

**DETERMINANTS OF DIGITAL SERVICE TAX AWARENESS AMONG
DIGITAL CORPORATIONS IN KENYA**

BY

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DECLARATION

Declaration by the Candidate

I declare that this project is my original work and has not been submitted in Moi University or any other institution for any academic awards; no part of this work may be produced, stored in a retrieval system or transmitted in any other form or by any means without prior permission of the author and or Moi University.

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DEDICATION

I would like to dedicate this work to the almighty God for making it possible even when I felt like my strength and faith had worn out. I would also like to dedicate this piece of work to my family, friends and class mates who have been there to give me moral and spiritual support and more so my mother for instilling the virtue of resilience even when circumstances proved to be weary.

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ABSTRACT

Global digital economy has presented a disruptive market economy where goods and services are traded online without the necessity to have a physical presence in the location where which sales are realized. This presents to many governments in the world the challenge of collecting the rightful amount of tax revenue from these digital economy platforms. Still, majority of these firms trading within the digital economy are not compliant. This study seeks to establish the determinants of digital service tax awareness among digital corporations in Kenya. The objectives of the study were to determine the tax knowledge, fairness of the tax and digitalization on digital service tax awareness among corporates in Kenya. The study was supported by three theories namely; The Ability to Pay Theory, The innovation diffusion theory, technology acceptance theory. The study adopted explanatory research design where the target population were all companies offering digital services in Kenya. The study adopts population census where a total of 130 corporates were subjected to the study. Primary data was used to collect the data using questionnaires. Regression and Correlation analysis was used to determine the significance and relationship of the variables. The data was analyzed using descriptive and inferential statistics. The study results showed that indeed; tax knowledge, fairness and digitalization enhances tax awareness on among corporates in Kenya. Regression analysis was conducted; the findings revealed that tax knowledge, fairness and digitalization correlate with tax awareness. The study findings indicated that tax knowledge had β_1 0.398 =p value of 0.001 which is less than 0.05. Fairness β_2 0.312 =p value of 0.004 which is less than 0.05. And digitalization β_3 0.456 =p value of 0.000 which is less than 0.05 significantly affect digital services among corporates in kenya. The study recommends that the management of Kenya Revenue Authority should put more emphasis on the digitalization of services to enhance tax awareness. Further research may be done by employing secondary data from tax authorities to model tax awareness.

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ABBREVIATIONS AND ACRONYMS

ATAF	–	Africa Tax Administration Forum
B2B	–	Business to Business
B2C	–	Business to Consumers
CAK	–	Communication Authority of Kenya
CIT	–	Corporate Income Tax
DST	–	Digital Service Tax
EDI	–	Electronic Data Interchange
GDP	–	Gross Domestic Product
IMF	–	International Monetary Fund
KNBS	–	Kenya National Bureau of Statistics
MSMEs	–	Micro Small and Medium Enterprises
NACOSTI	–	National Commission for Science, Technology, and Innovation
OECD	–	Organization for Economic Corporation and Development
PWC	–	Price Water Coopers
UNCTAD	–	United Nations Commission on Trade and Development
USA	–	United States of America
VAT	–	Value Added Tax

OPERATIONAL DEFINITION OF TERMS

Digital Economy – The advent of doing business using online digital platforms to buy goods and services from various businesses to business and from businesses to consumers using internet and gadgets as the transaction avenues (UNCTAD, 2020).

Digital Service Tax awareness – The ability to effectively identify, keep records, file taxes due and pay taxes due as realized on the digital platform according to laws and regulations governing the administration of digital market economy (OECD, 2020).

Tax Knowledge – The ability of taxpayers to be aware of the general, procedural, and legal requirements of the tax base to which they are obligated to pay to relevant tax authorities (Barefoot, 2018).

Fairness of the Tax – The judgment made about a specific tax base ability to take into consideration all factors prevailing in the market and ensure paying of the tax does not hamper business operations and growth. These include tax rates, tax regulations and tax procedures (Manchilot, 2018).

Digitalization - The environment where business transactions are primarily conducted online using various digital platforms existing in the digital marketplace including ecommerce platforms and digital payment (Switzer & Switzer, 2014).

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter covers the background of the study where it discusses the overview of the study context and the current situation of the study area. It is then followed by the postulation of the problem statement that necessitates the study. It goes down further to describe the objectives of the study. This is then followed by research questions, significance of the study, the scope of the study which gives the extent to which the study was carried out and concludes the chapter with the limitations of the study.

1.1 Background of the Study

Taxation is the main source of every government's revenue and as such the backbone of every country's development. Every now and again various government strive to increase their revenue collection to meet the ever-growing budgets. Kenya has not been left out in its efforts to increase its revenue collection. For all governments, the administration of tax is a priority. Paying tax is one of the most universal, frequent, and potentially contentious interactions that citizens have with their government. It can affect, and be affected by, an individual's broader perception of government (PWC & World Bank, 2020). Taxes account for a significant part of government revenue. According to one estimate, total tax revenues make up to 80 percent of total government revenue in nearly every second country in the world, and more than 50 percent in almost every country (Ortiz-Ospina & Roser, 2019). Due to the importance of taxation on the economy, Kenya has made various attempts to widen its tax base to ensure that it collects sufficiently to meet its budget needs. In the recent years, Kenya Revenue Authority has not been able to meet its annual set targets. When compared to other developed economies, it can be found that developing economies perform

dismally in relation to their GDPs. For instance, as recent research suggests, the average total tax and contribution rate that is to say all taxes borne by private companies expressed as a percentage of commercial profit, is around 13 percentage points higher for low-income economies than for high and middle-income ones (PwC & World Bank, 2018).

1.1.1 Digital Economy

The world economy is transforming due to the rapid revolution and going use of information and communication technologies. Although the pace of digital transformation varies, all countries are being affected. This has significant implications on the implementation of the 2030 Agenda on Sustainable Development, presenting major opportunities and challenges for developing countries (UNCTAD, 2020). Digital economy has evolved from the first time it was coined in the mid-1990s. The definition itself has evolved reflecting the rapidly changing nature of technology and its use by enterprises and consumers (Barefoot et al., 2018). In the late 1990s, analyses were mainly concerned with the adoption of internet and early thinking about its economic impacts. The internet economy was referenced by Brynjolfsson and Kahin (2012) and Tapscot (1996). As internet use expanded, reports from the mid-2000s onwards focused increasingly on the conditions under which the internet economy might emerge and grow.

According to the report on Digital Economy by UNCTAD (2019), a major feature of the evolving digital economy is the rise of a few, very large global digital platforms, mainly from the United States but also from China. Seven of the world's top eight companies by market capitalization have data-centric business models (PwC, 2018). While the highest ranked enterprises today have begun as software companies (Apple

and Microsoft), or as internet companies (Alibaba, Amazon, Facebook, Google and Tencent), they now focus heavily on data and digital intelligence. The platform-based economy is growing fast. Globally, digital economy is estimated to be worth US\$ 11.5 trillion representing a 15.5% of the global GDP. (Oxford Economics, 2016 & UNCTAD, 2019). A study of the leading digital of the leading digital platform companies has estimated their combined market value at US\$7.2 billion in 2017 (Dutch Transformation Forum, 2018); this was 67% higher than an estimate of US\$4.3 billion in 2015 (Evans & Gawer, 2016). Seven “super platforms” – Microsoft, followed by Apple, Amazon, Google, Facebook, Tencent and Alibaba – accounted for two thirds of the total value in 2017. In 2018 and 2019, Apple, Amazon, and Microsoft each exceeded a US\$1 trillion market valuation. This points to high geographical concentration of the digital platform economy.

The United States accounts for 72% of the total market capitalization of digital platforms valued at more than US\$1 billion, followed by Asia with 25%, whereas EU’s share is only 2% (Dutch Transformation Forum, 2018). There is less concentration in terms of number of platforms: 46% are based in the United States, 35% based in Asia, 18% based in EU and 1% in Africa and Latin America. A case in point, according to UNCTAD (2019), internet advertising accounts for a rising share of global advertising revenue. It surged from 15% in 2010 to 38% in 2017 to reach about US\$200 billion. As a result, online advertising overtook television as the largest advertising medium. This trend seems set to continue, it is expected that digital advertising will account for 60% of all media advertising spending by the year 2023 (eMarketer, 2019). Digital advertising has also become more concentrated. Google and Facebook, together earned US\$135 billion in internet advertising revenue in 2017, corresponding to 65% of the global total. From the foregoing statistics and data

to the literature on digital economy, it is important for countries to tap into the volumes of trade and use the platforms to address some of their development challenges.

1.1.2 Global Digital Service Tax (DST)

A critical way for most countries to capture value in the digital economy is through taxation. Many countries have come up with different tax bases and names to describe the taxes levied to goods and services traded at the digital economy platforms (Oxford, 2016). According to OECD (2013), proposed measures that seek to directly tax businesses earning income from certain digital services, such as online advertising and intermediary services. This gave rise to the digital service tax (DST) which further seek to tax income earned by digital service providers by reference to fees paid either directly or indirectly based on the number of users, views (advertising services), or transactions (intermediary services) in the jurisdiction.

In France, the Digital Service Tax (DST), became law on the 24th of July 2019 and was applicable from January 2019. The tax will apply to companies with the global digital turnover of more than euro 750 million and digital turnover of more than 25 million in France. It covers targeted online advertising, the management and sale of user data for advertising purposes and connecting users through digital platforms. It is applied at the rate of 3% on gross revenues generated by those digital activities where French users play a major role in value creation. It is of importance however to note that the introduction of DST tax in France sparked a lot of tension with the USA. If an agreement could be reached within the OECD level, the current DST in France would be replaced (European Union, 2020).

In Africa, about 5 countries have in one way or the other legislated laws or are in the process of legislating laws to govern the taxation of the digital economy. According to Deloitte (2020), Nigeria had intended to levy 30% taxable income where a foreign company transmits, emits or receives signals, sounds, messages, images, or data of any kind by cable, radio, electromagnetic systems or any other electronic or wireless apparatus to Nigeria in respect of any activity, including electronic commerce, application store, high frequency trading, electronic data storage, online adverts, participative network platform, online payments and so on, to the extent that the company has significant economic presence in Nigeria and profit can be attributable to such activity. Tunisia levies 3% on gross income from sale of computer applications and digital services as of 1st January 2020 performed via the internet companies' non-resident, non-established excluding taxes realized by persons and companies' resident in Tunisia. The tax is payable on quarterly basis.

1.1.2.1 Digital Service Tax in Kenya

As noted by Saint-Amans (2017), digital economy is a transformative process, brought about by advances in information and communication technology which has made technology cheaper and more powerful, changing businesses processes and bolstering innovation across all sectors of the economy, including traditional industries. Today, sectors as diverse as retail, media, manufacturing, and agriculture are impacted in some way by the rapid spread of digitalization. For instance, in the broadcasting and media industry, the expanding role of data through user-generated content and social networking have enabled online advertising to surpass television as the largest advertising medium (Saint-Amans, 2017). Corporates registered in other markets and Kenya have utilized the exponential growth information and communication technology in Kenya to sell their services. The services are aimed at

all kinds of traders whether small and medium to large corporations that sell their services and goods through online platforms. This has brought about the fact that many businesses generate revenue from the digital economy where this revenue often go untaxed. This hinders the government's goal of economic growth and development.

The Finance Act 2020 introduced a digital service tax (DST) on income from services provided through the digital marketplace in Kenya to tap into the growing digital economy and help improve the performance of revenue. According to the Finance Act 2020, DST is applied at 1.5 percent on the gross transaction value, exclusive of VAT, and it has been effective from 1 January 2021. One is subject to DST if one provides or facilitates provision of a service to a user who is located in Kenya (Grant Thornton, 10th November 2020). The DST applies to the income of a resident or non-resident person derived or accrued in Kenya from the provision of services through a digital marketplace (KMPG, 2020). The digital services that are subject to DST are wide-ranging and include: online streaming of digital content such as movies, music, online games and e-books; provision of a digital marketplace that link buyers and sellers; subscription-based media including news, magazines and journals; electronic data management including website hosting, file-sharing and cloud storage services; tickets for live events, restaurants etc. purchased through the internet as well as e-learning and online courses (PWC, 2019).

