PSYCHO- ECONOMIC FACTORS, DIGITALIZATION AND PAY AS YOU EARN TAX COMPLIANCE AMONG SMALL AND MEDIUM ENTERPRISES IN THIKA TOWN, KENYA

BY

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS AND ECONOMICS, DEPARTMENT OF ACCOUNTNG AND FINANCE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS IN TAX AND CUSTOMS ADMINISTRATION

MOI UNIVERSITY

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DECLARATION

Declaration by Candidate

This 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 prior written permission of the author and Moi University.

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KESRA105/0071/2021

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DEDICATION

This research project is dedicated to all those who assisted in making this project successful and particularly my family, parents; I also appreciate my brother, sisters for making jokes to cheer me up whenever I was worried or upset. Finally, I thank my husband, daughter and son for the time they gave me when I was doing this project. Their belief in me has given me the strength to stand the difficult times. May God bless them abundantly.

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ABSTRACT

The Kenyan government establishes annual targets for the amount of taxes it intends to collect in order to settle its debt. The Kenya Revenue Authority (KRA) has however not met the treasury's targets for revenue compliance in spite of several restructuring efforts made in recent years to improve revenue compliance. For example, the PAYE tax revenues for the financial year 2022–2023 were Ksh. 441.60 billion, or 96% of the objective of Ksh. 459.26 billion, meaning that the target was missed by 17.66 billion. PAYE tax receipts in 2021–2022 were Ksh. 407.83 billion, similar to the previous financial year, but Ksh. 7.69 billion, or 98% of the total, fell short of the target. Because of this, the government is unable to sufficiently meet the requirements of its people, which include social security, roads, water, healthcare, education, and security. The study examined Pay As You Earn compliance among small and medium-sized businesses in Thika, Kenya, and how it is affected by psycho-economic aspects and the moderating effect of digitalization of tax systems. Specific goals included determining the impact of tax knowledge, compliance costs, taxpayer impression on small and medium-sized businesses in Thika town's Pay As You Earn compliance and to ascertain how the digitalization of tax systems has affected the relationships between taxpayer perception and Pay As You Earn compliance, tax knowledge and Pay As You Earn compliance, and compliance cost and Pay As You Earn compliance. Four taxation theories—the attribution theory, the benefit theory, the Allingham and Sandmo Theory (AS Theory), and the Technology Acceptance Theory—were used to support the study. An explanatory sample design was used in the study. The small and medium-sized businesses with licenses in Thika town were the study's primary focus. In an attempt to obtain respondents from the sample, the study employed the stratified random sampling technique. With a sample size of 301 small and medium-sized businesses, the target population consisted of 1223 small and medium-sized businesses. Primary data were used in the investigation. Structured questionnaires were used to gather primary data. The data was analyzed through descriptive analysis, correlation and regression analysis. Regression analysis was used in the study to validate the psychological, economic, and digitalization of tax systems as well as income (PAYE) tax compliance. The hierarchical regression was used to determine the moderating effect of digitization of tax systems on the relationship between Tax knowledge, Compliance cost Taxpayer's perception and Pay As You Earn compliance. The study found that there is positive and significant effect of tax knowledge on PAYE tax compliance ($\beta1 = 0.543$, $p<0.05$), there is a negative and significant effect of tax compliance costs on PAYE tax compliance ($\beta2 = -0.244$, $p<0.05$), and there is positive and significant effect of taxpayer's perception on PAYE tax compliance ($\beta3 = 0.244$, $p<0.05$). The study found that digitization of tax systems moderates the relationship between tax knowledge compliance costs, taxpayer's perception and PAYE tax compliance ($\beta5 = 0.529$, $p<0.05$). ($\beta6 = 0.079$, $p<0.05$). and ($\beta7 = 0.102$, $p<0.05$). respectively. The recommendations for policy makers and academic institutions were as follows; KRA should work towards simplifying and streamlining the tax compliance processes, reducing unnecessary administrative burdens. This could involve revisiting and simplifying tax regulations, providing clear guidelines, and leveraging technology to automate routine compliance tasks. KRA should explore ways to minimize these tax compliance costs by reviewing and optimizing administrative requirements, providing user-friendly platforms, and offering support services to assist businesses in meeting their obligations more efficiently. Future research should be carried out to determine the effect of tax incentives on tax compliance.

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DEFINITIONS OF TERMS

Cost of Compliance: Individual taxpayers engage in various economic endeavors, such as dedicating time to pay taxes, hiring tax professionals to prepare returns, or incurring penalties and fines for failing to comply with tax rules and regulations (Slemrod, 2012).

Pay as you Earn (PAYE): refers to either an income-based student loan repayment system or a system where employers withhold income taxes (OECD, 2018).

PAYE Compliance Refers to adhering to tax laws and regulations by correctly reporting income, expenses, and other financial details to the relevant tax.

Psycho- Economic factors In the context of small and medium-sized enterprises' (SMEs) tax compliance, the term "psycho-economic factors" refers to the behavioral and psychological elements that impact SMEs' tax compliance decisions and actions, especially in light of digitalization and Pay-As-You-Earn (PAYE) tax systems. These factors can play a significant role in how SMEs adapt to and comply with evolving tax regulations and technologies, (Edwards, 2017)

Small and Medium enterprises: A small and medium-sized enterprise (SME) is a legally recognized company that employs five to one hundred fifty people, has an annual revenue of Ksh. 8 to Ksh. 10 million, and has at least Ksh. 4 million in assets (World Bank, 2019).

Tax knowledge: This refers to programs that provide workers with information, new skills, or professional development opportunities (Elnaga & Imran, 2016).

Taxation: Refers to a system by which government takes money from people and spends it on things such as education, health and defense (Marchese, 2021).

Taxpayer: Refers to a person or organization (such as a company) subject to pay a tax and has an identification number issued by government. The term taxpayer generally describes one who pays tax (Clark, 2019).

ABBREVIATIONS AND ACRONYMS

KNBS Kenya National Bureau of Statistics

KRA Kenya Revenue Authority

PAYE Pay As You Earn

SME Small and Medium Enterprises

CHAPTER ONE

INTRODUCTION

1.0 Chapter Overview

In this chapter covered background of the study to determine the psycho- Economic factors, Digitalization of tax systems and Income tax compliance among small and medium enterprises from both the global, regional and local viewpoint is discussed. The chapter also included a description of the problem, the study's background, its goals, its hypothesis, its justification, its scope, and its objectives.

1.1 Background of the Study

According to Arum (2012), tax revenue has been the primary source of state revenue in Indonesia for the past five years. Income tax receipts accounted for about 78% of the state revenue in the 2013 budget. The self-assessment system, which is being implemented in Indonesia, gives each taxpayer more responsibility to register, calculate, pay, and report the amount of tax owed to the government. Because of this, the amount of individual income tax collected is largely dependent on the awareness and compliance of the person. Tax money collected by the government is typically used to fund public hospitals, colleges and institutions, the military, and other essential everyday necessities.

Even when tax collecting is not supported or understood by the populace of a country, Gcabo and Robinson (2017) contend that it is nevertheless vital to any given nation. They contend that even if taxpayers accept that they must pay taxes and take advantage of government services like public service, the majority of taxpayers do not support tax compliance. Understanding the significance of tax compliance is crucial because it affects how the government influences the lives of its constituents (Oberholzer, 2018).

Taxpayers, whether they are an individual or a corporate entity, typically see taxes as costs. When it comes to taxes, there is typically conflict between the government's goal of maximizing income through increased tax compliance and the taxpayers' desire to maximize profit and avoid costs. The tax authority must devise plans and techniques for streamlining tax laws and procedures in order to preserve the equilibrium between taxpayers and tax collectors. Using improved tax understanding is one of the tactics (Oats and Lymer, 2019). Taxation drives pressure for greater transparency, better governance, and increased efficiency in government spending. It also raises incentives for the general public to participate in politics. Additionally, taxes encourage the government to modernize its infrastructure for tax administration and collection as well as to expand its range of public services.

The PAYE is a high-yielding revenue collector in many countries. It generates a lion's share of the personal income tax and, in industrial countries, usually exceeds the revenue of the general sales tax or value-added tax (VAT) by an ample margin (Osho, 2020). In Russia, for instance, the wage withholding is nearly 100 percent of total personal income tax, but VAT revenue amounts to about three times the PAYE revenue (Elena, Kirill & Dina, 2019). In countries such as Australia, Canada, Sweden, and the United States, all wage earners whose income exceeds the exempt amount are still required to file an income tax return. Tax withheld is credited against the total income tax due, and the difference is paid or refunded (Arnold, Ault, & Cooper, 2019). Countries like Chile, Germany, Hungary, the Netherlands, and the United Kingdom, however, use the PAYE as a final income tax for most wage earners. Administrative and compliance costs are lower under final withholding because many taxpayers are not required to file returns. These countries regularly implement additional measures to expand the finality of the tax. The withholding schemes are often modified to make

them more compatible with the general income tax, and sometimes a limited filing threshold is applied to those with other income (Conte, Miller & Pope, 2019).

In the UK, PAYE non-compliance mostly results from errors that do not stem from evasion intent with only 3 per cent attributed to tax-evasion (Balashov & Sanina, 2023). The U.S. has a simple PAYE system, which applies withholding predominantly on wage income. By contrast, other countries, such as the United Kingdom (U.K.) and New Zealand, have a broader PAYE system collecting tax on a range of payments beyond simple wages. The U.K. has been so successful at this expansion that approximately two-thirds of British taxpayers end each year having already fully and accurately satisfied their tax liabilities (Arnold, Ault & Cooper, 2019).

In developing countries, personal income tax collected from wages represents an even higher percentage of total personal income tax revenue. However, depending on the actual rate structure, the VAT often generates more revenue in these countries than the PAYE. This is particularly true in countries in transition (Benedek, Benitez & Vellutini, 2022). Gideon and Alouis (2013) observed that in Zimbabwe, it was necessary to examine the operational and structural frameworks that oversee the national revenue authority, close loopholes in the income tax frameworks, and establish openness in the national revenue remittance procedures. One of the recommendations made by the national tax collector Zimbabwe Revenue Authority (Zimra) in 2015 was the implementation of an electronic system.

According to the Third Schedule of the Income Tax Act, CAP 470, personal income taxes in Kenya are assessed on an individual's income on a progressive basis, with the lowest rate being 10% and the highest rate being 30%. According to the Income Tax Act, CAP470, PAYE tax returns must be filed by the ninth day of the month that follows

the Pay-roll month. Gideon and Alouis (2017) claim that understated tax requirements were the cause of high tax compliance costs connected with the income tax return system. Income tax returns received a low score for taxpayer convenience due to the difficult and time-consuming nature of filing the Return forms.

According to IMF (2016), barely 15% of people in developing nations acquire full income (as opposed to over 57% in wealthy nations), and less than 5% of people in these regions pay PAYE tax (as opposed to nearly 50% in rich nations). This is made worse by ineffective income tax collection systems, which are brought on by insufficient tax analysis abilities, tax evasion, outdated technology, and corruption among revenue collectors. It is important to keep in mind that income tax is highly sensitive to the state of the economy because business closures and layoffs reduce the economy's income taxable base (Gideon and Alouis, 2013).

According to Gitaru (2017), tax is an obligatory levy placed on income, expenses, or capital assets by the government or a body designated by the government (tax authority), for which the taxpayer is not compensated in any particular way. It is a contribution intended to reallocate income, eliminate market inadequacies, eliminate private expenditure in favor of public expenditure, and stabilize the economy in order to allow the government to deliver essential public goods and services (Simiyu, 2008).

In order to pay appropriate taxes SMEs must be knowledgeable about the different compliance measures and requirements. Taxation knowledge is a specific part of the general human potential of entrepreneurs, which increases the chances of business success (Newman, Mwandambira, Charity & Ongayi, 2018). The extent of non-compliance arising from knowledge deficits because of the complexity of reporting and returning requirements might be substantial. Tax-specific knowledge is necessary in

order to enable SMEs to comply, as well as to increase their willingness to do so. Most taxes paid by employed people are withheld from the outset or included in gross prices. In contrast, SMEs typically pay their taxes “out of their pocket.” In other words, while employed are passive recipients of information about the amount of taxes they pay, SMEs dispose of their gross income, which is mentally perceived as their own money, and actively determine taxes as representing a loss. Paying the tax share out of one’s own pocket represents a loss frame. While paying taxes typically constitutes a loss for SMEs, it constitutes a non-gain for taxpayers whose taxes are withheld at the source (Keraro, 2017). Research based on prospect theory has demonstrated that the perceived pain of a loss is greater than the perceived pain caused by an equally sized non-gain (Kamleitner, Korunka & Kirchler, 2012).

In contrast to the majority of employed people who in many countries are paid net salaries with taxes being deducted at source. Small businesses often need to self-assess and self-report their income and pay taxes “out of their pocket.” SMEs not only pay their income taxes but need to take account of various types of business taxes such as 19 corporate tax, property taxes, and payroll taxes; they need to collect sales taxes such as VAT; and they need to withhold taxes such as personal income taxes in the case of having at least one employee (Kanbur & Keen, 2014) argue that the various types of taxes and taxation requirements may significantly shape the perceived tax situation of SMEs. As tax system implementation is largely concerned with information processing, the bulk of costs of tax compliance are caused by information obligations, for instance, record keeping, filing in tax returns with data (Cui, 2017).

Perceived fairness of a tax system and authorities influence several perceptions directly and indirectly. It is a key to taxpayers’ acceptance of messages (for instance the likelihood of evasion detection) and support (for instance information on taxation,

framing) provided by tax authorities. To ensure fairness, several authors suggest a dialogic approach to address non-compliance (Taylor, 2019). An argument is made first to educate, inform, advise, and help taxpayers before threatening with the “big stick” and enforcing compliance via severe sanctions (von Werlhof & Morag, 2023).

Technological improvements and digitalization have influenced the tax collection processes worldwide by improving the speed, quality, and accuracy of the data and changing the ways of reporting, controlling, and auditing the taxes (Atayah & Alshater, 2021). Tax authorities, policymakers, regulators, accountants, and taxpayers have realized the opportunities of digitalization and started to get benefits from e-services, applications, websites, software. Digitalization may reduce tax fraud by enhancing information collection, improving the control tools, and increasing efficiency while giving new opportunities for evading the tax (Tsindeliani, et al., 2021). Hence the need to adopt the use of digitalization as a moderating variable.

1.1.1 Tax compliance

Tilahun (2019) asserts that the word "tax compliance" lacks a single, widely recognized definition. It may be characterized, for instance, as adhering to the nation's reporting standards, which include timely filing of all mandated tax returns and accurate reporting of the amount of tax due in compliance with the Internal Revenue Code, relevant laws, and court decisions at the time the return is submitted. As an alternative, tax gaps might be used to characterize tax compliance. The difference between an individual's actual income tax burden and the amount ultimately paid voluntarily or through enforcement action is known as the tax gap.

In general, obeying the law is considered compliance, whereas breaking it is considered noncompliance. From the aforementioned definitions, tax compliance can be succinctly

defined as the taxpayers' voluntary endeavor to pay their tax burden on time and their desire or willingness to behave in conformity with the tax law. Intentional or inadvertent, tax noncompliance refers to the inability to fulfill tax responsibilities. A genuine intention on the part of the taxpayer to purposefully mislead, deceive, or conceal in order to pay less tax than is actually owed is required for tax evasion. There are many various ways to be in violation of the law: understating your income or overstating your deductions, filing your tax return after the deadline, or not filing at all. Tax compliance is the extent to which taxpayers submit and pay their taxes in a timely manner, accurately, and in compliance with all applicable rules and regulations. Numerous factors, including the perception of an equitable and fair tax system, people's trust in tax authorities, the intricacy of tax laws, and the expectation that noncompliance will be detected and addressed, all have an impact on tax compliance (Kibet & Ondiek, 2021). The degree of income and education, the accessibility of public services, and the degree of corruption are additional variables that impact tax compliance in Kenya (Mutua, 2020). Addressing these determinants is crucial for improving tax compliance and increasing tax revenues for the Kenyan government.

On the other hand, a variety of factors, including the amount of the penalty, the perceived fairness of the tax system, the taxpayers' level of understanding, and the taxpayers' judgments of government spending, might influence tax compliance.

1.1.2 Income Tax

Dostie et al. (2018) state that employees' PAYE tax is assessed based on their total compensation. It is directly related to hiring a worker and taken out of the employer's money. Other statutory deductions like social payments to employment insurance, workplace health and safety, disability, and pension plan contributions are not the same as this tax deduction. The costs of social contributions are often split between the

employer and the employee and vary based on the employee's compensation; however, unlike PAYE tax, which is withdrawn straight from the employee's wage, social contributions can also be paid exclusively by the employer. In OECD nations, PAYE tax revenue accounts for about 25% of total revenue (Saez, Schoefer, and Seim 2017).

Pay As You Earn (PAYE) is applicable to job income, according to Aloo (2012). Employers are required to act as agents of the tax authorities under the PAYE system, deducting taxes from employment income and the amount of all benefits (apart from health benefits). When income is derived from an employment, taxes are paid in whole and no deductions are made for expenses. The same graduated scale tax rate applies to both PAYE tax and personal income tax, but the tax bases are different (Simiyu, 2003).

Section 5 of the Income Tax ACT, CAP 470 legislation of Kenya, establishes the Pay As You Earn (PAYE) tax. It is a tax that is deducted from each person's income from employment. This pertains to all forms of income, including commissions, bonuses, non-cash benefits, weekly wages, monthly salaries, annual salaries, and any other type of revenue (Income Tax Act, CAP 470). The Income Tax Act's Third Schedule states that employee income is subject to progressive taxation, with the lowest rate being 10% and the highest rate being 30%. Typically, the employer deducts the computed tax at source and subsequently sends the money to the relevant tax authorities.

The withheld sum is regarded as an advance payment of income tax that is owed. The PAYE tax may involve withholding the employee's portion of insurance premiums or other related social welfare taxes. Every month, on or before the ninth day, it is remitted. Almost every dollar earned through employment in this nation is subject to taxation. In addition to wages and salaries, PAYE is applied to sick pay, maternity pay, directors'

fees, pensions (but not the state pension), and other benefits. Every person has a tax code that is used to display any benefits and allowances they may receive.

Finance Act (2021), new tax rates for Kenyan PAYE came into effect from 1st January 2021 and the minimum taxable income is Ksh. 24,000 per month which is taxed at the least rate of 10% and the highest rate being 30% which is charged to those who earn Ksh.32322 and above per month.

1.1.3 Small and Medium Enterprises SMES in Kenya

Small sized enterprises largely operate in the informal sectors they are commonly referred to as “Jua kali’. The government of Kenya defines this a legally recognized company that employs five to one hundred fifty people, has an annual revenue of Ksh. 8 to Ksh. 10 million, and has at least Ksh. 4 million in assets (Kinyua, 2018). These small enterprises operate within SME as the blanket term. According to the 2016 Economy Survey Report, small businesses employed over 80% of Kenya's workforce and produced 70% of the country's GDP.

