

**CHALLENGES OF TELECOMMUTING ON EFFECTIVE MANAGEMENT OF STAFF
IN THE KENYA'S TELECOM SECTOR: A CASE OF SAFARICOM LTD**

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DECLARATION

This Research report is my original work and has never been presented for the award of degree in this University or any other institution.

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This Research report has been submitted for examination with my approval as a University Supervisor.

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DEDICATION

This Research report is dedicated to my mother Grace Mwikali for her moral and financial support.

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I would like to acknowledge my Supervisor Dr Evans Mbutia for his dedicated support and guidance to see me through the completion of this Research report.

I also acknowledge the support I have received from the lecturers and staff of University of Nairobi in creating an enabling environment for me to gather the required information relevant to my research report.

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ABBREVIATIONS AND ACRONYMS

GSA	General Services Administration
HR	Human Resource
ICT	Information and communications technology
IT	Information Technology
KESSA	Kenya Scholars and Studies Association
OPM	Office of Personnel Management
SPSS	Statistical Package for Social Science

ABSTRACT

Virtual working arrangements, including telecommuting, are on the increase globally due to the challenges that organisations face in the current global economy. Virtual working arrangements present considerable possible benefits to organisations, employees and the community at large if correctly implemented. In Kenya this organisational form is not well documented or implemented. As a result, local organisations are unaware of the employee benefits and challenges that will be faced when implementing a telecommuting programme. Management of virtual teams comes with its own unique challenges and opportunities. This study explored virtual teams, their benefits and challenges faced by management and suggested possible solutions to these challenges. The target population comprised of the organization's middle level management based at the head office in Westlands Nairobi. The population for this study consisted of 61 members, however in view of the target population, it was more appropriate to treat the population as a study group. The research design of this study was descriptive survey. The research adopted a questionnaire for the middle managers and an interview guide for the senior managers as instruments for data collection. Instrument's validity was checked by use of content validity. Cronbach alpha method was used to affirm the reliability of the instrument. Data was analyzed through organizing responses in the themes as per the objectives of the study. The study found that shared understanding and top level management commitment to implementing telecommuting helped virtual team performances. Different national backgrounds and culture had less impact on the performance of virtual teams. The study also found that consultations were made between employees and the management on who was to telecommunicate. It also revealed that email and phone conversations and chatting were put into great use by the middle level managers to ensure communications with remote workers were effective. The study recommended that organizations should develop policy guidelines outlining the risks associated with telecommuting hence emphasize on the importance of securing sensitive information stored on the devices used and provide recommendations for selecting, implementing and maintaining the necessary security controls. It was further recommended that managers should be trained on the use of this technology before they are requested to manage staff involved in telecommuting and that workers too should be involved in information systems security training. Finally the study recommended that management should work together with employees to ensure they fully promote teamwork and build trust amongst themselves with a view of optimising the output of telecommuting staff.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The concept of telecommuting was coined by Nilles, (1975) to describe a work arrangement in which employees work outside the conventional workplace and interact with their managers and co-workers by way of computer-based technology. According to Kurt (1996), telecommuting has diverse definitions. While certain scholars consider telecommuting as work done from the home, others consider it is work done in satellite offices or the road via laptop technology. The concept of telecommuting is founded on remoteness and use of technology to support remote activities. By definition, telecommuting can be considered as working away from the traditional office at any time and any place. Advances in technology and the advent of a global economy have seen many people come closer together than ever before. Globally, managers are resulting in investing in ways to better their workforce by attracting and retaining the best and most qualified workers. Organizations that are able to develop and employ the necessary policies and procedures in bettering their workforce are thereby able to maintain a competitive advantage among their counterpart, in turn increasing their effectiveness (US Department of Commerce, 2012).

To achieve success and maintain this competitive advantage, organizations must be able to draw on the most important resource, that is - the skills of the workforce. Today, the world is faced with an ever increasing richness of diversity in the workforce, and therefore organizations have been forced to expand their outlook and employ creative strategies in order to be successful (US Department of Commerce, 2012). According to Huws, (2000), technological advances have led to traditional methods of flexible working practices being less widely used as companies embrace new methods of working that would take advantage of these technological opportunities. With rapidly evolving communications technologies, the expanding global scope of business, and changing societal expectations with regard to employment, the prevalence of telecommuting, or teleworking, as an employment arrangement has expanded (Bruner, 2002).

Safaricom has over the years leveraged on workforce management and adoption of telecommuting as an approach of gaining competitive advantage in the industry (Gathodu, 2012). The company acknowledges the importance of balancing the 3 pillars of employees lives-

work, family and health. At Safaricom telecommuting was introduced in January 2012 to provide workers with the option of performing full-time job responsibilities at sites other than the primary location usually home or a remote office using appropriate technology. For the company telecommuting is not just a staff benefit but a strategy geared towards positioning safaricom as the employer of choice. With this in mind, this study seeks to investigate the challenges of telecommuting on workforce management in Telecommunications Companies in Kenya by a case of Safaricom Ltd.

1.2 Statement of the Problem

The current global business environment and its challenges are characterised by amongst other things: increasing and controlling costs, increasing scarcity of resources both human and material, reducing profits, increasing commuting time to and from the work place for all employees, increasing employee turnover, increasing productivity and quality requirements and increasing competition from existing and new sectors, both locally and globally (Akkirman& Harris, 2005; Johnson, 2004; Siha& Monroe, 2006). The changing work environment is visible in how the boundaries of time, space and the existing organisational structures transcend across the globe (Watson-Manheim, Chudoba&Crowston, 2002).

In order to address these issues and others, organisations require flexibility and progressive management to remain competitive and at the forefront of their respective industries. One of the newer strategies to deal with these issues is “virtual team.” These are teams that are comprised of members who do not work at the same place or even at the same time. They may be spread across many time zones and may be located all over the world. These types of teams are made possible by advances in computer-mediated communication and software that allows people to work collaboratively on projects without being co-located or even working at the same time. Obviously, managing teams of this sort presents many, and sometimes unique, challenges. It is against this background that this study sought to determine the challenges of telecommuting on effective management of employees in the Kenya’s telecom sector with particular reference to Safaricom limited.

1.3 Purpose of the Study

The purpose of this study is to explore the challenges of telecommuting on effective management of employees in the Kenya's telecom sector a case of Safaricom limited.

1.4 Objectives of the Study

This study will be guided by the following objectives:

- i. To determine how corporate culture influences effective management of staff in Kenya's telecom sector.
- ii. To establish how trust of employees influences effective management of staff in Kenya's telecom sector.
- iii. To determine how security of information influences effective management of staff in Kenya's telecom sector.
- iv. To determine how previous experience in remote supervision influences effective management of staff in Kenya's telecom sector.

1.5 Research questions

This study will be guided by the following research questions:

- i. How does corporate culture influence effective management of staff in Kenya's telecom sector?
- ii. How does trust of employees influence effective management of staff in Kenya's telecom sector?
- iii. How does security of information influence effective management of staff in Kenya's telecom sector?
- iv. How does previous experience in remote supervision influence effective management of staff in Kenya's telecom sector?

1.6 Significance of the Study

This study hopes to provide a wealth of knowledge on Telecommuting that will go a long way in helping telecommunication companies in Kenya to take advantage of the enabling capacity of information and communications technologies and applications in their drive for comprehensive development. The knowledge acquired from this study may be useful to a number of companies that would wish to adopt telecommuting as a work arrangement in Kenya as a whole. To scholars, the study will be an important contribution to the development of knowledge on telecommuting, its challenges on management of remote staff and how best to handle these challenges.

1.7 Delimitation of the Study

This study notes that in order to build on the empirical framework and in terms of theory building a survey of a diverse range of companies and industries would yield more. Despite this, the researcher contemplates that a survey of many companies would be too wide and the research would be constrained on financial and time resources. Therefore, the research will narrow down the research to a single company in the telecommunications industry, Safaricom limited. Nevertheless, the researcher will ensure that a wide range of participants from Safaricom Limited is included in this study.

1.8 Limitation of the Study

The study will involve collecting data from managers who have busy schedules and at times attending meetings away from their work stations. This is expected to be challenging due to the fact that some of them would be away when the researcher needs them. Nevertheless, the researcher will make an effort to get the contacts of the respondents and find out the most appropriate date and time to deliver and collect the questionnaires.

1.9 Assumptions of the Study

This study assumes that the Human Resource (HR) Departments will be willing to give contacts for middle level managers. The study also assumes that all the target respondents will be willing to participate in this research and will give honest answers to the research questions.

1.10 Definition of significant Terms

The following terms were defined in the context of the study.

Telecommuting: In this study, telecommuting was used to mean working from home or a remote location while using electronic connection to a company's main office.

Telecommuter: A person who works from home or a remote location.

Challenges: in this study, challenges mean the constraints which managers face when controlling employees who work from home.

Effective management: This was used to mean coordinating the efforts of people to accomplish desired goals and objectives using available resources efficiently and effectively.

Remote location: A location away from the main office.

Corporate culture: This was used to refer to the shared values, attitudes, standards, and beliefs that characterize members of an organization

Trust of employees: This was used to mean the belief by managers that employees will perform their duties even when working from home.

Information security: In this study, information security was used to mean the practice of defending information from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction.

1.11 Organization of the Study

The study is organized into five chapters. Chapter one, which is the introductory part, contains the background of the study, the statement of the problem, purpose of the study, objectives of the study as well as the research questions. Also included are the significance, justification, limitation, delimitation of the study, definition of key significant terms and organization of the study. In chapter two, literature review is given. Chapter three encompasses the research methodology under which, research design, target population, sampling procedure and sample size selection, research instrument in data collection, validity and reliability of the instrument, data collection procedures and data analysis techniques are discussed. Data analysis, interpretation and presentation were dealt with in chapter four. The summary of the findings of the study, discussion of the findings, conclusion and recommendations made were discussed in chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, a review of the literature on telecommuting is highlighted with a view of providing an informed background in regards to the research objectives. The theoretical framework and conceptual framework of the study have also been highlighted at the end of the chapter.

