

**MODERATING EFFECT OF TAXPAYER AWARENESS ON THE
RELATIONSHIP BETWEEN DIGITALIZATION OF SYSTEM AND RENTAL
INCOME TAX COMPLIANCE AMONG LANDLORDS IN MAKADARA
CONSTITUENCY, NAIROBI COUNTY, KENYA**

BY

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DECLARATION

Declaration by the Candidate

This research project is my original work and has not been presented for a degree in any other university. No part of this project may be reproduced without the prior written permission of the author and/or Moi University.

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DEDICATION

This research project is dedicated to my father and mother Mr. Daniel Nyaata Onger and Mrs. Jane Moraa Nyaata for their moral and financial support in the course of the project work and to my siblings; Seth Onger Nyaata, Stanley Maonga Nyaata and Loice Nyaboke Nyaata who have stood with me all this time and shared words of encouragement and insights. Thank you very much, God bless you.

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ABSTRACT

Property developments are very crucial to providing shelter and to an extent, ensuring comfortable living. It is also an important contributor to the economy of nations. Despite the tremendous growth in real estate, the corresponding tax collection from the sector has remained low. The contribution by rental income earners has been low despite all the efforts to enforce rental income tax policies. The study examined the moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. It was guided by three objectives: to establish the effect of perceived ease of use of digitized system, perceived benefit of digitized system and perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya. While the moderating variable was tax awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. It was guided by Theory of Technology Acceptance, unified theory of acceptance and use of technology and Ability to Pay Theory and adopted explanatory research design. The target population was 4,927 landlords in Makadara Nairobi County. The sample size of the study was 369, the study questionnaires that were correctly filled and returned were 230. The study used primary data which was collected using structured questionnaires with close ended questions and a pilot test was conducted to test reliability and validity. Both descriptive and inferential statistics were carried out. The study adopted multiple regression analysis to confirm the effect of digitalization of service and rental income tax performance. It found that perceived ease of use of digitized system has a positive and significant effect on rental income tax compliance, $\beta=0.970$, $p\text{-value} = 0.000 < 0.05$. The study found that perceived benefit of digitized system has a positive and significant effect on rental income tax compliance $\beta=0.150$ $p\text{-value} = 0.000 < 0.05$. The study also found that perceived benefit of digitized system has a positive and significant effect on rental income tax compliance $\beta=0.085$ $p\text{-value} = 0.024 < 0.05$. The study further found that taxpayer awareness moderates the relationships between perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system and rental income tax compliance, $\beta=0.203$ $p\text{-value} = 0.003 < 0.05$, $\beta=0.104$ $p\text{-value} = 0.007 < 0.05$ and $\beta=0.053$ $p\text{-value} = 0.007 < 0.05$ respectively. The study shows that the perceived ease of use, perceived benefit, and perceived usefulness of a digitized system positively impact rental income tax compliance. All three factors are significant, with ease of use showing the strongest effect. Additionally, taxpayer awareness significantly moderates these relationships, enhancing the impact of perceived ease of use, benefit, and usefulness on compliance. These findings suggest that simplifying digital systems and improving awareness can boost tax compliance. The recommendations of the study are such that the KRA should ensure that the digitized tax system is intuitive and easy to navigate for all users, including those with limited technological proficiency. The KRA should launch widespread awareness campaigns to educate landlords about the benefits and ease of use of the digitized tax system. Consequently, it is recommended that KRA enhances the use of digitalization to increase tax revenue compliance. A study should be conducted to determine the impact of tax reforms on rental income tax compliance. A study on the effects of tax incentives on rental income tax compliance could benefit the research field.

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ABBREVIATION AND ACRONYMS

KRA	Kenya Revenue Authority
MRI	Monthly Rental Income
NACOSTI	National Commission for Science, Technology and Innovation
OECD	Organization Economic Cooperation and Development
PEoU	Perceived Ease of Use
PU	Perceived Usefulness
SPSS	Statistical Package for the Social Sciences
TAM	Technology Acceptance Model
UTAUT	Unified Theory of Acceptance And Use of Technology
VAT	Value Added Tax

OPERATIONAL DEFINITION OF TERMS

Digitalization of Services: The application of technology in aiding tax compilation and compliance (Iordachi & Timus, 2020).

Perceived Benefit of a Digital System: Refers to the advantages or positive outcomes that users believe they will gain from using digital technology or digitalized processes, Smith, 2019)

Perceived Ease of Use (PE): Defined as the degree to which individuals perceive how easy it is to use the system (Davis, 1989a). That is, the system is free of physical effort, mental effort and is hassle-free (Venkatesh & Davis, 2020).

Perceived Usefulness (PU): Refers to the extent to which individuals believe how useful the system would be (Davis, 1989a). That is, the ultimate reason that users exploit e-filing system is that they find the systems useful to their information needs. Users' perception on the usefulness of the system helps them to increase the results of their work Smith, (2019).

Residential Rental Income Tax: This is tax payable by resident persons (individual or company) on rental income earned for the use or occupation of a residential property (KRA, 2020).

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter presents the background of the study, statement of the problem, objectives of the study, hypotheses, significance of the study and finally the scope of the study.

1.1 Background of the Study

Taxation is the main source of government revenue in both developed and developing economies. It gives countries financial independence from external assistance (OECD, 2019). However, one of the biggest threats to this method of financing governments is tax avoidance and evasion. Developing economies are worst affected by this challenge. While Developing countries record relatively higher tax performance levels (35%), African countries report less than 23% (OECD, 2019).

Rental income tax is the tax imposed on income from rent of residential buildings. Since any income that is received from renting out a property is legally chargeable to income tax, the owners of the property are required to declare this income on their tax return. This income could be from renting out land or buildings (Berhane & Yesuf, 2019). Cytonn (2020) reported that the largest demand for housing units is driven by urban dwellers at 61%. A shortage of quality affordable housing and student accommodation has led to a 40% deficit in urban areas. The problem has been exacerbated by a rise in infrastructure development, improved roads, and utility connections with a stable GDP growth at 5.4% over the last five years, which is above 4.1%. Furthermore, demographic trends such as rapid urbanization (4.4%) as compared to the global 2.5% against a population rise of 26%. Furthermore, it provides a high total return of 25.0% against the 12.4% derived from traditional asset classes.

The concept of rental income tax centers on the taxation of income generated from leasing or renting out property. It is based on the principle that income earned through property ownership, like other forms of income, should contribute to the public revenue. Rental income tax applies to both individuals and corporations, encompassing all types of property, including residential, commercial, and industrial properties, OECD, (2021)

In the recent past the Kenya Revenue Authority has been faced with the need to expand its tax base. According to the 7th Corporate Plan by KRA countless challenges have been experienced as KRA plans to raise the number of active taxpayers by 3.06 million taxpayers by June 2021 from 3.94 million in June 2018, which could be achieved by spying on homes and businesses using technology to flash out cheats and also achieve the tax revenue targets amid the ever-rising levels of shortfalls in tax collection in the subsequent financial years.

The Kenya Revenue Authority which has basically underperformed on its revenue targets is seeking to implement skimming through bank records and transaction details of utility firms with the hope of adding more than 66,000 landlords to the tax net in the next three years (7th Corporate Plan 2018-2021). The link with the third-party systems and utility providers helped to recruit an additional 58,934 real estate owners between July 2015 and June 2018. A total of 20,570 landlords were added into the tax net in the year ended June 2016 surpassing the annual target of 20,000 landlords. However, the number fell to 16,978 landlords in the year 2017 and 12,386 subsequently in 2018 (KRA 2018). This decline was amid the boom in the real estate industry which was reported in the same period.

1.1.1 Global Perspective

Globally, Embaye (2020) also reported that evasion is considerable in U.S with about 16% overall noncompliance for rental income tax. The concept related to tax evasion is tax avoidance, which is described as creative compliance in McBarnett (2019). An improvement in tax compliance results in more tax revenue collection hence some improvements in economy since with more revenue, the government can invest more in development projects (Tilahun & Yidersal, 2018). There is increased awareness of the potential consequences of evasion for the efficiency of taxation. For instance, in the U.K, it is estimated that a significant tax loss is likely in the rental market. In addition, a recent report concluded that roughly half of the landlords in one borough of London do not report their rental income (Tesfaye, 2015).

1.1.2 Regional Perspective

Regionally, with regard to rental income tax payers, (Rizal, 2019 and Kuria, 2019) found that there is attitudinal and knowledge difference, unfair tax rate, dishonesty of rental tax payers, lack of awareness, complexity of tax law and regulation and inadequacy of government spending. According to (Desta, 2010) taxpayers perceive that tax evasion as a crime and as it indicates that there is an attention towards taxation by taxpayers. But the problem here is that there is poor performance even though tax evasion is considered as crime by the taxpayers because of they think unfair and less transparent system and tax rate used and also non-believing on government spending on public services. In several developing countries it's observed that there is low capacity of tax administration to monitor performance among rental taxpayers. Ethiopia, like any other developing countries, faces difficulty in raising revenue to the level required for the promotion of economic growth. Hence, country has been

experienced a consistent surplus of expenditure over revenue for long period of time (Tesfaye, 2021)

In Tanzania, property taxation is a top most political agenda and is the government's foundation in the strengthening of the direct taxation that is broad based. (Ali, Fjeldstad & Katera, 2018). It has special potential by founding the government and taxpayers' bargain on revenue and public expenditures since it has a link on local service delivery and is visible to the taxpayers. However, the revenue generated from the property tax in the country is limited. Various reasons have been linked to the limitations including landlords' resistance, and inadequate knowledge which is required in addition to the right attitudes and a policy design that is more informative (Ali, Fjeldstad & Katera, 2018).

1.1.3 Kenya Perspective

In Kenya, it is a law that any income generated from any investment in the country is subject to taxation (Karanja, 2014). However, the low tax revenue is more attributed to lack of good mechanisms to enforce tax collection. The Kenyan government needs to invest more on tax administration so as to ensure that no tax revenue is lost or uncollected. As such, Kenya is also ranked among countries with low performance as far as tax revenue collection is concerned (Makori *et al.*, 2013). Although there has been significant growth in tax collection by over 300% (2010-2018), the contribution by landlords has been very low despite all the efforts by government taxing all Kenyans to support the development of the economy by paying their fair share of taxes (Karanja, 2019).

Rental income tax is the tax levied on rental income from residential buildings. Berhane and Yesuf (2019) reported that landlords are mandated to declare all the income they

derive from renting out property. Introduced in January 2016, it requires a 10% tax on the gross rent. According to the Finance Act 2015, the 10% tax must be paid by any resident persons, that's individuals or entities that have earned income from the use of their residential property in the country.

The introduction of the rental income tax is part of KRA's efforts to increase tax compliance by landlords and property managers. Moreover, the tax is easy to compute due to the absence of deductions. Essentially, it is computed on the percentage of the gross rentals (KPMG, 2015). Moreover, the government provided an amnesty for unpaid tax accrued before 2014 in an effort to encourage compliance.

1.1.4 Residential Rental Income Tax compliance

Residential rental income tax is the tax imposed on income from rent of residential buildings. Since any income that is received from renting out a property is legally chargeable to income tax, the owners of the property are required to declare this income on their tax return. This income could be from renting out land or buildings (Berhane & Yesuf, 2019). The rental income tax rate of 10% tax on gross rent took effects on 1st January 2016 and applies to rental income received from calendar month January 2016.

Eligible persons are required to file their tax return via iTax System (KRA, 2015). The 10% tax rate on gross rental income is payable by a resident person whether individual or an entity and will apply to rental income that has accrued in or is derived from Kenya for the use of residential property where the rent income does not exceed KShs.10 million per annum (The Finance Act, 2015). The change is part of the KRA efforts to encourage property owners to be tax compliant. The tax is simple to compute since it is based on a percentage of the gross rentals and is lower than the standard rate of 30% to reflect the fact that the landlords do not receive a deduction for the expenses incurred to generate the income (KPMG, 2015).

Some of the benefits of the residential rental income tax include simplified tax computation at 10% flat rate on gross rent and not at 10% -30% rates. Landlords shall not be required to produce records to account for expenses. In addition to simplifying the taxation of rental income, the Finance Act also provides for an amnesty on taxes, penalties and interest on rental income for the period prior to 2014 (KPMG, 2015).

1.2 Statement of the Problem

Tax non-compliance stands a bigger problem and is prevalent in many economic sectors including housing and property developers. Tax non-compliance occurs where taxpayers fail to file tax dues in time and correctly declare tax owed. Tax non-compliance also entails underreporting of tax dues and misstatements of tax expenses (Sani & Gbadegesin, 2022). Despite the high revenue target, KRA is still faced with numerous challenges, such as loopholes in collection of rental income with many landlords failing to comply. Rental income tax remitted by landlords has been dismal notwithstanding all the efforts to enforce rental income tax policies. There has been little improvement in rental tax performance in Kenya.

Kenya Revenue authority did not meet the residential rental income tax Target in 2022/2023 Financial Year. Despite a 6.7 percent rise in collections to Sh2.166 trillion the taxman missed its Sh2.273 trillion targets by Sh107 billion KRA, 2023. KRA did not meet its target hence affecting infrastructure development, and social services.

Since the inception of Monthly Rental Income (MRI) through the Finance Act 2015, there has been an elaborate framework geared towards educating and facilitating the landlords to comply with the simplified tax regime. Kenya Revenue Authority collected Ksh.10 billion from 52,000 landlords in the FY2016/2017 slightly over 50% of the targeted 100,000. This can be attributed to low tax performance on rental income

which has greatly undermined KRA's achievement of its revenue targets. The Finance 2023 Act has introduced a provision for appointment of rental income tax agents for the purposes of collection and remittance of rental income tax to the Commissioner (effective 1st July 2023.) The tax shall be charged at 7.5% effective 1st January 2024 and remitted by the fifth working day after the deduction was made. Further, the Commissioner may revoke this appointment at any time.

A number of studies have been conducted on rental income tax compliance both globally and locally. According to Palil (2020), in Malaysia rental income tax compliance is determined particularly by tax knowledge, likelihood of being audited, government's expenditure, influence of referent group penalties and personal financial constraints. while the current study will be determined by perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system. Moturi (2020) observed limited financial performance determinants in real estate development. The disposable income of the target market has been identified as the main determinant. Interestingly, it also established that the choice of a project's location had a negative correlation on the returns derived, which therefore implied that the project's location does not directly influence the financial performance. The current study will focus on rental income tax compliance hence the conceptual gap.

This study therefore sought to determine moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi county, Kenya.

1.3 Objectives of the Study

1.3.1 General objective

The general objective was to determine the moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya.

1.3.2 Specific objectives

The specific objectives of this study were;

1. To determine the effect of perceived ease of use of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya.
2. To determine the effect of perceived benefit of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya
3. To determine the effect of perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya.
4. To determine the moderating effect of taxpayer awareness on relationship between perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya
 - a. To establish the moderating effect of taxpayer awareness on relationship between perceived ease of use of digitized system, on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya

- b. To establish the moderating effect of taxpayer awareness on relationship between perceived benefit of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya
- c. To establish the moderating effect of taxpayer awareness on relationship between Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya

1.4 Research Hypotheses

The research hypotheses of this study were;

H₀₁: Perceived ease of use of digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya

H₀₂: Perceived benefit of digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya

H₀₃: Perceived usefulness digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya

H₀₄: There is no significant moderating effect of taxpayer awareness on relationship between perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya

H_{04a} Taxpayer awareness has no significant moderating effect on the relationship between perceived ease of use of digitized system, on rental income tax

compliance among landlords in Makadara Constituency, Nairobi County, Kenya

H_{04b} Taxpayer awareness has no significant moderating effect on the relationship between perceived benefit of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya

H_{04c} Taxpayer awareness has no significant moderating effect on the relationship between Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya.

1.5 Significance of the Study

The study was of significance to policy makers, researchers and scholars, KRA Authority and landlords.

The study acted as a guide to the various policy makers by helping to establish in-depth understanding of complexities in the tax system and also any loopholes that the taxpayers may maximize on either to evade or avoid paying their tax obligations in the country.

It was of great importance to various researchers and scholars as it added to a body of knowledge on the factors affecting rental income tax and also create the need for more extensive research in other related areas in rental income tax.

The findings from this study also assisted Kenya Revenue Authority to identify the various bottlenecks in revenue collection mechanism and effective measures, through this it will help to come up with solutions and proper ways to eliminate the shortcomings in revenue collection and also boost rental income tax compliance.

This study was of significance to various stakeholders especially landlords as it helped create a better understanding of challenges they encounter while trying to keep up to their tax obligations.

1.6 Scope of the Study

This study was to determine the moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. Specifically, to establish the effect of perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya. In this study primary data was used by administering structured questionnaires. The target population was 4,927 landlords in Makadara Constituency, Nairobi County and a sample of sample size was 369 respondents. The study focused on financial year 2022/2023. The selection of the 2022/2023 financial year as the study period for landlords in Makadara Constituency, Nairobi County, is justified based on its relevance to current economic conditions and the alignment with stakeholders' interests. Firstly, the financial year 2022/2023 provides recent data, ensuring the study reflects contemporary issues and trends. This period captures the most up-to-date information on factors like rental income, operating expenses, and tax obligations, which affect landlords' financial outcomes. Using the latest completed financial year enhances the study's applicability, ensuring that findings are relevant to stakeholders, including policymakers and industry practitioners.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter outlines the concept, theoretical framework, which is highlighting the theories central to this research. It is also looking into the conceptual framework, empirical review with a view of identifying gaps that may exist in the body of knowledge. The review brought out the gaps and enhance knowledge to determine the moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya.

2.1 Review of Concepts

This section is a review of concepts of perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system on rental income tax compliance.

2.1.1 Concept of Rental income tax compliance

Rental Income Tax Compliance refers to the adherence of property owners or landlords to tax laws and regulations governing income earned from renting out properties. It encompasses accurate reporting, filing, and payment of taxes on rental income as required by the tax authority in a given jurisdiction. Rental income tax is the tax imposed on income from rent of residential buildings. Since any income that is received from renting out a property is legally chargeable to income tax, the owners of the property are required to declare this income on their tax return. This income could be from renting out land or buildings (Berhane & Yesuf, 2019).

