DETERMINANTS OF E-FILING SYSTEM ADOPTION AMONG TAXPAYERS IN GATUNDU SOUTH SUB-COUNTY KIAMBU COUNTY, KENYA

BY

JESSE NJERU NJUGUNA

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DECLARATION

Student Declaration

This research project is my original work and has not been presented for a degree in any other university.

Signature: ---------- Date: ----------

Jesse Njeru Njuguna

MU/KESRA 105/0014/2019

Supervisors Declaration

This research project has been submitted for examination with our approval as university supervisors.

Signature: ---------- Date: ----------

Dr. Marion Nekesa (PhD)

Department of Tax and Custom

Kenya School of Revenue Administration

Signature: ---------- Date: ----------

Dr. Joel Tuwey

Department of Accounting and Finance

Moi University, Kenya

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DEDICATION

This work is dedicated to my beloved parents Rhoda Njoki Njuguna and Joseph Njuguna Kenju and my brother Simon Njagi Njuguna for their financial support, advice and prayers which motivated me to pursue further studies.

ABSTRACT

Due to advancement in technology many countries have shifted to e-Filing Systems to enable taxpayers to file their tax returns online on their own from any location connected to the internet without necessarily visiting the KRA-workplaces for help in filing their tax returns in every calendar year within the month of June. This notwithstanding, many taxpayers are still seeking help from KRA work-places to file their tax returns and in some instances seen them request for the extension of tax filing time in every calendar year within the month of June which always forces KRA to operate for longer hours both in weekdays and weekends in order to support taxpayers in filing their tax returns invoking the issue of e-filing system adoption. It is surprising that a few studies have examined this concern yet e-filing ought to make it convenient for taxpayers to file their tax returns on their own. Consequently, the study invokes the question as to what drives taxpayers to resort to KRA work places, professionals and cybercafé for help in filing their tax returns. The study aimed to examine the determinants of e-filing system adoption among taxpayers in Gatundu South Sub-county, Kiambu County. The specific objectives were to determine the effect of perceived ease of use, perceived usefulness, facilitating conditions and user ability on e-filing system adoption among taxpayers in Gatundu South Sub County. The study was anchored on three theories; Unified Theory of Acceptance & Use of Technology, Technology Acceptance Model and Diffusion of Innovation Theory. The study employed explanatory research design. The target population for the study was 75,974 potential users of the e-filing system (iTax) in Gatundu South Sub-County who were derived from the 2019 census report by the Kenya National Bureau of Statistics. The study used random sampling technique in selecting a sample size (n) of 398 respondents in Gatundu South Sub-County. The study collected primary data through close-ended questionnaire, with a response rate of 84%. The data was analyzed using descriptive and inferential statistics to determine the association between variables, with the measurement of variables based on 5-point Likert Scale. Correlation and regression analysis provided an understanding of the relationship between the study variables. On Regression, These results indicate that the independent variable, perceived ease, perceive usefulness, facilitating conditions and user ability caused a variation of 27.3% (R^2=0.273) on e-filing system adoption. The study findings indicated that perceived ease, perceived usefulness, facilitating conditions and user ability had a statistically positive significant effect on e-filing system adoption as per Beta coefficients of perceived ease ($\beta_{1=}$0.395, p=0.000<0.05), perceived usefulness ($\beta_{2=}$0.227, p=0.000<0.05), Facilitating conditions ($\beta_{3=}$ 0.264, p=0.000<0.05) and user ability ($\beta_{4=}$0.009, p=0.000 <0.05). The study results concluded that perceived ease of use, perceived usefulness, facilitating conditions and user ability affect e-filing system adoption. Based on the findings, the study recommends that KRA should plan a more effective strategy and formulate policies of promoting e-filing usage among individual taxpayers in Kenya. Therefore, future studies can be extended to individual taxpayers in other Counties within the country using other variables not utilized in this study to find out what drives/invoke them to resort to KRA work-places for support in filing their tax returns which always led to extension of working hours both in weekdays and weekends by KRA country wide in every calendar year in the month of June.

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DEFINITIONS OF TERMS

E-filing System Adoption (ESA): it is an online platform that enables the taxpayer access tax services through the internet. Such tax services include registration for a tax identification number, filing of tax returns, registration of a payment and compliance certificate application (Wasao, 2014).

Perceived Ease of Use (PE): Defined as the degree to which individuals perceive how easy it is to use the system (Davis, 1989a). That is, the system is free of physical effort, mental effort and is hassle-free (Venkatesh & Davis, 2000).

According to (Kashada, Ghaydi & Mohamed 2020) a system perceived to be easier to use than another is more likely to be adopted/accepted by users.

Perceived Usefulness (PU): Refers to the extent to which individuals believe how useful the system would be (Davis, 1989a). That is, the ultimate reason that users exploit e-filing system is that they find the systems useful to their information needs. Users' perception on the usefulness of the system help them to increase the results of their work (Mohd et al., 2009).

Facilitating conditions (FC): Refers to the organizational and technical infrastructure to support/aid the use of a system by the user(s) e.g. availability of relevant resources such as human/materials, periodic training in order to sustain the use of a system *(*Venkatesh *et al.,* 2003b).

User Ability (UA): In order for a system user(s) to perform an activity in a system, the user(s) has to have the ability to get it done. User ability is defined as the knowledge, experience, and skills that an individual user or group of system users bring to a particular task or activity (Lennard, 2009).

AGE: Age is the length of time that a person has lived. It is often used as a demographic variable in research on e-filing tax system adoption to control for

differences in technological experience, familiarity with computers, and comfort with online transactions (Harshani De Silva, 2018).

LEVEL OF EDUCATION: Level of education is the highest level of schooling that a person has completed. It is often used as a demographic variable in research on e-filing tax system adoption to control for differences in knowledge and skills about computers and the internet (Ruohonen et al., 2016).

OCCUPATION: Occupation is the work that a person does for a living. It is often used as a demographic variable in research on e-filing tax system adoption to control for differences in income, access to computers, and time constraints (Yakubu et al., 2022).

ABBREVIATIONS AND ACRONYMS

ANOVA	–	Analysis of Variance
BIR	-	Bureau of Internal Revenue
DOI	-	Diffusion of Innovation
e -FPS	-	Electronic Filing and Payment System
ESA	–	E-filing System Adoption
E-TAX / E-FILING	-	Electronic Tax Filing
FC	–	Facilitating Conditions
GST	-	Goods and Service Tax
GSTN	-	Goods and Service Tax Network
IRB	–	Inland Revenue Board
IS	-	Information System
ISO	–	International Organization for Standardization
IT	-	Information Technology
KESRA	–	Kenya School of Revenue Administration
KRA	–	Kenya Revenue Authority
NTA	-	National Tax administration
OTS	-	Online Tax System
PC	–	Personal Computer
PE/PEoU/ PEOU	–	Perceived Ease of Use
PIN	–	Personal Identification Number
PU	–	Perceived Usefulness
SPSS	–	Statistical Package for the Social Sciences
TAM	–	Technology Acceptance Model
TRA	–	Theory of Reasoned Action
UA	–	User Ability

UI	–	User Interface
UTAUT	–	Unified Theory of Acceptance and Use of Technology
WWW	–	World Wide Web
PAYE	–	Pay As You Earn
RRA	–	Rwanda Revenue Authority
EE	–	Effort Expectancy
SI	–	Social Influence
TRA	–	Theory of Reasoned Action
TPB	–	Theory of Planned Action
SCT	–	Social Cognitive Theory
GLOBAL	–	Worldwide

CHAPTER ONE

INTRODUCTION

1.0 Overview

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

1.1 Background of the study

E-filing System is an online platform that enables the taxpayer access tax services through the internet. Such tax services include filing of tax returns (Wasao, 2014). E-filing system provides facilities to taxpayers to submit their tax returns electronically (Kumar & Sachan, 2017).

Electronic filing system (e-filing system) defined as an electronic system used to notify the tax return for both individual and firm, as medium to report tax return filing through online system using internet or application service provider (Prawati & Dewi, 2018), is beneficial to both government and taxpayers in many ways. For instance, literature shows that e-filing is fast, effective, efficient and convenient for most of the tax payers as compared with manual filing (Egowan, 2011). Further, e-filing system ensures fast processing of transactions and ease of tax collection among governments around the world (Sharma et al., 2011). There has been a lot of emphasis in the advancement of Internet tax filings under the e-government activity in many parts of the world, the objectives of which are a paperless domain and the efficient and effective process where taxpayers are able to enjoy tax incentives, for example, faster tax refunds and online credit card payment, which brings about an expanding number of Internet tax users (Chang et al., 2005). As a result, the adoption of e-filing as an advanced tax framework is important to a government because it aids in the elimination of tax evasion and

the efficient collection of tax, and it is convenient to taxpayers because it eliminates the formalities associated with manual filing of returns (Jankeeparsad, 2016).

However, manual tax filing has been used for a long period by most developing countries. Owing to the advancement in technology many countries in developing contexts have shifted to electronic filing Systems (Kumar & Sachan, 2017). The transformation of filing from manual to electronic shows the successful implementation of e-filing system in ensuring that infrastructure and facilities in the domain of tax accommodate technology (Abdul Aziz & Md Idris, 2012). The success of a system (e-filing system) in any country starts by users' acceptance, which in turns initiates and promotes users utilization of the system in their tasks (Hwa et al., 2015).

Although developing countries are beginning to rapidly accept internet as a way to extend their service with greater degree of effectiveness and efficiency , the concept of e-filing remains unaccepted, unnoticed by the public or are seriously underused in spite of their availability and not fully utilized by taxpayers (Wang, 2003a), and thus the desire to understand what drives the adoption of e-filing system to be accepted. Hence, providing key insights on this issue has the potential to help government to plan and promote new forms of electronic tax filing systems in the future.

Many studies have made attempts to comprehend what influences the e-filing system adoption. For instance, existing literature have showed that the adoption of tax e-filing system is increasing day by day, but such an adoption of tax filing system is influenced by many psychological, behavioral, demographic, and social factors (Maji & Pal, 2021). While it is argued that several benefits may be

realized by adopting e-filing, many taxpayers of different countries many not be able to realize such benefits due to factors such as performance expectations, perceived system quality, credibility and user satisfaction, complexity, experience, attitude, perceived security and privacy, design & content, and speed (Dewi. 2009; Prawati & Dewi, 2018; Moorthy et al., 2014). Some other factors include compatibility, service quality, trust of the internet, trust of the government, result demonstrability, perceived risk, trust of the government, computer efficacy and anxiety, service quality and social influence (Kumar & Sachan, 2017; Abdul Aziz & Md Idris, 2012; Jankeeparsad, 2016). These studies have reported mixed or contradictory results on their effect on the adoption of e-filing system.

The present study investigates whether perceived ease of use, perceived usefulness, facilitating conditions and user ability influences the adoption of e-filing system among taxpayers in Kenya. Anchored on theory of action we argue that level at which an individual taxpayer believes that he or she can use information technology with ease and without any problem is more likely to influence adoption of e-filing (Venkatesh & Davis, 2000). Equally, the extent of taxpayers perception of how far e-filing can increase their work performance may have an impact on the adoption of electronic filing (Davis, 1989a). The perception that an individual taxpayer believes that organizational and technical infrastructure exists to support the use of a system and the ability to navigate and operate a computer system and access to the various resources required to access and use the system may influence the adoption of the electronic filing of the returns (Venkatesh et al., 2003b; Jankeeparsad, 2016). Although there have been indications that adoption of e-filing system is an efficient and convenient method,

taxpayers both in developed and developing countries still resort to assistance from professional experts to file their returns (Turbotax, 2021; Egowan, 2011; (Sharma et al., 2011); (Lai, 2005); Shukla & Kumar, 2019; Lai & Choong, 2010). This is not exceptional to Kenya as many of the taxpayers still seek help to file their returns despite the suggestion by the tax authority to use electronic device.