Over 16 million Kenyans are employed by microbusinesses and small traders, making the SMEs sector the country's largest employer, according to Muteti (2018), CEO of the Kenya National Federation of Jua Kali Association. According to representatives of the micro economy, the majority of small traders' reluctance to pay taxes stemmed from their sense of being abandoned and disregarded by the government. Ndemo (2015) states that the majority of small businesses operate without permits from local and federal governments and do not register for taxes. Therefore, for the majority of SMEs, VAT is a major issue.

The Kenya National Bureau of Statistics (KNBS) (2016) states that small and medium-sized enterprises (SMEs) contribute more than 95% of economic development in the

majority of countries. Small and medium-sized businesses (SMEs) are vital to Kenya's economy because they create jobs, increase GDP, earn income from exports, support industrial development, and satisfy demand for local services. Compared to large enterprises, SMEs can obtain client feedback and expertise more quickly since they are closer to their customers.

1.2 Statement of the Problem

The Kenyan government establishes annual targets for the amount of taxes it intends to collect in order to settle its debt. It should be noted, too, that the Kenya Revenue Authority frequently falls short of these goals. This makes looking for measures to enhance revenue collection necessary. The Reasons of Tax Avoidance and Evasion: Reflections from Pakistan study by Mughal and Akram (2012) states that taxpayers' ignorance of tax computations is the cause of tax evasion. Taxpayer education can, in fact, contribute to higher tax morale and ultimately higher tax compliance. Awan and Hannan (2014) also mentioned that in order to improve tax compliance, the governments and tax authorities of Peru and Rwanda began educating and training citizens.

The Kenya Revenue Authority (KRA) has not met the treasury's targets for revenue compliance in spite of several restructuring efforts made in recent years to improve revenue compliance. For example, the PAYE tax revenues for the financial year 2022–2023 were Ksh. 441.60 billion, or 96% of the objective of Ksh. 459.26 billion, meaning that the target was missed by 17.66 billion (KRA, 2023). PAYE tax receipts in 2021–2022 were Ksh. 407.83 billion, similar to the previous financial year, but Ksh. 7.69 billion, or 98% of the total, fell short of the target (KRA, 2022).

Because of this, the government is unable to sufficiently meet the requirements of its people, which include social security, roads, water, healthcare, education, and security. This has sparked worry as the government works to meet its goals, which is why this study is necessary. The study will concentrate on variables that affect Pay As You Earn (PAYE) tax compliance, including but not limited to taxpayer perception, tax knowledge, and compliance costs. Prior research has shown that these variables are important PAYE determinants that impact tax compliance. There is little research that has considered moderating effect of digitalization on factors influencing Pay as you Earn tax compliance.

The "Survey on the Individual Taxpayer at Jabodetabek & Bandung," a study carried out in 2015 by Kamil, looked at the effects of tax payer knowledge, awareness, tax penalties, and tax authority services on tax compliance in Indonesia. Taxpayer awareness has a good and considerable impact on individual taxpayer compliance, the study found. Taxpayer compliance is negatively and significantly correlated with knowledge. The variables' perception, cost of compliance, and tax expertise are introduced by the present. Pay as you earn (PAYE) tax compliance is another of its main topics.

A review of the studies carried out in Kenya indicates that factors influencing Pay As you Earn tax compliance have not been exhaustively documented. For instance, Ngeno (2018) conducted a study on factors affecting tax compliance in Small and Medium Enterprises in Mombasa Central Business District and established that Compliance cost, taxpayers' Psychological factors- moral values, taxpayers' perception to fairness and equity in taxation affects tax compliance but adopted a descriptive research design. Thuku (2020) investigated the determinants of consumption tax compliance among micro and small enterprises in Ruiru Town and taxpayer education was found to play a

significant role in the consumption tax compliance. Obong'o (2022) assessed the perceived effect of Taxpayer Education on Income Tax Performance among Micro Enterprises in Nairobi County, Kenya and the findings revealed that taxpayer sensitization, print media education, and electronic media education correlate with income tax performance but used systematic sampling technique. Munga, Olweny and Yegon (2021) investigate the effect psychological factors and tax knowledge has on tax compliance particularly among Micro and Small enterprise owners in Nairobi County, Kenya and found that psychological factors tax knowledge had a positive and significant effect on tax compliance of micro and small enterprise owners in Nairobi County, Kenya. Therefore, by concentrating on the psycho-economic aspects, the digitalization of tax systems, and the Pay As You Earn tax compliance among small and medium-sized businesses in Thika town, this study aimed to close the knowledge gap.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to determine the role of Digitalization of tax systems in the relationship between psycho economic factors and Pay as You Earn tax compliance among small and medium enterprises in Thika town. Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives:

1. To establish the effect of tax knowledge on Pay as You Earn tax compliance among small and medium enterprises in Thika town.
2. To determine the effect of compliance cost on Pay as You Earn tax compliance among small and medium enterprises in Thika town.

3. To establish the effect of taxpayer's perception on Pay as You Earn tax compliance among small and medium enterprises in Thika town.
4. To determine the moderating effect of digitalization of tax systems on relationship between psycho economic factors and Pay as You Earn tax among small and medium enterprises in Thika town. Kenya.

1.4 Research Hypotheses

Based on the objectives of the study the following null hypotheses was tested:

H_{01}: Tax knowledge has no significant effect on PAYE tax compliance among small and medium enterprises in Thika town.

H_{02}: Tax compliance cost has no significant effect on PAYE tax compliance among small and medium enterprises in Thika town.

H_{03}: Taxpayer perception has no significant effect PAYE tax compliance among small and medium enterprises in Thika town.

H_{04}: There is no significant moderating effect of digitalization on the relationship between psycho economic factors and Pay as You Earn tax among small and medium enterprises in Thika town. Kenya.

H_{04a}: There is no significant moderating effect of digitalization on the relationship between Tax knowledge and Pay As You Earn tax compliance among small and medium enterprises in Thika town.

H_{04b}: There is no significant moderating effect of digitalization on the relationship between: Compliance cost and Pay As You Earn tax compliance among small and medium enterprises in Thika town.

H_{04c}: There is no significant moderating effect of digitalization on the relationship between: Taxpayer's perception and Pay As You Earn tax compliance among small and medium enterprises in Thika town

1.5 The Significance of the Study

The findings benefited the different stakeholders such as the management of Kenya Revenue Authority, policy makers and Theory.

The pertinent authorities would be able to develop policies for increased revenue collection and compliance thanks to the assistance of this study. In terms of creating appropriate tax policies, it greatly profited from enhanced tax changes. The study findings would therefore help the management of tax authorities to come up with policies that will result in increased knowledge of PAYE tax and perception as well as the reduction in compliance costs.

Additionally, management, particularly those at the Kenya Revenue Authority, considered this study to be pertinent and helpful in making decisions about the applicability of Pay As You Earn tax compliance. The study will assist managers in strengthening and improving their tax administration and management. The management will be able to create strategies to educate the SMEs on PAYE tax and increasing their perception through awareness campaigns.

In the end, our study will contribute to the corpus of information that will be accessible for upcoming research projects. Scholars, researchers, and students considered this study to be a helpful resource for future talks and investigations. As a result, it served as a foundation for more study on pay as you earn tax compliance from interested parties. The study findings will be useful in adding to the existing theories. The study findings revealed a support for the theories that show the relationship between psycho

economic factors and Pay as You Earn tax compliance and the moderating effect of digitization on the relationship between psycho economic factors and Pay as You Earn tax compliance.

1.6 Scope of the Study

The study concentrated on Pay As You Earn tax compliance among small and medium-sized businesses in Thika town. Thika town was selected based on the high population of SMEs and due to reported low PAYE compliance as shown by low revenue collected from the PAYE tax. The study variables were digitalization of tax systems as the moderating variable, and psycho-economic aspects including taxpayers' knowledge, compliance costs and taxpayers' perception as independent variables. The study took to a period of two months. The target population was 1223 licensed SMEs who are the business owners in Thika town and sampled 301 SMEs. The study focused on tax compliance reports during the financial year 2022/2023.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the theoretical and empirical research on Pay As You Earn compliance among small and medium-sized businesses, digitalization of tax systems, and psycho-economic aspects. It discusses the work of earlier writers and the approaches they employed. Additionally, there is the conceptual framework, which explains one variable influence which. There is also a critique and a list of research gaps.

2.2 Conceptual Review

This section contains review of concepts of the variables used in the study.

2.2.1 PAYE Tax compliance

PAYE is a system of tax collection whereby employers are required to deduct tax from the employment income of their employees and remit the tax to the Kenya Revenue Authority. PAYE tax compliance is an area of concern for all governments and tax authorities worldwide, and it continues to be an important issue that must be addressed. Regardless of time and place, the main concern faced by all tax authorities is that it has never been easy to persuade all taxpayers to comply with the regulations of a PAYE tax system. Voluntary PAYE tax compliance is a person's act of completing the Income tax form, declaring all taxable income accurately and disbursing all payable taxes within the stipulated period without having to wait for follow up action from the tax authorities (Singh 2003).

In contrast to the majority of employed people, who in many countries are paid salaries with PAYE taxes having been deducted at source, informal sector investors often need

to self-assess and self-report their income and pay taxes "out of their pocket." They not only pay their PAYE tax but need to take account of various types of business taxes such as corporate tax, property taxes and payroll taxes. They also need to collect other taxes such as VAT and withhold taxes such as personal income taxes in cases where they have at least one employee (Christensen et al., 2001). When the level of PAYE tax compliance is low, the government's revenue collection always falls behind targets. During the 2011/2012 financial year, KRA reported a tax shortfall of Ksh12.7 Billion therefore leading to a tax deficit.

Torgler (2017) found that trust in government and tax authorities was a critical determinant of tax compliance. Kirchler et al. (2008) also highlighted the importance of trust, along with enforcement and penalties, as key factors influencing taxpayer behavior. Additional research, such that conducted by Feld and Frey (2017), has shown how the tax system's complexity influences compliance behavior. According to Alm and Torgler (2006), tax literacy has also been found to be a significant factor in determining PAYE tax compliance, with taxpayers who are more knowledgeable about the tax system being more likely to fulfill their duties.

A study by Ombati and Mose (2020) found that perceived fairness and trust in government were positively associated with PAYE tax compliance. Another study by Kamau and Muturi (2021) highlighted the importance of tax literacy and ease of compliance in promoting PAYE tax compliance. Furthermore, Feld and Frey (2017) have emphasized how taxpayer compliance behavior is shaped by the intricacy of the tax system. When creating and putting into practice tax policies and methods to improve PAYE tax compliance, legislators and tax authorities must take these factors into account.

2.2.2 Tax Knowledge

Being aware of tax laws and regulations is a big assistance since it allows firms to comply with them. Knowing the tax obligations specific to their industry (manufacturing and servicing) may have an impact on their company plans. The World Trade Organization Report (2019) found that the largest obstacle to business operations is low tax awareness and knowledge, based on a survey of 147 economies. Additionally, Aruna's (2019) study revealed that inefficient tax knowledge resulted in complexity and disorganized administrative expenses for firms Barbone (2018).

According to a study by Konstantin (2020), businesses with low tax awareness frequently become victims of bankrupt traders, which can result in fraudulent refund schemes Wilks and Cruz (2019). According to Loo and Evans (2019), companies in Malaysia and Australia with limited tax expertise experienced significant financial losses as a result of tax penalties incurred from noncompliance with tax laws. Hence, governments and policymakers desire that businesses understand the tax system and all of its rules and regulations. Timely tax compliance, income collection, improved corporate efficiency, and a decrease in tax frauds would all result from it.

Put simply, tax knowledge is the taxpayer's understanding of the laws, regulations, and standards pertaining to the tax system (Ayuba, Saad, & Arifin, 2016). Pratama (2018) defines tax knowledge as the level of comprehension that taxpayers need to have in order to comply with their tax obligations. This understanding includes basic tax concepts such as financial knowledge and tax legislation. Declarative knowledge (knowing that) and procedural knowledge (knowing how) are the two categories into which Gore & Wong (1998) separated tax knowledge. Previous studies by Fallan (1999), Omagor & Mubiru (2008), Manual & Xin (2016), Newman, Charity, & Ongayi

(2018) found that tax compliance and tax knowledge are related, with higher tax knowledge levels potentially leading to higher levels of tax compliance.

2.2.3 Tax Compliance Cost

Alm et al. (2018) have highlighted the importance of considering tax compliance costs in tax policy design. They argue that high compliance costs can discourage taxpayers from complying with tax obligations and may lead to reduced revenue collection. Therefore, reducing compliance costs should be an important consideration in tax policy design.

A study by Kirui and Kibet (2019) found that high compliance costs, such as the cost of obtaining tax clearance certificates, can discourage taxpayers from complying with PAYE tax obligations. Similarly, Ndung'u et al. (2018) argue that high compliance costs could be the cause of Kenya's low tax compliance rates among small and medium-sized enterprises. Tax compliance expenses may have a big influence on PAYE tax compliance. Therefore, in order to enhance PAYE tax compliance, authorities should think about measures to lower compliance costs and streamline tax compliance processes.

2.2.4 Tax Payer Perception

According to Alm (2016), taxpayer perception is a critical factor in shaping tax compliance behavior. Similarly, Torgler (2002) contends that taxpayers' desire to abide by tax regulations is influenced by their opinions about the administration and fairness of the tax system. According to a study by Kinyanjui (2015), taxpayer compliance behavior was highly affected by their opinions of the fairness and efficiency of the tax administration. Namusonge et al. (2019) investigated the variables influencing PAYE tax compliance among Kenyan small and medium-sized businesses in a different study.

The study discovered that two important predictors of PAYE tax compliance were taxpayer impression of the tax system and degree of trust in tax officers.

Additionally, Oluoch and Kabinga (2018) studied how taxpayers' perceptions and knowledge of tax regulations affected PAYE tax compliance in Kenya. Taxpayers' compliance behavior is greatly influenced by their opinions of how fair the tax system is and how well the tax administration is working, especially when it comes to PAYE tax compliance.

2.2.5 Digitalization

The governments realized the opportunities of digitalization and started to use information technologies and e-services to enhance efficiency and improve government services such as tax collection and auditing. Through software or integrated websites, the e-services of the public authorities provide reliable and quick processes, helping both accountants and customers access accounting information swiftly. With the advent of online e-government services being more widely used, online taxation services are now being utilized by integrating internet-based technologies. Following this, tax returns have begun being approved through online services. The governments may collect taxes swiftly, minimize tax evasion, and reduce the burden on the tax offices (Kuzey, Dinc, Gungormus & Incirkus, 2019).

Brenner and Hartl (2021) discussed the definition of digitalization as a complex phenomenon. They mentioned a distinction between digitization, digitalization, and digital transformation, even though they are interrelated. While digitization is simply converting information into a digital format, digitalization ‘describes how the use of information and communications technology alters an organization’s business model, including creating new or improved ways of delivering services, communicating, and

improving the quality of offerings'. Digital transformation is a more general term for using digital technologies to create entirely new business models. In this study, we use the term digitalization to explain the adoption of digital technologies such as the internet, mobile phones, and all other tools used by the economy.

There are different approaches to measuring the degree of digitalization in the literature. Kotarba (2017) used five metrics to measure digitalization activities: Metrics for the digital economy, digital society, digital industry, digital enterprise, and digital clients. Digital Density Index (DDI), which was produced by Oxford Economics in partnership with Accenture Strategy, and Digital Economy and Society Index (DESI), a composite index published annually by the European Commission, can be used to measure the digital economy. Bernhard et al. (2018) constructed an index of four different indices: e-strategy, e-services, e-information/transparency, and e-interaction, to measure the degree of digitalization by using the national surveys.

2.3 Theoretical Review

The three theories served as the study's guidelines. According to Kamil (2015), the Attribution theory is the first theory that underpins the investigation. The Allingham and Sandmo Theory (AS Theory), as articulated by Sandmo (Sandmo, 1972), serves as the other theoretical framework for this investigation. Originally, Knut Wicksell (1896) and Erik Lindahl (1919) created the benefit idea. David introduced the concept of Technology Acceptance Theory (TAT) in 1986. In order to understand and predict technological behavior, this theory is crucial (Chem Shing-itan and Chien-Yi 2011).

2.3.1 The Attribution Theory

This theory was developed by Heider (1957), and it states that attribution is the process by which individuals ascertain what motivates the actions of others. The hypothesis

states that the individual is perceived as a self-taught psychologist who attempts to explain why specific events occurred in the face (Kamil, 2015). The goal of attribution theory is to determine what causes what or what drives someone to do action. Our reaction to an occurrence is contingent upon how we understand it (Kelley, 1967).

Robbins (2018) asserts that when people watch someone behave, they attempt to ascertain whether the conduct was brought on by internal or external factors. Internal behavior is thought to be within an individual's personal control, whereas external behavior is thought to be caused by external influences, meaning that people must act in accordance with external demands or environmental cues (Agus, 2016).

The study of attribution theory focuses on how and why individuals come to conclusions about the causes of occurrences or observations (Winkler, 2010). The foundation of this theory is the notion that human knowledge, sense-making, and conduct all stem from perception. According to the theory, people create justifications for other people's actions depending on how they view the conduct and the circumstances around it. The aforementioned explanation is predicated on the way the observer interprets the reason behind the actor's actions. Kelly et al. (2016) provide a thorough analysis of attribution theory in the context of IS, with a focus on post-adoptive behavior.

People's initial assessment of a behavior when they witness it, regardless of whether the actor or something external to them caused it. An onlooker is more likely to pass such judgment if the action has an impact on their personal well-being. Individuals typically credit talent, effort, task complexity, and luck for performance outcomes (Graham, 1991).

Per Kamil (2015), the perspective of the taxpayer when evaluating the tax itself is linked to the taxpayer's willingness to pay taxes. A person's perception and judgment are impacted by both external and internal variables. Because it supports the independent variable of tax knowledge—that is, the idea that tax knowledge encourages taxpayers to file taxes—this theory is relevant to the research.

According to Heider (1958), attribution theory offers the foundation required to comprehend how people assign causes to events that occurred in their surroundings. The need for this attribution theory special issue was prompted by a number of causes. Firstly, it is evident from recent journal publications that attribution theory has not yet reached its full potential in the organizational sciences. Specifically, attributional perspectives of human behavior occupy a significant amount of journal space in social psychology, but attributional topics receive a disproportionately small amount of space in journals of organizational behavior, as noted by Martinko, Harvey, and Dasborough (2018). In that paper, they point out that by downplaying the usefulness of the construct, many researchers have misunderstood debates of attribution theory.

The amount of variance in organizational outcomes explained by attributional constructs is comparable to other more widely accepted constructs, like organizational justice and organizational citizenship behaviors, according to a meta-analysis conducted by Harvey, Madison, Martinko, Crook, and Crook (2019) in response to criticisms of the explanatory power of attribution theory (Lord & Smith, 1983; Mitchell, 1982). Even while recent research has shown that attribution theory can fill in many of the gaps in our understanding of organizational behavior, this promise has not gone ignored.