The performance of rental income tax can be improved in several ways. One approach is to take advantage of deductions and tax credits available for rental income, such as the residential energy credit and the mortgage interest deduction (Maharaj, 2019). Additionally, property owners can consider investing in more energy-efficient appliances and home improvements to reduce their monthly utility bills and thus, increase rental incomes. Finally, property owners can also look for ways to reduce their tax liability by using tax deferment strategies or by taking advantage of tax incentives offered by their local governments (Rothman, 2020).

2.1.2 Concept of Perceived Ease of Use of Digitized System

The concept of Perceived Ease of Use (PEOU) is part of the Technology Acceptance Model (TAM), developed by Fred Davis in 1989. PEOU refers to the degree to which a person believes that using a particular system would be free of effort. It influences users' attitudes towards using technology and their eventual acceptance and usage of it. In the context of tax compliance, PEOU can be defined as the degree to which taxpayers believe that the processes and systems associated with tax filing and payment are easy to understand and use. When taxpayers perceive the tax compliance process as straightforward and user-friendly, they are more likely to comply willingly and accurately. OECD, (2023)

Perceived ease of use (EOU) is the degree to which a potential adopter views the use of target technology to be relatively free of effort (Davis, 1989). Perceived ease of use has also been found as antecedent to technological factors in study by (Bojuwon & Obid, 2014). If taxpayers perceived online tax system to be easy to use and is less complex, there is a high likelihood of it being accepted and used by potential users (Agarwal & Prasad, 2000). Hence, this will lead to increase in tax compliance and increase in revenue generation because the self-employed taxpayers feel the ease of using the

online tax system in filling in their tax return. It has been widely examined as a determinant of behavioral intention in technology acceptance (Lai, Obid, & Meera, 2004).

Therefore, study on adoption of an online tax system has found EOU to have a significant influence on the use of technology (Carter & Belanger, 2004). Studies on factors affecting consumers' behavioral intention in adopting broadband in Pakistan (Dwivedi, Williams, Weerakkody, Lal, & Bhatt, 2020) researchers use EOU as one of the control constructs and found it to have a significant effect on the use of information system. Also, in a survey of the perceptions of 97 respondents in Sungai Petani, Kedah towards e-filing Zakaria & Hussin (2020), EOU was found to be significant in a single stage model. A similar finding was found in the earlier reported study by Ojha *et al.* (2019). The finding shows that young Indian professionals' effort in using e-tax filing was determined by the perceived ease of use, compatibility, and relative advantage, perceived innovativeness of information technology and performance of the e-filing system.

2.1.3 Concept of Perceived Benefit of Digitized System

Perceived Benefit refers to the extent to which taxpayers believe that complying with tax regulations and requirements will result in positive outcomes for them. These benefits can be tangible, such as avoiding fines and penalties, or intangible, such as the satisfaction of fulfilling a civic duty or contributing to public services. When taxpayers perceive significant benefits from complying with tax laws, they are more likely to do so willingly and accurately. This perception can be influenced by factors such as the efficiency of tax systems, the clarity of tax regulations, and the fairness of tax enforcement, Alm (2022).

Tax compliance is a taxpayer willing to carry out its obligations without any coercion in paying taxes based on regulations that are still valid (Trisnawati and Sudirman, 2020). Compliance with taxpayers can be said as compliance with reporting requirements where taxpayers submit, report and pay their obligations in accordance with applicable regulations (Devos, 2019). Compliance of taxpayers to fulfil their tax obligations needs to be increased in order to create the desired tax target (Doran, 2019).

People or taxpayers who are aware of making tax payments will improve the welfare of the community indicating that they want to participate in supporting the country's development (Tatiana and Hari, 2019; Untari *et al*, 2022). However, it does not rule out the possibility that the awareness of taxpayers to pay taxes is getting lower by delaying tax payments and reducing tax burdens, causing State revenues to tax to decline (Nalendro and Isgiyart, 2014) Knowledge of tax regulations is important to foster obedient behavior because of how taxpayers may be ordered to comply if they do not know how the tax regulations (Untari, 2019). In addition to knowledge about tax regulations, perceptions of the benefits received by the community as compensation for tax payments are one of the factors that influence the discipline of the public in paying Widayati and Nurlis taxes (2020).

2.1.4 Concept of Perceived Usefulness of Digitized System

Perceived Usefulness (PU) refers to the degree to which taxpayers believe that complying with tax regulations will enhance their effectiveness in fulfilling their tax obligations. This concept, originating from the Technology Acceptance Model (TAM), emphasizes the belief that using a particular system or complying with a set of rules will result in better outcomes, such as accuracy in tax filing, timely submissions, and avoidance of legal issues. When taxpayers perceive that the tax system or tools provided

for tax compliance are useful in simplifying the process, reducing errors, and saving time, they are more likely to comply. This perception can be influenced by the quality of the tax system, the availability of support and resources, and the overall user experience, Chau, (2021).

Perceived usefulness is defined according to Lu, (2022) as a prospective user's which is subjective or with the likelihood of using a specific innovation to enhance it processes. Jiang, Hsu, Klein, and Lin (2020) expanded perceived usefulness the development and utilization of the internet technology model to explore the ways by which it is been implemented. With the above definition perceived usefulness is accomplished of being used as advantages for easy application of a new innovation. In organization context users of any innovation are reinforced by their performance in the use of any technology by given bonuses. More so when a system is perceived of high users believe in the existence of positive user perception is said to be an innovation of good performance base on their benefits Zakaria et al. (2023).

2.1.5 Concept of Taxpayer Awareness

Taxpayer Awareness in the context of tax compliance refers to the extent to which taxpayers are informed about tax laws, regulations, deadlines, and procedures. This awareness includes understanding their tax obligations, the benefits of compliance, and the consequences of non-compliance. High levels of taxpayer awareness can lead to higher rates of voluntary compliance as individuals and businesses are more likely to fulfill their tax duties accurately and timely, Chan, (2020).

Tax awareness is the ability of a taxpayer to know the tax regulations regarding tax rates and also the benefits that are obtained when they pay taxes Cahyadi and Jati (2022). Social learning explains that a person's behavior can be influenced by direct

experience felt by that person. This can be related to the tax knowledge that a person has. The more learning from observations a person has made about taxation, the more awareness he has, so that compliance in implementing taxation will increase. According to Marjan, (2021), the awareness is information obtained by taxpayers in order to understand and understand information about taxation. Taxpayers who do not understand and understand will tend to disobey and commit fraud in complying with tax regulations.

Conversely, if the taxpayer knows and understand to be the tax itself, indirectly they will be obedient and willing to actively contribute to the implementation of the tax. Tax awareness is the most influential factor in determining the compliance of taxpayers because if the taxpayer does not have knowledge, it can result in avoiding behavior either intentionally or unintentionally Saad, (2022). To be able to increase tax awareness of taxpayers, one of the efforts that must be made is to disseminate tax regulations, either through counselling or providing a site to access tax regulations. This method is one form of effort to increase the knowledge of the Taxpayer. Taxpayers who already know all applicable tax provisions, taxpayers will easily carry out their tax obligations, Sari, (2013).

2.2 Theoretical Framework

The study was supported by the following theories: Theory of Technology Acceptance, unified theory of acceptance and use of technology and Ability to Pay Theory

2.2.1 Theory of Technology Acceptance

Davis (1985) advanced this theory. The TAM postulates that user adoption of a new information system is determined by their intention to use the system, which in turn is determined by their beliefs about the system. (TAM) theory is information one that

models how users come to accept and use computer generated information. TAM suggests that when users are presented with information that are computer generated, a number of factors such as perceived usefulness and perceived ease of use influence people to embrace technology.

Davis *et al* (2003) point out that Theory of Technology Acceptance Model (TAM) shows that an individual's intention towards using a system is jointly determined by perceived usefulness, the user's "subjective probability that using a specific application system will increase his or her job performance" and Perceived Ease of Use (PEOU), "the degree to which the user expects the target system to be free of effort. According the PEOU also has a direct effect on predicting usage; TAM models might be useful within and across organizations for evaluating applications or technologies, or to make comparisons between user groups or applications. However, TAM has limitations in being applied beyond the work place because its fundamental constructs do not fully reflect the variety of user task environment and constraints (Fu & Chao, 2016).

Paul & John (2019) suggested that TAM is a useful model but has to be integrated into a broader one which would include variables related to both human and social factors. However, tax compliance levels remain low and tax collections are below the targets set by state authorities in Africa (Kumar & Anees, 2020). Despite the increasing need to increase revenue collection and enforcement so as to provide public services, and the introduction of electronic tax systems in most countries across the global divide, developing countries like Kenya, still face the challenges of low tax compliance and tax administration.

Karingi (2020) argued that online tax systems are rapidly replacing paper-based tax reporting systems, promising many advantages over the traditional method of hard copy

tax filing, these systems promise faster process, lower costs and increased efficiency. Kamau (2019) determine the impact of adoption of technology as a strategic tool in enhancing tax compliance in Kenya. For tax authorities, electronic filing lightens the workload and reduces operational costs such as the costs of processing, storing and handling tax returns.

2.2.2 The Unified Theory of Acceptance and Use of Technology (UTAUT)

The unified theory of acceptance and use of technology (UTAUT) was created by Venkatesh *et al.* (2003). The UTAUT model, as described by Ann *et al.* (2021), integrates various acceptance theories to create a unified framework for understanding technology acceptance and use. This model was developed by reviewing and synthesizing eight prominent theories and models: the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM), the Motivational Model, the Theory of Planned Behavior (TPB), a combined TBP/TAM, the Model of PC Utilization, Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT) (Williams *et al.*, 2015).

These foundational theories and models have been extensively and successfully applied in numerous previous studies on technology or innovation adoption and diffusion across various fields, including information systems, marketing, social psychology, and management (Williams *et al.*, 2015). According to the UTAUT model, the acceptance of a technology or system is largely influenced by factors such as performance expectancy, effort expectancy, social influence, and facilitating conditions (Hamzat & Mabawonku, 2018).

The UTAUT model merges the previous eight theoretical models and comprises four key constructs that determine behavioral intentions and usage behavior (Hamzat &

Mabawonku, 2018). These constructs—performance expectancy, effort expectancy, social influence, and facilitating conditions—are direct determinants of usage intention and behavior (Bhuasiri *et al.*, 2016). The UTAUT model incorporates various acceptance theories to form a unified theory of acceptance and use of technology (Ann *et al.*, 2021).

The UTAUT model is composed of four constructs: performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC), which are used to predict behavioral intention and determine user behavior (Ann *et al.*, 2021). By analyzing the presence of each of these UTAUT constructs in a "real world" setting, researchers and practitioners can assess an individual's intention to use a particular system. This approach helps identify the key factors influencing acceptance in any given context (Williams *et al.*, 2015).

However, this study focuses specifically on the impact of facilitating conditions (supporting facilities) on the use and adoption of e-filing (online tax filing system). Facilitating conditions (FC) refer to an individual's access to various resources (both human and material) necessary to use the system (Jankeeparsad, 2016). The UTAUT model also incorporates moderator variables such as gender, age, experience, and voluntariness to examine the strength of the relationships between the independent constructs and the dependent construct (Ann *et al.*, 2021).

2.2.3 Ability to Pay Theory

This theory was developed by Adam Smith and supported by Swiss philosopher Jean, the French political economist Say and the English economist Mill. According to the ability to pay principle, taxes should be distributed according to the capacity of taxpayers to pay them (Hyman, 2014). This theory treats revenue and expenditure of

the government separately. The obligation to pay to the government is taken as a social and collective responsibility although the question of who shall pay and in what amount is necessarily an individualized one. Those who have means pay and those who have not need not to pay (Kennedy, 2012).

According to Kennedy (2012), the ability to pay theory has been justified on the basis of equality of sacrifice. The basic tenet of this theory is that the burden of taxation should be shared by the members of society on the principles of justice and equity and that these principles necessitate that the tax burden is apportioned according to their relative ability to pay. This theory suggests that the payers of TOT should pay unconditionally and according to their paying capacity (Chigbu *et al.*, 2012). According to Hyman (2014), individual evaluations of the ability to pay are likely to differ but in countries such as U.S.A and Kenya, ability to pay varies with income.

According to this theory, a citizen pays taxes because they have the ability to pay and the total tax burden is determined by their relative paying capacity. The theory was bound to be supported by social thinkers because it follows the ideas and concepts of justice and equity. However, the doctrine received equally support from non-social thinkers also and became part of the theory of welfare economics. The major principle of this theory is that the tax burden should be paid by the members of society on the canons of justice and equity and that these canons demand that tax burden is apportioned according to their relative ability to pay theory.

This theory propagates that people should be asked to pay taxes according to their ability to pay and assessment of their taxable capacity should be made based on the basis of income and property. The most popular and accepted principle of equity or justice in taxation is that citizens of a country should pay taxes to the government in

accordance with their ability to pay (Limerick, 2013). It can therefore be argued and appears reasonable and just that taxes should be taxed on the basis of the taxable capacity of a person and in using this principle it can be stated that if the taxable capacity of one individual is greater than that of the other person, that a person who earns more should be asked and expected to pay more taxes in comparison with the one who earn less.

2.3 Empirical Review

The review of empirical studies focused mainly on the themes drawn from the research objectives and they include;

2.3.1 Perceived ease of use of digitized system and Rental income tax compliance

Perceived ease of use is the degree to which a person believes that using a technology will be free from effort. In the context of this study, PEOU refers to the extent to which users believe that their continued use of e-government is free of effort. If a system is relatively easy to use, individuals will be more willing to learn about its features and finally intend to continue using it. Studies indicate that perceive ease of use is positively associated with continuance intention in the context of Web-based learning (Chiu & Wang, 2019).

Hernandez *et al.*, 2019) examined the factors that affect the present and future e-purchasing intention of consumers. In the earlier reported study of Huang, (2020) PEOU was also found not to be significant due to the context of the study – e-commerce. In the study of the factors affecting consumers' BI to adopting broadband in Pakistan (Dwivedi, Papazafeiropoulou, Brinkman, & Lal, 2021), with a survey of 237 respondents sampled through snowball technique, used PEOU as one of the control constructs and found it to have a significant effect on the BI. Also, in a survey of the

perceptions of 97 respondents in Sungai Petani, Kedah, towards e-filing, Zakaria *et al.*, (2019), PEOU to be significant in a single stage model. (Ojha *et al.*, 2019: Boon & Lee, 2020: Wu & Wang, 2021).

Anna and Yusniza (2019) researched on the relationship of Perceived ease of use on e-filing in Malaysia. The research was premised on the argument that e-government is becoming increasingly significant in the modern world because of its effectiveness and applicability in various sectors of the economy. Electronic filing of tax returns has been introduced by many developed countries in order to encourage the public to take their responsibility of paying tax using online systems. Even though e-filing has been implemented in many countries, reliable and integrated online tax system is yet to be established.

To avoid the problem of a "useful but underused" system, electronic tax-filing systems must be both easy to learn and user-friendly (Wang, 2022). A system is considered high quality if it is designed to achieve user satisfaction by being easy to use (Tahar *et al.*, 2020). Perceived Ease of Use (PEOU) involves evaluating the intrinsic features of information technology, such as its ease of use, ease of learning, flexibility, and the clarity of its interface (Gefen & Straub, 2020). Ease of use extends beyond the simplicity of using the e-Filing system to include whether the system simplifies completing tax filings online compared to traditional/manual methods (Tahar *et al.*, 2020). Moreover, perceived ease of use affects the performance risk of the e-Filing system, as a less complicated system will reduce performance risks (Tahar *et al.*, 2020).

Chung and Tan (2004) have included a new playfulness variable to their study of Internet acceptability. Bashir and Madhavaiah (2015) advocated modifying TAM by adding experiences, self-efficacy, perceived risk, and social influence variables.

Agarwal and Karahanna (2000) added cognitive absorption, playfulness, and self-efficacy to the TAM model in another study. In a study, (Abu-Dalbouh, 2022) examined TAM by examining two categories of perceived usefulness in the short-term and long-term. After examining the individual acceptance and use of the website Gómez-Ruiz, Grimaldi-Puyana, Lara-Bocanegra, and García-Fernández (2022) introduced two additional dimensions to TAM: perceived entertainment value and perceived presentation attractiveness.

Dalbouh (2022) incorporated the peer influence factor into the Technology Acceptance Model According to a study by Haverila, McLaughlin, and Haverila (2022) goal directed users had a substantial correlation between perceived usefulness and behavioral intention. Molina, Chau, Rodewald, and Garip (2022) compared three models; the Technology Acceptance Model, the Theory of Planned Behavior and a deconstructed model that is theoretically appropriate in the setting of healthcare professionals in Hong Kong. The results suggested that TAM was more effective than TPB in describing physicians' intentions to employ telemedicine technology.

Ridwan, Tanveer, and Khan (2023) used time-series data and the Autoregressive Distributed Lag (ARDL) estimation approach to demonstrate that Perceived ease of use on ICT infrastructure has no substantial positive impact on overall tax revenue collection. Nevertheless, it is possible to uncover tax loopholes and administer a country's taxation system effectively in the context of good governance and efficient systems. Using unbalanced panel data Wandaogo, Sawadogo, and Lastunen (2022) present compelling evidence that ICT penetration drives tax revenue mobilization. Specifically, the results indicate that, among the four ICT penetration indicators mobile subscription, internet access, personal computers, and fixed broadband subscription,

fixed broadband subscription contributes the most to three distinct tax revenue indicators, namely overall tax revenue, VAT, and corporate tax.

2.3.2 Perceived benefit of digitized system and Rental income tax compliance

Everest-Phillips and Sandall 2019) affirm that even though various factors might influence tax compliance, the importance of governance should not be underestimated. Alabede *et al.* (2021) state that a better tax system with good governance improves compliance. In contrast, the failure of the government to provide citizens with public amenities and infrastructure may force them not to comply with tax provisions. For (Khwaja *et al.* 2020), a low willingness to pay taxes is a symptom of citizens' disengagement due to inadequate service provision.