1.1.1 Global Perspective

In USA, e-filing over the last few years have experienced substantial growth due to good internet network in place and fast processing of transactions. However, in spite of e-filing system being in place most of the taxpayers are still requesting for support/assistance/help with filing their tax returns as well as filling their tax returns manually instead of using internet (Sharma et al., 2011). Further still in the USA, during the year 2019 as the deadline for filing online tax returns approached, tax authorities issued extensions since most taxpayers preferred to wait until the due date to seek assistance/support/help to file their tax returns creating online traffic on the online tax filing system. This was confirmed by the Internal Revenue Service, which established that 20-25% of all Americans wait until the last two weeks before the deadline to file their online tax returns. At that late date, there are only two options you can do: File your taxes pronto, or request an extension and assistance/support/help to file tax returns (Turbotax, 2021).

Sweden has aimed to be the main web country by 2015 (Egowan, 2011), as a result, most of the resources had been heavily invested in E-filing. E-filing has been fast, effective, efficient and convenient for most of the tax payers as compared with manual filing. In spite of all the advantages of E-filing system some of the taxpayers are still requesting for support/assistance/help with filling their tax returns as well as using manual filing for example in 2010 out of 7 388 461 tax declarations forms which were sent out to the taxpayers by the tax body

only 4.35 million people filed their taxes using E-filing platform (Egowan, 2011). Numerous investigations have inferred that the internet is broadly utilized in Sweden. On the off chance that the web is broadly utilized in Sweden, the question which remains unanswered is what might be the explanation behind long lines of taxpayers requesting for support/assistance/help at the tax offices during the tax filing? (Egowan, 2011).

In India one of the basic main forces to impact the accomplishment of Goods and Service Tax (GST) is the adoption of GSTN (Goods and Service Tax Network) (Shukla & Kumar, 2019). Although online tax filing is mandatory in India under the new online tax filing framework and the numerous effort put in place by Indian government through training and promotional effort, the adoption and use of the online tax filing system is still low among the taxpayers (Shukla & Kumar, 2019). Attributable to this most taxpayers hire tax experts to file tax returns on their behalf, which, to a degree, invalidates the point of the GST system (Shukla & Kumar, 2019).

1.1.2 Regional Perspective

In order to achieve tax compliance, Rwanda implemented an e-tax system to replace manual form filling returns, voluntary tax registration, and timely payment of taxes due. It was implemented as part of a series of steps to increase government revenue by making self-assessment easier for taxpayers via online tax compliance services. There are a number of variables such as non-filers, late filers, non-payers, late payers, nil filers, as well as on time filers and payers for assessing noncompliance, according to RRA reports (2021).

The study in Rwanda discovered that the e-tax management system has improved tax collection in Rwanda, and there is an added value to examine the skills

required by taxpayers or other users of e-filing, as well as the tax authority's preparedness in enhancing the adoption of tax compliance, which is directly influencing positively the tax collected by RRA. The tax administration encourages clients to file electronically due to a variety of advantages. E-filing, according to Anderson *et al.*, (2005), is more efficient than paper filing because it reduces paperwork and errors while also being less expensive. Even if e-filing has significant advantages, users of e-filing, both taxpayers and RRA officers, may face challenges.

Still in developing countries, Sifile, *et al.*, (2018) conducts a research study with the main objective to find out how e-filing influenced tax compliance in Harara, Zimbabwe. The study found that e-filing influences tax compliance, where other measures have required to analyze in which class of taxpayers complying more and how to mitigate the risk from attitude of taxpayers that is diluted by a number of factors that make e-filing difficult or not easy to use.

In Kenya, this is not exceptional as many of the taxpayers still seek help to file their returns despite the suggestion by the tax authority to use electronic device. Hence, the study examines the e-filing system adoption from the Kenyan context.

1.1.3 Kenyan Perspective

In Kenya, the Kenya Revenue Authority (KRA) is charged with collecting and accounting for tax revenue collected on behalf of the government. Kenya has over years confronted challenges of meeting it spending plans owing to the inability to collect enough revenues. Recently Kenya Revenue Authority presented an online tax filing system (iTax) for filling tax returns via internet with an aim to provide high quality service. Different focal points of e-filing system are that it incorporates tax filing and tax payment on the same platform, thus enables

taxpayers to file returns without visiting KRA offices and avoid making long queues which are characterized by manual filing system. This may eventually simplify filing of returns and payment of tax as could reasonably be expected (Lai, 2005). An electronic filing system empowers taxpayers to enlists and present their tax return over the Internet and facilitates the assessment of tax returns due for payment and relevant tax refund to various taxpayers over the online tax system (iTax). The iTax portal for Kenya is a Web-based tax filling and payment system created and monitored by KRA to reduce tiring manual processes, minimize tax evasion and help to increase tax base.

Despite the adoption of online tax filing system (iTax) by KRA, many taxpayers still seek support in filing their tax returns from KRA offices, professional experts and cybercafés. This becomes evident as the deadline for filing tax returns approaches since long queues are apparent at KRA offices and cybercafés in Gatundu South Sub-County. This could be largely attributed to taxpayers not being able to file tax returns online on their own due to lack of knowledge and skills to file tax returns or the taxpayers believes that organizational and technical infrastructure does not exists to aid the use of e-filing system or the taxpayers are not able to use the information technology with ease and large amount of effort needed to use the system or the taxpayers feel that by using the help of the information technology they are not able to improve their performance that is taxpayers believes that the e-filing system is not useful enough to cater for their information need. Thus, there is a strong necessity to identify the acceptance process by the electronic tax-filing service users and what influence its adoption (Wang, 2003b). The identification can help government of any country to improve the existing e-filing system to be more users friendly (Wang, 2003b).

Against this backdrop, the present study investigates the drivers of e-filing system adoption among taxpayers thus, enriching literature by focusing on the reasons why taxpayers around the world including Kenya seek assistance/support in filing their tax returns from Revenue bodies (tax authorities), professionals(experts) or cyber cafes yet they can file tax returns on their own since they have a PIN and electronic filing system (iTax) developed with features to enable taxpayers to file tax returns on their own without assistance/help/support anywhere as long as there is internet. The question which remains unanswered in literature especially in developing context like Kenya where KRA has frequently been compelled to extend working hours. For example, in every calendar year within the month of June KRA Service Centers and KRA Contact Centers usually notify taxpayers of extended working hours for both weekdays and weekends in order to assist/support/help taxpayers in filing their tax returns using e-filing system before the due date as displayed in figure 1.1 (BT Reporter, 2021). Owing to these evidences, the present study invokes the question as to what drives taxpayers to resort to KRA work-places (service centers, huduma-centers and contact centre), professionals and cybercafés for support/ help in filing their tax returns using e-filing system and the extension of tax filing time. Therefore, the purpose of this study was to examine the determinants of e-filing system adoption among taxpayers in Gatundu South Sub-County, Kiambu County Kenya, who request for extension of time and support in filing their tax returns using e-filing system in June every calendar year.

Source: Business Today Kenya

Figure 1.1: KRA Steps up Efforts to Avoid Last-Minute Rush by extending working hours both in weekdays and weekends to support taxpayers in filing their tax returns using e-filing system (iTax).

1.2 Statement of the Problem

As long as individual taxpayer has a PIN, Internet & E-filing system (i-Tax) he/she should be able to file his/her tax return online on his/her own without requesting for support/ help from professionals expert, cybercafé and KRA work places (service centres, huduma-centers, contact-centers). But as the cutoff time for filing of tax returns draws near, many individual taxpayers are seen at KRA workplaces and cyber cafes countrywide requesting for support/help with filing their tax returns using e-filing system (iTax), this is in spite of existence of iTax framework meant to encourage filing of tax returns among taxpayers on their own. This prompted the Director General of Kenya Revenue Authority (KRA), to

urge Kenyan taxpayers to be filing tax returns early, beginning January of every calendar year, to avoid system overload that is caused by too many taxpayers using the e-filing system (iTax) to file their tax returns at the same time during the due date of 30th June deadline every calendar year (Njugunah, 2021).This always forces KRA to operate for longer hours both in weekdays and weekends in order to support taxpayers in filing their tax returns (BT Reporter, 2021). As a result the study invokes the question which remains unanswered as to what drives taxpayers to resort to professional experts, cybercafés and KRA work places (service centres, huduma-centers , contact-centers) for support/ help in filing their tax returns using e-filing system (iTax) and the extension of tax filing time, prompting KRA to extend working hours in June of every calendar year in both weekdays and weekends in order to support taxpayers in filing their tax returns invoking the issue of e-filing system adoption, See figure 1.1, hence the need for this study which is set to answer the question as to what drives individual taxpayers to resort to KRA work-places, professional experts and cybercafés for help in filing their tax returns instead of taxpayers filing on their own since they have the PIN and e-filing system (i-tax) in every calendar year within the month of June by examining the determinants of e-filing system adoption among taxpayers in Gatundu South Sub-County, Kiambu County Kenya by focusing on four variables namely; user ability, perceived ease of use, facilitating conditions (supporting facilities) and perceived usefulness.

1.3 Research Objectives

1.3.1 General Objective

The main objective was to examine the determinants of e-filing system adoption among taxpayers in Gatundu South Sub-County Kiambu County, Kenya

1.3.2 Specific Objectives

The following are the specific objectives:

i. To determine the effect of perceived ease of use on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

ii. To establish the effect of perceived usefulness on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

iii. To examine the effect of facilitating conditions on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

iv. To analyze the effect of user ability on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

1.4 Research Hypotheses

i. **H_{o1}:** Perceived ease of use has no significant effect on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

ii. **H_{o2}:** Perceived usefulness has no significant effect on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

iii. **H_{o3}:** Facilitating conditions has no significant effect on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

iv. **H_{o4}:** User ability has no significant effect on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

1.5 Significance of the Study

The following research study is of significance to the following groups of people:

The Kenya Revenue Authority (KRA) aims to increase revenue collection therefore this study will enable them to know which area of the system (iTax) to improve for it to be more user-friendly system. This study will assist Kenya revenue authority (KRA) to improve their internet e-Filing system. This in turn,

will be useful for them to educate Kenyan taxpayers in order to improve their attitude towards using e-filing as their mode to file tax return undoubtedly. Since the Kenya Revenue Authority (KRA) is currently promoting the use of e-filing, the results may assist the KRA to plan a more effective strategy of promoting e-filing usage among individual taxpayers in Kenya. For a taxpayer, a more usable system will enable them to file tax without requesting for support/assistance/help in filing their tax returns and the extension of tax filing time in every calendar year within the month of June. For system designers, the study will provide the opinions of taxpayers for purposes of improving the general performance of iTax (Online tax filing system).The information generated from this research study will be used by other researchers who will be interested in the subject matter as a secondary source of data. It will give insight and knowledge which confirmed various theories of Technology Acceptance Model (TAM), the Unified Theory of Acceptance &Use of Technology (UTAUT) and Diffusion of Innovation (DOI) theory to explain the empirical relationship on factors influencing the e-filing system adoption and advances support for the relationships hypothesized.