Even though attributional processes haven't gotten much attention, certain recent contributions have been encouraging because they emphasize how important attributional processes are. Among these advancements is a recent study by Chan and McAllister (2018) that was published in the Academy of Management Review and attributes the way subordinates perceive abusive supervision to attribution theory. Furthermore, the notion of relational attributions was clarified by Terry Mitchell and his colleagues' work published in the Academy of Management Review (Eberly, Holley, Johnson, & Mitchell, 2018). Last but not least, a 2017 Journal of Organizational Behavior study by Burton, Taylor, and Barber experimentally assessed the notions of internal, external, and relational attributions in subordinate/supervisory relations.

This theory was used in the study to support the variables tax knowledge and taxpayers perception. This is because the theory explains how people behave based on the perception and information they possess about a particular thing. A taxpayer will therefore pay PAYE tax based on the knowledge they have about the tax and also their perception about the same.

2.3.2 The Allingham and Sandmo Theory (AS Theory)

This notion was first put forth by Allingham and Sandmo. According to the AS hypothesis, tax evasion is deterred by the government through audits and punitive measures (Sandmo, 1972). Hokamp et al. (2018) use five criteria to analyze the two popular neoclassical anticipated utility models for tax evasion and non-compliance. The Becker (1968, 1993) economics-of-crime approach was used by Allingham and Sandmo (1972) as well as Srinivasan (1973). This covered tax payer's optimal choice comparative statistics, mathematical modeling, (iv) framework extensions, and model critique, which included Yitzhaki's (1974) well-known critique on ambiguous income and substitution effects. By using computational agent-based modeling, Hokamp and

Cuervo Diaz (2018) demonstrate that in an Allingham-Sandmo context, the tax rate has a positive impact on the total amount of tax evasion, whereas the fine rate has a negative impact. Alm et al. (2020) shed light on the audit rate's aspirational consequences.

Payment and/or utility functions, which have their roots in the Allingham-Sandmo approach, are used in tax experiments, theoretical approaches to tax evasion and non-compliance, and computerized numerical agent-based tax compliance modeling (sometimes in conjunction with public goods provision) (see Zelmer, 2003; Hokamp, 2013; Hokamp et al., 2018; Robbins and Kiser, 2018, and Alm and Malezieux, 2021, for meta-analyses and literature reviews)

Rizzi (2017) does not go into great detail about utility functions when presenting indices and profiles for tax evasion. Therefore, the primary unanswered concerns for this work are (i) what qualities utility functions should have in order to be consistent with the Allingham-Sandmo strategy for non-compliance and tax evasion, and (ii) how to construct such Allingham-Sandmo Functions (ASFs). Keep in mind that, in accordance with Becker's economics-of-crime theory (1968, 1993), such unique utility functions can therefore be employed for experiments, theoretical inquiries, and/or numerical simulations of any form of criminal actions.

When a taxpayer feels the cost of avoiding taxes is too low and decides they won't be caught or subject to an audit, they will choose to break the law and avoid paying their taxes (Lokanan, 2023). When a taxpayer believes that paying taxes would be too costly, they may also choose to avoid paying them. Tax evasion is often encouraged by complex and onerous tax systems and procedures. Tax evaders are those who believe that the tax rate is harsh and excessive. The likelihood of being caught, the severity of the penalty, and the high transaction costs related to tax regulations are all negatively

correlated with tax evasion. Allingham and Sandmo (1972) invented the Pay As You Earn evasion strategy, in which a morally and rationally responsible taxpayer maximizes predicted benefit, which is contingent only on income. Penalties are levied on the agent based on the amount of income they have avoided paying. One important comparative static finding is that competing income and substitution factors may cause tax compliance to increase or decrease depending on the tax rate. Because the marginal advantage of cheating increases with the tax rate, the substitution effect promotes tax evasion. Conversely, a higher tax rate makes a taxpayer with decreasing absolute risk aversion feel worse off, which discourages them from taking on more risk. For this reason, the income effect tends to inhibit evasion. As a result, the overall result is unclear.

Yitzhaki's (2002) findings, which sparked many noteworthy expansions, is arguably the most significant finding in the early literature on tax evasion. Because they have trouble adhering to tax legislation, SMEs are vulnerable to tax evasion. They must maintain accurate books of accounts and adhere to stringent deadlines. However, Shlomo Yitzhaki (2018) demonstrated that the replacement effect disappears when the penalty is based on the amount of taxes evaded, as it is under the majority of existing tax laws. There is no substitution effect at the first optimum since the penalty paid on disguised income rises in proportion to the tax rate.

This theory was relevant n this study as it was used to explain the variable compliance cost and how it relates with PAYE compliance. The taxpayer is deterred from complying with PAYE tax due to cost of compliance which is as a result of government failure to reduce the cost.

2.3.3 Benefit theory

The benefit theory was first proposed by Knut Wicksell (1896) and Erik Lindahl (1919). It states that an agent's taxes should be based on the benefits he receives from the combination of goods and services provided by the state. This helps determine what government will do and who will pay for it. The more benefits an individual receives from state activities, the more they should pay the government. If this principle were put into practice, public sector resource allocation would directly respond to the preferences of consumers.

Knut W. and Erik L. (1919) created the benefit theory, which holds that the state should tax citizens according to the benefits they receive. The more benefits a person obtains from state-sponsored activities, the more they should be required to pay the government. Neumark & McLure (2021) assert that taxes have a similar purpose to a private transaction process in that they aid in deciding what government operations will be carried out and by whom. The public sector's resource allocation would directly reflect consumer preferences if this theory were put into practice; but, as most residents are generally unwilling to pay for public utilities, it is challenging to execute most public services.

Wasao (2014) adds that if this principle is followed to the letter, the poor will end up paying the most taxes based on the benefits they receive, meaning small taxpayers may have to pay more taxes than medium and large taxpayers. There is no quid pro quo in the process; the total amount of money accumulated by the state cannot be adequately equated to the benefits derived by an individual taxpayer. These are the claims put out by opponents of benefit theory, who argue that there is no need for the state to keep a distinction between benefits received and benefits granted.

The idea is pertinent to the study because it argues that micro companies shouldn't be led to believe that they should only pay taxes as their company expands and maybe receive government advantages because there is no return on investment associated with taxation. However, taxpayers are the only ones who can acquire this information if they are well-informed and realize that paying taxes is a requirement regardless of whether an individual benefits directly from it. Therefore, the theory is relevant to Pay As You Earn compliance since higher Pay As You Earn compliance results from taxpayers performing better when perks are not required in order to pay taxes. Since informed taxpayers are more likely to comprehend that paying taxes is a must and is not correlated with the advantages received from the government (Blum & Kalven, 1952). The free-rider issue has been used to refute this notion. There will inevitably be a rise in tax compliance when people only pay what the state gives them because they see the benefits.

This was the main theory of the study. This is because it explains why taxpayers pay tax and this is influenced by the benefit they derive from it. For SMEs in Thika to comply with PAYE, they must find benefit from the government as a result of the tax they pay.

2.2.4 Technology Acceptance Theory

David proposed TAT for the first time in 1986. In order to understand and predict technological behavior, this theory is crucial (Chem Shing-itan and Chien-Yi 2011). This approach can be used to accept and reject technology. According to the concept, a customer's decision regarding the time and method of use is influenced by several factors after they are presented with alternative ideas. This makes up its ostensibly perceived convenience and helpfulness. This resulted from social clinicians' planned

hypothesis activity. According to Davis' research, perceived helpfulness and convenience are the two main components (Davis, Foxall & Pallister, 2002).

Because TAM can forecast how people will utilize technology, it has been widely embraced (Fishbein & Ajzen, 2010). According to Davis (1989), adoption intentions and perceived utility are influenced by perceived simplicity of use. Despite being a clever tool for studying technology adoption and use, TAM has been associated with haddocks because, among other things, it ignored the factors that moderate ICT adoption and failed to take the organization's setting, generality, and parsimony into account when designing the model (Sun & Zhang, 2006).

This notion has an impact on research on how well technology is accepted. Using Time and Attendance Management (TAM), this study will investigate how people have been gradually adopting mobile banking to save time, save expenses, and improve corporate performance. TAM will be used in this survey to find out how technology use influences Kenya Revenue Authority digitalization and how it improves voluntary tax compliance in Kenya.

This theory was used in the study to anchor the variable digitalization as a moderating variable.

2.4 Empirical Literature

This section contains empirical review showing the relationship between the independent variable and dependent variable.

2.4.1 Tax Knowledge and PAYE Tax compliance

Proficiency in taxes necessitates a deep comprehension of the laws and guidelines that regulate the tax system. General, procedural, and legal tax knowledge have been defined as the three main components of tax knowledge (Bornman, 2019).

Understanding tax compliance procedures is considered procedural knowledge; rules and regulations comprise legal knowledge; and general tax knowledge is comprised of Sustainability 2022, 14, 10217. 3 of 18 edge compromises financial awareness. People respect taxation regulations because they are generally aware of taxes, which suggests that they are willing to comply with tax laws. Failure to do so may result in hazardous circumstances for businesses (Theory of Reasoned Action).

According to Fauziati (2020), tax expertise is consequently thought to be one of the key elements affecting a firm's performance. Tax non-compliance can lead to substantial fines and penalties that negatively impact the company's earnings and reputation, regardless of whether it is deliberate or the product of ignorance about taxes Rahmayanti (2020). Procedural tax knowledge, according to Libby (2017), is the capacity and means of maintaining accurate tax records. It helps taxpayers maintain the required tax documentation and meet their deadlines. Tax education is essential for reducing fear-based reactions to tax changes and the tax system, and it is directly related to bettering company tax compliance. Businesses find it difficult to thrive in the complex corporate tax environment and adapt to future developments when they lack sufficient tax knowledge. Minovia and Fauziati (2020).

According to Sulistiani & Jayanto (2016), tax understanding refers to the knowledge or comprehension that a taxpayer has regarding taxes. According to Satria (2017), a taxpayer's opinion of their level of tax knowledge is known as their tax comprehension. The degree of knowledge and proficiency that taxpayers possess regarding the enactment and implementation restrictions of the tax law, in terms of both substance and administration, is known as tax understanding. Prior studies by Adiasa (2013), Agustiningsih & Isroah (2016) found a connection between tax compliance and tax

understanding. Therefore, greater tax comprehension may result in increased compliance.

A survey on individual taxpayers at Jabodetabek & Bandung was carried out by Kamil in 2015 to investigate the effects of tax fines, taxpayer awareness, knowledge, and tax authority services on tax compliance. The study found that taxpayer awareness has a favorable and significant influence on individual taxpayer compliance. Knowledge has a negative and strong correlation with taxpayer compliance. Machogu and Amayi (2013) carried out a study on the effect of tax awareness on voluntary compliance among SMEs in Mwanza City, Tanzania. The study employed a descriptive research design. Both primary and secondary data were used. The findings indicated that a person's level of tax comprehension affects their ability to comply with the law.

Olowookere and Fasina (2018) carried out a study in Lagos State, Nigeria, titled Taxpayer's Education: A Key Strategy in Achieving Voluntary Compliance. Survey research methods was applied in this study. It was found that tax knowledge is a necessary element of any successful tax administration. It improves the level of tax literacy among taxpayers. Machogu and Amayi (2017) carried out a study on the effect of tax knowledge on voluntary tax compliance among SMEs in Mwanza City, Tanzania. The study concludes that a person's level of tax comprehension eventually affects their ability to comply with tax laws. The focus of the current inquiry will be income tax compliance (PAYE). Ndirangu (2014) studied the effect of tax knowledge on the value added tax compliance of motor vehicle part sellers in Nairobi Central Business District. The results of the study show that tax knowledge and education have a major impact on tax compliance; PAYE tax compliance will be the dependent variable in this study.

2.4.2 Tax Compliance Cost and PAYE Tax compliance

Huerta et al. (2017) observed that small business owners, whether or not they have experience in accounting, typically oversee the whole implementation of accounting and processes. According to Blackburn et al. (2018), trust concerns prevented a large number of small and medium-sized businesses from utilizing professional accounting services, including tax services. SMEs lack expert second opinions when it comes to tax regulation as a result. This frequently resulted in higher compliance costs. However, Faridy et al. (2014) pointed out that due to the complexity of the tax code, some businesses—especially the more affluent ones—may hire knowledgeable tax specialists to assist them in sophisticated tax planning in an effort to reduce their tax obligations.

When designing reforms to lower compliance risks and costs for small enterprises, a tax compliance cost study might yield important information. This note highlights the key findings from tax compliance cost surveys that evaluated the costs to firms in Peru, South Africa, the Republic of Yemen, and Ukraine. These surveys assisted in improving the design of reforms aimed at reducing corporate expenses and enhancing their competitiveness (Coolidge, 2017).

Exorbitant compliance costs can lead to tax evasion and fraud, as well as stifle investment by making the nation less attractive to investors in terms of taxation (Ojeka, 2018). The overall cost of a tax system is not solely determined by the quantity of taxes paid. It also includes the cost of tax preparation and filing fees. Economists refer to these charges as "tax compliance" costs. The IRS estimates that each year, Americans spend 6.6 billion hours filing taxes, with 1.6 billion of those hours devoted to the 1040 form alone. The complexity of tax laws, the number of governmental levels involved in tax levying and collection, the number of taxes an entrepreneur is subject to, and the frequency of filing tax returns are all factors that tend to increase compliance costs,

according to an OECD (2016) study on tax compliance and simplifications. Taxes impose costs and problems unrelated to SMEs, and they may become more complex when there are several tiers of government engaged, as in Kenya's devolved government system. SMEs avoid paying taxes because they feel that it will negatively affect their firm.

In order to investigate the impact of tax compliance expenses on the tax compliance practices of medium- and large-sized company taxpayers in Africa, Abdul and Wang'ombe (2018) conducted research. The findings show that tax compliance in Kenya dramatically decreases as tax compliance costs rise, especially those associated with comprehending the intricate tax laws that are already in place, modifications to tax regulations, and overall expenses associated with complying with regulatory obligations. Approximately 40% of the differences in Kenyan tax compliance behavior can be explained by the model constructs, which is more than the empirically recommended threshold for preliminary research. The actual costs that taxpayers bear in order to pay taxes exceed the net amounts that the government receives. If the work is limited to compliance, taxpayers who are individuals or firms will have to pay a significant amount more before they can access the same level of government services as beneficiaries. Before paying their taxes due, individuals and businesses have to spend time gathering documentation, filing paperwork, and navigating the tax code to ascertain their tax liability. They also have to pay for services and products like tax software or an accountant to help them ascertain their tax liability—expenses associated with tax compliance. Lastly, the administrative expenses of maintaining the tax authority are borne by the taxpayers. Teams of accountants, attorneys, and tax experts are employed by companies of all sizes to monitor, assess, and file taxes. According to Laffer et al. (2017), this tax infrastructure is also utilized to maximize tax obligation.

The high costs associated with tax compliance have an impact on revenue collection as well as wasted money on professional tax services, lost economic growth, and other expenses. These funds would have been better used by firms on projects that boosted output and capacity, and by individuals on investments, work, and savings. Various researchers have presented their results about the reasons for SMEs' low levels of compliance with their tax duties in various regions of the world (Fichtner & Feldman, 2015).

Nevertheless, no information is available regarding the factors that contribute to low or nonexistent tax and rate compliance in Kenya's Bungoma County and town. Scholars focused on two aspects after examining relevant research works: age group and marital status, tax rate, income level and tax information, and compliance costs and education (Mwangi, 2014; Ching, 2013; Tusubira, 2013; Atawodi, 2018). Omeri et al. (2010) looked into the connection between taxpayer attitudes and compliance behavior among SMEs company income earners in Kerugoya Town, Kirinyaga District. There hasn't been any other research done to determine how taxpayers' opinions affect local authorities' tax compliance behavior, according to Simiyu (2003), who examined the elements influencing taxpayers' voluntary compliance among them. Also Silvani & Baube, 1992 regarding the comprehension of tax laws and the tax system by taxpayers. The aforementioned studies were rather helpful in addressing certain aspects of tax compliance; nevertheless, they did not address managerial abilities, bureaucracy, the mindset of taxpayers, or expenses. The studies that are currently available were also conducted in several cities (Mwangi, 2014; Atawodi, 2012; Ching, 2013; Agbadi, 2017), where the factors pertaining to population, geography, economic endowment, administrative effectiveness, and entrepreneurship interest are different from those in Bungoma county. In addition to this, the study will close the gap by analyzing the

factors that influence small and medium-sized businesses in Bungoma County to comply with tax laws.

2.4.3 Taxpayer Perception and PAYE Tax compliance

Taxpayer impression and tax compliance are highly correlated in Kenya. For the simple reason that everything that shapes the attitudes of taxpayers also influences their compliance with tax duties, taxpayer perspectives have a beneficial impact on tax compliance. A study conducted in Kenya produced the following conclusions (Wanjohi, 2018): First, most taxpayers think that the tax system in Kenya is unfair. This was because most respondents disagreed, saying they are paying their fair share of taxes and that tax procedures are complicated, especially those relating to filing and payment dates. Second, a few causes of non-compliance with tax laws were found. These included not understanding tax regulations, including tax rates and filing and payment deadlines; thinking they are not paying their fair share of taxes; acting rudely toward colleagues; and failing to provide incentives to taxpayers.

The perception problem stems from studies that focus on tax justice, inappropriate government revenue utilization, and deliberate tax evasion for the benefit of the public good rather than the interests of the individual. An individual's attitudes reveal their positive and negative perceptions of objects. People's attitudes are thought to influence their behavior. It follows that a taxpayer with a positive attitude on tax evasion is expected to be less compliant than one with a negative attitude. It is often found that opinions on tax evasion are very positive (Kirchler, 2011). Numerous studies on the subject found strong, albeit tenuous, correlations between opinions and self-reported tax evasion (Trivedi, 2005). Weigel developed the Hessing model of tax evasion behavior, which considers social and psychological elements, such as moral beliefs and opinions about the validity of tax evasion, as predictors of tax compliance. Data

gathered from honest taxpayers and punished tax evaders revealed that while attitudes play a little role in explaining self-reported tax evasion, they are not very good indicators of real activity.

Nonetheless, there is a strong but somewhat modest link between attitudes and self-reported tax noncompliance. Although the relationship between views and tax evasion is quite subtle, we may reliably anticipate that tax evasion will increase as tax attitudes deteriorate (Lewis, 2015). Both the power and the trust dimensions depend on the attitudes. Positive attitudes will, on the one hand, increase confidence in the authority and, as a result, promote voluntary tax compliance. However, whether or whether the exercise of power is perceived as benign or malevolent will depend on one's attitude toward the authorities. Taxpayer perception is linked to knowledge because it is contingent upon how the money gathered is viewed by the taxpayers in general (Kirchler, 2001).

2.4.4 Moderating effect of digitalization on PAYE Tax compliance

In statistical modeling, moderation analysis is a frequently employed technique that aids in comprehending the nature of the interactions between variables and pinpointing the circumstances in which such associations are strongest or weakest. Moderation analysis can be performed using a variety of statistical methods, such as multiple regression, ANOVA, structural equation modeling, and Dovetail (2019).

The Federal Inland Revenue Service in Nigeria hosted the e-tax system with the Nigeria Inter-Bank Settlement System in 2015 to keep in close contact with international trades toward automated payment systems (Nnubia, Okafor, & Chukwunwike, 2020). To improve revenue collection and give taxpayers more flexibility over where and when to make their tax payments, Nigeria implemented an electronic tax system (Yusuf,

2022; Okafor, Nnubia, Chukwunwike, Asogwa, & Ogan, 2020). Revenue generation is the process of providing financial resources to a government.

