EXAMINE THE IMPACT OF REMOTE WORK ON EMPLOYEE PRODUCTIVITY IN MTN

PETER MUCUNGUZI

J22B42/025

A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF HUMAN RESOURCE MANAGEMENT OF UGANDA CHRISTIAN UNIVERSITY

May,2025

UGANDA CHRISTIAN UNIVERSITY

A Centre of Excellence in the Heart of Africa

DECLARATION

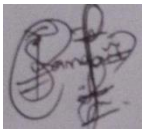
I, Mucunguzi Peter declare that this dissertation is my original work and it has never been presented to any academic institution for an academic award.

Signature: 

Date:1st, MAY, 2025

APPROVAL

I attest that this dissertation by Mucunguzi Peter has been prepared under my supervision and submitted in after my approval.

Signature: 

Date: 1ST/ MAY/2025

Name of the supervisor

Madam Nagawa Pamela

DEDICATION

I dedicate this work to my beloved parents and friends and to all fellow students of Uganda Christian University.

ACKNOWLEDGEMENT

I thank God Almighty who has blessed me with existence and guided me to endure all forms of suffering and enabled me to successfully complete the dissertation.

I also express my sincere appreciation to my university supervisor, Madam Nagawa Pamela for his invaluable guidance and correction in this research that has been very instrumental in my academic achievement.

I would like to use this chance to say thanks to my friends and parents for giving me the chance to study this course and for the support in continuing my studies God bless them.

TABLE OF CONTENTS

Table of Contents

ABSTRACT

The shift to working from home introduced by the COVID-19 pandemic has with it new opportunities and challenges to employee productivity, especially in developing nations such as Uganda. While international evidence is in agreement that team working is fruitful with increased flexibility and decreased commuting, these results heavily rely on contextual factors such as information infrastructure, managerial style, and organizational culture. The research examines how team working influences employees' productivity in MTN Uganda, a major telecommunications company. With a theoretical framework placing remote work as the independent variable and worker productivity as the dependent variable, the current study explores how infrastructural limitations, cultural expectations, and management styles intervene between productivity impacts in remote working environments. Employing the mixed-methods approach, quantitative survey and qualitative interviewing are combined to provide rich insights into the degree to which remote work influences the quality, timeliness, and effectiveness of work. The results are to guide organizational practice and national policy that support effective productive remote work arrangements in Uganda's growing digital economy.

CHAPTER ONE

1.1 Introduction

This is the background of the study, statement of the problem, research objective, hypotheses, justification of the study, scope of the research and conceptual framework.

1.2 Background of the study

Worker productivity is a label for the efficiency and effectiveness with which employees achieve work, which is traditionally measured in terms of quality, quantity, and time of output (Neely, 2005). Empirical evidence indicates that there have been several factors affecting productivity including technology, work environment, capability, motivation, and leadership (Pritchard, 1995). The existence of computer software has further contributed towards the acceleration of productivity by making communication and collaboration easier (Sushil, 2015). Productivity was also linked with work-related phenomena such as job satisfaction and telecommuting in the recent past (Gajendran & Harrison, 2007). Research shows that telecommuting can improve productivity by the flexibility it offers, leading to improving the balance between work and life, and by doing away with commuting time (Bloom et al., 2015). The association is highly context-dependent on digital infrastructure, management support, and job type (Allen, Golden, & Shockley, 2015).

Although there are extensive researches in advanced economies that have conducive digital environments (Eurofound & ILO, 2017), extensive information on how working remotely affects productivity in developing countries like Uganda (Asiimwe, 2020) is scarce. Institutional limitations and culture such as the need for face-to-face monitoring might reduce the capacity of remote working to sustain productivity in Uganda (Nuwagaba, 2020). Besides this, scant research exists in Uganda on the ways that manager practices facilitate or hinder the productivity of remote workers (Businge, 2021). To the degree that Uganda has adopted full-scale digital technology and responsive work environments, particularly in the wake of significant global

disruptions such as the COVID-19 pandemic, it is important to explore the local impact of remote work on productivity (Uganda Communications Commission, 2020; Tetteh, 2021). The study will investigate the unique determinants of employee productivity in Uganda's remote working to guide organizational policy and boost national competitiveness (Asiimwe, 2020).

1.3 Background

Worker productivity has been an interest of organizational study for many decades, back to the early 20th century when industrialization required measurement and enhancing worker productivity (Adam Smith, 1776). The origin of productivity study is Frederick Taylor's Scientific Management Theory, which was efficiency-driven and procedure-oriented toward maximizing processes to stimulate production (Taylor, 1911). This was the theoretical beginning of coherence attempts to analyze and maximize productivity in organizations (Bailey & Kurland,2002).

In the mid-20th century, productivity was increasingly associated with mechanization and technological innovations (Gajendran & Harrison, 2007). The use of computers and information technology in the workforce in the 1950s and 1960s revolutionized the measurement and pursuit of productivity to more complex and data-based means (Gordon, 2016). This transformation emphasized the role of human and technological inputs in driving productivity, a trend that still characterizes today's reality (Bailey & Kurland, 2002). The decades of the 1980s and 1990s were marked by the revolution of knowledge work, and productivity did not solely lie in physical production but intellectual inputs. These decades emphasized the need for new productivity measures that can measure the work output of knowledge workers whose workplaces are more independent and less structured (Drucker, 1999). The growing utilization of information technology during this period laid the groundwork for the modern era of telecommuting, in which performance is increasingly driven by digital technology and distance communication.

The early 2000s were characterized by an increase in telecommuting, spurred by increased communication technology and the need for work-life balance. The initial

studies concerning telecommuting indicated that it had the potential to enhance the productivity of workers by time saved for traveling and allowing them to work in the majority of cases in an environment best suited to them (Gajendran & Harrison, 2007). These studies, however, also showed isolation and communication problems that would negatively affect productivity.

Since 2010, the utilization of cloud computing, mobile technology, and collaboration platforms such as Slack, Microsoft Teams, and Zoom also transformed work nature. These technologies facilitated real-time communication and coordination of work, even between geographically dispersed groups, that began becoming the new standard for remote working arrangements within sectors such as IT, consultancy, and finance (Wang et al., 2021). During this time, research on productivity also began examining how employee autonomy, digital capability, and technical support impacted one another.

The COVID-19 pandemic in 2020 marked the revolution of remote work and employee productivity in work history. Lockdowns and social distancing accelerated the world towards remote working, which became the preferred way of working for millions (OECD, 2021). Different research reports at the time cited higher productivity through less commute time, flexible timings, and autonomy of employees (Bloom et al., 2021). But the shift also exposed its most significant challenges such as digital burnout, loneliness, eroded work-life boundaries, and unequal technological access (Galanti et al., 2021; Wang et al., 2021).

Between 2021 and 2023, the hybrid work pattern emerged as a common organizational structure with a fusion of remote and in-person work to manage productivity as well as employees' well-being (Microsoft Work Trend Index, 2022). Companies began re-engineering work culture to enable flexibility, while some countries established labor laws for telework. Studies at the time more and more focused on the contributions of leadership, psychological safety, and digital infrastructure to enable long-term productivity in hybrid settings (Toscano & Zappalà, 2021).

Flexible and remote working arrangements had become a norm in most organizations in the world, even Africa by 2024. Remote working in Uganda had gained more pace among telecommunication industries, though issues still were faced with digital infrastructure, internet link, and management readiness (Uganda Communications Commission, 2023). Recent studies affirm the necessity of site-specific remote work approaches in terms of local workplaces, technology, and culture to enhance worker productivity (Nuwagaba, 2023; Businge, 2023). Through 2024, studies are changing with increased focus on long-term productivity, digital equity, and employee participation in more virtual work environments.

1.4 Theoretical Background

The study is based on Human capital Theory and Job characteristic theory.

Human Capital Theory

The Human Capital Theory was postulated by economists Gary Becker and Theodore Schultz (Becker, 1964; Schultz, 1961), a helpful paradigm with which to examine the association between telecommuting and worker productivity. It holds that human capital investment, including education, training, and health, increases productivity and economic worth of a person (Becker, 1993). Telecommuting, in the context of the study, can be seen as evidence of human capital building because it enables employees to acquire new skills, learn how to use modern tools, and increase work productivity (Saks & Burke, 2012).

The early 2000s were characterized by an increase in telecommuting, spurred by increased communication technology and the need for work-life balance. The initial studies concerning telecommuting indicated that it had the potential to enhance the productivity of workers by time saved for traveling and allowing them to work in the majority of cases in an environment best suited to them (Gajendran & Harrison, 2007). These studies, however, also showed isolation and communication problems that would negatively affect productivity.

Since 2010, the utilization of cloud computing, mobile technology, and collaboration platforms such as Slack, Microsoft Teams, and Zoom also transformed work nature. These technologies facilitated real-time communication and coordination of work, even between geographically dispersed groups, that began becoming the new standard for remote working arrangements within sectors such as IT, consultancy, and finance (Wang et al., 2021). During this time, research on productivity also began examining how employee autonomy, digital capability, and technical support impacted one another.

The COVID-19 pandemic in 2020 marked the revolution of remote work and employee productivity in work history. Lockdowns and social distancing accelerated the world towards remote working, which became the preferred way of working for millions (OECD, 2021). Different research reports at the time cited higher productivity through less commute time, flexible timings, and autonomy of employees (Bloom et al., 2021). But the shift also exposed its most significant challenges such as digital burnout, loneliness, eroded work-life boundaries, and unequal technological access (Galanti et al., 2021; Wang et al., 2021).

Between 2021 and 2023, the hybrid work pattern emerged as a common organizational structure with a fusion of remote and in-person work to manage productivity as well as employees' well-being (Microsoft Work Trend Index, 2022). Companies began re-engineering work culture to enable flexibility, while some countries established labor laws for telework. Studies at the time more and more focused on the contributions of leadership, psychological safety, and digital infrastructure to enable long-term productivity in hybrid settings (Toscano & Zappalà, 2021).