Togler *et al.* (2022) demonstrate how governance impacts tax compliance. Cummings *et al.* (2021) found that individual perceptions of good governance increase tax compliance. However, the relationship between tax compliance and quality of governance remains to be studied in the existing literature review, especially in developing countries (Sebele-Mpofu 2020). According to (Everest-Phillips and Sandall 2019), this is the "least understood but most fundamental dimension of tax compliance."

Damayanti *et al* (2021) have illustrated the role of perceived benefit of the government and society in relation to improvement on tax compliance. In their study, they conclude that the strong desire for tax payers to comply with tax obligations is among other things greatly influenced by the subjective norms and tax payer perception of the government. The perception of the government as noted is underscored by the fact that relationship between the tax payer and government/tax authority is a contract that involves intricate relationship between the two as is based on expectation of a fair reciprocal relationship

(Feld & Frey, 2007). For the purpose of this study, the government and tax authority were treated as one and the same thing.

According to (Ali *et al.*, 2014) to establish the impact of satisfaction with public services on tax morale of people in the sub-Saharan African countries (Kenya, Tanzania, Uganda, and South Africa) found significantly negative effects on taxpayers morale in Uganda and South Africa. Results of Taxpayer Opinion Survey have also indicated that higher respect and obedience for tax authorities leads to higher tax morale and being compliant (Torgler, 2007) and that an increase in punishment and detection should not be the only strategy to increase tax compliance and tax morale. Hence, Frey (2017) argues that laws and regulations should recognize the basic goodwill of its people

2.3.3 Perceived usefulness of digitized system and Rental income tax compliance

Perceived ease of use is different from perceived usefulness. Perceived usefulness refers to the extent to which a person believes that using a particular technology will enhance his/her job performance. In TAM framework, PU is hypothesized to be the direct predictor of behavioral intention to use (BI) of the technology of interest (Park, 2023). Previous studies indicate that PU is positively associated with continuance intention in the context of e-text, instant messaging, mobile service provider, online travel services, e-learning, blog learning, knowledge creation (Chou, Min, Chang, & Lin, 2019).

Davis (2019) emphasized that perceived usefulness and perceived ease of use are individual's subjective appraisal of performance and effort respectively, hence they are not necessarily objective. Davis however believed that though these are just human beliefs, they are meaningful variables indicating behavioral determinants of adoption of an information system. Fishbein and Ajzen (2022) further stated that according to

the Fishbein's Model for the Prediction of Intentions "the general subjective norm is determined by the perceived expectations of specific referent individuals or groups and by the person's motivation to comply with those expectations" Additionally, according to Miller & Khera (2020), the influence of subjective norms is culturally specific.

Thong *et al.* (2022) observed that with higher visibility, the benefits of using the information system would be known by potential users. This would help them perceive the functions of the system as more useful hence increasing their intention to adopt it. They therefore postulated that higher visibility leads to higher perceived usefulness of the technology innovation. Alraja, Hammami, & Alhousary (2020) on the other hand argued that governments should increase the awareness of the electronic services and the benefits of the services through using social media and not traditional mediums to be able to reach its targets with real time information.

Miller and Khera (2020) noted that relevance is a critical predictor of perceived usefulness of the information technology system. Additionally, non-users and low users of the system complain about the absence of their specific requirements not being met. Relevance is therefore consistent with TAM in that, the system should have the ability to enhance the user's job performance. Miller & Khera (2020) further observed that trust in the information's systems' content is key though this is not as strong a predictor as relevance. They defined trust as "the degree of validity attributed by a user to a given database or set of knowledge content" They also noted that domain knowledge is a predictor of perceived usefulness but it's not a significant predictor.

2.3.4 Tax Awareness as a moderator

Tax awareness acts as a moderator on tax compliance, influencing the relationship between various factors and an individual's adherence to tax regulations. Higher tax

awareness can enhance compliance by improving understanding of tax obligations and the benefits of compliance, thus potentially strengthening the impact of facilitating conditions and other determinants on the adoption and use of e-filing systems.

Tax knowledge is an important contributing factor as it helps businesses adhere to tax rules and regulations. Understanding the tax requirements as per their nature of business (manufacturing and servicing) might influence their business strategies. A survey from 147 economies identified low tax awareness and knowledge as the biggest constraint for business operations, World Trade Organization (2020) Further, the study by Aruna (2022), stated that businesses faced problems in their operations as low tax knowledge led to complexities and unorganized administrative costs Barbone, (2023).

A study by Konstantin (2023), pointed out that firms with low tax awareness often get trapped by insolvent traders, leading to illegal refund scams Wilks, (2019). Loo (2022); Mckerchar, and Hansford (2023) emphasized that businesses in Malaysia and Australia with low tax awareness suffered heavy losses due to tax fines that occurred because of tax non-compliance. Therefore, policymakers and governments want that firms must be aware of the taxation system, its rules, and its regulations. It would lead to timely tax compliance, generation of revenue, increased business efficiency, and reduction in tax scams

Mukasa (2021), examined the relationship between tax awareness, perceived tax fairness and tax compliance of small and medium enterprises in Uganda. The study adopted a cross-sectional research design, combined with qualitative (analytical and explanatory) and quantitative (descriptive and inferential) research designs. The study considered tax registered small and medium enterprises within the Central Division of Kampala District. The sample size of the study was 330 respondents. Self-administered

questionnaires were used to collect data from the SME owners or managers. The study found out that, tax awareness and perceived tax fairness had a causal relationship with tax compliance. Tax awareness and perceived tax fairness was found to have a positive and significant relationship with tax compliance. However, the relationship between tax awareness and perceived tax fairness was found to be weak. These findings imply that positive improvement of taxpayers' knowledge and perceptions of fairness about taxes will lead to improved tax compliance.

2.4 Summary of Literature and Research Gaps

Anna and Yusniza (2019) researched the relationship of Perceived ease of use on e-filing in Malaysia. The research was premised on the argument that e-government is becoming increasingly significant in the modern world because of its effectiveness and applicability in various sectors of the economy. Electronic filing of tax returns has been introduced by many developed countries in order to encourage the public to take their responsibility of paying tax using online systems. Even though e-filing has been implemented in many countries, reliable and integrated online tax system is yet to be established. The study focused on Perceived ease of use on e-filing in Malaysia. Hence conceptual gap by focusing on e-filing and study done in Malaysia thus contextual gap

Ridwan, Tanveer, and Khan (2023) used time-series data and the Autoregressive Distributed Lag (ARDL) estimation approach to demonstrate that Perceived ease of use on ICT infrastructure has no substantial positive impact on overall tax revenue collection. Nevertheless, it is possible to uncover tax loopholes and administer a country's taxation system effectively in the context of good governance and efficient systems. Using unbalanced panel data Wandaogo, Sawadogo, and Lastunen (2022) present compelling evidence that ICT penetration drives tax revenue mobilization. The

study used time-series data and the Autoregressive Distributed Lag (ARDL) hence methodological gap.

Mckerchar, and Hansford (2023) emphasized that businesses in Malaysia and Australia with low tax awareness suffered heavy losses due to tax fines that occurred because of tax non-compliance. Therefore, policymakers and governments want that firms must be aware of the taxation system, its rules, and its regulations. It would lead to timely tax compliance, generation of revenue, increased business efficiency, and reduction in tax scams. The study was done in Malaysia and Australia hence contextual gap.

2.5 Conceptual Framework

Cooper and Schindler (2018) define a conceptual framework as a construct that shows the relationship between the variables in a study. The framework helps specify and define the concepts within the problem of the study. The rental income tax compliance was measured in Tax collected and Tax Declarations. The specific objectives which were also the independent variables was Perceived ease of use of digitized system was measured by Easy to Learn and Easy to become skillful. Perceived benefit of digitized system was measured by Tax fairness and Government spending. Perceived usefulness of digitized system was measured by Improved performance and Useful in work. The moderating variable was Taxpayer Awareness was measured by Taxpayer rights and Tax Obligations Figure 2.1

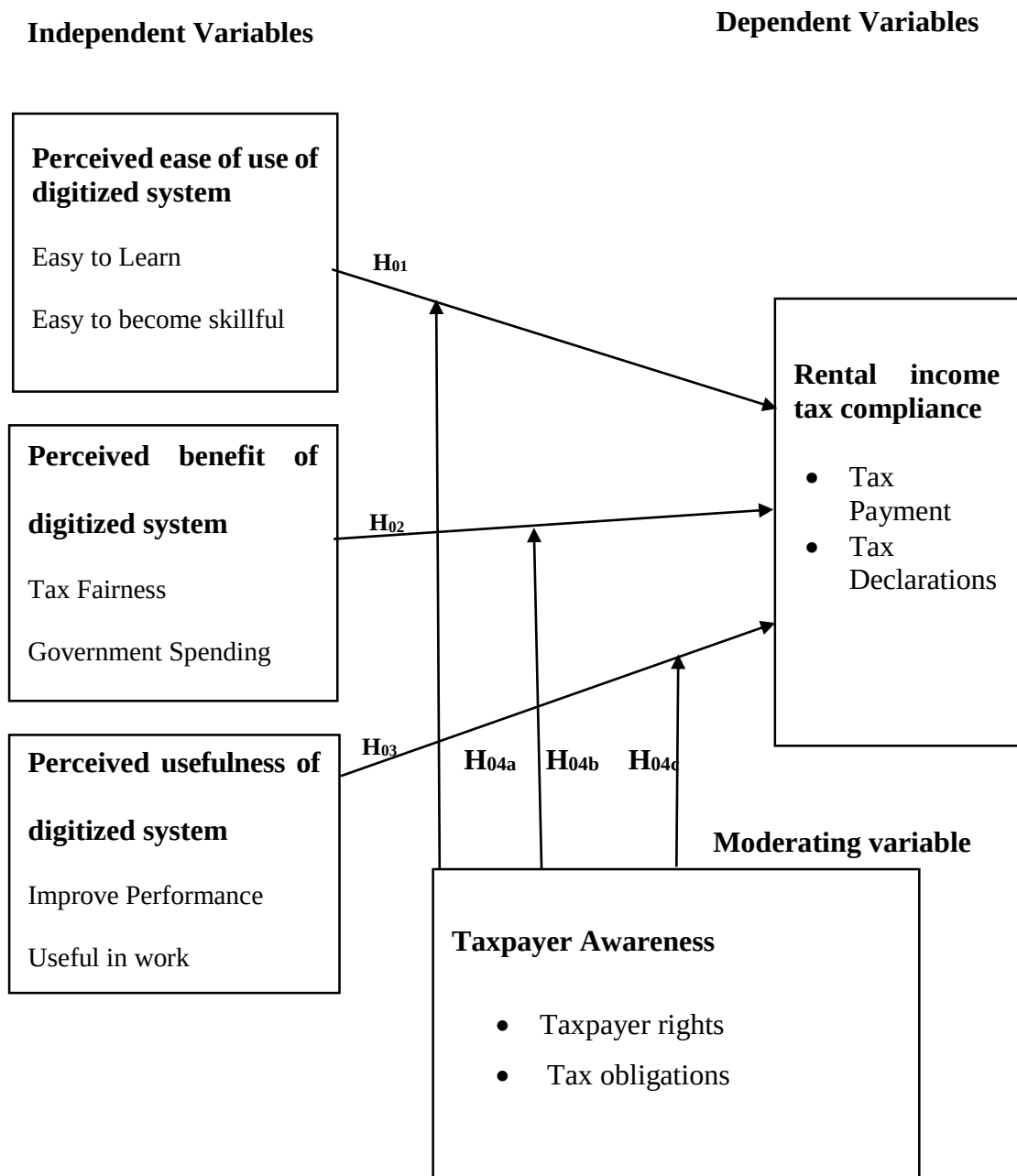


Figure 2.1: Conceptual Framework

Source: Researcher (2024)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology that was used to conduct the study. It specifically presents the research design, target population, sampling design, data collection method and instruments, and data analysis and interpretation.

3.2 Research Design

Silva (2017) and Akhtar (2016) define research design as the blueprint, which guides the conduct process of a study with a clear plan for data collection, measurement, and analysis to give answers to the research questions. This study adopted an explanatory research design, which was used to establish the cause and effect in the relationship between the variables.

3.3 Target Population

Blumberg *et al.* (2003) defines the target population as the whole gathering of individuals or articles that a study centers on as the subject of research. The target population consisted of 4,927 landlords from Makadara Constituency in Nairobi County. Makadara Constituency comprises four wards: Harambee, Maringo/Hamza, Makongeni, and Viwandani. Makadara was chosen because as Nairobi grows, Makadara has experienced rapid urbanization and infrastructural changes. This could make it an ideal location for research on urban planning, housing, or infrastructure development.

3.4 Sample and Sampling Techniques

A sample is a smaller group derived from target population and having similar characteristics as target population (Kothari, 2014). A sample size must be large enough

to be representative of the universe population (Kothari, 2012). Creswell (2014) stresses that sample size chosen by the researcher should be capable of giving enough information about the population and one, which can be analysed with ease. Yamane formula (1967) was adopted in this study to determine the sample size. The formula was adopted in the calculation of sample size (n) when the size of the population (N) and an error of margin (e) is known.

The formula is a random sampling technique that was used in the estimation of the sampling size. This formula was chosen because it considers the size of the population. Simple random sampling is a basic sampling technique where each member of a population has an equal chance of being selected. This method is used to ensure that the sample represents the entire population without bias.

$$n = \frac{N}{1 + Ne^2}$$

Where by:

n = Desired sample size

N = Target population under study (in this case, there are 4,927 landlords in Makadara Constituency, Nairobi County)

e = Signifies the Margin of error in this case taken as 5%

$$n = \frac{4927}{1 + 4927 * 0.05^2} n = 369 \text{ landlords in Makadara Constituency, Nairobi County}$$

Table 3.1: Sample Frame

	Population Size	Sample Size (n)
Harambee	1879	141
Viwandani	857	64
Maringo/Hamza	1773	133
Makongeni	418	31
Total	4927	369

(Source: Research 2024)

Table 3.1 showed that the sample size of 369 questionnaires was determined using a formula for simple random sampling, ensuring that each individual in the population had an equal chance of being selected. Simple random sampling was used to minimize bias and make the sample representative of the population. The total sample of 369 questionnaires were then proportionally distributed across the four sub-locations based on their population sizes. 141 in Harambee, Viwandani 64, and 133 and 31 in Maringo/Hamza and Makongeni respectively.

3.5 Data Collection Instrument

Choosing the method for collecting data depends on the purpose for conducting the study, the skills that the researcher has and the available resources (Kumar, 2011). This study was primary data which was collected using structured questionnaires with closed questions so as to find out the opinion of the respondents. The use of questionnaires was preferred because a questionnaire is simple to administer and convenient for collecting data within a short time (Cooper & Schindler, 2010).

3.6 Data Collection Procedures

Questionnaire is a tool for primary data collection in which respondents provide written answers to written questions (Albuquerque *et al.*, 2014). The questionnaire is structured with close-ended questions and was hand delivered to the respondents. It is good to

know the study population's attitude and interest towards participating in the study. Drop and pick, calls and emails method of administering questionnaires was used. The method first involved seeking consent from the selected respondents to participate in the study.

3.7 Pilot Testing

Pilot testing is done with the intention of revealing errors in the design and improper control of extraneous or environment conditions. Pre testing the instruments enables refinement prior to the final test (Cooper & Schindler, 2003). Pre-testing of the questionnaire was conducted using a small group of respondents who are not part of the study in order to reveal the words and questions that the respondents may not comprehend. Cooper and Schindler (2010) states that a pilot sample should be 10% of the sample projected for the larger parent study. Therefore, 36 respondents from Kiambu town was used for the pilot study.

3.7.1 Reliability of the research instrument

Reliability refers to the measure of degree to which an instrument yields consistent measurement across time and across items in the instrument (Collis and Hussey, 2014). While Bell (2015) suggested that reliability is to the extent to which your data collection techniques or analysis procedures yielded consistent findings. A reliable study is trustworthy if the appraises yield the same results on other occasions, if similar observations be reached by other observers and if there is transparency in the sense made is from the raw data. Typically, reliability coefficients of 0.70 or higher are considered adequate (deVaus, 2012) Nunnally (1978) argued that a Cronbach's alpha value of 0.7 and above, proves that the research instrument used is reliable. This study adopted a coefficient of 0.7 as the benchmark for reliability

3.7.2 Validity of the research instrument

Kervin (2010) state that validity in research is concerned with measuring what is intended for measurement. Validity is the degree to which an instrument used to collect data measure what they are intended and answer the research question (Saunders and Rojon, 2014). The research adopted content validity to ascertain the validity of the questionnaire. Content validity draws an inference from test scores to a large domain of items similar to the test. Content validity is basically concerned with the sample's validity. Knowledge and skill covered by the test items were representative of the population, Gillham (2008). Several ways may be used to estimate the validity of a test, including content validity, face validity, construct validity, and criterion-related validity. Creswell (2013) defines content validity as the extent to which the questions on the instrument and the scores from these questions represent all possible questions about the content. It ensures that the questionnaire includes an adequate set of items that tap the concept. In their analysis of recurrent events, Cook & Lawless (2006) describes face validity as validity without empirical testing hence the weakest (Robertson & Kandola, 1982). Anastasi & Urbina (1997) describe construct validity as the extent to which a test may be said to measure a theoretical trait. It is verified by comparing the test to other tests that measure similar qualities to see how highly correlated the two measures are. Criterion-related validity is one which correlates test results with another criterion of interest (Pallant, 2011) Thus, this study adopted research content validity through the use of factor analysis.

3.8 Statistical Assumptions

The study conducted diagnostic and this ensured that assumptions of classical regressions was not be violated. The tests of normality, & homoscedasticity,

multicollinearity, Autocorrelation tests and Linearity tests as well as were conducted before running the respective regression models.