Mabugu's (2022) study on the dynamics of domestic revenue mobilization over four decades indicates that, while not always the case, the ratio of taxes and other revenues to GDP increased on average during the early and late 2000s. Adegboye, Uwuigbe, Ojeka, and Uwuigbe (2022) carried out a similar analysis and discovered that industrialization and ICT are both sufficient and essential components for tax revenue mobilization below certain ICT thresholds. The author also found that in order to sustain the overall beneficial impact on tax revenue collection, further regulations are needed above and beyond these ICT limitations. According to Ershaid's (2021) research, there is a strong association between computerized tax registers and VAT compliance.

2.5 Conceptual Framework

A conceptual framework is a written or visual presentation that illustrates the essential concepts, variables, and elements to be researched, together with their assumed relationships, either graphically or narratively (Miles et al., 1999). The conceptual framework for the study is reflected in Figure 2.1, which illustrates the link between the independent and dependent variables. Figure 2.1 provides an overview of the factors that determined the independent variables: tax knowledge, which was measured by looking at due dates, rates, and penalties; tax compliance cost, which was measured by looking at the cost of record keeping, audit costs, and time; taxpayer perception, which was measured by looking at benefits received and perceived costs; Pay As You Earn compliance, which was measured by looking at PAYE tax returns filed and PAYE tax paid; and moderating variables, which included measuring e-filing and e-payment.

Independent Variable **Dependent Variable**

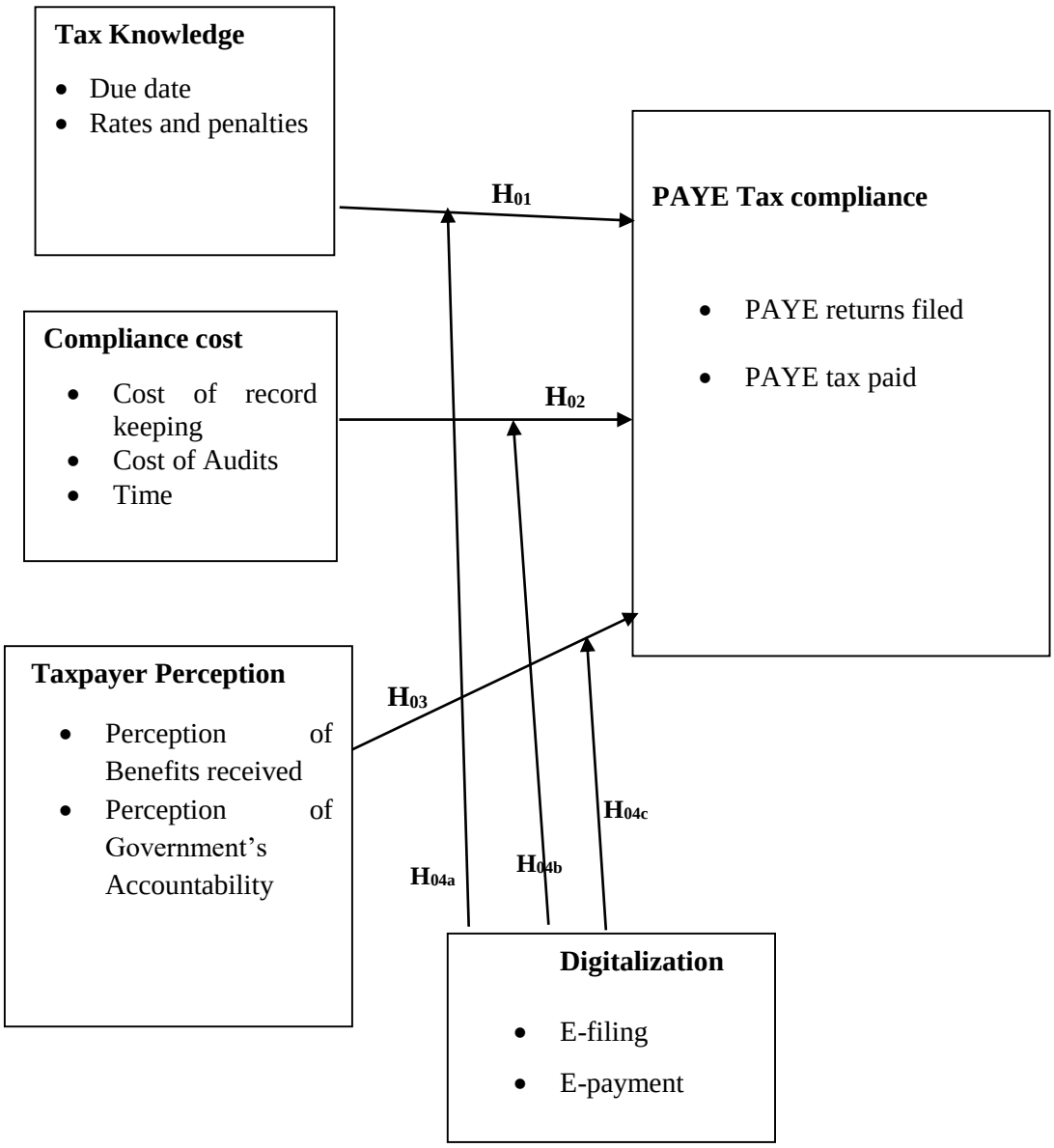

Figure 2.1: Conceptual Model

2.6 Summary of Literature and Research Gaps

The current study, which looks at the influence of mass media campaigns on individual attitudes toward tax compliance, was undertaken in Kenya, whereas the Cyan et al. (2017) study was conducted in Pakistan, creating a contextual gap. There is a contextual gap in Obeid's (2015) study on taxpayer perceptions of tax compliance, which was done in Sudan, because this survey is conducted in Kenya. There is a conceptual gap because Ndirangu (2014) focused on VAT compliance as the dependent variable when examining the effect of tax knowledge on value added tax compliance by auto part merchants in Nairobi Central Business District. The PAYE tax compliance was studied in this investigation.

Tax knowledge was measured using tax knowledge, compliance costs, and taxpayer perception in Olowookere and Fasina's (2013) study Tax knowledge: A Key Strategy in Achieving Voluntary Compliance in Lagos State, Nigeria, which had a conceptual gap. In contrast, tax knowledge was taken into account as a whole in the current study. Additionally, Olowookere and Fasina's (2013) study used a survey design, whereas the current study used the explanatory research approach, indicating a methodological discrepancy.

The study by Kariba (2005) on examination of tax reform policies and tax revenues in Kenya had a methodological gap; primary data was acquired for the current study, while secondary data was used in the study by Kariba (2005).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the techniques and steps taken to carry out the investigation. It covers the following topics: data collection, pilot test, validity test, reliability test, study population, sampling frame, sample, and sampling technique.

3.2 Research Design

A study design, according to Khan (2018), is a researcher's guide to the procedures they employ to look at the link between the independent and dependent variables. The procedures to be taken for carrying out the research are indicated by the research design. Since the goal of the study was to identify the variables impacting small and medium-sized businesses in Thika town's income (PAYE) tax compliance, an explanatory research methodology was employed. Explanatory research is a research method that explores why something occurs when limited information is available. It can help one increase understanding of a given topic, ascertain how or why a particular phenomenon is occurring, and predict future occurrences (Fellows & Liu, 2021). Therefore this research design was the most appropriate since not much is published on the topic that the current study explores.

3.3 Target Population

A target population, as defined by Mugenda & Mugenda (2003), is the group to which a researcher intends to apply the study's findings. The small and medium-sized businesses in Thika town make up the study's population. In Thika town, there are 1223 licensed SMEs that operate as business owners, according to the Kiambu County Revenue Office (2022). The sampling frame therefore consisted of licensed SMEs in Thika town. The main justification for choosing Thika town is that it is an urban setting

with a population that is aware of tax laws and that is made up of people from various ethnic backgrounds. The place was chosen in part due to its cost, time, and proximity.

3.4 Sampling Method and Sampling Technique

Zikmund (2010) also describes a source list that includes every name in the universe as a sample frame. The random sampling approach is used to obtain the sample size in an ad hoc manner. The Yamane (1967) formula is used to calculate the sample size of 301. This formula makes the assumption that the population of Thika Town is regularly distributed with respect to the studied limitations. The formula therefore is deemed appropriate for determining the appropriate sample size. As per Nairobi KRA there are 1223 licensed SMEs who are the business owners in Thika town. The respondents of the study were SME owners.

The sample size is determined by the simplified Yamane formula

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

Where;

n - The sample size

N- The population size

e- The acceptable sampling error

*95 confidence level and p =0.5 are assumed Source: Yamane (1967)

$$n = \frac{1223}{1 + 1223(0.05)^2} = 301$$

Zikmund (2010) also describes a source list that includes every name in the universe as a sample frame. The random sampling approach is used to obtain the sample size in an ad hoc manner. First, the target population were categorized based on the sector they operate in. Simple random sampling was then used to pick individual SMEs form each category by allotting numbers and picking them randomly hence avoiding bias. The Yamane (1967) formula is used to calculate the sample size of 301. This formula makes the assumption that the population of Thika Town is regularly distributed with respect to the studied limitations. As a result, the formula is accepted as suitable for figuring out the right sample size. Table 3.1 shows the sample frame.

Table 3.1: Sample Frame

	Population Size	Sample Size (n)
Manufacturing	500	123
Retail	310	77
Services	398	98
Others	15	3
Total	**1223**	**301**

3.6 Data Collection

Structured questionnaires were used to gather primary data from taxpayers, SME owners and managers, and SME owners and/or managers in charge of the accounting and finance departments. Since they enable researchers to quickly contact a large number of respondents, questionnaires are favored as the best tools for gathering data (Mugenda & Mugenda, 2003). It should be mentioned that vital population data is obtained through the use of surveys.

The final sample size, which is derived from the entire population, therefore consisted of 301 licensed small and medium-sized businesses. A stratified random sampling

method was used to choose study participants from the town. Various subgroups were created for small and medium-sized firms according on the kind of business they ran.

The objectives of the study served as a guidance for creating the questionnaires. The format consisted of structured questions and Likert rating scales. The drop and pick method was used, and the questions were self-administered. After being collected, the data was organized in tables and graphs for analysis.

3.7 Data Collection Procedure

First, the researcher obtained an introduction letter and research permits from National Commission for Science, Technology, and Innovation (NACOSTI) for data collection. The questionnaires were administered to the respondents using the drop and pick method. The researcher administered the questonnaire with the help of research asssitants. The researcher also obtained contacts for the respondents for follow up to ensure the right response rate is attained. After two weeks, the respondent collected the filled in questionnaires.

3.8 Pilot Test

Before starting the real study, Kothari (2004) suggests doing a pilot study to pre-test the questionnaire. To make sure the study's goals are met, the questionnaire may be modified in light of the pilot study's findings. Pilot test participation included thirty licensed small and medium-sized businesses in Muraga County. Murang'a County was selected since it neighbours Thika town hence the SMEs operate under the same business conditions. Cooper and Schindler (2010) recommend that a pilot sample consist of 10% of the sample anticipated for the larger parent study.

3.8.1 Validity

This is done in order to verify the data's accuracy and lend credibility to the research. Validity, according to Cooper and Schindler (2014), is the degree to which a test captures the information that we would like it to capture. Three main categories of validity are recognized in the literature: content validity, which measures how well the items' content captures the universe of all pertinent items under investigation, criterion-related validity, which measures how well the predictor captures the pertinent aspects of the criterion, and construct validity, which addresses measure variance. This study used the content validity measured by use of factor analysis test where the items in the instrument were checked to ensure that they reflect the research question

3.8.2 Reliability

According to Sekaran (2003), an instrument's reliability is determined by how consistently and steadily it assesses the idea. Nunnally (1978) noted that a variety of circumstances can make it difficult to repeat measurements precisely. When a set of scale items' one-dimensionality was assessed using Cronbach's alpha to compare the two scores obtained, an alpha value of 0.7 and above was found, indicating the reliability of the study instrument Nunnally (1978).

3.8.3 Factor analysis

In line with Kasier's (1974) assertions, the KMO test (Kaiser-Meyer-Olkin test) assesses the suitability of data for factor analysis by assessing the consistency between variables. The test score ranges from 0 to 1; results greater than 0.5 are regarded appropriate for factor analysis.

The Bartlett test is used to test the hypothesis that the correlation matrix is homogeneous. With a p-value <0.05, the correlation matrix's variables are assumed to

be sufficiently connected for component analysis. Factor loadings were used to determine the most sufficient factors for selection.

3.9 Assumption of Regression

In order to guarantee that the regression results are objective, consistent, and effective, the assumption of regression helps to confirm the nature of the data and helps to identify the model appropriate for the study (Yihua, 2010). Prior to starting the model estimating process, this study was conducted to evaluate the pertinent diagnostic tests. The diagnostic tests that were pertinent to this investigation included multicollinearity, autocorrelation, and violation of normality tests.

3.9.1 Testing for Normality

According Fiorentini (2004) the Jarque-Bera test provides a way to statistically assess the normality of a dataset based on skewness and kurtosis. However, it is essential to consider its assumptions and limitations, and it's often used in conjunction with other normality tests for a comprehensive analysis, JB > Critical Value: Reject the null hypothesis and Conclude that the data does not follow a normal distribution. Otherwise if JB<= critical value Fail to reject the null hypothesis and Conclude that there is not enough evidence to suggest a departure from normality. The p-values >0.05 indicate not significant evidence to suggest a departure from normality.

3.9.2 Heteroscedasticity Test

Heteroscedasticity is the term used to describe a regression model's error term variability that is not constant across all levels of the independent variables (Wooldridge, 2015). In this study, the Breusch-Pagan Test was applied. In this test, the relationship between the independent variables and the squared residuals is examined. If the test is statistically significant, heteroscedasticity might exist. The results are

considered statistically significant at the 5% level. If the p-value is less than 0.05, the null hypothesis is rejected and heteroscedasticity is clearly seen.

3.9.3 Multicollinearity test

Kumari (2008) defines multicollinearity as the existence of a linear relationship between the independent variables. Large forecasting errors and difficulty determining the relative significance of distinct variables inside the model might result from multicollinearity. For this investigation, the Variance Inflation Factor (VIF) was chosen. The Variance Inflation Factor (VIF) was examined in the study to look for multicollinearity. According to Belsley, Edwin, and Roy (1980), the variance inflation factor indicates the extent to which multicollinearity is inflating the variance of the coefficient estimate. VIF for every independent variable more than 10 or tolerance is lower than 0.1 indicates a multicollinearity issue.

3.9.4 Test for Linearity

A linearity test's objective, according to Cox (2004), is to determine whether or not each predictor variable and the predicted variable have a linear connection. A study of linearity is required for both correlation and close regression. A regression model that demonstrates a linear relationship between the predictor and the predicted variables is considered to be of high quality. The substantial departure from linearity value was used to examine the linearity of the variables in this investigation. By general agreement, a connection is linear if the amount of the sign departure from linearity is larger than 0.05; if not, the opposite is true.

3.10 Data Analysis

The first step in the data analysis process was to edit and carefully review each data piece to look for spelling errors, incorrect responses, and any blank sections that the

respondents had left unfilled. To create frequency tables and percentages, the completed questionnaires were coded, sorted, and entered into the Statistical Package for Social Sciences (SPSS) program. Given that the study's primary features were descriptive, data analysis employed descriptive statistics. Specifically, frequencies and percentages were utilized to analyze the data, which was then displayed in frequency distribution tables.

Model i:

Model iv: $Y= \beta_o+\beta_1TK_1 + \beta_2CC_2 + \beta_3TPP_3 +\varepsilon$

$Y= \beta_o+ \beta_1TK_1 + \beta_2CC_2 + \beta_3TPP_3 + \beta_4DIG_4 + \beta_5TK*DIG_4 + \beta_6CC *DIG_4 + \beta_7TPP *DIG_4 + \varepsilon$

Where;

Y = PAYE tax compliance

βo= Constants

$\beta_1 ... \beta_3$= Coefficients

TK_1 = Tax knowledge

CC_2= Tax compliance cost

TPP_3 = Taxpayer's perception

DIG_4= Digitalization

$TK*DIG_4$ = Digitalization* Tax knowledge

$CC*DIG_4$ = Digitalization* Tax compliance cost

$TPP*DIG_4$ = Digitalization* Taxpayer's perception

ε = error term

3.11 Moderation Effect by Hierarchical Regression Analysis

The hierarchical regression model is a special kind of multiple linear regression analysis that permits the gradual inclusion of new variables in the model. This is often done to investigate the moderating influence of a variable or to determine whether the addition

of the variables significantly improves the model's prediction of the criterion variable. The following models will be estimated.

$Y== \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + e.$

$Y= \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + \beta_5 X_1 * M + e.$

$Y= \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + \beta_5 X_1 * M + \beta_6 X_2 * M + e.$

$Y= \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + \beta_5 X_1 * M + \beta_6 X_2 * M + \beta_7 X_3 * M + e.$

Where:

Y = PAYE Tax Compliance

$\beta 0$ = Constant

X_1 = Tax Knowledge

X_2= Compliance cost

X_3 = Taxpayers perception

M = Digitalization

ε = Error term

X_1M = Tax knowledge * digitalization

X_2M = Compliance cost * digitalization

X_3M = Taxpayers perception * digitalization

ε = error term

The assumptions for hierarchical regression are the same as those covered for simple or basic multiple regression and therefore the assumptions stated for regression analysis were used to test the data for appropriateness for hierarchical regression.

3.12 Measurement of Variables Table

This section provides details of how each of the study variables were measured and operationalized. The independent variable tax knowledge was measured by knowledge on due dates, tax rates and penalties ((Elnaga & Imran, 2016). To measure compliance

cost, time, cost of audits cost of compliance were used as suggested by Slemrod (2012). The other independent variable taxpayers' perception was measured by government accountability and benefits received (Kirchler, 2001). The dependent variable PAYE tax compliance was indicated by Returns filed and Tax paid (OECD, 2018) while digitalization as the moderating variable was measured by e-filling and e-payment (Mabugu, 2022).

Table 3.2: Operationalization of Study Variables

Variables	Source/Authors	Data collection instrument	Measurement of Items	Types of Analysis
Independent variable Tax Knowledge	(Elnaga & Imran, 2016).	Questionnaire	Knowledge on due Dates Tax rates Penalties	Regression analysis Correlation analysis Regression analysis
Compliance cost	(Slemrod, 2012).	Questionnaire	Time Cost of Audits Cost of compliance	Correlation analysis Regression analysis
Taxpayer perception	Kirchler, 2001).	Questionnaire	Government accountability Benefits received	Correlation analysis
Dependent Variable PAYE tax compliance	(OECD, 2018).	Questionnaire	Returns filed Tax paid	Regression analysis Correlation analysis
Moderating Variable Digitalization	Mabugu (2022).	Questionnaire	E-filling E-payment	Regression analysis Correlation analysis

3.13 Ethical Considerations

Research participants come on board voluntarily and as such are free to pull out anytime without any repercussions. It is vital to ensure participants clearly understand why the study is being conducted and its utility to them prior to joining. The research observed the principle of anonymity, and ensures the protection of the identity of those that participate in the survey so as to facilitate credible answers without repercussions. Facts obtained won't be divulged to anybody else and the data was anonymized so that it cannot be linked to other data by anyone else. The researcher was endeavor to keep to the bare minimum, if at all, any potential harm to the participant, whether, they be physical, social or psychological. The research was devoid of any form of misconduct and that it was accurately represents the result. Informed consent was sought and obtained in the process of conducting data collection.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter boons a comprehensive analysis and interpretation of data collected in relation to these objectives, providing insights into the moderating effect of digitization of tax systems on the relationship between systems on relationship between Tax knowledge, Compliance cost Taxpayer's perception and Pay As You Earn compliance.