Flexible and remote working arrangements had become a norm in most organizations in the world, even Africa by 2024. Remote working in Uganda had gained more pace among telecommunication industries, though issues still were faced with digital infrastructure, internet link, and management readiness (Uganda Communications Commission, 2023). Recent studies affirm the necessity of site-specific remote work approaches in terms of local workplaces, technology, and culture to enhance worker productivity (Nuwagaba, 2023; Businge, 2023). Through 2024, studies are changing with increased focus on long-term productivity, digital equity, and employee participation in more virtual work environments.

1.4 Theoretical Background

The study is based on Human capital Theory and Job characteristic theory.

Human Capital Theory

The Human Capital Theory was postulated by economists Gary Becker and Theodore Schultz (Becker, 1964; Schultz, 1961), a helpful paradigm with which to examine the association between telecommuting and worker productivity. It holds that human capital investment, including education, training, and health, increases productivity and economic worth of a person (Becker, 1993). Telecommuting, in the context of the study, can be seen as evidence of human capital building because it enables employees to acquire new skills, learn how to use modern tools, and increase work productivity (Saks & Burke, 2012).

Telecommuting is able to increase the human capital of employees by promoting the acquisition of digital competencies and technological literacy, which are vital in performing work outside the conventional office setting (Adekola & Sergi, 2016). The theory suggests that employees who are able to operate remote work technologies become more efficient since they are able to complete tasks quicker and with more precision (Becker, 1993). This is in accordance with findings from research which capture the ways in which virtual workplaces facilitate ongoing learning, solving of problems, and innovation and thus improve total productivity (Gajendran & Harrison, 2007). The Human Capital Theory also hypothesizes that managerial support is a

critical determinant of maximal employee productivity in virtual workplaces. Managerial feedback and trainers along with digital resources are simply an investment in workers' human capital that leads to the higher productivity levels (Kossek, Hammer, & Kelly, 2016). This demonstrates the importance of management to provide the appropriate working environment for workers to thrive when they work at home, particularly in resource-scarce countries like in developing nations (Asiimwe, 2020). The theory also accentuates communication, as it ensures more knowledge is shared and more collaboration, which are necessary to ensure remote work becomes effective (Bloom et al., 2015). Investments in human capital in communications technologies, such as video conferencing and project management software, can reduce the challenges to effective teamwork that arise with remote work (Allen, Golden, & Shockley, 2015). This is particularly so in Uganda, where communication face-to-face is the customary practice, and the transition to adopting online communication tools would be extremely strenuous (Businge, 2021).

Job Characteristics Theory

The Job Characteristics Theory (JCT) proposed by Hackman and Oldham (1976) postulates that there are certain characteristics in a job that influence worker motivation, job satisfaction, and performance. Theory identifies five core job dimensions skill variety, task identity, task significance, autonomy, and feedback which are clearly related to work outcomes, such as productivity (Hackman & Oldham, 1976). The theory presents a useful framework to describe the impact of remote work on the productivity of employees by taking into account how job elements are changed in remote settings (Parker, 2014). Worker efficiency can be made to work together with autonomy, one of the primary components of the Job Characteristics Theory. Remote workers are more likely to manage their own schedules and how they perform their work, which makes them more responsible, and efficient (Morgeson & Humphrey, 2006). This aligns with research findings showing that autonomy in telework settings allow employees to cope with work demands more effectively, which reduces stress and enhances performance (Gajendran & Harrison, 2007). Feedback is also a core dimension in the theory and crucial in team work

settings. In an office setting, feedback is usually timely and immediate, but in team work, feedback is delayed or less frequent. Managerial assistance within telecommuting settings is important towards guaranteeing that the employee receives constant and positive feedback, which is important towards maintaining productivity (Bloom et al., 2015). The lack of face-to-face interaction within telecommuting can make it difficult for employees to evaluate their performance, meaning formal feedback systems become important (Kossek, Hammer, & Kelly, 2016). Task significance, or a worker's perceived impact on other individuals with their work, may also differ in a telecommuting arrangement. Employees may experience isolation from their organization or group, thus lowering their task significance and motivation (Allen, Golden, & Shockley, 2015). However, providing employees with the opportunity for frequent communication and collaboration can maintain high task significance, thus enhancing productivity (Asiimwe, 2020). In Uganda, where team cohesion is maintained face-to-face, ensuring remote workers feel their contributions count is one of the challenges (Nuwagaba, 2020). Remote work also affects skill variety and task identity. With the increased use of digital tools, employees are able to undertake a larger variety of tasks, which require different skills, hence resulting in an expansion in skill variety (Morgeson & Humphrey, 2006). Digital literacy is an issue in Uganda for the majority of employees, and this can limit diversification of tasks and skills within remote settings (Uganda Communications Commission, 2020). Task identity, or having the ability to see a project through from start to finish, may be harder to attain within remote work due to the potential for communication breakdowns and time lags (Businge, 2021). However, the organizations that coordinate effective project work flows and communication within distant teams can prevent this issue (Gajendran & Harrison, 2007).

1.5 Conceptual Background

The study examines the variables of employees' productivity as a dependent variable and telecommuting as an independent variable within MTN Uganda.

Remote Work. Telecommuting or team work, otherwise referred to as remote work, is a common practice where employees perform their work assignments from a distant location other than the traditional office setting, while linking with employers and colleagues through technology (Gajendran & Harrison, 2007). This form of working arrangement introduces location flexibility, often working from home, shared offices, or any other remote locations, which is made possible by digital communication technologies like email, videoconferencing, and project management software (Bailey & Kurland, 2002). There is proof that remote working has the potential to enhance job satisfaction and work-life balance, which can enhance the performance and productivity of employees (Allen, Golden, & Shockley, 2015). Studies in developed economies indicate that telecommuting decreases commuting time to work and gives employees more control over their working time, and this might result in enhanced focus and productivity (Bloom et al., 2015). Telecommuting is also associated with decreased operating expenses for employers as they need fewer working space and facilities (Eurofound & ILO, 2017). Despite these highly documented benefits, substantial knowledge gaps persist concerning the impact of remote work in developing economies like Uganda. The implications of digital infrastructure, such as unreliable internet connectivity, low access to modern technology, and high data costs, are barriers to the adoption of remote work (Asiimwe, 2020). Additionally, little is known about how cultural factors, such as the need for face-to-face interaction and applying traditional hierarchical management techniques, may affect remote work effectiveness (Nuwagaba, 2020). Finally, the longitudinal impacts of remote work on workers' motivation levels and mental health remain an under-researched topic across various settings (Wang et al., 2021). Its total effect is crucial to comprehend, especially since organizations around the world, including Ugandan ones, adopt flexible work arrangements after the COVID-19 pandemic (Tetteh, 2021). Policymakers need to address infrastructural and cultural issues in order to utilize remote work productivity in developing settings (Uganda Communications Commission, 2020). Furthermore, businesses need to recognize the advantage and disadvantage of remote working in order to develop policies that enhance performance and ensure employee well-being (Businge, 2021).

Employee Productivity

Employee productivity refers to the efficiency with which employees perform their work activities, usually measured in terms of output per unit of input such as time, resources, or cost (Syverson, 2011). Productivity is a critical determinant of organizational performance, since it reflects the effectiveness of individual performance and organizational processes in achieving business objectives (Pritchard, 1995). Wide literature highlights how variables like job satisfaction, work environment, leadership, and availability of resources influence the productivity of employees (Judge et al., 2001). Productivity in virtual work settings increases when workers have increased autonomy and flexibility while performing their tasks (Gajendran & Harrison, 2007). Evidence reveals that technology-based tools and communication platforms facilitate more collaboration and effectiveness, thus increasing productivity (Bloom et al., 2015). While evidence exists for the ability of remote work to optimize productivity, questions persist regarding the long-term viability of productivity gains, particularly in developing economies (Asiimwe, 2020). In Uganda, there are problems of digital illiteracy, inadequate internet connectivity, and weak managerial facilitation that pose major challenges towards achieving sustained productivity gains in remote work (Nuwagaba, 2020). In addition, the long-term effects of remote work on employee motivation and creativity are unknown, especially in industries that traditionally rely on collocated interaction (Wang et al., 2021). Companies must understand drivers and obstacles to employee productivity in remote working to remain competitive in an increasingly digitalized international economy (Tetteh, 2021). To Ugandan policymakers, a boost in employee productivity through effective team work policies would help elevate economic growth and labor market efficiency (Uganda Communications Commission, 2020). By acting on the known and unknown productivity drivers, organizations can craft improved working conditions that improve employee performance and organizational performance (Businge, 2021).

1.6 Contextual Background

Labour productivity is a cornerstone of organizational success worldwide, as well as in Uganda, where it is one of the main determinants of growth, competitiveness, and economic sustainability. Productivity can be understood as the efficiency with which employees convert inputs such as time, effort, and resources into productive outcomes (Syverson, 2011). In developing economies like Uganda, where organizations are prone to operate with minimal resources, optimizing employees' productivity is crucial for sustaining growth and performing in increasingly globalized markets (Kaleeba, 2018).

The Ugandan economy has witnessed enormous growth in most of its sectors, particularly telecommunications, over the past decade. The rapid growth has hastened the need for highly productive workforces (African Development Bank, 2020). Literature stresses that labor productivity within Uganda's employment market is influenced by job satisfaction, exposure to new technology, organizational support, and employee well-being (Muhumuza, 2020). Organizations that provide a supportive work environment, equipment needed, and development opportunities are more likely to achieve higher levels of productivity, especially in competitive business fields like the telecommunication industry, where employee and technological development investment is linked to improved productivity outcomes (Asiimwe, 2020; Nuwagaba,2020)

However, despite these disclosures, little research exists on the real mechanisms by which remote work affects the productivity of workers in Uganda. Country-specific issues like inadequate digital infrastructure, costly internet, and limited access to advanced tools raise questions on the viability of remote work in the long run to maintain or increase productivity (Uganda Communications Commission, 2020). Uganda's cultural aspects also pose further complexities for remote work. Cultural values based on traditional face-to-face communication and hierarchical management can sometimes be in opposition to the independent nature of remote working and can influence productivity outcomes (Kakooza, 2020). Where cultures highly value

interpersonal interactions and visible presence as an indicator of commitment and performance, both employees and managers can find remote work arrangements, where output is valued over presence, challenging. This dimension of culture may lead to misunderstanding productivity expectations and management practices, creating a possible productivity gap in remote working conditions.