2.2 Overview of Telecommuting

The term telecommuting was coined by Jack Nilles in the 1970s during the Arab Oil embargo. It was coined in response to the realization that the world's natural fossil-fuels were hardly inexhaustible and energy conservation was a necessary forethought. In this regard measures to conserve energy such as limiting travel to work places were conceived as strategies to mitigate this challenge. Therefore was, individuals involved in the information economy began to develop ways to remotely commute, giving birth to telecommuting (Noorliza and Hasmi, 2006). As the energy crisis waned, focus shifted on the integration of the computer into the workplace. In the late 1970s, the silicon chip became part of a major industrial restructuring which saw cheap personal computers and workstations becoming an integral part of the workplace. With the word processing components, computers increased accuracy and productivity and made it easier for managers to monitor the clerical workforce (Huws, 1991).

In the late 1980s, this social construction of the technology of the workplace saw another transformation as those in professional occupations grasped onto the idea of using the computer as a space-flexible work tool. While many executives were at first shy of being called home workers, telecommuting increasingly became an acceptable behaviour attracting more individuals (Braus, 1993). Today, telecommuting is widely practiced in many organizations in the developed countries such as USA, United Kingdom (UK) and Japan.

2.2.1 Telecommuting in the United States of America (USA)

In America, several states have legislations that permit telecommuting. These states have used the full spectrum of public policy approaches to increase access to telecommuting. In Oregon, a state agency (exercising its discretion) is required to develop policies that allow its employees to telecommute if their job, in relation to the operational and customer needs, allows them to telecommute. Several states are known to not only encourage but also provide positive incentives for the development of telecommuting programs, especially in cases where adoption of telecommuting leads to cost savings or other efficiencies (Workplace Flexibility, 2010).

In Dakota, for example, a program was implemented ensuring a state agency received 10% of any cost savings accrued as result of implementing a telecommuting program for up to a maximum of Usd 2,000 (Workplace Flexibility, 2010). Montana in 2005 enacted a law allowing state agencies to authorize telecommuting for specified employees in cases where doing so was in the state's best interest as determined and documented by the agency. It also required the state Department of Administration to adopt policies to encourage agencies to authorize telecommuting and to provide for the uniform implementation of telecommuting agencies (Montana Laws, 2005). Several states require the development of telecommuting polices by the state agencies. One state reimburses the entire cost of telecommuting connectivity for state employees (Workplace Flexibility, 2010).

Adoption of telecommuting in the federal states can be traced back to 1990 when the Office of Personnel Management (OPM), working in partnership with the General Services Administration (GSA), initiated the Federal Flexible Workplace Pilot Project. The aim of this project was to assess the benefits and challenges of allowing employees to work outside their government office base (termed as “flexiplace”). The rationale behind this project was in order for the government to improve on the retention and recruitment of employees while at the same time increasing productivity and reducing the expanding needs for office space (U.S. General Accounting Office, 1997). In 1994 a Presidential Memorandum directed executive agencies to ensure that they established a program for encouraging and supporting the expansion of flexible

family-friendly work arrangements. This was to include both telecommuting and satellite work locations. The memorandum encouraged agency heads to; identify positions suitable for flexible work arrangements, adopt relevant employment policies, provide training to support employees' use of those arrangements, identify barriers to implementation, and recommend solutions to the President. In 1996, a follow up Presidential Memorandum reemphasized the utilization of telecommuting as a means to create family-friendly work arrangements. The President, Bill Clinton, directed government agencies to report on the results of a review of their policies within 120 days of issuance of the memorandum (Workplace Flexibility, 2010). In contrast to the public sector; there exist very few federal laws that provide access to telecommuting for private sector employees. The laws that exist on telecommuting in private sector generally target specific populations such as federal contractors, people with disabilities, and those with religious needs. The Omnibus Consolidated Appropriations Act of 1997 authorizes the General Services Administration (GSA) to create telecommuting centres that can be used by private sector employees (Workplace Flexibility, 2010).

Application of telecommuting in America was best seen in 1996 during the Summer Olympics. Employers, who were fearful that their workers would not be able to reach to the office, ended up setting telecommuting programs. With the adoption of telecommuting, Atlanta's Roads were less crowded, stress from driving was eased and traffic pollution was reduced (CNN, 1996). According to the US Bureau of National Affairs, the tragedy of September 11, 2001, brought the need for America to boost telecommuting. The tragedy exposed the risk that comes with all employees working from offices located in a single building. As a result the risk of terrorism forced many organizations to let their workers telecommute in order to eliminate the risk that companies could face when all employees work from a single office building. As a result, the percentages of organizations and workers that adopted telecommuting increased tremendously after the September 11 attack (Bureau of National Affairs, 2005).

2.2.2 Sun Microsystems' Telecommuting Environment

Sun Microsystems' Inc. is a global leader in enabling a flexible, mobile 21st century workforce. The company's has an Open Work platform that provides the tools and technologies that allow employees the freedom to work wherever they want or need (at home, at a flexible office, or in a coffee shop near a customer's office). Employees are part of a network-centric workforce where

employees telecommute, anytime using appropriate devices. This work platform encompasses an integrated suite of technologies, workplaces, and organizational practices that supports an increasingly distributed employee population. Open Work is ingrained into Sun's corporate culture, allowing employees to work from anywhere they need in order to expand collaboration and build stronger relationships and communities within Sun and with partners and customers. In September 2008, an estimated 19,000 employees (over 56% of the workforce) were telecommuting at least one or two days a week (Sun Microsystems, Inc., 2009).

According to Sun Microsystems, Inc. (2009), the concept of telecommuting in the organization was borne from the realization that the Open Work platform would provide many benefits to the company, communities, and employees. The biggest savings accrued by the organization on adoption of telecommuting were those resulting from reduced commuting. Reduced commuting helped employees and the organization to save on fuel. As a result Sun's U.S. employees reduce their carbon dioxide (CO₂) production by 52,000 metric tons each year. The savings from reduced commuting was 50 to 100 times the amount of energy used a non-telecommuter. Telecommuting at the Sun Microsystems, Inc. results in environmental and financial savings. It also gives the employees benefit from connecting to work instead of going to work (Sun Microsystems, Inc., 2009).

2.2.3 Telecommuting in Africa

In Africa telecommuting has been hampered by technological advances. In most African countries, for example Kenya and South Africa (SA), electronic exclusion or digital divide against the poor (measured in terms of Internet access; ownership and access to computers) is common (Gillwald and Stork, 2008). Africa is known to exhibit a high digital divide in terms of ICT. This is exacerbated by the fact that the Internet and other ICT infrastructure such as fixed land-line telephones are not widespread in Africa. Within the continent, the mobile phones are the most common viable ICT accessible to the majority of the poor population and are not sufficient tools for telecommuting (Chepken, 2012).

2.3 Challenges facing effective management of telecommuting staff

This section will look at the challenges affecting effective management of telecommuters.

2.3.1 Corporate culture and effective management of telecommuting staff

A telework program challenges management traditions, as it fundamentally changes how a manager should think about supervising employees. With teleworkers, managers should evaluate an employee's performance by results, not by physical presence. Effective management of virtual teams and including these teams as part of the greater organisation requires that the larger organisational culture be developed and maintained within virtual teams (Curseu et al., 2008). Establishing norms and values that form common ground within the virtual team creates greater cohesion and effectiveness from the team (Curseu et al., 2008). Simple norms for processes should be established and developed by managers to create the desired culture within the virtual team, which directs members to perform in a consistent manner (Horwitz et al., 2006). A bureaucratic culture with extensive rules and regulations is well suited to telecommuting arrangements (Monroe, 2006).

Panteli (2004) state that even with globally dispersed virtual team members, face-to-face meetings are necessary to build relationships and trust and to retain team members. According to Mann et al. (2000), virtual workers cannot be left in total isolation and need to remain part of the greater organisation and have the sense of belonging within a team in order to create successful virtual teams and to retain members. Nandhakumar (2006) also state that occasional face-to-face meetings will resolve many of the misunderstandings that can occur with virtual communication and will aid in effective, long-term virtual communication through the creation of social connections between members. This aspect of virtual working is only applicable to pure virtual workers, as telecommuters would not be faced with the same issues of being separated from team members for long periods due to the nature of teleworking arrangements, where teleworkers, by definition, work from the office at least once a week, maintaining the social connection.

Team building initiatives and social functions appear to be even more vital in pure virtual organisations than in the traditional organisational structure as social connections are minimal and understanding of team members through direct communication is limited (Kowalski & Swanson, 2005). These two factors are critical to the ongoing success of the virtual team. Patrickson (2002) states that telework can be seen as either liberating or enslaving, depending on how the virtual experience takes place for different individuals. Managers need to be aware of this possibility and ensure that the right conditions are put in place and understood, with the correct training, to make the virtual experience as positive as possible for employees according to Ahmadi et al. (2000). The authors also state that mentoring of teleworkers by management is essential to their productivity. Virtual team leaders need to lead by example with the culture and norms that they seek to establish within virtual teams (O'Brien & Hayden, 2007). Leaders need to identify and deal with conflict and the beginnings of conflict before it becomes a negative element within the team, reducing overall effectiveness and reducing teamwork (Curseu et al., 2008). Virtual teams need to develop internal cohesion and alignment of values, but need to also form part of the greater organisation and fit in with its culture and values in order to be aligned (Horwitz et al., 2006).

Porter and Kakabadse (2006) highlight the addiction to technology and work that can develop in virtual working teams and how employees can end up checking emails 24 hours a day and monitoring business processes constantly. Managers need to be aware of employees who are susceptible to overworking themselves, who will ultimately burn themselves out and will no longer form an effective part of the virtual team (Porter & Kakabadse, 2005). Managers need to create a culture within virtual teams that balances hard work and life. Tietze and Musson (2003) state that even though traditionally there are questions and debate around the association of commitment to the employer and the number of long hours worked, culturally workers still feel the need to demonstrate commitment through working longer hours and can be particularly vulnerable to this in a virtual environment.