1.6 Scope of the Study

The purpose of this research project was to examine the determinants of e-filing system adoption among taxpayers in Gatundu South Sub-County Kiambu County, Kenya Specifically the influence of perceived ease of use, perceived usefulness, facilitating conditions and user ability on e-filing system (iTax) adoption among taxpayers in Gatundu South Sub-County in Kiambu County. The study adopted explanatory research design. A closed ended questionnaire was used to collect primary data from respondents (households). The study was conducted in Gatundu South Sub-County in Kiambu County where many individual tax payers

seek help in filing their tax return online on 30th June every calendar year from KRA work places, professional and cybercafé's. The study was conducted between February 2022 and September 2023.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This section presents a review of literature. It covers concepts, theoretical framework, empirical literature review and the conceptual framework of the study.

2.1 Conceptual Review

This section contains review of concepts studies related to the variable of the study

2.1.1 Concept of E-filing System Adoption

Prior to the presentation of Online Tax Filing System (iTax) by KRA, manual filing of tax used to take weeks, however since its introduction, e-filling and e-payment of tax nowadays takes just a couple of moments (Jankeeparsad, 2016). E-filing system frameworks gives advantage to the taxpayers for they can be able to file their tax returns anywhere as long as they have internet without necessarily visiting the Revenue offices (Jankeeparsad, 2016). It is in this regard that KRA has embraced the change and adopted online tax filing system/e-filing tax system (iTax system) for filing tax returns via internet.

The objectives of e-Filing are to facilitate tax compliance and to give taxpayers service using Internet technologies and world wide web (www) and by using the e-Filing system, taxpayers can prepare, report, and file their tax online (Tahar et al., 2020).Internet and its related technology applications are increasingly popular for business organizations and public institutions. This gives motivation to the government to provide information and deliver service to citizens and business partners through internet (Azimaton et al., 2016). User acceptance of electronic

transactions has improved significantly over the past decade with more individuals using the internet as a medium of transaction (Jankeeparsad, 2016).

E-filing tax system is an application on filing information of tax payment and tax return forms electronically by obtaining a valid digital certificate from the Revenue Body and this valid digital certificate is to help taxpayers to complete their tax filing online (Moorthy et al., 2014). This shows an obvious contrast between the traditional manual tax filing method and e-filing tax method where the transaction process can be done in a paperless environment and rather without physically paying a visit to the tax department (Moorthy et al., 2014).

Despite several benefits and advantages provided to taxpayers by using e-filing system in terms of information searching, speedy filing, minimizing processing errors, fast and direct deposit refunds, eliminating delays or uncertainties of online tax filing, statistics from Revenue Bodies of many countries around the world indicates that taxpayers who adopt e-filing tax system represent only a small percent of total taxpayer's population (Moorthy et al., 2014).e- Filing is an important tool to the tax return filers as it has enhanced the efficiency in filing the return, getting the refund, faster assessment and gathering tax information. It has also improved tax filing service by reducing cost and time effort both to the tax payers and tax collecting agency. However, the introduction of the e-filing system does not necessarily mean that it would automatically become popular and people would readily accept this sort of change (Maji & Pal, 2021).

Online tax filing system or e-filing system is a prominent type of e-government system (Kumar & Sachan, 2017). E-filing system provides facilities to taxpayers to submit their tax returns electronically (Kumar & Sachan, 2017). E-filing has been adopted by many developing countries along with developed countries

(Kumar & Sachan, 2017).Technological advances has led to production of electronic devices to help in maintaining archives of important government documents. It helps offices to speed up the process of e-governance. The increase in number of taxpayers who are scattered throughout the country requires high quality services, minimum time and cost involved in tax payment and minimum paper usage in the administrative process. Thus, e-filing system is vital (Prawati & Dewi, 2018). Online tax system (e-filing) has received global attention through the development of information technology, which affects tax administration system (Mustapha & Obid, 2015).

E-filing is recommended to facilitate taxpayer activities in filing taxes which is expected to eliminate the perception of taxpayers that filing taxes is not complicated, so that it has an impact on increasing tax revenues received by the country (Z & Putra, 2019).The success of a system (e-filing system) in any country starts by users' acceptance, which in turns initiates and promotes users utilization of the system in their tasks (Hwa et al., 2015). Thus, it is necessary to assess the key barriers to the adoption of a system among users as it is a critical issue for improving e-filing usage and effects which in turn determine the success of the system (Hwa et al., 2015).

Governments across the world have recognized the need to become an e-government and migrate from traditional manual transactions to electronic transactions using the internet to provide services to its citizens (Jankeeparsad, 2016).Every transactions conducted via e-filing is protected by public key infrastructure technology which allows users to file their tax returns online from any location. This application (e-filing system/online tax filing system) also assists the users to fill, compute and submit their tax returns easily, safely, and

accurately (Azimaton et al., 2016). According to Kumar & Sachan (2017), e-filing system is convenient to users like access from anywhere, anytime, easy to use, information searching and online transaction facilities that are not available through conventional pen and paper based tax filing system. It reduces calculation error also. Furthermore, e-filing offers many benefits to service provider authority by minimizing their workload and operational, processing, storing and handling cost of tax returns but despite the rapid adoption of tax e-filing system in many countries Tax authorities face some major challenges towards the implementation of the e-filing system (Kumar & Sachan, 2017).

Despite all the efforts aimed at developing better and easier electronic tax-filing systems, these tax-filing systems remained unnoticed by the public or are seriously underused in spite of their availability (Okunogbe & Pouliquen, 2022). Therefore, there is a need to understand the acceptance by the users of the electronic tax-filing systems and identify the factors that can affect their decision to use or not use these electronic tax-filing systems (Okunogbe & Pouliquen, 2022). This issue is important in that the answer could help the government to plan and promote new forms of electronic tax-filing systems in the future (Okunogbe & Pouliquen, 2022). E-filling (online tax filing) has significant benefits for both government as well as for taxpayers in terms of cost effective, convenient, time saving, accuracy, fast, secure, more productive and efficient (Kumar & Sachan, 2017). While several benefits incurred in e-filing, all the taxpayers of country many not be able to realize these benefits due to several factors like perceived ease of use, perceived usefulness, facilitating conditions (supporting facilities), user ability, etc. (Kumar & Sachan, 2017).

The major challenges with e-filing system to date have not necessarily been a problem of design, but utilization (Kumar & Sachan, 2017). Due to digital divide, a large number of taxpayers either prefer pen and paper based return filing or dependent on intermediaries like tax consultant to file tax return on their behalf (Kumar & Sachan, 2017). Use/utilization of the systems and meeting users' need is the main key to successful e-filing system implementation (Kumar & Sachan, 2017). It is important to understand the users' need, the factors that influence taxpayers to adopt/to have interest in using e-filing system (online tax filing system) accordingly to maximize its utilization (Kumar & Sachan, 2017).The success of e-filing relies on users' acceptance, hence it is important to identify influencing factors on acceptance and use of e-filing from taxpayers' perspective and to encourage them to use e-filing instead of manual ways (Ann et al., 2021).Based upon the many supporting features available within the e-filing system, the Revenue Bodies expects taxpayers will not feel threatened when using e-filing system (Tallaha et al., 2014).

The existing literature supports that the adoption of tax e-filing system is increasing day by day, but such an adoption of tax filing system is affected by many psychological, behavioral, demographic, social and other factors (Maji & Pal, 2021). Thus, there is a strong necessity to identify the acceptance process by the electronic tax-filing services users and also to determine the factors which possess the potential to affect/influence the behavior of the e- filing system/ online tax filing system users to use or not to use these online web-based e-filing systems (Wang, 2003b). The identification of such issue can be of great help to the government of any country to improve the existing e-filing system to be more user friendly (Wang, 2003b).

Against this backdrop, the present paper examine the determinants of e-filing system adoption among taxpayers and the reason behind taxpayers request for support/assistance/help in filing their tax returns from tax experts (Revenue Body e.g. KRA, tax consultant and Cyber café) and yet they have the system (iTax) and Personal Identification Number (PIN) to enable them to file tax returns on their own. The question that remain unanswered is whether the e-filing system is it not easy to learn/use by the taxpayers hence request for help/support/assistance in filing their tax returns?

The use of e-filing system for online tax filing could be a function of TAM constructs which are perceived ease of use (PEOU) and perceived usefulness(PU) and the four core constructs suggested by UTAUT model that is performance expectancy (PE),effort expectancy (EE), social influence (SI) and facilitating conditions/supporting facilities (FC) (Onaolapo & Oyewole, 2018). In order to empirically test this, the study is set to examine factors influencing the adoption of e-filing system (iTax) among taxpayers in Gatundu South Sub-County in Kiambu County, Kenya.

2.1.2 Concept of Perceived Ease of Use

Perceived ease of use reflects the extent to which a user believes that it is easy to use a particular system and the extent to which the user believes that making use of a particular system would be free of physical effort, mental effort and hassle-free (Lanlan et al., 2019). According to (Kashada, Ghaydi & Mohamed 2020) an application perceived to be easier to use than another is more likely to be accepted by users.

Perceived Ease of Use (PEoU) is defined as the user's perception of the amount of effort needed to use the system (Azmi et al., 2012). Perceived ease of use is

defined as "the degree to which an individual believes that using a particular system would be free of physical and mental effort" (Davis, 1987).

For the e-Filing system to be used more widely, users must perceive the system to be easy to use and navigate through with as little software knowledge as possible (Jankeeparsad, 2016). Davis (1989), defined Perceived ease of use as the degree to which a user aspects the use of Internet tax-filing system to be free of effort. Perceived ease of using technology is scaled when someone is able to operate a system to do a task without any difficulties or barrier (Saparudin et al., 2020).PEOU relates to assessments of the intrinsic characteristics of IT, such as the ease of use, ease of learning, flexibility, and clarity of its interface (Gefen & Straub, 2000).

Perceived ease of use (PEoU) is defined as the level at which someone believes he or she can use information technology (a system) with ease and without any problem (Venkatesh & Davis, 2000). According to Lanlan et al., 2019), perceived ease of use relates to the extent to which the user believes that making use of particular technology would be effortless and hassle-free. Perceived ease-of-use explains the extent to which users can believe that in using technology, they can do anything without the interference that becomes an obstacle for them (Tahar et al., 2020).

Perceived ease is related to how easy it is to access a technology system and its display (Tahar et al., 2020). If taxpayers feel that e-Filing is easy to use, then the level of intention to it using is also increasing (Tahar et al., 2020). A system can be said to be quality if it is designed to meet user satisfaction through the ease in using it (Tahar et al., 2020). The ease, in this case, is not only limited to the ease of using e-filing, but also related to whether this system eases them in completing

online tax filling compared to doing it traditionally/manually (Tahar et al., 2020).Perceived ease of use influences the performance risk of the e-filing system in that less complicated e-filing system will minimize performance risks (Tahar et al., 2020).

Davis (1986), defined perceived ease of use as the extent to which users believe that by using a specific system, they will be free from effort. In other words, the more users feel a system is easy-to use, the higher their interest in using the system (Tahar et al., 2020). The core assumptions in the TAM are that an individuals' use of technology is mediated by their acceptance of that technology, which in turn is determined by two cognitive factors, namely, perceived usefulness (PU) and perceived ease-of-use (PEOU) (Tahar et al., 2020).TAM posits that two particular beliefs, perceived usefulness and perceived ease of use, are of primary importance for information system technology acceptance behaviors (Jankeeparsad, 2016). Both of these are influenced by external variables such as training, user support, documentation, prior experience and system features (Jankeeparsad, 2016). Thus in the e-Filing context, perceived ease of use postulates that the easier a taxpayer believes the e-Filing system is to use, the more likely they are to use it (Jankeeparsad, 2016).

