers gave for needing to work in an office. Supervisors ought to assume a dynamic part in handling confinement head on. They should guarantee that versatile specialists keep up, sustain and improve their associations with each other, partners and clients. The information demonstrated that when working in groups, portable laborers value having to start up close and personal

gatherings where parts and assignments are talked about. The individuals who worked in groups trusted that customary conventions were required.

As indicated by Kandola (2007), Mobile laborers concur that group meetings ought to include chances to mingle and assemble connections. Numerous interviewees felt it was essential for administrators to drive team building. Reasonable approaches to doing this incorporate empowering correspondence and data partaking in group gatherings and benefitting as much as possible from the chances to hobnob by sorting out gathering dinners and general social exercises. Many felt that it was critical to helping as much as possible from gatherings and time together so that when they expected to work with partners and impart via phone or by email, they could work all the more productively.

Kandola (2007) survey likewise demonstrates that fruitful administrators invest energy urging specialists to create associations with the more long relationship. Methods for doing this incorporate accepting open doors to work with different groups, supporting contact with new representatives and sharing casual correspondence over the association.

Kandola (2007) review demonstrates that mobile specialists acknowledge endeavors made by their supervisors to raise their profile inside the association. Administrators accomplish this by imparting great work to senior figures and urging versatile laborers to cooperate with individuals in senior positions. Chiefs likewise increment the permeability of their portable staff by building up an organizational culture where versatile workers are seen to be of equal status from office-based specialists.

A mobile specialist who invests a lot of energy working at a particular site which does not have a place in their association. Illustration, a customer site, may feel a debilitating feeling of recognizable proof with their association. They may start to relate to the client group more than their own particular, and thus, their organization devotion might be traded off. This impact is exacerbated in associations where the parts or work of versatile specialists is not seen as emphatically as office-based laborers. Associations are tested to make a culture where portable workers feel installed and esteemed as equivalent to office-based representatives. Group gatherings ought not to be the exclusively errand based, but rather likewise concentrate on the

advancement of connections through the sharing of personal difficulties, victories, and data. managers must perceive their indispensable part in encouraging both the development of group relationships and the advancement of an organizational culture that backings portable is working. There is a hazard that such versatile specialists won't act to the greatest advantage of their association, appoint bring down need and less push to interior work or less drive to incoming offering data to their association.

Kandola (2007), recommends that Managers must make a move toward the start of activities to strengthen the group in building up a reasonable comprehension of parts and errands, sorting out undertakings to energize interdependency. Chiefs can encourage objective and target setting, concede to techniques for working and set up correspondence methodologies. The help of group connections may incorporate activities, for example, masterminding customary telephone calls with the team and honing on methods for conveying viable through virtual media. Supervisors must set aside a few minutes for the group to mingle, regardless of whether this is eye to eye or for all intents and purposes. A decent adjust is 80 percent talk time and 20 percent relationship time.

Managers need to work to raise the profile of portable working all through the association by publicizing accomplishments and input about new techniques for working. Managers ought to be clear about what characterizes great execution, determining how great performance will be remunerated. Abstain from making central office command the concentration of data and power. Make interchanges channels where everybody has parallel access to data and can share thoughts, e.g., group intranets, talk discussions and video gathering connections to important audiences.

2.1.3 The Emerging Profile of Mobile Workers

International Data Corporation Survey (2004) uncovers that versatility inside the worldwide workforce is blasting. As per International Data Corporation's comprehensive investigation of versatile working patterns distributed in 2014, the biggest number of portable specialists, are in Asia/Pacific (barring Japan), trailed by the United States and Western Europe.

Five primary drivers express the mobility revolution:

1. Businesses (and people) jump at the chance to convey progressing.
2. Mobility increments corporate efficiency and intensity
3. Well created broadband cell phones, advancements, and administrations
4. Mobile innovation bolsters individual correspondence.
5. Digital information and content are increasingly pervasions
6. Versatile specialists are expanding speedier than home laborers

international Data Corporation (2014) predicts that the development of mobile workers will be massive, more noteworthy than the expansion in representatives telecommuting, notwithstanding the far-reaching rehearses. This expectation mirrors the expansive scope of voice, video and information benefits that are currently accessible to clients, for example, code division various get to, comprehensive framework for versatile correspondence, remote neighborhood, advanced endorser line and different gadgets like PCs, and custom fitted devices which make dealing with the move conceivable. Versatile specialists can be more profitable than home laborers.

2.1.4 Key Strategies Impacting the Mobile Workforce

Klynveld Peat Marwick, Goerdeler (KPMG's) Technology Innovation Survey (2013) Knowledge administration and progressed investigation are two of the advancements that guarantee to change how handle benefit organisations work. organisations that grip how to use these progressions remain to drive efficiencies, enhance client administration and lifting benefits. The following are seven must-watch methodologies that will modify how mobile workforce works.

1. Increased Leverage of Mobile Applications: As mobile applications surge the commercial center, field staff will utilize them more to share information and facilitate their workloads. Portable applications help area specialists turn out to be more beneficial by using the cloud to get to client records, date-books, directing data and even online networking. This permits representatives to in a split second get to data on customers, financials, and stock and occupation areas as opposed to returning to the workplace. Data is moved down and after that ordered into reports for investigation and arranging.

2. New Generation of Technicians: The retreat left a hole in the work compelling, and now interest for field benefit specialists is developing as the maturing workforce resigns. There is the likelihood of another era of professionals to rise, and it will have a great deal more capability in portable instruments and applications, notwithstanding a solid handle of the significance of the cloud and other cutting-edge arrangements in driving achievement. This new type of laborer will rush to adjust to change and grasp innovation to determine issues, increment productivity, and team up with collaborators.

3. Rise in Data-Driven Productivity: Big information streams into organisations in different configurations from an unlimited cluster of sources, including sites, web-based social networking and organization frameworks. Gathering, organising and drawing bits of knowledge from these massive volumes of information will help handle benefit associations enhance administrations and operations and emerge from contenders. Organizations should survey recorded information, distinguish designs and assemble measurements for prescient investigation and necessary business arranging. By utilizing information from various frameworks, including content administration, information distribution centers, and active record structures, organizations can better comprehend their operations and client needs, and settle on choices that drive consumer loyalty and increment benefits.

4. Cloud-Driven Transformations: The advantages of cloud-based programming will keep on giving organizations critically favorable circumstances. KPMG's Technology Innovation Survey (2013) positions the cloud as the most significant driver of business change for undertakings later on years, referring to continuous data and efficiency as key subsidiaries. Best-in-class field benefit associations realize that cloud makes them more adaptable in taking care of client requests, so the question is no longer whether chiefs ought to send cloud arrangements yet when. Associations must assess and actualize cloud benefits as systematically, as with on-premises applications to stay deft and productively address client issues.

5. Aggregation of Knowledge Management: Information accumulated from the variety of innovative apparatuses and frameworks utilized by field benefit associations is regularly used independently for particular undertakings, and sometimes overlooked in databases and available documents. In any case, if amassed

in an absorbable frame, the data can drive development and empower change. This is called information administration, which is usually fixing to particular objectives, for example, expanding intensity, upgrading staff skill and enhancing correspondence between various divisions. Later on, more associations will get a handle on the significance of learning administration as a to cross-train informing technique and course over the undertaking.

6. Better Integration of Machine to Machine Communication: Machine-to-machine correspondence is changing how organizations work together. Information transmitted from gadgets in the field to applications in the workplace can prompt to choices that fundamentally enhance the business. In field administrations, information streams in from universal position benefit and in-vehicle information catching gadgets, and also ruggedized handheld PCs utilized for invoicing and affirmation of conveyances and errand finishing. Additionally, sensors and checking devices on everything from family unit apparatuses to utility meters to complex hardware in oil fields transmit information on diagnostics, estimations, temperature and general conditions, all of which is instrumental in avoiding gear disappointment, booking upkeep, and enhancing security and vitality utilization.

7. Profit-Driven Analytics: Companies will progressively depend on information gathered through armada and workforce administration answers for drive operational knowledge, enhance client management and efficiencies and lifting benefits. By utilizing investigation instruments, organizations can better authorize laborer responsibility and improve arranging. Investigation recognizes best entertainers, figure out which timetables and courses create the best outcomes, and think about results from just workers and groups against the whole armada. Aberdeen Survey(2013)reveals that best-in-class associations utilizing investigation see benefits expanded by almost 20 percent, client maintenance by 42 percent and administration level understanding execution by 44 percent. In an inexorably focused market, this means higher effectiveness, expanded consumer loyalty, and enhanced primary concern.

2.1.5 Effects of Mobile Technology on Organizations' Productivity

Mobile know-how has profoundly affected working examples in a short space of time. Universal Business Machine's Institute Survey (2015) found out that the extent of mobile staff for all time based out of the workplace grew 15% in the vicinity of 2011 and 2015. In any case, it creates the impression that few firms have adequately considered the effect of such changes on their representatives and organizational culture. While representatives without a doubt welcome the adaptability of having the capacity to work from anyplace, versatile innovation has apparently set included weights specialists by rendering them reliably accessible. Individuals tend to work an excessive number of hours when telecommuting. Sorensen (2007) states that the reasons come from insecurity over what other people consider others. On the off chance that a mobile laborer is physically isolated from their associates, they ensure to work. The out-of-office reason has vanished.

The overview respondents affirm this view. that Nearly 68% indicate the obscuring of individual and work time as the central disadvantage of portable innovation utilize. It might likewise add to work environment weights in different courses, through its impact of accelerating business forms. For instance, if a deal delegate visits a client's area outfitted with a smart individual computerized aide, the client may expect a prompt choice on demand for a markdown, knowing the sales representative has admittance to the pertinent data. Such burdens could be viable countered with proper preparing. International Business Machine survey (2007) found out that over a portion of mobile staff think that it's hard to partake in gatherings while working remotely; many whines of battling to get on the web. The absence of a regular introduction to organization data and talk likewise causes telecommuters to feel detached and disengaged from their casual systems at work. The proposition is that portable working may have concealed negative impacts on profitability, without a successful system to oversee mobile specialists.

Matarazzi (2007) states that one of his organizations' most significant difficulties with mobility has been to keep up work-assemble liking. Matarazzi (2007) says that online devices (the staple method for a coordinated effort among its specialized staff) should be supplemented with standard phone calls and balanced and group gatherings to cultivate union. The difficulties of a dispersed workforce, the review shows that most

firms still can't seem to address such substances. While two in three organizations have overhauled data security rules and systems for versatile utilize, just a minority (36%) of firms as of now give preparing in the utilization of portable innovation, while only 30%/prepare administrators in how to oversee mobile workers. The absence of regard for preparing is unusually intense in North America and among money related administrations firms.

Such included weights and expanded feeling of detachment for some portable representatives appear not in any event yet to influence workforce spirit. In any case, there are some stressing signs that 54% of overview respondents think utilizing cell phones and applications has supported worker spirit and occupation fulfillment is empowering. Notwithstanding, one-fifth of budgetary industry administrators and 17% of all respondents from North America concur that versatile utilize has had an adverse effect around there. A few of the administrators met for this review express the view that individual teacher is the way to overseeing work-life adjust and bring up that representatives are in charge of controlling their utilization of handheld email gadgets. Others hold that workers will just take to more propelled portable endeavor applications, for instance, when protection concerns have been exhaustively tended to, and a high level of boss representative trust has been set up. There should be another arrangement that cutoff points how these advancements can be utilized and remunerate laborers.

Matarazzi (2007) states that open work program was introduced 12 years back to empower the business drive to invest more energy with clients. Today, it is a vast, grant-winning representative bolster program keep running by a committed staff and is a critical component of Sun's system to win the war for ability.

Matarazzi (2007) states that Sun organization partitioned its workforce into three classifications: Sun-doled out (specialists whose occupation obligations or data innovation needs to oblige them to be nearby, and are apportioned a settled work area), versatile and locally established representatives. Representatives survey their capacity to work remotely and along these lines counsel with their chief on the most appropriate assignment, with the worker having the last say. Half (48%) of the organizations' representatives have been assigned as versatile specialists, with a further 8% locally situated. Chiefs are prepared in separation joint effort, yield based

administration and building bunch proclivity, including the arrangement of abilities, devices, and best practices.

Matarazzi (2007) states that the program has yielded unprecedented financial advantages, including proficient utilization of land, expanded deals, and enhanced capacity to pull in and hold staff, Matarszzi (2007) battles that the old mechanical style of overseeing sources of info, for example, how long a worker spends in their work area, is progressively irrelevant. Young individuals consider work to be a movement, not a place, We are all in opposition for the brightest ability, and they have, altogether different points of view than we do.

Matarazzi (2007) recognizes the trouble of observing the yield of information laborers and states that organizations need to trust representatives and chiefs to carry out their employment. On the off chance that a representative says they have turned out to be more proficient and their administrator concurs, we acknowledge that as accepted proof.

Organizations without adequate controls on cell phone allotment and use chance heightening direct remote costs (65% of European administrators report that portable working has adversely affected correspondences costs). Firms likewise confront higher data innovation bolster costs because of the more prominent trouble of giving specialized help outside the workplace condition mainly if the organization does not have a viable approach with respect to unsupported gadgets. Higher month to month interchanges expenses are a more noteworthy sympathy toward littler organizations: 26% of little and medium scale endeavors refer to this as a noteworthy concern, contrasted with 14% of expansive partnerships. In any case, the more significant part of small and medium undertakings (55%) trust versatile innovation has had a positive general effect on operational expenses. Administrations are accessible to help firms control their portable interchanges costs. For instance, the United Kingdom dealer bank Augusta and Company have contracted a pro supplier to persistently screen and deal with their portable information costs. While the security dangers of cell phone utilization have been tended to by 71% of substantial partnerships, this issue has been less very much secured by little and medium scale undertakings; just 58% of administrators from these organizations concur that they have updated data security rules and methods to cover portable use.

Corporate utilization of mobile innovation has achieved a level. To push forward and accomplish the following level of efficiency increases, organizations require a move to an arranged approach. Simmonds Survey (2007) discovers that the issue with versatile is that it has crawled into a considerable measure of organizations by osmosis. One needs to have control over what gadgets individuals are utilizing particularly in the event that one needs to utilize versatile innovation in a more key manner. Simmonds (2007) states that an approved approach is inadequate in many organizations: just 36% of administrators trust their organization has an unmistakable procedure for utilization of mobile innovation. Remote working is flourishing in numerous associations, however to a great extent in a specially appointed an unmanaged way.

Shockingly, management seems to perceive this inadequacy and intend to address it in the blink of an eye. At the point when asked essential measures they can take to support the profitability advantages of portable working, the second-positioned reaction from 43% of study members is to build up a reasonable technique and usage gets ready for the utilization of versatile innovation in the endeavor. While giving portable access to central business applications is viewed as a critical stride by overview respondents, the encounters of organizations, for example, Sun organization demonstrates that it is similarly as essential to bolster workers and supervisors and furnish them with new abilities to receive the best rewards from utilizing versatile innovation. As said before, just a minority of studied firms give preparing to workers in how to utilize cell phones and applications, and for administrators in how to oversee versatile representatives. Among the main three measures, officials concur that their organizations must take to expand efficiency increases are to give more careful preparing to representatives. Boosting efficiency is not by any means the only motivation to adopt a more key strategy for versatility. Organizations which proactively address the human part of portable working will enhance their odds of clutching key representatives. This is particularly valid in divisions intensely subject to high-esteem information laborers, for example, budgetary administrations (where, it could be reviewed, the occurrence is generally high of harm to workforce confidence from the weights of versatile work.

Kaetsu (2007) states that management ought to perceive that mobile working addresses issues including human capital (individuals), physical resources (workplaces) and additionally, apparently, the innovation decisions that organizations make. It additionally has the capability of affecting vigorously on business forms. Subsequently, the requirement for cautious portable administration system improvement with every one of the achievements anticipates execution, preparing, observing and investigating.

Before conceiving a formal strategy, the management ought to likewise evaluate how portable innovation has officially influenced business forms, representative director relations, and worker resolve and organization culture. A few firms may see culture change as an objective in its privilege, with mobile innovation seen as a method for advancing it. Kaetsu (2007) states that Nissan company, for instance, is effectively reassuring its representatives to embrace new working styles, and gives ready access to Value-Up, an apparatus intended to encourage cross-practical attempting to further this objective.

Kaetsu (2007) states that the shortcoming in Nissan company in the past was in the region of learning sharing. Since employment are moving to higher esteem included part, the accentuation is on streamlining information work, exceptionally innovative work.

In light of these exchanges with professionals and free specialists, Kaetsu (2007) states that the accompanying is a few contemplations that ought to control the advancement of big business mobile management strategy:

Ensure that the technology deployed is user-friendly and reliable: This is a first strive to guarantee a productive mobile workforce. Imperial Chemical ventures kept away from discharging a remote intranet get to answer for workers for a long time, passing judgment on it was essential to hold up until the innovation was more dependable. Today, the organization gives a remote get to the administration that is consistent and secure, producing high use and worker fulfillment.

Access to mobile applications may not be basic for everybody: The business case to give handheld gadgets to officials and chose shop-floor laborers are clear, The issue is with the center ground. When does a Blackberry turn into a toy? The prevalence of

designated cell phones among senior administration, deals, and data innovation staff recommend firms are persuaded by the efficiency advantages of portable innovation for these capacities. Portable applications for different administrations may need to demonstrate their value through constrained trials.

Staff requires training in more than device or application use to maximize the benefits: Experience is that representatives get the innovation before long. The ideal approach is to guarantee that portable applications are anything but awkward to utilize and to center preparing assets around staffing to grow new attitudes that empower them to benefit as much as possible from being versatile. For instance, workers may profit by preparing in overseeing virtual gatherings or using constant information amid deals arrangements. Administrators may profit by direction on building conveyed groups and assessing worker execution.

Define the company's desires for portable specialists and show you bolster them: Mobile workers need to agree to accept particular objectives and see how their execution will be assessed. Organizations ought to make it clear that workers are trusted to deal with their own particular time. Organizations may consider building up a versatile working arrangement covering issues, for example, when participation is required in the workplace (if by any stretch of the imagination), direction on when representatives can and can't be reached and guidelines administering the utilization of touchy portable information.