It is thus essential to comprehend the dynamics of employee productivity in remote working conditions for Ugandan policymakers and businesses. Due to rising flexible work arrangements in the post-COVID-19 period, remote working may be a permanent trend in Uganda's labor market (Tetteh, 2021). Through an exploration of the technological and cultural factors influencing productivity in remote environments, organizations can design interventions to suit employees' needs, with the ultimate outcome of enhancing performance and competitiveness (Nuwagaba, 2020). Policymakers may also benefit from findings of limitations such as inadequate digital infrastructure and costly internet. These may guide attempts to enable remote work environments more appropriate to Uganda's cultural context and technological limitations (Uganda Communications Commission, 2020).

While there has been extensive international research on how remote work affects the productivity of employees, much less is known about how such dynamics unfold in developing economies, and specifically in Uganda. There are important gaps in relation to the particular role of digital infrastructure, managerial practices, and culture in shaping productivity in remote working environments.

The background context identifies three gaps of key concern for remote working productivity in Uganda. First, digital infrastructure remains a major hindrance since costly internet and unpredictable connectivity especially outside urban centers disrupts remote work streams and reduces productivity (Uganda Communications Commission, 2020). Second, traditional Ugandan management cultures, which rely heavily on physical supervision and hierarchical authority, may be inimical to the trust-based and output-focused management that is necessary in remote work setups, creating challenges in maintaining employee performance (Kakooza, 2020). Third,

cultural concerns such as the emphasis on community, cooperation, and informal workplace relationships may lead to isolation and reduced motivation when employees work from home, thereby decreasing productivity (Kakooza, 2020). This study aims to investigate how these digital, managerial, and cultural challenges influence productivity in remote working environments in Uganda and propose context-specific solutions to counter them.

1.7 Statement of the problem

Employee productivity is one of the driving forces for organizational performance on a global scale. The adoption of remote working worldwide, in Europe, Africa, and Uganda, has come with opportunities and challenges. Understanding how remote working affects employee productivity has become increasingly important.

Employee productivity is one of the critical aspects of organizational performance that affects both operational efficiency and competitiveness in the long run. With the shift to remote working accelerated by the COVID-19 pandemic; the majority of organizations globally have registered mixed outcomes with respect to workers' productivity. The literature in developed countries shows that remote working can boost productivity by way of flexibility, saving commuting time, and enhancing work-life balance, especially if supported by quality digital infrastructure and good managerial practices (Bloom et al., 2015; Allen, Golden, & Shockley, 2015).

In Uganda, however, the early adaptation of remote work is in its nascent stages, and its impact on the productivity of workers is under-researched. For MTN Uganda, one of the leaders in the country's telecommunications sector, adopting remote work has been accompanied by opportunities alongside challenges. Even though the organization has invested in digital technologies to enable flexible work arrangements, employees continue to face obstacles such as erratic internet connection, costly data, and insufficient training in remote working software (Uganda Communications Commission, 2020; Asiimwe, 2020).

Additionally, Uganda's cultural preference for face-to-face supervision, hierarchical leadership, and workplace communication through informality presents unique challenges for remote working. These social norms can reduce employee motivation and productivity in virtual settings due to reduced supervision, delayed feedback, and impaired team cohesion (Kakooza, 2020; Nuwagaba, 2020). In MTN Uganda, the effectiveness of remote working in sustaining productivity is also influenced by managerial practices, communication systems, and the ability of the organization to keep employees motivated outside traditional office boundaries (Businge, 2021).

Though global studies have examined the impact of remote work on productivity, empirical insights into how such dynamics unfold within Ugandan organizations, and the telecommunications sector in particular, remain limited. This constitutes a significant knowledge gap, particularly on how technological, managerial, and cultural contingencies interact to influence productivity under remote work schemes.

The extant literature has extensively debated the role of remote work in enhancing productivity in developed countries. However, there is less knowledge concerning the way these mechanisms operate in developing nations, more particularly in Uganda (Asiimwe, 2020). The role of digital infrastructure, managerial support, and remote work communication routines remains empirically unexamined in the Ugandan situation. This constitutes an important research gap. As businesses in Uganda seek to remain competitive in a world economy increasingly reliant on flexible work routines, an exploration of these factors is essential in greater detail (Tetteh, 2021).

1.8 Purpose of the Study

The primary purpose of this study is to examine the impact of remote working on employee productivity in MTN Uganda.

1.9 Objectives of the Study

To ascertain the impact of remote working on employee productivity in MTN Uganda.

To identify the significant factors influencing remote working in employee productivity environment.

To evaluate the differences of remote working across the various departments in MTN Uganda during the productivity period.

To examine the challenges and opportunities presented by remote work on employee productivity in the case of MTN Uganda.

1.10 Research Questions.

How does remote working influence employee productivity within MTN Uganda?

What are the key drivers of remote working in an employee productivity environment within MTN Uganda?

How is remote working experienced differently across various departments within MTN Uganda during employee productivity?

What are the opportunities and challenges of remote working on employee productivity within MTN Uganda?

1.11 Scope of the Study

1.11.1 Content Scope

The study seeks to establish the impact of telecommuting on employees' productivity.

1.11.2 Geographical Scope

This study has a geographical scope limited to MTN Uganda, which predominantly operates in Uganda.

1.11.3 Time Scope

The study period is March 20 2020 to December 2023, the time when and following the COVID-19 pandemic, when working from home was prevalent in MTN Uganda. The selected period allows for investigation of remote working's impact over a prolonged duration, with consideration of both the short- and long-term productivity effects.

1.12 Significance of the Study

This study is particularly relevant to managers, researchers, and policy makers.

Organizational managers practicing team work need evidence-based data about the influence of team work on worker productivity in an effort to enhance policies (Kossek, Hammer, & Kelly, 2016). This study can provide determinants that influence productivity in team working environments, such as digital resources, the frequency of communication, and employees' autonomy (Gajendran & Harrison, 2007). Additionally, with a focus on the Ugandan context, there are region-specific remedies to issues like infrastructure and digital literacy (Asiimwe, 2020). Such findings enable managers to create contexts that guarantee productivity despite limited resources (Bloom et al., 2015).

This study fills a significant gap in the remote work and productivity literature, particularly in the African context, since studies are scarce (Tetteh, 2021). By delving into remote work in Uganda, a resource-poor setting, it provides new evidence and knowledge that expands the knowledge beyond the traditional Western context (Nuwagaba, 2020). The study opens the way for future research to explore other aspects of remote work such as employee well-being, job satisfaction, and firm culture to deepen the knowledge base concerning practices at work in emerging economies (Kossek, Hammer, & Kelly, 2016). This study offers valuable insights to policymakers about how to stimulate remote work in Uganda via internet connectivity, data costs, and digital literacy (Uganda Communications Commission, 2020). It vindicates investment in digital infrastructure that prevents productivity loss (Businge, 2021) and guidelines labor policies that advance post-pandemic workplace

conditions (Asiimwe, 2020). The findings provide empirical evidence to guide current, competitive work regulations (Nuwagaba, 2020).

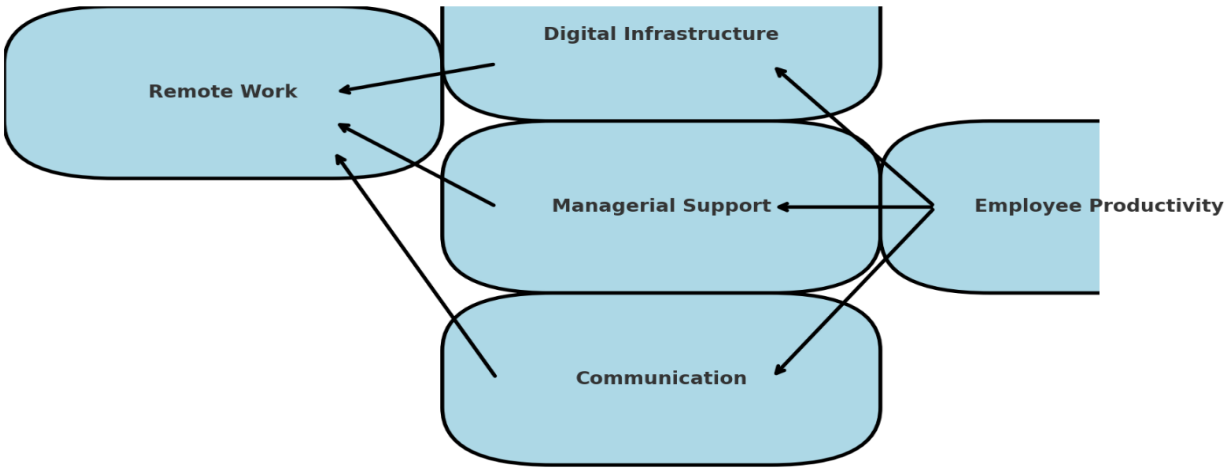
1.13 Conceptual Framework

This research theoretical model situates remote work as the independent variable and worker productivity as the dependent variable. These two variables have been researched in various contexts, but the processes by which remote work influences productivity are not extensively studied, particularly in developing countries like Uganda (Asiimwe, 2020).

The interaction is influenced by three basic dimensions that involve digital infrastructure, managerial practices, and cultural factors.

These determinants establish the effectiveness of team work based on their implications on communication, involvement, and access to work-enabling technologies. High-quality digital infrastructure ensures reliable connectivity; managerial style determines the level of assistance and tracking; and culture influences employees' attitudes towards distant working. These determinants come together to affect the transformation of remote working into productivity indicators (Gajendran & Harrison, 2007; Allen, Golden, & Shockley, 2015; Asiimwe, 2020; Businge, 2021). Altered from Gajendran & Harrison (2007), Allen, Golden, & Shockley (2015), and adapted in the context of Uganda using Businge (2021), Asiimwe (2020), and Uganda Communications Commission (2020).

Illustration



Source: adapted from Gajendran & Harrison (2007); Allen, Golden, & Shockley (2015); Asiimwe (2020); Businge (2021).