Even if potential users believe that a given application/system is useful they may at the same time believe that the systems is too hard to use and that the performance benefits of the usage of the system are outweighed by the effort of using the system , that refers to perceived ease of use (Davis, 1989a). In order to prevent the "underused" useful system problem, electronic tax-filing systems need to be both easy to learn and easy to use (Wang, 2003a). Therefore, the use of e-filing system for online tax filing could be a function of TAM constructs which

are perceived ease of use (PEOU) and perceived usefulness(PU) (Onaolapo & Oyewole, 2018). In order to empirically test this, the study is set to examine factors influencing the adoption of e-filing system (iTax) among taxpayers in Gatundu South Sub-County in Kiambu County, Kenya.

2.1.3 Concept of Perceived Usefulness

Perceived usefulness can be referred to as the extent to which a person believes that using a particular system would enhance the execution of his or her duties (Izzani et al., 2016). Perceived Usefulness is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989 as quoted by Mohd et al., 2009). Within the e-filing system context, a system that is high in perceived usefulness is one that the user believes will have a positive use-performance relationship. In fact, IS adoption research suggests that “a system that does not help users perform their jobs is not likely to be received favorably” Mohd et al., 2009). The ultimate reason that users exploit e-filing system is that they find the systems useful to their information needs or search Mohd et al., 2009). According to (Davis, 1987) perceived usefulness is defined as "the degree to which an individual expects that using a particular system would enhance his or her job performance".

Perceived Usefulness is described as a person's tendency to use an application and to believe that this perception will help him do a better work (Indarsin & Ali, 2017).

According to Wicaksono & Maharani, 2020), Perceived Usefulness (PU) is defined as a person's or organization's belief in a system that can facilitate their work. When someone does not believe the system is able to help him in doing

work, then that person or organization has no intention of using it Wicaksono & Maharani, (2020).

Perceived usefulness occurs when users believe that technology will significantly help to increase the result of their work. Users' perception on the usefulness of the system help them to increase the results of their work (Saparudin et al., 2020). Perceived usefulness describes the extent to which users feel that by using the help of technology, they can improve their performance (Tahar et al., 2020). The perceived usefulness of the system is related to the productivity and effectiveness of the system and its overall benefits to improve user performance (Tahar et al., 2020). Taxpayers' perceived usefulness is the taxpayers' perception on how far or the extent to which the e-filing is capable to give them benefits and advantages (Yefni et al., 2018).The success of e-filing depends on the citizens' (taxpayers) view of the convenience and usefulness of such services (Azmi et al., 2012).

Perceived usefulness(PU) is defined as the degree of taxpayers' believes from using internet tax-filing system that would enhance their job performance (Ilias et al., 2008).Perceived usefulness (PU) is defined as the level of taxpayers' perception of how far e-filing can increase their work performance (Davis, 1989a).PU is a response to user assessment of its extrinsic, i.e., task-oriented, outcomes: how IT helps users achieve task-related objectives, such as task efficiency and effectiveness (Gefen & Straub, 2000). The ultimate reason that people exploit electronic tax-filing systems is that they find the systems useful to their tax return preparation (Wang, 2003a).

TAM posits that two particular beliefs, perceived usefulness and perceived ease of use, are of primary importance for information system technology acceptance behaviors (Jankeeparsad, 2016). Both of these are influenced by external variables

such as training, user support, documentation, prior experience and system features (Jankeeparsad, 2016). Thus in the e-Filing context, perceived usefulness refers to the notion that the more a person believes that e-Filing will enhance their efficiency, the greater the possibility of its use (Jankeeparsad, 2016).First, people tend to use or not use an application/ a system to the extent they believe it will help them perform their job better. We refer to this variable as perceived usefulness (Davis, 1989a). Perceived Usefulness (PU) is defined as user's perception of the degree to which using the system will improve his or her performance in the workplace (Azmi et al., 2012).

The ultimate reason that taxpayers will exploit the e-Filing system is that they find the system useful to their tax return preparation and submission and will result in significantly less effort and time in completing the tax return task (Jankeeparsad, 2016).The core assumptions in the TAM are that an individuals' use of technology is mediated by their acceptance of that technology, which in turn is determined by two cognitive factors, namely, perceived usefulness (PU) and perceived ease-of-use (PEOU) (Tahar et al., 2020).

In other words perceived usefulness (PU) is the extent to which a person believes that using a technology will improve the performance of his/her work hence the more useful a technology is, the higher the users' desire to use it (Tahar et al., 2020). If users of the online tax filing system/e-filing system (taxpayers) feel that e-Filing is useful, this will increases the level of interest to use or adopt the system (Tahar et al., 2020). If taxpayers feel the benefits, they will develop interest in using e-filing system (online tax filing system) and if they do not feel the benefits of the system, then they will not develop interest in using e-filing system (online tax filing system) (Tahar et al., 2020).Therefore, the use of e-filing

system for online tax filing could be a function of TAM constructs which are perceived ease of use (PEOU) and perceived usefulness(PU) (Onaolapo & Oyewole, 2018). In order to empirically test this, the study is set to examine the factors influencing the adoption of e-filing system (iTax) among taxpayers in Gatundu South Sub-County in Kiambu County, Kenya.

2.1.4 Concept of Facilitating Conditions

Facilitating conditions are factors in an environment that make possible the use of e-filing for filing tax returns by taxpayers (Onaolapo & Oyewole, 2018).In this study, facilitating condition/supporting facility is the availability of relevant resources such as human/materials/ organizational or technical infrastructure which support the admission of/use of e-filing system/online tax filing system (iTax). Facilitating condition is a perception to be able to access the resources needed, supported by the knowledge and support needed to use technology (Z & Putra, 2019).

Given that an individual perceives that using a system will improve his job performance represents performance expectancy, while Availability of technical and organizational infrastructure required to use a system represents the facilitating conditions; facilitating conditions(supporting facilities) could be said to play a critical role and have direct impact on the use of any system (Hamzat & Mabawonku, 2018). Facilitating conditions(supporting facility) is the relevant resource readiness, for example, organizational or technical infrastructure to assist users to use the system (Venkatesh et al., 2003b).

Facilitating conditions refer to the degree to which an individual believes that organizational and technical infrastructure exists to support/aid the use of a system (Venkatesh et al., 2003b).Facilitating conditions such as resources

availability, skills as well as technical infrastructure could play a significant role towards e-filing use among taxpayers (Hamzat & Mabawonku, 2018).Facilitating conditions are the degree to which an individual believes that an organizational and technical infrastructure exists to support the use of the system (Abdul Aziz & Md Idris, 2012).

Facilitating conditions (supporting facilities) such as access to resources and technology are particularly important for developing country (Jankeeparsad, 2016).Facilitating conditions (supporting facilities) are seen as the availability of resources in the use of e- filing for taxpayers, and availability of technical support when experiencing difficulties (Pratiwi et al., 2018). Facilitating conditions represents the degree to which an individual believes that an organizational and technical infrastructure exists to support the use of a system (Hamzat & Mabawonku, 2018).

Facilitating conditions entails provision of uninterrupted power supply, high Internet bandwidth and Facilitating of periodic training in order to sustain the use of a system (Hamzat & Mabawonku, 2018). Facilitating conditions represents the logistics and technical aids/support needed to use e-filing by the users of a system (Hamzat & Mabawonku, 2018). In this study, facilitating conditions is described as the extent to which taxpayers believe that technical infrastructure exists to enhance the use of e-filing.

The challenges faced by e-filing users in terms of access to computer equipment, software and the internet connectivity necessary to use e-filing can be a significant barrier to usage and intention/ interest to use online system (Actual system usage) (Jankeeparsad, 2016).The effective use of e-filing for filing tax returns by taxpayers' hinges on the availability of organizational resources

(human and materials) and appropriate technical infrastructure required for their optimum performance (Onaolapo & Oyewole, 2018). This implies that the degree to which taxpayers believe that organizational resources and technical infrastructure exist to support the effective use of e-filing for filing tax returns could determine if taxpayers will actually use their e-filing system for filing tax returns or not (Onaolapo & Oyewole, 2018).

Therefore, the use of e-filing system for online tax filing could be a function of these UTAUT constructs (Onaolapo & Oyewole, 2018). In order to empirically test this, the study is set to examine factors influencing the adoption of e-filing system (iTax) among taxpayers in Gatundu South Sub-County in Kiambu County, Kenya.

2.1.5 Concept of User Ability

In order for a user to do something, the user has to have the ability to get it done. User ability is defined as the knowledge, experience, and skill that an individual user or group of system users

bring to a particular task or activity (Lennard, 2009).

User ability (perceived ability) in an information system scenario means one's perceived ability to navigate and operate a computer system and access to the various resources required to access and use the system (Jankeeparsad, 2016). Therefore in the e Filing context, a taxpayer is more willing to file their tax return using e Filing if he or she has a positive attitude towards using e Filing, wants to conform with other important people's opinions on the use of e Filing, has access to the required resources to do so and has the necessary skills (user ability) to use the system (Jankeeparsad, 2016).

Irrespective of whether taxpayers use manual or e-filing system (online tax filing system), taxpayers still need sufficient tax knowledge/skill to assist them in filing their tax returns (Tallaha et al., 2014). Regarding the decision to use e Filing, a user who doubt his ability to use an information systems or consider computers too complex to use and believe that they will never be able to operate these computers or use the necessary software and interface will prefer to avoid them and are less likely to use them to conclude the transaction in question (Jankeeparsad, 2016).

The higher the user ability to use an information systems, the higher the acceptance of e-Filing system in place (Pratiwi et al., 2018). Taxpayer who has confidence in his ability to use computer systems and various software applications will be more willing to use the e Filing system (Jankeeparsad, 2016). This confidence is most likely to grow based on the taxpayer's past experiences/skills with computers and information systems (Jankeeparsad, 2016). In order to empirically test this, the study is set to examine factors influencing the adoption of e-filing system (iTax) among taxpayers in Gatundu South Sub-County in Kiambu County, Kenya.

2.1.6 Concept of Age

Age is the length of time that a person has lived. It is often used as a demographic variable in research on e-filing tax system adoption to control for differences in technological experience, familiarity with computers, and comfort with online transactions. For example, a study on the factors that influence taxpayers' willingness to adopt e-filing might control for age by only including participants who are within a certain age range (Harshani De Silva, 2018). According to (Pruett & Choi 2013), Age, as a control variable in this research, refers to the

chronological age of the taxpayers being studied. It can be used as a control variable in research to account for the potential differences in behavior between people of different ages. Age can be used as a control variable to account for the potential differences in e-filing adoption behavior between younger and older taxpayers. Younger taxpayers may be more likely to adopt e-filing because they are more familiar with and comfortable with using technology.

Older taxpayers may be less likely to adopt e-filing because they are less familiar with technology. For instance, Huang, (2010) argues that age is a significant predictor of e-filing adoption, with younger taxpayers being more likely to adopt e-filing than older taxpayers. In his study, Huang found that the odds of a taxpayer adopting e-filing increased by 1.1% for every year that the taxpayer was younger. Previous research has shown that age is a significant predictor of technology adoption behaviors among individuals (Johnson & Smith, 2017). To control for the potential confounding effect of age, we will include it as a control variable in our study (Brown et al., 2020).