How should Mobile Services be Delivered

The methodology should likewise address the supply side, how portable venture administrations will be given and upheld. The way of versatility implies that external systems will be used to some degree, at any rate for conveying voice and information movement, recommending that system suppliers will have extraordinary skills to deal with the conveyance of an organization's portable administrations. Getting the most out of versatility means incorporating propelled portable voice and information applications with the center venture arrange frameworks integrators can offer particular qualities in this condition. In the meantime, the utilization of system driven versatile applications implies that the organization's in-house arrange administrators will be intensely required in conveyance and support in somehow. Many organizations will see the temperance of using every one of the three sorts of models

for conveying diverse sorts of administrations or in various parts of the undertaking. The most significant share of officials in the overview, 43% hope to use such a mixed model for administration conveyance, while 33% anticipates duty remaining soundly in-house. Among the diverse enterprises, producers are destined to look outside for help in overseeing portable administration conveyance (Kaetsu 2007).

2.1.6 The Critical Role of Fingerprint (Biometric) Time and Attendance to Workforce Management Strategies

Kaetsu (2007) states that one of the fundamental achievement variables for any workforce administration strategy is the capacity to address difficult. Industry gauges put deliberate and blunder driven time robbery in the scope of 1.5% to 10% of gross finance, costing United State's organizations many billions of dollars every year. Biometric-based time and participation arrangements practically take out the most critical wellspring of time burglary known as amigo punching, the act of one specialist "timing" in or out for another. Biometrics offers the main compelling method for tending to the pal punching situation by straightforwardly connecting an individual utilize record. This demonstrated innovation had been utilized as a part of time timekeepers for over 10 years by a considerable number of associations and a great many representatives worldwide, and the outcomes are in biometrics reliably convey precise, dependable, and auditable constant work information, the establishment of successful work administration. workforce administration has been robotized in numerous organisation, and these have critical decreased immediate and roundabout work costs.

In today's dynamic business environment, employees are both a central resource and a noteworthy cost for ventures expensive and little. Automated workforce management gives a way to use this key resource while monitoring authoritative expenses adequately. Biometric-based time and participation arrangements for all intents and purposes dispose of the most unique wellspring of time burglary known as pal punching, the act of one specialist "timing" in or out for another. Biometrics offers the main viable method for tending to the amino punching quandary by straightforwardly connecting a person to an individual work record. Additionally, biometrics offers exciting advantages past certain work records by taking out the requirement for time clock supervision and decreasing procedures and supplies

identified with a time card, identification, or stick based time and participation frameworks. This demonstrated technology had been utilized as a part of time and participation frameworks for over 10 years by a great many associations and a large number of workers worldwide, and the outcomes are in biometrics reliably convey precise, dependable, and auditable consistent work information the establishment of successful work administration. Organizations of all sizes are progressively actualizing computerized workforce management frameworks that fuse biometric time tickers. These organizations are seeing a critical diminishment in immediate and roundabout work costs.

Kaetsu (2007) states that biometrics is the art of measuring physical and behavioral qualities that exceptionally distinguish people. These components, finger, iris, facial, or vascular pictures, hand geometry, voice or mark elements are caught by specific gadgets and changed over by means of refined calculations into accurate portrayals or formats. Layouts are utilized as references against which an individual's personality is confirmed. Biometric time tickers have customarily utilized hand geometry or a finger picture to check a laborer's character and catch work information. All the more as of late, facial acknowledgment, vascular examples (close by fingers), and voice acknowledgment have additionally been utilized. Notwithstanding the sort of biometric caught, the essential achievement components for a biometric time and participation gadget incorporate speed of check (one moment or less), exactness, and simplicity of enlistment.

High-esteem Biometrics Overcomes Legacy Perceptions Biometrics has been utilized successfully for over 10 years for time and participation and all the more as of late for a scope of other high and low-security applications. In spite of across the board utilize, perplexity and confusions about the innovation and its abilities endure. These worries are immediately dissipated when the certainties about biometrics are set up. As per Purdue University Survey, 2015, Biometrics offers the unique capacity to rapidly and precisely catch continuous, work information and give a non-denied review trail. The utilization of biometrics is across the board and developing quickly.

Biometrics has experienced severe examination, and the outcomes are in when legitimately sent, biometrics function admirably and are sheltered, secure, and exact. Biometrics offers associations a more extensive scope of immediate and aberrant time, cost, and operational advantages than option time and participation techniques. Biometrics offers the unparalleled capacity to rapidly and precisely catch ongoing work information and give a non-renounced review trail

Work information exactness is accomplished through the concurrent affirmation of time and character. Biometrics offers the main accessible technique to accomplish this level of information trustworthiness, unequivocally connecting a person to his or her work record. This gives a sound, solid establishment for powerful workforce administration. Time card, identification, and Pin-based frameworks confirm time just not the personality of the individual representative entering the work information. Biometrics kills more purposeful and accidental human mistake than time clock choices that can't check personality. Biometrics additionally enhances representative spirit and fulfillment by expanding trust in the finance work through the predictable utilization of classified and fair-minded timekeeping. At last, biometrics guarantees administrative consistency and shirking of legitimate activities and charges by giving a renounced review trail to all work information. Biometrics is not a common, high-chance business recommendation, but instead demonstrated genuine innovation that helps undertakings, expansive and little, control work expenses and better addresses the aggressive difficulties of twenty-first-century business operations. Biometrics is a billion dollar industry with an anticipated 34.2% Compound Annual Growth Rate throughout the following five years. A massive number of biometric gadgets have been effectively sent worldwide in government, social insurance, money related administrations, assembling, retail, and other basic conditions with high hourly workforces. Applications run from time and participation to fringe security, government worker personality to robotized teller machine and cell phone get to, home entryway bolts and carport entryway openers to arrange logins and atomic power plant get to.

Kaetsu (2007) states that in the United States of America market estimates demonstrate about 400,000 thousand biometric estimates have been conveyed to date worldwide for time and participation applications. Anticipated Compound Annual Growth Rate for these gadgets throughout the following five years is just about 40%.

He further says that Biometrics has been severely used, and the outcomes are in when legitimately sent, biometrics function admirably and are sheltered, secure, and exact. Myths and misguided judgments about biometrics continue, however, most have been indisputably discredited. Three of the most popular concerns rotate around innovation execution, cost, and client acknowledgment.

Kaetsu (2007) states that biometrics has been really utilized as a part of time and participation applications for over 10 years. A significant part of the biometric execution wrangle about focuses on the utilization of particular innovations, for example, iris acknowledgment for extensive scale, high-security, recognizable proof applications, for example, outskirt control, voter enlistment, or national character programs. Hand geometry and finger check biometrics have a demonstrated reputation for performing precisely and dependably with large amounts of client acknowledgment and consumer loyalty inside the workforce administration condition. The cost of biometrics has fallen fundamentally in the course of the most recent five years, setting aside a few minutes and participation sound venture for organizations of each size. Most associations discover the reserve funds from dispensing with amigo punching alone legitimizes the interest in a biometric time clock. Additionally, many organizations rent biometric time tickers, empowering them to exploit innovation progressions as they get to be distinctly accessible. Client acknowledgment, significant feelings of trepidation that affect worker acknowledgment of biometrics cleanliness, protection, and everyday freedoms have been definitively reproached.

A current review from Purdue University (2015) discovers that biometric devices are less inclined to transmit germs, infections, or microbes than entryway handles. As to, biometrics is protection for improving innovation when conveyed adequately. This is valid for time and participation applications where biometrics ensures and secures individual work information. At last, civil freedoms concerns have been terribly distorted. Biometric time timekeepers don't catch information that can be utilized by

law implementation organizations. These frameworks catch and store biometric formats (numerical portrayals), not pictures. These models are inconsistent with law requirement frameworks.

Biometrics offers organisations a more extensive scope of immediate and aberrant time, cost, and operational advantages than option time and participation techniques. Biometrics gives main concern benefits through the diminishment of work expenses and operational costs and also giving indirect advantages.

2.1.7 Implementing Biometric Time and Attendance Strategies to Increase Employee Productivity

Shahenwa (2015) states that biometric and participation time is getting embraced to enhance workforce profitability, effectiveness and work administration around the world. It's given that for most organizations, finance and workforce administration eats up as much as half of their aggregate spending plan. The current worldwide monetary condition has brought about reductions over each sort of industry and to stay practical and look after efficiency; directors are stood up to with troublesome decisions. While numerous organizations have been compelled to cut workforce administration costs by falling back on cutbacks, others are attempting to build representative profitability and responsibility to augment their arrival on speculation. Many organizations are receiving biometric time and participation frameworks to enhance workforce profitability, proficiency, and work administration. Without distinguishing biometric proof, organizations still depend on manual techniques for finance estimation which are to a significant degree tedious as well as accompany the danger of mistakes. In contrast with - these manual techniques, biometric participation frameworks rush, to introduce, easy to understand and exceptionally exact.

Kaetsu (2007) states that biometric and participation time is set up to record when representatives begin and stop work, notwithstanding the division where the work is performed. Be that as it may, for a few associations it is likewise standard to track dinners and breaks, the kind of work done, and the number of things delivered, when representatives are not functioning as a piece of their workforce administration technique (e.g., get-away time, remuneration time). These records can be kept physically with pen and paper, or they can be computerized. Cutting edge

computerized time and participation frameworks are generally utilized with biometric innovation, where a representative gives their biometric qualifications to logging going in or log out of the framework.

Shenhawa (2015) states that dissimilar to different sorts of time and participation frameworks, biometric time and participation frameworks are more secure, and there is no compelling reason to bear any card or recollect any passwords. Biometrics based time and participation terminals are turning out to be progressively famous in today's market as a result of their many advantages. Since biometrics terminals read a man's exceptional, unique mark, iris, palm vein, or facial shape, they guarantee that representatives can't check in for each other, along these lines forestalling worker time burglary and amigo punching.

Shenhawa (2015) states that biometric time and participation systems directly affect representative efficiency which incorporates:

Higher Efficiency

At the point when it's an ideal opportunity to run finance toward the finish of a payroll interval, in the event that one is utilizing a manual procedure the gathering of timecards, reentry of information into your finance arrangement, and time relevant to process finance for the whole association can be dreary and difficult. It is normal for organisations with a manual timekeeping and finance procedure to spend upward of five hours or all the more running finance toward the finish of each payroll interval. Regardless of the possibility that it is the duty of one individual, five hours for each payroll interval indicates a considerable measure of profitability hours with an immediate cost (the individual's time-based compensation) The fact of the matter is, the measure of time it requires to use investment and participation information through physically run finance can be radically decreased to a matter of minutes with a biometric time and participation framework. Efficiency hours spared and the related staff wages can be reallocated somewhere else once you dispense with a portion of the manual procedures. Mechanizing the accumulation of time through information gathering gadgets guarantees time records are in an electronic organization. This permits the exchange of that information to be naturally sent to your finance answer for installment handling.

Expanded Accuracy

Biometric time and participation registration and recognizable proof decrease or can wipe out the requirement for any manual reentry of timekeeping information into a finance system when the two are incorporated. The outcome is correct finance handling that can take as meager as 20 minutes for each compensation period. Reducing the time required to run finance while expanding information exactness through the accumulation by biometrics can prompt to changes in both profitability and cost savings.

Eliminates Buddy Punching and Time Theft

Shenhawa (2015) says that with mate punching, a worker either sorts a late representative's close to the home recognizable proof number or swipes the representative's identification sooner than they touch base to work or after they leave work. The organisations expenses of this sort of time burglary can be gigantic. As indicated by the American Payroll Association, buddy pal punchers cost United States' organizations almost \$400 billion a year in misfortunes. Biometrics makes it practically inconceivable for workers to swindle a period and participation framework. As biometrics is one of a kind, nobody else with the exception of you can punch in or punch out which brings about opportune participation and billions of dollars of investment funds for an organisation.

Shenhawa (2015) states that various organisations and their representatives have mistaken assumptions about biometric time and participation system that it will abuse their security. In all actuality, biometric time and participation frameworks don't store or utilize any unique finger impression picture, making it almost unthinkable for culprits to hack a framework and figure out biometric certifications to utilize them for fraud purposes. Trader (2015) states this is a common worry among workers who expect that their information will be utilized against them. However, it's essential to note that no picture is ever put away. Biometric time clock doesn't take real pictures or fingerprints of representatives. Biometric time clock filters the unique elements and makes an interpretation of them into a numbered code that relates to a specific representative character. Without a related picture, the sweeps can't be utilized to track an individual or take that individual's character. It is only an encoded parallel information stream. (Trader 2015). Truth be told, there could be a contention that the

utilization of biometrics upgrades worker protection. The potential outcomes of utilizing biometrics for representative validation are unending in workforce administration. Workforce Management specializes trust that biometric time and participation are probably going to be utilized later on since it essentially dispenses with the capacity for representatives to swap, share, or take accreditations to copy biometrics qualities of a worker which keeps the likelihood of pal punching and time robbery. Biometrics enhances the convenience, proficiency, and precision of timekeeping frameworks while sparing finance costs and expanding efficiency.

2.1.8 Managing the Mobile Workforce

Organizations swinging to workforce management applications ought to consider both Cloud-construct and in light of premises provision. Shenhawa (2015) recommends two fundamental contemplations when choosing the correct model for organisation. company with mobile workforces confront two critical innovation patterns. One is the utilization of mobile workforce administration arrangements that can add essential support to the business model. The other is the development of cloud-based solutions as a different option to the conventional on-premises organization. Consolidating •the two through cloud-based mobile workforce administration can bode well, contingent upon the specific conditions and objectives of an organisation. By considering the specialized market drivers and vital contemplations, organizations can choose whether a cloud or conventional on-premises arrangement is the best.

Shenhawa (2015) states that any organisations wither small or significant must deal with its mobile workforce in some shape, as individuals speak to a noteworthy segment of working costs. There are timetables to track, individuals to allocate to employment or tasks, and HR to adjust. By more effective utilization of faculty, organisation can keep on increasing profitability and productivity; diminish waste, blunders, and expenses; authorize administrative consistency; and enhance items, administrations, and client encounter. This reward and others clarify the significance of mobile workforce administration programming that can robotize workforce arranging and upgrade planning, arrangement booking, work-arrange administration, team and contractual worker administration, and request determining for significant business associations. Usage of workforce administration frameworks is developing

rapidly. As per a Gartner estimate, (2014) near 90 percent of organizations will execute workforce administration frameworks with cell phone incorporation. Besides, Frost and Sullivan research(2014) propose that 40 percent of associations utilizing portable workforce administration consider it to be crucial to satisfying business techniques.

Aberdeen Group (2014), say 65 percent of incoming services demands require the dispatch of a mobile delegate, and more than a fourth of those dispatches require extra visits. Apparently, there are important mobile field workforce assignments to oversee. Organizations with best-in-class versatile workforce administration saw first-time consumer loyalty levels of 88 percent contrasted and 71 percent of different organizations, and year-over-year determination time changes of 10 percent. Many organizations swinging to movable handle compel administration applications ought to consider sellers that give a cloud-based model, in which an organization gives the elements of demand as .administrations through an Internet connection . Organizations can test workforce management programming or take off full executions with constrained forthright venture or long-haul duty. Not exclusively clouds workforce is planning to diminish capital costs. Additionally, it limits upkeep multifaceted nature and increments vital adaptability.

Dutta (2012) states that cloud computing keeps on developing in notoriety on account of the substantial advantages it can give to an organization, it frequently needs minimal capital cost. Instead, organizations commonly pay charges for a month to month utilize. Execution is quick so organizations can respond to market advancements and critical bearings much more rapidly than with conventional on-premises usage. The application is adaptable; organizations can openly include or evacuate clients without broad scope quantification. Furthermore, the aggregate cost of possession can be lower. Many sorts of significant business programming including undertaking asset arranging, client relationship administration, and information examination are accessible through cloud administrations. Aberdeen, (2014) posit that just about 30 percent of organisations studied anticipate that distributed computing will affect their portable workforce administration arranges in 2016. Workforce administration conveyed from the cloud permits an organization to offload data innovation contemplations. The business can receive the workforce

administration abilities it needs without the going with data innovation, authoritative weights and major specialized assets of an on-premises implementation. The In expansion, staff who might find some way or another be expected to introduce, run and bolster the product can be redeployed to bolster the organization's technique better. Such an approach to a great extent wipes out direct capital costs, as there is no equipment to purchase or programming to permit. There is no compelling reason to keep up different cases of the product with a similar form or level of fixing.

Another explanation behind cloud conveyance of workforce management administrations is business coherence, including debacle recuperation. A decent cloud supplier has colossal repetition and recuperation frameworks to limit downtime. To accomplish a similar level of accessibility, an organization would require numerous, topographically inaccessible server farms with copied establishments of the workforce administration application and entirely repetitive information. Moreover, including various server farms could possibly build data innovation authoritative headcount and expenses. The organization would likewise require every server farm to be virtualized, which would additionally limit potential disturbance. Making and keeping up such offices is expensive. Cloud portable workforce administration is a superior fit for a few organizations than others. Any organization that needs a portable workforce administration techniques ought to look at the specialized and business calculates that can influence whether a cloud arrangement is the best decision.

Dutta (2012) states that the specialized establishment of a cloud arrangement client get access through an Internet association and a program is genuinely fundamental. However, the subject of whether cloud-based portable workforce administration bodes well for a given organization is a more nuanced question. Organizations ought not to consider moving only one application to the cloud, yet their whole data innovation procedure. A business that would discover cloud talented workforce administration a superior fit than on-premises organization likely doesn't have a broad worldwide framework with various server farms for the overall conveyance of administrations. The data innovation office needs save the ability to send or grow an on-premises application as required and furthermore doesn't have the essential managerial aptitude. The organization may have depended on operational procedures that can no longer keep pace with the intricacy of current field benefit prerequisites or necessities to

redesign existing frameworks. In the event that the business faces expanded operational and capital costs to convey another arrangement, a cloud model could be exceptionally alluring both monetarily and deliberately. The cloud is likewise engaging if the organization arranges a comprehensive development that would require an exorbitant foundation extension(Dutta,2012).