4.2 Pilot test

The pilot test involved testing the reliability of the data, the validity of the data, the response rates to eliminate response bias in the questionnaire questions.

4.2.1 Reliability test

The Cronbach's alpha analysis test was used to determine the reliability of the questionnaire items Table 4.1 shows that PAYE tax compliance has a $\alpha = 0.796 > 0.7$, while tax knowledge has a $\alpha = 0.816 > 0.7$, tax compliance costs has a $\alpha = 0.852 > 0.7$, taxpayer perception has a $\alpha = 0.703 > 0.7$, and lastly digitization of tax systems has a $\alpha = 0.762 > 0.7$, The alpha values are above 0.7 and closer to indicating high levels of reliability.

Table 4.1: Reliability Tests

Variable	Cronbach's Alpha	N of Items
PAYE tax compliance	0.796	4
Tax knowledge	0.816	4
tax Compliance cost	0.852	5
Taxpayer's perception	0.703	5
digitization of tax systems	0.762	4

(Source: Research 2024)

4.2.3 Response rate

In research investigations, the response rate is an important measure of participant participation as well as data quality. It is calculated as the ratio of fully completed survey replies to the total number of participants requested. A greater response rate improves the study's validity and applicability. It's generally accepted that a response rate of 60% or more is adequate to get trustworthy results. Figure 4.1 shows that 249 out of the 301 surveys that could have been sent out were completed and returned, representing an 83% response rate.

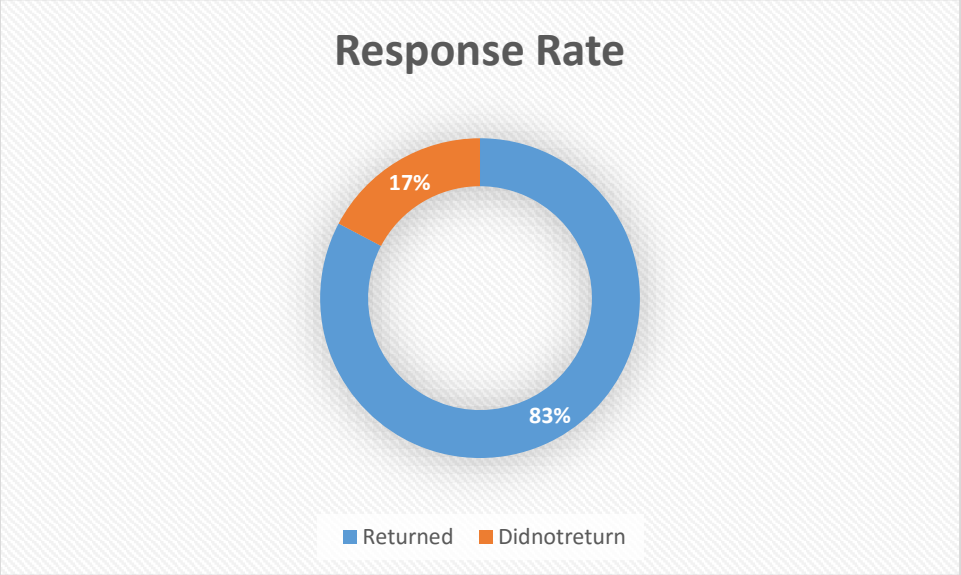

Figure 4.1: Response rate

4.3 Demographics data

Demographics data indicates that the demographic data in Table 4.2 provides insights into the characteristics of the surveyed entities.

In terms of the number of employees, the majority falls within the 11 to 15 and 16 to 20 range, comprising 26.1% and 28.1%, respectively. A significant proportion also

reported having 5 to 10 employees (23.7%), while 22.1% have more than 20 employees. This distribution suggests a diverse representation of businesses in terms of size.

Regarding the average pay to employees, the data reveals a fairly balanced distribution. A notable portion falls within the 34001 to 44000 range (24.9%), followed closely by above 44000 (30.5%). Meanwhile, 23.3% reported paying between 25000 to 34000, and 21.3% reported paying below 25000. This suggests a variety of salary structures among the surveyed entities.

Examining annual turnover, businesses with turnovers of over 20 million constitute the largest group at 23.7%. The 10 to 15 million and 5 to 10 million categories both represent 21.3% and 19.3%, respectively. Entities with turnovers below 5 million constitute 17.3%, while those with turnovers between 15 to 20 million make up 18.5% of the total. This indicates a diverse range of annual turnovers among the surveyed entities.

Table 4.2: Demographics data

	Frequency	Percentage
How many employees do you have?		
11 to 15	65	26.1
16 to 20	70	28.1
5 to 10	59	23.7
More than 20	55	22.1
What is the average Pay to your Employees?		
25000 to 34000	58	23.3
34001 to 44000	62	24.9
Above 44000	76	30.5
Below 25000	53	21.3
What is your annual turnover?		
10 to 15 million	53	21.3
15 to 20 million	46	18.5
5 to 10 million	48	19.3
Below 5 million	43	17.3
over 20 million	59	23.7
Total	**249**	**100.0**

(Source: Research 2024)

4.4 Descriptive statistics

Measures of central tendency were used to define the structure of the questionnaire data with a Likert scale of 1 to 5

4.4.1 Descriptive statistics on tax knowledge

The tax knowledge descriptive statistics are displayed in Table 4.3. The government offers sufficient information and assistance to enable people to abide with the tax laws. The high average score of 4.82 indicates that participants strongly concur that the government offers enough information and assistance to enable taxpayers to abide by tax regulations. The 0.501 standard deviation suggests a comparatively high degree of agreement among participants.

The negative skewness (-2.835) indicates that the majority of responses are clustered towards the higher end of the scale, and the positive kurtosis (6.948) suggests a peak in the distribution, indicating a strong consensus among participants. I have received sufficient tax knowledge on due dates. The mean score of 3.99 suggests a moderate agreement that participants have received sufficient tax knowledge on due dates. The low standard deviation of 0.353 indicates relatively consistent responses. The skewness close to zero (-0.173) suggests a relatively symmetrical distribution, while the positive kurtosis (5.147) indicates a peak in the distribution, but not as pronounced as in the first statement. I believe that increasing awareness would lead to better PAYE compliance and fewer errors. The high mean score of 4.83 indicates a strong agreement that increasing awareness would improve PAYE compliance and reduce errors. The low standard deviation (0.487) suggests a high level of consensus among respondents. The negative skewness (-2.914) suggests that responses are concentrated towards the higher end of the scale, and the high positive kurtosis (7.485) indicates a pronounced peak, highlighting a robust agreement among participants. I'm aware of penalties of non-

compliance. The mean score of 4.75 indicates a strong agreement that participants are aware of the penalties of non-compliance. The relatively higher standard deviation (0.565) compared to previous statements suggests some variability in responses. The negative skewness (-2.144) indicates that responses are skewed towards the higher end of the scale, and the positive kurtosis (3.447) indicates a peak in the distribution, though less pronounced than in the third statement. Overall, there is a substantial consensus among participants regarding their awareness of non-compliance penalties. The mean aggregate for tax knowledge is 4.60

Table 4.3: Descriptive statistics tax knowledge

	N	Mean	Std. Deviation	Skewness	Kurtosis
The government provides adequate knowledge and support to help taxpayers comply with the tax laws.	249	4.82	.501	-2.835	6.948
I have received sufficient tax knowledge on due dates		3.99	.353	-.173	5.147
I believe that increasing awareness would lead to better PAYE compliance and fewer errors.		4.83	.487	-2.914	7.485
I'm aware of penalties of non-compliance		4.75	.565	-2.144	3.447
Aggregate Mean		4.60			

(Source: Research 2024)

4.4.2 Descriptive statistics on compliance cost

Table 4.4 indicate descriptive statistics on compliance cost. The cost of complying with the tax laws in my country is reasonable. Respondents, on average, find the cost of complying with tax laws in their country to be reasonable Mean: 3.94. There is a low variability in responses Std. Deviation: 0.406 The distribution of responses is slightly negatively skewed Skewness: -0.486, suggesting that more respondents are inclined towards agreement. Kurtosis: 2.853I spend too much time and effort on tax compliance. On average, respondents feel that they invest a significant amount of time and effort in

tax compliance Mean: 4.70. With low variability in responses Std. Deviation: 0.691. The negative skewness Skewness=-1.961 indicates that the majority of respondents strongly agree or agree with this statement. The penalties and fines for noncompliance with the tax laws are too harsh. Respondents, on average, believe that penalties and fines for noncompliance are perceived as too harsh Mean: 4.88. The SD=0.442 The high negative skewness of -3.683 and kurtosis of 12.385 suggest that a considerable number of respondents strongly agree with this statement.

I believe that tax compliance is an important civic duty. On average, respondents strongly believe that tax compliance is an important civic duty Mean: 4.81. The low standard deviation indicates low variability in responses Std. Deviation: 0.492 The negative skewness of -2.631 and Kurtosis of 6.063 indicates a tendency towards strong agreement among the respondents.

Lastly for I would be willing to pay more taxes if it meant a reduction in the tax compliance burden. Respondents, on average, express a willingness to pay more taxes if it leads to a reduction in the tax compliance burden Mean: = 4.87. The standard deviation of 0.469 The high negative skewness -3.488 and kurtosis 10.769 indicate a strong agreement with this statement among the respondents. The aggregate mean fir compliance costs is 4.64.

Table 4.4: Descriptive statistics compliance cost

	N	Mean	Std. Deviation	Skewness	Kurtosis
The cost of complying with the tax laws in my country is reasonable.	249	3.94	.406	-.486	2.853
I spend too much time and effort on tax compliance.		4.70	.691	-1.961	2.014
The penalties and fines for noncompliance with the tax laws are too harsh.		4.88	.442	-3.683	12.385
I believe that tax compliance is an important civic duty.		4.81	.492	-2.631	6.063
I would be willing to pay more taxes if it meant a reduction in the tax compliance burden.		4.87	.469	-3.488	10.769
Aggregate Mean		4.64			

(Source: Research 2024)

4.4.3 Descriptive statistics on taxpayer's perception

Table 4.5 shows descriptive statistics on taxpayers' perception, for The tax system in my country is fair: The mean response is 4.86, indicating that, on average, taxpayers tend to strongly agree that the tax system is fair. The standard deviation (Std. Deviation) is 0.470, which suggests that the responses are relatively consistent around the mean. The skewness value of -3.267 indicates that the distribution is negatively skewed, meaning that more respondents leaned toward the higher end of the scale. The kurtosis value of 9.550 suggests a leptokurtic distribution, indicating that the responses are more concentrated around the mean than a normal distribution.

The tax authorities are transparent in their actions and decisions: The mean response is 3.15, which corresponds to a neutral stance. The standard deviation is 0.482, implying moderate variability in responses. The skewness value of 3.224 indicates a positively skewed distribution, suggesting that more respondents leaned toward agreement. The kurtosis value of 9.153 indicates a leptokurtic distribution. For Satisfaction with the government's use of tax contributions: The mean response is 2.33, which indicates that, on average, taxpayers tend to disagree with the government's use of their tax

contributions. The standard deviation is 0.836, suggesting considerable variability in responses. The skewness value of 2.480 indicates a positively skewed distribution. The kurtosis value of 4.804 suggests a platykurtic distribution, meaning that the responses are less concentrated around the mean than a normal distribution. For Complexity of the tax system: The mean response is 4.87, indicating that, on average, taxpayers tend to strongly agree that the tax system is complex and difficult to understand. The standard deviation is 0.457, implying relatively consistent responses. The skewness value of -3.545 indicates a negatively skewed distribution. The kurtosis value of 11.297 suggests a leptokurtic distribution. Confidence in complying with tax laws: The mean response is 4.82, indicating that, on average, taxpayers tend to strongly agree with their ability to comply with tax laws. The standard deviation is 0.470, suggesting consistent responses. The skewness value of -2.648 indicates a negatively skewed distribution. The kurtosis value of 6.330 suggests a leptokurtic distribution. The aggregate mean for taxpayer perception is 4.01.

Table 4.5: Descriptive statistics taxpayer perception

	N	Mean	Std. Deviation	Skewness	Kurtosis
The tax system in my country is fair.	249	4.86	.470	-3.267	9.550
The tax authorities are transparent in their actions and decisions.		3.15	.482	3.224	9.153
I am satisfied with the way the government uses my tax contributions.		2.33	.836	2.480	4.804
The tax system in my country is too complex and difficult to understand.		4.87	.457	-3.545	11.297
I feel confident in my ability to comply with the tax laws in my country.		4.82	.470	-2.648	6.330
Aggregate Mean		4.01			

(Source: Research 2024)

4.4.4 Descriptive statistics on digitalization of tax systems

Table 4.6 shows descriptive statistics summary for digitalization of tax systems Online Payment is Easy and Faster: The high mean of 4.83 suggests a strong agreement among

respondents that online payment is easy and faster. The relatively low standard deviation (0.530) indicates that there is a consensus among respondents. The negative skewness (-2.946) suggests that the distribution is skewed towards higher agreement, and the positive kurtosis (7.144) indicates a peaked distribution. Overall, respondents find online payment to be efficient and fast, with a high level of agreement among them. The question Online Filing is Easy and Faster, Thus Convenient: The mean of 4.79 indicates a strong agreement that online filing is easy and faster, thus convenient. The standard deviation (0.505) suggests a relatively low level of variability among respondents. The negative skewness (-2.410) indicates that the distribution is skewed towards higher agreement, and the positive kurtosis (4.953) suggests a moderately peaked distribution. Overall, respondents perceive online filing as not only convenient but also efficient and fast. Tax Registration on iTax System is Efficient: With a mean of 4.83, respondents strongly agree that tax registration on the iTax system is efficient. The low standard deviation (0.479) indicates a high level of agreement with minimal variability. The negative skewness (-2.884) suggests a distribution skewed towards higher agreement, and the positive kurtosis (7.430) indicates a peaked distribution. Overall, respondents find the tax registration process on the iTax system to be highly efficient. For Tax Returns Filing on iTax System has Reduced Corruption: The mean of 3.14 suggests a moderate agreement that tax returns filing on the iTax system has reduced corruption. The standard deviation (0.472) indicates relatively low variability in responses. The positive skewness (3.419) suggests a distribution skewed towards disagreement, and the high positive kurtosis (10.335) indicates a highly peaked distribution. Overall, there is some agreement that the iTax system has contributed to reducing corruption in tax returns filing, but opinions are more diverse compared to the other aspects. The aggregate mean for digitization of tax systems is 4.40.

Table 4.6: Descriptive statistics digitization of tax systems

	N	Mean	Std. Deviation	Skewness	Kurtosis
Online payment is easy and faster	249	4.83	.530	-2.946	7.144
Online filling is easy and faster thus convenient		4.79	.505	-2.410	4.953
Tax registration on iTax system is efficient		4.83	.479	-2.884	7.430
Tax returns filing on iTax system has reduced corruption		3.14	.472	3.419	10.335
Aggregate Mean		4.40			

(Source: Research 2024)

4.4.5 Descriptive statistics on Pay As You Earn compliance

Table 4.7 indicates descriptive statistics for items of PAYE tax compliance For KRA provides guidelines on the process of filling returns: The majority of respondents strongly agree that the Kenya Revenue Authority (KRA) gives clear rules on the procedure of submitting returns, as indicated by the high mean of 4.84. The low standard deviation (0.473) suggests that there is a relatively low level of variability in responses, indicating a consensus among participants. The negative skewness (-2.996) indicates that the distribution is skewed to the left, suggesting that more respondents are inclined towards Strongly Agree.

I have been provided with a tax filing environment by KRA that can improve PAYE performance. The average score of 4.01 indicates that most respondents concur that KRA has made it easier to file taxes. The low standard deviation (0.311) indicates a relatively consistent level of agreement among respondents. The positive skewness (0.192) suggests a slightly right-skewed distribution, meaning that more respondents lean towards agreement. Taxpayers have less information on filling PAYE returns: The high mean of 4.81 indicates that respondents strongly agree that taxpayers have less information on filling PAYE returns. The moderate standard deviation (0.542) suggests some variability in responses, but the overall trend is towards agreement. The negative

skewness (-2.716) indicates a left-skewed distribution, with a majority of respondents strongly agreeing that taxpayers have less information. Lastly for PAYE returns filing through iTax is complicated: The mean of 2.45 suggests that, on average, respondents disagree that PAYE returns filing through iTax is complicated. The relatively high standard deviation (0.919) indicates a notable level of variability in responses, with some respondents strongly disagreeing while others strongly agree. The positive skewness (1.655) suggests a right-skewed distribution, meaning that more respondents lean towards disagreement, but there is variability in opinions. The mean aggregate for pay as you earn compliance is 4.03.

Table 4.7: Descriptive statistics Pay As You Earn compliance

Table 4.7: Descriptive statistics Pay As You Earn compliance

	N	Mean	Std. Deviation	Skewness	Kurtosis
KRA provide guide lines on the process of filling returns.	249	4.84	.473	-2.996	8.068
KRA has offered me enabling environment for tax filing which can enhance PAYE performance		4.01	.311	.192	7.540
Taxpayers have less information on filling PAYE returns		4.81	.542	-2.716	5.969
PAYE returns filling through iTax is complicated.		2.45	.919	1.655	1.346
Aggregate Mean		4.03			

(Source: Research 2024)

4.5 Factor Analysis

Factor Diagnostic tests

The KMO and Bartlett's tests were used to diagnose the sufficient Tale 4.8 indicates KMO values for PAYE compliance = 0.478 indicating medium suitability, for tax knowledge 0.754 for compliance cost 0.742, taxpayer's perception 0.653 and lastly for digitalization of tax systems is 0.720 the KMO values indicate Overall, the KMO values suggest that the data may be highly suitable for factor analysis. All of the variables' p-

values are 0.000, or less than 0.05. Given that the variables are associated and there is sufficient evidence to reject the null hypothesis, component analysis might be acceptable.