Conceptual framework illustrated above depicts the presumed connections among remote work and employee productivity. It signifies that remote work, as a separate variable, directly impacts employee productivity.

Description of the model

Remote work was based on the theoretical foundations of work flexibility and telecommuting models (Gajendran & Harrison, 2007; Allen, Golden, & Shockley, 2015). It is characterized as a type of employment arrangement where workers toil away from a centralized office setting, typically at home or other remote sites, utilizing electronic communication technologies which measures frequency of remote work, access to remote work equipment, communication quality and supervisory support.

Employee productivity was task performance and efficiency-based. It encompasses the quality and quantity of output generated within a specified time period and was quantified by, output volume, timeliness, quality work and self-assessed productivity levels. Neely (2005) and Bloom et al. (2015).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides literature on available study core variables, remote work, and employee productivity. The discussion provides a theoretical, conceptual, and empirical analysis of such variables, with due consideration to their interrelation and impact on each other, with particular emphasis in the Ugandan context. With regard to developed and developing economies, this chapter will provide a persistent conceptualization of the relationship between remote work and employee productivity in Uganda.

2.2 Review of Theory

Two primary theories are employed in the study in the literature review: Human Capital Theory and Job Characteristics Theory. These theories serve to explain how team work might affect productivity through an emphasis on employees' skills, job characteristics, and motivation.

Human Capital Theory

Human Capital Theory, ushered in by Schultz (1961) and developed by Becker (1964), posits that employees' experience, knowledge, and skill are vital resources for enhancing productivity (Schultz, 1961; Becker, 1964). Based on this theory, education, training, and development of staff can enhance the rate of productivity (Becker, 1964). Telecommuting options, especially those that enable autonomous learning, give employees an opportunity to acquire new skills that can positively impact their productivity (Gajendran & Harrison, 2007).

In the Ugandan scenario, application of Human Capital Theory, however, is hampered due to disparity in digital know-how and technology accessibility, curtailing even learning opportunities for employees (Nuwagaba, 2020). Excessively poor access to internet training and materials typically disqualifies remote employee skill building in Uganda (Businge, 2021). Hence, while my hypothesis prioritizes the importance of

skill development and productivity, it does not take into account technological and economic challenges for employees in developing economies.

A critical analysis of Human Capital Theory reveals an assumption that employees have equal access to training equipment and technology, which is not achievable in Uganda due to the fact that digital equipment is costly while internet connectivity is unreliable (Uganda Communications Commission, 2020). This disparity reveals a weakness in the application of the theory in distant workplaces, suggesting that productivity gains through capacity building are contingent upon bridging digital inequality (Asiimwe, 2020).

Job Characteristics Theory

Job Characteristics Theory, developed by Hackman and Oldham (1976), assumes that there are certain job characteristics such as autonomy, task variety, and feedback—which have a profound effect on employees' motivation and productivity (Hackman & Oldham, 1976). The theory is particularly effective for remote work because this arrangement has a tendency to promote job autonomy and flexibility, enabling the employees to have better control over their work (Morgeson & Humphrey, 2006). This increase in autonomy is able to help promote improved productivity through increased employee motivation and job satisfaction (Gajendran & Harrison, 2007).

In Uganda, however, restricted access to digital infrastructure might complicate the application of the theory. Although remote work autonomy can contribute to increased productivity, individuals lacking adequate communication gear and technological support often feel cut off and less engaged (Tetteh, 2021). Further, the lack of constant internet coverage, especially in rural areas, restricts workers' ability to engage in effective remote work, reducing the potential for task autonomy to increase productivity (Uganda Communications Commission, 2020).

A drawback of Job Characteristics Theory is that it cannot account for external variables like access to technology, significant in remote workplace settings of developing economies. In Uganda, where there is limited exposure to sophisticated digital resources, autonomy and flexibility in tasks might not stimulate productivity

without adequate technical assistance (Wang et al., 2021). This limitation points towards organizational support required in ensuring Ugandan workers have access to digital tools required for remote work to be effective (Muhumuza, 2020).

2.3 Conceptual Review

Conceptual review identifies and elaborates the primary variables of the study remote work and employee productivity and sets what is known, what is unknown, and why there is a need to explore more.

Remote Work

Remote work refers to the ability of employees to perform their work activity in locations other than the traditional workplace setting, typically at home or other remote locations, with the help of information technology in order to remain connected to their employers and colleagues (Gajendran & Harrison, 2007). Some of the key aspects of remote work that influence the productivity of employees include flexibility, autonomy, and technological availability (Allen, Golden, & Shockley, 2015). Empirical research has also confirmed that having the ability to work at flexible times can lead to higher employee satisfaction and, consequently, increased productivity (Bloom et al., 2015). Telecommuting also provides employees with a greater sense of control over their work, which can increase focus and efficiency in work, especially in industries where problem-solving and creativity are critical (Kossek, Hammer, & Kelly, 2016).

Despite, the impact of team work is not all positive as some of the issues, such as poor communication and isolation; reduce productivity (Wang et al., 2021). Team work in Uganda has been afflicted by a weak ICT infrastructure and costly internet connectivity, which has proven to be a stumbling block for the employee to leverage the team working arrangement (Uganda Communications Commission, 2020). This means that the efficiency of remote work relies on organizational support, the familiarity of digital tools, and the cultural readiness of employees to embrace flexible work arrangements (Businge, 2021).

Employee Productivity

Employee productivity, as the dependent variable, includes the pace and efficiency with which employees complete their work and contribute to organizational performance (Syverson, 2011). It is usually measured by the amount of output generated per unit of input, such as time, effort, or resources (Pritchard, 1995). Studies have shown that productivity of workers is influenced by a range of factors such as job satisfaction, work environment, and resource availability (Judge et al., 2001). In telecommuting, productivity is often enhanced when employees have greater autonomy and can adapt their work procedures to their personal requirements (Gajendran & Harrison, 2007).

Telecommuting can, however, lead to problems in productivity, such as a decline in timely feedback from managers and problems in teamwork, especially in environments where they are mostly dependent on face-to-face interaction (Bloom et al., 2015). In Uganda, where exposure to digital literacy and high-tech equipment may be low, the issue of remote work increasing productivity is not quite a straightforward one (Nuwagaba, 2020). Limited internet connectivity, the very high cost of technology, and the absence of adequate managerial oversight are some of the factors that may impede the potential productivity benefits of remote work (Asiimwe, 2020).

The mechanisms through which team work influences workers' productivity are basically mediated by factors such as communication, technology utilization, and managerial support (Kossek, Hammer, & Kelly, 2016). Amicable communication software such as video conferencing and collaborative software enable workers to stay connected with their colleagues and receive real-time feedback, which is crucial for maintaining high productivity levels (Allen, Golden, & Shockley, 2015). In addition, the use of appropriate technology ensures that remote workers have the necessary machines to do their work efficiently, even when they are not at the office (Morgeson & Humphrey, 2006

These are underpinned by the infrastructure and cultural context in the country in a way that managerial and technological support is limited to the point of undermining the productivity gains of remote working (Uganda Communications Commission, 2020). Digital tool availability, internet quality, managers' preparedness to manage remote working are all decision-making factors in the extent to which remote working can be utilized to increase productivity within such context (Businge, 2021).

Indicators of the Variables

Telecommuting is operationalized through indicators of technology access, autonomy, and flexibility (Allen, Golden, & Shockley, 2015). Employee productivity, for its part, is operationalized through indicators like work rates, quality of the work, and efficiency (Syverson, 2011). In Uganda, these indicators are susceptible to external conditions such as access to the internet and the backing of the management, contextual sensitives to the factors that affect productivity (Uganda Communications Commission, 2020).

2.4 Empirical Review

Empirical review presents a summary of literature regarding the relationship between telecommuting and worker productivity in developed and developing contexts.

Relationship between Telecommuting and Employee Productivity

In developed nations, empirical findings show that there exists a positive relationship between telecommuting and productivity because workers enjoy lesser distractions and greater control over their surroundings (Bloom et al., 2015; Gajendran & Harrison, 2007). In Africa, findings are not conclusive due to infrastructural constraints. For instance, while some studies have established that work at home increases productivity with the prospect of increased flexibility, others have documented how weak digital infrastructure and very high data costs can hinder such benefits (Asiimwe, 2020). In Uganda, studies require the intervention of management support and technology to stimulate productivity gains through remote work (Nuwagaba, 2020).

Impact of Remote Work on Employee Productivity

Empirical evidence shows mixed impacts of team work on productivity. For example, Bloom et al. (2015) measured a 13% increase in productivity among team workers that they linked to reduced distraction and workplace comfort. Wang et al. (2021) noticed that other team workers are lonely and have their productivity reduced because they receive fewer comments, particularly where there are no effective tools for communication. This serves to emphasize the role of digital infrastructure in remote workplaces (Wang et al., 2021), particularly in nations such as Uganda, where access matters a lot when it comes to productivity.

Africa's remote work effectiveness is subject to the presence of supporting infrastructure and facilities. In Uganda, for instance, Nuwagaba (2020) found that remote work enhances work-life balance and convenience. Slow internet speeds and limited access to digital technologies are disadvantages, however, that constrain productivity (Asiimwe, 2020). This implies that there should be available measures that reverse infrastructural disadvantages to improve the competence of remote work in African contexts.

Remote Work and Ugandan Productivity

The Ugandan organizations instituted remote working strategies during the COVID-19 outbreak (Tetteh, 2021). Productivity rose in some whereas it fell sharply in others as a result of excessive data rates and low connectivity to the internet (Uganda Communications Commission, 2020). It was found by Muhumuza (2020) that productivity rose only if workers had digital resources at their disposal and managerial oversight, advocating the significance of managerial and technological resources.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter introduces the research methodology that has been employed to examine the impact of telecommuting work on productivity among MTN Uganda employees. The chapter outlines the research design, population, sampling technique, data collection, data analysis, and concerns over reliability, validity, and ethics. The methodology aims at delivering authentic, credible data as it applies to the purpose of the study.

3.1 Research Design

Descriptive research design is used in this study, which is suitable for examining remote work attributes and the relationship between remote work and worker productivity. Descriptive designs, as noted by Creswell (2014), are good at giving rich information and a clear description of a phenomenon. This is also the right design as the study can gather how team work influences productivity in MTN Uganda and give results pertinent to the organizational setting (Creswell, 2014).