Different techniques for the organization are suited to various vital prerequisites. A fundamental question is the means by which rapidly the workforce administration arrangement should be conveyed. The more quickened the time period, the more qualified a cloud arrangement will be. That is on the grounds that conventional sending of new programming is perplexing, including requesting equipment, sitting tight for conveyance, arrangement, establishment, and reconciliation with existing frameworks. An organization should facilitate equipment and programming conveyance with planning administrations. The procedure can add weeks or more to a timetable. Executing a cloud arrangement, on another hand, takes a small amount of the time in light of the fact that the administrations as of now exist and need just an Internet association forget to.

Dutta(2012) states that notwithstanding contemplations of speed, mobile workforce management problem solving are unpredictable. They require specific skills to, convey and work. A data innovation office may need to enlist experienced workforce to utilize and keep up the solution. Cloud arrangements intrinsically give the vital mastery. A business can be a decent contender for a cloud-based mobile workforce administration solutions when no less than one of the following elements is essential. Cloud-based mobile workforce management solutions are especially helpful when an organization anticipates that its field workforce will fundamentally grow or contract. This can be because of changes in item or business lines, real acquisitions or divestments, fast market changes, or regular market shifts, among different elements. The bigger the swings and the all the more rapidly they occur, the more proper cloud arrangement gets to be. Be that as it may, for a private cloud to convey the essential level of scaling, an organization should obtain adequate ability to bolster its pinnacle stack prerequisites and may see a bit of that limit sitting inert amid specific times of its working cycle. This, without anyone else, makes conveyance alluring financially.

An important advantage of any cloud arrangement is the capacity of the organization to have data innovation center assets and consideration around center abilities. The hypothesis and mechanics of portable workforce administration would be diversions for some organizations and detract from zones that are imperative to aggressive achievement.

Since cloud solution doesn't require extra equipment and programming or software, organizations can move costs from capital costs to operational costs. The last is more adaptable and receptive to business needs. On the off chance that an organization arrangements to downsize a portable workforce eventually, or on the off chance that it no longer will require a given programming application at any given moment, later on, it can essentially finish off the proper number of client records when it wishes. The solution is temporary in nature (Dutta, 2012).

Indeed, even in the wake of considering both information technology and business indices, an organization ought to take a gander at some potential ramifications of cloud sending to guarantee similarity technology and strategic needs:

Identified with the overhaul issue is customization. The more intensely an organization needs to rebuild the product to work the way its business as of now does, the more troublesome cloud updates can be. Once the merchant redoes its product for a given customer, it might need to rehash the procedure for each new form, and that would be exorbitant and might be incomprehensible now and again. With sufficiently high levels of customization, a cloud arrangement might be more troublesome, albeit a few sellers do bolster customization through overhauls.

Dutta (2012) posit that even with no customization caught up, updates can be a problematic issue. The client has no power over when redesigns occur. Merchants might possibly chip away at a settled and unsurprising calendar or give notice ahead of time. Sufficiently extensive changes between variants can affect business procedures and request some level of retraining, or if nothing else modification by workforce contingent upon how the seller handles these contemplations, the customer organization could get itself over and over confronting occasional misfortunes in profitability. On the off chance that this is an issue, a few sellers offer single-occupant models that permit a decision of overhaul timetable.

Fieldwork ordinarily includes sensitive client Data. Data and operational security are critical contemplations for organizations. A merchant must demonstrate that it has the fortitude and abilities to give sufficient security. The seller ought to likewise give review comes about all the time with the goal that customers can choose whether their data is protected.

Dutta (2012) states that a few nations and a few enterprises require that delicate information is shielded from unapproved access. There may likewise be confinements on sending information to other geographic locality that has lesser degrees of lawful security. The cloud merchant must embrace a periodic review to show progressing consistency with every single material control and models. Mobile workforce management offers organizations essential changes in productivity and, accordingly, consumer loyalty. A cloud mobile workforce management solution sending can permanently diminish capital and operational costs while giving an answer on a quickened and more adaptable premise. Cloud solution additionally offers organizations more remarkable adaptability in scaling an answer up or down to meet changing essential needs and enhances business progression and debacle recuperation.

An organization considering another or extended workforce administration execution for its field drive ought to inspect both the advantages and potential restrictions to figure out if a cloud talented workforce administration arrangement is a solid match. Notwithstanding, regardless of whether an organization picks a cloud or on-premises arrangement, it can simply choose to change to the next conveyance demonstrate at a later date, protecting a definitive in adaptability and support for critical choices (Dutta, 2012).

2.1.9 New Technology Available to Support Mobile Workforce Management Strategy

Gartner (2015) recognizes current technology accessible to bolster management workforce administration methodology to include:

- i. **BitLocker:** This is incorporated into the buy of the windows operating system and ought to be actualized on all portable PCs to ensure that information is scrambled in case of the tablet is stolen or lost,
- ii. **Warren Averett Technology (Wa-Tech)Virtual Private Network Share Service:** This is accessible to interface with the state arrange security. This

will guarantee that organizations classified data is secured regardless of the possibility that associated with the state from a branch office,

- iii. **Warren Averett Technology (Wa-Tech) cell phone administration benefit:** This administration permits organizations to utilize cell phones for email safely. It secures both organizations gave telephones and also individual cell phones. Organization information put away on the telephone is scrambled and can be wiped remotely if the cell phone is lost or stolen.
- iv. **Text is informing gathering:** Although a collective administration, this is innovation openly accessible on cell phones to permit versatile workers to gather and send records that may have been sent by means of content informing. Representatives ought to be taught on the best way to deal with records in content informing
- v. **Warren Averett Technology (Wa-Tech) Shared email benefit:** Using this email benefit alongside cell phone administration benefit deals with records administration issues identified with messages.
- vi. **Box.com:** This permits organizations to utilize the cloud to safely store and share reports and empower associations to be more portable.

2.2 Theoretical Framework

2.2.1 McClelland's Need for Achievement Theory

McClelland's (1961) hypothesis examined by Moorhead and Griffin (2002) this hypothesis depends on the individual's requirement for accomplishment, alliance, and power. The requirement for accomplishment alludes to an individual's craving to achieve an assignment or objective more viable than before. Alliance needs involve the requirement for human camaraderie and to invest energy in social connections, while the requirement for power incorporates the yearning to control assets or impact, mentor and control others (Kreitner and Kinicki 2002). Of the three needs, the requirement for accomplishment is most pertinent to this exploration extend and additionally explains the fundamental thought processes driving the mobile workforce. Beneath takes after an outline of a portion of the individual qualities Moorhead and Griffin (2002) related to each of the requirements said above.

The need for accomplishment

Individuals with a high want for accomplishment set tolerably troublesome objectives and take decently unhealthy choices. Then again, people with a low need for accomplishment are slanted to set effortlessly achievable objectives with least threat. Receiving quick, particular feedback on execution is particularly essential to high need achievers. Hence, high need achievers will probably take employments where the input is quick, for example, deals positions. High-require achievers are engrossed in their work and persistently consider it notwithstanding when they are far from work. They likewise get to be distinctly disappointed with small undertakings. High-require achievers assume individual liability for the occupation and frequently go up against more than is required. This, thusly, prompts to a feeling of achievement. From this trademark, it might be concluded that the occupation itself turns into a wellspring of inspiration. High-require achievers frequently don't make it to senior administrative positions as their attributes struggle with the necessities of more elevated amount positions. At more elevated amounts, they are relied upon to delegate progressively and are compelled to take either pretty much unsafe choices than they are set up to. They may likewise not get prompt input. The attributes of high-need achievers intently take after those related with a talented workforce. It is aphoristic that associations would want to utilize whatever number workers as could reasonably be expected that follow the previously mentioned attributes and in this manner ought to fuse them in their enlistment criteria. The instrument for measuring the requirement for accomplishment is the Thematic Apperception Test (TAT) created by McClelland (1963) as examined in (Kreitner and Kinicki 2002).

The Need for Affiliation

People with a high need or affiliation need consolation and endorsement from others and are really worried about other's feelings. They will probably adjust their reasoning and activities to consent to those of people whom they have a cozy relationship or recognize. Professions including elevated amounts of interpersonal contact and helping other people will speak to individuals with a high requirement for the alliance. Kreitner and Kinicki (2002:213) report that individuals that fall into this classification like to invest energy sustaining connections and thusly will think that its difficult to take disagreeable choices. As a result, people in this class are not the best manager as they would be worried about taking a decision that others may loathe.

The need for Power

1. The requirement for power can be utilized positively or negatively.
2. Individuals with a high need for power can be a compelling manager on the off chance that they channel their requirement for power in the following ways:
3. Power ought to be looking for the advancement of the organisations and not for self-intrigue;
4. They ought to have a low requirement for the association, as a few choices might be disliked with workers; and
5. They require a vast level of poise when the requirement for power may meddle, with viable hierarchical and individual connections.
6. Kreitner and Kinicki (2002) report that if people channel this need decidedly, they will help others in errand finishing and objective accomplishment.

2.2.2 Expectancy Theory

Traditional anticipation hypothesis holds that exertion will just prompt to performance if the related results are esteemed and put in high respect. In spite of the fact that the Porter and Lawler hope model of inspiration as talked about in Staw (2004) incorporate the basics of Vroom's unique approach, various changes have been made. While Vroom's model recommended that fulfillment prompts to performance, the Porter and Lawler model contend that it is a performance that prompts to fulfillment. This speaks to a critical takeoff from early anticipation hypothesis and expands the mobile workforce theory, that is, being propelled by work itself

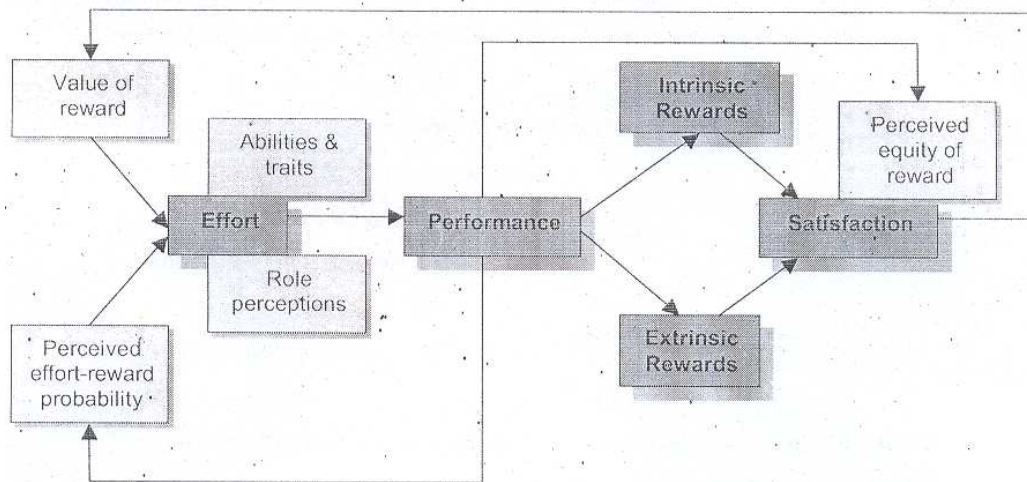


Figure 2.4: The Porter-Lawler Model

Source: Staw (2004). *The psychological dimension of organizational behavior*. New Jersey, Prentice Hall

Additional features of the Porter and Lawler model depicted in figure 2.4 as compared to conventional expectancy theory includes abilities and traits as well as role perceptions that play a role in individual ability to perform. In addition, the perceived value of reward together with the effort-reward probability combines at the outset with the individual ability and role perceptions in determining whether the effort will be expanded. Performance results in intrinsic rewards that are associated with feelings of accomplishment and achievement, whereas extrinsic rewards denote tangible outcomes such as pay and promotion. In the perceived equity section of the model, individuals judge whether their performance delivered to the organization is commensurate with the rewards received and if found to be equitable only then will the individual feel satisfied. The more equitable the rewards are perceived, the more individuals will perform and in turn exert more effort in pursuance of valued outcomes.

Nadler and Lawler in Staw (2004) mention a number of implications for organizations, these are summarized as follows:

- i. The design of pay and reward systems;
- ii. The design of tasks, jobs, and roles;
- iii. The importance of group structures;
- iv. The supervisor's role;

- v. Measuring motivation; and
- vi. Individualizing organizations.

The above-mentioned organizational implications are of more relevance to organizational strategy formulation. The significance of this model for this research project lies in the identification of abilities and traits as well as the role perceptions of individuals whilst deciding on the degree of effort to expend. Of further importance is the nature of intrinsic rewards that corresponds well with the mobile workforce management

2.2.3 The Job Characteristics Theory

The job characteristics theory addresses the motivational potential inherent to jobs. Hackman and Oldham (1976) postulate that there are critical psychological states that determine the extent to which characteristics in the job will enhance employee performance. These psychological states are:

The experienced meaningfulness of the work: This represents how meaningful, valuable and worthwhile the job is experienced;

Experienced responsibility for work outcomes: Degree of personal responsibility and accountability employees feel for the results of their work; and

Knowledge of results: The degree to which individuals continuously understand how adequately they are performing the job.

Hackman and Oldham (1976) suggest that if the psychological states are experienced at sufficiently high levels, it will lead to a number of satisfactory work and related personal outcomes, as depicted in figure 2.5. Employees will experience these psychological states more regularly if a number of critical job dimensions exist. These dimensions are skill variety, task identity, task significance, autonomy, and feedback. The model depicted in figure 2.5, indicates that the core job dimensions, operating through the psychological states, affect a number of personal and work outcomes. These outcomes are intrinsic motivation derived from the job itself, pride in delivering high-quality work, a sense of satisfaction, and low turnover and absenteeism. Finally, the theory also suggests that individuals will differ in their responses to the five core job dimensions. Employees with substantial needs for growth and development will be mainly motivated by the core job dimensions.

Conversely, employees with a low need for growth and development will be less motivated by the core job dimensions.

According to Hackman and Oldham (1976), the theory presents a number of essential guidelines relating to job design for employers/managers. These are summarized below as follow:

- i. Tasks of a similar nature should logically be grouped together forming a natural work unit thereby, forming more complex tasks;
- ii. Direct relationships between customers and employees should be set up;
- iii. Jobs should be loaded vertically in so doing increasing autonomy; and
- iv. Feedback channels should be opened up allowing employees to get information first-hand.

The job characteristics theory provides meaningful insight into some of the core job dimensions that impact employees' psychological states whilst also correlating strongly with the mobile workforce notion and underlying construct.

2.2.4 Theory X and Y

Theory X and Theory Y. are theories of human motivation and management, developed by Douglas McGregor (1960). Theory X stresses the importance of strict supervision and external rewards and penalties while theory Y highlights the motivating role of job satisfaction and allows scope for workers to approach tasks creatively. For McGregor, Theory X and Y are not opposite ends of the same continuum but slightly two different continua in themselves. In order to achieve the most efficient production, a combination of both theories may be appropriate; it is likely that a manager will need to take both approaches depending on the evolving circumstances (internal and external) and personalities (McGregor, 1960). These theories support the management of the mobile workforce. There are new classes of software and device technologies that are enabling employers to monitor their mobile workers more closely. Technologies to manage mobile workers and mobile assets are becoming more widely available for organizations. This is primarily due to wide-scale adoption of software-as-a-service and a new class of cheaper powerful mobile devices.

As businesses adapt to these trends, the responsibility for clear and robust privacy controls lies both on the employer and the employee. With such controls in place, location tracking, messaging, and other forms of management tools are not so much about Theory X and Theory Y as they are about better logistics planning, security, payroll management, reduction in check-calls, emergency response planning, asset monitoring, etc. Organizations that have mobile workers out of the office, serving customer and company needs, there's a range of application based and cloud-based mobility tools to help them be more productive during their work day. But it's also more than likely that their managers are also mobile and on the road and there we have a different story, with few tools aimed at helping field managers stay on top of things. It is pretty standard that the applications and services that let managers locate, message and manage field teams from desktop or laptop.

Extra components of the Porter and Lawler display portrayed in figure 2.4 when contrasted with traditional hope hypothesis incorporates capacities and qualities and also part observations that assume a part in individual capacity to perform. Furthermore, the apparent estimation of reward together with the exertion remunerate likelihood joins at the start with the individual capacity and part recognitions in figuring out if the exertion will be extended. Execution brings about natural rewards that are related to sentiments of achievement and accomplishment, while extraneous prizes indicate substantial results, for example, pay and advancement. In the apparent value area of the model, people judge whether their execution conveyed to the association is similar with the prizes got and if observed to be fair at exactly that point will the individual feel fulfilled. The more even-handed the prizes are seen, the more people will perform and thusly apply more exertion incompatibility of esteemed results.

Nadler and Lawler in Staw (2004:35) say various ramifications for associations; these are compressed as takes after:

- i. The plan of pay and reward frameworks;
- ii. The plan for errands, occupations, and parts;
- iii. The significance of gathering structures;
- iv. The manager's part;
- v. Measuring inspiration; and

vi. Individualizing organizations.

The previously mentioned authoritative ramifications are of more pertinence to the hierarchical methodology definition. The essentialness of this model for this exploration extends lies in the recognizable proof of capacities and attributes and in addition the part impression of people while settling on the level of push to grow. Of further significance is the way of characteristic rewards that compares well with the versatile workforce administration

2.2.3 The Job Characteristics Theory

The employment qualities hypothesis addresses the motivational potential natural to occupations. Hackman and Oldham (1976) propose that there are basic mental states that decide the degree to which qualities in the occupation will improve representative execution. These mental states are:

The experienced seriousness of the work: This speaks to how important, significant and beneficial the occupation is experienced;

Experienced duty regarding work results: Degree of moral obligation and responsibility representatives feel for the aftereffects of their work; and

Learning of results: how much people consistently see how successfully they are playing out the occupation.