3.8.1 Normality test

Normality tests assessed whether a dataset follows a normal distribution. Commonly used tests include the Shapiro-Wilk test (Shapiro & Wilk, 1965) and the Kolmogorov-Smirnov test (Kolmogorov, 1933). These tests were evaluated the null hypothesis that the data are normally distributed when p value >0.05 . Deviations from normality may impact the validity of certain statistical techniques, such as parametric tests.

3.8.2 Homoscedasticity Test

The even distribution of residual or error term across the graph is a crucial assumption for this method. If this assumption is not met and the variance of errors from the regression line is not constant, (Paper, 2016) the results of the analysis may be biased, causing distorted statistical conclusion. A scatterplot of residuals versus predicted values is a good way used in checking for homoscedasticity. In this research, Probability of Chi square was used. The p value >0.05 shows that assumption of homoscedasticity was not violated.

3.8.3 Multicollinearity Test

Multicollinearity tests assessed the presence of high correlations between independent variables in a regression model. The most common diagnostic measure is the variance inflation factor (VIF), which quantifies the extent of multicollinearity (Neter *et al.*, 1996). Multicollinearity can distort coefficient estimates and hinder interpretation, requiring corrective actions such as variable selection or data transformation. VIF less than 10 mean there is no violation of collinearity, VIF higher than 10 indicate that the assumption has been violated.

3.8.4 Linearity Test

Linearity tests assess whether the relationship between the dependent variable and the independent variable(s) in a regression model is linear. The Ramsey's RESET test (Ramsey, 1969) is commonly employed to detect nonlinearities. It tests the null hypothesis that the model is correctly specified as linear. Nonlinearity can lead to biased coefficient estimates and inaccurate predictions. using deviation from linearity at a 95% confidence level, if the p value >0.05, the linearity assumption has not been violated, p value <0.05 indicates violation of the assumption for linearity.

3.9 Data Analysis and Presentation

The collected data was screened for accuracy, consistency, completeness and then presented in the form of percentages, pie charts and tables. The relationship between the independent variables and dependent variable was analyzed using balance scorecard and bench marking. A comprehensive descriptive and predictive analysis was carried out. The study was employed a multi linear regression in the data analysis. The data was presented in table format for ease of understanding and analysis.

Equation interaction between before (i)

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

3.9.1 Moderation process

The hierarchical regression model to determine the moderating effect of taxpayer awareness on relationship between perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya.

Testing for moderation involved assessing whether the interaction between a predictor and a moderator significantly explained variance in the dependent variable (Memon *et al.*, 2019).

For taxpayer awareness to be considered a moderator in this analysis, several conditions were met. The first condition is for there to be a significant relationship between the independent variables (perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system) and the dependent variable (rental income tax compliance). Secondly, for taxpayer awareness to interact with these independent variables in a way that alters the strength or direction of their relationships with rental income tax compliance.

Specifically, the interaction terms between taxpayer awareness and the independent variables must be statistically significant ($p < 0.05$), indicating that the effect of perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system on rental income tax compliance depends on the level of compliance cost (Baron & Kenny, 1986).

The moderator also met the assumption of non-multicollinearity with the other independent variables, as high collinearity could obscure the true nature of the moderation effect (Garson, 2012). The moderator also met the assumptions for normality, homoscedasticity, and linearity

The regression added interactions between each of the independent variables and the moderator in each of the proceeding models after model 2, until all interactions are added in the overall model

Equation (ii)

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + M + \varepsilon$$

Equation (iii)

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + M + M^* X_1 + \varepsilon$$

Equation (iv)

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + M + M^* X_1 + M^* X_2 + \varepsilon$$

Equation (v)

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + M + M^* X_1 + M^* X_2 + M^* X_3 + \varepsilon$$

Where:

Y= Rental tax income performance

α is a constant,

$\beta_1, \beta_2, \beta_3, \beta_4$ is the beta coefficients of the variables

$\beta_1 X_1$ is perceived ease of use of digitized system

$\beta_2 X_2$ is perceived benefit of digitized system

$\beta_3 X_3$ is Perceived usefulness of digitized system

M = is Tax awareness (Moderator variable)

$M^* X_1$ = perceived ease of use of digitized system * Tax awareness

$M^* X_2$ = perceived benefit of digitized system * Tax awareness

$M^* X_3$ = Perceived usefulness of digitized system * Tax awareness

ε is the error term

3.10 Measurement of Variables

This is the process of defining variables into measurable factors and ensuring that the survey items of each construct are quantified (Steimberg *et al.*, 2019). The variables were measured using five-point Likert scale of 1 – 5 where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree.

3.10.1 Dependent Variable

Rental Income Tax Compliance

Rental income tax compliance was the dependent variable in this study, focusing on how well landlords adhere to the rental income tax regulations stipulated by the relevant tax authorities. The compliance was primarily assessed through indicators such as tax payment and tax declarations. The data source for these indicators was the Kenya Revenue Authority (KRA, 2021). To measure rental income tax compliance, a 5-point Likert scale was used, allowing respondents to express their degree of agreement or disagreement with statements related to their tax compliance behavior. The data collected was analyzed using multiple regression analysis to identify the key factors that influence compliance with rental income tax regulations.

3.10.2 Independent Variables

The study explored several independent variables that were hypothesized to impact rental income tax compliance. These variables mainly focused on the perceived characteristics of a digitized tax system and how these perceptions influence taxpayers' behaviors.

Perceived Ease of Use of Digitized System

The perceived ease of use of a digitized tax system refers to the degree to which individuals believe that using such a system is straightforward and user-friendly. This perception was measured by indicators such as how easy it is to learn to use the system and how easily users can become proficient in it. (Ajape, Afara & Uthman, 2017). The measurement was done using a 5-point Likert scale that captures respondents' levels of agreement with statements regarding the ease of use of the system. Multiple

regression analysis was then applied to examine how the perceived ease of use influences rental income tax compliance.

Perceived Benefit of Digitized System

The perceived benefit of a digitized tax system captures taxpayers' views on the advantages of such a system, including the fairness of the tax system and the effectiveness of government spending. The indicators for this variable were tax fairness and government spending, with Ramayah *et al.* (2020) serving as the source. Like the other variables, perceived benefit was measured using a 5-point Likert scale, where respondents indicated their agreement or disagreement with specific statements on the benefits of a digitized tax system. The data was analyzed using multiple regression to determine how perceived benefits influence tax compliance.

Perceived Usefulness of Digitized System

Perceived usefulness is another important independent variable that measures how much individuals believe that using a digitized tax system improved their tax-related performance and be useful in their work. Indicators for this variable included improved performance and usefulness in work, Obert *et al.* (2018). This variable is measured using a 5-point Likert scale, with respondents expressing their views on the usefulness of digitized systems. The relationship between perceived usefulness and rental income tax compliance was evaluated using multiple regression analysis to determine its impact.

3.10.3 Moderator

To understand how the relationship between the independent variables and rental income tax compliance changes under different conditions, a moderator variable was included in the study.

Tax Awareness

Tax awareness serves as the moderator in this study and includes knowledge about taxpayers' rights and obligations under the tax laws. The indicators for this variable were taxpayer rights and tax obligations, Chan (2020). Tax awareness was measured using a 5-point Likert scale, allowing respondents to rate their level of awareness. The moderating effect of tax awareness on the relationship between the perceived characteristics of the digitized system (ease of use, benefits, usefulness) and tax compliance was analyzed using multiple regression techniques.

3.10.4 Data Analysis

Data analysis for this study involved the use of multiple regression analysis to explore the relationships between the dependent variable (rental income tax compliance), independent variables (perceived ease of use, perceived benefit, perceived usefulness of a digitized system), and the moderator (tax awareness). This method allows for a comprehensive understanding of the impact of each independent variable and how tax awareness moderates these relationships.

By organizing the variables thematically and describing their measurement approaches, this section provides a solid foundation for the empirical analysis that follows.

The choice of an explanatory research design is justified for this study as it sought to understand the relationships and causal mechanisms among variables affecting landlords in Makadara Constituency, Nairobi County. Explanatory research is valuable when the aim is to not only describe phenomena but also to investigate the "how" and "why" behind observed trends and patterns (Creswell & Creswell, 2018). This design enables a deeper exploration of underlying factors, such as economic

conditions, policy impacts, and tenant behavior, and their influence on landlords' financial outcomes. By focusing on cause-and-effect relationships, explanatory research provides insights that are both actionable and relevant, offering landlords, policymakers, and other stakeholders an informed basis for decisions.

Furthermore, explanatory research was well-suited to testing hypotheses about potential factors affecting landlords, such as changes in rent prices, property taxes, or regulatory requirements. This design allows the study to control for various variables, leading to a clearer understanding of how specific factors impact landlords' operational and financial dynamics. The explanatory design thus enhances the study's rigor and helps to generate conclusions that can be generalized to similar contexts, making the findings valuable for broader application (Saunders, Lewis, & Thornhill, 2019).

3.11 Operationalization and Measurement of Variables

This section provides details of how each of the study variables was measured and operationalized.

Table 3.2: Operationalization and Measurement of variables

Variable	Indicator	Source/ Author	Measurement	Data analysis
<u>Dependent variable</u>	Tax payment	KRA	5-point Likert	Multiple
	Tax Declarations	(2021)	scale	regression
Rental income tax compliance				
Perceived ease of use of digitized system	- Easy to Learn - Easy to become skillful	Ajape, Afara and Uthman (2017)	5-point Likert scale	Multiple regression
Perceived benefit of digitized system	- Tax fairness - Government spending	Ramayah <i>et al.</i> , 2020).	5-point Likert scale	Multiple regression
Perceived usefulness of digitized system	- Improve performance - Useful in work	Obert <i>et.al.</i> , (2018)	5-point Likert scale	Multiple regression
<u>Moderator</u>	Taxpayer rights	Chan,	5-point Likert	Multiple
Tax awareness	Tax obligations	(2020).	scale	regression

(Source: Research 2024)

3.12 Ethical Issues

In any research undertaken, there are important logistical and ethical considerations that the researcher must be aware of before starting the research as this helps the researcher to protect their integrity and also ensure honest results (Mugenda & Mugenda, 2003). Before data collection, a research permit was obtained from NACOSTI and to obtain

introductory letters from Moi University. The respondents participated in the study voluntarily in line with this, the consent and permission from the respondents before undertaking to collect data was sought. The respondents were assured high level of confidentiality at all times by using codes on the data instruments thus names of respondents were not written and anonymity of the identity of the respondents safeguarded using numbers. Integrity and honesty were ensured and the confidentiality of data provided by the participants and their anonymity and all major statements in the study is cited to avoid plagiarism.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter involves the comprehensive analysis and interpretation of questionnaire data collected in relation to the objectives of study, providing insights into moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya.

4.2 Pilot Test

The purpose of the pilot test was to verify the accuracy of the data and the honesty of the responses in the questionnaire. 10% form the sample size indicating 36 respondents from Kiambu town were analysed, was used to conduct a pilot test, the results from the pilot test indicate validity

4.3 Reliability Test

Typically, reliability coefficients of 0.70 or higher are considered adequate (deVaus, 2012) Nunnally (1978) argued that a Cronbach's alpha value of 0.7 and above, proves that the research instrument used is reliable. Table 4.1 indicates that rental income tax compliance has $\alpha = 0.980 > 0.7$, perceived ease of use of digitized system $\alpha = 0.918 > 0.7$, perceived benefit of digitized system $\alpha = 0.968 > 0.7$, Perceived usefulness of digitized system $\alpha = 0.975 > 0.7$, and lastly taxpayer awareness has $\alpha = 0.895 > 0.7$. The alpha value indicate that data from all the questionnaire response variable are reliable.

Table 4.1: Reliability Tests

Variable	Cronbach's Alpha	N of Items
Rental Income Tax Compliance	0.980	5
Perceived Ease of Use of Digitized System	0.918	5
Perceived Benefit of Digitized System	0.968	5
Perceived Usefulness of Digitized System	0.975	5
Taxpayer Awareness	0.895	5

(Source: Research 2024)

4.4 Response Rate

The response rate in research reflects the level of participation and the reliability of the information obtained. The calculation involves dividing the total number of completed survey responses by the number of participants who were invited to participate in the survey. The study becomes more precise and applicable to real life with a higher rate of people responding.

A reply rate of 60% or more is usually good enough to get trustworthy results. Out of 369 respondents targeted, 230 questionnaires were correctly filled and returned, indicating 62.3% response rate. Table 4.2 presents summary of respondent details.

Table 4.2: Response Rate Analysis

Response Rate	Frequency	Percentage (%)
Response	230	62.3%
No Response	139	37.7%
Total	369	100

(Source: Research 2024)

4.5 Demographics Analysis

The demographics analysis involves demographics on gender, level of education and age brackets. Demographic analysis allows researchers to understand the composition of the population involved in the study such as age, gender and level of education. This

helps to determine whether the study's sample is representative of the broader population or if it targets a specific demographic.

The sample consisted of 230 participants, with a slightly higher representation of males (54.3%) compared to females (45.7%). Participants' ages varied, with the largest group being those below 30 years (32.2%), followed by those aged 31 to 40 years (26.5%). The groups aged 51 to 60 years and 41 to 50 years comprised 23.9% and 16.5% of the sample, respectively, while the smallest age group was those aged below 30 years (0.9%). Regarding education levels, the majority of participants had completed secondary education (34.8%), while 30.9% held a bachelor's degree. Those with diploma level education accounted for 28.7%, certificate holders made up 5.2%, and a small fraction (0.4%) had other forms of education.

Table 4.3: Demographics

		Count	Percent %
Gender	Female	105	45.7%
	Male	125	54.3%
Age	31 to 40 years	61	26.5%
	41 to 50 years	38	16.5%
	51 to 60 years	55	23.9%
	below 30 years	2	0.9%
	Below 30 years	74	32.2%
Education Level	Bachelor degree	71	30.9%
	Certificate	12	5.2%
	Diploma level	66	28.7%
	Other	1	0.4%
	Secondary level	80	34.8%

(Source: Research 2024)

4.6 Descriptive Statistics

Descriptive statistics are specific methods fundamentally used to estimate, describe, and summarize collected research data in a consistent, evocative, and resourceful way.

The study shows the research finding on the descriptive statistic in the data collected so as to establish the standard deviations, skewness, mean and kurtosis of the variables.

4.6.1 Descriptive statistics for perceived ease of use of digitized system

The analysis of the descriptive statistics for perceived ease of use of the online tax system is detailed on table 4.4, with each statistic described for every questionnaire item. For the statement "It is easy to use the online tax system in filing my rental income tax," the mean score was 3.85 (SD = 1.044), indicating a general agreement among respondents, though some variability in their responses was observed. The skewness value of -0.527 suggests a slight negative skew, implying that more respondents rated this statement on the higher end of the scale. The kurtosis value of -0.712 indicates a relatively flat distribution compared to a normal distribution. Regarding the statement "I find it easy in using the online tax system to do my transaction," the mean score was higher at 4.12 (SD = 0.948), showing a stronger agreement among respondents. The skewness of -0.795 reflects a moderate negative skew, with most respondents selecting higher ratings. The kurtosis of -0.375 suggests a distribution slightly flatter than normal. For the statement "Learning to operate the tax system would be easy for me," the mean was 3.96 (SD = 1.038), indicating agreement but with some dispersion in responses. The skewness of -0.631 shows a moderate negative skew, implying a tendency towards higher ratings. The kurtosis of -0.707 denotes a relatively flat distribution. The statement "The online tax system is easy, clear, and understandable" received a mean score of 3.80 (SD = 1.021), suggesting agreement among respondents with notable variability. The skewness value of -0.409 indicates a slight negative skew, and the kurtosis of -0.850 points to a flatter distribution. For the statement "I find the online tax system application easy to use," the mean score was 4.08 (SD = 0.931), reflecting agreement with relatively less variability. The skewness of -0.909 indicates a moderate

negative skew, showing a preference for higher ratings. The kurtosis value of 0.351 suggests a slightly peaked distribution. The aggregate mean score across all items was 3.96, indicating overall agreement that the online tax system is perceived as easy to use by the respondents. This consistent pattern of means, skewness, and kurtosis values highlights a generally positive perception of the system's ease of use, with a tendency for responses to be on the higher end of the scale.

Table 4.4: Descriptive statistics perceived ease of use

	N	Mean	Std. Deviation	Skewness	Kurtosis
It is easy to use online tax system in filing my rental income tax	230	3.85	1.044	-.527	-.712
I find it easy in using online tax system to do my transaction		4.12	.948	-.795	-.375
Learning to operate tax system would be easy for me		3.96	1.038	-.631	-.707
The online tax system is easy, clear and understandable		3.80	1.021	-.409	-.850
I find online tax system application easy to use		4.08	.931	-.909	.351
Aggregate Mean		3.96			

(Source: Research 2024)

4.6.2 Descriptive statistics for perceived benefit of digitized system

Table 4.5 shows that perceived benefits of digitized systems, the descriptive statistics for the perceived benefit of compliance reveal insightful data on respondents' attitudes toward various aspects of tax compliance. The statement "Compliance helps in avoiding costly penalties and fines for incorrect filings or late payments" had a mean of 3.81 (SD

= 1.056), indicating that respondents generally agree with this benefit. The skewness value of -0.485 suggests a slight leftward skew, meaning a tendency towards higher agreement, while the kurtosis of -0.966 indicates a distribution that is slightly flatter than a normal distribution. The statement "Meeting tax obligations ensures legal compliance, reducing the risk of legal actions or disputes" had a mean of 3.90 (SD = 1.040), again showing general agreement among respondents. The skewness of -0.605 suggests a moderate leftward skew, indicating more frequent higher ratings, and a kurtosis of -0.801 indicates a slightly flatter distribution. For the statement "Compliance may provide access to tax incentives, credits, or deductions that can lower overall tax liabilities," the mean was 4.01 (SD = 1.053). This suggests that respondents agree more strongly with this benefit. The skewness of -0.719 indicates a noticeable leftward skew, with more respondents giving higher ratings, and a kurtosis of -0.735 suggests a somewhat flat distribution. The statement "Clear tax compliance can facilitate better financial planning and budgeting, ensuring that resources are effectively allocated" had a mean of 4.00 (SD = 1.051), indicating general agreement. The skewness of -0.714 points to a leftward skew, with a tendency toward higher ratings, and a kurtosis of -0.732 suggests a distribution slightly flatter than normal. Finally, the statement "Streamlined compliance processes can lead to better operational efficiency and reduced costs associated with managing tax-related issues" had a mean of 3.98 (SD = 1.041), reflecting agreement among respondents. The skewness of -0.645 indicates a moderate leftward skew, and a kurtosis of -0.806 shows a slightly flatter distribution. Overall, the aggregate mean of the items was 3.94, reflecting a general consensus that compliance offers significant benefits. The slight negative skewness values across all items suggest a tendency for higher ratings, indicating a generally positive perception of the benefits of compliance. The negative kurtosis values, being slightly less than

zero, indicate distributions that are somewhat flatter than the normal curve, suggesting a wide range of opinions but with a central tendency towards agreement.