2.1.7 Concept of Occupation

Occupation is the work that a person does for a living. It is often used as a demographic variable in research on e-filing tax system adoption to control for differences in income, access to computers, and time constraints. For example, a study on the factors that influence the use of e-filing by small businesses might control for occupation by only including participants who are self-employed (Yakubu et al., 2022). Occupation is a variable that measures the type of work that a person does. It can be used as a control variable in research to account for the potential differences in behavior between people of different occupations

Occupation is a categorical variable that measures the type of work that a person does. It can be used as a control variable in research to account for the potential differences in behavior between people of different occupations (Ramakrishnan & Sadagopan, 2006). The type of work that a person does can affect their familiarity with and comfort level with technology. For example, people who work in occupations that require them to use computers on a regular basis, such as accountants and lawyers, are more likely to be familiar with and comfortable with using technology than people who work in occupations that do not require them to use computers on a regular basis, such as construction workers and farmers (Brown et al., 2020). By including occupation as a control variable, researchers can statistically account for these differences and focus on the primary determinants of e-filing system adoption.

2.1.8 Concept of Level of Education

Level of education is the highest level of schooling that a person has completed. It is often used as a demographic variable in research on e-filing tax system adoption to control for differences in knowledge and skills about computers and the internet. For example, a study on the factors that influence the use of e-filing system by users might control for level of education by only including participants who have completed high school or higher (Ruohonen et al., 2016). Level of education is a categorical variable that measures the amount of formal education that a person has received. It can be used as a control variable in research to account for the potential differences in behavior between people of different levels of education (Kim & Malhotra, 2005).

Level of education in dicates how much formal education an individual has obtained. It can be used as a control variable in studies to take into account

potential behavioral variations between individuals with various degrees of education. Individuals with higher levels of education may have better computer skills, greater familiarity with technology, and a greater propensity to adopt electronic methods for tasks such as tax filing (Smith & Johnson, 2019). This is because they are more likely to have had more exposure to computers and other forms of technology in their education and work experiences. By including level of education as a control variable, the researcher statistically accounts for these differences and focus on the primary determinants of e-filing system adoption.

2.2 Theoretical Review

This study used three theories namely: Technology Acceptance Model (TAM) Theory, the Unified Theory of Acceptance &Use of Technology (UTAUT) and Diffusion of Innovation (DOI) Theory to explain the empirical relationship on the determinants of e-filing system adoption.

2.2.1 Technology Acceptance Model (TAM) Theory

Technology Acceptance Model was created by Davis, 1989. There are many models that can be used to measure the level of acceptance of information systems (Pratiwi et al., 2018). Technology Acceptance Model (TAM) is one of the most frequently used models in research to know the factors that influence the adoption of e-filing system (Pratiwi et al., 2018). Technology Acceptance Model (TAM) was developed by Fred Davis (1989) as one of the most popular research models to predict use and acceptance of information systems and technology by individual users. TAM was developed to explain computer usage (Ilias,Norazah,Mohd &Rahida, 2008). The goal of TAM is to provide an explanation of the determinants of computer acceptance that is capable of explaining user behavior across a broad range of end user computing technologies

and user populations, while at the same time being both economical and theoretically justified (Fred D. Davis, 1989b).

The TAM is utilized to disclose how people come to acknowledge and utilize new information technology (Zaidi et al., 2017). TAM proposes that when users (taxpayers) are given another innovation, two convictions, the Perceived ease of use and the Perceived usefulness decide perspectives to embrace new technologies by the users of the system (Venkatesh & Davis, 2000).In addition, TAM is being used and accepted in most of the past studies to explain the relationship between the usage perception and information technology (Moorthy et al., 2014). And is being verified as a useful theoretical model to understand and explain the user's behavior to implement an information system (IS) (Moorthy et al., 2014).

Technology Acceptance Model (TAM) is a theory describing the perception of technology users (Tahar et al., 2020). TAM is designed to predict and explain information technology acceptance and usage on the job (Venkatesh et al., 2003b).Technology Acceptance Model (TAM) is an adaptation of the Theory of Reasoned Action (TRA) to the field of information system which aims to accurately model how users respond to the presentation of a new technology, addressing factors such as their initial perception, level of acceptance and use of the technology (Hwa et al., 2015).The TAM adopts the theory of reasoned act (TRA) model to explore the IT acceptance (Ilias et al., 2008). TAM and TRA, both of which have strong behavioral elements, assume that when someone forms an intention to act, they will be free to act without limitation (Davis, 1989a).

TAM is the most widely used model for identifying factors contributing to technology acceptance (Tahar et al., 2020). The theory suggests that, when users

are presented with a new piece of technology, several factors influence their decision about how and when they will use the technology (Noor Ardiansah et al., 2020). Also according to TAM, individuals accept a particular system if they believe in the system (Azmi & Lee Bee, 2010). These believe are perceived usefulness (PU) and perceived ease of use (PEOU) (Azmi & Lee Bee, 2010).

In essence, TAM posits that IT adoption is affected by prior use-related beliefs (Gefen & Straub, 2000). TAM identified two such beliefs: perceived usefulness (PU) and perceived ease of use (PEOU) (Gefen & Straub, 2000). According to TAM, IT adoption is influenced by two perceptions: Perceived usefulness (PU) and Perceived ease-of-use PEoU) (Gefen & Straub, 2000). TAM is constructed on the foundations of perceived usefulness and perceived ease of use (Lu et al., 2010).

PU is defined as the user's perception of the degree to which using the system will improve his or her performance in the workplace (Azmi & Lee Bee, 2010). PEOU is defined as the user's perception of the amount of effort they need, to use the system (Azmi & Lee Bee, 2010).Perceived Ease of Use (PEoU) is how much an individual client sees that utilizing a specific system framework will be liberated from physical and mental exertion (Karahanna & Straub, 1999)**.** PEOU relates to assessments of the intrinsic characteristics of IT, such as the ease of use, ease of learning, flexibility, and clarity of its interface (Gefen & Straub, 2000). PU, on the other hand, is a response to user assessment of its extrinsic, task-oriented, outcomes: how IT helps users achieve task-related objectives, such as task efficiency and effectiveness (Gefen & Straub, 2000).

Perceived ease of use indicates how ease individual learn how to operate or use new technology or information system (Lu et al., 2010).Perceived ease of use is

an individual's assessment of the extent to which interaction with a specific information system or technology is free of mental effort (Moorthy et al., 2014). Perceived Usefulness (PU) is defined as the degree that a person believes to an extent that adoption of a particular system will enhance their job performance (Davis, 1989a).Perceived usefulness refers individual believe that the system will improve the degree of job performance through using particular new technology and information system (Lu et al., 2010).

Perceived usefulness is the extent to which a person deems a particular system to boost his or her job performance (Moorthy et al., 2014). Perceived ease of use indicates how ease individual learn how to operate or use new technology or information system (Lu & Ting, 2013). Exogenous variables/external variables such as environment are also the antecedent that induces perceived usefulness and perceived ease of use.

Thus TAM posits that two particular beliefs, perceived usefulness and perceived ease of use, are of primary importance for information system technology acceptance behaviors. Both of these are influenced by external variables such as training, user support, documentation, prior experience and system features (Jankeeparsad, 2016).Thus in the e-Filing context, perceived usefulness refers to the notion that the more a person believes that e-Filing will enhance their efficiency, the greater the possibility of its use while perceived ease of use postulates that the easier a taxpayer believes the e-Filing system is to use, the more likely they are to use it (Jankeeparsad, 2016).

The TAM model shows that, when users are presented with new technology, some factors influence their decisions about how and when they will use them. The two most important factors are perceived usefulness and perceived ease-of-

use (Tahar et al., 2020).Thus, according to TAM model, user acceptance of an information system depends on two factors, namely, perceived usefulness and perceived ease-of-use (Tahar et al., 2020). Together, these factors determine attitudes toward the use of technology, where it can affect the behavioral intention to use (BI), leading to the actual use of the system (Tahar et al., 2020).As per TAM, perceived usefulness and perceived ease of use affects the attitude of the individuals that ultimately forms the basis of behavioral intentions (Maji & Pal, 2021).

If due to the application or use of the new technology, there is a perceived improvement of the performance of the job in any context, the new technology will be believed to be useful and will have positive implication towards forming the attitude (Maji & Pal, 2021).The perceived ease of use is measured in terms of the efforts that an individual needs to put in to accomplish any task by using the new technology (Davis, 1989b).TAM indicates both perceived usefulness (PU) and perceived ease of use (PEOU) as key independent variables that determine or influence potential users' attitudes toward IT intention of use (Davis, 1989b).Attitude is an individual's positive or negative evaluation of self-performance of a particular behavior while Subjective norm is an individual's perception about particular behavior, which is influenced by the judgment of significant others (Lu & Ting, 2013). Behavioral intention is an indication of an individual's readiness to perform a given behavior and it is assumed to be immediate antecedent of behavior (Lu & Ting, 2013).

TAM posits that perceived usefulness (PU) and perceived ease of use (PEOU) are significant factors affecting acceptance of an information system and influence behavioral intention and attitude towards actual usage by the computer users

(Moorthy et al., 2014).Exogenous variables such as environment are also the antecedent that induces perceived usefulness and perceived ease of use (Lu et al., 2010).

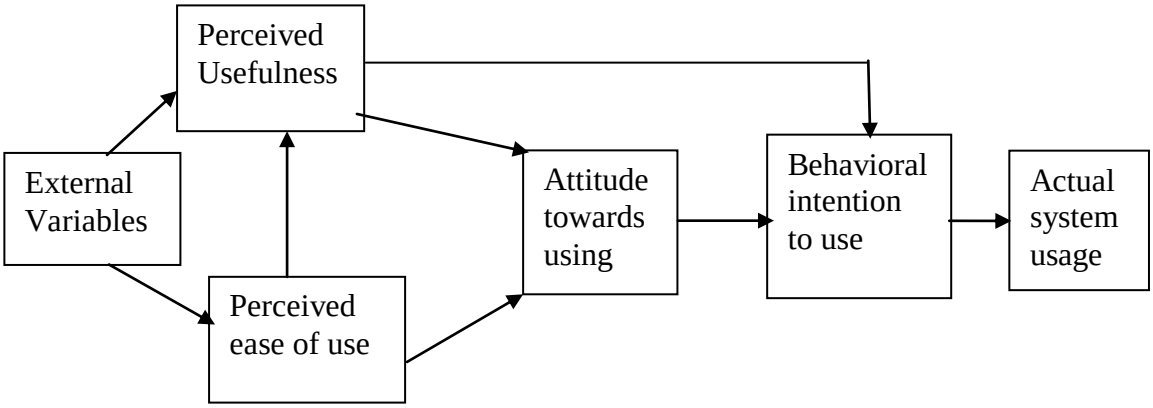

Figure 2.1: Technology Acceptance Model

Source: (Davis et al., 1989)

Research in TAM suggests that users' intention to use (BI) is the single best predictor of actual system usage (Giner et al., 2009). The intention to use is determined by one's attitude towards using (Giner et al., 2009). This attitude is determined by perceived usefulness (PU) and perceived ease of use (PEOU) (Giner et al., 2009).

Perceived usefulness (PU) is defined as the degree to which a person believes that using a particular system would enhance his or her job performance while the perceived ease of use (PEOU) refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989a). Main external variables or factors are related both to individuals, design and contextual variables are: objective design characteristics, training, computer self-efficacy, user involvement in design, etc. (Giner et al., 2009).