The DST will however not apply to licensed financial services providers who carry out online services which facilitate payments, lending or trading of financial instruments, commodities, or foreign exchange (KMPG, 2020). This effectively exempts banks, licensed Saccos, micro-finance institutions among others from DST.

The DST will be due at the time of transfer of the payment for the service to the service provider. According to Kenya Revenue Authority (2021), the revenue authority will appoint digital service tax agents who will collect and remit the digital service tax to the revenue authority by the 20th of the following month from when the digital service was offered, which is similar to the current VAT collection system (Thornton, 2020). Foreign companies who do not have a physical presence and addresses in Kenya will be required to appoint a local tax representative who will be required to remit the DST on their behalf. For resident companies and companies with a permanent establishment, the DST will be an advance tax that they will offset against income taxes due in the course of the financial year (KRA, 2020).

According to a study conducted by Twum (2020) on tax knowledge and tax awareness among small and medium enterprises in Ghana. The study found that knowledge of tax rights and responsibilities, knowledge of employment income and awareness of sanctions were found to have positive and significant relationship with tax awareness. However, knowledge of tax rights and responsibilities and awareness of sanctions were strongest determinants of tax awareness. Sahari *et al.* (2021) conducted a study on whether tax knowledge motivate compliance in Malaysia. The study revealed there is a negative and insignificant relationship between tax knowledge and tax awareness. Due to the fact that some studies show positive and significant relationship while others show negative and insignificant relationship, the proposed study would further investigate the relationship between tax knowledge and tax awareness among the digital economy players. Hence the choice of the variable tax knowledge in the study.

Saad (2012) conducted a comparative study on perceptions of tax fairness and tax awareness behaviour between New Zealand and Malaysia and among individual taxpayers. The result of the study shows that Malaysian taxpayers have significantly better perceptions of fairness of their income tax systems than New Zealand counterparts. Machali and Graha (2018) conducted a study on the effect of tax fairness on tax awareness with trust as an intervening variable. The study findings revealed that tax fairness has a significant positive effect on tax awareness, and tax fairness has positive effect on trust. Even there is some level of relationship between fairness of the tax and tax awareness; the context under which compliance is achieved differs. Therefore, it is important for this study to evaluate whether fairness of the tax has effect on compliance with the digital economy and in the Kenyan context and hence the choice of the variable.

Wahab and Bakar (2021) conducted a study on digital economy tax awareness model in Malaysia using machine learning approach. The study findings revealed that digitalization among ecommerce traders, it influences digital tax awareness however under different experiments. The experimental results show that ensemble method can improve the single classification accuracy of 87.94% whereby knowledge analysis phase learns meaningful features that could classify contexts of taxpayers that could potentially influence the degree of tax awareness in the digital economy. The study further shows that using digitalization could influence taxpayers' compliance because the traders' transactions could be easily traced and hence put to account. This inform the use of this variable in study since digital economy is a fairly new and competing business model, focusing onto the manner in which these businesses are run could enhance revenue collection.

1.2 Statement of the Problem

In recent years revenue collection underwent a major transformation due to widespread transition to digital services. Taxation is an important source of revenue and a tool for fiscal and macro-economic development for all developed and developing countries (Eugene & Chineze, 2015). According to the World Bank (2020) report, the digital economy has created multinational corporations which earn huge sums of income and mostly go untaxed. As a result, countries around the globe, are either discussing, legislating and or imposing the digital service tax unilaterally on services that are offered online through global digital market platforms (OECD, 2020).

Kenya revenue authority has experienced mixed fortunes over the past years in so far as digital service tax awareness targets are concerned, For instance, in the financial year 2019/2020 the tax collections were Ksh. 152.199 million against a target of Ksh. 167,504 million, falling short of the target by Ksh .15,305 million. This has raised a concern as the Government seeks to achieve its targets and hence the need for this study. Despite a number of restructuring exercises, the Kenya Revenue Authority (KRA) has undertaken towards improving its digital service tax awareness in recent years, it has failed to meet the targets set by the treasury.

This problem affects many governments around the world who suffer budget deficits and skyrocketing expenditure that has made the government over agitating for a share of the multinational tech companies exploits on the digital space (OECD, 2020). Not much is known regarding the digital services tax awareness in Kenya but The study by Simiyu in 2017, sought to establish determinants of digital tax education of some SMEs. Mutinda (2011) undertook an assessment of the effect of digital tax awareness

on tax collection by the Kenya Revenue Authority. However, none of these studies has explicitly evaluated and quantified the net to investigate the effect of tax knowledge, fairness of the tax and digitalization on digital service tax awareness among corporates in Kenya. This study seeks to address this gap by investigating the determinants of digital service tax awareness among corporates in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective of the Study

The general objective of the study is to investigate the determinants of digital service tax awareness among corporates in Kenya.

1.3.2 Specific Objectives of the Study

- i. To determine the effect of tax knowledge on digital service tax awareness among corporates in Kenya.
- ii. To investigate the effect of fairness of the tax on digital service tax awareness among corporates in Kenya.
- iii. To establish the effect of digitalization on digital service tax awareness among corporates in Kenya.

1.4 Research Hypothesis

H₀₁: Tax knowledge does not significantly affect digital service tax awareness among digital corporations in Kenya

H₀₂: Fairness of the tax does not significantly affect digital service tax awareness among digital corporations in Kenya

H₀₃: Digitalization does not significantly affect digital service tax awareness among digital corporations in Kenya

1.5 Significance of the Study

There is considerable significance of the study to various sectors of involved in the global and local digital economy. Some of the importance to these various sector players are discussed below: The study will attempt to investigate the determinants of digital service tax awareness among corporates in Kenya. The findings of this study may be useful to the government and its relevant agencies to evaluate the existing policies and regulations used to imposition digital service tax within the local digital economy. The findings of the study may also be used by the government policy makers to better understand the emerging economic sector of digital economy and ensure that the policies formulated facilitates the government through its tax agency to tap into the huge global economy and reap its benefits.

To the Kenya Revenue Authority, the study findings may be used to improve on tax knowledge among the corporates that have presence in Kenya. The benefits of having both the general knowledge, procedural knowledge and the legal knowledge may contribute towards lesser disputes on the administration of digital service tax. Further this knowledge may be used to improve revenue performance as intended taxpayers will have informed thoughts and decisions on DST and the justification for payment.

The study also aims at investigating the extent to which permanent establishment determines tax awareness among the corporates in Kenya. The findings of the study may be useful to the Kenya Revenue Authority so as to determine how to appropriate tax corporates in the digital economy as the presence of these corporates would be ascertain for ease of digital service tax valuation and computation. The findings may also be useful to the corporates in Kenya so as to accurately evaluate their digital tax burdens in relation to the DST procedures in Kenya.

To the academic fraternity, the study findings will firstly contribute to academic body of knowledge where other scholars may investigate similar or different variables aided by the findings of this study. Since, digital service tax is very new many developed and developing economies, the findings of the study will provide better insights into the determinants of digital service tax awareness for improved revenue generation by various governments. There is a need to enhance knowledge and understanding among researchers and other scholars so that they can contribute to the immense challenges currently experienced in the taxation of global digital economy. This would be of critical importance to developing countries, including Kenya, since majority struggle with revenue generation.

1.6 The Scope of the Study

The study was to investigate determinants of digital service tax awareness among corporates in Kenya. The specific interest is on tax knowledge, Fairness of the tax and digitalization. The geographical scope is Kenya, because the digitally present companies do not have geographical boundaries that would segment them according to geographical segmentations in Kenya. The study focused on financial years 2019/2020 and the study targeted 130 business corporations (companies) that conduct their business using online/digital platforms.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers the introduction to literature review, the concept of the study by briefly discussing the dependent variable and the three independent variables in the study. The chapter then postulates the theories in which the study is anchored. Empirical review of literature follows where each variable is critiqued as well. The chapter goes on to identify the gaps in the study, summarizes the entire literature review and then concludes with conceptual framework.

2.2 Concept of the Study

The study aims at establishing determinants of digital service tax awareness among corporates in Kenya. The study will further attempt to evaluate whether tax knowledge determines digital service tax awareness, whether fairness of the tax determines digital service tax awareness and whether digitalization determines digital service tax awareness among corporates in Kenya. The study generally assumes that tax knowledge, fairness of the tax and digitalization do determine digital service tax awareness in Kenya.

2.2.1 Digital service tax awareness

Digital service tax is a tax levied on digital service providers irrespective of them having permanent establishment and physical presence in the countries in which the services were provided (OECD, 2020). There are few countries in the world that have come up with the modalities to tax the digital economy. However, there is no universally accepted policy on taxing the digital economy and therefore each country is at liberty to tax the digital services providers for the sales realized within their tax jurisdiction (Saint-Amans, 2017). The non-existence of global framework to tax

digital economy makes the taxation itself contested an issue and mostly likely to perform dismally due to compliance issues. Kenya through the Finance Act 2020; chose to tax digital economy by levying 1.5% on sales from the service providers. The imposition of this new tax base took effect on the first of January 2021. There are a number of issues that would determine compliance and ensure that the DST tax base contributes to revenue generation. Some of the assumed determinants in the study include tax knowledge, fairness of the digital service tax and digitalization where corporates would make sales but are having no physical presence in Kenya.

2.2.2 Tax Knowledge

Tax knowledge is the ability of the taxpayer to comprehend the general knowledge, procedural knowledge and the legal knowledge on laws and regulations of tax. When this knowledge is inadequate, taxpayers tend to fail to comply voluntarily or involuntarily with tax regulations and laws hence generally affects tax awareness environment. Barefoot (2018) concurs and states that digital economy presents an enormous challenge to both governments and tax authorities, because the environment of the digital economy keeps on shifting. The tax knowledge on how best to comply with requirement of digital service tax among the taxpayers present a challenge on one hand while on the other, tax revenue authority has to contend with the fact that majority of the target taxpayers have the ability to shift profits business to location which currently do not administer digital service. It would be critical however to investigate these determinants among taxpayers and whether lack of knowledge thereof determines compliance.

2.2.3 Fairness of the Tax

Fairness of a tax system is about a concept which is related to having equitable tax system. According to Manchilot (2018), fairness of the tax means that the principle is

based on the fact that taxes should be fair and should be based on different people's ability to pay, which is normally related to their income. Tax fairness and tax awareness are directly related since the compliance behaviour of taxpayers will decline if they perceive that tax rates are high in particular jurisdiction as opposed to others with probably similar economic conditions. Accordingly, tax systems should be fair and where its perceived otherwise it will negative impact on compliance. The fairness cuts across systems, tools and even to laws and regulations that govern different tax bases (Helhel & Ahmed, 2021). The study assumes that there is a relationship between fairness of the tax and compliance among the digitally present corporates in Kenya.

2.2.4 Digitalization

According to UNCTAD (2015), digitalization is the aspect of doing business and business transaction on-net without any requirement for physical or permanent establishment in the country, region, or location where the business takes place. Lack of physical presence or permanent establishment of a corporate entity present tax administration challenges to various tax authorities around the world (European Union, 2020). Switzer and Switzer (2014), notes moreover the experienced challenges, internet gives taxpayers access to new income streams through virtual transactions. These transactions even though virtual, do take place in the digital economy and still have taxation consequences. Due to the non-permanent establishment nature of these virtual business and buyers, it's challenging to exert force to collect the requisite taxes (Haltiwanger & Jarmin, 2002). Therefore, the study assumes still that digitalization determines compliance among corporates in the economy and especially among developing economies.