Table 4.8: KMO& Bartlett's test

Table 4.8: KMO& Bartlett's test

	Pay As You Earn compliance	tax knowledge	compliance cost	taxpayer's perception	digitalization of tax systems
KMO	0.478	0.754	0.742	0.653	0.720
Bartlett's test for sphericity (sig)	0.000	0.000	0.000	0.000	0.000

(Source: Research 2024)

Principal Component Analysis

In data analysis, principal component analysis (PCA) is a potent method for reducing dimensionality. PCA is a statistical process that reduces a larger set of uncorrelated variables (principal components) from a set of correlated variables (features). The objective is to minimize the dimensionality of the dataset while maintaining as much of the original data as feasible. The basic features are combined linearly to form these fundamental components. The greatest amount of variance is explained by the first principal component, the second by the second, and so forth. By selecting a subset of these components, we can represent the data in a lower-dimensional space. The values in the table represent the factor loadings for each variable on the identified principal components. Factor loadings indicate the strength and direction of the relationship between each variable and the underlying factor. The higher the absolute value of the factor loading, the stronger the variable is associated with that particular factor.

A common criterion for selecting components is to consider those with factor loadings above a certain threshold, typically 0.6 or 0.7. This threshold is somewhat arbitrary and can vary depending on the context and the specific goals of the analysis. In table 4.9, components with factor loadings above 0.6. Based on the factors are: PTC1 (.885), PTC2 (.894), PTC3 (.779), and PTC4 (.953) all have factor loadings above 0.6. These components are likely to be important in capturing the underlying patterns in the variables related to Pay As You Earn compliance. TK1 (.800), TK3 (.772), and TK4 (.610) have factor loadings above 0.6. These components are likely to be important in capturing the underlying patterns in the variables related to tax knowledge.

TCC1(.862), TCC2(.904), TCC3 (.900), TCC4 (.841), TCC5 (.858) have factor loadings above 0.6. These components are likely to be important in capturing the underlying patterns in the variables related to compliance cost." TTP1 (.890), TTP2 (.942), TTP3 (.938), TTP4 (.917), and TTP5 (.819) have factor loadings above 0.6. These components are likely to be important in capturing the underlying patterns in the variables related to taxpayer’s perception."DTS2 (.804), DTS3 (.791), and DTS4 (.918) have factor loadings above 0.6. These components are likely to be important in capturing the underlying patterns in the variables related to the digitalization of tax systems.

Table 4.9: Principal component factor analysis

	Pay As You Earn compliance	tax knowledge	compliance cost	taxpayer's perception	digitalization of tax systems
PTC1	.885				
PTC2	.894				
PTC3	.779				
PTC4	.953				
TK1		.800			
TK2		.422			
TK3		.772			
TK4		.610			
TCC1			.862		
TCC2			.904		
TCC3			.900		
TCC4			.841		
TCC5			.858		
TTP1				.890	
TTP2				.942	
TTP3				.938	
TTP4				.917	
TTP5				.819	
DTS1					.721
DTS2					.804
DTS3					.791
DTS4					.918

(Source: Research 2024)

4.6 Statistical assumptions

Diagnostic test was conducted to test whether the assumptions for heteroscedasticity, normality, linearity, autocorrelation and multicollinearity are violated or not.

4.6.1 Normality test

Table 4.10 shows test results from Jarque-Bera test for normality and it shows that Tax knowledge has JB statistic: 1.553 and p-value (Sig.): 0.054, Tax Compliance cost: has JB statistic: 0.654 and p-value (Sig.): 0.077, Taxpayer's perception: has JB statistic: 0.355 And p-value (Sig.): 0.122 lastly Digitization of tax systems has JB statistic of 0.799, and p-value (Sig.): 0.063 The results from the test indicate the there the data does not significantly deviate from a normal distribution.

Table 4.10: Normality test

	JB	Sig.
Tax knowledge	1.553	0.054
tax Compliance cost	0.654	0.077
Taxpayer's perception	0.355	0.122
digitization of tax systems	0.799	0.063

(Source: Research 2024)

4.6.2 Heteroskedasticity test

The test for heteroskedasticity was conducted using the Breusch-Pagan- Godfrey heteroskedasticity. Table 4.11 indicates that Prob. F(4,244) (0.2904): This is the p-value associated with the F-statistic. In this case, with a p-value of 0.2904, there is not enough evidence to reject the null hypothesis. Therefore, there is no sufficient evidence to conclude that heteroskedasticity is present.

Table 4.11: Heteroskedasticity test

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.249961	Prob. F(4,244)	0.2904
Obs*R-squared	4.999847	Prob. Chi-Square(4)	0.2873
Scaled explained SS	10.98091	Prob. Chi-Square(4)	0.0268

(Source: Research 2024)

4.6.3 Multicollinearity test

A phenomenon known as multicollinearity occurs when there is a significant degree of correlation between the independent variables. Regression coefficient estimates in multiple regression models that exhibit a high correlation between these predictor variables are erroneous. This leads to strange results when trying to determine how much each independent component contributes to the understanding of the dependent variable (Creswell, 2014).

Kumari (2008) defines multicollinearity as the existence of a linear relationship between the independent variables. Table 4.12 presents the multicollinearity test results. Tax knowledge has a tolerance of 0.330 and a VIF of 3.0332; compliance cost has a tolerance of 0.390 and a VIF of 2.562; taxpayer perception has a tolerance of 0.490 and a VIF of 2.444; and the moderator digitization of tax systems has a tolerance of 0.480 and a VIF of 2.084. All tolerance values are greater than 0.1, and the VIFs<10, indicating that none of the predictors violated the collinearity assumption.

Table 4.12: Multicollinearity test

Model		Collinearity Statistics	
		Tolerance	VIF
1	TaxKnowledge	.330	3.032
	complianceCost	.390	2.562
	taxpayerperception	.409	2.444
	DigitizationofTaxsystems	.480	2.084

a. Dependent Variable: PAYEtaxCompliance

(Source: Research 2024)

4.6.4 Linearity test

Table 4.13 shows deviation from linearity test the deviation from linearity shows F statistic of 0.707 and significance of 0.494 which is >0.05 indicate that the relationship

between Tax knowledge, Compliance cost Taxpayer's perception, digitization of tax systems and Pay As You Earn compliance is linear.

Table 4.13: Linearity test

			Sum of Squares	df	Mean Square	F	Sig.
PAYEtaxCompliance * Digitizationof Taxsystems	Between Groups	(Combined)	160.595	3	53.532	61.503	.000
		Linearity	159.364	1	159.364	183.095	.000
		Deviation from Linearity	1.231	2	.616	.707	.494
	Within Groups		213.245	245	.870		
	Total		373.839	248			

(Source: Research 2024)

4.7 Correlation Analysis

Table 4.14's correlation matrix, which was utilized to ascertain the direction of the relationship between the variables, reveals that tax knowledge and PAYE tax compliance have a positive and significant relationship up to 71.3% ($p=0.000<0.05$), while compliance costs and PAYE tax compliance have a significant and negative correlation up to -60.6% ($p=0.000<0.05$). The correlation matrix show that taxpayer's perception has significant and positive correlation with PAYE tax compliance up to 70.2% ($p=0.000<0.05$), Lastly digitization of tax systems has a significant and positive correlation between taxpayer's perception and PAYE tax compliance up to 65.3% ($p=0.000<0.05$).

Table 4.14: Correlation Analysis

		PAYEtaxCompliance	taxKnowledge	complianceCost	taxpayerperception	DigitizationofTaxsystems
PAYEtaxCompliance	Pearson Correlation	1				
	N	249				
taxKnowledge	Pearson Correlation	.713	1			
	Sig. (2-tailed)	.000				
	N	249	249			
complianceCost	Pearson Correlation	-.606	-.652	1		
	Sig. (2-tailed)	.000	.000			
	N	249	249	249		
taxpayerpercep tion	Pearson Correlation	.702	.718	-.557	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	249	249	249	249	
DigitizationofTaxsystems	Pearson Correlation	.653	.651	-.530	.660	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	249	249	249	249	249

(Source: Research 2024)

4.8 Regression analysis

The regression model was conducted to determine the direct effects of Tax knowledge; Compliance cost Taxpayer's perception on Pay as You Earn compliance. The model summary, ANOVA and coefficient tables express the merits of the direct effects of the predictors on Pay as You Earn compliance.

4.8.1 Model Summary

The model summary to determine the correlation and coefficient of determination was conducted on table 4.15, which indicates that there is a positive correlation up to 77.7%

between Tax knowledge; Compliance cost Taxpayer's perception and Pay as You Earn compliance. The coefficient of determination R-square shows that 60.3% of the variation caused on PAYE compliance is caused by psycho economic factors, leaving 39.7% of the remaining variation is caused by factors not analyzed in this model.

Table 4.15: Model Summary effects of psycho- Economic factors on PAYE compliance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.777	0.603	0.598	0.77828

a. Predictors: (Constant), DigitizationofTaxsystems, complianceCost, taxpayerperception, taxKnowledge

(Source: Research 2024)

4.8.2 ANOVA

Table 4.16 shows that the effects of psycho-economic factors on PAYE tax compliance were examined using a one-way analysis of variance (ANOVA). The results revealed a significant overall effect of the predictors on PAYE tax compliance. The regression model accounted for a substantial amount of variance in PAYE tax compliance, as indicated by the high F-statistic ($F(3, 245) = 124.059$) and the associated p-value of $0.000<0.05$. The predictors, including tax knowledge compliance cost, taxpayer perception, collectively contributed to the model's explanatory power.

Table 4.16: ANOVA effects of psycho- Economic factors on PAYE compliance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	225.437	3	75.146	124.059	0.000
	Residual	148.403	245	0.606		
	Total	373.839	248			

a. Dependent Variable: PAY Etax Compliance

b. Predictors: (Constant), compliance Cost, taxpayer perception, tax Knowledge

(Source: Research 2024)

4.8.3 Regression Standardized Coefficient analysis psycho- Economic factors on PAYE compliance

The coefficient table shows that the coefficient table the main regression equation is

Y= 1.544 + 0.346TK1 – 0.191CC2 + 0.367TPP3

Table 4.17 demonstrates that, at a constant of 1.544, a unit change in taxpayer perception results in an increase of 0.367 on PAYE compliance, a unit change in tax knowledge results in an increase of 0.346 on PAYE compliance, and a unit change in compliance cost results in a decrease of -0.191 on PAYE compliance. This implied that tax knowledge has a positive and statistically significant relationship with PAYE tax compliance. It was also revealed that taxpayers' perception has a positive and statistically significant relationship with PAYE tax compliance. However, it was established that compliance cost has a negative and statistically significant relationship with PAYER tax compliance. This implied that when compliance cost increases, PAYE tax compliance decreases. This is so because the taxpayers will count the cost of compliance against the tax they are required to pay.

Table 4.17: coefficient table the psycho- Economic factors on PAYE compliance

Table 4.17: coefficient table the psycho- Economic factors on PAYE compliance

Variable	Standardized Coefficient β	Std. Error	t-Statistic		Prob.
(Constant)	1.544	0.319	4.840		0.000
Tax knowledge	0.332	0.067	4.955	0.346	0.000
Compliance Cost	-0.191	0.054	-3.537	-0.191	0.001
Taxpayers Perception	0.357	0.060	5.950	0.367	0.000

4.9 Hierarchical process

The hierarchical regression was used to determine the moderating effect of digitization of tax systems on the relationship between Tax knowledge, Compliance cost Taxpayer's perception and Pay as You Earn compliance.

Baron & Kenny (1986) states a procedural system with the following steps;

The first step is to demonstrate relationship between the independent variables (Tax knowledge, Compliance cost Taxpayer's perception.) and the dependent variable (and Pay As You Earn compliance) without considering the moderating variable (digitalization of tax systems).

Conduct a regression analysis to establish the direct effects

Test whether the moderator has a significant effect on dependent variable by conducting a regression analysis with digitalization of tax systems as one of the independent variables and Pay As You Earn compliance as the dependent variable.

Introduce the interaction terms between. These interactions terms are the product of the scores of t each independent variables and the moderator.

the interaction terms are examined to determine whether the effects on the dependent variable are significant through a hierarchical regression model. If the interaction terms are significant, it suggests that digitalization of tax systems moderates the relationship between (Tax knowledge, Compliance cost Taxpayer's perception.) and the dependent variable (Pay As You Earn compliance)

Figure 4.2 shows the hierarchical process of moderation.

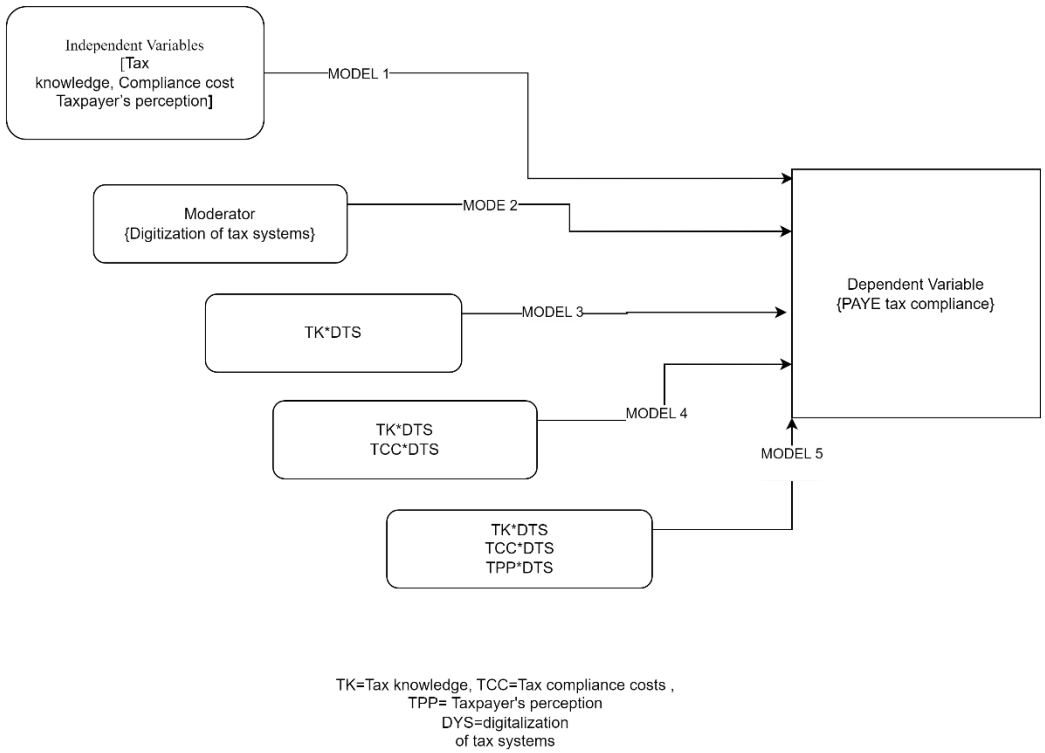

Figure 4.2 Hierarchical model Illustration

Source (Baron & Kenny 1986)

4.9.1 Model summary with moderation

The Model summary illustrating the hierarchical process was conducted through a regression model indicating the five models Table 4.18 shows that R (Correlation Coefficient): The R values range from 0.777 (Model 1) to 0.741 (Model 5). These values indicate the strength and direction of the linear relationship between the predictors and the dependent variable decreases are moderation occurs. This was due to the decrease in R square when the moderating variable was introduced in the model. A higher R value suggests a stronger correlation. R Square (Coefficient of Determination): R Square values range from 0.603 (Model 1) to 0.549 (Model 5). These values represent the proportion of variance in the dependent variable that is explained

by the independent variables. Model 1 explains 60.3% of the variance, while Model 5 explains 54.9%.

The models indicate decreasing R Square values as more predictors are added (Models 1 to 5). The r-square changes indicate p-values of 0.000<0.05 indicating a significant change in variation caused my moderating through digitization.

Table 4.18: Model Summary with moderator

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	Sig. F change
1	0.777	0.603	0.598	.77828		0.000
2	0.750	0.563	0.557	.75963	0.041	0.000
3	0.744	0.554	0.546	.75148	0.009	0.000
4	0.743	0.552	0.545	.75256	0.001	0.000
5	0.741	0.549	0.543	.75397	0.003	0.000

e. Predictors: (Constant), taxpayerperception, complianceCost, taxKnowledge, DigitizationofTaxsystems, tk_dts, tcc_dts, tpp_dts
(Source: Research 2024)

4.9.2 ANOVA with moderation

Table 4.19 indicate the hierarchical analysis of variance caused on PAYE tax compliance as moderation is introduced in the models, Model 1 has F statistic of 124.059 and P-value of 0,000, while model 5 show F statistic of 41.923 and P=value of 0.000 indicating a steady decline in the F statistic indicating the model is significant in explaining the variance

Table 4.19: ANOVA with moderator

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	225.437	3	75.146	124.059	0.000
	Residual	148.403	245	0.606		
	Total	373.839	248			
2	Regression	210.284	4	52.571	78.429	0.000
	Residual	163.555	244	0.670		
	Total	373.839	248			
3	Regression	206.933	5	41.387	60.255	0.000
	Residual	166.906	243	0.687		
	Total	373.839	248			
4	Regression	206.377	6	34.396	49.706	0.000
	Residual	167.462	242	0.692		
	Total	373.839	248			
5	Regression	205.268	7	29.324	41.923	0.000
	Residual	168.571	241	0.699		
	Total	373.839	248			

a. Dependent Variable: PAYEtaxCompliance

f. Predictors: (Constant), taxpayerperception, complianceCost, taxKnowledge, DigitizationofTaxsystems, tk_dts, tcc_dts, tpp_dts

(Source: Research 2024)

4.9.3 Standardized Coefficient analysis with moderator

The regression model equations for the final model after moderation is

Y= 0.680+0.543TK1 – 0.244CC2 + 0.245TPP3 + 0.377DIG4 + 0.529 TK*DIG5 + 0.079 CC*DIG 6+ 0.102 TPP*DIG7

Table 4.20 demonstrates that a unit change in tax knowledge results in a 0.543 increase in PAYE tax compliance at a constant of 0.680. PAYE tax compliance decreases by -0.244 for every unit change in compliance costs. PAYE tax compliance increases by 0.245 for every unit change in taxpayer perception. The moderator digitization of tax systems increases PAYE tax compliance by 0.377 units. The link between tax knowledge, compliance cost, taxpayer perception, and PAYE tax compliance was

shown to be significantly moderated by the study's findings as shown by the coefficients and P value of tax knowledge (β5 = 0.529 p=0.000<0.05), compliance cost (β6 = -0.079 p=0.004<0.05), and taxpayer perception (β7 = -0.102 p=0.000<0.05). This showed that when the moderating variable digitalization was added to the model, the sign of the coefficient remained the same and the p values showed a significant value. This implied that digitalization has a positive moderating effect on the relationship between.