Jackson et al. (2006) state that improved performance from employees in virtual settings can be attributed to higher levels of commitment through strong organisational culture. Culture cannot be ignored when developing virtual teams, having a strong, positive corporate culture is noted as a critical component to the transition to virtual working, with a culture change identified as a

way to improve work effectiveness within the organisation (Jackson et al., 2006). The sense of belonging and pride that workers experience as part of a large organisation is difficult to retain in the long term with virtual workers. Managers need to focus on developing and maintaining these cultural elements to ensure success and to retain employees (Jackson, 2006). The strength of organisational identification and association is critical to the successful management of virtual workers and understanding the employee's need for affiliation and social support is key, influenced by the culture of the organisation (Wiesenfeld 2001). Akkirman and Harris (2005) state that the successful implementation of virtual teams in an organisation may result from the specialised and on-going training that this group receives due to the nature of the team. The authors also note that success of virtual teams may result from the special attention and focus given by management to the development and success of the team and better design of the virtual office with modern techniques, technology and understanding. Success of virtual teams may not be as a result of a superior culture or communication within the organisation alone (Akkirman & Harris, 2005). Conner (2003) highlights, as a possible obstacle, the lack of referent to others that exist for a virtual worker to benchmark or compare his/her performance and progress against. This can result in weaker performance because of not being exposed to positive peer pressure, as well as increased feelings of isolation for virtual workers. A strong organisational culture, retaining and including virtual workers as part of that culture, will assist in reducing these feelings. While virtual working arrangements may physically remove employees from the organisation, processes to retain and include these virtual workers in the culture of the organisation need to be established and maintained in order to achieve long-term success. Management must be aware of these factors and not leave organisational culture in virtual arrangements to deteriorate or disappear altogether, resulting in the breakdown of the virtual teams.

2.3.2 Trust and effective management of telecommuting staff

In a telecommuting environment, the traditional face-to-face management is done away with and thus the control of the workforce is different. The management therefore has to deal with the issue of whether their employees will work without supervision. Therefore, in a telecommuting environment the management of the workforce includes setting goals, assessing progress, giving regular feedback, and managing by results. In telecommuting worker performance is not measured on the hours worked but on results and the attainment of established goals, because

those are the only issues which can be objectively measured in any event (Cooper *et al.*, 2002). One of the key characteristics of successful remote team management is a strong sense of shared trust between managers and employees. In essence, managers of virtual teams must trust that team members will prioritize action items effectively, Follow through on daily activities required to meet long term goals, Share information with one another, remain motivated to reach the finish line and raise concerns as they develop.

Building on this trust is based on three common elements which includes; past experience with that employee, shared goals with the employees and confidence in the employee's skill and ability (PI Worldwide, 2012). Huws (1993) identifies three different management styles that are being practiced by successful telecommuting managers. The "at hands reach" approach (where the work of employees is closely and frequently monitored) appears to be effective when telecommuters possess minimal qualifications and are remunerated on a piecemeal basis. In the "collaboration" style, targets are mutually agreed between teleworkers and managers. In this approach, managers frequently meet teleworkers and supplemental team meetings are often scheduled. This style is especially well suited for permanent employees with whom managers have a close relationship and extensive communications. The "relationship of trust" style (*a laissez-faire approach*) generally applies to self-managed senior professionals that have contractual employment arrangements or work autonomously, are often paid on an hourly basis.

Notwithstanding the approach favoured, telecommuting requires well-structured and constant communications between the telecommuter and the manager. In the survey conducted by Guimaraes and Dallow (1999), telecommuters identified the "ability to communicate well with others" as one of the most important manager characteristic. In a study on the relationship between 103 telecommuters and their managers, Reinsch (1997) found that established relationships began to deteriorate after about seven months into the project. The author suggests that, during the first few months, a strong sensitivity exists towards telecommuters because of the newness of the arrangement, but that negative consequences emerge after the initial excitement fades. Because the telecommuter is no longer expected to adhere to regular office hours, managers should be more easily accessible; moreover, it becomes essential to adequately plan meetings, communications, and the exchange of documents (Mahfood, 1992). Hartman et al.'s, (1991) study of 97 telecommuters indicates that adequate communications and technical/emotional support was significantly and positively correlated to their satisfaction with

telecommuting. To help foster trust and rapport, virtual team leaders must focus on relationship building, demonstrate excellent communication skills (including the ability to provide frequent feedback), and have emotional intelligence. Because decision-making can be a challenge, particularly early in a virtual team's partnership, virtual team leaders must also have a track record of producing results and a focus on process (Lockwood, 2010).

2.3.3 Information security and effective management of telecommuting staff

Another risk associated with telecommuting is technological security risks. Protecting the privacy and integrity of company data and networks should be high priority when employees are working outside the office. Even if remote workers are no less vigilant than their on-site counterparts, security remains a major technical issue for organisations using remote workers. Remote workers are more likely to use their computer for non-work related activities, which may expose them to unsafe applications, viruses, and other security threats. Organisations must ensure that their security policies are up-to-date and cover remote working. A company should always have a detailed acceptable user policy (AUP) regarding the use of computers, company data and online media. Employees need to sign an AUP, the policy should be updated annually, or whenever organizations implement new technology or new ways of using technology.

Using Virtual private network (VPN) is the safest way to protect important data that transmits in both directions. The reason for use of VPN is that a lot of telecommuters tend to use free Wi-Fi in coffee shops, airports and other places that put data at risk from device to the wireless access point. (Anne and Gabriele, 2004).

Access control, encryption and the integrity of digital data flows, as well as efficient firewalls and anti-virus software are crucial today, but as long as discreet documents are filed in paper form or invaluable materials and equipment (such as USB flash drives containing confidential information) are being handled, traditional control systems and precautions should remain in place. Even in the case of digital security, the most common problems are often surprisingly mundane and essentially human in origin. The careless use of passwords, for example, can compromise any security system.

Although research on data security in relation to telework remains scarce, empirical evidence suggests that especially small firms lack expertise and resources to combat security risks (Clear, 2007). In individual cases, this has led management to forbid telework altogether (Pyo-ria,

2003). As a necessary minimum, an organization should develop and maintain an appropriate data-security policy if it aspires to advance telework.

2.3.4 Previous experience in remote supervision and effective management of telecommuting staff

Previous first-hand experience with telecommuting is an important asset for a manager. It provides familiarity with the different facets of telecommuting and enables managers to better respond to the expectations of telecommuting employees (Haddon and Lewis, 1994). In a telecommuting environment managers' may experience the feeling of losing direct control over employees (Huws, 1984; Kinsman, 1987; Olson, 1987a). Nevertheless, managers can use alternative strategies in order to compensate for this loss. These practices include such measures as control by electronic means (e.g., verification of access time and consulted files; Olson, 1985), increased control by the use of formal and rigorous specifications (e.g., targets, detailed procedures and formalization; Huws, 1984; Kinsman, 1987), and finally, market control mechanisms (e.g., lump-sum payment based on results or on a piecemeal basis; Haddon and Lewis, 1994). Guthrie and Pick (1998) reported the attitudes of 134 professionals in the Los Angeles area regarding what represented ethical behaviours when managing telecommuters. Results showed that keeping logs of telecommuters' connect time and performing telephone spot checks were not perceived as being unethical control measures. Davenport and Pearlson (1998) suggest that customer satisfaction levels may be used as a means for evaluating certain telecommuters because one may consider it as indicative of the virtual worker's performance.

Alternatively, managers can reduce reliance on control mechanisms and adopt a more appropriate results-oriented approach. When managers use goals and quotas, they should be reasonable and attainable, but nevertheless, challenging for the telecommuter (Davenport 1998) suggest defining 'milestones' in order to clearly establish what is expected on what date. Companies usually set the same standards for both telecommuters and office workers although some companies do expect higher performance from telecommuters (Fitzer, 1997).

2.4 Factors that Augment Telecommuting

The current global business environment is characterized by an increasing scarcity of human and material resources as well as an increase in competition from existing and new global and local players. Such demands call on organizations to be flexible in order address competition effectively and gain a competitive advantage (Baard and Thomas, 2010). According to Conner (2003), telecommuting through virtual working arrangements herald organizations to locate many business activities in low-wage countries, creating economies of scale for global operations and reducing input costs.

Knight and Westbrook (1999) stresses on organizational structures that allow for hiring and retention of qualified workers, which often means dipping into a labour pool that requires greater flexibility, such as working parents and people with limited mobility. The need to attract new and competent employees, especially those who need flexibility, have in the recent past been motivating multinational companies to give an allowance for telecommuting. This is because telecommuting is known to increase retention rates, reduces sick time and absenteeism while at the same time increasing productivity and increasing job satisfaction.

According to Makimoto and Manners (1997), convergence between information and communication technologies is a major contributor of telecommuting. Convergence is heralded by the emergence of an integrated broadband system relying on ICT. Convergence is seen as the technological component influencing the growth of telecommuting as it offers cheaper, faster and lighter portable information and communication technology (ICT) year by year. This has seen many workers long for the ultimate portable technology. With the advancement of communications and information technology (ICT), the ability to log on the company's network with ease from any location as well as the availability of devices like notebook computers, smart mobile phones, and handheld devices has given rise to a trend of mobile computing and telecommuting (Makimoto and Manners, 1997).

The deregulation/reregulation of telecommunication and media industries in most western countries in the last few decades is also an important augments of telecommuting. This has seen the emergence of new organizational trends in order to cope with changing times and emerging

technologies. Symptomatically mobile telecommuters are most commonly found in sales and services functions, as well as in consultancy firms. According to Grint and Woolgar (1997), technological determinism portrays technology as an exogenous and autonomous development which coerces and determines social and economic organizations and relationships. Multinationals with huge workforces also have deep pockets with which to implant systems and procedures for teleworking.

2.5 Advantages and Disadvantages of Telecommuting

In the quarter century since Nilles first coined the term 'telecommuting' (Nilles, 1975), the practice of telecommuting, or alternatively telework, has been heralded as a cure for a variety of organizational and social ills. It has been lauded as a strategy to help organizations decrease real estate costs and respond to employees' needs for a healthy work-family balance. In the developed countries, telecommuting is promoted as a way to reduce air pollution and traffic congestion. Telecommuting can be a strategic option for addressing ever rising problems associated with office space, traffic jams, environmental pollution, flexibility, productivity, work-related stress in developing countries (Nyaanga, 2013). According to Nyaanga (2013), telecommuting has the potential of transforming organizations into viable competing entities given the global nature of the marketplace. Telecommuting is known to have some positive outcomes such as improved productivity, organizational loyalty and belonging, job satisfaction, and employee retention (Bailey and Kurland, 2002). Based on the Western studies, telecommuting does improve quality of life and makes the work force more efficient, cuts on costs and even helps protect the environment (CNN, 1996). In the Nordic countries telecommuting is a means of providing employment opportunities in rural and remote areas. In the United States and the Netherlands it used as an environmental tool, by reducing traffic congestion and pollution in the rush hours (Johannessen, 2001).