Table 4.5: Descriptive statistics perceived benefit

	N	Mean	Std. Deviation	Skewness	Kurtosis
Compliance helps in avoiding costly penalties and fines for incorrect filings or late payments.	230	3.81	1.056	-.485	-.966
Meeting tax obligations ensures legal compliance, reducing the risk of legal actions or disputes.		3.90	1.040	-.605	-.801
Compliance may provide access to tax incentives, credits, or deductions that can lower overall tax liabilities.		4.01	1.053	-.719	-.735
Clear tax compliance can facilitate better financial planning and budgeting, ensuring that resources are effectively allocated.		4.00	1.051	-.714	-.732
Streamlined compliance processes can lead to better operational efficiency and reduced costs associated with managing tax-related issues.		3.98	1.041	-.645	-.806
Aggregate Mean		3.94			

(Source: Research 2024)

4.6.3 Descriptive statistics for Perceived usefulness of digitized system

The descriptive statistics on the perceived usefulness showed on table 4.6. For "I would find the tax system useful" received a mean score of 4.01, indicating that respondents generally agree with this statement. The standard deviation of 1.047 suggests moderate variability in responses. The skewness of $-.740$ indicates a negative skew, meaning that more respondents rated this item higher than the mean. The kurtosis of $-.678$ suggests a slightly flatter distribution compared to a normal distribution. "Using the tax system increases my productivity" had a mean score of 4.03, reflecting general agreement among respondents. The standard deviation was 1.071, showing moderate variability in responses. The skewness of $-.727$ indicates a negative skew, implying a tendency for higher ratings. The kurtosis of $-.799$ suggests a slightly flatter distribution compared to normal. "Using the tax system enables me to accomplish tasks more quickly" garnered a mean score of 3.91, indicating that respondents slightly agree with this statement. The standard deviation of 1.055 shows moderate variability in responses. The skewness of $-.581$ indicates a slight negative skew, and the kurtosis of $-.888$ suggests a flatter distribution than normal. "Using the tax system would make it easier to file my tax returns" received a mean score of 3.83, showing slight agreement among respondents. The standard deviation was 1.027, indicating moderate variability. The skewness of $-.565$ suggests a slight negative skew, and the kurtosis of $-.689$ indicates a flatter distribution compared to normal. "Using the tax system would improve my performance" had a mean score of 3.88, indicating slight agreement among respondents. The standard deviation was 1.059, showing moderate variability in responses. The skewness of $-.601$ indicates a slight negative skew, and the kurtosis of $-.761$ suggests a flatter distribution compared to normal. The aggregate mean score

across all items was 3.93, indicating overall agreement that the tax system is perceived as useful.

Table 4.6: Descriptive statistics Perceived usefulness

	N	Mean	Std. Deviation	Skewness	Kurtosis
I would find tax system useful	230	4.01	1.047	-.740	-.678
Using tax system increases my productivity		4.03	1.071	-.727	-.799
Using tax system enables me to accomplish tasks more quickly		3.91	1.055	-.581	-.888
Using tax system would make it easier to file my tax returns		3.83	1.027	-.565	-.689
Using tax system would improve my performance		3.88	1.059	-.601	-.761
Aggregate Mean		3.93			

(Source: Research 2024)

4.6.4 Descriptive statistics for taxpayer awareness

In examining taxpayer awareness as presented in Table 4.7, several descriptive statistics were analysed for five questionnaire items. For the statement, "I'm aware of Tax laws and rules and regulations," the mean score is 3.98, indicating that respondents generally Agree with this statement. The standard deviation of 0.984 suggests moderate variability in responses. The skewness of -0.768 indicates a leftward skew, meaning more respondents rated this item higher on the scale. The kurtosis of -0.147 suggests a relatively flat distribution. The statement, "I'm aware of penalties and interest chargeable for non-compliance," also has a mean of 3.98, showing a similar level of

agreement among respondents. The standard deviation here is slightly higher at 1.024, implying slightly more variation in responses. The skewness of -0.729 indicates a left skew, similar to the previous item, while the kurtosis of -0.397 points to a flatter distribution compared to a normal curve. For "I have attended Tax Seminars and Workshops organized by KRA," the mean is slightly higher at 4.05, reflecting a stronger agreement. The standard deviation is 0.961, indicating consistent responses among participants. The skewness of -0.850 suggests a more pronounced leftward skew, with many respondents selecting higher ratings. The kurtosis value of 0.076 suggests a distribution close to normal. The statement, "I know Services offered by Tax Agent," has a mean of 4.00, indicating general agreement. The standard deviation is 0.951, showing moderate consistency in responses. The skewness of -0.808 suggests a leftward skew, and the kurtosis of 0.086 implies a distribution close to normal. Lastly, "I'm aware of tax due dates" has the highest mean score at 4.06, suggesting that respondents generally Strongly Agree with this statement. The standard deviation is the lowest among the items at 0.933, indicating high consistency in responses. The skewness of -0.839 and kurtosis of 0.192 both suggest a distribution that is slightly skewed to the left and close to normal in terms of peakiness. Overall, the aggregate mean for these items is 4.01, indicating that respondents generally Agree with the statements regarding their awareness of tax-related information and services. This analysis demonstrates a consistent pattern of agreement with moderate to high consistency in responses across all items.

Table 4.7: Descriptive statistics taxpayer awareness

	N	Mean	Std. Deviation	Skewness	Kurtosis
I'm aware of Tax laws and rules and regulations	230	3.98	.984	-.768	-.147
I 'm aware of penalties and interest chargeable for non-compliance		3.98	1.024	-.729	-.397
I have attended Tax Seminars and Workshops organized by KRA		4.05	.961	-.850	.076
I know Services offered by Tax Agent		4.00	.951	-.808	.086
I'm aware of tax due dates		4.06	.933	-.839	.192
Aggregate Mean		4.01			

(Source: Research 2024)

4.6.5 Descriptive statistics for rental income tax compliance

The descriptive statistics for rental income tax compliance were presented on table 4.8. For the item "I understand rental income tax obligation," the mean score is 3.92 (SD = 1.050), indicating that on average, respondents tend to agree that they understand their rental income tax obligations. The negative skewness (-.664) suggests a slight skew towards higher agreement levels, while the kurtosis value (-.482) indicates a relatively flat distribution compared to a normal distribution. The statement "I always file return as required by law" has a mean score of 4.07 (SD = 1.057), suggesting that respondents generally agree that they file returns as required by law. The skewness of -.888 indicates a skew towards higher agreement, and the kurtosis value of -.211 suggests the distribution is slightly flatter than normal. For "I remit taxes due on time," the mean score is 4.03 (SD = 1.038), showing that respondents tend to agree that they remit taxes on time. The skewness of -.817 indicates a skew towards higher agreement levels, and

the kurtosis value of $-.234$ shows the distribution is slightly flatter than a normal distribution. Regarding the statement "As a rental income earner, I file tax returns every month," the mean score is 3.94 ($SD = 1.035$), which indicates that respondents generally agree with this statement. The skewness value of $-.641$ suggests a slight skew towards higher agreement, while the kurtosis value of $-.562$ indicates a relatively flat distribution. The item "KRA has offered an enabling environment for tax filing" has a mean score of 3.99 ($SD = 1.024$), suggesting that respondents tend to agree that the Kenya Revenue Authority (KRA) provides a supportive environment for tax filing. The skewness of $-.722$ indicates a skew towards higher agreement levels, and the kurtosis value of $-.420$ shows a relatively flat distribution. Overall, the aggregate mean of 3.99 across all items suggests that respondents generally agree with the statements related to rental income tax compliance. The negative skewness values across all items indicate a consistent tendency towards higher levels of agreement, while the kurtosis values suggest a relatively flat distribution of responses compared to a normal distribution.

Table 4.8: Descriptive statistics rental income tax compliance

	N	Mean	Std. Deviation	Skewness	Kurtosis
I understand rental income tax obligation	230	3.92	1.050	-.664	-.482
I always file return as required by law		4.07	1.057	-.888	-.211
I remit taxes due on time		4.03	1.038	-.817	-.234
As a rental income earner, I file tax returns every month		3.94	1.035	-.641	-.562
KRA has offered an enabling environment for tax filing		3.99	1.024	-.722	-.420
Aggregate Mean		3.99			

(Source: Research 2024)

4.7 Factor Analysis Dimension Reduction

The KMO and Bartlett's test were used to test for validity of the questionnaire data for dimension reduction. A varimax rotation was used to generate the factor loadings, after which the assessment of the KMO and Bartlett's tests for each variable questionnaire items were carried out. Table 4.9 shows the results for the KMO and Bartlett's tests. The KMO results for rental income tax compliance, perceived ease of use of digitized system, perceived benefit of digitized system, perceived usefulness of digitized system and taxpayer awareness were $0.774 > 0.5$, $0.829 > 0.5$, $0.822 > 0.5$, $0.839 > 0.5$ and $0.832 > 0.5$ respectively, while the Bartlett's test for sphericity had p-value < 0.05 .

Table 4.9: KMO & Bartlett's test

	rental income tax compliance	perceived ease of use of digitized system	perceived benefit of digitized system	Perceived usefulness of digitized system	taxpayer awareness
KMO	0.774	0.829	0.822	0.839	0.832
Bartlett's test for sphericity (sig)	0.000	0.000	0.000	0.000	0.000

(Source: Research 2024)

4.7.1 Dimension reduction factor loadings

Khosla (2006) argues that dimensionality algorithms strive to create a more concise and accurate representation of multi-variate data by eliminating unnecessary components. Choosing the right input for classification and regression is a way to simplify the data. Visualizing data that has many different parts needs to be simplified so it's easier to understand. In questionnaire data dimensions exist in the form of questionnaire items, the items with highest factor loadings are extracted through factor analysis and the

variables are generated through getting the mean and standardized versions of the questionnaire items. The Principal Component Factor Analysis (PCA) results from table 4.12 provide detailed insights into the factor loadings of each element within the studied constructs. Factor loadings represent the correlation coefficients between observed variables and latent factors in factor analysis. They indicate how much variance in each variable is explained by a factor, with higher loadings suggesting a stronger relationship. A loading above 0.4 is generally considered significant. Factor loadings help in interpreting and understanding the underlying structure of data (Hair *et al.*, 2010).

Table 4.10: Principal component Factor Analysis

	rental income tax compliance	perceived ease of use of digitized system	perceived benefit of digitized system	Perceived usefulness of digitized system	taxpayer awareness
RITC1	.962				
RITC2	.965				
RITC3	.959				
RITC4	.957				
RITC5	.967				
PEU1		.827			
PEU2		.813			
PEU3		.931			
PEU4		.904			
PEU5		.861			
PB1			.884		
PB2			.928		
PB3			.965		
PB4			.966		
PB5			.961		
PU1				.916	
PU2				.923	
PU3				.941	
PU4				.968	
PU5				.965	
TPA1					.940
TPA2					.946
TPA3					.969
TPA4					.344
TPA5					.945

(Source: Research 2024)

For Rental Income Tax Compliance (RTC), the factor loadings are consistently high across all items: RITC1 scores 0.962, RITC2 scores 0.965, RITC3 scores 0.959, RITC4 scores 0.957, and RITC5 scores 0.967, indicating strong associations with the underlying factor of RTC. Moving to Perceived Ease of Use (PEU), the loadings range from 0.813 for PEU2 to 0.931 for PEU3, demonstrating moderate to strong correlations with the PEU factor. Similarly, Perceived Benefit (PB) items exhibit robust loadings: PB1 scores 0.884, PB2 scores 0.928, PB3 scores 0.965, PB4 scores 0.966, and PB5 scores 0.961, indicating strong alignment with the PB factor. For Perceived Usefulness (PU), loadings range from 0.916 for PU1 to 0.968 for PU4 and PU5, highlighting strong associations with the PU factor. In contrast, Taxpayer Awareness (TPA) items show generally high loadings: TPA1 scores 0.940, TPA2 scores 0.946, TPA3 scores 0.969, TPA4 scores a lower 0.344, and TPA5 scores 0.945, with TPA4 potentially warranting further investigation due to its notably lower loading. The only variable with a factor loading below the typical cut-off value is TPA4 (0.344), which suggests a weak relationship with the "Taxpayer Awareness" factor. This variable was not being strongly associated with the underlying component and was not considered for exclusion when computing the index. Overall, the factor loadings confirm the constructs' alignment with their respective factors, underscoring the measurement model's validity and reliability across most elements, while suggesting potential refinement for TPA4 in future studies.

Data transformation

Data transformation involves converting original variables into composite variables or factors based on factor loadings from factor analysis. Each observed variable with a high loading on a specific factor was combined to form a composite score or index representing that factor. Standardized constructs with loadings above a cut-off of 0.5

were selected and averaged to create a new variable. This transformation reduced dimensionality and simplified the analysis by condensing multiple item variables into single indices that capture underlying constructs. It ensured each composite variable, was derived based on its strong association with its respective factor. Khosla (2006).

In constructing the variables for each construct based on their factor loadings, only items with loadings that met the threshold for strong association were included in the calculation of each construct's composite score. This approach ensures that each composite score accurately reflects the construct it is intended to measure, thus reinforcing the validity of the measurement model.

For Rental Income Tax Compliance (RTC), the items (RITC1 to RITC5) displayed factor loadings ranging from 0.957 to 0.967, each exceeding the threshold for inclusion in the composite score. The formula used for calculating RTC involved taking the mean score of each item that met the threshold, represented as follows

$$RTC = \frac{RITC1 + RITC2 + RITC3 + RITC4 + RITC5}{5}$$

For Perceived Ease of Use (PEU), factor loadings spanned from 0.813 (PEU2) to 0.931 (PEU3), indicating moderate to strong associations. Similar to RTC, all items met the loading threshold. The composite score for PEU was calculated by averaging the individual items:

$$PEU = \frac{PEU1 + PEU2 + PEU3 + PEU4}{4}$$

In the case of Perceived Benefit (PB), all items (PB1 to PB5) demonstrated strong loadings, ranging from 0.884 to 0.966, thus justifying their inclusion in the PB

construct. The PB composite score was computed by taking the mean of these items, as follows:

$$PB = \frac{PB1 + PB2 + PB3 + PB4 + PB5}{5}$$

Perceived Usefulness (PU) showed loadings between 0.916 and 0.968, with all items surpassing the threshold. Therefore, the composite PU score was derived by calculating the mean of all items:

$$PU = \frac{PU1 + PU2 + PU3 + PU4 + PU5}{5}$$

Lastly, Taxpayer Awareness (TPA) presented high loadings for most items, with TPA1 through TPA3 and TPA5 scoring between 0.940 and 0.969. However, TPA4 showed a notably lower loading of 0.344, which suggested a weak association with the TPA factor. Due to its low factor loading, TPA4 was not included in the calculation of the TPA composite score. The final TPA score was thus calculated using the remaining items:

$$TPA = \frac{TPA1 + TPA2 + TPA3 + TPA5}{4}$$

The variables were centered and tested for statistical assumptions before being used for regression analysis

4.8 Statistical Assumptions

Statistical Diagnostic tests for normality, linearity, heteroscedasticity, and multicollinearity.

4.8.1 Test for Normality

The Shapiro-Wilk test was conducted to determine the normality for each independent variable. If the Shapiro-wilk test is not statistically significant, the data is normally distributed. The results from table 4.11 Perceived Ease of Use of Digitized System shows a p-value of $0.078 > 0.05$, Perceived Benefit of Digitized System shows a p-value of $0.068 > 0.05$, Perceived Usefulness of Digitized System shows a p-value of $0.166 > 0.05$, and lastly taxpayer awareness shows a p-value of $0.77 > 0.05$. The results imply that the residuals for each of the independent variables are normally distributed.

Table 4.11: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Perceived Ease of Use of Digitized System	.176	230	.665	.838	230	.078
Perceived Benefit of Digitized System	.155	230	.788	.832	230	.068
Perceived Usefulness of Digitized System	.111	230	.655	.844	230	.166
Taxpayer Awareness	.200	230	.991	.836	230	.077

a. Lilliefors Significance Correction

(Source: Research 2024)

4.8.2 Homoscedasticity test

The test for heteroscedasticity tests the assumption that there is constant variance in the error terms of the variables being regressed. A Breusch-Pagan test was used and the results from table 4.12 indicate a Chi2(1) of 2.01 and p-value of $0.1562 > 0.05$, indicating that there is constant variance, and that the data is homoscedastic.

Table 4.12: Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity	
Ho: Constant variance	
Variables: fitted values of rental income tax compliance	
chi2(1)	= 2.01
Prob > chi2	= 0.1562

(Source: Research 2024)

4.8.3 Linearity test

The Ramsey RESET test was utilized to determine whether the relationship between the dependent variable and the predictor variables are linear. The linearity test on table 4.13 indicated a p-value >0.05, this indicates that there is a linear relationship between digitalization of systems and rental income tax compliance.