Table 4.20: Overall Multiple Regression Table

Model	Variable	Standardized Coefficient	Std. Error	t-Statistic	Unstandardized Coefficient	Sig.
1	(Constant)	1.544	0.319	4.840		0.000
	Tax knowledge	0.332	0.067	4.955	0.346	0.000
	Compliance Cost	-0.191	0.054	-3.537	-0.191	0.001
	Taxpayers Perception	0.357	0.060	5.950	0.367	0.000
2	(Constant)	1.256	0.321	3.913		0.000
	Tax knowledge	0.271	0.068	3.985	0.283	0.000
	Compliance Cost	-0.165	0.053	-3.113	-0.165	0.000
	Taxpayers Perception	0.281	0.063	4.460	0.289	0.002
	Digitizations of tax systems	0.204	0.057	3.579	0.207	0.000
3	(Constant)	0.181	0.090	2.011		0.044
	Tax knowledge	0.571	0.141	4.050	0.595	0.000
	Compliance Cost	-0.156	0.053	-2.943	-0.157	0.003
	Taxpayers Perception	0.296	0.062	4.774	0.305	0.000
	Digitizations of tax systems	0.509	0.136	3.743	0.519	0.000
	tk*DTS	-0.565	0.036	-15.694	-0.090	0.013
4	(Constant)	0.613	0.147	4.170		0.000
	Tax knowledge	0.513	0.179	2.866	0.534	0.003
	Compliance Cost	-0.242	0.104	-2.327	-0.242	0.038
	Taxpayers Perception	0.294	0.063	4.667	0.303	0.000
	Digitizations of tax systems	0.397	0.108	3.676	0.404	0.000
	tk*DTS	-0.462	0.047	-9.830	-0.074	0.000
	tcc*DTS	0.077	0.032	2.406	0.023	0.009
5	(Constant)	0.680	0.274	2.482		0.009
	Tax knowledge	0.543	0.207	2.623	0.566	0.007
	Compliance Cost	-0.244	0.114	-2.140	-0.244	0.022
	Taxpayers Perception	0.245	0.119	2.059	0.252	0.035
	Digitizations of tax systems	0.377	0.158	2.386	0.384	0.017
	tk*DTS	0.529	0.059	8.966	0.084	0.000
	tcc*DTS	0.079	0.022	3.591	0.024	0.004
	tpp*DTS	0.102	0.024	4.250	0.016	0.000

(Source: Research 2024)

4.9.4 Mo Digraphs Analysis

Moderating effect of digitalization of tax systems on relationship between Tax knowledge and Pay as You Earn tax compliance.

The Mo Digraph figure 4.3 indicates that digitization positively moderates the relationship between Tax knowledge and PAYE tax compliance.

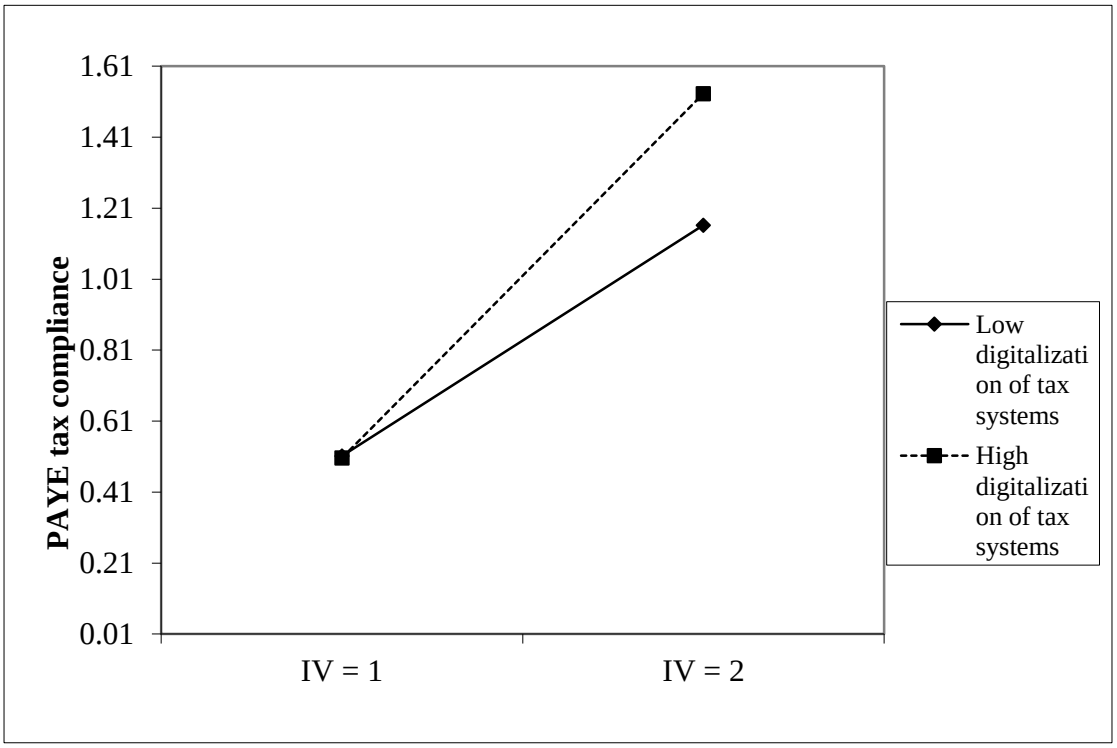

Figure 4.3: moderating effect of digitalization on the relationship between Tax knowledge and PAYE tax compliance

Moderating effect of digitalization of tax systems on relationship between Compliance cost and Pay as You Earn tax compliance.

Figure 4.4 indicates that High levels of digitation of systems improves the effects of compliance costs on PAYE tax compliance

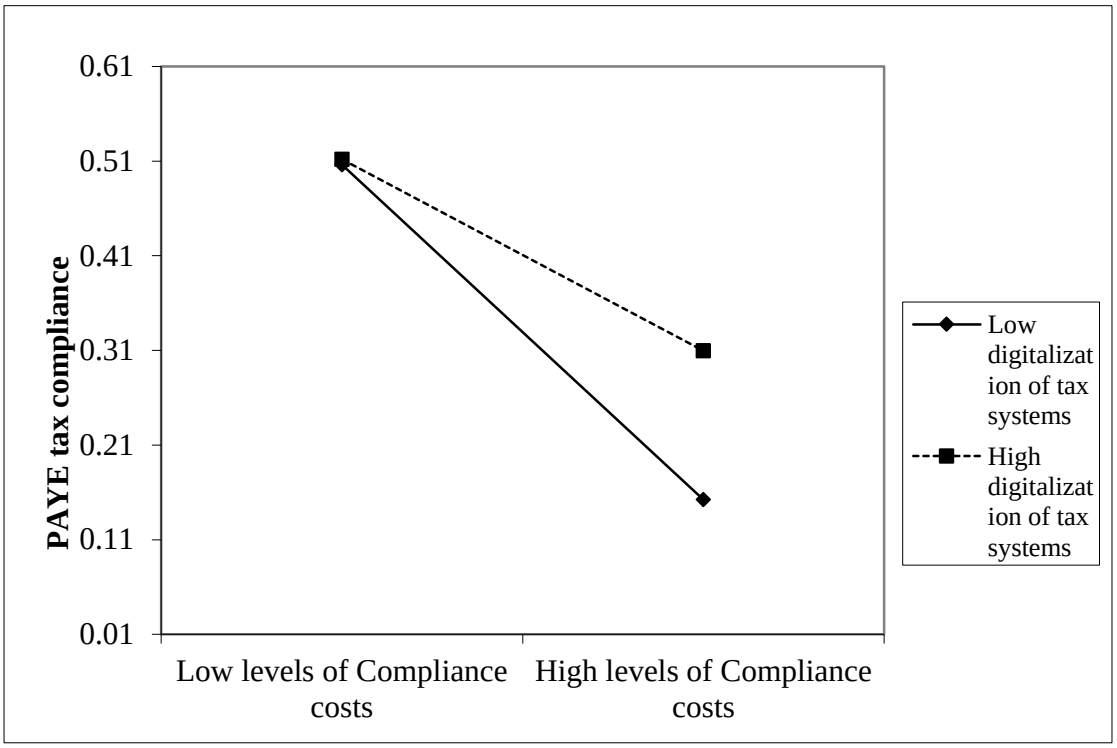

Figure 4.4: moderating effect of digitalization on the relationship between compliance costs and PAYE tax compliance

Moderating effect of digitalization of tax systems on relationship between Taxpayer's perception and Pay as You Earn tax compliance.

Figure 4.5 implies that digitization of tax systems improves the relationship between Taxpayers Perception and PAYE tax compliance

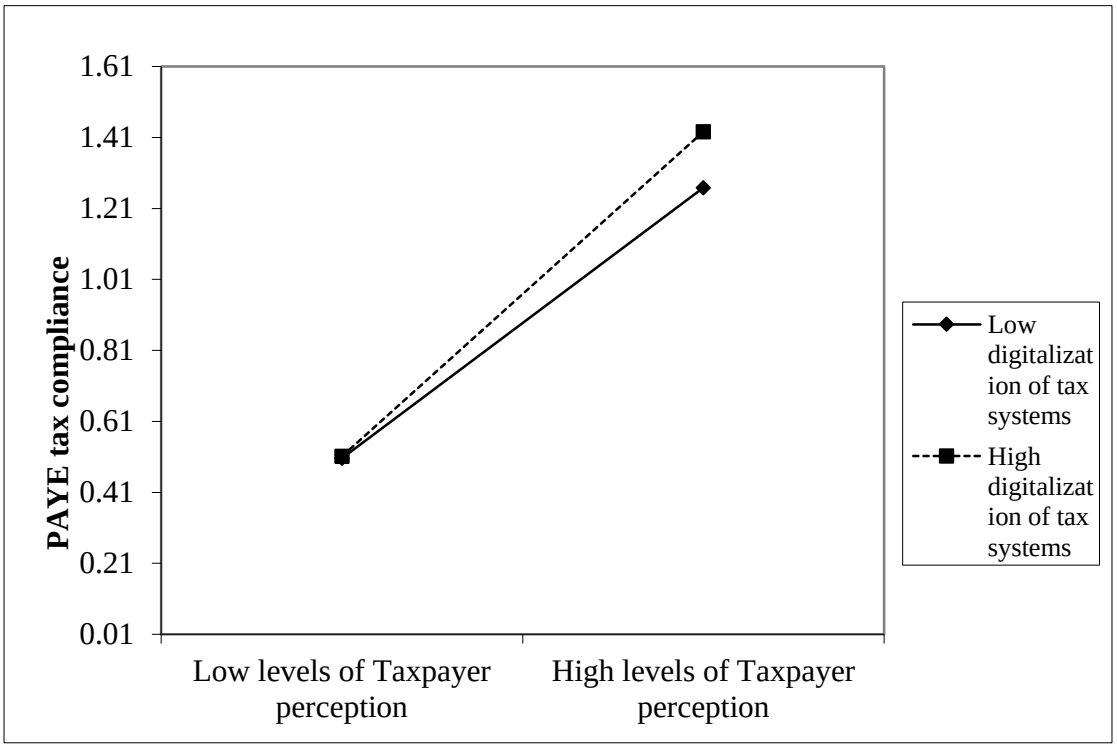

Figure 4.5: moderating effect of digitalization on the relationship between Taxpayers Perception and PAYE tax compliance

4.11 Hypotheses tests

Table 4.21 shows the hypotheses tests

The first null hypothesis was that Tax knowledge has no significant effect on PAYE tax compliance among small and medium enterprises in Thika town, the study found that Tax knowledge has a positive and significant effect on PAYE tax compliance ($p=0.007<0.05$) the null hypothesis is therefore rejected.

The second null hypothesis was that Tax compliance cost has no significant effect on PAYE tax compliance among small and medium enterprises in Thika town. The study found Tax compliance cost has a negative and significant effect on PAYE tax compliance ($p=0.022<0.05$) the null hypothesis is therefore rejected.

The third null hypothesis was that Taxpayer perception has no significant effect PAYE tax compliance among small and medium enterprises in Thika town. the study found that Taxpayer perception has a significant effect on PAYE tax compliance ($p=0.035<0.05$) the null hypothesis is therefore rejected.

The fourth null hypothesis was that there is no significant moderating effect of digitalization on the relationship between Tax knowledge tax Compliance Cost, Taxpayers Perception and PAYE tax compliance among small and medium enterprises in Thika town. The study found that there is a significant moderating effect of digitalization on the relationship between Tax knowledge tax Compliance Cost, Taxpayers Perception and PAYE tax compliance ($p=0.017<0.05$) the null hypothesis is therefore rejected.

More specifically H04a hypothesized that there is no significant moderating effect of digitalization on the relationship between Tax knowledge and PAYE tax compliance among small and medium enterprises in Thika town. The study found that digitalization significantly moderates the relationship between Tax knowledge and PAYE tax compliance ($p=0.000<0.05$) the null hypothesis is therefore rejected.

H04b hypothesized that There is no significant moderating effect of digitalization on the relationship between tax Compliance Cost and PAYE tax compliance among small and medium enterprises in Thika town. The study found that there is a significant moderating effect of digitalization on the relationship between tax Compliance Cost and PAYE tax compliance($p=0.004<0.05$) the null hypothesis is therefore rejected.

Lastly H04c stated that There is no significant moderating effect of digitalization on the relationship between Taxpayers Perception and PAYE tax compliance among small and medium enterprises in Thika town. The study found that there is a significant

moderating effect of digitalization on the relationship between Taxpayers Perception and PAYE tax compliance($p=0.000<0.05$) the null hypothesis is therefore rejected.

Table 4.21: Summary of Hypotheses testing

Hypothesis	P-value	Verdict
H_{01} Tax knowledge has no significant effect on PAYE tax compliance among small and medium enterprises in Thika town.	0.007	**Reject H_{01}**
H_{02} Tax compliance cost has no significant effect on PAYE tax compliance among small and medium enterprises in Thika town.	0.022	**Reject H_{02}**
H_{03} Taxpayer perception has no significant effect PAYE tax compliance among small and medium enterprises in Thika town.	0.035	**Reject H_{03}**
H_{04} There is no significant moderating effect of digitalization on the relationship between Tax knowledge tax Compliance Cost, Taxpayers Perception and PAYE tax compliance among small and medium enterprises in Thika town.	0.017	**Reject H_{04}**
H_{04a} There is no significant moderating effect of digitalization on the relationship between Tax knowledge and PAYE tax compliance among small and medium enterprises in Thika town.	0.000	**Reject H_{04a}**
H_{04b} There is no significant moderating effect of digitalization on the relationship between tax Compliance Cost and PAYE tax compliance among small and medium enterprises in Thika town.	0.004	**Reject H_{04b}**
H_{04c} There is no significant moderating effect of digitalization on the relationship between Taxpayers Perception and PAYE tax compliance among small and medium enterprises in Thika town.	0.000	**Reject H_{04c}**

(Source: Research 2024)

4.12 Discussion of Findings

This section involves review of the findings

4.12.1 Tax Knowledge and Pay As You Earn compliance

The first objective of study was to establish the effect of tax knowledge on Pay As You Earn compliance among small and medium enterprises in Thika town. The study found that there is a positive and significant relationship between tax knowledge and PAYE tax compliance r=0.713 ($p=0.000<0.05$), This finding suggests that as individuals' understanding of tax-related matters increases, their adherence to PAYE tax obligations also tends to improve. p-value, implies that the observed relationship is highly unlikely to be due to random chance.

The study further shows that there is a positive and significant effect of tax knowledge on PAYE tax compliance $\beta=0.543$ ($p=0.007<0.05$), This finding suggests that as individuals' understanding of tax-related matters increases, their adherence to PAYE tax obligations also tends to improve. These results emphasize the importance of tax knowledge in influencing and predicting PAYE tax compliance. It implies that efforts to enhance tax related awareness could potentially contribute to improved adherence to PAYE tax regulations. The outcome corroborates Agustiningsih & Isroah (2016) outcome that discovered a link between tax understanding and compliance. Therefore, increasing compliance could be the outcome of better understanding taxes. A survey on individual taxpayers at Jabodetabek & Bandung was carried out by Kamil in 2015 to investigate the effects of tax fines, taxpayer awareness, knowledge, and tax authority services on tax compliance. The study found that taxpayer awareness has a favorable and significant influence on individual taxpayer compliance.

4.12.2 Compliance Cost and Pay As You Earn compliance

The second specific objective was to determine the effect of compliance cost on Pay As You Earn compliance among small and medium enterprises in Thika town. The study found that there is a negative and significant relationship between tax compliance

cost and PAYE tax compliance r= - 0.606 (p=0.000<0.05), this suggests that when taxpayers face higher costs in complying with tax regulations, they may be less motivated or able to comply with PAYE tax obligations. This could be due to increased administrative burdens, complexity in tax regulations, or other factors associated with compliance costs. The standardized coefficient reiterated that tax compliance cost has a negative and significant effect on PAYE tax compliance β= - 0.242 (p=0.022<0.05), This suggests that higher tax compliance costs are associated with lower levels of PAYE tax compliance. This implies that if there's a desire to improve PAYE tax compliance, reducing the burden of compliance costs might be a consideration. The study supports the conclusions of Abdul and Wang'ombe (2018), who looked into how tax compliance costs affected the tax compliance procedures of Kenyan taxpayers with medium- and large-sized businesses. The study used structural equation modeling, or SEM, to identify the primary cost drivers while taking significant tax system elements and firm characteristics into consideration. SEM was first used to survey data. The findings show that when tax compliance expenses rise, Kenyan tax compliance dramatically decreases.

4.12.3 Taxpayer's Perception and Pay As You Earn compliance

The third specific objective was to establish the effect of taxpayer's perception on Pay As You Earn compliance among small and medium enterprises in Thika town. The correlation matrix indicates that there is a positive and significant relationship between taxpayers' perception and PAYE tax compliance r= 0.702 (p=0.000<0.05), this suggests that as taxpayers' perception of the compliance with PAYE taxes improves, It's crucial to note that correlation does not imply causation, consequently other factors could be influencing this relationship. The standardized coefficient reiterated that taxpayer's perception has a positive and significant effect on PAYE tax compliance β=

0.245 (p=0.035<0.05), these findings suggest that fostering a positive perception among taxpayers can enhance compliance with Pay-As-You-Earn (PAYE) taxes. The study concurs with Wanjohi (2018), who said that the perception problem results from several studies that focus on tax justice, inappropriate use of government money, and the deliberate intention to avoid paying taxes for the benefit of the general public rather than the interests of the individual. An individual's attitudes reveal their positive and negative perceptions of objects. People's attitudes are thought to influence their behavior. It follows that a taxpayer with a positive attitude on tax evasion is expected to be less compliant than one with a negative attitude.

4.12.4 Digitalization of Tax Systems Tax knowledge tax Compliance Cost, Taxpayers Perception and PAYE tax compliance

The fourth specific objective was to determine the moderating effect of digitalization of tax systems on relationship between Tax knowledge, Compliance cost Taxpayer's perception and Pay As You Earn compliance. The study found that there is a positive and significant relationship between digitization of tax systems and PAYE tax compliance r= 0.653 (p=0.000<0.05), signifies that as the digitization level of tax systems increases, there is a concurrent increase in PAYE tax compliance. In other words, organizations or individuals operating within a tax system that embraces digital technologies are more likely to adhere to their PAYE tax obligations.

In a quest to determine the moderating effect of digitization of tax systems on the relationship between Tax knowledge and PAYE tax compliance the study found that there is significant moderating effect of digitization of tax systems on the relationship between relationship between Tax knowledge and PAYE tax compliance β= 0.529 (p=0.000<0.05), it indicates that the effectiveness of traditional tax education and knowledge may be influenced by the extent to which tax systems are digitized. As tax

systems become more technologically advanced, individuals may rely more on automated processes or digital tools, potentially reducing the reliance on traditional tax knowledge for compliance.