2.3 Theoretical Framework

This section gives a detailed discussion of the theories that guided this research study which include, The Ability to Pay Theory, The innovation diffusion theory, technology acceptance theory

2.3.1 The Ability to Pay Theory

The ability to pay theory was first postulated by Adams Smith in 1776. The ability-to-pay theory of posits that taxes should be levied according to a taxpayer's ability to pay. Smith (1776), wrote that the subjects of every state ought to contribute towards the support of the government, as near as possible, in proportion to their respective abilities; that is in proportion to the revenue which they respectively enjoy under the protection of the state. Ability-to-pay theory of taxation argues that those who earn higher incomes should pay greater percentage of those incomes in taxes as compared to those who earn less (Britannica, 2021). This theory further stresses according (Kagan, 2020) that everyone should make an equal sacrifice in paying taxes, and because people with more money have less use for a given amount, paying more of them in taxes does not impose a greater burden.

The ability-to-pay theory also is commonly interpreted to mean as requirement that direct personal taxes have a progressive rate structure, although there is no way of demonstrating any particular degree of progressivity is the right one. This is because considerable part of the population does not pay certain direct taxes such as income and thus some tax theorists believe that a satisfactory redistribution can only be achieved when such taxes are supplemented by direct transfers or refundable credits (Blum & Kalven, 1952). Other scholars however argue that income transfers and negative income tax create negative incentives; instead, they favor public expenditure

targeted toward low-income families as better means of reaching distributional objectives (Neumark et al, 2020).

Utz (2002), while writing on the ability-to-pay theory indicated that indirect taxes such as value added tax (VAT), excise duty, sales tax including in this case digital service tax, or turnover taxes can be adapted to the ability to pay criterion, but only to a limited extent, for example by exempting necessities such as food or by differentiating tax rates according to the urgency of need. Neumark, (2018), however disagrees that such policies are generally not very effective, moreover, they distort consumer purchasing patterns and their complexity often makes them difficult to institute. Other scholars (Due *et al*, 2018), held that throughout the 20th century, the distribution of the tax burden among individuals should reduce the income disparities that naturally result from market economy. However, Mill (1989) and other classical economists were of the opinion that if taxes are levied in proportion to the incomes of the individuals, it will extract equal sacrifice. Yet, the modern economists assert that when income increases, the marginal utility of income decreases. The equality of sacrifice can only be achieved if the persons with high incomes are taxed at higher rates and those with low income at lower rates.

The ability to pay theory based on the foregoing discussions for and against by the theory, is relevant and support the study dependent variable. Since majority of corporates with digital platform trade in volumes and make substantial amount of incomes and profits (IMF, 2017), they have the ability to pay and therefore should pay their fair share of the tax deemed. Apart from the trade volumes realized by these digital economy corporates, they have the capacity to employ sufficient staff to particularly look into the issues of taxation within their businesses locations and different branches. This in other words means that they should be duly compliant

since they have the ability to put systems in place to facilitate and enhance their compliance. Kagan (2020), states that since these companies have financial ability, they should make every effort to comply as any cost of compliance will not have much impact on their incomes and lifestyles.

To the independent variables, the ability to pay theory still is relevant and supports the study. In relation to tax knowledge, still these corporations have the capacity either understand among their own internal staff through training on DST requirements and hence comply. in a situation where these corporates cannot build internal capacity, they have the resources required to hire external tax experts to ensure that they comply with all the regulations and requirement in particular to digital service tax which presents a global challenge. On to fairness of the tax and the theory, digital service tax is charged currently at the rate of 1.5%, which when compared to other countries which have implemented DST such as South Africa, Uganda, Tanzania, France, India among others is comparatively lower (PwC, 2020) and therefore these entities have the ability to pay.

2.3.2 Innovation Diffusion Theory

The innovation diffusion theory is traced back to Rogers and looks at how and the rate at which innovation is being dispersed. There exist four components that determine the dissemination of a new idea; the innovation or the new idea, communication channels, time to allow for adoption and lastly the social system. These go through a process of diffusion consisting five stages namely; knowledge, persuasion, decision, implementation and confirmation. The result is six categories of users namely; innovators, early adopters, early majority, late majority, laggards and the leap forgers which normally take up a sigmoid shape ((Robertson, 1967).

The innovators are those who risk exploration of new ideas and technologies and account for approximately 2.5% of the market share. For early adopters, they are those opinion leaders who give referrals and share positive testimonials about the innovations. They do not require much persuasion as they are already open minded and may actually be interested in some change. They account to for roughly 13.5%. On the other hand, the early majority are those willing to adopt new technologies of convinced by positive reviews from earlier adopters forming 34% of the market share. The late majority are the skeptics and are reluctant for any changes unless they feel strongly left behind. Lastly, the laggards always stick to the old proven ways of doing things ad account for 16% of the market share. They trust their past experiences and only adopt new products when the adoption is available (Hanlon, 2013).

According to Schumpeter (1976), the innovation diffusion theory is a form of creative destruction arguing that it was creating a new one and destroying the old one. Initially, the innovation diffusion theory was utilized to research on marketing and consumer behaviour but since the proposal of Bass Diffusion Model which showed the interaction between innovators and the imitators its being applied widely from retail services, technology to even agriculture and education among others (Li & Sui, 2011) This theory was relevant to this study as it shows the importance of innovation or the new idea corporates and in business.

2.3.3 Technological theory

Technology diffusion theory was first advanced by David in 1986. This model is important in explaining and determining technological behavior (Chem, *et al.*, 2011). The acceptance and rejection of technology can be used by this approach. The model implies that once a customer is given is exposed to alternative innovations, some components affect their choices on the time and means of utilization. This constitutes

its apparently seen helpfulness and convenient. This was produced from the contemplated hypothesis activity by social clinicals. In Davis' research, two fundamental parts are recognized: seen helpfulness and convenience (Davis, Foxall & Pallister, 2002).

Technology theory has been largely adopted due to its ability to predict usage of technology by individuals (Fishbein & Ajzen, 2010). Davis (1989) argues that the perceived ease of use affects the intention for adoption and perceived usefulness. Technology theory has however been linked with haddocks despite being a resourceful in the study of adoption and use of technology such as failing to consider the organization's setting, generality and parsimony during the initial stages of designing the model and disregarding the factors moderating ICT adoption (Sun & Zhang, 2006). This theory has influences explorations on technology acceptance. In this research, technology theory is applied to explore the manner in which persons have how individuals have been slowly embracing the use of mobile banking in order to save time and cut costs thus better business performance. In this survey, technology theory is utilized to ascertain the usage of technology enhances digitalization service tax awareness in Kenya and how technology use influences the adoption of digital platform by Kenya Revenue Authority.

2.4 Empirical Review

This section reviews studies that have been undertaken by various scholars on the same subject area. These are past and present studies which are relevant to the study variables. These studies will be discussed and critically analyzed to find out the gaps on contextual approaches, the methodological that would still be filled by this research.

2.4.1 Tax Knowledge and Digital service tax awareness

Tax knowledge has been promoted as a factor that determines tax awareness. According to several studies (Mohdali & Pope, 2012; Wahl *et al.*, 2010; Fauvelle-Aymar, 1999; Kirchler, 2010; Feld & Frey, 2007) seeking to understand factors such as tax knowledge, trust in authority, ethics, education, and social norms and their relevance in explaining tax awareness. Musimenta (2020), conducted a study on knowledge requirements, tax complexity, compliance costs and tax awareness in Uganda. The study adopted descriptive research method. The findings of the study revealed that knowledge requirements do not have significant relationship with compliance costs however knowledge requirements are best suited in explain the internal compliance. Further the study results indicates that taxpayers may have sufficient tax knowledge to enable them to comply with tax laws, but compliance costs may still be hindering factors.

Bornman and Wassermann (2020) conducted a study on tax knowledge for the digital economy. The research adopted qualitative approach through thematic search of appropriate literature. The findings of the study suggest that there are specific tax knowledge requirements in different areas that must be in place to ensure tax awareness in the digital economy. The study further found that any shortcomings in these areas of knowledge create the risk of non-compliance for individuals functioning in the digital economy. According to Fauziati *et al.* (2016), tax knowledge determines compliance behavior of taxpayer in a tax system. Baru (2016), noted that increasing the taxpayer's knowledge leads to them becoming more responsible citizens which has a potential to yield greater revenue for tax authorities. This would be the best approach as opposed to pursuing non-compliers through legal means which does not guarantee itself of realizing the pursued revenue (Devos, 2012).

According to a study conducted by Twum *et al.*, (2020) on tax knowledge and tax awareness of small and medium enterprises in Ghana. The study adopted survey methodology of research. the data was analyzed using a structural equation modelling approach. The results of the study suggest that knowledge of tax rights and responsibilities, knowledge of employment income and awareness sanctions have a positive and significant relationship with tax awareness. As per the various studies conducted around tax knowledge and compliance, there is evidence that tax knowledge influences tax awareness in a number of ways. It may lead to increased revenue to the tax authority, reduce on compliance costs and improve the environment in digital economy businesses are done. It would be further important to assess how this relationship between tax knowledge and compliance in the digital economy specifically in relation to digital service tax awareness.

2.4.2 Fairness of the Tax and Digital service tax awareness

According to cannons of taxation, a good tax system should be fair and equitable. In equity, it means that taxes should be based on people's ability to pay which is often related to their income (Manchilot, 2018). Saad (2012) studied the perception of tax fairness and tax awareness behaviour. The study adopted comparative analysis between New Zealand and Malaysia. A T-test and Partial Least Squares were used in data analysis. The study findings suggests that perception of tax fairness, which are still influenced by both tax knowledge and perceived complexity in the tax system, was influential in explaining tax awareness. Put differently, perception of tax fairness is only possible when taxpayers have the requisite knowledge about the tax procedures and legal knowledge than will they comply. Tax awareness is greatly influence by tax knowledge with enhances taxpayer's ability to ascertain tax fairness.

Graha (2018) conducted a study on the effect of tax fairness on tax awareness with trust as an intervening variable. The study adopted qualitative research design methods. The Partial Least Squares approach was used to test the hypothesis. The findings of the study revealed that tax fairness has a significant positive effect on tax awareness. The study further revealed that tax fairness has a significant positive effect on trust. Therefore, fairness of the tax goes along with trust in its tax agency and as such compliance is greatly improved. Saad (2013) conducted a study on tax knowledge, tax complexity and tax awareness from the taxpayers' view in Indonesia. The data was gathered through telephone and analyzed using thematic analysis. The results of the analysis suggest that taxpayers have inadequate technical knowledge and perceive tax system as complex. Tax knowledge and tax complexity are viewed as factors contributing to non-compliance behaviour among taxpayers.

Pertiwi, Iqbal and Baridwan (2020) conducted a study on effect of fairness and tax knowledge on tax awareness for micro, small and medium enterprises. The study used survey method, data was analyzed with the help of SPSS 24, multilinear regression, and simple linear regression analysis. The result of the study shows that tax fairness that affect MSMEs compliance in general tax fairness, tax rates and self-interest. It is important that taxpayers have a good understanding of tax fairness because it contributes to compliance whether voluntary or involuntary (Saad, 2009). The reviewed literature points to the fact that tax fairness is a contributor to tax awareness. Many studies have revolved around Asia, and Western Countries including the USA. All these studies show positive relationship between tax fairness and tax awareness. Increased compliance is beneficial to tax authorities as more revenue is generated. Countries need revenues for economic growth and development.

2.4.3 Digitalization and Digital service tax awareness

Taxation is a complex, an important fiscal tool used to balance efficiency and social wellbeing by various governments. Digital disruption makes technology an inseparable tool across all economic sections (OECD, 2014). Damith, Wasanthi and Aluthge (2021), conducted a study on use of technology to manage tax awareness behaviour of entrepreneurs in the digital economy. The study investigated how technology compliance of entrepreneurs in the digital economy. The study findings reveal that trust in technology used by the tax authority and the power of tax authority in implementing the technology-driven tax system influence maintaining tax awareness. Digitalization is the act doing business using the existing business platforms to reach out to customers and receive payment in the same manner (IMF, 2016). For digitalization to effectively offer the platforms for doing business, both hard and soft technology must support these platforms (UNCTAD, 2015).