Lupton and Haynes (2000) note that distinction between formal and informal telecommuting is an issue. In instances where telecommuting is perceived by the management as being informal, it is commonly accepted and used as a temporary means of providing flexibility. However, this opens measurement problems as the management is faced with challenge of determining the amount of people working in this manner and the extent of telecommuting. Management is also faced with a problem of effectiveness and efficiency of informal telecommuting.

According to Murray and Conford (1997), failure to gain the support of the management can lead telecommuting not to realize its full potential. In informal telecommuting, organizations are not able to utilize space related benefits and without a necessary level of network support, employees may be unavailable to others (including clients, customers, other employees and wider stakeholders). There can also be significant negative consequences for the involved telecommuters as inadequate training, planning of work schedules and office set-up can create safety and health issues. Management resistance to allowing formalized telecommuting can facilitate sub-standard forms of telecommuting (Lupton and Haynes, 2000).

Numerous factors constitute key obstacles to telecommuting which may limit the degree to which organizations and employees actually adopt telecommuting. An oft-cited obstacle is employee isolation. Isolation of telecommuters can manifest itself professionally or socially. Professionally, employees fear that being off-site and out-of-sight will limit opportunities for promotions and organizational rewards. Socially, employees comment that they miss the informal interaction they garner by being around colleagues and friends. The greatest impact on isolation appears to be telecommuting frequency. If people do not telecommute a lot, they will not be isolated. Yet, in study after study, respondents cite isolation as a reason why they do not want to telecommute frequently. The fear of isolation may limit telecommuting frequency rather than telecommuting infrequency limiting isolation. (Baruch & Nicholson, 1997).

Based on literature by Pinsonneault and Boisvert (2001), the positive and negative impacts of telecommuting for organizations can be seen in table 2.1 below:

Table 2.1: Potential Impact of Telecommuting on Organizations

Positive Impacts	Negative Impacts
Lower absenteeism	Increased absence of best employees from the central office
Increased feelings of belonging with the organization	Loss of synergy in the organization
Increase in loyalty and improved morale	Difficulty managing remote workers leading to manager's dissatisfaction
Increased ability to retain employees and attract new ones	Increased data security concerns
Increased productivity	Difficulty in objective evaluation of financial benefits of telecommuting
Decrease in real-estate costs and overcrowding	_____
Quicker responsiveness to customer needs and unexpected human-made and natural disasters	_____
Increased organizational flexibility	_____

Source: Adapted from Pinsonneault and Boisvert (2001)

Similarly, Table 1.2 summarizes the positive and negative impacts of telecommuting on individual telecommuters.

Table 2.2: Potential Impacts of Telecommuting on Individuals

Positive Impacts	Negative Impacts
Increased job satisfaction	Feeling of isolation
Elimination/ reduction of commute time	Reduction in chances for promotion
Reduction in work-related expenses	Tendency to overwork
Flexibility in the organization of work hours and leisure activities	Potential decrease in frequency of intra-organizational communication
Greater sense of autonomy and self-empowerment	_____
Better balance of competing work/family demands	_____
Increase in productivity	_____
Ability to get more/quality work done	_____

Source: Pinsonneault and Boisvert, (2001)

2.6 Implementing Telecommuting arrangements in Organizations

There is need for a gradual transition for organizations seeking to adopt telecommuting as a work option. The management and employee also need to be in support of any telecommuting arrangements. This is because adoption of telecommuting calls for transformation of large parts of the existing organizational structure, most of which takes time to develop and document and also requires new human resource approaches (Lardi-Nadarajan, 2008; Heneman and Greenberger, 2002).

According to Baard and Thomas (2010), there are no clear guidelines for the implementation of telecommuting. Nevertheless, there are areas that need to be considered for telecommuting

arrangements to be successful (Kowalski and Swanson, 2005). There is need of support from all areas of management, especially encouragement to the employees by their direct supervisors. Technological support and provision of the necessary tools along with appropriate training is also vital for telecommuting to be a successful arrangement as it requires sound communication and trust across all levels and all relationships in an organization.

According to Horwitz, Bravington and Silvis (2006), managers or supervisors who exhibit a great desire to control people are unlikely to succeed as managers of employees in a telecommuting environment. As such managers or supervisors in a telecommuting environment are required to relinquishing control over employees and afford them more freedom. The manager's role should be more of mentorship and that of an evaluator of daily performance. Unlike in traditional settings, managers of telecommuters have to provide employees with greater support and positive feedback. In a telecommuting environment, the management's focus should not be on measuring process but on output (Stanford, 2003). This calls for clear work arrangement and a careful balance between virtual and face-to-face meetings which are crucial for strengthening interpersonal relationship between virtual employees and the management (Baard and Thomas, 2010).

Implementation of telecommuting arrangements involves many organizational changes such as; operational changes, mode of communication and functions of employees. These changes need to be clearly understood and planned for prior to the introduction of a telecommuting environment in order to ensure that the resistance to change does not prevent its successful implementation (Diefenbach, 2007). The success of telecommuting in any organization also depends on the willingness and readiness of the organization and its employees to accept change. Establishing and preparing all the members of the organization should precede implementation of telecommuting in order for positive results to be realized. The change needs to be managed in terms of both the telecommuters and non-telecommuters (Baard and Thomas, 2010).

2.7 Theoretical Framework

This study is based on Stacy Adams Equity Theory, according to this theory motivation depends on the way employees evaluate their treatment by an organization, relative to its treatment of other workers.

Managers can use several strategies to improve employee satisfaction and motivation. The principle of reinforcement or behaviour modification theory proposes that rewards and punishments can control behaviour. Management by objectives, participative management, and empowerment can improve human relations by increasing the level of employee commitment and involvement in the organizational team. Job enrichment, job redesign, and modified work schedules can build job satisfaction by adding motivation factors to jobs in which they are normally lacking. Effective managerial leadership is a key contributor to employee satisfaction and motivation. Autocratic managers typically issue orders that they expect employees to obey. Democratic managers generally seek subordinates' input into decisions. Free-rein managers more often advise than make actual decisions. The contingency approach to leadership suggests that managers should assess each situation individually and exercise a leadership style based on the elements of the situation

2.8 Conceptual framework

The conceptual framework below describes how main variables in this research study are related.

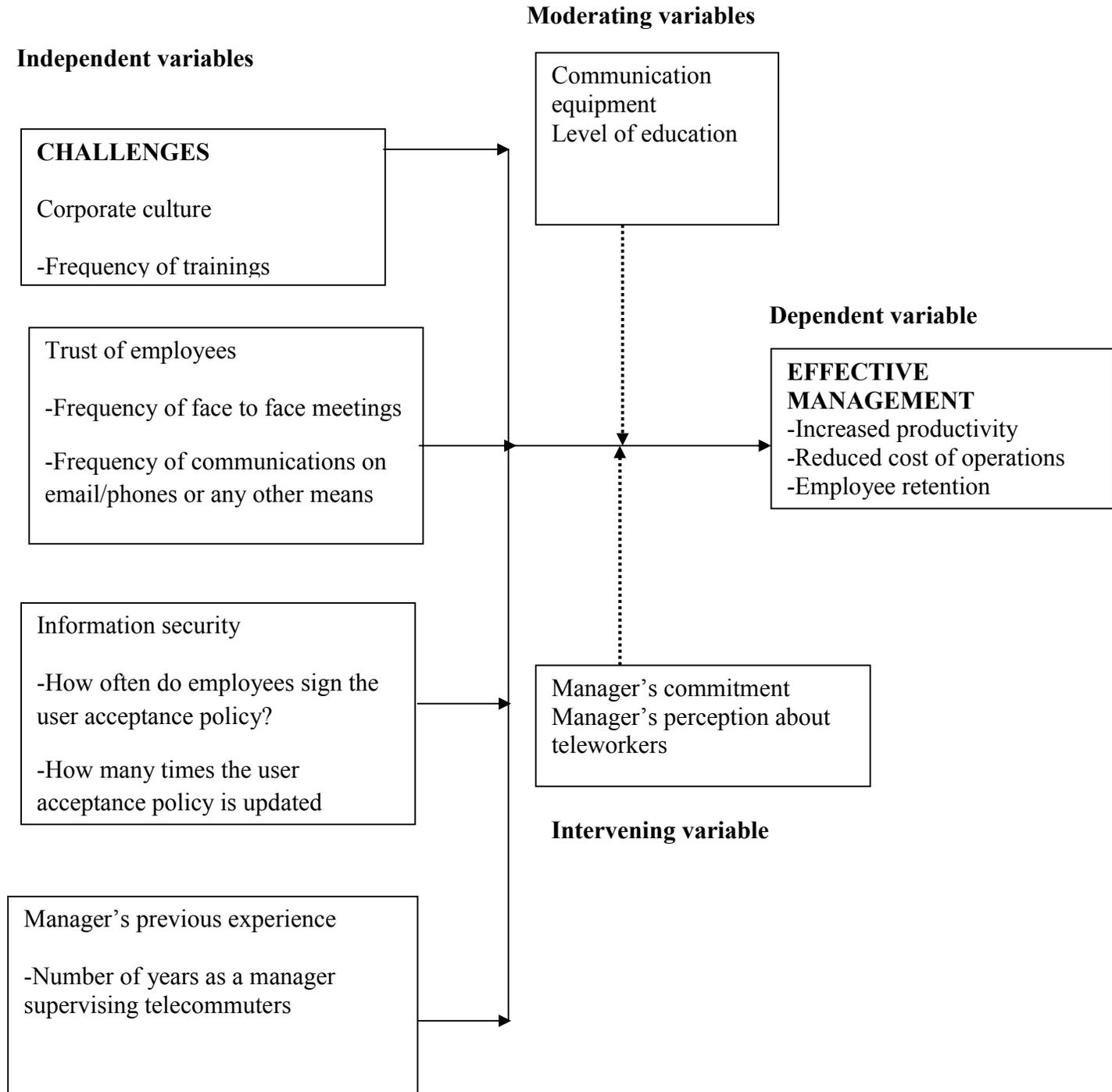


Figure 1: Conceptual frame work

Source: Researcher (2014)

2.9 Summary of the literature review

Implementing an effective telecommuting policy requires supervisors to understand how their decisions will affect both in-office and remote employees. The most successful managers take a similar approach to monitoring the workflows of the two groups and create a feeling of equity between them. Supervisors must stay in frequent contact with their telecommuting employees to make them feel they are a part of the office culture. When assigning work, the manager needs to clearly define the roles and responsibilities of each team member.