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

The unified theory of acceptance and use of technology (UTAUT) was created by Venkatesh et al. (2003). UTAUT model incorporates various acceptance theories to develop the unified theory of acceptance and use of technology (UTAUT) model (Ann et al., 2021).The unified theory of acceptance and use of technology (UTAUT) model was developed through the review and integration of eight dominant theories and models, namely: the Theory of Reasoned Action (TRA), the Technology Acceptance Model (TAM), the Motivational Model, the Theory of Planned Behavior (TPB), a combined TBP/TAM, the Model of PC Utilization, Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT) (Williams et al., 2015). These contributing theories and models have all been widely and successfully utilized by a large number of previous studies of technology or innovation adoption and diffusion within a range of disciplines including information systems, marketing, social psychology, and management (Williams et al., 2015). According to the Unified Theory of Acceptance and Use of Technology model, the degree to which a technology/system is accepted depends largely on a number of factors such as performance expectancy, effort expectancy, social influence and facilitating conditions (Hamzat & Mabawonku, 2018).

The UTAUT model combines the previous eight theoretical models and is made up of four key factors/constructs that act as determinants of behavioral intentions and use behavior (Hamzat & Mabawonku, 2018). UTAUT consists of four constructs, performance expectation, effort expectation, social influence, and facilitating conditions, which are direct determinants of usage intention and behavior (Bhuasiri et al., 2016). UTAUT model incorporates various acceptance

theories to develop the unified theory of acceptance and use of technology (UTAUT) model (Ann et al., 2021). This UTAUT model consists of four constructs: performance expectancy (PE); effort expectancy (EE); social influence (SI); and facilitating conditions (FC) to predict behavioral intention and to determine user behavior (Ann et al., 2021). It is argued that by examining the presence of each of these UTAUT constructs in a “real world” environment, researchers and practitioners will be able to asses an individual’s intention to use a specific system, thus allowing for the identification of the key influences on acceptance in any given context (Williams et al., 2015).

This study is however, limited to the influence of facilitating conditions (supporting facilities) on the use/adoption of e-filing (online tax filing system). Facilitating conditions/supporting facilities (FC) is one’s ability to access to the various resources (human & materials) and use the system (Jankeeparsad, 2016).UTAUT model also includes these moderator variables gender, age, experience and voluntariness to check the tendency of the relationship between independent constructs and dependent construct (Ann et al., 2021). The unified theory of acceptance and use of technology (UTAUT) is a technology acceptance model formulated by Venkatesh and others in "User acceptance of information technology: Toward a unified view” (Venkatesh & Zhang, 2010). The UTAUT aims to explain user intentions to use an information system and subsequent usage behavior (Venkatesh & Zhang, 2010). The theory holds that there are four key constructs: 1) performance expectancy, 2) effort expectancy, 3) social influence, and 4) enabling/supporting/facilitating conditions (Venkatesh & Zhang, 2010).This study is however, limited to the influence of facilitating conditions (supporting facilities) on the use of e-filing (online tax filing system).

2.2.3 Diffusion of Innovation (DOI) Theory

Diffusion of Innovation (DOI) explains the user adoption of new technology (Kumar & Sachan, 2017). Diffusion is defined as “the process by which an innovation is communicated through certain channels over time among the members of social society”, while innovation refers to an idea or object that is perceived to be new (Kumar & Sachan, 2017).

DOI theory explains that there are four key factors that influence the diffusion process. These include the innovation itself, how information about the innovation is communicated, the timing of the innovation, and the nature of the social system into which the innovation is being introduced (Rogers, 1995). DOI theory explains that innovation’s relative advantage, compatibility, complexity, trial ability, and observability are the elements that affect rate of diffusion (Kumar & Sachan, 2017).Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories (Wiley & Cory, 2013).

It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system and the end result of this diffusion is that people/users, as part of a social system, adopt a new idea, behavior, or product (Wiley & Cory, 2013). Adoption means that a person does something differently than what they had previously (i.e., purchase or use a new product/system, acquire and perform a new behavior, etc.) (Wiley & Cory, 2013). The key to adoption is that the person (user of a system) must perceive the idea, behavior, product or a system as new or innovative and It is through this that diffusion is possible (Wiley & Cory, 2013).

Adoption of a new idea, behavior, or product (i.e., "innovation") does not happen simultaneously in a social system; rather it is a process whereby some people

(users of information systems) are more apt to adopt the innovation than other users (Wiley & Cory, 2013). Researchers have found that people (users of information systems) who adopt an innovation early have different characteristics than people (users of information systems) who adopt an innovation later (Wiley & Cory, 2013). When promoting an innovation to a target population (users of information systems), it is important to understand the characteristics of the target population (users of information systems) that will help or hinder adoption of the innovation (Wiley & Cory, 2013). Besides the people who work to create, administer, and manage information systems, one more significant group of people: the users of information systems (Ly-Huong T. Pham, Tejal Desai-Naik, Laurie Hammond, 2021). This group (users of information systems)represents a considerable percentage of the people involved and If the user (users of information systems) cannot successfully learn and use an information system, the system is doomed to failure (Ly-Huong T. Pham, Tejal Desai-Naik, Laurie Hammond, 2021).

One tool used to understand how users (users of information systems) will adopt a new technology comes from a 1962 study by Everett Rogers (Ly-Huong T. Pham, Tejal Desai-Naik, Laurie Hammond, 2021).In his book, Diffusion of Innovation, Rogers explains how new ideas and technology spread via communication channels over time (Ly-Huong T. Pham, Tejal Desai-Naik, Laurie Hammond, 2021). Innovations are initially perceived as uncertain and even risky and to overcome this uncertainty, most users seek out others users like themselves who have already adopted the new idea or technology (Ly-Huong T. Pham, Tejal Desai-Naik, Laurie Hammond, 2021). Thus, the diffusion process consists of successive groups of users of a system adopting new technology. The adoption

rate will start slowly and then dramatically increase once adoption reaches a certain point - its market share reaches saturation level and becomes self-sustaining (Ly-Huong T. Pham, Tejal Desai-Naik, Laurie Hammond, 2021).

Innovators are the first individuals/users to adopt new technology. Innovators are willing to take risks, are the youngest in age, have the highest social class, have great financial liquidity, are very social, and have the closest contact with scientific sources and interaction with other innovators. Risk tolerance has them adopting technologies that may ultimately fail. Financial resources help absorb these failures (Rogers, 1962). The early adopters adopt an innovation after a technology has been introduced and proven. These individuals have the highest degree of opinion leadership among the other adopter categories, which means that they can influence the largest majority's opinions. They are typically younger in age, have higher social status, more financial liquidity, more advanced education, and are more socially aware than later adopters. These people are more discrete in adoption choices than innovators and realize the judicious choice of adoption will help them maintain a central communication position (Rogers, 1962).

Early majority, Individuals in this category adopt an innovation after a varying degree of time. This time of adoption is significantly longer than the innovators and early adopters. This group tends to be slower in the adoption process, has above average social status, has contact with early adopters, and seldom holds opinion leadership positions in a system (Rogers, 1962). The late majority will adopt an innovation after the average member of the society. These individuals approach an innovation with a high degree of skepticism, have below-average

social status, very little financial liquidity, contact others in the late majority and the early majority, and show very little opinion leadership.

Laggards, Individuals in this category are the last to adopt an innovation. Unlike those in the previous categories, individuals in this category show no opinion leadership. These individuals typically have an aversion to change agents and tend to be advanced in age. Laggards typically tend to be focused on "traditions," are likely to have the lowest social status and the lowest financial liquidity, be the oldest of all other adopters, and be only in contact with family and close friends.

Knowledge of the diffusion theory and the five types of technology users help provide additional insight into how to implement new information systems within an organization/in a country and For example, when rolling out a new system, IT may want to identify the innovators and early adopters within the organization and work with them first, then leverage their adoption to drive the implementation (Ly-Huong T. Pham, Tejal Desai-Naik, Laurie Hammond, 2021).

2.3 Empirical Literature Review of the Variables

This chapter reviewed the literature review on determinants of e-filing system adoption among taxpayers. There are many research on e-Filing, in different countries around the world that studied the factors influencing the adoption of e-Filing (Pratiwi et al., 2018). For example:

Previous study on Factors Which Affect Corporate Taxpayer`s Interest Using e-Filing System) (Prawati & Dewi, 2018). It's founded that this adoption depends on performance expectations, system quality and user satisfaction. Previous study conducted on an empirical study on tax payers' acceptance of e-filing. It's founded that this adoption depends on perceived usefulness, perceived ease of use, complexity, voluntaries, experience, attitude, security and privacy, design

and content, and speed (Dewi.A.A., 2009).Previous study conducted on e-filing Acceptance by the Individual Taxpayers – A Preliminary Analysis (Azimaton et al., 2016). It's founded that this interest depends on risk factor when using the online system and easiness of the e-Filing Previous study conducted on E-Filing Behavior among users of a system (Academics) in Perak State in Malaysia.

It's founded that this adoption depends on perceived ease of use, perceived usefulness, perceived security, perceived credibility, perceived service and information quality (Moorthy et al., 2014).Previous research conducted on Empirical Study to Find Factors Influencing e-Filing Adoption in India (Kumar & Sachan, 2017). It's founded that this adoption depends on perceive usefulness (PU), perceived ease-of-use (PEOU), compatibility, service quality, trust of the internet, trust of the government, result demonstrability, service quality and social influence (Kumar & Sachan, 2017).

Previous research conducted on professionals on Perceived Ease of Use, Perceived Usefulness, Perceived Security and Intention to use e-Filing: The Role of Technology Readiness (Tahar et al., 2020). It's founded that this adoption depends on perceived ease of use, compatibility and relative advantage, perceived innovativeness of information technology, and performance of the e-Filing system (Tahar et al., 2020).Previous research conducted on The Acceptance of the e-Filing System by Malaysian Taxpayers: A Simplified Model (Azmi & Lee Bee, 2010). It's founded that this adoption depends on perceived usefulness, perceived ease of use and perceived risk (Azmi & Lee Bee, 2010).

Previous research conducted on The Determinants of Tax E-filing among Tax Preparers in Malaysia (Abdul Aziz & Md Idris, 2012).This study utilized the following constructs, which are facilitating conditions, performance expectancy,

effort expectancy and social influence (Abdul Aziz & Md Idris, 2012).Previous research conducted on what are the Motivation of Taxpayers in using e-Filing Information System? It's founded that this interest depends on Perceived Usefulness, Perceived Convenience and Perceived Satisfaction (Yefni et al., 2018).Previous research conducted on Analysis of Factors Affecting the Admission of E- Filing Systems in Jakarta (Pratiwi et al., 2018).

It's founded that this interest depends on perception of usefulness, ease of use, the readiness of supporting facilities, the influence of security and confidentiality, and user ability, against the adoption of individual taxpayer using e-Filing in Jakarta (Pratiwi et al., 2018).Previous research conducted on the acceptance and adoption of electronic tax filing in other countries (Jankeeparsad, 2016). It's founded that this interest depends on perceived risk, social influences, trust of the government, computer self-efficacy and computer anxiety.