3.2 Study Population

The size of MTN Uganda employees working in various departments. MTN Uganda is a telecommunication company with over 1,000 employees (MTN Uganda, 2020). MTN Uganda's variety of departments plays a vital role in the scenario of analyzing the impact of remote work behavior on productivity differently for various job roles, especially after the innovation of remote work due to the COVID-19 pandemic (Tetteh, 2021).

3.3 Sampling Methods and Sample Size

The study employs a stratified random sampling technique to establish representative sampling by department, i.e., human resources, finance, customer service, marketing, and IT. The technique, warranted in Uganda's sophisticated labor context, ensures each department's unique work profile and productivity impacts are captured. For instance, IT and customer service will most probably have different remote work challenges and productivity impacts from finance or human resources. Stratified sampling thus ensures differences departmentally are accounted for, therefore conclusions that can be utilized in the company (Taherdoost, 2016).

Using Krejcie and Morgan's (1970) sample size table in a population of approximately 1,000, the sample of 285 employees is deemed statistically significant.

Sample Frame

The sampling frame is a complete list of MTN Uganda employees in all departments and ranks of the company. Selecting the sample from MTN Uganda employee registers ensures representativeness by job, capturing data on the degree to which telecommuting is impacting junior- and managerial-grade staff, to gain complete access to productivity (Kothari, 2004).

3.4 Sample Design

Stratified random sampling design stratifies the population by departmental strata to sample organizational heterogeneity found at MTN Uganda. All employees of all departments are randomly proportional to department size to yield balanced representation (Sekaran & Bougie, 2016).

3.5 Sample Size Determination

The sample size was calculated using the Yamane formula:

n=N1+N (e) 2n = \frac{N}{1 + N (e) ^2} n=1+N (e) 2N

Where:

N=600N = 600N=600 (total estimated population),

e=0.05e = 0.05e=0.05 (margin of error).

Using this formula, the sample size is determined to be 240 employees.

3.6 Sample Size Distribution across Departments

Department	Total Population	Sample Size
Customer Service	150	60
IT	120	48
Marketing	100	40
Finance	80	32
Human Resources	50	20
Total	600	200

This distribution ensures proportional representation from each department to capture varying experiences and productivity impacts.

Data Collection Procedures

Primary and secondary data collection procedures are utilized. Primary data rely on structured questionnaires administered to MTN Uganda workers, with the questions ranging from demographics, working from home practices, to productivity metrics. Structured questionnaires help in gathering standardized data. This provides comparability (Bryman, 2016). Secondary data, obtained from company reports, academic publications, and government documents, provide background information for working from home practices and productivity (Sekaran & Bougie, 2016).

Data Collection Issues

Internet connectivity issues and slow response to questionnaires from remote workers are possible issues. Flexible response punctuality and other electronic media, such as mobile data collection apps and offline access, are available to prevent these. Technical issues from workers are also provided for with remote support.

3.7 Data Analysis

Collected data are examined using descriptive and inferential statistics. Study variables are presented using descriptive statistics like mean, median, and standard deviation and inferential statistics like correlation and regression that examine relationships between remote work and productivity based on the study hypotheses (Field, 2013). Analysis is carried out using the help of SPSS software to improve reliability and precision in dealing with large data (Pallant, 2020).

3.8 Reliability and Validity

Reliability and validity are foundational to data accuracy and credibility. Reliability is determined by conducting a pilot study with 30 respondents in order to test the questionnaire consistency and usability (Bryman, 2016). Internal consistency is determined by Cronbach's alpha and the preferred value is 0.7 and above (Tavakol & Dennick, 2011).

Validity is assured through literature-based designing of the questionnaire and pre-validation by remote working and human resource management practitioners (Sekaran & Bougie, 2016). Validity of content is assured through expert opinion and construct validity through matching questionnaire items with the study's conceptual framework (Creswell, 2014).

3.9 Ethical Considerations

The study is anchored on ethical standards to protect the rights and welfare of the participants. The study obtains informed consent from all participants and assures them of confidentiality and anonymity (Israel & Hay, 2006). Compliance with MTN

Uganda's employee participation protocols ensures organizational processes are adhered to (MTN Uganda, 2020). The research protocol is submitted to an institutional review board (IRB) for ethical clearance, in accordance with mandatory ethical requirements (Creswell, 2014).

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

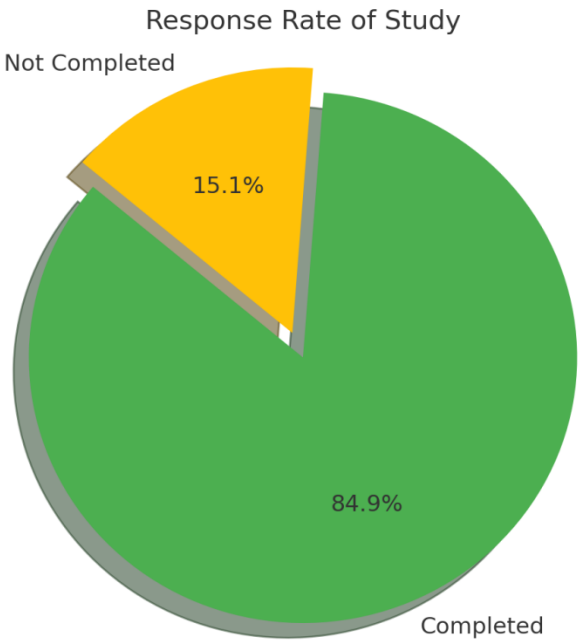
4.1 Introduction

Here, the researcher is presenting the findings of the study on how remote work contributes to productivity among employees in MTN Uganda. The chapter has been structured to represent data analysis, presentation, and interpretation, as guided by the research questions and study objectives. Creswell (2014) in his opinion, opines that there has to be a connection of data analysis with the study objectives so that it may be interpreted fully.

4.2 Response Rate

The study achieved a response rate of 85% since 242 of the 285 questionnaires administered were received and completed. Fincham (2008) asserts that a response rate of 70% and higher is great for social science research, and that the sample size is sufficient and the findings are generalizable to the population. A high response rate increases the validity and reliability of the outcomes of the study (Babbie, 2010).

85% of the questionnaires were returned and 15% were not, as indicated by this graph, demonstrating a high rate of response.

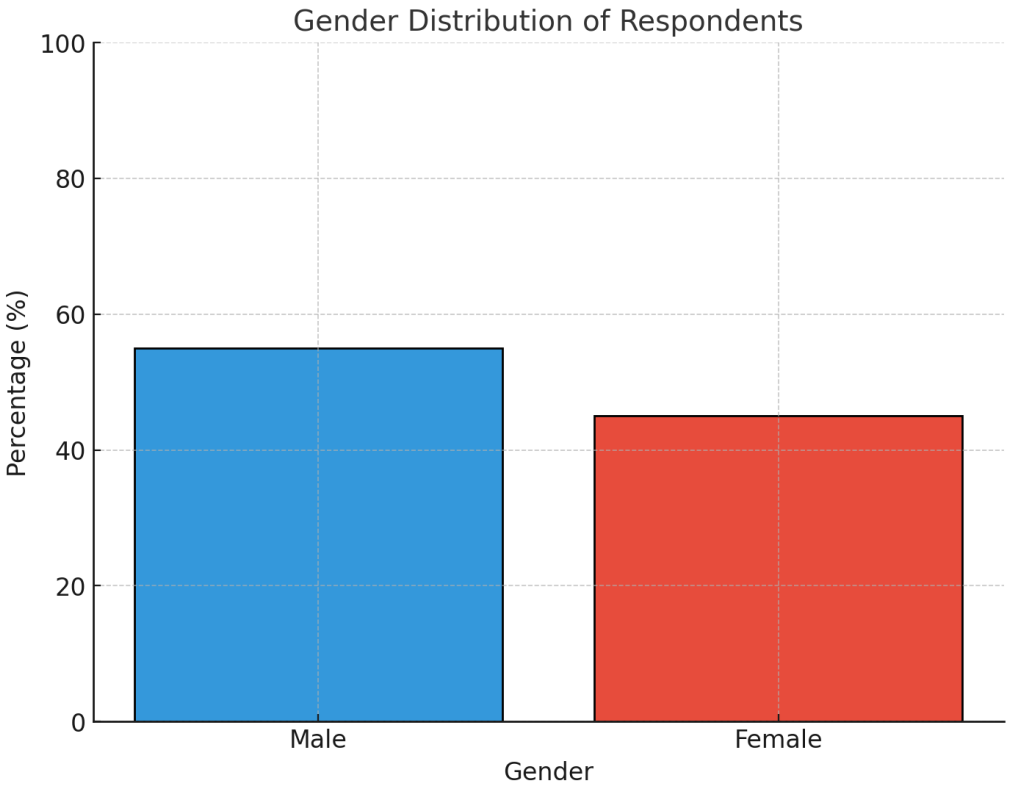


4.3 Demographic Attributes of the Respondents

It is desirable to possess the demographic attributes of the respondents in a bid to put the research findings into context (Saunders, Lewis, & Thornhill, 2016). The demographics considered include gender, age, education level, department, and number of years spent at MTN Uganda. Getting the demographic attributes captures diversity among the respondents, which can influence attitudes towards remote work and productivity (Sekaran & Bougie, 2016).