Hackman and Oldham (1976) propose that if the mental states are experienced in adequately abnormal states, it will prompt to various palatable work and individual related results, as delineated in figure 2.5. Representatives will encounter these mental states all the more consistently if various necessary occupation measurements exist. These measurements are ability assortment, errand personality, undertaking criticalness, self-governance, and input. The model portrayed in figure 2.5, demonstrates that the center occupation measurements, working through the mental states, influence various individual and work results. These results are natural inspiration got from the occupation itself, pride in conveying fantastic work, a feeling of fulfillment, and low turnover and non-appearance. At long last, the hypothesis additionally proposes that people will contrast in their reactions to the five center occupation measurements. Workers with substantial requirements for development

and advancement will be especially roused by the center employment measurements. Alternately, workers with a low requirement for development and improvement will be less persuaded by the center employment measurements.

As indicated by Hackman and Oldham (1976), the hypothesis exhibits various critical rules identifying with occupation outline for businesses/supervisors. These are abridged underneath as taking after:

- i. Tasks of a comparable sort ought to legitimately be gathered together framing a characteristic work unit along these lines, shaping more mind-boggling errands;
- ii. Direct connections amongst clients and workers ought to be set up;
- iii. Jobs ought to be stacked vertically in this manner expanding independence; and
- iv. Feedback channels ought to be opened up permitting workers to get data direct.

The occupation attributes hypothesis gives significant understanding into a portion of the center occupation measurements that effect representatives' mental states while likewise associating unequivocally with the talented workforce thought and necessary develop.

2.2.4 Theory X and Y

Hypothesis X and Theory Y. are hypotheses of human inspiration and administration, created by Douglas McGregor (1960). Hypothesis X focuses on the significance of strict supervision and outside prizes and punishments while hypothesis Y highlights the spurring part of occupation fulfillment and permits scope for specialists to approach assignments imaginatively. For McGregor, Theory X and Y are not inverse closures of a similar continuum yet instead two different continua in themselves. With a specific end goal to accomplish the most proficient generation, a mix of both hypotheses might be proper; it is likely that a chief should adopt both strategies relying upon the developing conditions (inner and outer) and identities (McGregor, 1960). These speculations bolster the administration of the talented workforce. There are new classes of programming and gadget innovations that are empowering managers to all the more nearly screen their versatile laborers. Advancements to oversee portable laborers and versatile resources are turning out to be all the more

broadly accessible for associations. This is principal because of wide-scale selection of programming as an administration and another class of less expensive capable cell phones.

As organizations adjust to these patterns, the obligation regarding straightforward and robust protection controls lies both on the business and the worker. With such controls set up, area following, informing, and different types of administration apparatuses are less about Theory X, and Theory Y as they are about better coordinations arranging, security, finance administration, decrease under tight restraints calls, crisis reaction arranging, resource observing and so forth. Associations that have versatile specialists out of the workplace, serving client and organization needs, there's a scope of utilization based and cloud-based portability instruments on helping them be more beneficial amid their work day. But on the other hand, it's more than likely that their chiefs are additionally portable and out and about and there we have an alternate story, with few instruments, went for handling supervisors remain in control. It is truly basic that the applications and administrations that let administrators find, message and oversee field groups from a desktop or portable workstation.

2.2.5 Fredrick Taylor's Scientific Management Theory

Taylor was a mechanical specialist who tried to enhance modern effectiveness. Taylor is viewed as the father of scientific management and was one of the central management advisors and executives of a renowned firm. Drucker (1974) states that Frederick Taylor was the first man in written history, who worked meriting orderly perception and study. On Taylor's logical idea rests, most importantly, the gigantic surge of abundance in the last seventy-five years which has lifted the working masses in the created nations well over any level recorded sometime recently, notwithstanding for the well-to-do. Taylor, however the Isaac Newton (or maybe the Archimedes) of the art of work, established just first frameworks, be that as it may. Very little has been added to them since despite the fact that he has been dead all of sixty years.

Taylor's logical administration comprised of four standards as talked about in Drucker (1974)

1. Replace general guideline work techniques with strategies in view of a logical investigation of the assignments.
2. Scientifically select, prepare, and build up every worker as opposed to inactively abandoning them to prepare themselves.
3. Provide point by point guideline and supervision of every specialist in the execution of that laborer's discrete errand.
4. Divide work almost similarly amongst chiefs and laborers, so that the supervisors apply consistent administration standards to arranging the work and the specialists really play out the undertakings.

Taylor had extremely exact thoughts regarding how to present his framework:

Drucker (1974) states that it is just through the authorized institutionalization of techniques, upheld appropriation of the best actualizes and working conditions, and implemented participation this quicker work can be guaranteed. What's more, the obligation of upholding the selection of models and implementing this participation rests with administration alone. Employees should be unequipped for understanding what they were doing and are adequately indifferent and doltish to pick this for his occupation is once in a while ready to appreciate the investigation of taking care of pig-iron.

Taylor says in exchanging control from workers to management. He set out to build the refinement between mental (planning work) and physical work (executing work). Point by point arranges, determining the occupation and how it was to be done, were to be planned by the administration and imparted to the laborers. The introduction of his system was frequently disdained by specialists and incited various strikes. The strike at Watertown Arsenal prompted to the congressional examination in 1912. Taylor alleged the worker was deserving of his contract, and pay was connected to efficiency. His laborers could procure generously more than those under customary administration, and this earned him adversaries among the proprietors of processing plants where the logical administration was not being used.

Drucker (1974) states that with the triumph of scientific management, unions would have nothing left to do, and they would have been scrubbed of their most malice highlight: the confinement of yield. To underscore this thought, Taylor designed the myth that there has never been a strike of men working under logical administration, attempting to give it believability by steady reiteration.

Taylor nations are that by investigating work, the "one most ideal route" to do it would be found. Druker (1974) states that Taylor is the most associated with building up the stopwatch, time examine, joined with Frank Gilbreth's movement think about strategies, later turned into the field of time and movement consider. The utilization of stopwatch is identified by utilizing biometric and participation time to decrease time burglary by a portable workforce. Taylor broke work into its segment parts and measured each to the hundredth of a moment. One of his most famous reviews included scoops. He saw that laborers utilized a similar scoop for all materials. He confirmed that the best load was 211/2lb, and found or outlined scoops that for every material would gather up that sum. Taylor could persuade specialists who utilized scoops and whose pay was attached to the amount they delivered to embrace his recommendation about the ideal approach to a scoop by separating the developments into their part components and prescribing better approaches to play out these developments. It was to a great extent through the endeavors of his followers (most remarkably Gantt) that industry came to execute his thoughts. In addition, the book he composed subsequent to separating c with Bethlehem Steel, Shop Management, sold well.

The utilization of mobile technology has gotten developing consideration, not just as a component of customer situated items and applications (corsairs et al., 2004) additionally to expand business techniques and to bolster organisations processes, specific when incorporated with web-based advances (Barnes, 2003, Varshney et al.,2002). new innovation advancements, for example, cell phone and individual computerized aides (PDAs), permit representatives to convey, utilizing voice as well as through-composed correspondence (email, short informing), and empower access to the corporate data framework foundation while being far from their workplaces, though in the past it was tough to build up constant electronic connections in advantageous and moderate ways. mobile innovation system has the individual

potential to build the productivity of mobile representatives thus of enhanced conveyance and lower operational cost (Leung and Antypas, 2001), and in addition increment mobile, for instance as higher quality essential leadership (Berlin and string, 2002, Varshney et al.,2002). Systematic assessments of the predecessors and results of the versatile data frameworks, be that as it may, are as yet remarkable (Alanen and Autio, 2003, Liang and Wei, 2004, Smith et al.,2002). What's more, the exploration address stays open to what degree beforehand created speculations to clarify versatile innovation utilize and effects are relevant to portable workforce administration (Mylonopoulos and Doukidis, 2003).

To address these two expressed research issues , the review concentrate on mobile email as one sort of mobile innovation that has accomplished moderately spacious reception among portable learning laborers (Alanen and Aoutio, 2003, Anckar, and D'lncau, 2002, Computer word, 2003, Loppers and Sengupta, 2004). The hypothesis of task innovation fit (Goodhue, 2007, Goodhue and Thompson, 1995) and the innovation acknowledgment demonstrate (Davis, 1989, Davis et al.,1989),

That has comprehensively settled the need to give information system that fit client assignments, and that is seen as helpful and straightforward to use, as states of system utilities and positive execution impacts bolster this review. The materialness of these prior hypotheses to versatile data frameworks relies on upon the impact that is shown by the peculiarities of the portable innovation curio on the different hypothetical builds (Orlikowski and Iacono, 2001). For instance, contrasts in client necessities thus of client portability have been ascribed to the way that versatile clients have a tendency to be more frequently diverted and multi-entrusting than non-portable clients.

Lee and Benbasat, (2004); experience particular security necessities (Ghosh and Swaminatha, 2001); and encounter a more unique requirement for particular non-utilitarian elements, for example, gadget conveyability (measure, weight), screen size and info segments (Gebauer and Ginsburg, expected). Moreover, contrasted with setting up non-mobile applications, mobile data frameworks are still a work in progress and overall have not achieved a level of innovation development that matches the level of innovation development of setting up non-portable data system. Inadequacies affect ease of use and incorporate possibly repetitive setup systems;

complicated substance introduction and route structures; and absence of client direction, data transfer capacity, and strength (Buchanan et al., 2001, Chan and Toot, 2003, Gebauer and Shaw, 2004). Most studies identified with the innovation acknowledgment demonstrate have recognized the level of client involvement with a specific technology as an arbitrator of the relationship between client saw usability, and goal to use to the degree that convenience has more consistent power for unpracticed clients than for experienced clients (Taylor and Todd, 1995). What's more, for individualized computing in small firms, information that was gathered from clients with a "low level of individualized computing complexity" likewise recommended saw convenience to be a predominant calculate clarifying (genuine) framework utilization (Igbaria et al., 1997). The discoveries support the proposed relationship between system quality and utilize that have for quite some time been distinguished as two measures of framework achievement (DeLone and McLean, 1992). Conversely, the effect of technology development and element changes accordingly of mechanical improvements are not generally incorporated into investigations of the appropriation and utilize effects of information system (Legris et al., 2003).

The current study to add to the comprehension of the reasons of mobile experts to utilize mobile information system exemplified by portable email and the ensuing saw impacts on individual execution. The scientist exhibits an exploration model that joins crucial components of two related surges of information system look into, in particular, the innovation-to-execution chain that has been proposed by researchers of the hypothesis of assignment innovation fit and the innovation acknowledgment model and considers client mobile and innovation development. To test the research, fundamental condition demonstrating utilizing halfway slightest square investigation is connected to a dataset of 55 reactions that were gathered at a Fortune 100 firm in 2002-3 and 2006-7.

2.2.6 Theory of Task-Technology Fit

Thoughtfully, the hypothesis of undertaking technology fit is identified with contingency theory that has been produced by researchers of hierarchical science (Drazin and Van de Ven, 1985, van de Ven and Drazin, 1985), and technique (Venkatraman, 1989) with an end goal to clarify and foresee the states of a

satisfactory match between the earth of an association, and its inside structure. In the exploration teach of data frameworks, the hypothesis of undertaking innovation fit has been produced with an end goal to distinguish the necessities of a sufficient relationship between the data innovation relic and the upheld client errands (Goodhue and Thompson, 1995, Zigurs and Buckland, 1998). A crucial part of the theory of tasks-technology fit is the innovating to-performance chain, affirming that "for information technology to positively affect performance, the technology must be used, and the innovation must be a solid match with the undertakings it bolsters" (Goodhue and Thompson, 1995,213). As such, it is recommended that a common thought of information technology utilize and of errands technology fit can clarify impacts on client performance superior to anything either consider alone (Goodhue, 2007). Applications of the theory of tasks-technology fit to various tasks and technology situations have demonstrated the relevance of the concept to explain and predict information system use and positive impacts on individual performance (Goodhue and Thompson, 1995) and on group performance (Zigurs and Buckland, 1998, Zigurs *et al.*,1999).

Scientists have connected diverse ways to deal with decide the degree to which information technology fit the necessary client errands. In one stream of research, fit has been resolved straightforwardly, for instance, in view of the impression of the client with respect to various measurements, for example, information quality and openness (Goodhue and Thompson, 1995, Lee et al.,2007). Others displayed a more wrong approach and decided fit as the degree to which innovation agreed to hypothetically inferred prerequisites to bolster a specific assignment. For instance, Zigurs and Buckland (1998) determined fit in view of the adherence of gathering emotionally supportive networks to perfect profiles of necessities of gathering errands, though Dishaw and Strong (1998) utilized a computational way to deal with decide fit as a match between client show prerequisites of programming upkeep undertakings, and the usefulness that was indeed given by the frameworks.

Utilizations of theory of task-technology fit to technologies fit to advancements, for example, web-business (D'Ambra and Wilson, 2004), mobile e-acquisition (Gebauer and Shaw, 2004), and portable trade in the protection business (Lee et al.,2007), have given observational proof to the capacity of errand innovation fit to help clarify and

anticipate the achievement of creative data frameworks. A current investigation of wireless innovation acknowledgment revealed mobile of useful and on utilitarian prerequisites, contingent upon particular undertakings (Fang et al.,2005).

2.2.7 Technology Acceptance Model

The technology acceptance model speaks to an expansive assortment of behavioral information technology studies that talks about the forerunners of clients' aim to utilize information technology (Davis et al.,1989), in view of the supposition that aims to utilize is related with genuine utilize (see Bagozzi, 2007 for a preventative note on this presumption). Among the fundamental after effect of information technology, show related research studies are the observing that client saw handiness and client saw convenience are both significant to clarify and anticipate the aim to utilize information technology. Still, convenience, for the most part, seemed, by all accounts, to be the overwhelming variable, though usability worked through helpfulness, specifically for more experienced clients (Taylor and Todd, 1995). In accordance with the general point of view of the technology adoption, the client saw convenience relates to the desires of an imminent client, and the build has been appeared to incorporate expected effects on individual performance (button and Todd, 1995, Venkatesh et al.,2003a).

The use of technology model to innovation advancements, for example, the World Wide Web (Lederer et al.,2000, Moon and Kim, 2001) and web shopping (Gefen et al.,2003, Gefen and Straub, 2000) revealed additional confirmation for the pertinence of both components: helpfulness and convenience. While handiness regularly gave the most grounded clarification to goal to utilize (and real utilize), clashing outcomes were gotten by various researchers with respect to the effect of client saw usability. Clarifications for the disparities and resulting augmentations of the innovation acknowledgment display incorporate the thought of inherent versus outward attributes (Gefen and Straub, 2000), trust (Gefen et al.,2003), and varying necessities for contrasting errands (Fang et al.,2005).

Complementarities of the Theory of Task-Technology Fit and the Technology Acceptance Model

As past research studied have built up the relevance of both theory of task-technology fit and the technology acceptance model to innovative forms of information technology, including mobile applications, both speculations give off an impression of being appropriate for this exploration objective. Besides, past research considers have recognized various complementarities between both methodologies, and have along these lines joined components from both speculations into coordinated research models (Dishaw and Strong, 1999, Pagani, 2006). Though the innovation acknowledgment demonstrates utilizes the aim of people to utilize a specific innovation as its fundamental ward develop, in light of the supposition that expectation to utilize will in the long run prompt to genuine utilize, the hypothesis of errand innovation fit concentrations all the more expressly on real utilize and resulting impacts on execution. Though expected convenience is a critical autonomous variable in the innovation acknowledgment show that discloses and foresee aim to utilize, the hypothesis of undertaking innovation fit analyzes an essential forerunner of handiness that is communicated as the degree to which innovation coordinates the underlining business assignment (Dishaw and Strong, 1999). Whereas scholars of the theory of task-technology fit often derive fit objectively (directly or indirectly), scholars of the technology acceptance model view usefulness as a behavioral, subjective (user-perceived) construct, whereby both constructs of fit and Expected usefulness is robust associated with use. The connection between the target approaches that are connected by a few researchers of the theory of information technology fit, and behavioral methodologies that are dominantly connected by researchers of the innovation acknowledgment display, has been set up, as clients have been observed to have the capacity to evaluate fit effectively (Goodhue, 1998).

A fundamental contrast can be found in the primary targets of the two approaches. While researchers of the technology acknowledgment show try to see better the conditions that prompt to the expectation to utilize a data framework, the hypothesis of assignment technology fit is worried about the predecessors of genuine utilize and the subsequent effects on performance. In any case, the verifiable (and observationally approved) supposition inside the innovation acknowledgment display that expectation to utilize regularly prompts to the real utilization of information

technology gives the connection between both approaches. A more simple refinement comes as the value/execution segment that assumes a part in both methodologies: client saw convenience that is incorporated into investigations of the innovation acknowledgment show includes typically an assortment of things, for example, adequacy (Chin and Todd, 1995). That is relied upon to affect client performance upon utilizing (Venkatesh et al., 2003a). Conversely, researchers of the hypothesis of errand innovation usually fit concentrate on the outcomes of good framework utilize, for example, impacts on an individual or gathering execution (Goodhue and Thompson, 1995, Ziguers et al., 1999). The real value, as alluded to it in the present review, might be client saw (Goodhue et al., 2000). Both methodologies supplement each other well: The theory of task-technology fit provides fit as an imperative precursor of value that is excluded in the innovation acknowledgment show, though the innovation acknowledgment display gives usability as an essential predecessor of utilization that is excluded in the hypothesis of undertaking innovation fit.

The theory of task-technology fit and the technology acceptance model in an effort to explain and predict the use and impact of mobile email systems in support of general tasks that are of relevance to a mobile workforce. Two components that are particular to current types of mobile innovation are given specific consideration, specifically client mobile, and technology development. Figure 2.6 provides a diagram of the exploration demonstrate that is clarified in more detail in the accompanying areas.