Tax awareness in an area where many scholars have studied using different variables overtime. However, Roth and Witte (1989) in their Agenda for Research Report, noted that there is no universally accepted single definition given to the term tax awareness. For instance, tax awareness has been defined as acting in accordance with reporting requirements of the country to which the taxpayer is liable. This means that the taxpayers file all required tax returns on time and the returns should report the correct amount of tax liability in accordance with procedures, regulations and laws that govern that particular tax base (Roth & Witte, 1989). On the other hand, tax awareness may be defined as a gap which is the difference between true individual income liability and that finally collected on voluntary basis or by enforcement (James & Alley, 2004). Otherwise, the most understood general term is that tax awareness is the ability to act as per the law on taxation and any deviation from it

amounts to non-compliance. Based on these terms tax awareness may further be defined as the desire of the taxpayers to act in accordance with the tax laws and the voluntary efforts to pay tax liability on timely basis.

Manchilot (2018) conducted a study on economic and social factors of voluntary tax awareness: evidence from Bahi Dar City. The study adopted explanatory research design. The result of the study shows that factors such as fairness of the tax system, penalty, tax rate, perceptions of government spending and compliance cost are found to be the determinants factors that affect taxpayers' voluntary compliance. Machinlot (2019) further conducted a systematic review on determinants of tax awareness. The study adopted the empirical research review methodology. The result of the review still shows that tax awareness decisions by the taxpayers will be affected by a number of factors like penalty, tax system fairness, tax rate, probability of detection and being audited, among others. This call for authorities to ensure that systems are fair, maintain appropriate levels of penalty, rather than merely relying on carrot and stick approach tax authorities should excel on responsible citizens' approach.

Niway and Jerene (2015) conducted a study on determinants of voluntary tax awareness behaviours in self-assessment systems in Ethiopia. The study used Pearson correlation matrix and logistic regression model. The result of the study reveals that tax knowledge, simplicity of tax returns and administration, perception on fairness and equity, perception on government spending, probability of auditing, and the influence of the referral group were determinant factors that influence voluntary compliance. Sinnasamy and Bidin (2017), conducted a study on the relationship between tax rate, penalty rate, tax fairness and excise duty non-compliance. The results of the study indicate that perceptions of tax rate, and penalty rate are positively

related while tax fairness is negatively related to excise duty compliance among importers.

Based on the literature reviewed on determinants of tax awareness, it is clear that there are a number of factors that determine compliance across different tax jurisdictions and across different taxpayers. However, the thought of most scholars is the study on conventional way of conducting business with minimal realization of the emerging digital economy. It is critical for the stud to evaluate determinants on tax awareness among businesses and entities that conduct businesses on various digital platforms especially on the digital service tax base.

Irawati (2019), conducted a study on understanding of tax rules, tax tariffs and tax-rights consciousness on e-commerce users tax awareness in Indonesia. The study adopted quantitative research using questionnaires and used quality test, classic assumption test, multiple regression analysis, t test, F test and test coefficient of determination. The study findings show that partially understanding of tax regulations does not affect the compliance of e-commerce taxpayers. While simultaneously understanding of tax regulations, tax rates and taxpayer's awareness influences the taxpayer compliance with e-commerce users. Agbo and Nwadiolor (2020) assessed the relationship between e-commerce and tax revenue in Nigeria. The study observes that e-commerce traders have issues with taxation of online businesses, and this leads to low compliance hence tax loss. Other literature also points to the same direction of the challenges that occur on the taxation and tax awareness of digital economy traders (Rosenberg, 2008).

According to a study conducted by Brandas, Megan and Craciunescu (2013) on the impact of e-commerce tax and accounting activities in Romania. The study adopted

exploratory and documentary to arrive at analysis and conclusions. The study findings revealed that digitalization of business (e-commerce) presents a challenge to taxation since it is not easy to trace the point in which sales occur and that taxpayers are likely to exploit the gaps in technology advancement to become non-compliant. From the aforementioned studies digitalization of business which is commonly understood to mean e-commerce or online buying and selling of goods and services present a challenge to tax authorities in relation to taxation. It is also challenging to business owners in relation to tax awareness. Taxpayers find the taxes confusing and therefore would involuntarily non-comply. It would be important to further investigate this relationship in the context of digital service tax imposition and how these digital corporates would react to it.

2.5 Summary of Literature Review

The chapter begun with overviewing the concept of the study. The concept of the study is to establish the determinants of digital service tax awareness among corporates in Kenya. Bornman and Wassermann (2020) conducted a study on tax knowledge for the digital economy. The research adopted qualitative approach through thematic search of appropriate literature. The findings of the study suggest that there are specific tax knowledge requirements in different areas that must be in place to ensure tax awareness in the digital economy. The study further found that any shortcomings in these areas of knowledge create the risk of non-compliance for individuals functioning in the digital economy.

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2.6 Conceptual Framework

The linkages between the study variables are described in the conceptual framework. Conceptual framework is a group of concepts which are well organized to provide a focus, a tool and rational for interpretation and integration of information and is usually achieved in pictorial illustrations. This is to explain how they are related to each other (Adom, *et al.*, 2016). The conceptual framework linked the independent variables (tax knowledge was measured by General knowledge , Procedural knowledge and Legal knowledge , fairness was measured by Tax rate, Tax Regulations and Tax Procedures and digitalization was measured by E-commerce platform and Online payment) to the dependent variable Digital Service Tax Awareness was measured by Registration Certificate , Tax paid and Compliance Certificate).

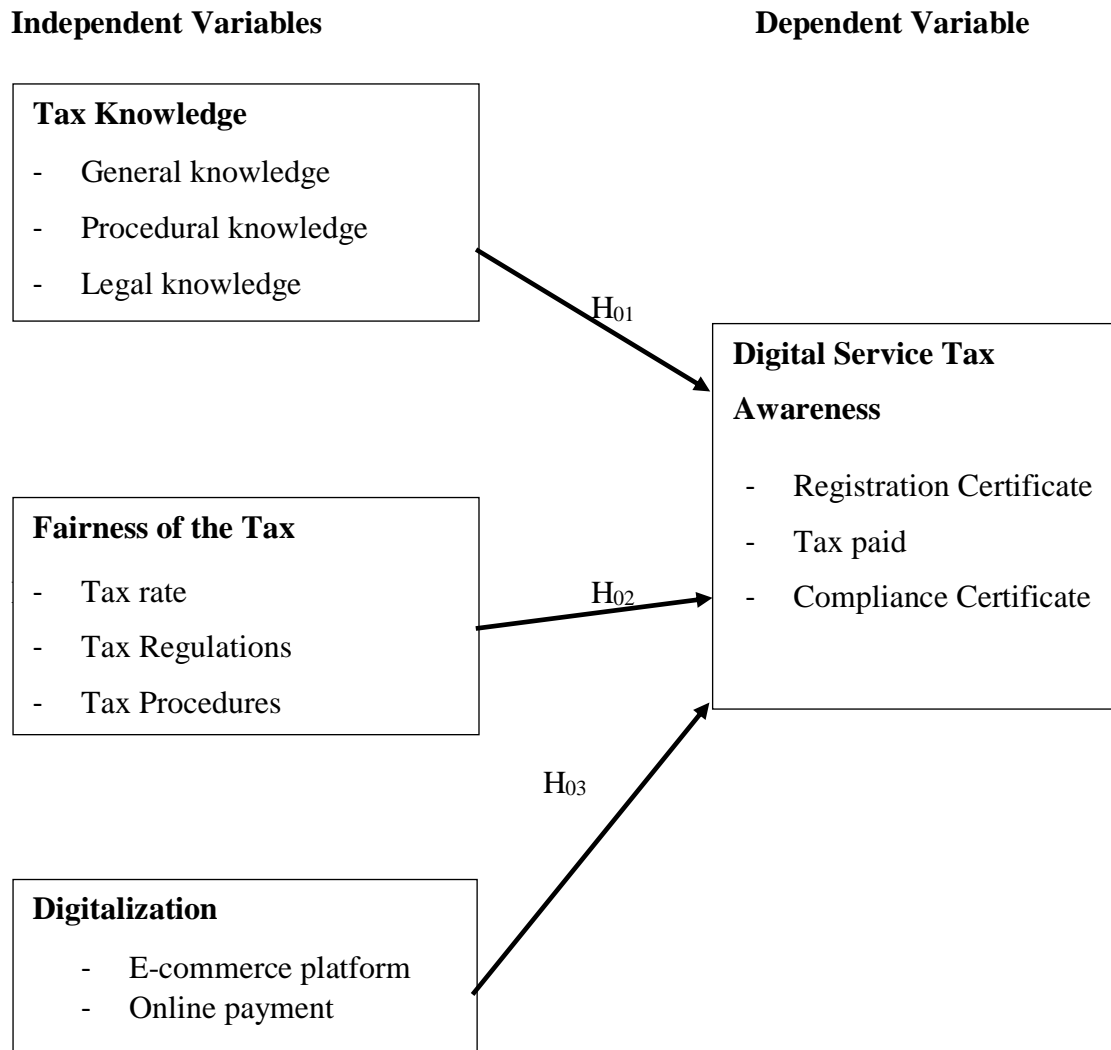


Figure 2.1: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the research methodology that the researcher adopted in conducting the research. It shows a clear blueprint on the research design, target population, sampling design, data collection method, and research procedures and data analysis.

3.2 Research Design

According to Lawrence (2012), a research design is a plan outlining techniques and strategies on how information is to be gathered for an assessment or evaluation that includes identifying the data gathering method, the study instruments was used, how the study instruments was administered, and how the information was organized and analyzed. Khan (2018) defines research design as the blue print of techniques adopted by the researcher to test the relationship between the dependent and independent variables. This research adopted explanatory research design which tries to explain the nature of certain relationships and investigates the causal relationship between variables. Other scholars have previously used the design successfully, and came up with credible and reliable conclusions (Muriungi *et al*, 2015). Additionally, explanatory research design allows the researcher to collect a large quantity of in-depth information about the population under study.

3.3 Target Population

The target population as defined by Williamson (2015) is the totality of elements that had one or more characteristics in common while Mugenda and Mugenda (2013) states that a research population is also known as a well-defined collection of individuals or objects known to have similar characteristic. Therefore, all individuals

or objects within a certain population usually have a common, binding characteristic or trait. The target population in this study is 130 business corporations (companies) that conduct their business using online/digital platforms to provide services to other ecommerce operators in Kenya (KRA, 2020). Given their small number, the research conducted a census study where all the 130 companies were studied. Kothari (2014), notes that when a study population is relatively small, a census should be conducted. Since digital service tax only targets the sales of service using digital platform such companies are fewer in Kenya. The study was particularly focus on those companies or corporates that do not necessarily have physical presence but digital. For example, Google, Facebook, Twitter, Kilimall, Viusasa, among others who conduct their businesses either at the national or multinational levels offering services only through the digital platform. This is because digital service tax does not focus onto those who sell goods on the digital platform but those that provide platform services (PwC, 2019). For this reason, such corporates are not many, and the study will target the entire population as the unit of analysis.

3.4 Data Collection and instruments and Data Type

Primary data was collected using structured questionnaires which were filled by the respondents and collected on a later date. The questionnaire as a tool of data collection was an ideal because the researcher was be able to collect information from a large population. The questionnaires were divided into three parts, and employed the use of five Likert scale statements to assess responses from respondents. The main partitions of the questionnaire included: Section A, which covers the demographic and respondent's profile, Section B, C, D that which covered the independent variables of the study statements and Section E which covered dependent variable of the study statement. Kothari, (2004) terms the questionnaires the most appropriate instrument

due to its ability to collect a large amount of information in a reasonably quick span of time. According to Magenda and Magenda (2003), questionnaires are commonly used to obtain important information about population under study

3.4.1 Pilot Study

According to Payne (2016), a pilot study is a mini version of a full-scaled study executed as is planned for the intended study but on a smaller scale. Pilot studies help pre-test a particular research instrument such a questionnaire or an interview guide in order to test various indicators, methodological, and reveal any deficiencies in the tool. According to Mugenda and Mugenda (2013), where the target population is less than 10,000, a sample size between 10% and 30% is a good representation of the target population thus 10 % is adequate for analysis. A pilot test was carried at Bolt company Nairobi on 13 respondents in who did not take part in the final study, to pre-test questions in the questionnaire. The respondents were encouraged to comment on and suggest areas in questions that are not clear and may need improvement. The questionnaire was then be adjusted based on the comments of the respondents and given to them for the second time. The scores of the first and the second time was recorded and correlated to test for reliability of the questionnaire.