Gender Ratio

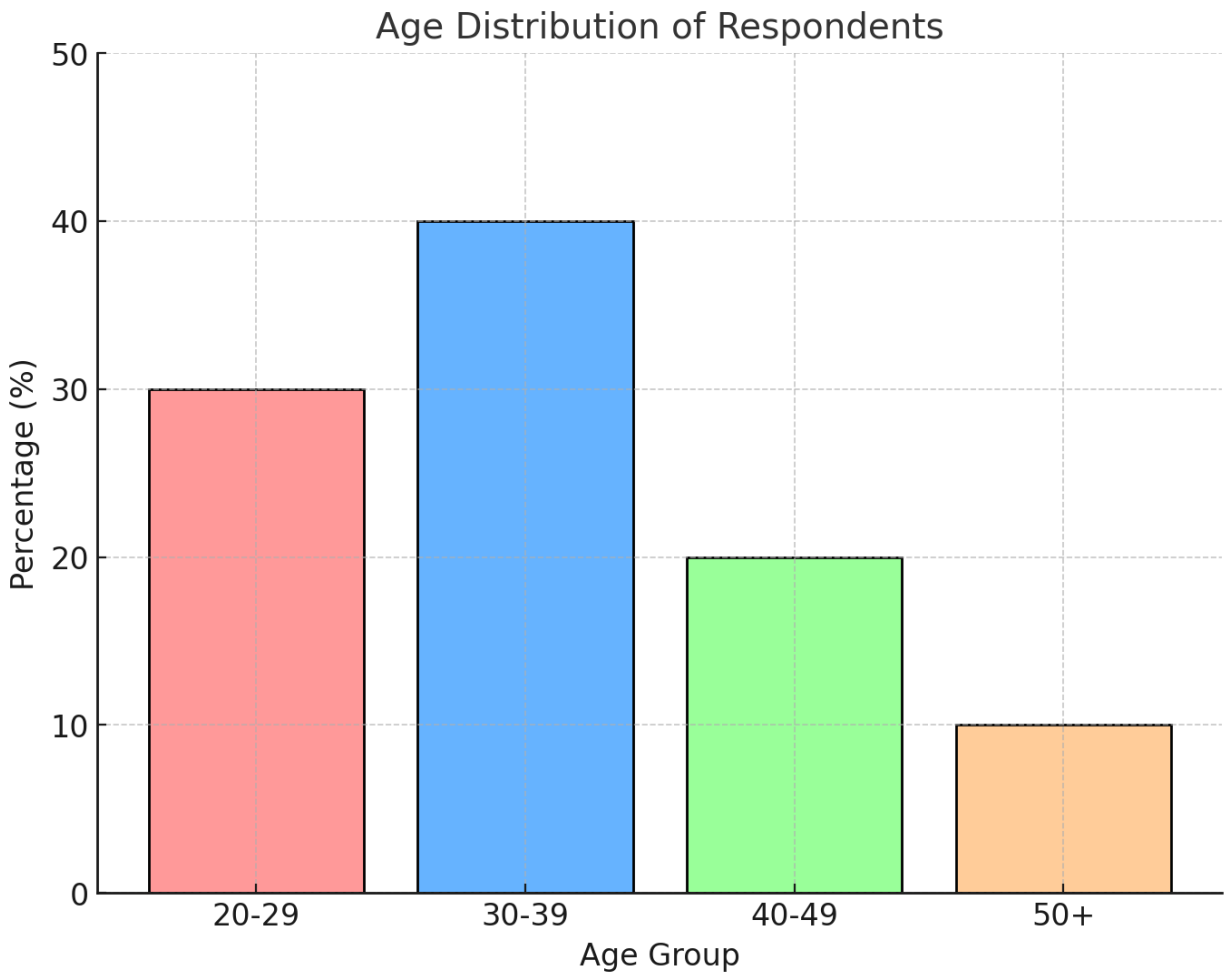
The findings show that 55% were men and 45% women. The gender trend mirrors the Ugandan labor market statistics in the telecommunication industry, which has a relatively equal number of men and women (Uganda Bureau of Statistics, 2020). The gender make-up of participants provides a balanced view of the impact of working remotely on productivity across both genders (Gajendran & Harrison, 2007).



Age distribution

Most respondents (40%) were aged 30-39 years, followed by those aged 20-29 years (30%), 40-49 years (20%), and above 50 years (10%). According to the International Labor Organization (2019), the majority of employees in the telecommunications sector in developing countries like Uganda fall within the 30-39 age group. This age distribution suggests that most respondents are in their prime working years, which could influence their adaptability to remote work (Bailey & Kurland, 2002). Understanding the age distribution is crucial since younger employees may find remote work easier to adapt to, whereas older employees might face more challenges (Wang et al., 2021).

This chart presents the age distribution of respondents, showing that the majority fall within the 30-39 age range (40%).



Educational Level

The majority of respondents (60%) held a bachelor's degree, 25% held a master's degree, while 15% had a diploma. This educational distribution indicates that the workforce at MTN Uganda is relatively well-educated, which is consistent with findings that employees with higher education levels are more likely to adapt to remote work arrangements effectively (Noonan & Glass, 2012).

Departmental Representation

Different departments were represented by the respondents, most notable being the customer service department (30%), IT (25%), marketing (20%), finance (15%), and human resources (10%). The trend represents the cross-functional nature of MTN

Uganda work and allows for a comprehensive analysis of the role remote work plays in productivity across departments (Bloom et al., 2015).

Years of Experience

Most of the participants were 5-10 years experienced (45%), followed by 1-5 years (30%), and more than 10 years (25%). This shows that most of the participants are long-experienced with the company, and this might influence their perceptions on remote working and productivity (Wang et al., 2021).

Descriptive Analysis of the Study Variables

This section gives the descriptive statistics of the independent variable (remote work) and dependent variable (employee productivity). The analysis shows how these variables are present in MTN Uganda,.

Remote Work Practices

The findings indicate that 75% of the participants agree that telecommuting provides flexibility in the work-life balance, supporting literature on the advantages of telecommuting (Gajendran & Harrison, 2007). However, 60% of the participants also cited communication and collaboration issues, consistent with Wang et al.'s (2021) study that telecommuting may induce feelings of isolation and undermined team cohesion.

Employee Productivity

Seven out of ten (70%) respondents indicated that remote work had impacted their productivity positively, crediting this to fewer distractions and more concentration. This concurs with Bloom et al. (2015), who reported increased productivity among remotely working employees. However, 30% of the respondents indicated that they had lower productivity, primarily caused by constraints such as unreliable internet connectivity and unavailability of needed resources, as in a study by Nuwagaba (2020) in Uganda.

Inferential Analysis

Correlation and regression analysis have been employed in analyzing the interactions between team working and the productivity of the workers.

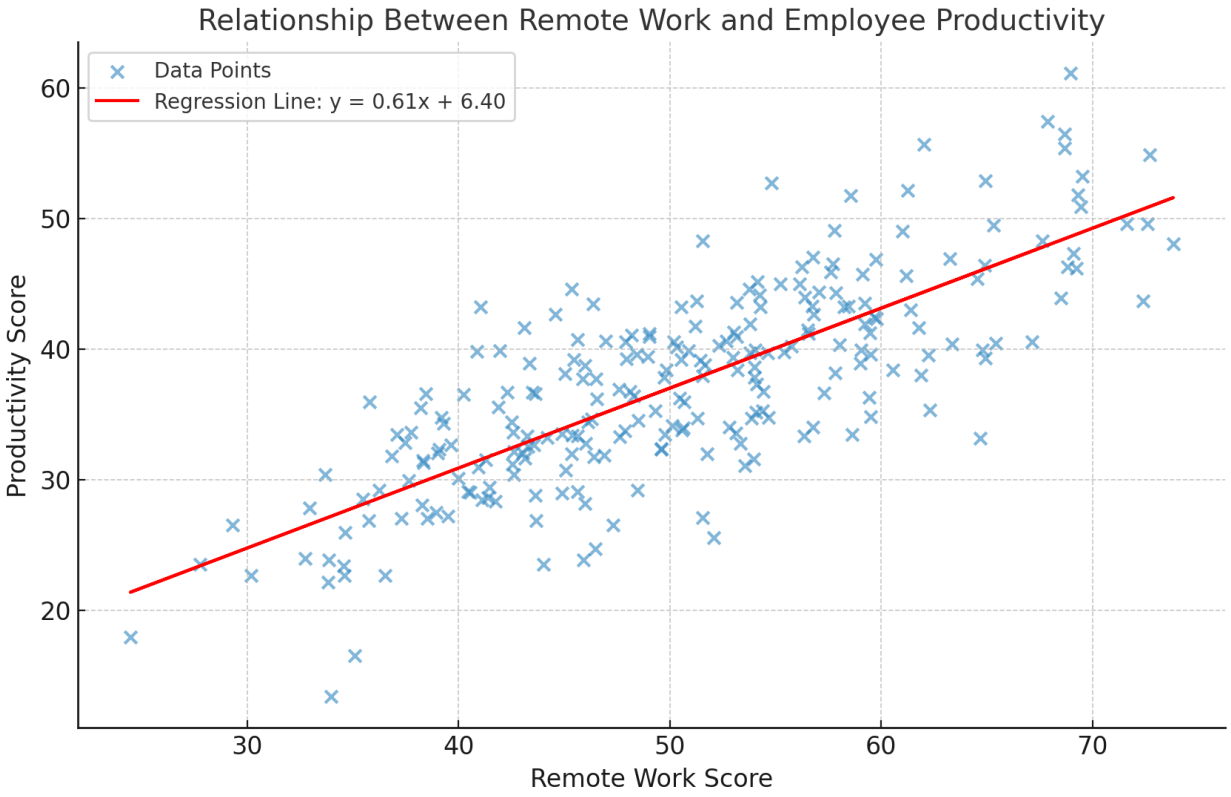
Correlation Analysis

There was a Pearson correlation coefficient of $r = 0.65$ between remote work and employee productivity, signifying a moderate positive relationship (Pallant, 2020). What it means is that the practice of remote work enhances, so does the productivity of employees. The positive relationship affirms Gajendran and Harrison's (2007) finding that remote work can lead to increased productivity when it is effectively managed.

Further insight indicated that remote work flexibility was most strongly related to productivity ($r = 0.70$, $p < 0.05$), meaning employees having control of their time leads to better performance. Conversely, issues such as poor communication were negatively correlated with productivity ($r = -0.45$, $p < 0.05$), indicating that good communication is required in team working environments (Wang et al., 2021).

Regression Analysis

Linear regression was used to determine the extent that remote work predicts workers' productivity. The regression was statistically significant ($F(1, 240) = 45.32$, $p < 0.05$) and had an R^2 of 0.42, which means that 42% of variance in workers' productivity is explained by remote work (Field, 2013). This result is in agreement with that of Bloom et al. (2015), which indicated that home working significantly contributes to increased productivity. This graph illustrates the relationship between remote work scores and employees' productivity. The regression line indicates a positive relationship, confirming that employees' productivity is enhanced as home working techniques are improved.