2.3.1 Perceived Ease of use and E-filing System Adoption

Perceived Ease of Use (PEoU) is defined as the user's perception of the amount of effort needed to use the system (A. A. C. Azmi et al., 2012). For the e-filing system to be used more widely, users must perceive the system to be easy to use and navigate through with as little software knowledge as possible (Jankeeparsad, 2016).Perceived ease of use is related to how easy it is to access a technology system and its display (Tahar et al., 2020).If taxpayers feel that e-filing is easy to use, then the level of intention to it using is also increasing (Tahar et al., 2020).

The more users feel a system is easy-to use, the higher their interest in using the system (Tahar et al., 2020). In order to prevent the "underused" useful system problem, electronic tax-filing systems need to be both easy to learn and easy to use (Wang, 2003a).A system can be said to be quality if it is designed to meet

user satisfaction through the ease in using it (Tahar et al., 2020). PEOU relates to assessments of the intrinsic characteristics of IT, such as the ease of use, ease of learning, flexibility, and clarity of its interface (Gefen & Straub, 2000).The ease, in this case, is not only limited to the ease of using e-Filing, but also related to whether this system eases them in completing online tax filling compared to doing it traditionally/manually (Tahar et al., 2020).Perceived ease of use influences the performance risk of the e-Filing system in that less complicated e-Filing system will minimize performance risks (Tahar et al., 2020).

2.3.2 Perceived Usefulness and E-filing System Adoption

Perceived usefulness describes the extent to which users feel that by using the help of technology, they can improve their performance (Tahar et al., 2020).The success of e-filing depends on the citizens' (taxpayers) view of the convenience and usefulness of such services (Azmi et al., 2012).The ultimate reason that people exploit electronic tax-filing systems is that they find the systems useful to their tax return preparation (Wang, 2003a). The ultimate reason that taxpayers will exploit the e-Filing system is that they find the system useful to their tax return preparation and submission and will result in significantly less effort and time in completing the tax return task (Jankeeparsad, 2016).

TAM posits that two particular beliefs, perceived usefulness and perceived ease of use, are of primary importance for information system technology acceptance behaviors (Jankeeparsad, 2016). Both of these are influenced by external variables such as training, user support, documentation, prior experience and system features (Jankeeparsad, 2016).The core assumptions in the TAM are that an individuals' use of technology is mediated by their acceptance of that technology, which in turn is determined by two cognitive factors, namely, perceived

usefulness (PU) and perceived ease-of-use (PEOU) (Tahar et al., 2020). If users of the online tax filing system/e-filing system (taxpayers) feel that e-Filing is useful, this will increases the level of interest to use or adopt the system (Tahar et al., 2020). If taxpayers feel the benefits, they will develop interest in using e-filing system (online tax filing system) and if they do not feel the benefits of the system, then they will not develop interest in using e-filing system (online tax filing system) (Tahar et al., 2020).

2.3.3 Facilitating Conditions and E-filing System Adoption

Facilitating conditions refer to the degree to which an individual believes that organizational and technical infrastructure exists to support/aid the use of a system (Venkatesh et al., 2003b).

Facilitating conditions are factors in an environment that make possible the use of e-filing for filing tax returns by taxpayers (Onaolapo & Oyewole, 2018). Facilitating conditions such as resources availability, skills as well as technical infrastructure could play a significant role towards e-filing use among taxpayers (Hamzat & Mabawonku, 2018). Facilitating conditions(supporting facilities) could be said to play a critical role and have direct impact on the use of any system (Hamzat & Mabawonku, 2018). Facilitating condition (supporting facility) is the relevant resource readiness, for example, organizational or technical infrastructure to assist users to use the system (Venkatesh et al., 2003b).The degree to which taxpayers believe that organizational resources and technical infrastructure exist to support the effective use of e-filing for filing tax returns could determine if taxpayers will actually use their e-filing system for filing tax returns or not (Onaolapo & Oyewole, 2018).

A moderator can gradually change the strength or the direction of the relationship between predictors and dependent variable (Ann et al., 2021).To support the four moderators, Venkatesh et al. (2003) stated that the impact of social variables on motive was affected by gender, experience, age, and desire of usage, while the impact of activity-based variables was influenced by gender, experience and age. The four core constructs suggested by UTAUT model that is performance expectancy (PE),effort expectancy (EE), social influence (SI) and facilitating conditions/supporting facilities (FC) are direct determinants of behavioral intention and ultimately usage behavior, and that these constructs are in turn moderated by gender, age, experience, and voluntariness of use (Venkatesh et al., 2003b).

2.3.4 User Ability and E-filing System Adoption

User ability (perceived ability) in an information system scenario means one's perceived ability to navigate and operate a computer system and access to the various resources required to access and use the system (Jankeeparsad, 2016). A taxpayer is more willing to file their tax return using e Filing if they have a positive attitude towards using e-filing, wants to conform with other important user's opinions on the use of e-filing, has access to the required resources to do so and has the necessary skills (user ability skills) to use the system (Jankeeparsad, 2016).

Regarding the decision to use e-filing, a user who doubt his ability to use an information systems or consider computers too complex to use and believe that they will never be able to operate these computers or use the necessary software and interface will prefer to avoid them and are less likely to use them to conclude the transaction in question (Jankeeparsad, 2016).The higher the user ability to use

an information systems, the higher the acceptance of e-filing system in place (Pratiwi et al., 2018). User ability which boost user confidence is most likely to grow based on the taxpayer's past experiences/skills with computers and information systems (Jankeeparsad, 2016).

2.4 Summary and Research Gaps

Numerous researchers have directed examination on different areas of tax revenue for instance on how to increase tax revenue, how to tax businesses, effect of tax evasion and so forth while forgetting the system(e-tax filing system) itself which is used to file tax return(s). The system (e-tax filing system) is key and must be user friendly to the taxpayer(s) for him/her to be able to file his/her tax returns successfully on his/her own without requesting any assistance /support/help from third party and without any difficulty in using the system since the taxpayer(s) have the Personal Identification Number (PIN) and the e-filing system which have all the features to enable taxpayers to file his/her tax returns on his/her own anywhere as long as he/she has the internet.

Based on the previous studies and to the researcher's knowledge, no such research has been conducted in Kenya to determine/identify the reason behind why taxpayers request for help/support/assistance in filing their tax returns online and yet they have an e-filing system that has features to enable individual taxpayers to file his/her tax returns on his/her own as long as the taxpayer has a PIN and online tax filing system (iTax) without requiring any assistance/support/help from Revenue body, tax consultants and cyber-café at a fee. While, the study on this subject already done many time, but many of those studies are conducted only on factors that can influence a taxpayer to make use of e-filing.

Meanwhile, the fact shows that most taxpayers who go to the tax office, and didn't understand the usage of e-filing are individual taxpayers who seek assistance/support in filing their tax returns from Revenue bodies/Tax experts/cyber cafes and yet the taxpayers can file tax returns on their own since they have the Personal Identification Number (PIN) and the e-filing system which have all the features to enable taxpayers to file his/her tax returns on his/her own anywhere as long as he/she has the internet. The question that remains unanswered is whether the e-filing system is it not easy to learn/use by the taxpayers hence requesting for help/support/assistance in filing their tax returns?

Understanding those fact, this study try to examine the factors that influence the adoption of e-filing system among taxpayers and the reason why taxpayers seek assistance/support from tax offices instead of taxpayers filing their tax returns on their own. This study will also help the government understand the critical factor to increase e-filling acceptance and satisfaction among taxpayers. The result of this study also hopefully will assist government (Tax Revenue Body- KRA) to understand taxpayers factors influencing their adoption of e-fling system/online tax filing system (iTax) and how to improve e-filing system (iTax) in order to be more user friendly to the taxpayers filing tax returns online and which in return will improve taxpayers' compliance and the interest/intention of taxpayers positively to use e-filing to file tax returns on their own without requiring the support/assistance/help of revenue body hence enabling KRA to net more taxpayer hence increasing tax revenue collected.

This study will also assist the Government or tax filing authority to design and enhance their e-filing portal that will attract more taxpayers to use online way of tax filing instead of using manual tax filing. The present study also by

investigating factors that influences the adoption of e-filing system among taxpayers and by extending prior studies by focusing on the reason why Taxpayers around the world including Kenya seek help/support/assistance in filing their tax returns from Revenue bodies/Tax experts/cyber cafes and yet the taxpayers can file tax returns on their own since they have the Personal Identification Number (PIN) and the e-filing system which have all the features to enable taxpayers to file his/her tax returns on his/her own anywhere as long as he/she has the internet, the answer for the questions that remain unanswered of what might be the explanation behind taxpayers request for assistance/support/help and extension of time to file their tax returns? Is the online tax filing system (e-filing system) not easy to learn? Is the online tax filing system (e-filing system) not easy to file tax returns online with? Are taxpayers negatively affected by the level of infrastructural support that does not facilitate taxpayers' interest in adopting e-filing system?

2.5 Conceptual Framework

Conceptual framework tries to relate the relationship between independent variables and dependent variables. In this study, e-filing system adoption among taxpayers in Gatundu South Sub-County Kiambu County Kenya is being viewed as a dependent variable while perceived ease of use (PEoU), perceived usefulness (PU), facilitating conditions (FC) and user ability (UA) constitute the independent variables. Additionally age, level of education and occupation as control variables.

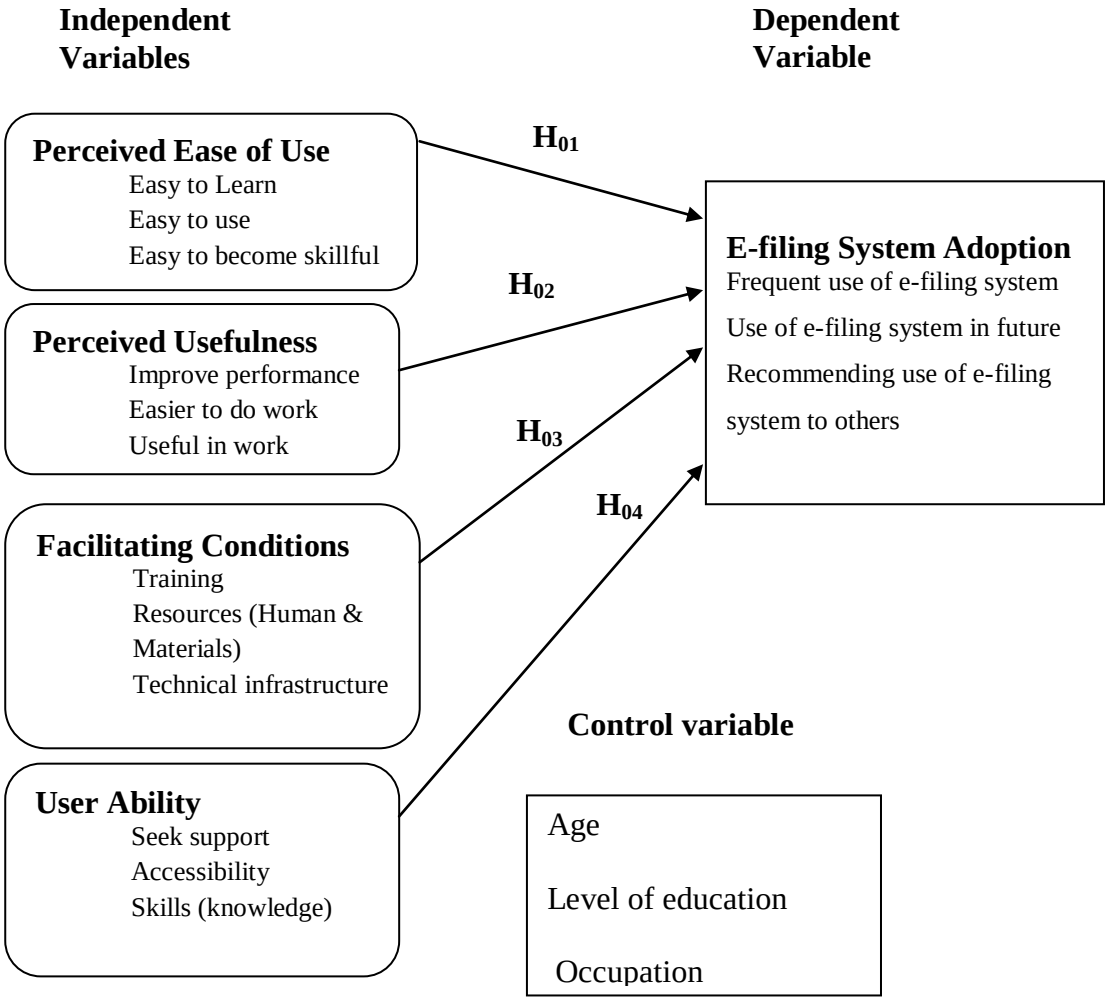

Figure 2.2: Conceptual framework

Source; Researcher (2023)

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Overview

This chapter presents research methodology which includes research design, target population, sample size and sampling techniques, data sources, types and procedures, data collection instrument, measurement of the variables, data analysis, model specification, regression assumptions and ethical considerations.