General Business Tasks

Past research investigation of management gives an applied premise to survey the necessities of the general business task that are not identified by exchanges and gaming (Fang et al., 2005-6). Two measurements have been distinguished as relevant to such managerial tasks, in particular, non-routine and errand relationship (Goodhue and Thompson, 1995, Karimi et al., 2004). Undertaking non-routine is identified with attributes, for example, structure, medium, and oddity of an assignment (Simon, 1960), whereby more elevated amounts of non-routine have been found to make it hard to program (computerize) necessary leadership and to require judgment and canny, versatile, issue arranged activity. Related is how much an undertaking is unsurprising and analyzable (i.e., depending on past encounters and already created ideas and schedules), or capricious and un-analyzable (i.e., not intelligent or un-

expository, regularly requiring instinct, possibility, and mystery), and with the quantity of exemption that should be prepared amid assignment execution (Perrow, 1967, Van de Ven, and Ferry, 1980). Undertakings of high non-routine have a tendency to be portrayed by a high number of special cases, weak consistency, and low levels of analyzability and program capacity. What's more, the need to perform non-routine undertakings has a tendency to be most prominent at more elevated amounts of the authoritative chain of importance (Anthony, 1965, Gorry and Scott Morton, 1971), including corporate administration and contract transactions (Mintzberg, 1973).

Errand relationship has been characterized as the trading of yield between portions inside a subunit and with other hierarchical units (Fry and Slocum, 1984). As reliance requires coordination between exercises (Malone and Crowston, 1994), it by and large expands the trouble and costs that are related to undertaking execution (Barki and Pinsonneault, 2005). Exceedingly associated assignments, for example, the improvement of a promoting effort, oblige on-screen characters to communicate broadly to produce the coveted result, while an undertaking that has no relationship, for example, telemarketing, can be executed entirely by one individual (Wageman and Gordon, 2005). Relationship influences the number of general correspondence channels and accomplices that a client connects with, the example of association amongst undertakings and assets that are expended and delivered together or separately (Crowston, 2003), and therefore loans itself well to mechanical support (Thompson, 1967), specifically with correspondence innovation.

For the examination of mobile innovation when all is said in done and mobile email applications specifically, two extra measurements of assignments give off an impression of being important, in particular, time-criticality (Anckar and D'Incau, 2002), and client portability. Time-criticality identifies with the significance with which an undertaking should be performed speedily (criticalness) and relies on upon the flow of business conditions. Despite the fact that time-criticality has gotten constrained consideration by researchers of association science, the requirement for associations to react rapidly to changing business sector prerequisites has been highlighted in administration and system - seek (Bradley and Nolan,

1998, D'Aveni, 2004). Likewise, examine investigations of information technology have set up the capacity of information technology to help clients accomplish instantaneousness. For instance, Straub and Karahanna (1998) found the criticalness of correspondence undertakings to impact the sort of media (synchronous versus nonconcurrent) that communicators liked to bolster their errands.

mobile is significant for the exploration objective in light of the fact that the utilization setting of mobile technology usually is not the same as the stationary setting in which more conventional sorts of data innovation are utilized (Kim et al., 2002, Turel, 2006). Portable circumstances, for example, travel, tend to confine a client in the capacity to convey hardware and to get to standard corporate information technology assets, including different undertaking applications. As a result of such restrictions, changes in the way that errands are performed in portable utilize settings have been accounted for (Perry et al., 2001, Zheng and Yuan, 2007). For instance, contrasted with a non-mobile client with prepared access to the corporate information technology resource that is adequate to finish a given business errand (e.g., endorsement of an obtaining demand), a mobile client may see a need to delegate parts of the assignment to non-mobile collaborators, and utilize accessible types of correspondence, for example, cell phone, tablet empowered remote constancy or email for directional and supervisory purposes (Gebauer and Shaw, 2004).

Mobile E-Mail Technology

mobile business applications have a tendency to look like a conventional information system as far as usefulness and assortment (Computerworld, 2003, Smith et al., 2002). As a distinction to conventional information system applications, in any case, mobile applications take back to consideration the gadgets that are utilized to get to and use application usefulness and the non-useful components that recognize versatile from non-mobile information technology. No longer would we be able to expect pretty much one sort of getting to the gadget, to be specific a fixed terminal or PC with a standard screen and console that is used for an assortment of utilization. Gadgets have instead turned out to be versatile and incorporate phones; individual computerized collaborators (PDAs); pocket and tablet PCs; and one-and two-way pagers. New difficulties rise up out of this move, stemming for instance from variables, for

example, little screens and consoles, and also from the way that innovation improvements are progressing.

Mobile e-mail constitutes an early, and comparatively prosperous, application of mobile technology (Alanen and Autio, 2003, Anckar, and D'Incau, 2002, Computerworld, 2003, Lopperi and Sengupta, 2004). given the mobile client with access to email considers the notice about holding up assignments, errand advance, and different issues of centrality, in this way supporting reachability. Likewise, the client started correspondence is bolstered by means of the formation of email messages by the mobile client.

The fit of Mobile E-Mail Technology to Support General Business Tasks

Dishaw and Strong (1998) registered task-technology fit "by coordinating attributes of an upkeep assignment to supporting usefulness in a product support instrument." The fit was surveyed by looking at the usefulness that was accessible in an apparatus with the desires of clients in regards to the usefulness that was required to finish different errands. The higher the number of expected functionalities that were accessible in a specific device, the better the fit was resolved to be. For gathering emotionally supportive networks (GSS), assignment technology fit has been exhibited as reasonably created, "perfect profiles made out of an inside predictable arrangement of errand possibilities and gathering bolster systems(GSS) components that influence aggregate performance", where perfect profiles were viewed as suitable arrangements of undertaking and innovation (Zigurs and Buckland, 1998) ("fit as profile deviation", Venkatraman, 1989). A similar approach is followed in the momentum consider, where the specialist decides fit as the degree to which the technology of mobile email underpins the assumed needs of a specific undertaking profile. Rather than Zigurs and Buckland (1998), be that as it may, the technology of mobile email is viewed as a consistent given its smaller utilitarian degree contrasted with gathering emotionally supportive networks. The impression of fit is, therefore, explicitly related to how much the errand qualities of non-schedules, association, time-criticality and client mobile convert into an assumed requirement for mobile email. In the accompanying, we examine the assumed attack of portable email with the four assignment qualities of non-schedule, reliance, time-criticality, and client mobile.

Prior, we depicted non-routine assignments as requiring judgment and regularly to be stand-out choices, for example, for crucial administration and contract arrangements. Look into investigations of data abundance (Daft and Lengel, 1984) have stressed the significance to bolster such very intricate and non-routine assignments with a rich and adaptable method for correspondence, empowered for instance by eye to eye gatherings and the phone. In the structure of data abundance (Daft and Lengel, 1984), composed correspondence in light of email can be considered of direct to great data extravagance that is arranged between the correspondence media of phone and paper-based composed correspondence and that depends on unique dialect an individual connection. Input can be gotten quicker than for customary composed correspondence, yet is normally slower than on account of a phone discussion. The analyst thus views email as a specialized apparatus of direct to high data extravagance with a solid match for business undertakings that are portrayed by direct to high non-schedules (Markus, 1994).

Coordination has been characterized as the administration of interdependencies (Malone and Crowston, 1994). Differing degrees of reliance, therefore, decide the requirement for coordination, whereby the capacity of data innovation to empower and bolster coordination has been stressed. The email gives off an impression of being an instrument that is especially appropriate to bolster and empower coordination, and, subsequently, the administration of interdependencies between numerous performing artists, as it takes into account a different of correspondence accomplices, and gives a remotely recorded and PC prepare memory (Markus, 1994). Thus, the scientist views email as giving a solid match to errands that are described by an abnormal state of the relationship.

Email has likewise been recognized to give a chance to the quick reaction between correspondence accomplices (Markus, 1994), and therefore, to bolster errands that are time-basic. The part of time-criticality turns out to be significantly more noticeable with mobile email applications, as has been stressed by researchers of portable data frameworks who recognized time-criticality as an important measurement of the mobile system. (Balasubrammaniam et al., 2002); proposes that portable business was appropriate for crisis and time-basic administrations (Liang and Wei, 2004, Yuan and Zhang, 2003); and states that mobile advancements give promptness (Siau et

al.,2001). Moreover, it has been found that clients' estimation of cell phones and management uncovers their craving to acquire quick input (Jarvenpaa et al.,2003), and that time-Criticality as a trigger for utilizing may be more imperative in remote than in wired conditions (Venkatesh et al., 2J03b). By and by, support for time-basic assignments (e.g., notice of crisis circumstances) has been among the most punctual utilizations of mobile technology (Ammenwerth et al.,2000). mobile email gives an immediate conveyance and gets to a system that seems, by all accounts, to be exceptionally strong of time-basic assignments and ought to thusly give a solid match. In conclusion, the setting in which an errand is performed adds to the requirement for mobile technology when all is said in done, and for mobile email specifically. mobile utilize settings are regularly connected with constrained access to the corporate data innovation foundation that is accessible in a stable office condition. After deciding the requirement for portable email, notwithstanding, there is have to remember that client necessity in mobile versus now-versatile utilize situations are no doubt not indistinguishable. For instance, versatile clients confront confinements on their capacity to convey hardware (Kim et al.,2002), or to focus for delayed timeframes because of natural diversions (Lee and Benbasat, 2004). Perry et al.,(2001) recommends that the consequence of such confinements might be a specific requirement for an essential yet adaptable method for correspondence support, for example, what is given by cell phones and portable email gadgets.

To condense, the build of fit hypothesis in this review is foreordained in view of the presumption that portable email frameworks give an exceptionally solid match with assignments that are described by a direct to an abnormal state of non-routineness, and copious amounts of reliance, time-criticality, and client portability. At the end of the day, the scientist utilizes the composite of the errands qualities of non-routineness relationship, time-criticality, and versatility, as an intermediary for the fit between portable email frameworks and general business assignments that ought to be relevant for pre-reception and post-appropriation circumstances.

Its restrictions, in any case, the review makes a few critical commitments to data frameworks research and practice. Initially, the hypothesis of innovation fit gives bits of knowledge about the proper innovation support of a talented workforce with an examination model that effectively connected the assumed requirement for a portable

email with client impression of value. Second, the hypothesis recognizes a need to operationalize client portability as a multi-dimensional build when applying set up data framework speculations to versatile utilize settings. Third, the hypothesis affirms a formerly recommended positive relationship between innovation utilize and execution impacts for the instance of portable email. In conclusion, the hypothesis recognizes client saw innovation development as a vital element to help clarify and anticipate utilize and utilize impacts. Specifically, the unforeseen issues with innovation that a client may involvement by and by are frequently excluded unequivocally in research investigations of the conditions and outcomes of data frameworks utilize.

CHAPTER THREE

METHODOLOGY

3.1 Research Design

The survey design is the most appropriate because it permits direct contact with the unit of study through the means of instruments such as questionnaire, interview guides and observation. It studied a targeted population using questionnaire and interview to draw opinion of the respondents (Agbadu, 2004).

3.2 Sources of Data

The data for this study were obtained specifically from two sources namely: primary and secondary sources

3.2.1 Primary Source of Data

In collecting primary data for the study, devices employed were oral interview and questionnaire. Research questionnaire was the major research instrument for this study. The questionnaire comprises two sections, section A entail questions soliciting the respondents socio-demographic data while section B have design in 5 likert scale of strongly agree, agree, undecided, disagree and strongly disagree.

1.2.2 Secondary Source of Data

This relates to information gathered and recorded by some other persons. The sources of secondary data include text books, journal and other published works in relation to the study. The information collected through this source was mainly used in the literature review aspect of the study, to help the researcher have a close grasp of the extent of the work in the area of investigation.

1.3 Population of the Study

The population of this study consisted of respondents from the selected eleven (11) deposit money banks operating in the South-East Nigeria (Enugu, Anambra, Imo, Abia and Ebonyi States). A total of Six thousand, Four hundred and Ten (6410) respondents comprising both the senior and junior staff of the deposit money banks.

Table 3.1: The Population of the study area

S/N		Number of Employees
1.	First Bank, Main Branch, Enugu, Enugu State	750
2.	Union Bank of Nigeria, Bank Road, Umuahia, Abia State	600
3.	Diamond Bank (Nigeria) Awka, Anambra State	550
4.	Guaranty Trust Bank, Abakaliki, Ebonyi State	600
5.	Zenith Bank, Owerri, Imo State	720
6.	Unity Bank, (Nigeria) Ogui Road, Enugu, Enugu State.	400
7.	EcoBank, Bank Road, Umuahia, Abia State.	700
8.	Heritage Bank, Awka, Anambra State	450
9.	United Bank for Africa (UBA), Station Road, Enugu	560
10.	Access Bank, Abakaliki, Road, Enugu State	620
11	Fidelity Bank, Umuahia, Abia State	460
	Total	6,410

Source: Researcher Field Compilation, 2015

3.4 Sample Size Determination

Sample size refers to a proportion of the population, which was taken as a representation of the whole population and on which conclusion made on them based on the data, which they give was taken to be peculiar to all members of the whole population. The actual population of the senior and Junior staff of in the eleven (11) selected money deposit banks in the South-east, Nigeria is Six thousand, four hundred and ten, using the finite populations formula of Godden (2004) as quoted in Okebaram (2014) to determine the sample size.

$$SS = \frac{Z^2}{C^2} (P) \times (1-P)$$

Given =

$$SS = \frac{SS}{\frac{(1 + (SS-1))}{POP}}$$

Where:

SS = Sample size

Z = Confidence level (95%)

P = Percentage of population picking a choice worst case % of the sample
90% or 0.9).

C = Confidence Interval, expressed as decimal.

POP = Total population (6,410)

Godden (2004:1) states that this formula is best applied where the population is less than 50,000.

Substituting

Z = 95% (1.96)

P = 90% (0.9)

C = 0.025

$$SS = \frac{1.96^2 (0.9) (1 - 0.1)}{0.0252}$$

$$SS = \frac{3.8416(0.9) (0.1)}{0.000625}$$

$$SS = 553.19$$

$$POP = 6,410$$

$$\therefore \text{New SS} = 553.19$$

$$\begin{aligned} & \frac{1 + (553.19 - 1)}{6,410} \\ &= \frac{552.19}{1.08} = 511.287037 \\ & \Omega = 511 \end{aligned}$$

3.5 Sampling Techniques

A sample of 511 (Five hundred and Eleven) respondents were selected from the population of the study using Purposive Sampling Technique. This is most appropriate since it enables the researcher have direct contact with the respondents. The researcher attempted to zero in on the targeted sample in the eleven selected Deposit money banks. In order to get the quantity of the questionnaire to be distributed in each of the eleven (11) Deposit money banks, the sample size has to be broken down using Bowley's population allocation statistic formula. It is thus:

$$n = \frac{n_1(n)}{N}$$

Where

n_1 = Element within the sample.

n = Sample size.

N = Total population

Substitute the figure of each bank branch above with Bowley's formular.

First Bank	=	511 x 750/6410	=	60
Union Bank	=	511 x 600/6410	=	48
Diamond Bank	=	511 x 550/6410	=	48
Guaranty Trust Bank	=	511 x 600/6410	=	48
Zenith Bank	=	511 x 720/6410	=	57
Unity Bank	=	511 x 400/6410	=	31
Eco Bank	=	511 x 700/6410	=	55
Heritage Bank	=	511 x 450/6410	=	35
United Bank for Africa	=	511 x 560/6410	=	44
Access Bank	=	511 x 620/6410	=	49
Fidelity Bank	=	511 x 460/6410	=	36

511

Table 3.2: Allocation of Sample Size

Banks	Population	No of questionnaire administered	Percentage of questionnaire %
First Bank	750	60	12
Union Bank	600	48	9
Diamond Bank	550	48	9
Guaranty Trust Bank	600	48	9
Zenith Bank	720	57	11
Unity Bank	400	31	6
Eco Bank	700	55	11
Heritage Bank	450	35	7
UBA	560	44	9
Access Bank	620	49	10
Fidelity Bank	460	36	7
Total	6410	511	100

Source: Field Survey, 2015.

3.6 Description of Research Instrument

The instruments for data collection used in this study were structured questionnaire and interview. The questionnaire has two parts. All the question in part A provides general information about the respondents while the remaining questions in part B address the research questions. The designed questinnare was on a 5- points Likert scale arranged according to the objective. The responses are Strongly Agree (SA), Agree, (A), Undecided, (U) Disagree(D) and Strongly disagree (SD). For positive statements the scores are 5,4,3,2 and 1. Also, an oral interview guide was used.

3.7 Validity of the Instrument

Validity of a test reflects what a test measures and how well it measures it (Enikanselu et al, 2009). It is concerned with how a measuring instrument is actually measuring the concept in question and also how the concept is being measured accurately. The study adopted the content validity to validate the instrument by using five experts from the Department of Management, in University of Nigeria, Enugu Campus and staff of the selected Deposit Money Banks.

3.8 Reliability of the Instrument

A test-re-test method was adopted for this study. A pilot study was carried out in order to ensure the reliability of the instrument used for this study. This method involved administering twenty-five (25) questionnaire to two groups of respondents under study. After two weeks, the twenty-five (25) questionnaire were collected and re-administered the two groups for the second time.. The degree of similarity between the sets of scores obtained from the two groups determined the reliability of the test. The reliability of the test instrument, was estimated by examining the consistency of the responses between the two tests. The results obtained from the two tests were consisent, hence the instrument was reliable.

The researcher employed Spearman Pearson Ranking Order Correlation Coefficient (R) to assess relationship.

$$R = \frac{1 - 6\sum d^2}{N(N^2 - 1)}$$

Where:

$$N = 25$$

$$N^2 = 511$$

$$\begin{aligned}
\sum d^2 &= 327.9925 \\
\therefore &= \frac{1 - 6(327.9925)}{25(511 - 1)} \\
&= \frac{1 - 1967.955}{25(510)} \\
&= \frac{1 - 1967.955}{12750} \\
&= 1 - \frac{1967.955}{12750} \\
&= 1 - 0.154349 \\
&= 0.845651 \\
&= 0.85 \\
\therefore &= 0.85 \text{ is close to } 1.0, \text{ hence we can conclude that } 1^{\text{st}} \text{ scores and} \\
&\text{the } 2^{\text{nd}} \text{ text scores agree very much with each other in their} \\
&\text{ranking. The table is in the appendix.}
\end{aligned}$$

3.9 Method of Data Analysis

Data were presented in tables and percentages. Thus both parametric and non-parametric techniques for data analysis were used for the hypotheses testing. Hypotheses 1, 2, and 3, were tested by simple Linear regression while hypothesis 4 and 5 were tested by multiple regression using statistical package for the social sciences (SPSS 15.00 version). The multiple regression test statistic is the most appropriate because of the large sample size.