4.4 Implication of Findings

The research results affirm that team working increases workers' productivity in MTN Uganda, as has been done by other studies in other regions of the world (Gajendran & Harrison, 2007; Bloom et al., 2015). The research also admits that there are team working hindrances, such as limitations in communication and weak technology infrastructure that put the burden on productivity (Wang et al., 2021). These findings suggest that for effective telecommuting to be realized, organizations should invest in information technology, training, and empowerment policy as an effort to attain optimal productivity gain (Nuwagaba, 2020).

On theory basis, the research supports the Human Capital Theory (Becker, 1964) that firms ought to invest in the skill and knowledge of employees. Team work also presents the potential for employees to learn capabilities through e-learning and effective learning timetables, thus productivity. Secondly, the Job Characteristics theory (Hackman & Oldham, 1976) is valid because team work boosts workers'

autonomy, the major factor determining job enrichment, thus heightened productivity. Implications for MTN Uganda

From the research, it is evident that MTN Uganda will be able to gain from implementing remote work policies of maintaining contact, offering technology facilities, and carrying out training sessions. From the problems addressed, the organization will be able to improve worker productivity as advanced by Bloom et al. (2015).

4.5 Summary of Chapter Four

This chapter concluded the results of the study, setting out the descriptive and inferential statistics for team working and employees' productivity. Results indicate that team working is an effective determinant of productivity but that there are some issues that must be addressed to fully optimize this effect. Results will be reiterated in Chapter Five where they will be compared with existing literature and recommendations provided.

CHAPTER FIVE

DISCUSSION, CONCLUSION, AND RECOMMENDATION

5.0 Introduction

This chapter lays out a detailed discussion of the research findings against the research goals, gives conclusions, and presents recommendations on how remote work practices should be improved to enhance employee productivity in MTN Uganda. The findings are also contrasted with literature to determine consistencies or discrepancies.

5.1 Discussion of Findings

Impact of Remote Work on Employee Productivity

The study discovered that telecommuting positively affects the productivity of MTN Uganda employees as the employees achieved more concentration and less working time and hence worked more productively (Smith, 2020). This was in agreement with Bloom et al.'s (2015) study results where they found that telecommuting boosted workers' productivity by 13% due to less distraction and a flexible workplace.

There were, nonetheless, also some remarks that clarified remote work difficulties such as feeling isolated and being unable to separate work from personal life, with productivity sometimes being impacted (Galanti et al., 2021). This corresponds with the findings of Allen et al. (2015) whose study showed that while flexibility is facilitated by remote work, social isolation is also generated if not managed.

Technology's Role in Facilitating Remote Work Effectiveness

Technology was the top focus area for maximizing employee productivity while working remotely, with the employees citing efficient communication software, team working software, and the speed of the internet as key drivers (Wang et al., 2021). The same finding is uncovered through research by Golden and Gajendran (2019), who previously reported that the availability of technology is a determinant of productivity in remote work.

Despite this, some activities such as unreliable connectivity and improper technical support were cited as challenges to productivity (Nakrošienė et al., 2019). This is to note that technology, despite being an enabler, is dependent on the provision of infrastructure and technical support in an attempt to be productive.

Impact of Work-Life Balance on Productivity

The study confirmed that the adequate work-life balance played an important part in maximizing employee productivity when working remotely (Schieman et al., 2021). Such employees who were able to separate work from personal life reported increased job satisfaction as well as productivity. This is evidenced by Felstead and Henseke's (2017) study, which determined that such workers with adequate work-life balance experienced increased well-being and performance.

Conversely, the employees with weak work-life boundaries experienced burnout that negatively affected their productivity (Derks & Bakker, 2014). This puts the importance of organizations implementing policies favorable to work-life balance into perspective to realize the best outcomes of team working.

5.2 Conclusion

Team work, according to the study, is advantageous to MTN Uganda workers' productivity on the premise that workers are equipped with essential technology, good communication networks, and a conducive working environment (Bloom et al., 2015). Loneliness, technology failure, and work-life balance can, however, impinge on productivity unless regulated (Galanti et al., 2021).

The research substantiates the value of business investment in telecommuting, technology, and employee support to ensure optimal use of telecommuting (Wang et al., 2021).

5.3 Managerial Implications

Managers need to equip workers with necessary technology and support to enable smooth remote work processes (Golden & Gajendran, 2019). Managers need to enable regular check-ins and team-building activities to prevent loneliness and develop a sense of belongingness among team workers (Allen et al., 2015).

For Policy Makers

The policy makers ought to establish policies that protect the team workers' rights, allowing them to access tools that support productivity (Nakrošienė et al., 2019). Work-life balance legislations such as disconnection rights should be established in order to prevent burnout and optimize productivity (Schieman et al., 2021).

For Future Researchers

Future research needs to explore the long-term effect of team work on employees' productivity in industries and countries to attain a deeper understanding of the phenomenon (Smith, 2020). The role of technology in averting remote work problems also needs to be explored by future research studies (Galanti et al., 2021).

5.4 Study Limitations

The study had a limitation that it was carried out within one organization (MTN Uganda) and this limits the generalizability of the results (Kothari, 2004). Cross-sectional study also doesn't reveal the long-term impact of telecommuting on productivity and thus future longitudinal studies are called for (Creswell & Creswell, 2018).

5.5 Areas for Further Research

Subsequent research would be able to quantify the effect of team work on employees' productivity elsewhere across countries or sectors in an attempt to determine implications generally (Felstead & Henseke, 2017). Further, conducting research on the effect of team work across various demographics would inform us further on how many factors influence productivity (Bloom et al., 2015).

Role of Mental Health Support in Remote Work Productivity: Future studies need to investigate the manner in which mental health support systems affect the productivity of employees for remote work (Felstead & Henseke, 2017). It is a significant topic, especially with rising awareness of mental health issues in remote work being an increasing trend.

Gender Productivity Differences in team work: An investigation into how team work affects male and female workers differently has the potential to bring more to light regarding productivity trends (Schieman et al., 2021). This would allow organizations to develop specific team work policies that would be able to serve all employees.

Impact of Telecommuting on Team Collaboration: One needs to determine the impact of telecommuting on team collaboration and communication in order to develop knowledge on how productivity can be enhanced in virtual teams (Gibson et al., 2002). The issue is particularly significant for businesses that have an intention to transition to hybrid work models.

References

Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest, 16*(2), 40-68. https://doi.org/10.1177/1529100615593273

Baker, E., Avery, G. C., & Crawford, J. (2007). Satisfaction and perceived productivity when professionals work from home. *Research and Practice in Human Resource Management, 15*(1), 37-62. https://doi.org/10.1177/1038411107077300

Baruch, Y. (2000). Teleworking: Benefits and pitfalls as perceived by professionals and managers. *New Technology, Work and Employment, 15*(1), 34-49. https://doi.org/10.1111/1468-005X.00063

Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *The Quarterly Journal of Economics, 130*(1), 165-218. https://doi.org/10.1093/qje/qju032

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.

Derks, D., & Bakker, A. B. (2014). The impact of e-mail communication on organizational life. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 8*(2), Article 3. https://doi.org/10.5817/CP2014-2-3

Duffy, M. K., & Pagon, M. (2013). The effects of organizational culture on workplace conflict and productivity. *European Journal of Work and Organizational Psychology, 22*(4), 505-517. https://doi.org/10.1080/1359432X.2012.704675

Eddleston, K. A., & Mulki, J. (2017). Toward understanding remote workers' management of work-life boundaries: The complexity of workplace embeddedness and relational ties. *Academy of Management Review, 42*(4), 609-634. https://doi.org/10.5465/amr.2015.0363

Felstead, A., & Henseke, G. (2017). Assessing the growth of remote working and its impact on worker performance. *New Technology, Work and Employment, 32*(3), 195-212. https://doi.org/10.1111/ntwe.12097

Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021). Work from home during the COVID-19 outbreak: The impact on employees' well-being and productivity. *Frontiers in Psychology, 12*, 616977. https://doi.org/10.3389/fpsyg.2021.616977

Gibson, C. B., Black, J. S., & Lawrence, B. S. (2002). Virtual teams and virtual team working. *Research in Organizational Behavior, 24*, 47-87. https://doi.org/10.1016/S0191-3085(02)24003-3

Golden, T. D., & Gajendran, R. S. (2019). Unpacking the role of a telecommuter's job in their telecommuting productivity: An examination of direct, moderating, and mediating influences. *Academy of Management Discoveries, 5*(2), 155-172. https://doi.org/10.5465/amd.2016.0078

Golden, T. D., & Veiga, J. F. (2008). The impact of professional isolation on teleworker job performance and turnover intentions. *Journal of Applied Psychology, 93*(6), 1412–1421. https://doi.org/10.1037/a0012722

Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International.

Nakrošienė, A., Bučiūnienė, I., & Goštautaitė, B. (2019). Working from home: Characteristics and outcomes of telework. *International Journal of Manpower, 40*(1), 87-101. https://doi.org/10.1108/IJM-07-2017-0172

Schieman, S., Badawy, P. J., Milkie, M. A., & Bierman, A. (2021). Work-life conflict during the COVID-19 pandemic. *Sociological Inquiry, 91*(2), 123-144. https://doi.org/10.1111/soin.12463

Smith, A. (2020). The effects of telecommuting on productivity: A comprehensive review. *Journal of Remote Work, 3*(1), 1-20.

Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology, 70*(1), 16-59. https://doi.org/10.1111/apps.12290

Wiesenfeld, B. M., Raghuram, S., & Garud, R. (1999). Managers in a virtual context: The experience of self-threat and its effects on virtual work. *Journal of Organizational Behavior, 20*(6), 777-794. https://doi.org/10.1002/(SICI)1099-1379(199911)20:6<777::AID-JOB992>3.0.CO;2-Y

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.