Table 4.13: Ramsey RESET Linearity Test

Ramsey RESET test using powers of the fitted values of rental_income_tax_compliance	
Ho: model has no omitted variables	
F (3, 222)	= 0.58
Prob > F	= 0.6302

(Source: Research 2024)

4.8.4 Multicollinearity test

Multicollinearity tests examine whether there are strong correlations among the independent variables in a regression model. The variance inflation factor (VIF) is a widely used tool for identifying multicollinearity in regression analysis. It shows how much multicollinearity there is in the data. (Neter *et al.*, 1996). VIF <10, and tolerance >0.1 indicates low levels of multicollinearity and non-violation of the statistical

assumption. The VIFs for perceived ease of use of digitized system, perceived benefit of digitized system, perceived usefulness of digitized system, taxpayer awareness is $1.599 < 10$, $1.685 < 10$, $1.463 < 10$ and $1.065 < 10$ respectively. The results indicate that the assumption for multicollinearity was not violated.

Table 4.14: Multicollinearity test

		Collinearity Statistics	
Model		Tolerance(1/VIF)	VIF
1	Perceived Ease of Use of Digitized System	.625	1.599
	Perceived Benefit of Digitized System	.593	1.685
	Perceived Usefulness of Digitized System	.683	1.463
	Taxpayer Awareness	.939	1.065

a. Dependent Variable: rental income tax compliance

(Source: Research 2024)

4.9 Correlation Analysis

Correlation Analysis is a tool in statistics used to determine the direction of the relationship between the variables in a research study, Table 4.15 shows that perceived ease of use of digitized system has a positive and significant correlation with Rental Income Tax Compliance at 54.9% $p\text{-value} = 0.001 < 0.05$. This suggests that simplifying the user interface and functionality of the system can lead to higher rental income tax compliance rates. The study further found that perceived benefit of digitized system correlates with Rental Income Tax Compliance positively up to 55.8% $p\text{-value} = 0.000 < 0.05$. This implied that improving perceived benefits is associated with increase in rental income tax compliance. Perceived usefulness of digitized system shows a positive and significant correlation with Rental Income Tax Compliance at 53.0% $p\text{-value} = 0.000 < 0.05$. This indicates that if taxpayers believe the system

significantly helps them in managing their tax responsibilities, they are more likely to comply with rental income tax obligations. Lastly the moderator which is taxpayer awareness shows a positive and significant correlation with Rental Income Tax Compliance at 34.3% $p\text{-value} = 0.003 < 0.05$. This suggests that increasing awareness and understanding of the digitized system plays a key role in enhancing compliance. The results indicate that as digitization of taxation systems and processes improve the compliance of rental income tax payers tend to have higher compliance.

Table 4.15: Correlation Analysis

Variables	(1)	(2)	(3)	(4)	(5)
(1) Rental Income Tax Compliance	1.000				
(2) Perceived Ease of Use	0.549	1.000			
Sig	(0.001)				
(3) Perceived Benefit	0.558	0.563	1.000		
Sig	(0.000)	(0.000)			
(4) Perceived Usefulness	0.530	0.491	0.503	1.000	
Sig	(0.000)	(0.000)	(0.000)		
(5) Taxpayer Awareness	0.343	0.149	0.247	0.133	1.000
Sig	(0.003)	(0.024)	(0.000)	(0.044)	
N	230				

. Correlation is significant at the 0.05 level.

[Key: () indicates the p values, N indicates number of observations in the study]

(Source: Research 2024)

4.10 Regression Analysis

The direct effects of perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system, on rental income tax compliance.

4.10.1 Model Summary

The model summary indicating direct effects by explaining the effects of perceived ease of use of digitized system, perceived benefit of digitized system, perceived usefulness of digitized system on rental income tax compliance was illustrated. Table 4.16 shows that perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system correlates positively to Rental Income Tax Compliance at 66.2%. The model summary further found that the variation of 43.8% is caused by perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system on Rental Income Tax Compliance. The remaining 56.2% of variation is caused by factors not captured in the model. This level of explained variance indicates a moderately strong model, reflecting that nearly half of the changes in tax compliance behavior can be attributed to landlords' perceptions regarding the usability, benefits, and usefulness of the digitized tax system. The findings imply that enhancing these perceptions may significantly impact compliance rates, underscoring the importance of improving and promoting digital systems for tax management.

Table 4.16: Model Summary without moderator

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.662	0.438	0.431	0.123931

a. Predictors: (Constant), perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system

4.10.2 Analysis of Variance

The analysis of variance on table 4.17 indicates that there is a significant variation caused by perceived ease of use of digitized system, perceived benefit of digitized

system, perceived usefulness of digitized system on Rental Income Tax Compliance, F statistic of 58.823, The F statistic is calculated as the ratio of the variance explained by the independent variables to the variance not explained (residual variance). A high F statistic suggests that the model's predictors collectively account for a significant portion of the variance in the dependent variable, which in this case is tax compliance. and p-value of $0.000 < 0.05$. This indicates that the probability of observing such a large F statistic under the null hypothesis (which states that there is no effect) is extremely low. Therefore, we reject the null hypothesis and conclude that the model's predictors significantly contribute to explaining the variation in Rental Income Tax Compliance. Davis (1989).

Table 4.17: ANOVA without Moderator

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.503	3	51.168	58.823	0.000
	Residual	196.588	226	0.870		
	Total	350.091	229			

a. Dependent Variable: RITC

b. Predictors: (Constant), perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system

Regression Coefficient Analysis without moderator

The regression coefficient analysis resulted in the following equation The decision to use standardized coefficients, rather than unstandardized coefficients, in this analysis is justified by the need to directly compare the relative effects of each independent variable on rental income tax compliance. Standardized coefficients are particularly valuable when variables are measured on different scales, as they transform the variables to a common metric. This transformation enables us to interpret each coefficient in terms of standard deviation units, allowing for a more intuitive

comparison of the strength of each predictor's influence on the dependent variable (Field, 2018).

$$Y = 0.643 + 0.264X_1 + 0.279X_2 + 0.261X_3$$

Table 4.18 shows that a unit change in perceived ease of use of digitized system causes a significant positive change of 0.264 p-value=0.000<0.05. in Rental Income Tax Compliance, a unit change in perceived benefit of digitized system causes a significant positive change of 0.279 p-value=0.002<0.05, Lastly a unit change in Perceived usefulness of digitized system causes a significant constructive change of 0.261 p-value=0.000<0.05 on Rental Income Tax Compliance.

Table 4.18: Coefficient Regression Analysis

		Standardized		Unstandardized		
		Coefficients	Std.	Coefficients	t	Sig.
		β	Error	β		
1	(Constant)	0.643	0.229		2.808	0.005
	Perceived Ease of Use of Digitized System	0.264	0.067	0.278	3.940	0.00
	Perceived Benefit of Digitized System	0.279	0.066	0.291	4.227	0.002
	Perceived Usefulness of Digitized System	0.261	0.062	0.270	4.210	0.000
Dependent Variable: Rental Income Tax Compliance						

(Source: Research 2024)

4.11 Regression Analysis with Moderator

The regression analysis was conducted with the aim to determine moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya.

Model Summary with Moderator

The model summary shows that there is a progressive R square change after the introduction of the moderation in hierarchical model. R statistics shows that Perceived Ease of Use of Digitized System, Perceived Benefit of Digitized System and Perceived Usefulness of Digitized System has a positive correlation with rental income tax compliance $R=0.662$. The after adding taxpayer awareness the R increases to 0.633, after adding interaction between Perceived Ease of Use of Digitized System and taxpayer awareness the R increases to 0.664. There is no change after introducing the interaction between Perceived Benefit of Digitized System and taxpayer awareness $r=0.664$. Lastly after adding all the interactions the $R = 0.668$, The R square is 0.446, indicating that the variation caused on rental income tax compliance is 44.6%, the remaining 55.4% variation is caused by factors not captured in the model.

The r square changes indicate that there was significant moderating effect of taxpayer awareness on relationship between perceived ease of use of digitized system, perceived benefit of digitized system and Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya.

Table 4.19: Overall Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Sig. F Change
1	0.662	0.438	0.431	0.932662		0.000
2	0.663	0.440	0.427	0.898416	0.002	0.000
3	0.664	0.441	0.281	0.888899	0.001	0.016
4	0.664	0.442	0.270	0.880966	0.001	0.026
5	0.668	0.446	0.210	0.880624	0.004	0.000

(Source: Research 2024)

ANOVA with Moderator

Table 4.20 shows that the variance caused on rental income tax compliance is statistically significant as per model number 5 F-statistic =25.555 p-value =0.000<0.05. A high F statistic suggests that the model's predictors collectively account for a significant portion of the variance in the dependent variable, which in this case is tax compliance. and p-value of 0.000<0.05. This implied that the model's predictors significantly contribute to explaining the variation in Rental Income Tax Compliance by moderating the effects of the independent variables on Rental Income Tax Compliance. Davis (1989).

Table 4.20: Overall two-way ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	153.503	3	51.168	58.823	0.000
	Residual	196.588	226	0.870		
	Total	350.091	229			
2	Regression	153.889	4	38.472	44.119	0.000
	Residual	196.202	225	0.872		
	Total	350.091	229			
3	Regression	154.354	5	30.871	35.328	0.000
	Residual	195.737	224	0.874		
	Total	350.091	229			
4	Regression	154.740	6	25.790	29.440	0.000
	Residual	195.351	223	0.876		
	Total	350.091	229			
5	Regression	156.219	7	22.317	25.555	0.000
	Residual	193.872	222	0.873		
	Total	350.091	229			

a. Dependent Variable: Rental_Income_Tax_Compliance

(Source: Research 2024)

Overall Coefficient Regression Analysis

Table 4.21 shows that Model II shows that unit change in Perceived Ease of Use of Digitized System caused a 0.276 positive change in rental income tax compliance, a unit change in Perceived Benefit of Digitized System caused a 0.237 positive change in rental income tax compliance. Further investigation showed that Perceived Usefulness of Digitized System caused a 0.267 positive change in rental income tax compliance. Lastly a unit change in Taxpayer awareness caused a 0.214 positive change in rental income tax compliance. The regression model was; $Y = 0.084 + 0.276X_1 + 0.237X_2 + 0.267X_3 + 0.214M$

Model III shows that unit change in Perceived Ease of Use of Digitized System caused a 0.658 positive change in rental income tax compliance, a unit change in Perceived Benefit of Digitized System caused a 0.255 constructive change in rental income tax compliance. Further investigation showed that Perceived Usefulness of Digitized

System caused a 0.261 positive change in rental income tax compliance. A unit change in Taxpayer awareness caused a 0.569 positive change in rental income tax compliance. The interaction between Perceived Ease of Use of Digitized System and taxpayer awareness caused a 0.105 positive change in rental income tax compliance. the regression mode was $Y = 1.123 + 0.658X_1 + 0.225X_2 + 0.261X_3 + 0.569M + 0.105M \cdot X_1$

For Model IV shows that unit change in Perceived Ease of Use of Digitized System caused a 0.981 positive change in rental income tax compliance, a unit change in Perceived Benefit of Digitized System caused a 0.234 positive change in rental income tax compliance. Further investigation showed that Perceived Usefulness of Digitized System caused a 0.268 positive change in rental income tax compliance. A unit change in Taxpayer awareness caused a 0.423 positive change in rental income tax compliance. The interaction between Perceived Ease of Use of Digitized System and taxpayer awareness caused a 0.192 positive change in rental income tax compliance. The interaction between Perceived Benefit of Digitized System and taxpayer awareness caused a 0.127 positive change in rental income tax compliance the regression mode was $Y = 0.666 + 0.981X_1 + 0.234X_2 + 0.268X_3 + 0.423M + 0.192M \cdot X_1 + 0.127M \cdot X_2$

Model v: found that a unit change in perceived ease of use of digitized system causes a 0.970 positive change in rental income tax compliance, a unit change in perceived benefit of digitized system causes a 0.150 positive change in rental income tax compliance, further unit change in Perceived usefulness of digitized system causes a 0.085 positive change in rental income tax compliance. Further unit change in taxpayer awareness causes a 0.363 positive change in rental income tax compliance. The model regression was; The study further found that taxpayer awareness positively and significantly moderates the relationship between perceived ease of use of digitized system, and rental income tax compliance $\beta=0.203$ p-value =0.003<0.05, also taxpayer

awareness positively and significantly moderates the relationship between perceived benefit of digitized system, and rental income tax compliance $\beta=0.104$ p-value $=0.007<0.05$. The study lasty found that taxpayer awareness positively and significantly moderates the relationship between Perceived usefulness of digitized system, and rental income tax compliance $\beta=0.053$ p-value $=0.007<0.05$

$$Y = 0.467 + 0.970X_1 + 0.150X_2 + 0.085X_3 + 0.363M + 0.203M*X_1 + 0.104M*X_2 + 0.053M*X_3$$

Table 4.21: Overall Regression Coefficients analysis

	Model	Standardized Coefficients		Unstandardized Coefficients	t	Sig.
		β	Std. Error	β		
1	(Constant)	0.643	0.229		2.808	0.005
	Perceived Ease of Use of Digitized System	0.264	0.067	0.278	3.940	0.000
	Perceived Benefit of Digitized System	0.279	0.066	0.291	4.227	0.002
	Perceived Usefulness of Digitized System	0.261	0.062	0.270	4.210	0.000
2	(Constant)	0.084	0.037		2.270	0.035
	Perceived Ease of Use of Digitized System	0.276	0.064	0.262	4.313	0.000
	Perceived Benefit of Digitized System	0.237	0.065	0.227	3.646	0.000
	Perceived Usefulness of Digitized System	0.267	0.060	0.258	4.450	0.001
	Taxpayer awareness	0.214	0.05	0.213	4.280	0.000
3	(Constant)	1.123	0.534		2.103	0.0370
	Perceived Ease of Use of Digitized System	0.658	0.162	0.625	4.062	0.000
	Perceived Benefit of Digitized System	0.225	0.064	0.216	3.516	0.000
	Perceived Usefulness of Digitized System	0.261	0.059	0.252	4.424	0.001
	Taxpayer awareness	0.569	0.147	0.564	3.871	0.000
	PEU*Taxpayer awareness	0.105	0.041	0.548	2.561	0.010
4	(Constant)	0.666	0.263		2.532	0.003
	Perceived Ease of Use of Digitized System	0.981	0.210	0.933	4.671	0.000
	Perceived Benefit of Digitized System	0.234	0.103	0.224	2.272	0.006
	Perceived Usefulness of Digitized System	0.268	0.059	0.259	4.542	0.000
	Taxpayer awareness	0.423	0.158	0.420	2.677	0.008
	PEU*Taxpayer awareness	0.192	0.055	1.005	3.491	0.001
	PB*Taxpayer awareness	0.127	0.053	0.696	2.396	0.018

	Model	Standardized Coefficients		Unstandardized Coefficients	t	Sig.
		β	Std. Error	β		
	(Constant)	0.467	0.192		2.432	0.0165
	Perceived Ease of Use of Digitized System	0.970	0.213	0.944	4.554	0.000
	Perceived Benefit of Digitized System	0.150	0.047	0.144	3.191	0.000
5	Perceived Usefulness of Digitized System	0.085	0.040	0.082	2.125	0.024
	Taxpayer awareness	0.363	0.167	0.360	2.174	0.031
	PEU*Taxpayer awareness	0.203	0.056	0.065	3.625	0.003
	PB*Taxpayer awareness	0.104	0.037	0.570	2.811	0.007
	PU*Taxpayer awareness	0.053	0.019	0.271	2.789	0.007

a. Dependent Variable: Rental Income Tax Compliance

(Source: Research 2024)

4.12 Modi Graph

Miocevic (2020) Moderators can be assessed using either a single item or multiple items, employing either reflective or formative indicators. The key distinction to be made, however, is based on the measurement scale of the moderator, which involves differentiating between categorical (often dichotomous) and continuous moderators. Modi graphs are used to determine the effects of the interaction between independent variables and the moderator at low and high levels.

Interaction between taxpayer awareness and perceived ease of use of digitized system

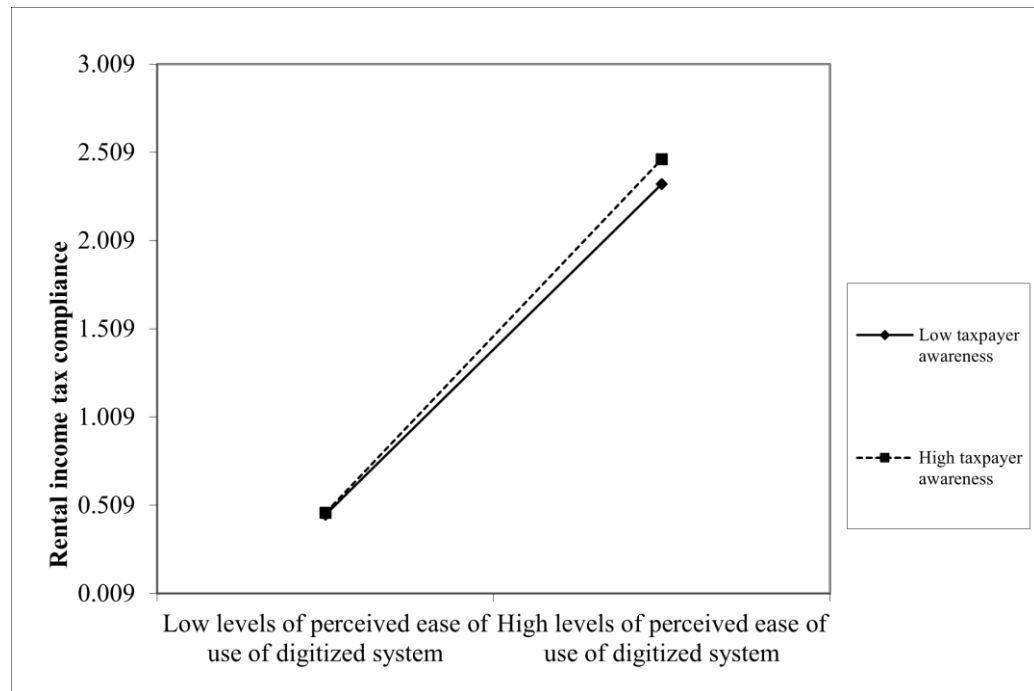


Figure 4.1: Perceived ease of use * taxpayer awareness

(Source: Research 2024)

Figure 4.1 shows that both perceived ease of use of the digitized system and taxpayer awareness are important factors influencing rental income tax compliance. Importantly, improving the ease of use of the digitized system can enhance tax compliance, and this effect is observed regardless of the level of taxpayer awareness. However, combining high taxpayer awareness with a user-friendly digitized system yields the highest levels of compliance. $\beta = 0.203$, $p\text{-value} = 0.003$ the positive effect of perceived ease of use on tax compliance is strengthened.