3.10 Decision Rule

In testing hypotheses, the calculated value of the test statistic was compared with critical or table value. The critical or table value serves as a benchmark for rejecting or not rejecting the null hypothesis. Reject the H_0 and uphold H_a (alternate hypothesis) if the Z-table calculated exceeds the Z-table (critical value). Otherwise do not reject the null hypothesis. Here, regression tested the extent of the relationship between two or more variables while the Z-test test the significance or fit of the variables.

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CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

Data collected in the course of this study were presented in this chapter descriptively with the aid of frequency tables. Also, the mean responses and standard deviation were presented. The results from the various tests of hypotheses were presented, also.

4.2 Data Presentation

This section contains the responses of the respondents to the questions in the study questionnaire.

4.2.1 Return Rate of Questionnaire

Five hundred and eleven (511) copies of the study questionnaire were administered to the sample study. Out of this number, four hundred and eighty-four (484) copies were correctly filled and returned, while twenty-seven (27) copies were not correctly or returned (see Table 4.1). Based on the high rate of return, the return copies were deemed adequate to provide the data for this study.

Table 4.1: Return Rate of Questionnaire

Bank	Administered (%)	Correctly Filled and Returned (%)	Incorrectly Filled or Not Returned (%)
First Bank	60 (100.0)	54 (90.0)	6 (10.0)
Union Bank	48 (100.0)	46 (95.8)	2 (4.2)
Diamond Bank	48 (100.0)	46 (95.8)	2 (4.2)
GTB	48 (100.0)	46 (95.8)	2 (4.2)
Zenith Bank	57 (100.0)	53 (93.0)	4 (7.0)
Unity Bank	31 (100.0)	30 (96.8)	1 (3.2)
Ecobank	55 (100.0)	52 (94.5)	3 (5.5)
Heritage Bank	35 (100.0)	34 (97.1)	1 (2.9)
UBA	44 (100.0)	42 (95.5)	2 (4.5)
Access Bank	49 (100.0)	46 (93.9)	3 (6.1)
Fidelity Bank	36 (100.0)	35 (97.2)	1 (2.8)
Total	511 (100.0)	484 (94.7)	27 (5.3)

Source: Field Survey, 2015

4.2.2 Respondents' Demographic Characteristics

The demographic characteristics of the respondents are presented here.

4.2.2.1 Sex

The distribution of the respondents based on their sex is presented in Table 4.2.

Table 4.2: Sex Distribution of Respondents

Sex	Frequency	Percent (%)
Male	255	52.7
Female	229	47.3
Total	484	100.0

Source: Field Survey, 2015

Table 4.2 shows that majority (52.7%) of the respondents are males. However, the difference between male and female participation in the study is not much (5.4% difference).

4.2.2.2 Marital Status

The distribution of based on their marital status is presented in Table 4.3.

Table 4.3: Respondents' Distribution based on Marital Status

Marital Status	Frequency	Percent (%)
Single	294	60.7
Married	190	39.3
Total	484	100.0

Source: Field Survey, 2015

As presented in Table 4.3, 294 (60.7%) respondents are single while 190 (39.3%) respondents are females.

4.2.2.3 Age Range

The respondents' frequency distribution based on the age range is presented in Table 4.4.

Table 4.4: Respondents' Distribution based on Age Range

Age (years)	Frequency	Percent (%)
30 – 40	212	43.8
41 – 50	179	37.0
51 years and above	93	19.2
Total	484	100.0

Source: Field Survey, 2015

Table 4.4 reveals that 212 (43.8%) respondents are aged 30 to 40 years, 179 (37%) respondents are aged 41 to 50 years and 93 (19.2%) respondents are aged 51 years and above.

4.2.2.4 Educational Qualification

The presentation of the respondents' distribution based on their educational qualification is seen in Table 4.5.

Table 4.5: Distribution of Respondents according to Educational Qualification

Educational Qualification	Frequency	Percent (%)
OND	134	27.7
HND/BSc	253	52.3
PhD	97	20.0
Total	484	100.0

Source: Field Survey, 2015

Table 4.5 shows that 134 (27.7%) respondents have OND, 253 (52.3%) respondents have HND/BSc and 97 (20%) respondents have PhD.

4.2.2.5 Length of Period in Service

The distribution of the respondents based on their length of period in service is presented in Table 4.6.

Table 4.6: Distribution of Respondents by Length of Period in Service

Length of Period	Frequency	Percent (%)
1 to 5 years	149	30.8
6 to 10 years	231	47.7
11 years and above	104	21.5
Total	484	100.0

Source: Field Survey, 2015

Based on the data presented in Table 4.6, the length of service for 149 (30.8%) respondents is 1 to 5 years, that of 231 (47.7%) respondents is 6 to 10 years while that of 104 (21.5%) respondents is over 11 years and above.

4.2.3 Data Presentation based on Study Objectives

Responses to the questions in the study questionnaire are presented in this section based on the study objectives. The presentation of the data is based on the decision rule stated below.

Decision Rule

If Mean < 3.5, the respondents are not in agreement with the statement

If Mean $\geq$ 3.5, the respondents are in agreement with the statement

4.2.3.1: Effect of Mobile Technology on Productivity of Deposit Money Bank

The respondents' responses on the effect of mobile technology on productivity of deposit money bank is presented in Table 4.7.

Table 4.7: Effect of Mobile Technology on Productivity

Statement	SA	A	U	D	SD	Mean
	(%)	(%)	(%)	(%)	(%)	(Std.)
Recent technological innovations such as smart phones allow mobile workers to access the corporate information while being away from their offices	140 (28.9)	191 (39.5)	60 (12.4)	48 (9.9)	45 (9.3)	3.67 (1.25)
Mobility enables deposit money banks to maximize return on real estate and resource investment	132 (27.3)	216 (44.6)	55 (11.4)	50 (10.3)	31 (6.4)	3.76 (1.15)
Mobile e-mail provides an instantaneous delivery and access mechanism that appear to be highly supportive of time critical tasks in deposit money banks	104 (21.5)	224 (46.3)	64 (13.2)	59 (12.2)	33 (6.8)	3.63 (1.15)
Mobile devices and applications boost the productivity of deposit money banks	152 (31.4)	245 (50.6)	38 (7.9)	29 (6.0)	20 (4.1)	3.99 (1.00)

Source: Field Survey, 2015

In response to the questions on the effect of mobile technology on productivity, Table 4.7 shows that 140 (28.9%) respondents strongly agreed that recent technological innovations such as smart phones allow mobile workers to access the corporate information while being away from their offices. This is also the perception of 191 (39.5%) respondents who agreed with this statement. However, 48 (9.9%) respondents and 45 (9.3%) respondents disagreed and strongly disagreed with this statement respectively. while 60 (12.4%) respondents were undecided. The mean score of 3.67 ± 1.25 shows that the respondents are in agreement that recent technological innovations such as smart phones allow mobile workers to access the corporate information while being away from their offices.

The responses of 132 (27.3%) respondents who strongly agreed, 216 (44.6%) respondents who agreed, 55 (11.4%) who were undecided, 50 (10.3%) respondents who disagreed and 31 (6.4%) respondents who strongly disagreed as well as the mean score of 3.76 ± 1.15 , indicates that the respondents are of the general opinion that mobility enables deposit money banks to maximize return on real estate and resource investment.

Based on the mean response score of 3.6 ± 1.15 and the responses of 104 (21.5%) respondents who strongly agreed, 224 (46.3%) respondents who agreed, 64 (13.2%) respondents who were undecided, 59 (12.2%) respondents who disagreed and 33 (6.8%) respondents who strongly disagreed, it is the determination of the respondents that mobile e-mail provides an instantaneous delivery and access mechanism that appear to be highly supportive of time critical tasks in deposit money banks.

In response to whether mobile devices and applications boost the productivity of deposit money banks, 152 (31.4%) respondents strongly agreed, 245 (50.6%) respondents agreed, 38 (7.9%) respondents were undecided, 29 (6%) respondents disagreed and 20 (4.1%) respondents strongly disagreed. With this responses and the mean response score of 3.99 ± 1.00 , the respondents are of the general opinion that mobile devices and applications boost the productivity of deposit money banks.

4.2.3.2 Effect of Biometric and Attendance Time on Market Share of Deposit Money Bank

Table 4.8 captures the respondents' opinions on the effect of biometric and attendance time on market share of deposit money bank.

Table 4.8: Effect of Biometric and Attendance Time on Market Share of Deposit money Bank.

Statement	SA	A	U	D	SD	Mean
	(%)	(%)	(%)	(%)	(%)	(Std.)
Labour costs associated with buddy-punching, the practice of one employee “clocking” in or out for another are virtually eliminated with biometrics which affect the market share of deposit money banks	102 (21.1)	252 (52.1)	89 (18.4)	26 (5.4)	15 (3.1)	3.83 (0.93)
Integration of biometric into mobile workforce management system positively affect market share of deposit money banks	117 (24.2)	246 (50.8)	74 (15.3)	38 (7.9)	9 (1.9)	3.88 (0.93)
Biometric time clock eliminate conflict over hours worked and time accrual benefits for mobile employees	167 (34.5)	235 (48.6)	21 (4.3)	32 (6.6)	29 (6.0)	3.99 (1.09)
Deposit money banks can achieve a boarder range of direct and indirect time cost and operational benefits than alternative time method through biometric system	106 (21.9)	241 (49.8)	78 (16.1)	27 (5.6)	32 (6.6)	3.75 (1.07)

Source: Field Survey, 2015

As shown in Table 4.8, it is the general view of the respondents that labour costs associated with buddy-punching, the practice of one employee “clocking” in or out for another are virtually eliminated with biometrics which affect the market share of deposit money banks. This is captured in the mean score of 3.83 ± 0.93 and the responses of 102 (21.1%) respondents who strongly agreed, 252 (52.1%) respondents who agreed, 89 (18.4%) respondents who were undecided, 26 (5.4%) respondents who disagreed and 15 (.1%) respondents who strongly disagreed.

Based on the responses of 117 (24.2%) respondents and 246 (50.8%) respondents who strongly agreed and agreed respectively as well as the mean response score of 3.88 ± 0.93 , the respondents are of the general opinion that integration of biometric into mobile workforce management system positively affects market share of deposit money banks. However, 74 (15.3%) respondents were undecided about this, 38 (7.9%) respondents disagreed with this and 9 (1.9%) respondents strongly disagreed with this.

The opinions of the respondents on whether biometric time clock eliminates conflict over hours worked and time accrual benefits for mobile employees is verified in the respondents’ responses. From the responses of 167 (34.5%) respondents, 235 (48.6%) respondents, 21 (4.3%) respondents, 32 (6.6%) respondents and 29 (6%) respondents who strongly agreed, agreed, were undecided, disagreed and strongly disagreed respectively as well as the mean response score of 3.99 ± 1.09 , the respondents are generally in agreement with this assertion.

Having a mean response score of 3.75 ± 1.07 , as well as 106 (21.9%) respondents strongly agreeing, 241 (49.8%) respondents agreeing, 78 (16.1%) respondents not being decided, 27 (5.6%) respondents disagreeing and 32 (6.6%) respondents strongly disagreeing; it is the general conception of the respondents that deposit money banks can achieve a boarder range of direct and indirect time cost and operational benefits than alternative time method through biometric system.

4.2.3.3 Effect of Mobile Applications on Stakeholders’ Level of Satisfaction of Deposit Money Bank

Respondents’ responses on the effect of mobile applications on stakeholders’ level of satisfaction of deposit money bank is presented in Table 4.9.

Table 4.9: Effect of Mobile Applications on Stakeholders' Level of Satisfaction

Statement	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean (Std.)
Mobile applications such as internet facility permits mobile workers instantly, access information on customers, stakeholders, financials, inventory and job locations instead of having to return to the office	95 (19.6)	221 (45.7)	77 (15.9)	55 (11.4)	36 (7.4)	3.59 (1.15)
Mobile applications directly influence how deposit money banks learn about developing stakeholders' relationship, protect the security and in general provide values to stakeholders level of satisfaction	132 (27.3)	220 (45.5)	90 (18.6)	15 (3.1)	27 (5.6)	3.86 (1.03)
Mobile applications enhance stakeholders' connectivity with deposit money banks	138 (28.5)	212 (43.8)	33 (6.8)	63 (13.0)	38 (7.9)	3.72 (1.23)
Automated teller machines enable stakeholders to transact business without queuing in the banking hall	100 (20.7)	211 (43.6)	53 (11.0)	76 (15.7)	44 (9.1)	3.51 (1.24)

Source: Field Survey, 2015

As presented in Table 4.9, 95 (19.6%) respondents and 221 (45.7%) strongly agreed and agreed respectively that Mobile applications such as internet facility permits mobile workers instantly, access information on customers, stakeholders, financials, inventory and job locations instead of having to return to the office. As this covers majority of the sample size and with a mean response score of 3.59 ± 1.15 , this assertion is taken to be the general perception of the respondents.

Though 27 (5.6%) respondents strongly disagreed, 15 (3.1%) respondents disagreed and 90 (18.6%) respondents were undecided, from the responses of 132 (27.3%) respondents who strongly agreed and 220 (45.5%) respondents who agreed as well as the mean score of 3.86 ± 1.03 , it is the general understanding of the respondents that mobile applications directly influence how deposit money banks learn about developing stakeholders' relationship, protect the security and in general provide values to stakeholders level of satisfaction.

With 138 (28.5%) respondents strongly agreeing, 212 (43.8%) respondents agreeing, 33 (6.8%) respondents being undecided, 63 (13%) respondents disagreeing and 38 (7.9%) respondents strongly disagreeing as well as the mean response score of 3.72 ± 1.23 , the respondents agree that Mobile applications enhance stakeholders' connectivity with deposit money banks.

Having a mean response score 3.51 ± 1.24 , and the responses of 100 (20.7%) respondents who strongly agreed, 211 (43.6%) respondents who agreed, 53 (%) respondents who were undecided, 76 (15.7%) respondents who disagreed and 44 (9.1%) respondents who strongly disagreed; the respondents agreed that automated teller machines enable stakeholders to transact business without queuing in the banking hall.

4.2.3.4 Effect of Contemporary Environmental Factors on Growth of Deposit Money Bank

The respondents' responses on the effect of contemporary environmental factors on the growth of deposit money bank is presented in Table 4.10.

Table 4.10: Effect of Contemporary Environmental Factors on Growth of Deposit Money Bank

Statement	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean (Std.)
Government regulations influence every process of the human resources department including hiring, training, compensation and termination in deposit money banks	133 (27.5)	227 (46.9)	51 (10.5)	49 (10.1)	24 (5.0)	3.82 (1.10)
Economic condition is one of the biggest external factor that cannot only affect the talent pool, but might affect deposit money banks' ability to hire any employee at all	163 (33.7)	207 (42.8)	52 (10.7)	34 (7.0)	28 (5.8)	3.92 (1.11)
Mobile technological advancement is considered an external factor that affect the growth of deposit money banks because when new mobile technology are introduced, the human resources department can start looking at how to downsize and look for ways to save money.	113 (23.3)	218 (45.0)	52 (10.7)	60 (12.4)	41 (8.5)	3.62 (1.21)
Workforce demographics influence the human resources department of deposit money banks in terms of hiring of new staff, compensation package and retirement of older staff	114 (23.6)	250 (51.7)	51 (10.5)	28 (5.8)	41 (8.5)	3.76 (1.13)

Source: Field Survey, 2015

From the presentation in Table 4.10, it can be seen that 133 (27.5%) respondents strongly agreed that government regulations influence every process of the human resources department including hiring, training, compensation and termination in deposit money banks. 227 (46.9%) respondents agreed with this, 51 (10.5%) respondents were undecided about it, 49 (10.1%) respondents disagreed with this and 24 (5%) respondents strongly disagreed with this. The mean response score of 3.82 ± 1.10 shows that this is the general view of the respondents.

The responses of 163 (33.7%) respondents, 207 (42.8%) respondents, 52 (10.7%) respondents, 34 (7%) respondents and 28 (5.8%) respondents who strongly agreed, agreed, were undecided, disagreed and strongly disagreed respectively including the mean response score of 3.92 ± 1.11 , showed that the respondents agreed that economic condition is one of the biggest external factor that cannot only affect the talent pool, but might affect deposit money banks' ability to hire any employee at all.

The mean response score of 3.62 ± 1.21 shows that the respondents agreed that mobile technological advancement is considered an external factor that affect the growth of deposit money banks because when new mobile technology are introduced, the human resources department can start looking at how to downsize and look for ways to save money. This is further reflected in the percentage responses of 23.3% respondents who strongly agreed, 45% respondents who agreed, 10.7% respondents who were undecided, 12.4% respondents who disagreed and 8.5% respondents who strongly disagreed.

114 (23.6%) respondents and 250 (51.7%) respondents strongly agreed and agreed that workforce demographics influence the human resources department of deposit money banks in terms of hiring of new staff, compensation package and retirement of older staff. This is however not the view of 28 (5.8%) respondents and 41 (8.5%) respondents who disagreed and strongly disagreed respectively. The mean response score of 3.76 ± 1.13 , shows that this is the general view of the respondents.

4.2.3.5 Relationship between Challenges of Mobile Workforce Management Strategies and the Profitability of Deposit Money Bank

The relationship between the challenges of mobile workforce management strategies and the profitability of deposit money bank as perceived by the sampled respondents is presented in Table 4.11.