A remote manager should have the ability to develop trusting relationships across cultures, time zones, and different geographic areas. Additionally to manage a telecommuting team effectively, companies should provide the basic hardware, software and communication tools that people need to complete their job. Being a relatively new work arrangement in Kenya, few studies have been done in relation to telecommuting and productivity as well as managing telecommuters. Although it's possible to measure performance of telecommuters based on output it is difficult to monitor the number of hours put to work related issues, thus there is room for further studies on how to effectively monitor how many hours a telecommuter puts to work as opposed to engaging in non-work related issues.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter was composed of the research methodology. It discusses the research design that was adopted in the study giving justification for the adopted approaches. The sample and sampling procedure, the data collection instruments, the validity and reliability of the research instruments and the method of data collection and analysis are also discussed in this in chapter.

3.2 Research Design

The research design adopted in this study was descriptive survey. Descriptive survey studies are concerned primarily with determining “what is” (Mutai, 2000). Therefore, descriptive survey in education while simple in design and execution can yield important information about a phenomenon. Surveys are excellent vehicles for collecting original data for the purpose of studying the attitudes and orientations of a population. Descriptive survey design is the most appropriate when the purpose of the study is to create a detailed description of a phenomenon (Cohen & Manion, 1987; Gall, Borg & Gall, 1996; Wiersma & Jurs, 2005).

In this study quantitative data was gathered through close-ended questions in semi-structured questionnaires while qualitative data was gathered through open ended questions in questionnaires.

3.3 Target Population

The target population for the study was 61 managers. The study targeted Safaricom’s middle level and senior managers. Safaricom has 51 middle level managers 10 senior managers who will form the target population for the study. .For logistical purposes; the study was carried out at the company’s corporate offices in Nairobi.

3.4 Sample size determination and sampling procedure

It is not necessary to study the entire population in order to provide an accurate and reliable description of the characteristics. In most cases, studying a sample is sufficient (Mugenda &

Mugenda, 1999). However in view of the target population, it is more appropriate to treat the population as a study group. According to Kothari (2008), when the universe is a small one, it is no use resorting to a sample survey. The population for this study consisted of only 51 middle level managers, thus eliminating the need for a sample survey. Questionnaires were administered to the 51 middle level managers. The study focussed on the 10 senior managers who were interviewed by the researcher herself.

3.5 Data Collection Instruments

The research adopted a questionnaire and interview guide as the instruments for data collection. Questionnaires were used to collect data from the middle level managers while interview guide was used to collect data from senior managers. As stated by Orodho (2009) a questionnaire has a diverse number of merits upon which a researcher may opt to use it as an instrument to collect data. The reason the researcher will use questionnaires in this study is because questionnaires are more efficient because they require less time and are less expensive. The questionnaires were divided into five sections, the first giving the demographic information of respondents while the other four were structured in line with the research objectives. The questionnaires were semi-structured questionnaires and contained both open ended and closed questions. Questionnaires were hand-delivered to the respondents and collected from them at an agreed date.

The interview schedule was used to obtain the necessary data from senior managers for this study. Through it broad questions were asked regarding the objectives of the study. They were semi-structured, allowing the researcher to ask open-ended questions in order to gain valuable information on key informant's perspectives of events and issues. The use of this instrument allowed the researcher the freedom to determine what further questions to ask in order to obtain the required information (Wimmer and Dominick, 2003). The research interviews were expected to yield a high response rate in the survey and also allow the researcher to clarify ambiguous answers and where appropriate, seek follow-up information. Their shortcoming is that they are time consuming and expensive.

3.6 Instrument Validity

According to Mayer (2004), validity refers to the ability of a research instrument being able to measure what it purports or is supposed to be measuring. Validation of the research instrument was done by use of content validity. This type of validity addresses how well the items developed to operationalize a construct provide an adequate and representative sample of all the items that might measure the construct of interest. This was addressed when writing the questionnaires and the judgment of experts in this field such as human resources officers and my supervisor was involved to enhance this. In order to measure what the study is intended to, relevant questions to the area of study were constructed. The questions were re-examined to ensure that they are not ambiguous, confusing, or potentially offensive to the respondents leading to biased responses.

3.7 Instrument Reliability

According to Orodho (2003) reliability of the measurements concerns the degree to which a particular measuring procedure gives similar results over a number of repeated trials. In this research, Cronbach alpha method was used to affirm the reliability of the instrument. This method was found practical in that it did not require two administrations of the same or an alternative form test. The questionnaire was found to be reliable with a reliability index of 82.5% as indicated in table.

Table 3.1 Reliability test index

Cronbach's Alpha	Cronbach's Alpha	Based on
	Standardized Items	N of Items
78.3%	82.5%	4

Table 3.1 shows a reliability index of 82.5%. This indicates a high level of consistency of the results obtained. Since the items used in the scale were on different metrics, we report the Alpha based on standardized items.

The primary purpose of Cronbach's alpha is to provide an indicator of the internal reliability or consistency of items in a multiple item scale or index

3.8 Data Collection Methods

The researcher first obtained an introduction letter from the university approving collection of data and conducting the study, this was used as an introduction to the respondents. A research permit to conduct the study was obtained from the National Council of Science and Technology (NCST) in order to conduct research in Kenya. The corporate offices of the Safaricom were visited and permission for research was sought from the relevant offices. The researcher used members of the human resource departments to facilitate introduction into the respective managers. The managers were then contacted and requested to participate in this study. In order not to interfere with the work schedule of the managers, the questionnaires were self-administered and arrangements were made on modalities of collection of the questionnaires.

3.9 Data Analysis Techniques

Data analysis involves scrutinizing the acquired information and making inferences. The method used in data analysis is influenced by whether the research data is qualitative or quantitative. It also refers to the interpretation of the collected raw data into useful information (Kombo and Tromp, 2006). Data will be analyzed through organizing responses in the themes as per the objectives of the study. Descriptive statistics were used to show the trend between the variables which helped the researcher understand and interpret the study. Frequencies and tables were used to describe, organize and summarize the collected data.

Finally the researcher used the software package for social sciences (SPSS) to analyze data.

3.10 Ethical Considerations

The respondents in the study were offered a detailed explanation about the study so that they can participate voluntarily after full disclosure. Additionally, utmost confidentiality of the respondents and their responses were safeguarded. In addition, the information obtained from the respondents won't be used for other purposes other than drawing the conclusion of this study.

3.11 Operational Definition of Variables

Table 3.2 Operational Definition of Variables

Objective	Variable	Indicator	Data collection method	Type of Analysis
To determine how corporate culture influences effective management of telecommuting employees	Independent variable Corporate culture	-Frequency of trainings -Team building activities	Questionnaire Interview guide	Descriptive statistics
To establish how trust of employees influences effective management of telecommuting staff.	Independent variable Employee trust	-Frequency of face to face meetings. -Frequency of communication- email or on phone	Questionnaire Interview guide	Descriptive statistics
To determine how security of information influences effective management of telecommuting employees.	Independent variable Information security	Number of times the company's user acceptance policy is updated	Questionnaire Interview guide	Descriptive statistics

<p>To determine how previous experience in remote supervision influences effective management of remote workers</p>	<p>Independent variable Previous experience in remote supervision</p>	<p>Number of years as a manager</p>	<p>Questionnaire Interview guide</p>	<p>Descriptive statistics</p>
	<p>Dependent variable Effective management</p>	<p>-Reduced real-estate cost -Increased productivity -Increased employee retention</p>	<p>Questionnaire Interview guide</p>	<p>Descriptive statistics</p>

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND PRESENTATION

4.1 Introduction

The study investigated challenges of telecommuting on effective management of staff in the Kenya's telecom sector, a case study of Safaricom Limited. The first section establishes the influence of corporate culture on the effective management of staff. The second section investigates the influence of trust of employees on the effective management of staff. Third section establishes how security of information influences the effective management of staff in Kenya's telecom sector. Fourth section establishes how previous experience in remote supervisions influence effective management of staff in Kenya's telecom sector.

The data was gathered exclusively from questionnaires as the research instrument. The questionnaires were designed in line with objectives of the study. To enhance quality, the collected data from all the respondents, was analysed using the Statistical Package for Social Sciences (SPSS) version 17 for Windows. Results are presented in this section using Descriptive statistics.

The following were the research guiding objectives;

- i. To determine how corporate culture influences effective management of staff in Kenya's telecom sector.
- ii. To establish how trust of employees influences effective management of staff in Kenya's telecom sector.
- iii. To determine how security of information influences effective management of staff in Kenya's telecom sector.
- iv. To determine how previous experience in remote supervision influences effective management of stall in Kenya's telecom sector.

The analysed research findings were presented in frequency tables and percentages.

4.1.1 Response rate

Table 4.1 Response rate

Respondents	Sample	Response	Rate
Middle level managers	51	48	94.1%
Senior managers	10	7	70%
Total	61	55	85.9%

The response rate achieved for the questionnaire was 85.9% as shown in the table above. This response rate was quite commendable and was made a reality by the fact that the researcher administered the questionnaires by herself to the students. This was valid and reliable representation of the targeted population hence adequate for the study analysis.

4.2 Demographic characteristics of respondents

The study sought to find the demographic characteristics of the respondents in order to understand the population dynamics. The findings are presented in the table below.

Table 4.2 Age and Gender factors of the respondents (Middle level Managers)

Factor	Variable	Frequency	Percentage
Gender	Male	30	65.2%%
	Female	16	34.8%
Age	18-27 years	4	8.7%
	28-37 years	40	87%
	38-47 years	2	4.3%

Table 4.2 shows the gender and age factors of the middle level managers. 65.25% of the respondents were male while 34.85 were female.