Interaction between taxpayer awareness and perceived benefit of digitized system

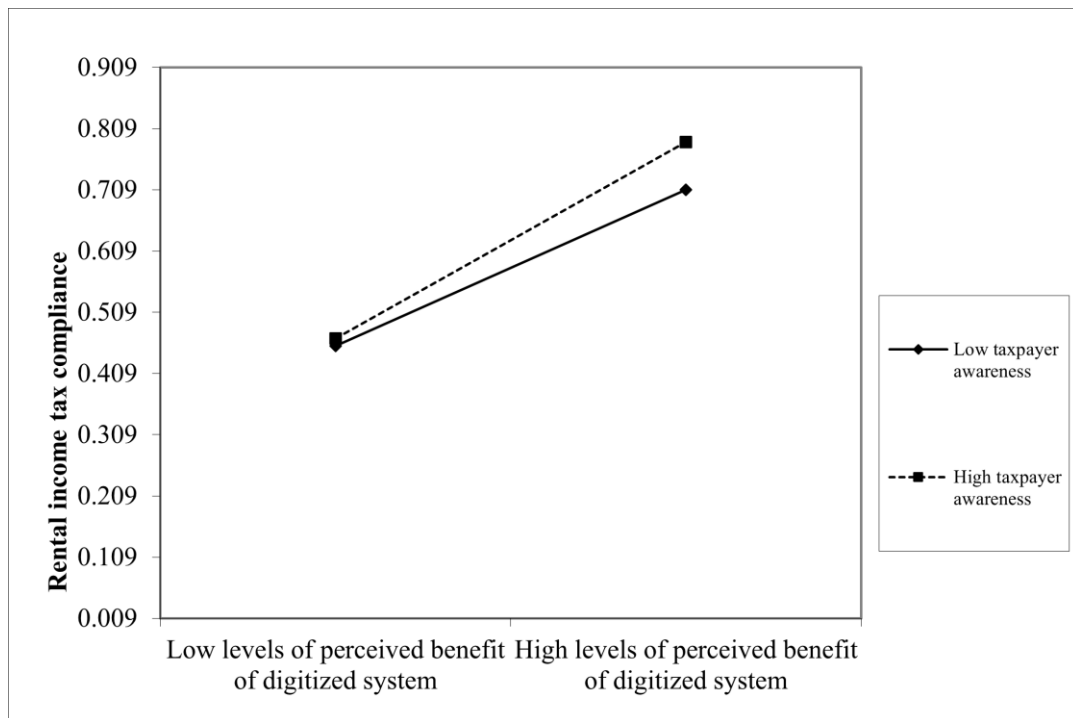


Figure 4.2: Perceived benefit * taxpayer awareness

(Source: Research 2024)

Figure 4.2 shows that both perceived benefit of the digitized system and taxpayer awareness significantly influence rental income tax compliance. Enhancing the perceived benefit of the digitized system can improve tax compliance, and this effect is observed regardless of taxpayer awareness level. Notably, the combination of high taxpayer awareness and high perceived benefit results in the highest levels of compliance. $\beta = 0.104$, $p\text{-value} = 0.007$. This indicates that higher taxpayer awareness enhances the positive impact of perceived benefits on compliance, thus showing an improvement effect.

Interaction between taxpayer awareness and Perceived usefulness of digitized system

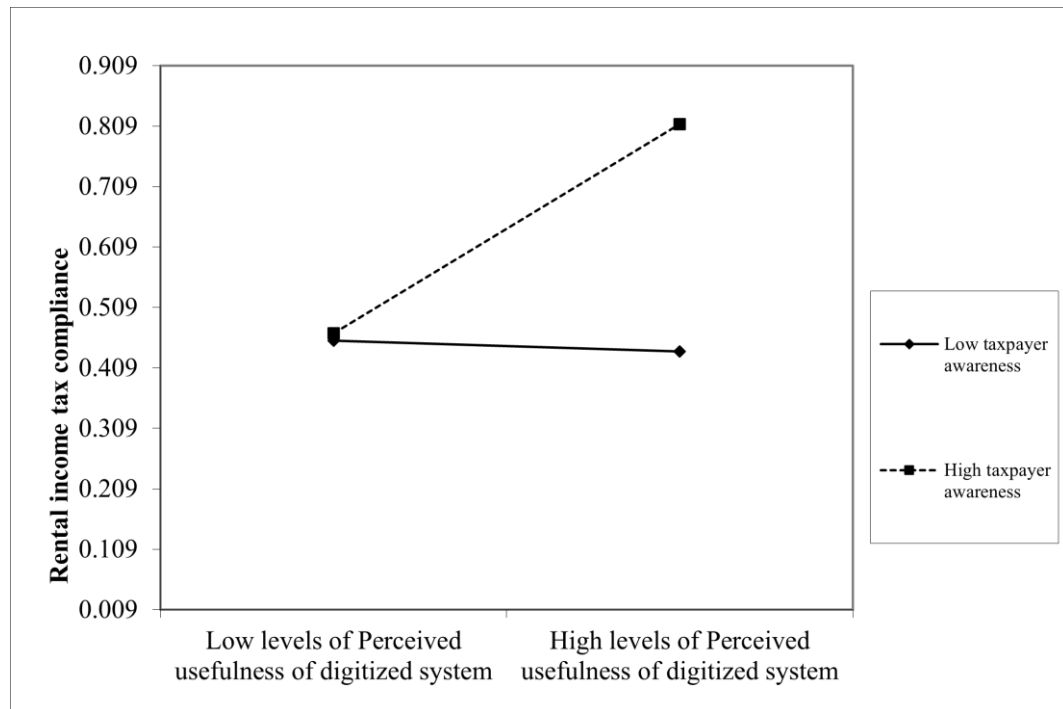


Figure 4.3: Perceived usefulness * taxpayer awareness

(Source: Research 2024)

Figure 4.3 shows that both perceived usefulness of digitized system and taxpayer awareness significantly influence rental income tax compliance. Enhancing the perceived usefulness of digitized system can improve tax compliance, and this effect is observed regardless of taxpayer awareness level. Notably, the combination of high taxpayer awareness and high perceived usefulness of digitized system results in the highest levels of compliance. $\beta = 0.053$, $p\text{-value} = 0.007$. indicates that as taxpayer awareness increases, the positive effect of perceived usefulness on compliance improves.

4.13 Hypotheses Tests

Hypotheses test was conducted and summarized on table 4.24.

The first null hypothesis was that Perceived ease of use of digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya. The study found that Perceived ease of use of digitized system has a significant effect on rental income tax compliance $p\text{-value} = 0.000 < 0.05$. The null hypothesis H_{01} is therefore rejected. This result aligns with prior research, which has established that ease of use often enhances users' willingness to engage with digital systems due to the reduced effort required (Chiu & Wang, 2019; Zakaria *et al.*, 2019). Hernandez *et al.* (2019) and Boon & Lee (2020) also confirmed that perceived ease of use is a significant predictor of continued use in other contexts, suggesting that when tax systems are user-friendly, taxpayers are more likely to comply willingly. Therefore, this study supports the general consensus that an intuitive and straightforward system promotes compliance by lowering barriers to use (Wang, 2022; Gefen & Straub, 2020).

The second null hypothesis was Perceived benefit of digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya. The study found that Perceived benefit of digitized system has a significant effect on rental income tax compliance $p\text{-value} = 0.000 < 0.05$. The null hypothesis H_{02} is therefore rejected. This outcome supports findings by Damayanti *et al.* (2021), who noted that perceived societal benefits of a tax system, such as enhanced governance and transparency, increase compliance rates. Torgler (2007) also emphasized that when taxpayers see a clear reciprocal benefit, they are more motivated to comply. The importance of perceived benefit in this study reflects Torgler's (2022)

assertion that good governance, alongside visible public service improvements, fosters tax morale, confirming that perceived benefit is a key factor in compliance behaviour.

The third null hypothesis was Perceived usefulness digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya. The coefficient analysis indicates that Perceived usefulness digitized system has a significant effect on rental income tax compliance $p\text{-value} = 0.024 < 0.05$. The null hypothesis H_{03} is therefore rejected. This result resonates with the Technology Acceptance Model (TAM) framework, which suggests that perceived usefulness significantly influences behavioural intentions to use technology (Davis, 2019). In line with Miller and Khera (2020), the study illustrates that landlords are more likely to comply when they perceive the tax system as beneficial in enhancing their efficiency or effectiveness. Thong *et al.* (2022) also supports this conclusion, emphasizing that when technology is perceived as useful, users exhibit higher engagement and compliance.

The fourth null hypothesis was that there is no significant moderating effect of taxpayer awareness on relationship between perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system and rental income tax compliance among landlords in Makadara Constituency Nairobi County, Kenya.

The study found that there is a significant moderating effect of taxpayer awareness on relationship between perceived ease of use of digitized system and rental income tax compliance $p\text{-value} = 0.003 < 0.05$. The null hypothesis H_{04a} is therefore rejected.

Similarly, the research found that there is a significant moderating effect of taxpayer awareness on relationship between Perceived benefit of digitized system and rental

income tax compliance $p\text{-value} = 0.007 < 0.05$. The null hypothesis H_{04b} is therefore rejected.

Lastly the study found that taxpayer awareness significantly moderates the relationship between Perceived usefulness of digitized system and rental income tax compliance $p\text{-value} = 0.007 < 0.05$. The null hypothesis H_{04c} is therefore rejected. This aligns with studies by Mukasa (2021) and Loo (2022), which found that increased tax knowledge and awareness enhance compliance by improving understanding and reducing uncertainties around tax obligations. Wandaogo *et al.* (2022) noted similar effects of awareness, where ICT literacy reinforced tax compliance behaviours by enabling users to better utilize digital tools. These findings highlight the critical role of taxpayer awareness in reinforcing the positive impacts of perceived ease, benefit, and usefulness on compliance behaviour.

Table 4.22: Summary of Hypotheses Testing

Hypotheses	P-value	Verdict
H₀₁ Perceived ease of use of digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya	0.000	Reject H₀₁
H₀₂ Perceived benefit of digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya	0.000	Reject H₀₂
H₀₃ Perceived usefulness of digitized system has no significant effect on rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya	0.024	Reject H₀₃
H_{04a} Taxpayer awareness has no significant moderating effect on the relationship between perceived ease of use of digitized system, and rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya	0.003	Reject H_{04a}
H_{04b} Taxpayer awareness has no significant moderating effect on the relationship between perceived benefit of digitized system and rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya	0.007	Reject H_{04b}
H_{04c} Taxpayer awareness has no significant moderating effect on the relationship between Perceived usefulness of digitized system and rental income tax compliance among landlords in Makadara Constituency, Nairobi County, Kenya	0.0074	Reject H_{04c}

(Source: Research 2024)

4.14 Discussion of Findings

4.14.1 Perceived Ease of Use of Digitized System on Rental Income Tax Compliance

The first objective of the study was to determine the effect of perceived ease of use of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. The study found that perceived ease of use of digitized system has a positive and significant correlation with rental income tax compliance $r = 0.549$ $p\text{-value} = 0.000 < 0.05$. The coefficient analysis shows that there is a positive and significant effect of perceived ease of use of digitized system on rental income tax compliance $\beta = 0.970$, $p\text{-value} = 0.000 < 0.05$. This substantial effect suggests that when landlords find the system user-friendly and simple to navigate, they are much more likely to comply with tax obligations. The result supports the idea that reducing barriers to using digital platforms, such as complicated interfaces or time-consuming steps, is a significant motivator for tax compliance among landlords, who may otherwise be deterred by a complex filing process. The study concurs with the Anna and Yusniza (2019) researched on the relationship of Perceived ease of use on e-filing in Malaysia. The research was premised on the argument that e-government is becoming increasingly significant in the modern world because of its effectiveness and applicability in various sectors of the economy. Electronic filing of tax returns has been introduced by many developed countries in order to encourage the public to take their responsibility of paying tax using online systems. Even though e-filing has been implemented in many countries, reliable and integrated online tax system is yet to be established. Huang (2020) reported that PEOU was not significant in the context of e-commerce. The difference in findings could be attributed to the context and specific user motivations. In e-commerce, users may prioritize perceived benefits (such as cost

savings or convenience) over ease of use, whereas in tax compliance, ease of use directly impacts willingness to comply.

4.14.2 Perceived Benefit of Digitized System on Rental Income Tax Compliance

The second objective of study was to determine the effect of perceived benefit of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. The study found that perceived benefit of digitized system has a positive and significant correlation with rental income tax compliance $r = 0.558$ $p\text{-value} = 0.000 < 0.05$. The coefficient analysis shows that there is a positive and significant effect of perceived benefit of digitized system on rental income tax compliance $\beta = 0.150$ $p\text{-value} = 0.00011 < 0.05$. This finding implies that the perceived value or advantage of using a digitized system, such as improved efficiency, transparency, or convenience, has a meaningful, albeit moderate, impact on compliance. While landlords are influenced by the benefits, they perceive in using the system, the effect is comparatively lower than the influence of ease of use, indicating that while benefits are attractive, ease of navigating the system is likely more critical for driving compliance behaviour. The study concurs that Alabede *et al.* (2021) state that a better tax system with good governance improves compliance. The study also concurs with Damayanti *et al.* (2021) who have illustrated the role of perceived benefit of the government and society in relation to improvement on tax compliance. In their study, they conclude that the strong desire for tax payers to comply with tax obligations is among other things greatly influenced by the subjective norms and tax payer perception of the government. However, studies by Ali *et al.* (2014) found that dissatisfaction with public services could negatively affect tax morale, which indirectly affects compliance. This highlights that while perceived benefits generally enhance

compliance, negative perceptions can have the opposite effect, suggesting a nuanced view of the relationship between perceived benefits and compliance.

4.14.3 Perceived Usefulness of Digitized System on Rental Income Tax Compliance

The third objective of the study was to determine the effect of Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. The study found that Perceived usefulness of digitized system has a positive and significant correlation with rental income tax compliance $r = 0.530$ $p\text{-value} = 0.000 < 0.05$. The coefficient analysis shows that there is a positive and significant effect of Perceived usefulness of digitized system on rental income tax compliance $\beta = 0.085$, $p\text{-value} = 0.024 < 0.05$. The finding suggests that, while usefulness contributes to compliance, it is secondary to ease of use and perceived benefit. Nonetheless, landlords who recognize the practical utility of the system are more inclined to adopt and regularly use it for tax-related purposes. The study concurs with Togler *et al.* (2022) demonstrate how governance impacts tax compliance. Cummings *et al.* (2021) found that individual perceptions of good governance increase tax compliance. However, the relationship between tax compliance and quality of governance remains to be studied in the existing literature review, especially in developing countries (Sebele-Mpofu 2020). However, in contradiction to the findings, Wandaogo, Sawadogo, and Lastunen (2022) showed that ICT penetration drives tax revenue mobilization more significantly through fixed broadband subscriptions than perceived usefulness. This suggests that while perceived usefulness is important, infrastructure development (such as internet penetration) could be more critical in certain contexts.

4.14.4 Moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance

The fourth objective was to moderating effects involved determine the moderating effect of taxpayer awareness perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system and rental income tax compliance. The study found that taxpayer awareness had a positive and significant correlation with rental income tax compliance $r= 0.343$ $p\text{-value} =0.000<0.05$. This result highlights the role of informed landlords, who, with adequate knowledge about tax regulations, deadlines, and system functionalities, are more likely to fulfil their tax obligations. The positive effect of awareness on compliance suggests that increased efforts to educate landlords about their tax duties and the benefits of the digital system could be an effective approach to improving compliance rates. The study further found that taxpayer awareness moderates the relationship between perceived ease of use of digitized system, and rental income tax compliance $\beta=0.203$ $p\text{-value} =0.003<0.05$, This result suggests that when landlords are well-informed about the digital system, the effect of ease of use on compliance becomes even more pronounced. In other words, landlords who are both aware of tax requirements and find the system easy to use are more likely to comply with rental income tax obligations. Also, taxpayer awareness moderates the relationship between perceived benefit of digitized system, and rental income tax compliance $\beta=0.104$ $p\text{-value} =0.007<0.05$. This positive moderation effect implies that awareness amplifies the impact of perceived benefit on compliance. When landlords understand the advantages of the digital system and are informed about its functionality and their tax responsibilities, the perceived benefits become more influential in encouraging compliance. The study lasty found that taxpayer awareness moderates the relationship between Perceived usefulness of digitized system and rental

income tax compliance $\beta=0.053$ p-value $=0.007<0.05$. Although this moderation effect is relatively modest, it still indicates that taxpayer awareness enhances the influence of perceived usefulness on compliance. When landlords recognize both the usefulness of the digital system in fulfilling tax obligations and have a solid understanding of tax regulations, they are more likely to engage with the system and maintain compliance. The study concurs with Organization (2020) who states that Further, the study by Aruna (2022), stated that businesses faced problems in their operations as low tax knowledge led to complexities and unorganized administrative costs Barbone, (2023). The study also concurred with Hansford (2023) emphasized that businesses in Malaysia and Australia with low tax awareness suffered heavy losses due to tax fines that occurred because of tax non-compliance. Therefore, policymakers and governments want that firms must be aware of the taxation system, its rules, and its regulations. It would lead to timely tax compliance, generation of revenue, increased business efficiency, and reduction in tax scams.

Landlords in Makadara Constituency and Beyond: Landlords will directly benefit from these findings by gaining insights into how the perceived ease of use, perceived benefits, and perceived usefulness of a digitized tax system impact their tax compliance behaviours. Understanding these factors can help landlords identify the advantages of using a digitized system, making tax compliance more straightforward and less burdensome. By recognizing the benefits of a digital system, landlords may be encouraged to adopt such systems, potentially reducing the risk of penalties and ensuring more consistent compliance with tax obligations.