Table 4.11: Relationship between Challenges of Mobile Workforce Management Strategies and Profitability

Statement	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean (Std.)
Hackers infiltrate the computer network of deposit money banks that result to loss, thereby negatively affecting the profitability of deposit money banks	100 (20.7)	257 (53.1)	51 (10.5)	36 (7.4)	40 (8.3)	3.70 (1.13)
Network failure (distributed denial of service) results to service disruptions thereby negatively affecting the profitability of deposit money banks	148 (30.6)	222 (45.9)	41 (8.5)	38 (7.9)	35 (7.2)	3.85 (1.16)
Hackers use malware to breach the card processors of deposit money banks in order to withdraw cash from automated teller machines which negatively affect the profitability of deposit money banks	132 (27.3)	239 (49.4)	52 (10.7)	32 (6.6)	29 (6.0)	3.85 (1.08)
The most prominent challenge in mobile workforce is managing the human error risk factor and how to handle employee trust and privacy	152 (31.4)	223 (46.1)	56 (11.6)	26 (5.4)	27 (5.6)	3.92 (1.07)

Source: Field Survey, 2015

As presented in Table 4.11, the respondents are in agreement that hackers infiltrate the computer network of deposit money banks that result to loss, thereby negatively affecting the profitability of deposit money banks. This is represented in the views of 100 (20.7%) respondents who strongly agreed, 257 (53.1%) respondents who agreed, 51 (10.5%) respondents who were undecided, 36 (7.4%) respondents who disagreed and 40 (8.3%) respondents who strongly disagreed as well as the mean score of 3.70 ± 1.13 .

Having a mean score of 3.85 ± 1.16 , and the responses of 148 (30.6%) respondents who strongly agreed, 222 (45.9%) respondents who agreed, 41 (8.5%) respondents who were undecided, 38 (7.9%) respondents who disagreed and 35 (7.2%) respondents who strongly disagreed, the respondents agreed that network failure (distributed denial of service) results to service disruptions thereby negatively affecting the profitability of deposit money banks.

With 132 (27.3%) respondents strongly agreeing and 239 (49.4%) respondents agreeing as well as the mean response score of 3.85 ± 1.08 , the respondents are in agreement that hackers use malware to breach the card processors of deposit money banks in order to withdraw cash from automated teller machines which negatively affect the profitability of deposit money banks.

While 26 (5.4%) respondents and 27 (5.6%) respondents disagreed and strongly disagreed respectively, 152 (31.4%) respondents and 223 (46.1%) respondents agreed and strongly agreed respectively that the most prominent challenge in mobile workforce is managing the human error risk factor and how to handle employee trust and privacy. The mean response score of 3.92 ± 1.07 shows that it is the determination of the respondents that the most prominent challenge in mobile workforce is managing the human error risk factor and how to handle employee trust and privacy.

4.3 Test of Hypotheses

The results from the various tests of hypotheses are presented in this section.

4.3.1 Test of Hypothesis One

Mobile technology significantly enhances the level of productivity in selected deposit money banks

This hypothesis is tested using the linear regression analysis. The results are summarized thus;

Table 4.12: Summarised Regression Results for Hypothesis One

Variable		Coefficient	t-value	p-value
Constant		1.034	18.759	0.000
Mobile Technology (MT)		0.801	56.297	0.000

$r = 0.932$; $r^2 = 0.868$; RegSS = 421.816; ResSS = 64.151; F-value = 3169.338; sig. = 0.000

Source: Appendix 3

The result of the regression analysis summarized in Table 4.12 shows that the model for the relationship between mobile technology (MT) and productivity (P) is: $P = 1.034 + 0.801MT$

This reveals that mobile technology (MT) has positive impact on performance (P). With t-value > 1.96 (t-critical) and p-value < 0.05, this impact is significant.

Also, the regression coefficient (r) of 0.932 indicates a strong relationship between the independent variable (mobile technology) and the dependent variable (productivity). The coefficient of determination (r^2) of 0.868 reveals that 86.8% of the variation observed the dependent variable is caused by the independent variables. Having a regression sum of square of 421.816 > the residual sum of squares of 64.151, this variation is not due to chance. The F-value and corresponding significance value of 3169.338 (0.000) shows that these results are significant.

Based on this, the results indicate that there is a significant positive effect of mobile technology on level of productivity in the selected deposit money banks.

4.3.2 Test of Hypothesis Two

Biometrics and attendance time to a great extent improves market share of deposit money banks

This hypothesis is tested using the linear regression analysis. The results are summarized thus;

Table 4.13: Summarised Regression Results for Hypothesis Two

Variable	Coefficient	t-value	p-value
Constant	0.443	9.388	0.000
Biometrics and Attendance Time (BAT)	0.891	75.140	0.000

$r = 0.960$; $r^2 = 0.921$; RegSS = 383.797; ResSS = 32.765; F-value = 5646.034; sig. = 0.000

Source: Appendix 4

The result of the regression analysis summarized in Table 4.13 shows that the model for the relationship between biometrics and attendance time (BAT) and market share (MS) is: $MS = 0.443 + 0.891MT$

This reveals that biometrics and attendance time (BAT) has positive impact on market share (MS). With t-value > 1.96 (t-critical) and p-value < 0.05, this impact is significant.

Also, the regression coefficient (r) of 0.960 indicates a strong relationship between the independent variable (biometrics and attendance time) and the dependent variable (market share). The coefficient of determination (r^2) of 0.921 reveals that 92.1% of the variation observed the dependent variable is caused by the independent variables. Having a regression sum of square of 383.797 > the residual sum of squares of 32.765, this variation is not due to chance. The F-value and corresponding significance value of 5646.034 (0.000) shows that these results are significant.

Based on this, the results indicate that biometrics and attendance time to a great extent improves market share of deposit money banks.

4.3.3 Test of Hypothesis Three

Mobile applications significantly promote stakeholders' level of satisfaction of deposit money banks

This hypothesis is tested using the linear regression analysis. The results are summarized thus;

Table 4.14: Summarised Regression Results for Hypothesis Three

Variable		Coefficient	t-value	p-value
Constant		0.868	18.427	0.000
Mobile Applications (MA)		0.829	66.811	0.000

$r = 0.950$; $r^2 = 0.903$; RegSS = 464.956; ResSS = 50.207; F-value = 4463.695; sig. = 0.000

Source: Appendix 5

The result of the regression analysis summarized in Table 4.14 shows that the model for the relationship between mobile applications (MA) and stakeholders' level of satisfaction (SLS) is: $SLS = 0.868 + 0.829MA$

This reveals that mobile applications (MA) has positive impact on stakeholders' level of satisfaction (SLS). With t-value > 1.96 (t-critical) and p-value < 0.05, this impact is significant.

Also, the regression coefficient (r) of 0.950 indicates a strong relationship between the independent variable (mobile applications) and the dependent variable (stakeholders' level of satisfaction). The coefficient of determination (r^2) of 0.903 reveals that 90.3% of the variation observed the dependent variable is caused by the independent variables. Having a regression sum of square of 464.956 > the residual sum of squares of 50.207, this variation is not due to chance. The F-value and corresponding significance value of 4463.695 (0.000) shows that these results are significant.

Based on this, the results indicate that mobile applications significantly promote stakeholders' level of satisfaction of deposit money banks.

4.3.4 Test of Hypothesis Four

Contemporary environmental factors to a great extent have a positive effect on the growth of deposit money banks

This hypothesis is tested using the multiple linear regression analysis. The results are summarized thus;

Table 4.15: Summarised Regression Results for Hypothesis Four

Variable	Coefficient	t-value	p-value
Constant	-0.341	-6.154	0.000
Government Regulations (GR)	0.278	4.566	0.000
Economic Condition (EC)	0.271	4.439	0.000
Workforce demographics (WD)	0.699	13.067	0.000

$r = 0.962$; $r^2 = 0.926$; RegSS = 653.287; ResSS = 52.275; F-value = 1999.525; sig. = 0.000

Source: Appendix 6

The result of the regression analysis summarized in Table 4.15 shows that the model for the relationship between contemporary environmental factors (government regulations, economic condition and workforce demographics) and growth (G) is:

$$G = -0.341 + 0.278GR + 0.271EC + 0.699WD$$

This reveals that government regulations (GR), economic condition (EC) and workforce demographics (WD) have positive impact on growth (G). With t-value > 1.96 (t-critical) and p-value < 0.05, this impact is significant.

Also, the regression coefficient (r) of 0.962 indicates a strong relationship between the independent variables (government regulations, economic condition and workforce demographics) and the dependent variable (growth). The coefficient of determination (r^2) of 0.926 reveals that 92.6% of the variation observed the dependent variable is caused by the independent variables. Having a regression sum of square of 653.287 > the residual sum of squares of 52.275, this variation is not due to chance. The F-value

and corresponding significance value of 1999.525 (0.000) shows that these results are significant.

Based on this, the results indicate that contemporary environmental factors to a great extent have a positive effect on the growth of deposit money banks.

4.3.5 Test of Hypothesis Five

There is a positive significant relationship between the challenges of mobile workforce management strategies and the profitability of deposit money banks

This hypothesis is tested using the multiple linear regression analysis. The results are summarized thus;

Table 4.16: Summarised Regression Results for Hypothesis Five

Variable	Coefficient	t-value	p-value
Constant	0.119	3.146	0.002
Hackers' Infiltration (HI)	0.213	7.609	0.000
Network Failure (NF)	0.297	6.656	0.000
Human Error (HE)	0.460	11.600	0.000
r = 0.981; r² = 0.963; RegSS = 541.524; ResSS = 21.061; F-value = 4114.019; sig. = 0.000			

Source: Appendix 7

The result of the regression analysis summarized in Table 4.16 shows that the model for the relationship between challenges of mobile workforce management strategies (hackers' infiltration, network failure, human error) and profitability (Pr) is:

$$Pr = 0.119 + 0.213HI + 0.297NF + 0.460HE$$

This reveals that hackers' infiltration (HI), network failure (NF) and human error (HE) have positive impacts on profitability. With t-value > 1.96 (t-critical) and p-value < 0.05, this impact is significant.

Also, the regression coefficient (r) of 0.981 indicates a strong relationship between the independent variables (hackers' infiltration, network failure and human error) and the dependent variable (profitability). The coefficient of determination (r²) of 0.963 reveals that 96.3% of the variation observed the dependent variable is caused by the

independent variables. Having a regression sum of square of 541.524 > the residual sum of squares of 21.061, this variation is not due to chance. The F-value and corresponding significance value of 4114.019 (0.000) shows that these results are significant.

Based on this, the results indicate that there is a positive significant relationship between the challenges of mobile workforce management strategies and the profitability of deposit money banks.

4.6 Discussion of Results

This section covered the discussion of results in accordance with the various study objectives and research hypotheses on performance of deposit money banks.

Objective One

To determine the effect of mobile technology on productivity of deposit money banks. The study discovered that 140 (28.9%) of the respondents strongly agreed that mobile technology has effect on productivity of deposit money banks. Also the study deduced that 191 (39.5%) of respondents agreed that mobile technology enhances deposit money banks productivity. However, 48 (9.9%) respondents and 45 (9.3%) respondents disagreed and strongly disagreed with this statement respectively, while 60 (12.4%) respondents were undecided. The mean score of 3.67 shows that the respondents are in agreement that recent technological innovations such as smart phones allow mobile workers to access the corporate information while being away from their offices. The responses of 132 (27.3%) respondents who strongly agreed, 216 (44.6%) respondents agreed, 55 (11.4%) who were undecided, 50 (10.3%) respondents who disagreed and 31 (6.4%) respondents who strongly disagreed as well as the mean score of 3.76, indicates that the respondents are of the general opinion that mobility enables deposit money banks to maximize return on real estate and resource investment.. The hypothesis one using simple linear regression analysis with a coefficient (r) of 0.932 affirmed that there are significant positive effect of mobile technology on productivity of the deposit money banks. The results of the analysis were in accordance with the reviewed work of Simmonds (2007), who agreed that technological growth increases the productivity of mobile workforce, thereby increasing productivity gains of companies. Matarazzi (2007) said that use of mobile

technology by mobile workers increases sales and improved ability to attract and retain staff.

Objective Two

To establish the extent of biometric and attendance time improves market share of deposit money banks. The study discovered that 102 (21.1%) of the respondents given the mean of 3.83 respondents who strongly agreed, 252 (52.1%) respondents who agreed, 89 (18.4%) respondents who were undecided, 26 (5.4%) respondents disagreed and 15 (.1%) who strongly disagreed that biometric and attendance time improves market share of deposit money banks. The hypothesis two using simple regression analysis with a coefficient (r) of 0.960 affirmed that biometric and attendance time to a great extent enhances market share of deposit money banks. The results obtained from the analysis are in line with the reviewed literature of this study.

Shahenwa (2015) said that biometric and attendance time improve workforce productivity, efficiency and labour management of deposit money banks.

Purdue University survey (2015) revealed among others that biometric and attendance time offers unparalleled ability to quickly and accurately capture real time, labour data and provide a non repudiated audit trail.

Objective Three

To assess the effect of mobile mobile applications on stakeholders' level of satisfaction of deposit money banks. The study discovered that 49 (19.6%) respondents and 221 (45.7%) of the respondents given the mean of 3.59 strongly agreed and agreed that mobile applications such as internet facility permits mobile workers instantly, access information on customers, stakeholders, financials, inventory and job locations instead of having to return to the office. As this covers majority of sample size with a mean response score of 3.59, this assertion is taken to be the general perception of the respondents. The hypothesis three using the linear regression analysis with a coefficient (r) of 0.950 affirmed that mobile application positively affects stakeholders' level of satisfaction of deposit money banks.

The results of the analysis are in line with the reviewed related literature. Dulta (2012) said that mobile applications can significantly reduce capital and operational expenses while providing a solution on an accelerated and more flexible basis. Dalta (2012) opined that mobile applications offers deposit money banks greater flexibility in scaling a solution up or down to meet changing strategic needs and improve business continuity and disaster recovery.

Objective Four

To ascertain contemporary environmental factors that affect the growth of deposit money banks. The study discovered that 133 (27.5%) respondents strongly agreed that government regulations influence every process of the human resources department including hiring, training, compensation and termination in deposit money banks. The responses of 163 (33.7%) respondents, 207 (42.8%) respondents, 52 (10.7%) respondents, 34 (7%) respondents and 28 (5.8%) respondents who strongly agreed, agreed, were undecided, disagreed and strongly disagreed respectively including the mean score of 3.92, showed that economic condition is one of the biggest contemporary environmental factor that cannot only affect the talent pool, but might affect deposit money banks' ability to hire any employee at all.

The hypothesis four using multiple regression with a coefficient (r) of 0.962 affirmed that government regulation, economic condition, mobile technological advancement and workforce demographics positively affect the growth of deposit money banks. The results obtained were in accordance with the reviewed related literature in this study. Friedman (2003) stated that there are four contemporary environmental factors that affect the growth of deposit money banks, these include-government regulations, economic conditions, technological advancements and workforce demographics.

Objective Five

To determine the relationship between mobile workforce management strategies and the profitability of deposit money banks. The study discovered that 100 (20.7%) of the respondents given the mean of 3.7 strongly agreed 257 (53.1%) agreed, 51 (10.5%) respondents who were undecided, 36 (7.4%) respondents who disagreed and 40 (8.3%) respondents who strongly disagree that hackers infiltrate the computer

network of deposit money banks thereby negatively affecting the profitability of deposit money banks.

The study also deduced that 148 (30.6%) respondents who strongly agreed, 222 (45.9%) respondents who agreed, 41 (8.5%) respondents who were undecided, 38 (7.9%) respondents who disagreed and 35 (7.2%) respondents who strongly disagree that network failure (distributed denial of service) results to service disruptions thereby negatively affecting the profitability of deposit money banks. The hypothesis five using multiple regression with coefficient of (r) 0.981 indicates a strong relationship between the challenges of mobile workforce management strategies and the profitability of deposit money banks.

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CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

1. Mobile technology significantly enhanced the level of productivity in selected deposit money banks in South- East, Nigeria ($r=0.932$, $p > 0.05$).
2. Biometric time and attendance system to a great extent enhanced market share of deposit money banks in South- East Nigeria ($r = 0.960$, $p > 0.05$).
3. Mobile application significantly promoted stakeholders level of satisfaction of deposit money banks ($r = 0.950$, $p > 0.05$).
4. Contemporary environmental factors to a great extent had a positive effect on the growth of deposit money banks. ($r = 0.962$, $p > 0.05$).
5. There was a positive significant relationship between challenges of mobile workforce management strategies (hacker's infiltration, network failure, human error) and profitability of deposit money banks ($r = 0.981$, $p > 0.05$).

5.2 Conclusion

The study concluded that mobile technology significantly enhances the level of productivity of selected deposit money banks. Mobile technology increases the performances of mobile work force, thereby increasing productivity gains of deposit money banks. It was further concluded that Biometric time and attendance system to a great extent enhances market share of deposit money banks. One of the critical success factors for any workforce management strategies is the ability to address time theft. Biometric-based time and attendance system virtually eliminate the most significant sources of time theft known as buddy punching, the practice of one worker clocking in or out for another. Biometrics offers the only effective means of addressing the buddy-punching dilemma by directly linking an individual worker to a personal labour record. Biometric time and attendance system offers money deposit banks a broader range of direct and indirect time cost and operational benefits than alternative time and attendance methods. The study also concluded that mobile application significantly promotes stakeholders' level of satisfaction of deposit money banks. Mobile workforce management strategies offers critical improvements in efficient and stakeholders level of satisfaction of deposit money banks. The study further concluded that contemporary environmental factors such as government regulations, economic conditions and workforce demographics had a positive effect

on the growth of deposit money banks. Finally, there is a positive relationship between challenges of mobile workforce management strategies (network failure, hackers infiltration and mental work load and profitability of deposit money banks.

5.3 Recommendations

In view of the findings earlier stated, the following recommendations are made with the firm belief that if implemented will result in overall improvement in deposit money banks performance.