Most of the respondents were between 28-37 years as represented by 87% response shown in the above table. 8.7% had between 18-27 years while only 4.3% were between 38-47 years old. This depicts that Safaricom has a more youthful middle level management. The respondents worked in different departments including Customer care department, financial services, marketing,

MPESA product development and technical. Their positions included business analysts, call centre managers, agent support managers, customer education managers, project managers, Mpesa administrators and operations managers among others.

4.3 Corporate culture

The corporate culture of an organization is likely to be influenced by the introduction of telecommuting given the importance of interactions between employees and their managers in ensuring smooth running of activities within the organization. Team work plays a major role towards achieving organizations' goals and objectives.

The study sought to find the challenge of telecommuting on the corporate culture. The middle level managers were therefore asked to share on whether shared understanding shared goals, commitment from top management, national backgrounds and culture and organization values help or hinder virtual team performance. The following are the findings as tabulated below.

Table 4.3 Shows Shared understanding and goals and top management commitment to Telecommuting

Factor	Neutral		Helps	
	Freq	%	Freq	%
Shared understanding	16	34.8%	30	65.2%
Shared goals	18	39.1%	28	60.9%
Top management commitment to telecommuting implementation	11	23.9%	35	76.1%

Table 4.3 shows that 30 (65.2%) of the respondents indicated that shared understanding really helps towards virtual team performance. The rest, 16 (34.8%) were neutral on this. On the shared goals, 28 (60.9%) indicated that it greatly helps while 18 (39.1%) were neutral. The top management commitment to implementing telecommuting helps a lot as specified by 35 (76.1%) of the respondents while the remaining 11 (23.9%) were not neutral on this. The other measures were done on shared organizational values, team building and national backgrounds and the results presented in Table 4.4 below.

Table 4.4 Other corporate culture factors influencing management of staff in Safaricom

Factor	Neutral		Helps	
	Freq	%	Freq	%
Different national backgrounds and culture	42	91.3%	4	8.7%
Shared organizational values	20	43.5%	26	56.5%
Team building	7	15.2%	39	84.8%

Table 4.4 shows that different national culture has less impact on virtual team performance as only 4 (8.7%) indicated that it helps in the evaluation while 42 (91.3%) were neutral on the same. Shared organizational values had a quite considerable impact as indicated by the 26 (56.5%) respondents that it helps while 20 (43.5%) remained neutral. Team building is of great importance especially for the virtual teams and this was reflected in the responses as 39 (84.8%) said that it helps while only 7 (15.2%) were not sure.

The findings emphasize that employees and managers have a responsibility to ensure they reach a shared understanding of the key skills and behaviours as they relate to the individual's job description. This helps the employees to evaluate themselves while the managers will be assessing their performance against the agreed expectations. Working as a team has always proved to be effective and in this context is of great importance given that the employees are not working from the same place.

This was supported by the senior managers who showed their commitment to implementing telecommuting in their departments as they had plans to support the telecommuters in their work. This includes providing proper equipment needed to work effectively from home for instance high-speed computer access and dedicated telephone lines among others. They also said that team building and regular meetings help foster team work among both telecommuters and non-telecommuters. The ability to build common visions and goals helps teams work together more effectively regardless of their locations. If consistent efforts are made in spreading corporate culture, then management of remote offices hence staff can be very effective.

Therefore telecommuting is effective and corporate culture spread among workers can help improve performance of the teleworkers.

4.4 Trust of employees and its influence on management of telecommuters

The second objective sought to find the influence of trust of on the management of telecommuters. This was measured using frequency of communication and the extent of related statements and the results are given below.

The managers indicated that the line manager is responsible for determining the employees who telecommute. An assessment was also done to know whether there were consultations between employees and the management on who is to telecommute and the results are shown in the table below.

Table 4.5 whether there are consultations on who is to telecommute

Factor	Variable	Frequency	Percentage
Consult on who is to telecommunicate	Yes	30	65.2%%
	No	16	34.8%

Table 4.5 shows that there were consultations between employees and the management on who is to telecommute even though the final decision was left on the line manager as specified above. This was supported by the senior managers' responses from the interviews that were conducted. They said that the decision is done by the line manager. The study then assessed the usage of various means of communication especially email, phones, and video conferencing and the results are displayed in the table below

Table 4.6 Frequency of communication using email, phone and video conferencing and the effectiveness of each

Factor	Variable	Email		Phone		Video conferencing	
		Freq	%	Freq	%	Freq	%
Use the service	Yes	46	100%	44	95.7%	14	13%
	No	2	4.3%	2	4.3%	32	87%
How often	All day	40	87%	32	69.6%	7	15.2%
	Few times a week	6	13%	12	26%	7	15.2%
How effective	Effective	46	100%	43	93.5%	14	30.4%
	Not effective	0	0%	3	6.5%	0	0%

Table 4.6 shows that emails and phones were of great use as 100% and 95.7% of the respondents indicated. Video conferencing was sometimes used as 14 (13%) respondents indicated. Email and phone were mostly used all day that is 87% and 69.6% respectively and video conferencing at 15.2%. These means were also used a few times a week with emails at 13%, phone at 26% and video conferencing at 15.2%.

The same was performed on desktop sharing, corporate or private networks and other means.

The results are given below on table 4.7

Table 4.7 Frequency and effectiveness of desktop sharing, corporate or private networks as means of communication.

Factor	Variable	Desktop sharing		Corporate networks	
		Freq	%	Freq	%
Use the service	Yes	18	39.1%	26	56.5%
	No	28	60.9%	20	43.5%
How often	All day	6	13%	8	17.4%
	Few times a week	12	26.1%	16	34.85
	Once a month	0	0	2	4.3%
How effective	Effective	18	39.1%	18	39.1%
	Not effective	0	0%	8	17.4%

Table 4.7 shows that desktop sharing and corporate networks were sparingly used with desktop sharing at 39.1% and corporate networks at 56.5%. The communications were mostly used few times a week with desktop sharing at 26.1% and corporate networks at 34.8% of the respondents based on those who responded. Sometimes they could be used all day with desktop sharing at 39.1% and corporate networks at 17.4%. Desktop sharing was considered effective by all the 18 respondents who use the service while corporate networks were considered effective by 18/26 respondents.

In addition to that, the frequency of face-to-face interaction between managers and reporting staff was assessed and the results tabulated as shown below.

Table 4.8 How often face-to-face interaction with reporting staff is done

Factor	Variable	Frequency	Percentage
How often face to face interaction is done	Daily	24	52.2%
	Several times per week	6	13%
	Weekly	6	13%
	Once or twice a month	6	13%
	Rarely	4	8.7%
	Total	46	100%

Table 4.8 shows that face-to-face interaction between managers and the reporting staff was done

mostly on daily basis at 24 (52.2%). Sometimes it was done several times a week by some managers, weekly and even monthly all at 6 (13%). Only 4 (8.7%) respondents rarely did face to face interactions with their staff. Other means used included the use of what sup, google talks and other phone applications.

The study thereafter sought the view of the respondents on the statements shown in Table 4.10.

Table 4.9 Extent of the following statements on the management of staff

Factor	Agree		Neutral		Disagree	
	Freq	%	Freq	%	Freq	%
Trust telecommuters will work from home	22	47.8%	22	47.8%	2	4.3%
Fair delegation increases trust	26	56.5%	20	43.5%	0	0%
Regular communication increase trust	26	56.5%	20	43.5%	0	0%
Trusting telecommuters increases productivity	20	43.5%	24	52.2%	2	4.3

Table 4.9 shows that 22 (47.8%) agreed that they trust the telecommuters will be involved in work related activities when working from home. 22 (47.8%) were neutral while a mere 2 (4.3%) disagreed. It was also indicated that fair delegation of assignment among telecommuters and no telecommuters increases the level of trust between a manager and the staff as specified by 56.5% of the respondents, while 43.5% were neutral. Quite a large number (56.5%) of the respondents specified that regular communication increase the level of trust between the manager and telecommuters with 20 (43.5%) disagreeing. In addition to that, 20 (43.5%) agreed that trusting telecommuters increases productivity while 24 (52.2%) and 2 (4.3%) disagreed.

The findings clearly show that communication is a challenge in the organizational set up and this is taken seriously by the managers to ensure effective performance of employees. Various means are more often used to address the issue and these included the use of emails, phone conversations, video conferencing, corporate networks and desktop sharing among other means. This was supported by the senior managers who said that they make use of the means to communicate company's objectives and goals to the telecommuting employees. Therefore telecommuting is effective given the communication means being employed to ensure it's done successfully. Proper communication ensures that the telecommuting employees and their

supervisors stay connected. The remote employees are kept in the loop with an aim of providing regular feedback. This connectivity enhances trust between the telecommuting employees and the managers. Effective management of employees who telecommute is based on trust. Trust is also important because the managers cannot see the employees work each day and therefore have to train themselves to trust in them (employees) that they are doing their jobs. Frequent communication with telecommuters enables managers to maintain appropriate guidance and direction employees need and expect.

4.5 Information security and management of staff (telecommuters)

The third objective sought to find out the influence of information security on the management of telecommuters. This was measured using time (how often) and extent of applicability of related statements on the same and the results are given below.

The study assessed the frequency of physical access to special office resources such as copying equipment, large machines, special files, etc. in order to do their job and how often telecommuters require access to information that must be strictly protected and the results tabulated as shown in table 4.11.

Table 4.10 How often telecommuters need physical access to special office resources and strictly protected information

Factor	Variable	Frequency	Percentage
How often team need physical access to office resources	Daily	16	34.8%
	Several times per week	8	17.4%
	Weekly	4	8.7%
	Once or twice a month	2	4.3%
	Rarely	16	34.8%
How often team require access to information strictly protected	Daily	16	34.8%
	Several times per week	8	17.4%
	Weekly	8	17.4%
	Once or twice a month	4	8.7%
	Rarely	10	21.7%

Table 4.10 shows that telecommuting team more often needs physical access to special office resources at 16 (34.8%) daily with a sharp contrast with the same response rarely needing the access, 8 (17.4%) several times per week, 8.75 weekly and 2 (4.3%) once or twice month. On how often the team requires access to information that must be strictly protected, 16 (34.8%) were for daily basis, 8 (17.4%) for several times per week with weekly also having the same measure, 4 (8.7%) once or twice a month and 10 (21.7%) rarely in need. This information was assessed to find out if it requires physical security precautions and the findings tabled below.