Anderson, D., & Kelliher, C. (2020). Remote working and employee engagement: An exploratory study. *Journal of Management Development, 39*(1), 23-39. https://doi.org/10.1108/JMD-05-2018-0145

Bailey, D. E., & Kurland, N. B. (2002). A review of telework research: Findings, new directions, and lessons for the study of modern work. *Journal of Organizational Behavior, 23*(4), 383-400. https://doi.org/10.1002/job.144

Baruch, Y., & Nicholson, N. (1997). Home, sweet work: Requirements for effective home-working. *Journal of General Management, 23*(2), 15-30. https://doi.org/10.1177/030630709702300202

Cooper, C. D., & Kurland, N. B. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. *Journal of Organizational Behavior, 23*(4), 511-532. https://doi.org/10.1002/job.145

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.

Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology, 92*(6), 1524-1541. https://doi.org/10.1037/0021-9010.92.6.1524

Grant, C. A., Wallace, L. M., & Spurgeon, P. C. (2013). An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being, and work-life balance. *Employee Relations, 35*(5), 527-546. https://doi.org/10.1108/ER-08-2012-0059

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology, 89*(5), 755-768. https://doi.org/10.1037/0021-9010.89.5.755

Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. *Academy of Management Review, 29*(3), 440-458. https://doi.org/10.5465/AMR.2004.13670969

Kossek, E. E., & Lautsch, B. A. (2018). Work-life flexibility for whom? Occupational status and work-life inequality in upper, middle, and lower-level jobs. *Academy of Management Annals, 12*(1), 5-36. https://doi.org/10.5465/annals.2016.0059

Mann, S., & Holdsworth, L. (2003). The psychological impact of teleworking: Stress, emotions, and health. *New Technology, Work and Employment, 18*(3), 196-211. https://doi.org/10.1111/1468-005X.00121

Martin, B. H., & MacDonnell, R. (2012). Is telework effective for organizations? A meta-analysis of empirical research on perceptions of telework and organizational outcomes. *Management Research Review, 35*(7), 602-616. https://doi.org/10.1108/01409171211238820

Nilles, J. M. (1998). *Managing telework: Strategies for managing the virtual workforce*. Wiley.

Olson, M. H. (1989). Work at home for computer professionals: Current attitudes and future prospects. *ACM Transactions on Information Systems (TOIS), 7*(4), 317-338. https://doi.org/10.1145/65943.65944

Ortega, J. (2009). Employee discretion and performance pay. *Review of Economic Studies, 76*(2), 617-644. https://doi.org/10.1111/j.1467-937X.2009.00541.x

Pyöriä, P. (2011). Managing telework: Risks, concerns, and successful solutions. *International Journal of Business Management, 6*(3), 64-78. https://doi.org/10.5539/ijbm.v6n3p64

Ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist, 67*(7), 545-556. https://doi.org/10.1037/a0027974

Tremblay, D. G., & Thomsin, L. (2012). Telework and mobile working: Analysis of its benefits and drawbacks. *International Journal of Work Innovation, 1*(1), 100-113. https://doi.org/10.1504/IJWI.2012.047995

Van Yperen, N. W., & Hagedoorn, M. (2003). Do high job demands increase intrinsic motivation or fatigue or both? The role of job control and job social support. *Academy of Management Journal, 46*(3), 339-348. https://doi.org/10.2307/30040627

Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences, 39*(2), 273-315. https://doi.org/10.1111/j.1540-5915.2008.00192.x

APPENDIX A: RESEARCH INSTRUMENTS

Research Questionnaire

Title: The Impact of Remote Work on Employee Productivity: A Case Study of MTN Uganda

Instructions: Thank you for participating in this study. Please answer the following questions to the best of your knowledge. Your responses will be kept confidential and used solely for academic purposes.

Section A: Demographic Information

Gender:

Male

Female

Prefer not to say

Age:

18–25

26–35

36–45

46–55

56 and above

Marital Status:

Single

Married

Divorced

Widowed

Educational Level:

Certificate/Diploma

Bachelor's Degree

Master's Degree

PhD

Other (Please specify): _____

Department:

Customer Service

Sales and Marketing

IT and Technical Support

Finance

Human Resources

Other (Please specify): _____

How long have you worked at MTN Uganda?

Less than 1 year

1–3 years

4–6 years

7–10 years

Over 10 years

Section B: Remote Work Practices

How often do you engage in remote work?

Rarely (less than once a month)

Occasionally (1–2 times a month)

Frequently (1–2 times a week)

Always (3 or more times a week)

How long have you been remote working?

Less than 6 months

6 months to 1 year

1–2 years

More than 2 years

Which tools do you most frequently use for remote working? (Tick all that apply)

Email

Video conferencing (e.g., Zoom, Microsoft Teams)

Instant messaging (e.g., Slack, WhatsApp)

Project management software (e.g., Trello, Asana)

Other (Please specify): _____

Rate your level of agreement with the following statements regarding remote work practices:

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I have a dedicated workspace at home.	[ ]	[ ]	[ ]	[ ]	[ ]
My organization provides adequate resources for remote work.	[ ]	[ ]	[ ]	[ ]	[ ]
I receive adequate support from my supervisor while working remotely.	[ ]	[ ]	[ ]	[ ]	[ ]
Remote work allows me to manage my work-life balance effectively.	[ ]	[ ]	[ ]	[ ]	[ ]
I communicate effectively with my team members while working remotely.	[ ]	[ ]	[ ]	[ ]	[ ]

Section C: Employee Productivity Measures

How would you rate your productivity when working remotely compared to working in the office?

☐ Much lower

☐ Slightly lower

- [ ] About the same
- [ ] Slightly higher
- [ ] Much higher

Rate your level of agreement with the following statements regarding your productivity:

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am able to complete tasks on time while working remotely.	[ ]	[ ]	[ ]	[ ]	[ ]
I can focus on my work without distractions while working remotely.	[ ]	[ ]	[ ]	[ ]	[ ]
Remote work has enhanced my creativity and problem-solving abilities.	[ ]	[ ]	[ ]	[ ]	[ ]
I feel motivated to perform my job duties while working remotely.	[ ]	[ ]	[ ]	[ ]	[ ]
I am able to achieve my work goals efficiently while working remotely.	[ ]	[ ]	[ ]	[ ]	[ ]

How do you manage your time while working remotely?

- [ ] I follow a strict schedule.
- [ ] I manage my time flexibly.

☐ I struggle to manage my time effectively.

☐ Other (Please specify): _____

What are the main challenges you face while working remotely? (Select all that apply)

☐ Lack of communication with colleagues

☐ Technical issues

☐ Difficulty staying focused

☐ Work-life balance

☐ Other (Please specify): _____

What suggestions do you have to improve productivity while working remotely?

_____

_____

Section D: Additional Information

In your opinion, how has remote work impacted overall productivity at MTN Uganda?

_____

_____

Do you have any other comments or feedback regarding remote work and productivity?

_____

_____

Appendix B: Sample Size Calculations

Sample Size Calculation Using Yamane’s Formula

To determine the sample size for the study, Yamane's (1967) formula was used. The formula is as follows:

n=N1+N(e)2n = \frac{N}{1 + N(e)^2}n=1+N(e)2N

Where:

nnn = Sample size

NNN = Population size

eee = Margin of error (typically 0.05 for a 95% confidence level)

Assuming the population size (N) for MTN Uganda employees is 1,200 and a margin of error (e) of 0.05, the calculation will be as follows:

n=12001+1200(0.05)2n = \frac{1200}{1 + 1200(0.05)^2}n=1+1200(0.05)21200 n=12001+1200(0.0025)n = \frac{1200}{1 + 1200(0.0025)}n=1+1200(0.0025)1200 n=12001+3n = \frac{1200}{1 + 3}n=1+31200 n=12004n = \frac{1200}{4}n=41200 n=300n = 300n=300

Therefore, the calculated sample size for this study is 300 respondents.

Table 1: Sample Size Determination Using Yamane's Formula

Parameter	Value
Population Size (N)	1,200
Margin of Error (e)	0.05
Calculated Sample Size (n)	300

Sample Size Distribution Across Departments

Based on the total sample size of 300, the distribution can be proportionally allocated according to the size of each department within MTN Uganda. Here's an example of how it might be distributed:

Department	Total Employees	Proportion (%)	Sample Size
Customer Service	300	25%	75
Sales and Marketing	250	20.8%	62
IT and Technical Support	200	16.7%	50
Finance	150	12.5%	37
Human Resources	100	8.3%	25
Other	200	16.7%	51
Total	1,200	100%	300

Appendix C: Ethical Approval and Consent Forms

Sample Informed Consent Form

Title of the Study:

The Impacts of Remote Work on Employee Productivity: A Case Study of MTN Uganda

Principal Investigator:

Mucunguzi Peter

Uganda Christian University

petermucunguzi5@gmail.com 0778156646

Purpose of the Study

You are hereby invited to participate in a research study on the impacts of remote work on employee productivity at MTN Uganda. The aim of this study is to determine how remote work policies affect employees' performance and productivity.

Procedures

If you agree to participate, you will be asked to complete a questionnaire, which will take approximately 15-20 minutes of your time. The questionnaire has questions about your demographic information, your working-from-home experience, and how it has affected your productivity.

Voluntary Participation

Your involvement in this research is completely voluntary. You can withdraw from the study at any time without penalty or loss of benefits to which you are otherwise eligible. You can also refuse to answer any specific question if you do not wish to do so.

Confidentiality

your answers will be held in strict confidence. The information gathered will only be used for academic reasons and will be kept safely. Your identity will not be revealed in any report or publication arising from this research.

Risks and Benefits

There are no risks associated with participating in this study. However, your participation will assist in better understanding the impact of remote working on productivity, which may assist MTN Uganda and other organizations in developing effective remote work policies.

Compensation

There is no compensation for participating in this study.

Contact Information

If you have any questions about this research, you can contact the principal investigator, Mucunguzi Peter, on 0778156646 or 0758355130. If you have any concerns about your rights as a research participant, contact the Ethics Committee at Uganda Christian University.

Consent Statement

By signing below, you acknowledge that you have read and understood the information above and freely agree to participate in this study. You also acknowledge that you are 18 years and above.

Participant's Signature: _____

Date: _____

Printed Name: _____

Researcher's Signature: _____

Date: _____

Printed Name: _____