3.4.2 Validity of the Instruments

Zikmund *et al.*, (2010) state that validity in research is concerned with measuring what is intended for measurement. It arises due to the fact that measurements in social science are indirect. It is the degree of accuracy of the indicators (Cooper and Schindler, 2006). Validity is therefore, the degree of accurate measure or score that fruitfully give the exact measure. There are four conventional ways of inaugurating validity, this includes, face validity, construct validity, criterion validity, and content validity. The study adopted content validity to determine data accuracy. This enabled

the researcher to assess validity of instrument including clarity, relevance, interpretation of questions and time spent, to improve where necessary. Supervisors were consulted to examine and review the instrument for content validity to avoid Type 1 error and Type 11 error. Any ambiguous questions were identified and rectified.

3.4.3 Reliability of the Instrument

The questionnaires were tested for reliability during the pilot study. The study used Cronbach's Alpha to undertake a reliability test to confirm internal consistency of items. According to Cooper and Schindler (2013) expressed that Cronbach Alpha determines a range that is between 0-1, as a result when the Cronbach Alpha has a score ranging 0-0.6 it is an indication that the reliability of the instrument is low however, a score of 0.7 and over is an expression that the internal consistency and reliability is high. Sekaran (2010) notes that reliability is a measure of stability and consistency with which instrument measures the concept. The study findings indicated that the data instruments were reliable with a Cronbach alpha Value of above 0.70. The findings indicated that the Cronbach alpha for each of the variables was above the lower limit of acceptability thus reliable with tax knowledge having a coefficient of 0.991; fairness 0.943; digitalization 0.829, and digital tax awareness 0.921 as shown in Table 3.1.

Table 3.1: Reliability Results

Variable	No. of Items	Cronbach Alpha (α)	Remark
Tax knowledge	6	0.991	Reliable
Fairness	6	0.943	Reliable
Digitalization	6	0.829	Reliable
Digital Service Tax Awareness	6	0.921	Reliable

3.5 Measurement of Study Variables

The following table below gives an outline of the dependent and independent variables and how they were measured and reviewed. Digital service tax awareness was operationalized using tax knowledge, fairness and digitalization

Table 3.2: Measurement of Variables

Variable	Operational Indicator	Source/author	Measurement of variables	Data collection & measurement	Types of Analysis
Tax knowledge	- General knowledge	Kirchler, 2010	Ordinal data	Questionnaire	Regression Analysis Correlation Analysis
	- Procedural knowledge			5point	
	- Legal knowledge			Likert	
Fairness	- Tax rate	Saad (2012)	Ordinal data	Questionnaire	Regression Analysis Correlation Analysis
	- Tax Regulations			5point	
	- Tax Procedures			Likert	
digitalization	• Ecommerce platform	Irawati (2019),	Ordinal data	Questionnaire	Regression Analysis Correlation Analysis
	• Online payment			5point	
Digital Service Tax Awareness	• Registration Certificate	Act of 2015 compliance	Ordinal data	Questionnaire	Regression Analysis Correlation Analysis
	• Tax paid			5point	
	• Compliance Certificate			Likert	

3.6 Data Collection Procedure

The study collected data by use of primary data sources. For the primary data, the study used questionnaires. The questionnaire is defined by Glen (2017) as any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing

answers. Questionnaires was used because as explained by Lyon (2018) they were used to collect data about phenomena that is not directly observable such as; inner experiences, opinions, values, interests. They are more convenient to use than direct observation when used for collecting data. Cohen (2015) provided advantages of using questionnaires are as follows: can be given to large groups, respondents can complete the questionnaire at their own convenience, answer questions out of order, skip questions, take several sessions to answer the questions, and write in comments. The cost and time to be involved in using questionnaires is less than with interviews. Questionnaire was developed and distributed to the respondents; this was undertaken by the basic approach of hand delivery and use of emails. A period of one week was allowed for the respondents to respond to the questionnaires which were later collected back for analysis. Closed ended questions was adopted which usually suggests the answers to solicit the most relevant information.

3.7 Diagnostic Tests

In scientific research, diagnostic tests are usually carried out to empirically determine the quantitative effect of study design shortcomings of more quantitative loading of diagnostic accuracy (Lijmer *et al.*, 1999). In this study, five diagnostic tests were done before data analysis to authenticate the research findings. The tests included Multicollinearity test, Bowerman and Connell (2006) stated that lower levels of VIF are more better while higher levels of VIF are known to affect adversely the result associated with a multiple regression analyses. The authors argued that VIF above 2.50 start to indicate relatively high levels of multicollinearity.

Normality test, Razali and Wah (2011) argued that the best and powerful normality test is Shapiro-Wilk. This study adopted it. The test was used in testing the data. Shapiro-Wilk test of less than 0.05 implies that there is significant deviation of data

from a normal distribution. The data presented was normally distributed as shown and the results for Shapiro-wilk had p values greater than 0.05, which means the assumption of normality was not violated. Heteroscedasticity test, the p values of $P > 0.05$ this concludes that the assumption for homoscedasticity was not violated. Linearity test When p value of deviation from linearity test is > 0.05 the assumption of linearity is not violated, if the p value is ≤ 0.05 the assumption for linearity has been violated. Autocorrelation was tested using Durbin Watson and the Numbers between 1.5 and 2.5 indicates no autocorrelation.

3.8 Data Analysis

According to (Zikmund, Babin, Carr, and Griffin, 2010) data analysis refers to the application of reasoning to understand the data that has been gathered with the aim of determining consistent patterns and summarizing the relevant details revealed in the investigation. The data that was collected from the filled in questionnaire was edited for consistency. The data was in quantitative in nature which was presented by use of tables, and charts in order to investigate the determinants of digital service tax awareness among corporates in Kenya.

Therefore, descriptive and inferential analysis technique was used in consistent with the research design using the statistical package for social sciences SPSS the qualitative data coded to enable the responses to be grouped into categories. Descriptive statistics was adopted to summarize the data. A correlation analysis was performed to determine the effect of the independent variable on the dependent variable using the multiple linear regression model. The multiple linear regression model as follow.

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

Where: Y – Digital service tax awareness

$\beta_0 - \beta_3$ - regression coefficient of independent variables

X_1 – Tax knowledge on DST awareness

X_2 – Fairness of the tax on DST awareness

X_3 – digitalization on DST awareness

ϵ - error term, it considers all the possible factors that would possibly influence the dependent variable though not captured in the model.

3.9 Ethical Considerations

Ethical Issues are norms governing human conduct which have a significant impact on human welfare. It involves making a judgment about right and wrong behavior (Kumar, 2011). The researcher approached the respondents with an introduction letter from the school. The nature of information required for this study was sensitive, thus the researcher treated all information with utmost confidentiality and used it solely for this study. There was need to strive and ensure honesty in analyzing and reporting the data that was collected and all major statements in the study was cited to avoid plagiarism.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Summary

This chapter presents the findings of the study and a discussion of these findings. The presentation has been done based on the specific objectives of the study where data is summarized using tables, and charts as well as narratives. The study sought to investigate the determinants of digital service tax awareness among corporates in Kenya. This chapter also describes the actual findings as per the feedback from the respondents, which linked them to the objectives of the study. It encompasses the nature of background information, descriptive and inferential statistics of the respondents' rating

4.2 Response Rate

The number of questionnaires that were administered was 117 and a total of 92 questionnaires were properly filled and returned but some of the respondents returned the questionnaires half-filled while others did not return them completely despite a lot of follow up. This response rate is considered satisfactory to make conclusions for the study. Bailey (2000) stated that a response rate of 50% is adequate while a response rate greater than 70% is very good. This implies that based on this assertion, the response rate in this case of 78% is therefore very good. A response rate of 100% is excellent; however, it was not achieved in this study. This was imputed to the work interrelated challenges on part of the respondents as the study the questionnaire was self-administered within a short time frame based on the permission granted to collect the data. The response rate result is shown in chart 4.1.

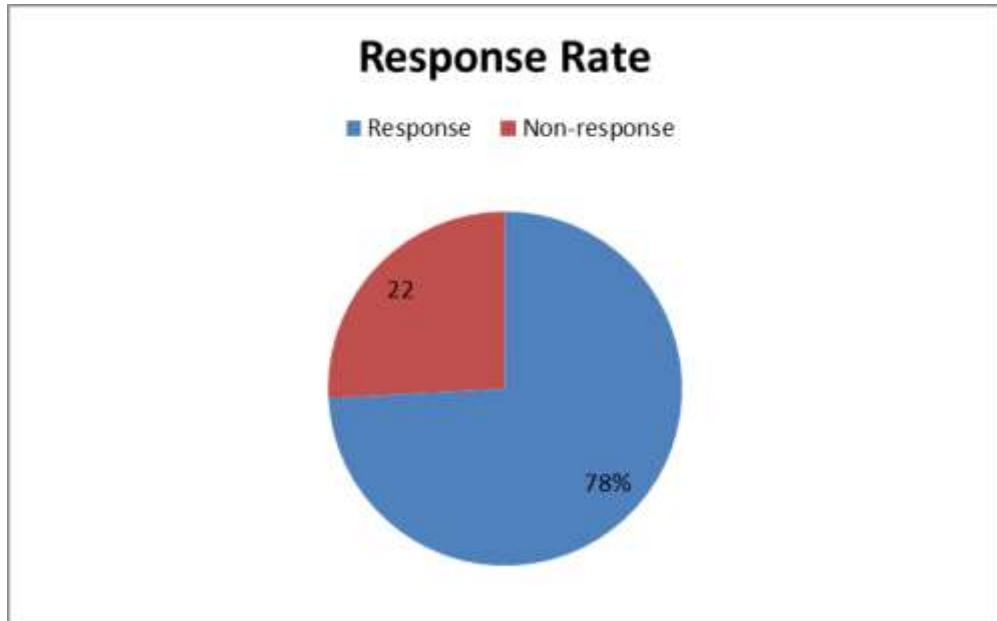


Figure 4.1: Response Rate

4.3 Demographic Characteristics of the Respondents

4.3.1 Role in Business

The findings in Table 4.1 indicated that, majority 3934.8% of the total respondents were business owners, 32.6% of the respondents were business accountants, 26.1% were local representatives while the least 6.5% were sales executives. The results imply that business owners were aware of digital services in their companies

Table 4.1: Role in Business

Statements	Frequency	Percent
Business owner	32	34.8
Business Accountant	30	32.6
Local Representative	24	26.1
Sales executive	6	6.5
Total	92	100

4.3.2 Offer Digital Services

As shown in Table below, of the total respondents, (76.1%) agreed to offer digital services and (23.9%) did not offer digital services. The findings imply that most business offer digital services

Table 4.2: Digital services

Statements	Frequency	Percent
Yes	70	76.1
No	22	23.9
Total	92	100

4.3.3 Other Countries

Asked about other countries do your corporate offer digital services to which income is realized, majority of the respondents indicated that 32.6% countries offer digital services. These were followed by those 30.4% corporates offering digital services while 25% countries offered digital services. Lastly, 11.9% countries does corporate offer digital services

Table 4.3: Other countries for digital service

Countries	Frequency	Percentage
Less than 2	11	11.9
2– 5	28	30.4
5 – 10	30	32.6
More 10	23	25
Total	92	100

4.3.4 Business Annual Turnover

The respondents were also asked about their business annual turnover. Respondents agreed on annual turnover was 0-15 M at 7.6% annually. 31.5%, turnover of 15-30M.