1. Management of deposit money banks must ensure that the right tools such as laptop enabled wireless fidelity, personal digital computers and resources are made available to mobile workers, giving them the same connectivity as office based workers.
2. The management of various deposit money banks should ensure that mobile employees engaged in overtime work, should be well compensated as this will motivate them and leads to extra productivity.
3. On line banking should be done preferably from a Wireless fidelity Protected Access 2 (WpA₂) net work to prevent the activities of hackers.
4. All laptops, smartphones and other hand held devices given to mobile workers should be secured from the activities of hackers.
5. Deposit money banks should enhance mobile workforce management integrity by integrating biometric into devices that capture time and labour data for mobile employees.
6. Management should train mobile workers in managing virtual meetings or utilizing real-time data.
7. Deposit money banks should adopt a holistic “defense in depth” strategy that addresses the entire vulnerability chain such as the user, the device, the network, the data, center server and application stacks that run on data center servers. Banks should ensure that all mobile devices must be protected from the activities of hackers with the help of current technology such as Bitlocker, Wa-Tech mobile devicemanagement, Text messaging collection, Wa-Tech shared e- mail service and Wa-Tech Virtual Private Network Share service.
8. Deposit money banks should procure mobile device management tools that allow enterprises to monitor the status of mobile devices in terms of installed

applications, security posture, allowable web sites etc. Enterprises that provide mobile devices for their mobile workers should definitely consider deploying mobile device management tool (MDM).

5.4 Contribution to Knowledge

Variables

1. Mobile technology
2. Biometric time and attendance system
3. Mobile workforce management strategies
4. Influencing factors of mobile workforce
5. Effective mobile workforce management strategies

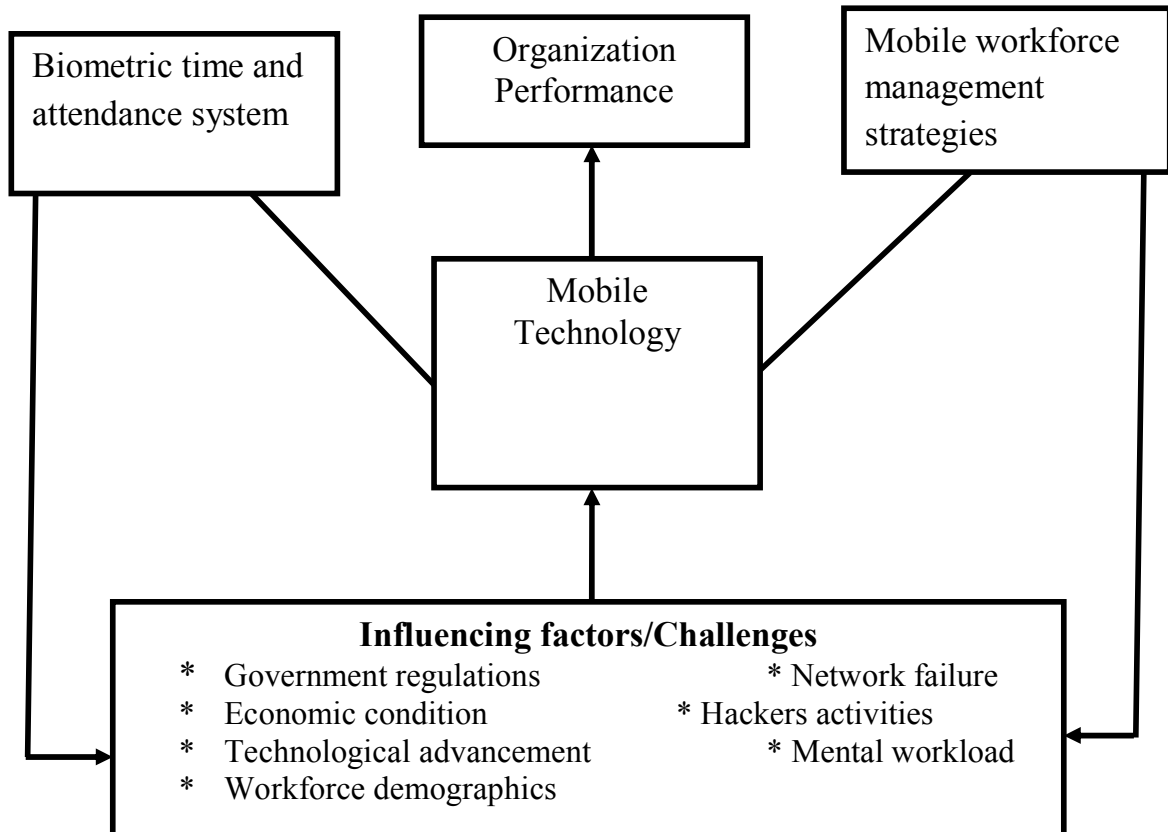


Figure 5.1: Mobile work force process model

Source: Researcher

Technological growth has rapidly penetrated the work place in recent years, leading to widespread changes in working practices and mobile workforce management strategies, biometric and attendance time have a direct impact on employee productivity. Mobility enables employees to be just as effective and efficient in a meeting room, branch office and anywhere as they may be. It is also becoming

increasingly more common to allow mobile employees to use their own devices at work.

Time and attendance system are in place to record when employees start and stop work, in addition to the department where the work is performed. When all the above mentioned variables are in place, as showed in fig 5.1, it will improve the performance of the organization. However, measures should be taken to minimize the impacts of the other influencing variables such as government regulations, economic condition, technological growth, network failure ,hackers, workforce demographics and mental workload as shown in fig 5.1.

5.5 Suggestions for Further Study

The following suggestions were made for further research based on the findings of this study:

1. Challenges facing deposit money banks in the implementation of mobile workforce management strategies in the South -East Nigeria.
2. Determinants of deposit money banks profitability in South- East Nigeria.

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APPENDIX I

Department of Management
Faculty of Business Administration
University of Nigeria
Enugu Campus
Enugu,

February 2017.

Dear respondent,

LETTER OF INTRODUCTION

The researcher is a Ph.D student of the Department in the Faculty of Business Administration, University of Nigeria, Enugu Campus. He is carrying out a research on the topic, “effect of mobile workforce management strategies on the performance of deposit money banks in south-east Nigeria”.

This research work is only for academic exercise.

It will be of immense assistance to respond to the investigative statements attached below, be assured of researcher’s complements, sincere regards and anonymity.

Thanks for your well anticipated co-operation.

Yours faithfully,

Agbo Melletus Uchechukwu

QUESTIONNAIRE

Section A: Personal Data

1. Name and address of your organization
2. Sex
 - (a) Male []
 - (b) Female []
3. Marital status
 - (a) Single []
 - (b) Married []
4. Age range
 - (a) 30- 40 []
 - (b) 41-50 []
 - (c) 51 years and above []
5. Educational qualification
 - (a) O.N.D []
 - (b) H.N.D/B.S.C []
 - (c) Ph.D []
6. Duration/number of years of service.
 - (a) 1-5 years []
 - (b) 6-10 years []
 - (c) 11 years and above []

Section B

Instruction s

1. To be completed by the respondent
2. Please study each questions carefully before responding.
3. Tick [✓] in the brackets for the answers of your choice to show your degree of acceptance or non-acceptance
4. The response keys are,

SA	=	Strongly Agree
A	=	Agree
U	=	Undecided
D	=	Disagree and
SD	=	Strongly Disagree

S/No		SA	A	U	D	SD
	Investigative statements as regards to your opinion on the extent to which mobile technology affect productivity of deposit money banks.					
5.	Recent technological innovations such as smart phones and personal digital assistants allow mobile workers to access the corporate information while being away from their offices.					
6.	Mobility enables deposit money Banks to maximize return on real estate and resource investment.					
7.	Mobile e-mail provides an instantaneous delivery and access mechanism that appear to be highly supportive of time critical tasks in deposit money banks.					
8.	Mobile devices and applications boost the productivity of deposit money banks.					
	Investigative statements as regards to your opinion on the extent to which biometrics and attendance time affect market share of deposit money banks.					
9.	Labour costs associated with buddy-punching, the practice of one employee ‘clocking’ in or out for another are virtually eliminated with biometrics which affect the market share of deposit money banks.					
10.	Integration of biometric into mobile workforce management system positively affect market share of deposit money banks.					
11.	Biometric time clocks eliminate conflicts over hours worked and time accrual benefits for mobile employees.					
12.	Deposit money banks can achieve a boarder range of direct and indirect time cost and operational benefits than alternative time method through biometric system.					

	Investigative statements as regards to your opinion on the extents to which mobile applications affect stakeholders' level of satisfaction in deposit money banks.					
13.	Mobile applications such as internet facility permits mobile workers instantly, access information on customers, stakeholders, financials, inventory and job locations instead of having to return to the office.					
14.	Mobile applications directly influence how deposit money banks learn about developing stakeholders' relationship, protect the security and in general provide values to stakeholders levels of satisfaction.					
15.	Mobile applications enhance stakeholder's connectivity with deposit money banks.					
16.	Automated teller machines enable stakeholders to transact business without queuing in the banking hall.					
	Investigative statements as regards to your opinion in which contemporary environmental factors affect the growth of deposit money banks.					
17.	Government regulations influence every process of the human resources department including hiring, training, compensation and termination in deposit money banks.					
18.	Economic condition is one of the biggest external factor that cannot only affect the talent pool, but might affect deposit money banks ability to hire any employee at all.					
19.	Mobile technological advancement is considered an external factor that affect the growth of deposit money banks because when new mobile technology are introduced, the human resources department can start looking at how to downsize and look for ways to save money.					
20.	Workforce demographics influence the human resources department of deposit money banks in terms of hiring of new staff, compensation package and retirement of older staff.					

	Investigative statements in regards to your opinion on the relationship between the challenges of mobile workforce management strategies and the profitability of deposit money banks.					
21.	Hackers infiltrate the computer networks of deposit money banks that results to loss, thereby negatively affect the profitability of deposit money banks.					
22.	Network failure (distributed denial of service) results to service disruptions thereby negatively affect the profitability of deposit money banks.					
23.	Hackers use malware to breach the card processors of deposit money banks in order to withdraw cash from automated teller machines which negatively affect the profitability of deposit money banks.					
24.	The most prominent challenge in mobile workforce is managing the human error risk factor and how to handle employee trust and privacy.					

APPENDIX II
REGRESSION RESULTS FOR TEST OF HYPOTHESIS ONE

Descriptive Statistics

	Mean	Std. Deviation	N
Productivity	3.9917	1.00307	484
Mobile Technology	3.6942	1.16706	484

Correlations

		productivi ty	Mobile Technology
Pearson Correlation	Productivity	1.000	.932
	Mobile Technology	.932	1.000
Sig. (1-tailed)	Productivity	.	.000
	Mobile Technology	.000	.
N	Productivity	484	484
	Mobile Technology	484	484

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.932 ^a	.868	.868	.36482	.076

a. Predictors: (Constant), Mobile Technology

b. Dependent Variable: productivity

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	421.816	1	421.816	3169.338	.000 ^b
	Residual	64.151	482	.133		
	Total	485.967	483			

a. Dependent Variable: productivity

b. Predictors: (Constant), Mobile Technology

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.034	.055		18.759	.000
	Mobile Technology	.801	.014	.932	56.297	.000

a. Dependent Variable: productivity

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.8343	5.0373	3.9917	.93452	484
Residual	-.83434	1.09799	.00000	.36444	484
Std. Predicted Value	-2.309	1.119	.000	1.000	484
Std. Residual	-2.287	3.010	.000	.999	484

a. Dependent Variable: productivity

APPENDIX III
REGRESSION RESULTS FOR TEST OF HYPOTHESIS TWO

Descriptive Statistics

	Mean	Std. Deviation	N
market share	3.8760	.92868	484
biometrics and attendance time	3.8547	1.00092	484

Correlations

		market share	biometrics and attendance time
Pearson Correlation	market share	1.000	.960
	biometrics and attendance time	.960	1.000
Sig. (1-tailed)	market share	.	.000
	biometrics and attendance time	.000	.
N	market share	484	484
	biometrics and attendance time	484	484

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.960 ^a	.921	.921	.26072	.154

a. Predictors: (Constant), biometrics and attendance time

b. Dependent Variable: market share

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	383.797	1	383.797	5646.034	.000 ^b
	Residual	32.765	482	.068		
	Total	416.562	483			

a. Dependent Variable: market share

b. Predictors: (Constant), biometrics and attendance time

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.443	.047		9.388	.000
	biometrics and attendance time	.891	.012	.960	75.140	.000

a. Dependent Variable: market share

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.3337	4.8960	3.8760	.89141	484
Residual	-.52114	.69769	.00000	.26045	484
Std. Predicted Value	-2.852	1.144	.000	1.000	484
Std. Residual	-1.999	2.676	.000	.999	484

a. Dependent Variable: market share

APPENDIX IV
REGRESSION RESULTS FOR TEST OF HYPOTHESIS THREE

Descriptive Statistics

	Mean	Std. Deviation	N
level of satisfaction	3.8574	1.03276	484
mobile application	3.6061	1.18343	484

Correlations

		level of satisfaction	mobile application
Pearson Correlation	level of satisfaction	1.000	.950
	mobile application	.950	1.000
Sig. (1-tailed)	level of satisfaction	.	.000
	mobile application	.000	.
N	level of satisfaction	484	484
	mobile application	484	484

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.950 ^a	.903	.902	.32274	.098

a. Predictors: (Constant), mobile application

b. Dependent Variable: level of satisfaction

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	464.956	1	464.956	4463.695	.000 ^b
Residual	50.207	482	.104		
Total	515.163	483			

a. Dependent Variable: level of satisfaction

b. Predictors: (Constant), mobile application

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.868	.047		18.427	.000
1 mobile application	.829	.012	.950	66.811	.000

a. Dependent Variable: level of satisfaction

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.6968	5.0131	3.8574	.98114	484
Residual	-.69684	.75045	.00000	.32241	484
Std. Predicted Value	-2.202	1.178	.000	1.000	484
Std. Residual	-2.159	2.325	.000	.999	484

a. Dependent Variable: level of satisfaction

APPENDIX V
MULTIPLE LINEAR REGRESSION RESULTS FOR TEST OF
HYPOTHESIS FOUR

Descriptive Statistics

	Mean	Std. Deviation	N
Growth	3.6240	1.20863	484
government regulations	3.8182	1.09582	484
economic condition	3.9153	1.11412	484
workfoce demographics	3.7603	1.13133	484

Correlations

		growth	government regulations	economic condition	workfoce demographics
Pearson Correla tion	Growth	1.000	.946	.926	.959
	government regulations	.946	1.000	.957	.965
	economic condition	.926	.957	1.000	.948
	workfoce demographics	.959	.965	.948	1.000
	Growth	.	.000	.000	.000
Sig. (1- tailed)	government regulations	.000	.	.000	.000
	economic condition	.000	.000	.	.000
	workfoce demographics	.000	.000	.000	.
	Growth	484	484	484	484
N	government regulations	484	484	484	484
	economic condition	484	484	484	484
	workfoce demographics	484	484	484	484
	Growth	484	484	484	484

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson
1	.962 ^a	.926	.925	.33001	.093

a. Predictors: (Constant), workfoce demographics, economic condition, government regulations

b. Dependent Variable: growth

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	653.287	3	217.762	1999.525	.000 ^b
	Residual	52.275	480	.109		
	Total	705.562	483			

a. Dependent Variable: growth

b. Predictors: (Constant), workforce demographics, economic condition, government regulations

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.341	.055		-6.154	.000
	government regulations	.278	.061	.252	4.566	.000
	economic condition	.271	.049	.165	4.439	.000
	workfoce demographics	.699	.053	.654	13.067	.000

a. Dependent Variable: growth

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.7059	4.8953	3.6240	1.16300	484
Residual	-.89530	.29412	.00000	.32898	484
Std. Predicted Value	-2.509	1.093	.000	1.000	484
Std. Residual	-2.713	.891	.000	.997	484

a. Dependent Variable: growth

APPENDIX VI
MULTIPLE LINEAR REGRESSION RESULTS FOR TEST OF
HYPOTHESIS FIVE

Descriptive Statistics

	Mean	Std. Deviation	N
Profitability	3.8533	1.07925	484
hackers' infiltratioin	3.7045	1.12634	484
network failure	3.8471	1.15532	484
human error	3.9236	1.06921	484

Correlations

		profitabili ty	hackers' infiltratioin	network failure	human error
Pearson Correlation	Profitability	1.000	.949	.973	.972
	hackers' infiltratioin	.949	1.000	.953	.930
	network failure	.973	.953	1.000	.974
	human error	.972	.930	.974	1.000
Sig. (1-tailed)	Profitability	.	.000	.000	.000
	hackers' infiltratioin	.000	.	.000	.000
	network failure	.000	.000	.	.000
	human error	.000	.000	.000	.
N	Profitability	484	484	484	484
	hackers' infiltratioin	484	484	484	484
	network failure	484	484	484	484
	human error	484	484	484	484

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.981 ^a	.963	.962	.20947	.255

a. Predictors: (Constant), human error, hackers' infiltration, network failure

b. Dependent Variable: profitability

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	541.524	3	180.508	4114.019	.000 ^b
	Residual	21.061	480	.044		
	Total	562.585	483			

a. Dependent Variable: profitability

b. Predictors: (Constant), human error, hackers' infiltration, network failure

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.119	.038		3.146	.002
	hackers' infiltration	.213	.028	.222	7.609	.000
	network failure	.297	.045	.317	6.656	.000
	human error	.460	.040	.455	11.600	.000

a. Dependent Variable: profitability

Residuals Statistics^a

	Minimu m	Maximu m	Mean	Std. Deviation	N
Predicted Value	1.0885	4.9662	3.8533	1.05885	484
Residual	-.75305	.51293	.00000	.20882	484
Std. Predicted Value	-2.611	1.051	.000	1.000	484
Std. Residual	-3.595	2.449	.000	.997	484

a. Dependent Variable: profitability

INTERVIEW GUIDE

1. To what extent does mobile technology affect on productivity of deposit money banks?
2. To what extent does biometric and attendance time in affect market share of deposit money banks?
3. To what extent does mobile applications affect on stakeholders' level of satisfaction of deposit money banks?
4. What are the effect of contemporary environmental factors on growth of deposit money banks?
5. What is the relationship between challenges of mobile workforce management strategies and the profitability of deposit money banks?