Table 4.11 whether the information requires physical security precautions

Factor	Variable	Frequency	Percentage
Whether information requires physical security precautions	Yes	34	73.9%%
	No	12	26.1%

Table 4.11 shows that the information requires physical security precautions such as access to special or locked files or other forms of physical, non-electronic protection in the office among others.

Then the extent to which the following statements associate with security was assessed and the results tabulated as shown on table 4.12

Table 4.12 Extent to which the given statements associate with security of data

Factor	Agree		Neutral		Disagree	
	Freq	%	Freq	%	Freq	%
Loose sensitive information through telecommuting	30	65.2%	6	13%	10	21.7%
No specific training on IT home environment	18	39.1%	16	34.8%	12	26.1%
Team read and signed user acceptance policy	42	91.3%	4	8.7%	0	0%
Hard to ensure safety and health of telecommuters	26	56.5%	10	21.7%	10	21.7%
Security of data affect employee productivity	24	52.1%	16	34.8%	6	13%

Table 4.12 shows that sensitive information could be lost through telecommuting as specified by 30 (65.2%) respondents (middle level managers), only 6 (13%) and 10 (21.7%) were neutral and disagreed respectively. Responses on whether telecommuters receive little or no specific training concerning home IT environment was varied as 18 (39.1%) agreed, 16 (34.8%) were neutral while 12 (26.1%) disagreed. It was immensely agreed that the telecommuters' team members read and signed the company's user acceptance policy as 42 (91.3%) agreed to that while only 4 (8.7%) were neutral. 26 (56.5%) of the respondents indicated that it was hard to ensure the safety and health of telecommuters while other respondents were equally neutral and disagreeing at 10 (21.7%). Finally it was found that security of data affects employee productivity as indicated by 24 (52.1%), 16 (34.8%) were neutral while 6 (13%) disagreed.

This results concurred with senior managers interview results that they face a major challenge in securing data and information especially information which needs face to face interactions.

Frequent data access poses security problems as far as data privacy is concerned. The fact that telecommuters will more often physically access special office resources such as copying equipment, large machines, and special files in order to do their job might create space through which information can be accessed. At the same time, strictly protected information might be required by the telecommuting team as shown above. This is a threat to service provision within the organization and hence makes teleworking ineffective. However, encryption and additional authentication provided by access cards could be used to increase confidence that data is

protected even in the home office. Eventually, basic hardware, software and communication tools needed for their job should be provided without tensions and worries brought about by the confidentiality of information that might be accessed in the process. This helps in managing telecommuting team effectively.

Telecommuting is still being introduced in Kenya and most workers are not well conversant with the practice. Specific training programs should be offered on telecommuting issues to encourage employees to participate. The difficulty of ensuring safety of telecommuters and the fact that data security might affect productivity of employee makes teleworking ineffective. The organizations should therefore develop guidance materials intended to help organizations understand and mitigate the risks associated with the technologies used in teleworking. This emphasizes on importance of securing sensitive information stored in telework devices and transmitted across external networks and also provide ways that can be used in selecting, implementing and maintaining the necessary security controls. The teleworkers' security should be considered by ensuring they participate in information systems security training, providing high level of security to any personal or private information accessed or transported on-site or between locations they travel to respectively.

4.6 Previous experience in remote supervision and its influence on management of staff at Safaricom

The fourth objective established the influence of previous experience in remote supervision on the management of teleworkers. Factors such as whether the managers had experience in managing steelworkers, and the related constraints were assessed and the results tabulated on table 4:13

Table 4.13 whether managers have experience in managing teleworkers

Factor	Variable	Frequency	Percentage
Have previous experience in managing steelworkers	Yes	27	58.7%
	No	19	41.3%

Table 4.13 shows that 27 (58.7%) of the managers indicated that they had the necessary experience in the management of teleworkers while 19 (41.3%) had none. This has various implications as revealed by the statements in the Table 4.14

Table 4.14 Implications of management experience

Factor	Agree		Neutral		Disagree	
	Freq	%	Freq	%	Freq	%
Difficult to manage people not seen	24	65.2%	12	13%	10	21.7%
Learn new management style	34	73.9%	8	17.4%	4	8.7%
Learn new technologies of management	42	91.3%	4	8.7%	0	0%
Difficult to communicate with telecommuters	14	30.4%	14	30.4%	18	39.1%

Table 4.14 reveals that most of the managers experienced difficulties in managing people they could not see (teleworkers); 12 (13%) were neutral while 10 (21.7%) disagreed. 34 (73.9%) complained that they may have to learn new styles of management while 8 (17.4%) and 4 (8.7%) remained neutral and disagreed respectively. A massive 42 (91.3%) agreed that they may have to learn new technologies of management, 4 (8.7%) neutral and none disagreed. On the difficulty to communicate with telecommuters, responses were varied among the managers as 14 (30.4%) agreed, and the same number were neutral while 18 (39.1%) disagreed. More factors were assessed and tabulated in the Table 4.15

Table 4.15 Management experience factors and their influence on staff management

Factor	Agree		Neutral		Disagree	
	Freq	%	Freq	%	Freq	%
Difficult to evaluate commuters	18	65.2%	6	13%	22	47.8%
No productivity of people working from home	18	39.1%	12	34.8%	12	26.1%
Previous experience is important	34	73.9%	4	8.7%	8	17.4%

Table 4.15 shows that the managers had difficulty in evaluating commuters at 18 (65.2%), 6 (13%) were neutral while 22 (47.8%) disagreed. Respondents had different opinions on the productivity of people working from home as 18 (39.1%) agreed that there will be no

productivity among the teleworkers, 12 (26.1%) were neutral while 12 (26.1%) disagreed. 34 (73.9%) managers agreed that previous experience in remote supervision is an important asset in managing teleworkers; a mere 4 (8.7%) had a neutral opinion while 8 (17.4%) disagreed.

These results were supported by the senior managers who cited inexperience among the managers as one of the challenges they face in the management of teleworkers.

The results reveal that experience, like in other areas, is very important in the management of telecommuters. Telecommuting is an option that makes sense to professionals who are aware of the best environment to inspire their productivity. In the high-tech world, handling sensitive data and telecommuting equipment requires technical know-how. This emphasizes on the importance of formal training programs that can effectively raise awareness of the new work environment (as most managers are specified above that they are new in the telecommuting world) and its implications which will equip them with knowledge and capabilities needed to succeed. Training on using performance management systems to focus on results, etiquette of communicating with remote workers, using Virtual private networks, and web conferencing tools need to be considered to change the managers attitudes towards telecommuting hence help implement it effectively in their organizations.

CHAPTER FIVE

SUMMARY OF DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings of the study, discussions, conclusions, and recommendations arrived at. The study assessed the challenges of telecommuting on the management of employees in the Kenya's telecom sector with a case study of Safaricom Company. The study determined how corporate culture as a challenge influenced staff management in Kenya's telecom sector. It also established how trust of employees as a challenge influenced management of staff. The study then determined how security of information and previous experience in remote supervision as challenges influenced staff management in Kenya's telecom sector. The study suggested further studies related on the same.

5.2 Summary of Findings

5.2.1 Corporate culture and effective management of telecommuting staff

The study found that shared understanding shared goals and top level management commitment to implementing telecommuting helped virtual team performances. Different national backgrounds and culture had less impact on the performance of virtual teams. In addition to that, shared organizational values and team building helped improve virtual team performances hence make telecommuting effective.

5.2.2 Trust and effective management of telecommuting staff

The study found that consultations were made between employees and the management on who was to telecommunicate even though the final decision rested in the hands of the line manager. It also revealed that email and phone conversations and chatting were put into great use by the middle level managers to ensure communications with remote workers were effective. Desktop sharing, corporate networks were used sparingly.

The study also found that face-to-face interaction between managers and the reporting staff was done mostly on daily basis and sometimes several times a week by some managers. Communication helped build trust hence effectively manage the employees.

The findings also revealed that some middle level managers had trust in the telecommuting workers that they could be involved in work related activities when working from home. The fair delegation of assignment among telecommuters was also found to increase the level of trust between managers and telecommuters. Middle level managers also revealed that communication increase level of trust between the managers and workers and it was agreed that trusting telecommuters increased productivity.

5.3.3 Information security and effective management of telecommuting staff

The study findings showed that the telecommuting team sometimes requires physical access to special office resources such as copying equipment, large machines and special files. The team was found to also require access to strictly protected information. Several constraints associated with security of data were established which included loss of information and difficulty to ensure safety and health of telecommuters, loss of sensitive information through telecommuting and that data security affected employee productivity. It was also found that telecommuters received little or no specific training concerning home IT environment.

5.2.4 Previous experience in remote supervision and effective management of telecommuting staff

The study found that on average, the managers had experience in the management of commuters. This led to some finding difficulty in managing and communicating with the remote workers. Other had to learn new management styles and technologies of management of remote workers. They also had difficulty in evaluating commuters and some revealed that there was no productivity in people working from home. Finally it was shown that previous experience was necessary implementing telecommuting and managing remote staff at Safaricom.

5.3. Discussion of the results

5.3.1 Corporate culture and effective management of telecommuting staff

The study found that shared understanding shared goals and top level management commitment to implementing telecommuting helped virtual team performances. Different national backgrounds and culture had less impact on the performance of virtual teams. In addition to that, shared organizational values and team building helped improve virtual team performances hence make telecommuting effective. Corporate culture therefore had an impact on performance of virtual teams.

This was in support of (Curseu et al., 2008, who specified that establishing norms and values that form common ground within the virtual teams creates greater cohesion and effectiveness from the team. Effective management of virtual teams and including these teams as part of the greater organisation requires that the larger organisational culture be developed and maintained within virtual teams (Curseu et al., 2008).