The study further found that digitization of tax systems significantly moderates the relationship between tax compliance costs and PAYE tax compliance β= 0.079 ($p=0.004<0.05$), this implies that businesses and individuals may experience efficiency gains and cost reduction in meeting PAYE tax obligations when tax systems are technologically advanced.

This could have broader economic implications, potentially fostering a more conducive environment for business operations and reducing administrative burdens.

Finally, the study discovered that the relationship between tax payer perception and PAYE tax compliance is significantly moderated by the digitization of tax systems (β= 0.102; $p=0.000<0.05$). This suggests that the influence of taxpayer perceptions on PAYE tax compliance grows as tax systems become more digitally connected. This could be seen as a result of digitalization offering a tax system that is more open, effective, and user-friendly, which in turn influences taxpayers' desire to pay PAYE taxes. The analysis concurs that, while this trend was not consistent, the ratio of taxes and other revenues to GDP increased on average from the early to late 2000s, according to Mabugu's (2022) analysis of the dynamics of domestic revenue mobilization over four decades. Adegboye, Uwuigbe, Ojeka, and Uwuigbe (2022) carried out a similar analysis and discovered that industrialization and ICT are both sufficient and essential components for tax revenue mobilization below certain ICT thresholds. Moreover, the author found that in order to sustain the overall beneficial impact on tax revenue collection above these ICT limitations, additional measures are needed.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section breaks down a summary of the research findings, makes conclusions associated with the research objectives, and propositions recommendations. Furthermore, it summaries potential paths for future research.

5.2 Summary of findings

5.2.1 Tax Knowledge and Pay As You Earn compliance

The first objective of study was to establish the effect of tax knowledge on Pay As You Earn compliance among small and medium enterprises in Thika town. The results of the study indicate that tax knowledge and PAYE tax compliance have a favorable and significant association ($\beta 1 = 0.543$, $p<0.05$). This result implies that people tend to stick to PAYE tax requirements better as they become more knowledgeable about tax-related issues. The study also demonstrates that tax knowledge has a favorable and significant impact on PAYE tax compliance The significance of tax knowledge in affecting and forecasting PAYE tax compliance is highlighted by these findings. It implies that efforts to enhance tax related awareness could potentially contribute to improved adherence to PAYE tax regulations.

5.2.2 Compliance Cost and Pay As You Earn compliance

The second specific objective was to determine the effect of compliance cost on Pay As You Earn compliance among small and medium enterprises in Thika town. The study discovered a negative and substantial link between tax compliance costs and PAYE tax compliance ($\beta 2 = -0.244$, $p<0.05$), indicating that taxpayers may be less inclined or able to comply with PAYE tax obligations when they are faced with increased costs associated with complying with tax regulations. This may be the result

of complicated tax laws, more onerous administrative requirements, or other elements driving up compliance expenses. Reducing the burden of compliance costs may be taken into consideration if one want to increase PAYE tax compliance, as the coefficient study shown that tax compliance costs had a negative and considerable impact on PAYE tax compliance.

5.2.3 Taxpayer's Perception and Pay As You Earn compliance

The third specific objective was to establish the effect of taxpayer's perception on Pay As You Earn compliance. The results of the study indicate that there is a positive and significant relationship between taxpayers' perception and PAYE tax compliance ($\beta 3 = 0.244$, $p<0.05$), suggesting that when taxpayers' perceptions of their compliance with PAYE taxes improve, so too will the compliance with PAYE taxes. This suggests that cultivating positive taxpayer perceptions can lead to higher levels of PAYE tax compliance.

5.2.4 Digitalization of Tax Systems Tax knowledge tax Compliance Cost, Taxpayers Perception and PAYE tax compliance

The fourth specific objective was to determine the moderating effect of digitalization of tax systems on relationship between Tax knowledge, Compliance cost Taxpayer's perception and Pay As You Earn compliance. The study found that there is a positive and significant relationship between digitization of tax systems and PAYE tax compliance ($\beta 5 = 0.529$, $p<0.05$). ($\beta 6 = 0.079$, $p<0.05$) and ($\beta 7 = 0.102$, $p<0.05$) respectively which signifies that as the digitization level of tax systems increases, there is a concurrent increase in PAYE tax compliance.

The study found that there is significant moderating effect of digitization of tax systems on the relationship between relationship between Tax knowledge and PAYE tax which

indicates that the effectiveness of traditional tax education and knowledge may be influenced by the extent to which tax systems are digitized. As tax systems become more technologically advanced, individuals may rely more on automated processes or digital tools, potentially reducing the reliance on traditional tax knowledge for compliance.

The study further found that digitization of tax systems significantly moderates the relationship between tax compliance costs and PAYE tax compliance which implies that businesses and individuals may experience efficiency gains and cost reduction in meeting PAYE tax obligations when tax systems are technologically advanced. This could have broader economic implications, potentially fostering a more conducive environment for business operations and reducing administrative burdens.

Lastly the study found that digitization of tax systems significantly moderates the relationship between tax taxpayer's perception and PAYE tax compliance which indicates that as the digitization of tax systems increases, the influence of taxpayers' perceptions on PAYE tax compliance strengthens. This could be interpreted as digitization providing a more transparent, efficient, and user-friendly tax system, which in turn positively affects taxpayers' willingness to comply with PAYE taxes.

5.3 Conclusions

In conclusion, this study aimed to investigate various study was to determine the effect of psycho- Economic factors, Digitalization of tax systems and Pay As You Earn compliance among small and medium enterprises in Thika town. The findings provide valuable insights into the dynamics of tax compliance in the context of tax knowledge, compliance cost, and taxpayer perception, with a special focus on the moderating role of digitalization of tax systems.

The first objective was to establish the effect of tax knowledge on Pay As You Earn compliance revealed a positive and significant relationship between tax knowledge and PAYE tax compliance. The study emphasizes the crucial role of tax education and awareness in enhancing adherence to tax obligations. Efforts to improve tax-related knowledge could contribute to increased compliance with PAYE tax regulations. This revealed that when the taxpayers' knowledge about the tax, its regulations, policies and the benefits of tax compliance increases, the taxpayer will most likely comply. This is because the taxpayer can understand clearly the benefits of complying versus the consequences of not complying to the PAYE tax. The taxpayer will pay PAYE tax due to proper understanding.

The second objective was to determine the effect of compliance cost on Pay As You Earn compliance highlighted a negative and significant relationship between compliance cost and PAYE tax compliance. The study underscores the potential impact of reducing the burden of compliance costs on improving overall compliance. Streamlining administrative processes and simplifying tax regulations may encourage businesses and individuals to meet PAYE tax obligations more willingly. The PAYE taxpayer will comply more to the PAYE tax since the costs involved in complying to the tax are less than the tax being paid. However, if the costs of complying exceed the PAYE tax, the taxpayer will possibly decide to evade of avoid the tax. Further, financial constraints that may arise due to the cost of compliance may discourage a taxpayer form obliging.

The third objective was to establish the effect of taxpayer's perception on Pay As You Earn compliance demonstrated a positive and significant relationship between taxpayer perception and PAYE tax compliance. Fostering a positive perception among taxpayers was identified as a key factor in enhancing compliance with PAYE taxes. This suggests

that creating a transparent and supportive tax environment can positively influence taxpayers' willingness to comply. The PAYE taxpayer if they perceive the tax in a negative way, they will fail to comply, however a positive perception will lead to increased PAYE tax compliance. Moreover, if the taxpayer perceives that the benefits arising from the tax will be more than the tax, they will end up complying.

The fourth objective focused on the moderating effect of digitalization of tax systems on the relationships between tax knowledge, compliance cost, taxpayer perception, and PAYE tax compliance. The study found a positive and significant relationship between the digitization of tax systems and PAYE tax compliance. Furthermore, it identified significant moderating effects of digitization of tax systems on the relationships between tax knowledge, compliance cost, taxpayer perception, and PAYE tax compliance. This underscores the transformative impact of technological advancements in tax systems, suggesting that as tax systems become more digitized, traditional factors influencing compliance may be reshaped.

The study provides valuable insights for policymakers, tax authorities, and businesses in understanding the multifaceted dynamics of PAYE tax compliance. The findings underscore the importance of targeted interventions to enhance tax knowledge, reduce compliance costs, and foster positive taxpayer perceptions, all while leveraging the potential of digitalization to improve overall compliance and create a more conducive environment for businesses.

5.4 Recommendations

The recommendations for policy makers and academic institutions were as follows;

The study indicates that there is a positive impact of improving tax knowledge on PAYE tax compliance. The KRA should therefore work towards improving the taxpayers’

knowledge about PAYE tax, its benefits, regulations and policies as well as the consequences of failing to comply. This can be done through such programs as trainings, awareness campaigns and taxpayer education.

Since the study indicated negative of high tax compliance costs on PAYE tax compliance the KRA should explore ways to minimize these tax compliance costs by reviewing and optimizing administrative requirements, providing user-friendly platforms, and offering support services to assist businesses in meeting their obligations more efficiently. The use of technology in filling, registering as well as paying the PAYE tax can also be used to reduce the tax compliance costs hence the study suggests that the government should make technological systems that such taxpayers can use.

Taxpayer perception was found to enhance PAYE tax compliance; the Government of Kenya should improve perception of taxpayers by having advertisements encouraging taxpayers to remit taxes as a national duty. Proper education about PAYE ta should also be provided to the taxpayers in order to make them more aware of the benefits of PAYE tax and address any cultural or social effect on the taxpayers' perception. The government can also use community leaders or religious leaders to educate the taxpayers on the importance of complying to the PAYE tax.

5.5 Suggestions for Future research

The study suggested that future researchers might consider the use of other data collection methods such as interview guides and focus group discussions since this may provide more thorough information. Moreover, future studies may consider including social norms as a moderating variable in order to include the possible effect it might have on the relationship between psycho economic factors and Pay as You Earn tax compliance.

5.6 Limitations of Study

Unlike interviews or focus groups, questionnaires did not allow researchers to probe deeper or seek clarifications since follow-up questions were restricted. Secondly the Questionnaires may have failed capture the situational factors that influence tax compliance. The contributors may have provided socially desirable replies due to social norms or perceived outlooks. This partiality could have affected the precision of the data collected.

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APPENDICES

Appendix I: Questionnaire

The purpose of this survey is to investigate the effect of psycho- Economic factors, Digitalization of tax systems and Pay As You Earn compliance among small and medium enterprises in Thika town. The information obtained will only be used for academic purposes and shall be treated with utmost confidentiality. You are kindly requested to complete this questionnaire objectively.

Instructions

Please tick in the appropriate box and also fill in the blank spaces provided for those questions where elaborate answers are required.

SECTION A: BACKGROUND INFORMATION

(Tick where Appropriate)

1. How many employees do you have?

   a) 5-10 [ ]

   b) 11-15 [ ]

   c) 16-20 [ ]

   d) More than 20 [ ]

2. What is the average Pay to your Employees?

   a) Below 25,000 [ ]

   b) 25,000 -34,000 [ ]

   c) 34,001-44,000 [ ]

   d) Above 44,000 [ ]

3. What is your annual turnover?

a) Below 5 million [ ]

b) 5-10 million [ ]

c)10-15 million [ ]

d) 15-20million [ ]

e) over 20million. [ ]

SECTION B: TAX KNOWLEDGE

In this section, please tick one of the factors corresponding to your personal opinion for each statement.

	5 Strongly agree	4 Agree	3 Neutral	2 Disagree	1 Strongly disagree
The government provides adequate knowledge and support to help taxpayers comply with the tax laws.					
I have received sufficient tax knowledge on due dates					
I believe that increasing awareness would lead to better PAYE compliance and fewer errors.					
I'm aware of penalties of non-compliance					

SECTION C: TAX COMPLIANCE COST

Please tick appropriately as per your personal opinion

	5	4	3	2	1
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The cost of complying with the tax laws in my country is reasonable.					
I spend too much time and effort on tax compliance.					
The penalties and fines for noncompliance with the tax laws are too harsh.					
I believe that tax compliance is an important civic duty.					
I would be willing to pay more taxes if it meant a reduction in the tax compliance burden.					

SECTION D: TAX PAYER PERCEPTION

Please tick the numeric value corresponding to your personal opinion for each statement

	5	4	3	2	1
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The tax system in my country is fair.					
The tax authorities are transparent in their actions and decisions.					
I am satisfied with the way the government uses my tax contributions.					
The tax system in my country is too complex and difficult to understand.					
I feel confident in my ability to comply with the tax laws in my country.					

SECTION E: PAYE TAX COMPLIANCE

Please tick appropriately as per your personal opinion

	5	4	3	2	1
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
KRA provide guide lines on the process of filling returns.					
KRA has offered me enabling environment for tax filing which can enhance PAYE performance					
Taxpayers have less information on filling PAYE returns					
PAYE returns filling through iTax is complicated.					

SECTION F: DIGITALIZATION OF TAX SYSTEMS

Please tick appropriately as per your personal opinion

	5	4	3	2	1
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Online payment is easy and faster					
Online filling is easy and faster thus convenient					
Tax registration on iTax system is efficient					
Tax returns filing on iTax system has reduce corruption					

Appendix II: KESRA Letter

KENYA REVENUE AUTHORITY

ISO 9001:2015 CERTIFIED

PUBLIC

KENYA SCHOOL OF REVENUE ADMINISTRATION

REF: KESRA/NBI/036

26th February 2024

TO: WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: REQUEST FOR ASSISTANCE TO MILKA CHEBET BETT OF REGISTRATION NO.: KESRA105/0071/2021 UNDERTAKING MASTERS ATKESRA

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: "*Psycho-economic factors, digitalization of tax system and Pay as you earn tax compliance among small and medium enterprises in Thika town, Kenya.*"

The purpose of this letter is to request for your kind facilitation in enabling the student progress in her 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.

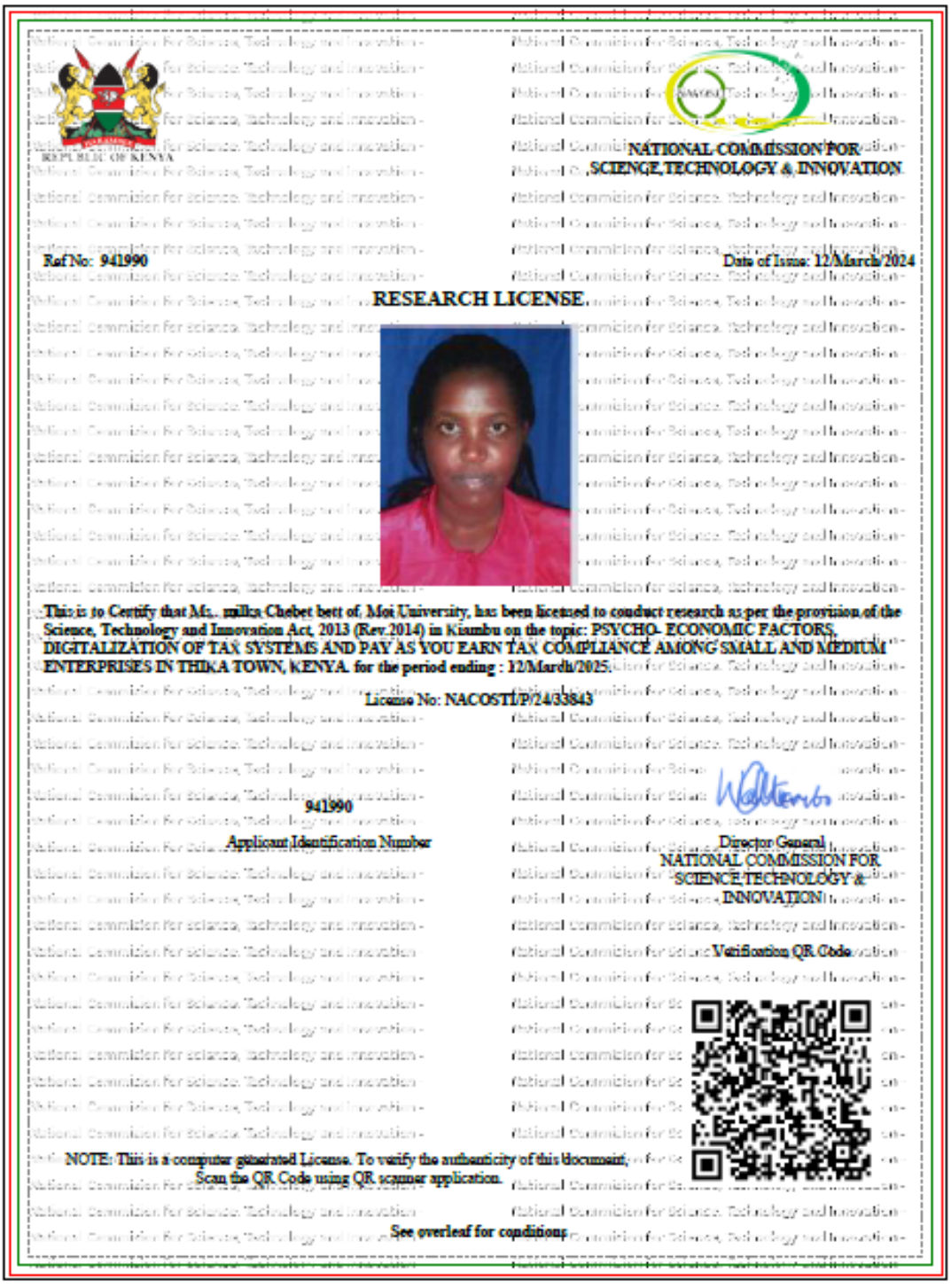
Thank you.

KENYA SCHOOL OF REVENUE ADMINISTRATION
DEAN OF STUDIES
28 FEB 2024
ACADEMIC AFFAIRS DIVISION

Damacrine Masira
Manager Academic Research,
KESRA

Tulipe Ushuru, Tujitegemee!

Appendix III: NACOSTI Research Permit



REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 941990

Date of Issue: 12/March/2024

RESEARCH LICENSE

This is to Certify that Ms.. milka Chebet bett of, Moi University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu on the topic: PSYCHO- ECONOMIC FACTORS, DIGITALIZATION OF TAX SYSTEMS AND PAY AS YOU EARN TAX COMPLIANCE AMONG SMALL AND MEDIUM ENTERPRISES IN THIKA TOWN, KENYA. for the period ending : 12/March/2025.

License No: NACOSTI/P/24/33843

941990

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

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See overleaf for conditions

Appendix IV: Plagiarism Awareness Certificate

SR630

ISO 9001:2019 Certified Institution

THESIS WRITING COURSE

PLAGIARISM AWARENESS CERTIFICATE

This certificate is awarded to

MILKA CHEBET BETT

KESRA105/0071/2021

In recognition for passing the University's plagiarism

Awareness test for Thesis **entitled: PSYCHO- ECONOMIC FACTORS, DIGITALIZATION AND PAY AS YOU EARN TAX COMPLIANCE AMONG SMALL AND MEDIUM ENTERPRISES IN THIKA TOWN, KENYA** similarity index of 2% and striving to maintain academic integrity.

Word count:20807

Awarded by

Prof. Anne Syomwene Kisilu
CERM-ESA Project Leader Date: 22/08//2024