The Kenya Revenue Authority will benefit from these findings by better understanding the motivations and barriers that landlords face in adopting digitized tax systems. Since the study highlights the significance of perceived ease of use, benefits, and usefulness,

as well as the moderating effect of taxpayer awareness, KRA can use this information to enhance digital tax platforms and design targeted awareness campaigns. This can lead to increased rental income tax compliance, improved tax revenue collection, and a more streamlined tax administration process.

Government agencies involved in economic planning and policy development will benefit by understanding the factors that promote digital tax compliance among landlords. Insights into the role of taxpayer awareness as a moderator in the adoption of digital systems can inform the development of supportive policies or programs that encourage digitalization and improve tax compliance. These findings may also contribute to the formulation of policies that enhance taxpayer education and reduce the complexity of tax compliance.

This study contributes to the growing body of research on tax compliance, particularly within the context of digitalization. Future researchers can use the findings as a foundation for further studies, expanding on the influence of digitized systems on tax compliance and exploring additional variables. The study's findings on the role of perceived ease of use, benefit, usefulness, and taxpayer awareness in tax compliance behaviour provide valuable data for theoretical development and practical applications in related fields.

Companies and developers involved in creating tax software can leverage these findings to improve the design and functionality of digital tax platforms. The study's emphasis on perceived ease of use and usefulness suggests that simplified, user-friendly interfaces are critical for encouraging compliance. Software developers can use this insight to make digital tax systems more intuitive and accessible, which may result in higher user adoption rates and improved compliance outcomes.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section breaks down a summary of the investigate findings, make conclusions associated with the research objectives, and recommendations. Moreover, it outlines potential suggestion for further research.

5.2 Summary of Findings

5.2.1 Perceived Ease of Use of Digitized System on Rental Income Tax Compliance

The first objective of the study was to determine the effect of perceived ease of use of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. The study found that perceived ease of use of digitized system has a positive and significant correlation with rental income tax compliance. ($r = 0.549$, $p\text{-value} = 0.000$). The coefficient analysis showed that there is a positive and significant effect of perceived ease of use of digitized system on rental income tax compliance. ($\beta = 0.970$, $p\text{-value} = 0.000003$).

5.2.2 Perceived Benefit of Digitized System on Rental Income Tax Compliance

The second objective of study was to determine the effect of perceived benefit of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. The study found that perceived benefit of digitized system has a positive and significant correlation with rental income tax compliance. $r = 0.558$ $p\text{-value} = 0.000$. The coefficient analysis shows that there is a positive and significant effect of perceived benefit of digitized system on rental income tax compliance. $\beta = 0.150$, $p\text{-value} = 0.000 < 0.05$.

5.2.3 Perceived Usefulness of Digitized System on Rental Income Tax Compliance

The third objective of the study was to determine the effect of Perceived usefulness of digitized system on rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya. The study found that Perceived usefulness of digitized system has a positive and significant correlation with rental income tax compliance. $r = 0.530$ $p\text{-value} = 0.000$. The coefficient analysis shows that there is a positive and significant effect of Perceived usefulness of digitized system on rental income tax compliance. $\beta = 0.085$, $p\text{-value} = 0.024 < 0.05$.

5.2.4 Moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance

The fourth objective was to moderating effects involved determine the moderating effect of taxpayer awareness perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system and rental income tax compliance. The study found that taxpayer awareness had a positive and significant correlation with rental income tax compliance $\beta = 0.343$ $p\text{-value} = 0.000$. The study further found that taxpayer awareness moderates the relationship between perceived ease of use of digitized system, and rental income tax compliance $\beta = 0.203$ $p\text{-value} = 0.003$. Also, taxpayer awareness moderates the relationship between perceived benefit of digitized system, and rental income tax compliance., $\beta = 0.104$ $p\text{-value} = 0.007$. The study lastly found that taxpayer awareness moderates the relationship between Perceived usefulness of digitized system, and rental income tax compliance $\beta = 0.053$ $p\text{-value} = 0.007$.

5.3 Conclusion

The study sought to determine the moderating effect of taxpayer awareness on the relationship between digitalization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya.

The study first found that perceived ease of use of digitized system causes an increase in rental income tax compliance, the study also found that perceived benefit of digitized system causes an increase in rental income tax compliance. The results support previous research, such as that of Gefen and Straub (2020) and Wang (2022), which suggests that the ease of using a digital system directly influences users' continued engagement and willingness to adopt e-filing for tax purposes. By confirming that perceived ease of use enhances compliance, this study extends the Technology Acceptance Model (TAM) framework to the domain of rental income tax compliance, similar to findings in studies by Chiu and Wang (2019) and Zakaria *et al.* (2019).

The study also established that perceived benefit of digitized system positively influenced rental income tax compliance. The study concludes that there was increased rental income tax compliance when taxpayers had a higher perception about the inherent benefits of digitized systems. The conclusion echo the findings of Damayanti *et al.* (2021) and Torgler *et al.* (2007), which demonstrated that positive perceptions of government-provided benefits can improve taxpayers' willingness to comply. This result is consistent with research on the social contract model (Feld & Frey, 2007), where the perception of benefits derived from tax compliance strengthens compliance behaviour, especially in contexts where governments are seen to reciprocate tax payments with public goods. Alabede *et al.* (2021) and Togler *et al.* (2022) also underscore this point, noting that compliance increases when the government demonstrates a commitment to providing infrastructure and services.

The study further found that perceived usefulness of digitized system causes an increase in rental income tax compliance. The findings conclude that digitization is pivotal in improving rental income tax compliance. This was in line with Davis's (2019) assertion that usefulness is a key predictor of intention to use technology. Alraja, Hammami, and Alhousary (2020) emphasized this by noting that the perceived utility of an e-filing system increases taxpayers' adoption intentions. The current study builds on these findings by showing that perceived usefulness extends to rental income tax compliance, where a functional digital system can significantly improve compliance rates by reducing the time and complexity associated with tax filing.

The study also found that taxpayer awareness moderates the relationships between perceived ease of use of digitized system, perceived benefit of digitized system, Perceived usefulness of digitized system and rental income tax compliance. The study also showed that high levels of taxpayer awareness improve the effects. The conclusions corroborated studies such as those by Mukasa (2021) and Aruna (2022), which found that increased tax awareness heightens compliance by improving taxpayers' understanding of their obligations and the benefits of compliance. Mukasa's research specifically found that knowledge positively impacted compliance behaviors in Ugandan SMEs, highlighting the broader applicability of this finding across different regions and tax bases. This study suggests that taxpayer awareness enhances the effectiveness of perceived ease of use, benefit, and usefulness by improving taxpayers' understanding of digital systems, echoing Loo's (2022) findings on the importance of awareness for compliance among Malaysian taxpayers.

5.4 Recommendations

5.4.1 Policy Implications

The government should implement policies that encourage the adoption of digital systems for tax compliance. Given the positive impact of perceived ease of use, perceived benefit, and perceived usefulness, the government should provide incentives for early adopters or offer training programs that make digital platforms more user-friendly. Findings indicated that taxpayer awareness significantly moderates the relationship between digitalization and rental income tax compliance. The government policies should focus on enhancing awareness through targeted education campaigns workshops, and seminars that clarify the benefits and ease of using digital tax systems. The government should regularly update digital tax platforms to ensure they are intuitive, reliable, and accessible. The government should establish frameworks to continuously monitor the effectiveness of digital platforms in improving tax compliance.

5.4.2 Practical Implications - For Practice by Management, KRA, and Taxpayers

The Kenya Revenue Authority (KRA) should implement regular training sessions and robust user support initiatives aimed at equipping landlords with the knowledge and skills needed to navigate and utilize the digitized tax systems effectively. Such training programs could cover step-by-step guidance on system features, troubleshooting common issues, and understanding compliance requirements, helping landlords overcome any technical or procedural barriers. Additionally, KRA and key stakeholders should actively promote the tangible benefits of digital tax systems, such as the significant reduction in filing time, improved accuracy in tax calculations, enhanced data security, and greater convenience, which together streamline the tax process and reduce administrative burdens. By clearly communicating these advantages, KRA can

help landlords appreciate the value of digital compliance, fostering higher voluntary participation and trust in the tax system. These efforts would not only improve compliance levels but also contribute to a more efficient, user-friendly, and taxpayer-centric system.

5.4.3 Theoretical Implications

The findings support the Technology Acceptance Model (TAM) as perceived ease of use and perceived usefulness are shown to significantly impact the adoption of digital systems for tax compliance. These results affirm the model's argument that ease of use and usefulness are critical factors in technology adoption.

The study also aligns with the UTAUT, which posits that performance expectancy (similar to perceived benefit) and effort expectancy (similar to perceived ease of use) are key determinants of technology acceptance and use. The significant correlations found between these variables and tax compliance support this theory.

The study's findings, particularly on the moderating role of taxpayer awareness, align with the Ability to Pay Theory. The theory suggests that taxpayers are more compliant when they perceive the system as fair and understand their obligations clearly, which correlates with the need for increased taxpayer awareness.

5.4.4 Recommendations for Future Research

Future research could explore the impact of tax reforms on rental income tax compliance, examining how changes in tax policy and regulations influence taxpayer behaviour and compliance rates within this sector. Specifically, studies could assess the effectiveness of reforms aimed at simplifying tax filing processes, reducing compliance costs, or enhancing enforcement mechanisms. A study on the effects of tax incentives on rental income tax compliance could benefit the research field. Such research would

contribute to a deeper understanding of how targeted incentives can encourage voluntary compliance, especially among rental income taxpayers, and inform policymakers on designing incentive structures that maximize compliance and revenue generation.

5.5 Contributions to the Knowledge

The findings of this study make a significant contribution to the field of tax compliance research by emphasizing the critical role of digitization and user perceptions in enhancing rental income tax compliance. Specifically, this study provides empirical evidence on how perceived ease of use, perceived benefit, and perceived usefulness of digitized systems individually and interactively drive compliance behavior among landlords. Additionally, by highlighting the moderating effect of taxpayer awareness, this research expands the Technology Acceptance Model (TAM) framework within the context of tax compliance, showing that awareness not only influences user engagement with digital tax systems but also strengthens the impact of perceived ease of use, benefit, and usefulness on compliance intentions. This nuanced understanding addresses gaps in the literature, particularly in the underexplored area of digital tax compliance within developing economies, and offers practical insights for tax authorities and policymakers. By suggesting that both system usability and taxpayer education are essential for increasing compliance, the study underscores the importance of an integrated approach to digital tax reforms, contributing to more effective tax administration and governance frameworks.

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APPENDICES

Appendix I: Letter of Introduction

Dear Respondent,

RE: REQUEST TO PARTICIPATE IN A STUDY AND DATA COLLECTION

I hope this letter finds you well.

My name is Sammy, pursuing a Master degree in tax administration offered by Kenya School of Revenue Administration (KESRA) in collaboration with Moi University. I am undertaking research on “**MODERATING EFFECT OF TAXPAYER AWARENESS ON THE RELATIONSHIP BETWEEN DIGITALIZATION OF SYSTEM AND RENTAL INCOME TAX COMPLIANCE AMONG LANDLORDS IN MAKADARA CONSTITUENCY, NAIROBI COUNTY, KENYA**”. This letter is to request you to participate in the study by filling the questionnaire. I pledge to you that the information gathered is for academic use only and that I will uphold confidentiality during and after the study.

Kind Regards,

Nyaata Sammy Mandela

Appendix II: Questionnaire

You are requested to participate in this study by filling this questionnaire. Kindly fill by ticking (✓) in line with your agreement to the statement or questions. All data and information is for academic use only.

SECTION A: GENERAL INFORMATION

1. Gender:

Male ()

Female ()

2. Age:

Below 30 years ()

31-40 years ()

41-50 years ()

51-60 years ()

3. Education level

Certificate ()

Diploma level ()

Bachelor degree ()

Others ()

SECTION B: PERCEIVED EASE OF USE OF DIGITIZED SYSTEM

Kindly state your level of agreement or disagreement with the following statements

Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

No.	Statement	1	2	3	4	5
1	It is easy to use online tax system in filing my rental income tax					
2	I find it easy in using online tax system to do my transaction					
3	Learning to operate tax system would be easy for me					
4	The online tax system is easy, clear and understandable					
5	I find online tax system application easy to use					

PERCEIVED BENEFIT OF DIGITIZED SYSTEM

Kindly state your level of agreement or disagreement with the following statements

Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

No.	Statement	1	2	3	4	5
1	Compliance helps in avoiding costly penalties and fines for incorrect filings or late payments.					
2	Meeting tax obligations ensures legal compliance, reducing the risk of legal actions or disputes.					
3	Compliance may provide access to tax incentives, credits, or deductions that can lower overall tax liabilities.					
4	Clear tax compliance can facilitate better financial planning and budgeting, ensuring that resources are effectively allocated.					
5	Streamlined compliance processes can lead to better operational efficiency and reduced costs associated with managing tax-related issues.					

PERCEIVED USEFULNESS OF DIGITIZED SYSTEM

Kindly state your level of agreement or disagreement with the following statements

Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

No.	Statement	1	2	3	4	5
1	I would find tax system useful					
2	Using tax system increases my productivity					
3	Using tax system enables me to accomplish tasks more quickly					
4	Using tax system would make it easier to file my tax returns					
5	Using tax system would improve my performance					

TAX AWARENESS

Kindly state your level of agreement or disagreement with the following statements

Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

No.	Statement	1	2	3	4	5
1	I'm aware of Tax laws and rules and regulations					
2	I 'm aware of penalties and interest chargeable for non-compliance					
3	I have attended Tax Seminars and Workshops organized by KRA					
4	I know Services offered by Tax Agent					
5	I'm aware of tax due dates					

RENTAL INCOME TAX COMPLIANCE

Kindly state your level of agreement or disagreement with the following statements

Please indicate your rate by ticking appropriately on a scale of 5-1, where 5= strongly agree, 4=agree 3=neutral 2=disagree 1=strongly disagree.

No.	Statement	1	2	3	4	5
1	I understand rental income tax obligation					
2	I always file return as required by law					
3	I remit taxes due on time					
4	As a rental income earner, I file tax returns every month					
5	KRA has offered an enabling environment for tax filing					

Appendix III: Work Plan

Activity	DEC 2023	JAN 2024	FEB 2024	MAR 2024	APR 2024	MAY 2024	JUN 2024	JUL 2024
Proposal Development								
Presentation								
Pilot Testing								
Data Collection								
Data Coding & Editing								
Data Analysis								
Report Writing								
Submission								

Appendix IV: Budget

Description	Total
Stationery	3,000
Photocopying	1600
Typing	2,300
Binding	5,000
Internet	4,000
Book binding	5,000
Research Assistants	40,000
Total	60,900

Appendix V: Introduction letter



**KENYA REVENUE
AUTHORITY**

ISO 9001:2015 CERTIFIED

PUBLIC

KENYA SCHOOL OF REVENUE ADMINISTRATION

REF: KESRA/NBI/036

5th July 2024

TO: WHOM IT MAY CONCERN

Dear Sir/Madam,

**RE: REQUEST FOR ASSISTANCE TO NYAATA SAMMY MANDELA OF
REGISTRATION NO.: KESRA105/0017/2018 UNDERTAKING MASTERS AT
KESRA**

This is to confirm that the above named is a student at Kenya School of Revenue Administration (KESRA) Nairobi Campus pursuing Masters in Tax and Customs Administration.

The named student is undertaking Research on TOPIC: **“Moderating effect of taxpayer awareness on the relationship between digitization of system and rental income tax compliance among landlords in Makadara constituency, Nairobi County, Kenya.”**

The purpose of this letter is to request for your kind facilitation in enabling the student progress in his research project by allowing access to any relevant information and/or conduct interviews, which are relevant to the project.

Your support to the student in this regard will be highly appreciated.

Thank you,



Damacrine Masira
Manager Academic Research,
KESRA

Tuliye Ushuru, Tujitegemee!

Appendix VI: NACOSTI

 REPUBLIC OF KENYA Ref No: 891921	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION Date of Issue: 12/August/2024
RESEARCH LICENSE	
	
This is to Certify that Mr. SAMMY MANDELA NYAATA of Kenya School of Revenue Administration, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: MODERATING EFFECT OF TAXPAYER AWARENESS ON THE RELATIONSHIP BETWEEN DIGITALIZATION OF SYSTEM AND RENTAL INCOME TAX COMPLIANCE AMONG LANDLORDS IN MAKADARA CONSTITUENCY, NAIROBI COUNTY, KENYA for the period ending : 12/August/2025.	
License No: NACOSTI/P/24/38667	
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See overleaf for conditions	

Appendix VII: Plagiarism Certificate



SR661

ISO 9001:2019 Certified Institution

THESIS WRITING COURSE

PLAGIARISM AWARENESS CERTIFICATE

This certificate is awarded to

NYAATA SAMMY MANDELA

KESRA/105/0017/2018

In recognition for passing the University's plagiarism

Awareness test for Thesis **entitled: MODERATING EFFECT OF TAXPAYER AWARENESS ON THE RELATIONSHIP BETWEEN DIGITALIZATION OF SYSTEM AND RENTAL INCOME TAX COMPLIANCE AMONG LANDLORDS IN MAKADARA CONSTITUENCY, NAIROBI COUNTY, KENYA** similarity index of 22% and striving to maintain academic integrity.

Word count:21923

Awarded by

Prof. Anne Syomwene Kisilu
CERM-ESA Project Leader Date: 09/09//2024

Appendix VIII: Similarity

similarity

ORIGINALITY REPORT

22%

SIMILARITY INDEX

PRIMARY SOURCES

1	ikesra.kra.go.ke Internet	1684 words — 7%
2	icmu.ac.ke:8080 Internet	1248 words — 5%
3	www.scribd.com Internet	338 words — 1%
4	erepository.uonbi.ac.ke Internet	314 words — 1%
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