Further 30-45M at 28.2%, turnover of 45-60M at 16.3%. Additionally annual turnover of 60-90M was at 6.5% and finally 90M and more turnover annually was at 9.7%.

Table 4.4: Turnover

	Frequency	Percentage
0-15M	7	7.6
15-30M	29	31.5
30-45M	26	28.2
45-60M	15	16.3
60-90M	6	6.5
90M & more	9	9.7
Total	92	100

4.4 Descriptive Statistics

4.4.1 Tax Knowledge on Digital service tax awareness

The study sought to explain the significance of tax knowledge on Digital service tax awareness. The results showed that respondents agreed that I have heard about on digital service tax and know that it came into effect on the 1st of January 2021 with a mean score of 4.21. The study also found that respondents agreed I am aware that digital service tax is only applicable on income earned from online marketplace services with a mean score of 4.67 and I am aware that both resident and non-resident companies are required to pay digital service with a mean score of 3.77. The results showed that I am aware that all business realizing DST must first register with iTax system in order to account for the tax due with a mean score of 2.80. Further results show that I am aware that filing and payment of DST due is strictly through iTax system upon being duly registered with a mean score of 4.46. Lastly, I am aware that failure to declare digital service tax amounts to tax evasion which bear both legal and economic consequences had a mean score of 3.93.

Table 4.5: Tax knowledge

	Mean	Std. Dev
I have heard about on digital service tax and know that it came into effect on the 1 st of January 2021	4.21	0.475
I am aware that digital service tax is only applicable on income earned from online marketplace services	4.67	0.508
I am aware that both resident and non-resident companies are required to pay digital service	3.77	0.321
I am aware that all business realizing DST must first register with iTax system in order to account for the tax due	2.80	0.158
I am aware that filing and payment of DST due is strictly through iTax system upon being duly registered	4.46	0.514
I am aware that failure to declare digital service tax amounts to tax evasion which bear both legal and economic consequences	3.93	0.7124
	3.31	

4.4.2 Fairness on Digital service tax awareness

The study sought to explain the role of fairness on Digital service tax awareness. The results showed that respondents agreed that I think that DST rate of 1.5% on gross sales of services realized from the digital marketplace is fairer with a mean score of 4.82. The study found that respondents agreed on I think that digital service tax rate will increase the cost of doing business including compliance costs with a mean score of 3.96 and My business considers that digital service tax regulations are not clear and often cause confusion during tax filing with a mean score of 4.60. The results showed that the respondents were in agreement that my business is of the view DST regulations are complicated which may lead to non-compliance with a mean score of 3.74. I think that digital services are unfairly taxed considering the economic environment in which my business operates had a mean score of 2.93 .Finally on I may consider relocating my sales on the digital services platform to a better tax jurisdiction had a mean score of 3.13

Table 4.6: Fairness

	Mean	Std. Dev
I think that DST rate of 1.5% on gross sales of services realized from the digital marketplace is fairer	4.82	0.495
I think that digital service tax rate will increase the cost of doing business including compliance costs	3.96	0.328
My business considers that digital service tax regulations are not clear and often cause confusion during tax filing	4.60	0.827
My business is of the view DST regulations are complicated which may lead to non-compliance	3.74	0.411
I think that digital services are unfairly taxed considering the economic environment in which my business operates	2.93	0.172
I may consider relocating my sales on the digital services platform to a better tax jurisdiction	3.13	0.278
	3.86	

4.5 Digitalization

The study sought to explain the role of digitalization on tax awareness. The findings showed that respondents agreed that Ecommerce platforms makes it difficult to keep issue documentary evidence on sales realized for tax purposes with a mean score of (3.91). Further the study revealed that respondents agreed Ecommerce platforms makes it difficult to separate various tax bases applicable for proper accounting and payment of tax with a mean score of (3.79) and It is easy to shift profits using digital business platforms to other tax jurisdictions to avoid paying high rates with a mean score of (3.46). The results showed that the respondents Ecommerce makes it hard to track sales leading to under declaration actual incomes realized on digital marketplace with a mean score of (4.02). On Issuance of digital payment receipts would lead to my company accounting for more taxes to pay from the digital marketplace with a mean score 4.47. Lastly, there is no evidence that any payments are made and there is no way to track where sales were realized.

Table 4.7: Tax Digitalization

	Mean	Std. Dev
Ecommerce platforms makes it difficult to keep issue documentary evidence on sales realized for tax purposes	3.91	0.278
Ecommerce platforms makes it difficult to separate various tax bases applicable for proper accounting and payment of tax	3.79	0.215
It is easy to shift profits using digital business platforms to other tax jurisdictions to avoid paying high rates	3.46	0.411
Ecommerce makes it hard to track sales leading to under declaration actual incomes realized on digital marketplace	4.02	0.385
Issuance of digital payment receipts would lead to my company accounting for more taxes to pay from the digital marketplace	4.47	0.463
There is no evidence that any payments are made and there is no way to track where sales were realized	3.12	0.254
	3.79	

4.6 Tax awareness

The study sought to explain the role of tax awareness. The findings showed that respondents agreed that my business is registered for digital service tax declaration, computing, filing and payment of the tax due and I have a certificate with a mean score of (3.87). Further the study revealed that respondents agreed my business having registered is an indicator of being compliant as per the requirements of the DST regulations with a mean score of (3.21) and My business keeps records of all sales realized through the digital marketplace services platform and can account for each sale with a mean score of (3.66). The results showed that the respondents My business keeps records of all taxes declared, computed, filed and paid for through the iTax system with a mean score of (4.49). On My business has a valid compliance certificate indicating that my business has complied with all the tax obligation as set out in various tax laws with a mean score 3.36. Lastly, my business owning compliance certificate means that we have not wrongfully made any declarations and that is the true picture of our business had a mean score 2.89.

Table 4.8: Tax Digitalization

	Mean	Std. Dev
My business is registered for digital service tax declaration, Computing, filing and payment of the tax due and I have a certificate	3.87	0.523
My business having registered is an indicator of being compliant as Per the requirements of the DST regulations	3.21	0.645
My business keeps records of all sales realized through the digital Marketplace services platform and can account for each sale	3.66	0.542
My business keeps records of all taxes declared, computed, filed and Paid for through the iTax system	4.49	0.838
My business has a valid compliance certificate indicating that my business Has complied with all the tax obligation as set out in various tax laws	3.36	0.271
My business owning compliance certificate means that we have not Wrongfully made any declarations and that is the true picture of our Business	2.89	0.173
	3.58	

4.7 Statistical Assumptions

Statistical tests rely upon certain assumptions about the variables used in the analysis. Osborne and Waters (2014), stated that when these assumptions are not met the results may not be valid. They further argue that this may result in a type I or type II error, or over or under-estimation of significance or effect size(s). It is therefore important to pretest for these assumptions for validity of their results. Osborne, Christensen, and Gunter (2001) observed that few articles report having tested assumptions of the statistical tests they rely on for drawing their conclusions.

According to Osborne and Waters (2014), not pretesting for these assumptions has led to a situation where there is rich literature in education and social science, but questions in to the validity of many of these results, conclusions, and assertions still exist. Testing for assumptions is beneficial as it ensures that an analysis meets the

associated assumptions and helps avoid type I and II errors (Owino, 2014). Prior to data analysis, assumptions for normality and multicollinearity were checked.

4.7.1 Test of Normality

Parametric statistics by definition assume that the data under test is normally distributed, hence the use of the measure of central tendency (Zikmund, 2010). Several statistical procedures such as correlation, regression, t-test and f-tests assume that data follows a normal distribution (Ghasemi & Zahediasl, 2012). There are several ways of testing normality such as Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson Darling.

According to Razali and Wah (2011) Shapiro-Wilk is the most powerful normality test. This study adopted it. The findings of the tests are presented in Table 4.9. The test was used in testing the data in this study. Shapiro-Wilk test of more than 0.05 indicates that the data is normally distributed. The study's data set was subjected to a normality test. The data presented was normally distributed and the results for Shapiro-wilk had p values greater than 0.05, 0.063, 0.059, and 0.074 which means the assumption of normality was not violated.

Table 4.9: Tests of Normality

	<u>Kolmogorov smirnow</u>		<u>Shapiro-Wilk</u>	
	<u>Statistics</u>	<u>sig</u>	<u>Statistics</u>	<u>sig</u>
Tax knowledge	0.127	0.001	0.861	0.063
Fairness	0.364	0.000	0.967	0.059
Digitalization	0.278	0.000	0.704	0.074

4.7.2 Heteroscedasticity test

In the event of the variance or spread of errors from the regression line is constant the data is said to be homoscedastic. Sweeten, G. (2016). Explains that in a regression, an

error is how distant a point deviates from the normal distribution regression line. Ordinary Least Squares regression gives equal weight to all observations, but when assumption for homoscedasticity is violated, the cases with larger disturbances have greater tug than other observations. The coefficients from regression where heteroscedasticity is present are therefore inefficient but remain unbiased. A Breusch-Pagan-Godfrey heteroscedasticity test was conducted by regressing the square residuals on the original regressors by default. Table 4.10 indicates results from the Breusch-Pagan-Godfrey test which was able to indicate F statistic 6.029274 Prob. F (5, 21) 0.0305 Prob. Chi-Square (5)0.0573 Prob. Chi-Square (5) 0.8021. The p values from Obs R squared and Scaled explained ss indicated values $P > 0.05$ this concluded that the assumption for homoscedasticity was not violated.

Table 4.10: Heteroscedasticity test

F-statistic	6.029274	0.0305
Obs*R-squared	7.509115	0.0573
Scaled explained SS	0.996623	0.8021

4.7.3 Linearity Test

Linearity tests was conducted to examine whether the relationship between independent variables and dependent variable is linear or nonlinear. Csorgo (1985) states that the assumption that relationship between predictor and predicted variables is linear is measured through a deviation from linearity metric with alpha of 0.05. When p value of deviation from linearity test is > 0.05 the assumption of linearity is not violated, if the p value is ≤ 0.05 the assumption for linearity has been violated,

The p value shown from table 4.11 showed that the P 0.512>0.05 which concluded that the assumption for linearity was not violated.

Table 4.11: Linearity Test

ANOVA Table

			Sum of		Mean		
			Squares	df	Square	F	Sig.
Tax	Between	(Combined)	.115	33	.003	.989	.502
awareness*	Groups	Linearity	.004	1	.004	1.265	.265
		Deviation from Linearity	.111	58	.001	.980	.512
Total			.23	92			

4.7.4 Autocorrelation Test

This test was conducted to check whether the values of the residuals are independent and that was to ensure that the observations are independent from one another and uncorrelated. Marshall (2018) explained statistic's value ranges from 0 to 4. Non-autocorrelation is shown by a number near 2; positive autocorrelation is indicated by a value near 0; and negative autocorrelation between independent variables is indicated by a value near 4. Numbers between 1.5 and 2.5 indicates no autocorrelation. Results from the Durbin Watson test showed the Durbin Watson result of 1.6966 which is between 1.5 and 2.5 thus this indicated no autocorrelation exists in the data set.

Table 4.12: Durbin Watson test

Model	Durbin-Watson
1	1.6966

4.7.5 Multicollinearity Test

Multicollinearity is the undesirable situation where the correlation among the independent are strong. It increases the standard coefficients errors to get tolerance and variance inflation factor (VIF). In order to test for multicollinearity, VIF was computed using statistical packages for social science (SPSS). Multicollinearity increases the standard errors of the coefficients and thus makes some variables statistically not significant while they should otherwise be significant (Osborne and Waters, 2014). Tolerance is the amount of variance in independent variable that that is not explained by the other independent variable.

Bowerman and Connell (2006) stated that lower levels of VIF are more better while higher levels of VIF are known to affect adversely the result associated with a multiple regression analyses. The authors argued that VIF above 2.50 start to indicate relatively high levels of multicollinearity. The Variance Inflation Factor test in the study regression model ranged between 1.378 and 1.602.