Akkirman and Harris (2005) stated that the successful implementation of virtual teams in an organisation may result from the specialised and on-going training that this group receives due to the nature of the team. The authors also note that success of virtual teams may result from the special attention and focus given by management to the development and success of the team and better design of the virtual office with modern techniques, technology and understanding. Success of virtual teams may not be as a result of a superior culture or communication within the organisation alone (Akkirman& Harris, 2005). Therefore for managers to enhance team building through corporate culture, they should ensure they cooperate with employees and work as a team, involve the employees in decision making and always keep in contact with them.

5.3.2 Trust and effective management of telecommuting staff

The study found that consultations were made between employees and the management on who was to telecommunicate even though the final decision rested in the hands of the line manager. It also revealed that email and phone conversations and chatting were put into great use by the middle level managers to ensure communications with remote workers were effective.

The findings also revealed that some middle level managers had trust in the telecommuting workers that they could be involved in work related activities when working from home. The fair

delegation of assignment among telecommuters was also found to increase the level of trust between managers and telecommuters. Middle level managers also revealed that communication increase level of trust between the managers and workers and it was agreed that trusting telecommuters increased productivity.

This concurs with PI Worldwide, 2012 that building trust is based on three common elements which includes; past experience with that employee, shared goals with the employees and confidence in the employee's skill and ability.

Hartman et al.'s, (1991) study of 97 telecommuters indicates that adequate communications and technical/emotional support was significantly and positively correlated to their satisfaction with telecommuting. Excellent communication has to be demonstrated for virtual teams' performance to be improved and ensure enhanced decision making.

5.3.3 Information security and effective management of telecommuting staff

The study findings showed that the telecommuting team sometimes requires physical access to special office resources such as copying equipment, large machines and special files. The team was found to also require access to strictly protected information. Several constraints associated with security of data were established which included loss of information and difficulty to ensure safety and health of telecommuters, loss of sensitive information through telecommuting and that data security affected employee productivity. It was also found that telecommuters received little or no specific training concerning home IT environment.

The findings were in supports of Clear, 2007, who revealed that although research on data security in relation to telework remains scarce, empirical evidence suggests that especially small firms lack expertise and resources to combat security risks in individual cases; this has led management to forbid telework altogether (Pyörriä, 2003).

5.3.4 Previous experience in remote supervision and effective management of telecommuting staff

The study found that on average, the managers had experience in the management of commuters. This led to some finding difficulty in managing and communicating with the remote workers. Other had to learn new management styles and technologies of management of remote workers. They also had difficulty in evaluating commuters and some revealed that there was no

productivity in people working from home. Finally it was shown that previous experience was necessary implementing telecommuting and managing remote staff at Safaricom.

This was in support of Huws, 1984; Kinsman, 1987; Olson, 1987a that in a telecommuting environment managers' may experience the feeling of losing direct control over employees. Nevertheless, managers can use alternative strategies in order to compensate for this loss. These practices include such measures as control by electronic means (e.g., verification of access time and consulted files; Olson, 1985), increased control by the use of formal and rigorous specifications (e.g., targets, detailed procedures and formalization; Huws, 1984; Kinsman, 1987). The managers therefore need to implement training programs to enhance the management of commuters.

5.4 Conclusion of the Findings

The study found that telecommuting has challenges on the management of employees in the Kenya's telecom sector. The main challenges addressed in this study included corporate culture which influences virtual team performance, trust of employees, security of information and previous experience in remote supervisions. Since telecommuting is becoming more widely accepted and utilized, it can be an extremely successful addition to any workforce if the planning and management attention needed is done.

5.5 Recommendations of the Study

From the above study, it is clear that the four factors that is corporate culture, trust of employees, information security and previous experience in remote supervisions influence management of telecommuting staff in Kenya's telecom sector. Therefore the researcher recommended the following:

- The organizations should develop policy guidelines outlining the risks associated with telecommuting hence emphasize on the importance of securing sensitive information stored on the devices used and provide recommendations for selecting, implementing and maintaining the necessary security controls.
- Managers should be trained on the use of this technology before they are requested to manage staff involved in telecommuting. Workers too should be involved in information systems security training.
- The management should work together with employees to ensure they fully promote teamwork and build trust amongst themselves. Ensure trust is maintained always.

5.6 Suggestions for Further study

Telecommuting is being adopted by most organizations in implementation of distributed systems and this research concentrated on the factors that influence management of telecommuting staff and their challenges. Thus there is need to conduct research to find out the impacts associated with telecommuting especially on workers and their health. Studies should also be carried out to determine how best telecommuting can be implemented to ensure it is applied in the right departments because it cannot work in all departments.

Although it's possible to measure performance of telecommuters based on output it is difficult to monitor the number of hours put to work related issues, thus there is room for further studies on how to effectively monitor how many hours a telecommuter puts to work as opposed to engaging in non-work related issues

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APPENDICES

APPENDIX I: LETTER OF TRANSMITTAL OF DATA COLLECTION

Alice Muasa

P.O Box 50169-00100,

Nairobi.

Dear Respondent,

RE: **DATA COLLECTION**

I am a student at the University of Nairobi. I am currently doing a research study to fulfil the requirements of the Award of Master of Project Planning and Management on the CHALLENGES OF TELECOMMUTING ON MANAGEMENT OF STAFF IN THE KENYA'S TELECOM SECTOR: A CASE OF SAFARICOM LTD. The purpose of this letter is to request you to provide me with relevant information regarding this proposal.

Your response will be treated with utmost confidentiality and will be used only for research purposes of this study only.

Thank you in advance for your co-operation.

Yours faithfully,

Alice Muasa

APPENDIX II

QUESTIONNAIRE FOR MIDDLE LEVEL MANAGERS

Dear Respondent,

I am Alice Muasa, a postgraduate Student at the University of Nairobi pursuing a Masters of Arts in Project Planning and Management. I am undertaking a study titled,

Challenges of telecommuting on the management of employees in the Kenya's telecom sector: A case of Safaricom Ltd.

This questionnaire is meant to assist me acquire information that will help me meet this objective. I hereby kindly request you to participate in this study by undertaking to answer this questionnaire. All the information gathered shall be used to for academic purpose only. (Please answer and tick where appropriate)

Section A: Demographic Information

1) Gender

a) Male b) Female

2) Age Bracket

18 – 27 yrs

28 – 37 yrs

38 – 47 yrs

47 – 57 yrs

Above 57 yrs

3) Level of Education

Primary

Secondary

Tertiary/College

University

4) Marital Status

Single

Married

Divorced

Separated

- 5) Which Department do you work in?
- 6) What's your current position?.....
- 7) How long have you been in this position?

Section B: Influence of corporate culture on management of telecommuter

8) Do the following hinder or help the virtual team performance?

		Greatly hinders	Hinders	Neutral	Helps	Greatly helps
i.	Shared understanding					
ii.	Shared goals					
iii.	Top management committed to telecommuting implementation					
iv.	Shared organizational values					
v.	Team buildings help foster team work among both telecommuters and non telecommuters					

Section C: Influence of trust of employees on management of telecommuters

9) Who determines which employees will telecommute?.....

10) Are there consultations between employees and the management on who is to telecommute?

- a) Yes b) No

11) How often do you communicate with your staff? Please indicate on the table below.

Method	Yes or no	How often. All day Few times a week Once a day Once a month	How effective is this method(Effective or not effective)
Email			
Phone			
Video conferencing			
Desktop sharing			
Corporate or private networks			
other			

12) How often do you have face-to-face interaction in the office with staff reporting to you?

- a) Daily
- b) Several times per week
- c) Weekly
- d) Once or twice per month
- e) Rarely

13) Please indicate to what extent the statements below are applicable to you

		Strongly agree	Agree	Disagree	Strongly disagree	Neutral
i	I trust that telecommuters will be involved in work related activities when working from home					
ii	Fair delegation of assignment among telecommuters and non telecommutes increases the level of trust between a manager and the staff					
iii	Regular communication increases the level of trust between you and telecommuters					
iv	Trusting telecommuters increases productivity					

Section D: Influence of information security on management of telecommuters

13) How often does your team need physical access to special office resources (such as copying equipment, large machines, special files, etc.) in order to do their job?

- a) Daily
- b) Several times per week
- c) Weekly
- d) Once or twice per month
- e) Rarely

14) How often does your team require access to information that must be strictly protected?

- a) Daily
- b) Several times per week
- c) Weekly

d) Once or twice per month

e) Rarely

15) Does that information require physical security precautions (such as access to special or locked files, or other forms of physical, non-electronic protection in the office)?

a) Yes b) No

17) Below is a list of items associated with security of data. Please indicate to what extent the statements below are applicable to your team.

	Constraints	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
i.	Sensitive information can be lost through telecommuting					
ii.	Telecommuters often receive little or no specific training concerning home IT environment					
iii.	All your team members have read and signed the company's user acceptance policy					
iv.	It is hard to ensure the safety and health of telecommuters					
v.	Does security of data affect employee productivity					

Section E: Previous experience in remote supervision as a challenge of managing teleworkers.

Do you have previous experience in managing teleworkers?

Yes No

Please tick where appropriate

		Strongly agree	Agree	Neutral	Strongly disagree	Agree
1	It is difficult to manage people I cannot see					
2	I may have to learn new style of management					
3	I may have to learn new technologies of management					
4	It is difficult to communicate with telecommutes					
5	It is difficult to evaluate telecommuters					
6	People will not be productive when working from home					
7	Do you agree that previous experience in remote supervision is an important asset in managing teleworkers?					

Thank you for your participation and support.

APPENDIX III: INTERVIEW SCHEDULE

1. Position in Management
2. How long have you worked at Safaricom?
3. Which employees telecommute?

4. Who decides who is to telecommute?
5. What criteria are used?
6. How does the management plan for telecommuters?
7. What performance appraisal measures do you use to determine the performance of telecommuters?
8. How do the company's objectives and goals get communicated to the telecommuting employees?
9. What leads staff members and the management to allow for telecommuting?
10. How do you ensure team work among the telecommuting and non-telecommuting employees.
11. How has telecommuting impacted on the management of the employees?
12. What are the common complains that are raised in regards to telecommuting?
13. What challenges does the management face in management of the workforce?
14. How do cope with these challenges?
15. In your own opinion what is the future of telecommuting in Safaricom?