Tables 4.13 show that the values of tolerance were less than 1 rule and of VIF were less than 2. This shows lack of multicollinearity among independent variables. These values were lower than the 2.5 level suggested by Allison (2009) as an indicator of multicollinearity; therefore, multicollinearity was not a problem on this analysis. Thus the study findings were able to fulfill the threshold mainly because Table shows that the VIF of the study were all less than 2.

Table 4.13: Multicollinearity Test

Model	Coefficients ^a	
	<u>Collinearity Statistics</u>	
	Tolerance	VIF
Tax knowledge	0.815	1.602
Fairness	0.766	1.414
Digitalization	0.822	1.378

a. Dependent Variable: Digital Service Tax Awareness

4.8 Correlation Analysis

A correlation coefficient enables the researcher to quantify the strength of the linear relationship between two ranked or numerical variables (Smith, 2010). Correlation analysis measures the degree of relationship between variables. Pearson correlation analysis was used to analyze the relationship between study variables. A correlation coefficient value (r) in the range of 0.1 to 0.29 is considered weak, 0.3 to 0.49 is considered moderate while 0.5 to 1.0 is considered strong extracts from O'Brien, 2007. Pearson correlation analysis shown in Table 4.14 indicate that tax knowledge is positively correlated with Tax awareness $r=0.276$, Fairness is also positively correlated with Tax awareness $r=0.303$. Lastly, digitalization had positive correlation with Tax awareness $r=0.462$ this implies all independent variable are positively correlated with dependent variable

Table 4.14: Correlation Analysis

	Digital services Tax awareness	Tax knowledge	Fairness	Digitalization
Digital Service Tax Awareness	1			
Tax knowledge	.276**	1		
Fairness	.303**	.251**	1	
Digitalization	.462**	.296**	.258**	1

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Research Data, (2021)

The results are discussed under table 4.15. The study noted that R was 0.598 which shows that Tax knowledge, fairness and digitalization have a positive correlation with tax awareness up to 59.8%. Tax knowledge, fairness and digitalization caused variations in tax awareness by 35.7% or ($R^2 = .357$). The results further reveal that even if the study adjusts the model would still account for 35.3% (Adjusted R Square, 0.353) of digital service tax awareness. The remaining 64.3 % of the variation was caused by other factors not included in the study.

Table 4.15: Effect of Tax knowledge, fairness and digitalization on Tax awareness

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.598 ^a	.357	.353	.32569	

4.8.1 Analysis of Variance

The ANOVA statistics presented in the table 4.16 was used to present the regression model significance

Table 4.16: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	6.213	1	6.213	41.321	.000 ^b
1	Residual	13.346	91	0.146		
	Total	19.559	92			

Further ANOVA tests were conducted to determine whether the model works in explaining the relationship among variables as postulated in the conceptual model. The findings in Table 4.17 show an F value of 41.321 with a significance level of 0.000 which is less than the p value of 0.05, hence establishing the model is

statistically significant. The implication is that Tax knowledge, fairness and digitalization contribute significantly to changes in the tax awareness.

Table 4.17 Overall Effect of Tax knowledge, fairness and digitalization on Tax Compliance

Model	Unstandardized		Standardized		Sig
	Coefficients		Coefficients		
	B	Std.Error	Beta	T	
(Constant)	0.268	0.041		6.536	0.006
Tax knowledge	0.398	0.152	0.214	2.618	0.001
Fairness	0.312	0.054	0.297	5.778	0.004
Digitalization	0.456	0.078	0.356	5.846	0.000

Dependent Variable: Digital Service Tax Awareness

Regression equation:

$$Y = 0.268 + 0.398 X_1 + 0.312 X_2 + 0.456 X_3$$

Where

Y = Digital Service Tax Awareness

X₁ = Tax knowledge

X₂ = Fairness

X₃ = Digitalization

The Regression equation shows that independent variables and dependent variable were statistically significant. The results shows, A unit change in tax knowledge increases Tax compliance by 0.398. A unit change in fairness increases Tax compliance by 0.312 and a unit change in digitalization increases Tax compliance by 0.456.

4.8.2 Test of Hypotheses

The first hypothesis H_{o_1} stated that Tax knowledge does not significantly affect digital service tax awareness among corporates in Kenya. Tax knowledge has a relationship on tax awareness among corporates in Kenya. The study results on Table 4.18 rejected the hypothesis as evidence of $\beta_2=0.398$, $\rho<0.001$ which is less than $\rho<0.05$. The statement is supported by the t-test of 2.618

The second hypothesis H_{o_2} stated that Fairness of the tax does not significantly affect digital service tax awareness among corporates in Kenya. Fairness has a relationship on tax awareness among corporates in Kenya. The study results on Table 4.18 rejected the hypothesis as evidence of $\beta_2=0.312$, $\rho<0.004$. Which is less than $\rho<0.05$. The statement is supported by the t-test of 5.778.

The third hypothesis H_{o_3} stated that digitalization does not significantly affect digital service tax awareness among corporates in Kenya. Digitalization has a relationship on tax awareness among corporates in Kenya. The study results on Table 4.18 rejected the hypothesis as evidence of $\beta_2=0.456$, $\rho<0.000$. Which is less than $\rho<0.05$. The statement is supported by the t-test of 5.846.

Table 4.18: Summary of Hypothesis Testing

Hypothesis	P-value	Conclusion
H₀₁: Tax knowledge does not significantly affect digital service tax awareness among corporates in Kenya	0.001	Reject H ₀₁
H₀₂: Fairness of the tax does not significantly affect digital service tax awareness among corporates in Kenya	0.004	Reject H ₀₂
H₀₃: Digitalization does not significantly affect digital service tax awareness among corporates in Kenya	0.000	Reject H ₀₃

Source: Research, 2021

4.9 Discussion of the Findings

4.9.1 Effect of Tax Knowledge on Tax awareness

First objective of the study was to determine the effect of tax knowledge on digital service tax awareness among corporates in Kenya. The results of the multiple regression analysis also study that there is significant relationship between tax knowledge and Tax awareness at (β_1) 0.398, p value 0.001 <0.05). The study concurs with Bornman and Wassermann (2020) conducted a study on tax knowledge for the digital economy. The research adopted qualitative approach through thematic search of appropriate literature. The findings of the study suggest that there are specific tax knowledge requirements in different areas that must be in place to ensure tax awareness in the digital economy. The study further found that any shortcomings in these areas of knowledge create the risk of non-compliance for individuals functioning in the digital economy

4.9.2 Effect of Fairness on Tax awareness

Second objective of the study was to investigate the effect of fairness of the tax on digital service tax awareness among corporates in Kenya. The results of the multiple regression analysis also study that there is significant relationship between Fairness and Tax awareness at (β_2) 0.312, p value 0.004 <0.05). The study agreed with Graha (2018) who conducted a study on the effect of tax fairness on tax awareness with trust as an intervening variable. The study adopted qualitative research design methods. The Partial Least Squares approach was used to test the hypothesis. The findings of the study revealed that tax fairness has a significant positive effect on tax awareness. The study further revealed that tax fairness has a significant positive effect on trust. Therefore, fairness of the tax goes along with trust in its tax agency and as such compliance is greatly improved

4.9.3 Effect of Digitalization on Tax awareness

Third objective of the study was to establish the effect of digitalization on digital service tax awareness among corporates in Kenya. The results of the multiple regression analysis also study that there is significant relationship between digitalization and Tax awareness at (β_3) 0.456, p value 0.000 <0.05). This was in agreement with. Damith, Wasanthi and Aluthge (2021),who conducted a study on use of technology to manage tax awareness behaviour of entrepreneurs in the digital economy. The study investigated how technology compliance of entrepreneurs in the digital economy. The study findings reveal that trust in technology used by the tax authority and the power of tax authority in implementing the technology-driven tax system influence maintaining tax awareness.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

In this chapter, a summary of findings is presented together with conclusions. This study sought to investigate the determinants of digital service tax awareness among corporates in Kenya. The aim was to assess tax knowledge, fairness and digitalization on tax awareness among corporates in Kenya.

5.2 Summary of Findings

The study revealed that all aspects assessed had an impact on tax awareness among corporates in Kenya.

5.2.1 Effect of Tax Knowledge on Tax Awareness

The first objective was to determine the effect of tax knowledge on digital service tax awareness among corporates in Kenya. Correlation analysis showed that tax knowledge and tax awareness are positively and significantly associated. Also the Regression analysis shows there was a significant relationship between tax knowledge and tax awareness

5.2.2 Effect of Fairness on Tax Awareness

The first objective was to investigate the effect of fairness of the tax on digital service tax awareness among corporates in Kenya. Correlation analysis showed that fairness and tax awareness are positively and significantly associated. Also the Regression analysis shows there was a significant relationship between fairness and tax awareness

5.2.3 Effect of Fairness on Tax Awareness

The first objective was to establish the effect of digitalization on digital service tax awareness among corporates in Kenya. Correlation analysis showed that digitalization and tax awareness are positively and significantly associated. Also the Regression analysis shows there was a significant relationship between digitalization and tax awareness.

5.3 Conclusion

The conclusions of this study were informed based on the findings of the study. Each objective was reviewed and a conclusion provided. Based on research finding it can be concluded that tax knowledge influences digital service tax awareness among corporates in Kenya. Respondent agreed to be aware that digital service tax is only applicable on income earned from online marketplace services. Further, conclusion were made on taxpayer being aware that filing and payment of DST due is strictly through iTax system upon being duly registered

It is also concluded Fairness significantly influences digital service tax awareness among corporates in Kenya. Fairness is a significant factor determining tax awareness. Based on research finding, Ecommerce makes it hard to track sales leading to under declaration actual incomes realized on digital marketplace and Issuance of digital payment receipts would lead to our company accounting for more taxes to pay from the digital marketplace. Respondent also were in agreement that their business considers that digital service tax regulations are not clear and often cause confusion during tax filing

From the findings, it is concluded that digitization influences digital service tax awareness among corporates in Kenya. The findings found out my business keeps

records of all sales realized through the digital marketplace services platform and can account for each sale and my business keeps records of all taxes declared, computed, filed and paid for through the iTax system and Ecommerce platforms makes it difficult to keep issue documentary evidence on sales realized for tax purposes.

5.4 Recommendations for Further Research

5.4.1 Policy Makers

Based on the study findings, it revealed a statistically significant relationship between tax knowledge, fairness and digitalization on tax awareness. Government policy makers will better understand the emerging economic sector of digital economy and ensure that the policies formulated will enhance digital service tax awareness among digital corporations.

5.4.2 Kenya Revenue Authority

On Kenya Revenue Authority, this study recommends the improvement on tax knowledge fairness and digitalization among the corporates that have presence in Kenya will contribute towards lesser disputes on the administration of digital service tax. The study also recommends that the management of Kenya Revenue Authority should put more emphasis and develop policies relating to the digitalization of services to enhance tax awareness. Also KRA management should focus and considers on digital service tax regulations which are not clear and often cause confusion during tax filing.

5.4.3 Academic Fraternity

The findings from this study expands the frontiers of knowledge, adding to the existing literature by confirming empirically, that indeed, tax knowledge, fairness and digitalization affect digital service tax awareness .The findings of the study will

provide better insights into the determinants of digital service tax awareness for improved revenue generation by various governments. The study will enhance knowledge and understanding among researchers and other scholars so that they can contribute to the immense challenges currently experienced in the taxation of global digital economy.

5.5 Suggestions for Further Studies

It is suggested Primary data at times may be misleading as it only measures people's opinions and perceptions and it may not be possible to quantify the results in actual numbers. Further research may include employing secondary data from tax authorities to model tax awareness.

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APPENDICES

Appendix I: Letter of Introduction

Dear respondent,

I am a student at Kenya School of Revenue Administration conducting a study on the determinants of digital service tax awareness among corporates in Kenya. This study will enlighten the business community, policy makers and the general public about the above area of study. In order to accomplish this study, I request you to complete this questionnaire.

The information obtained will be used purely for academic purposes and therefore, will be treated with utmost confidentiality and of good faith. Thank you in advance for participating and making this study successful.

Yours sincerely

.....

Justus Kamau Kiondo

KESRA/105/0102/2019

Appendix II: Respondents Questionnaire

Instructions for Use

This questionnaire is divided into sections A, B, C, D and E. You are requested to be as honest as possible when answering the questions. You are required to put a tick, circle, or mark your answers in the spaces provided and as per the instruction given, where applicable.

Respondent's Number: _____

SECTION A: BASIC INFORMATION

1. What your role in this business?

Business owner	<input type="checkbox"/>	Business Accountant	<input type="checkbox"/>
Local Representative	<input type="checkbox"/>	Sales executive	<input type="checkbox"/>

2. Does your corporate offer any digital services platform which other entities use for their businesses to which fees are charged in Kenya?

Yes No

3. How many other countries does your corporate offer digital services to which income is realized?

Less than two	<input type="checkbox"/>	Between two and five	<input type="checkbox"/>
Between five and ten	<input type="checkbox"/>	More than 10	<input type="checkbox"/>

4. How much was your digital services sales turnover in the previous year in Kenya shillings?

Less than 15,000,000	<input type="checkbox"/>	15,000,000 – 30,000,000	<input type="checkbox"/>
30,000,000 – 45,000,000	<input type="checkbox"/>	45,000,000 – 60,000,000	<input type="checkbox"/>

60,000,000 – 90,000,000

90,000,000 and more

SECTION B: TAX KNOWLEDGE

5. To what extent do you agree or disagree with the following statements on tax knowledge? *Put a tick (✓) or a cross (X) where applicable. Use a scale of 1-5 where; 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly Agree*

	1	2	3	4	5
I have heard about on digital service tax and know that it came into effect on the 1 st of January 2021.					
I am aware that digital service tax is only applicable on income earned from online marketplace services.					
I am aware that both resident and non-resident companies are required to pay digital service.					
I am aware that all business realizing DST must first register with iTax system in order to account for the tax due.					
I am aware that filing and payment of DST due is strictly through iTax system upon being duly registered.					
I am aware that failure to declare digital service tax amounts to tax evasion which bear both legal and economic consequences.					

SECTION C: FAIRNESS OF THE TAX

6. To what extent do you agree or disagree with the following statements on the rate of digital service tax awareness as currently is regulated by tax authority? *Put a tick (✓) or a cross (X) where applicable. Use a scale of 1-5 where; 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly Agree*

	1	2	3	4	5
I think that DST rate of 1.5% on gross sales of services realized from the digital marketplace is fairer					
I think that digital service tax rate will increase the cost of doing business including compliance costs.					
Our business considers that digital service tax regulations are not clear and often cause confusion during tax filing.					
Our business is of the view DST regulations are complicated which may lead to non-compliance.					
I think that digital services are unfairly taxed considering the economic environment in which my business operates.					
I may consider relocating my sales on the digital services platform to a better tax jurisdiction.					

SECTION D: DIGITALIZATION

7. To what extent do you agree or disagree with the following statements on your interaction with ecommerce platform to provide digital marketplace services? *Put a tick (√) or a cross (X) where applicable. Use a scale of 1-5 where; 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly Agree*

	1	2	3	4	5
Ecommerce platforms makes it difficult to keep issue documentary evidence on sales realized for tax purposes.					
Ecommerce platforms makes it difficult to separate various tax bases applicable for proper accounting and payment of tax.					
It is easy to shift profits using digital business platforms to other tax jurisdictions to avoid paying high rates.					
Ecommerce makes it hard to track sales leading to under declaration actual incomes realized on digital marketplace.					
Issuance of digital payment receipts would lead to my company accounting for more taxes to pay from the digital marketplace.					
There is no evidence that any payments are made and there is no way to track where sales were realized.					

SECTION E: DIGITAL SERVICE TAX AWARENESS

8. To what extent do you agree or disagree with the following statements on digital service tax awareness as provided from in existing tax laws? *Put a tick (√) or a cross (X) where applicable. Use a scale of 1-5 where; 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly Agree*

	1	2	3	4	5
Our business is registered for digital service tax declaration, computing, filing and payment of the tax due and I have a certificate.					
Our business having registered is an indicator of being compliant as per the requirements of the DST regulations.					
Our business keeps records of all sales realized through the digital marketplace services platform and can account for each sale.					
Our business keeps records of all taxes declared, computed, filed and paid for through the iTax system.					
Our business has a valid compliance certificate indicating that my business has complied with all the tax obligation as set out in various tax laws.					
Our business owning compliance certificate means that we have not wrongfully made any declarations and that is the true picture of our business.					

THE END

Thank you for your time and participation!

Appendix III: Work Plan

No.	What Activity	When	Place	Responsibility	How	Resources
1.	Preparation of the Research Proposal and Submission for Review by Project Supervisors	May & early June 21	KESRA	Researcher Lecture Supervisor	Writing & Compilation Reviews & Corrections	Student & Supervisors
2.	Registration and Presentation of the Approved Proposal for Defense.	June 2021	KESRA Moi Uni.	Researcher Defense Panel	Presentation / Questions and Answers	Student The Proposal
3.	Corrections on any issues raised during defense.	June 2021	KESRA Moi Uni.	Researcher Supervisor	Writing & Compilation	Student The Proposal
4.	Data Collection, Data Preparation and Data Coding	July 2021	Nairobi	Researcher Research Assistants	Surveys Physical visits	Questionnaires Assistants
5.	Data Analysis, Interpretation and Presentations of Findings	July to August 2021	Nairobi KESRA Moi Uni.	Researcher Supervisor Defense Panel	Writing & Compilation Reviews & Corrections Presentation	Student The Report The Panel
6.	Research Report Compilation, Presentation for Final Marking	August 2021	Nairobi KESRA	Researcher Moi University	Editing, Printing & Binding	Report Stationery
7.	Post Research Follow Activities if any	August 2021	KESRA Moi Uni.	Researcher Moi University	Visits, Emails and Phone Calls	Student

Appendix IV: The Budget

No.	Budget Item	Quantity	Unit	Unit Cost	Total
1.	Secondary literature sources and materials reviewed	20	Set	1000	20,000
2.	Typing and editing costs	12	Set	500	6,000
3.	Stationery and writing materials	10	Dozen	1200	12,000
4.	Research proposal printing costs	12	Set	500	6,000
5.	Printing of Questionnaires	50	Set	150	7,500
6.	Photocopying of questionnaires	100	Set	5	500
7.	Transport to research locations	5	Day	1000	500
8.	Research Assistants allowances	3	Pax	7500	22,500
9.	Research Report Editing	2	Set	2500	5,000
10.	Research Report Printing and Binding	8	Set	2500	20,000
11.	Miscellaneous Costs at 20%	1/s	1/s	1/s	20,000
TOTAL PROJECT COST					120,000

Appendix V: Population Frame

No.	Name of Firm	No.	Name of Firm
1.	3 technologies	66.	Witflair Enterprises Limited
2.	Adobe Acrobat	67.	Kindle
3.	Akus Digital Solutions	68.	Qallan Marketing Agency
4.	AliExpress	69.	Little Cab
5.	Amitruck	70.	Bollere Logistics
6.	AutoCAD Group	71.	YouTube
7.	British Broadcasting Corporation (BBC)	72.	Facebook
8.	Cable News Network (CNN)	73.	Amazon
9.	Calla Marketing	74.	Tipping Point Media Marketing
10.	Carrefour Online Supermarket	75.	Sky Garden
11.	Charlesian Group	76.	Makuba Consultancy Services
12.	Cinemax	77.	EBay
13.	Cisco Electronics	78.	Kilimall
14.	Citizen Media Group	79.	Digital Satellite Television (DSTV)
15.	ContentZai	80.	Freedom Digital
16.	Daily Mail UK	81.	Twitter
17.	Daproim Africa	82.	Kenya Digital Marketers
18.	DHL	83.	Maersk
19.	Digital Monkeys Limited	84.	5th Branding Africa
20.	Disruptive Advertising INC	85.	Growthpad Digital Consulting
21.	Eazzy Labs	86.	Oxygen Digital Solutions
22.	Equitel	87.	Unilever
23.	Fahrenheit Digital Agency	88.	Glowbal Digital
24.	Fat Rain Films	89.	White Rhino Film
25.	Gadzone	90.	Naivas Online Supermarket
26.	Global Desarts Media	91.	Netlit Digital Kenya
27.	Google Group	92.	Jumia

28.	GOtv	93.	Masoko
29.	Grammarly	94.	Jambo Shop
30.	Grid Branding Solutions	95.	Kenya Website Designers
31.	Higani Creative	96.	Focus4ward Digital Media Agency
32.	Ideon Limited	97.	Accurate Africa eServices
33.	iDeveloper Technologies	98.	Karabach Media
34.	Instagram	99.	Little Cab
35.	Jiji	100.	Spotify
36.	LIVETEL Media	101.	Fiction Entertainment
37.	Markitors	102.	Ignite Visibility
38.	MaxAudience	103.	Lounge Lizard
39.	Media Force Communications	104.	INSIGNIA Productions
40.	Microsoft Group	105.	Mixed Martial Arts (MMA)
41.	Nation Media Group	106.	Aljazeera News Network (AJN)
42.	Netflix	107.	Alibaba
43.	Oceans Digital Marketing	108.	All Seasons Communications Ltd
44.	Oracle Software	109.	Cheki Kenya
45.	Peak and Dale Solutions Ltd	110.	QuerySoftke Technologies Limited
46.	Perfect Search Media	111.	Brolik
47.	Pettinsky	112.	Madavi Agency
48.	Pryton Technologies	113.	Oracom Wen Solutions
49.	Qube Limited	114.	Papaya Digital Consult
50.	Quickbooks Accounting	115.	Uber
51.	Rupu	116.	Zalando
52.	Safaricom Limited	117.	Airtel Limited
53.	Sage Accounting Firm	118.	ESPN
54.	Sendy Logistics	119.	G4S Logistics
55.	ShopIt	120.	Avechi
56.	ShowMax	121.	Forbes News

57.	Silverback Strategies	122.	Fuel Online
58.	Skype Services	123.	Viusasa
59.	Smith Aegis PLC	124.	Socialmeds Digital
60.	Sony World Media	125.	Quantum Pixels Media
61.	Sprout Africa	126.	Dellco Technologies Ltd
62.	Squad Digital	127.	Hariox Media
63.	Standard Media Group	128.	SuperSport
64.	Telegram	129.	Tiktok
65.	The Portfolio Interactive Agency	130.	Salves Intelligence

Appendix VI: Research Authorization Letter – KESRA



REF: KESRA/NBI/036

15th September 2021

TO: WHOM IT MAY CONCERN

RE: REQUEST FOR RESEARCH PERMIT

JUSTUS KAMAU KIONDO- REG. NO.: KESRA105/0102/2019

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: **"DETERMINANTS OF DIGITAL SERVICE TAX COMPLIANCE AMONG CORPORATES WITH DIGITAL PRESENCE IN KENYA."**

The purpose of this letter is to request your good office to assist the above student with the information he requires to enable him work on his project.






Your support to KESRA in this regard will be highly appreciated.

Thank you.


 Dr. Marion Nekesa, PHD,
 Head Academic Research
 KESRA



Appendix VII: Research Permit – NACOSTI

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 562234	Date of Issue: 27/September/2021
RESEARCH LICENSE	
	
<p>This is to Certify that Mr. JUSTUS KAMAU KIONDO of Kenya School of Revenue Administration, has been licensed to conduct research in Nairobi on the topic: DETERMINANTS OF DIGITAL SERVICE TAX COMPLIANCE AMONG CORPORATES WITH DIGITAL PRESENCE IN KENYA for the period ending : 27/September/2022.</p>	
License No: NACOSTI/P/21/13078	
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