3.1 Research Design

This study adopted explanatory research design and by using explanatory research design the researcher established the relationship among the operational variables (perceived ease of use, perceived usefulness, facilitating conditions and user ability in adoption of e-filing system (online tax filing system). Research design is the blueprint used to guide a research study to ensure that it addresses the research problem. It provides a framework that guides the determination of the data to be collected and how it will be analyzed. There are three broad types of research designs, namely exploratory research design; descriptive research design; and causal research design (Blatter & Haverland, 2012). This study adopted explanatory research design and by using explanatory research design the researcher established the relationship among the operational variables (perceived ease of use, perceived usefulness, facilitating conditions and user ability in adoption of e-filing system (online tax filing system). In order to test researcher hypothesis and learn more about the relationship between independent variables (perceived ease of use, perceived usefulness, facilitating conditions and user ability) and dependent variable (adoption of e-filing system), the researcher designed and conducted an explanatory study. Other scholars have previously

used the design successfully, and came up with credible and reliable conclusions (kanguru, 2021).

By using explanatory research design the researcher abled to conduct a survey using close ended questionnaire that was used to gather insights from participants about their experiences when using e-filing system. By using explanatory research design the researcher intends to obtain data from a randomly sampled respondents (households) who are potential users of e-filling system (iTax) in Gatundu South Sub-County using close ended questionnaires. By using explanatory research design, the researcher was able to randomly sample respondents (households) who are potential users of e-filling system (iTax) in Gatundu South Sub-County hence allowing for more accurate findings across a greater number of respondents.

3.2 Target Population

The target population for the study was 75, 974 households (PAYE fillers –who have PIN and iTax), who are the potential users of the e-filing system (iTax) in Gatundu South Sub-County (Kenya National Bureau of Statistics, 2019b). The reason for choosing Gatundu South Sub-County is because many taxpayers (PAYE fillers –who have PIN and iTax who file their tax during the due date of 30th June every calendar year) seeks help and support in filing their tax returns from KRA work places, professionals and cybercafés using e-filing system (iTax). This becomes evident as the 30th June deadline for filing tax returns approaches since long queues are apparent at KRA places and cybercafés.

3.3 Sample Size Determination and Procedure

3.3.1 Sample Size

Analyses were conducted on samples collected from potential users (households) of e-filing system (iTax) in Gatundu South Sub-County. Sampling was used to

select a portion of the population to represent the entire population. The methods/techniques/sampling design selected for the study was based on probability. The main method that was employed in selecting sample from the population was random sampling method/design/technique. Data was collected using close ended questionnaires which was dropped to the households and picked later. The random sampling method/design/technique allowed for more accurate findings across a greater number of households in Gatundu South Sub-County. The target population (N) for the study was 75, 974 households ((PAYE fillers –who have PIN and iTax), who are potential users of the e-filing system (iTax) in Gatundu South Sub-County which was derived from the 2019 census report by the Kenya National Bureau of Statistics (Kenya National Bureau of Statistics, 2019b).

Random sampling method/design/technique was employed in selecting a sample size (n) of 398 respondents (households) who are potential users of the e-filing system (iTax) in Gatundu South Sub-County. The sample size (n) was determined using a formula by (Yamane, 1967);

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

$$n = \frac{75974}{1+75974(0.05)^2}$$

$n \approx 398$

Where n = the sample size

N = the size of the population – 75, 974

e = the precision level (significance level/alpha level) – 5 % (0.05)

This formula was used on the taxpayers of Gatundu South Sub-County at 95% confidence level.

3.3.2 The Sampling Procedure

The researcher developed a sampling plan to obtain data systematically. This involved defining a population, the group (taxpayers) the researcher intended to draw conclusions about, and a sample, the group (taxpayers) the researcher actually collect data from. The sampling method of the researcher determined how the researcher recruited participants or obtained measurements for this study. To decide on a sampling method the researcher needed to consider factors like the required sample size, accessibility of the sample, and timeframe of the data collection.

3.4 Data Types, Collection instrument and Procedure

3.4.1 Data Types

The study collected primary data. According to (Ajayi, 2017), primary data refers to the data originated by the researcher for the first time. Primary data was collected from first-hand-experience. Primary data, involves data that has not been published yet and is more reliable, authentic and objective. Primary data has not been changed or altered by human beings; therefore its validity is greater than secondary data. Primary data is essential in statistical surveys and it is necessary to get information from primary sources and work on primary data. If required, it may be possible to obtain additional data during the study period (Buchanan, 1981).

Primary data represents data collected from the source by the researcher. Primary source of data was obtained through questionnaire. Primary data was used because respondents from Gatundu South Sub-County are users of the e-filing system/online tax filing system (iTax) in order to examine the determinants of e-filing system adoption. The main reason for using primary data is because it was

more accurate, up to date information, privacy was maintained and the researcher will have more control over the data.

Questions that utilized in the research were close-ended questions. To make analysis simpler, the close ended questions were provided with options and clear directions/instructions to respondents. The inquiries/questions are in six sections – Section “A” “B”, “C”, “D”, “E” and “F” (deal with inquiries/questions for the study).

3.4.2 Data Collection Instrument

The five-point Likert scale (Yu, 2021). The five-point Likert scale aims to determine the effect of e-filing system adoption among taxpayers, perceived ease of use, perceived usefulness, facilitating conditions and user ability. Each factor was identified by six, six, three, and three questions respectively (see Appendix 2). Each question followed by a five-point Likert Scale, ranging from Strongly Disagree to Strongly Agree.

A five-point Likert scale to determine e-filing system adoption. The factor identified by three questions (see Appendix 2). Each question will be followed by a five-point Likert Scale, ranging from Strongly Disagree to Strongly Agree. The researcher used a five-point Likert scale since it enabled him to understand feedback in a comparatively better way because it offered various degrees of responses.

The instrument that used utilized by the researcher to collect data for the study used close ended questionnaire because it used easier and quicker for respondents to answer and the answers of different respondents used easier to be compared by the researcher. A questionnaire (closed) used an appropriate instrument for data collection and will feature questions that provided quantitative data for statistical

analysis. The benefit of using questionnaire is because it is an easy tool to collect data and large amount of information was collected within a shortest period of time. Questionnaire ensured protection of privacy of the respondents which lead to high response rate from respondents especially when the researcher allows the respondent to remain anonymous. Additionally, questionnaires allowed the researcher to address a large number of issues in a standardized way. Questionnaires made it easy for the researcher to process results and provide useful insight into the subject's strengths, weaknesses and preferences. Questionnaires was dropped and picked later from the respondents.

3.4.3 Data Collection Procedure

The method to be used to collect data for the study was by close ended questionnaires which was dropped and picked from randomly selected respondents (households) in Gatundu South Sub-County. The benefit of using questionnaire is because it is an easy tool to collect data and large amount of information was collected within a shortest period of time. Additionally, questionnaires allowed the researcher to address a large number of issues in a standardized way. The researcher solicited the help of research assistants since this enabled researcher to cover wide area during dropping and picking of questionnaires from the respondents. The researcher by using the drop and pick method enabled wide coverage and guarantee the anonymity of respondents.

3.4.4 Pilot Study

The researcher undertook pilot testing in order to develop and test the adequacy of research instruments, to determine financial resources needed for a planned study and to identify logistical problems which might occur when using proposed methods. Administering questionnaires to two different tests under the same

conditions and population for comparative results leads to consistent, reliable and observable results (Gray et al., 1995). The pretest sample should be between 1% and 10% Creswell and Clark (2014). In this study, the questionnaire was piloted on 10% of the population to ensure that the instrument was relevant and reliable therefore 40 questionnaires was administered to 40 respondents (households) who are potential users of e-filing system (iTax) in Murang'a County in order to ensure reliability and validity of the research instruments and therefore this was not part of the actual study.

3.5 Reliability and Validity of Research Instrument

3.5.1 Reliability of Research Instruments

Reliability is a measure of the degree to which a research instrument gives consistent results after repeated trials Creswell and Clark (2014). To enhance the reliability of the research instruments, a pre-test was conducted and the aim of pre-test was to measure consistency of the research instruments so that those instruments found to be insufficient for measuring variables would be rejected or adjusted to improve the quality of data analysis. This was done to ensure that the research instruments capture all the needed data. Reliability of the research instruments was determined during the pilot study where consistency of responses from the respondents (taxpayers) was evaluated. Reliability of the instrument (Questionnaire tool) was conducted using Cronbach Alpha which was measures the internal consistency. Where measure of Cronbach alpha is 0.7 or higher indicates the item's internal consistency.

3.5.2 Validity of Research Instruments

Validity of a research instrument assesses the extent to which the instrument measures what it is designed to measure (Robson, 2011). It is the degree to which

the results are truthful. So that it requires research instrument (questionnaire) to correctly measure the concepts under the study (Pallant, 2011). Researchers should carry out a pilot study before commencing research study (McMillan, JH and Schumacher, 2001). Validity involves issues that the research design fully addresses, the research questions/hypotheses and the objectives the research is trying to answer and address.

Construct validity assesses the adherence of a measure to existing theory and knowledge of the concept being measured (Middleton, 2019). The researcher ensure that construct validity was achieved by ensuring test measure the concept that it is intended to measure. The researcher ensured that the method of measurement matches the variable that the researcher intended to measure. Content validity assesses the extent to which the measurement covers all aspects of the concept being measured (Middleton, 2019). To guarantee content validity, the researcher ensured that the test was fully representative of what it aimed to measure. For the researcher to produce valid results the measurement method covered all relevant parts of the study it aims to measure. Face validity (logical validity) refers to how accurately an assessment measures what it was designed to measure, just by looking at it (Williams, 2013). To realize face validity the researcher ensured that the content of the test is appropriate to the variables that were measured.

To determine validity, guidance from the supervisor was taken into account to ensure that the instruments was constructed accurately to guarantee proper content and accuracy of variables under study with the stated purpose and study objectives.

3.6 Measurement of Variables

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

3.6.1 Dependent Variable

The dependent variable is the e-filing system adoption. The variable measured based on a five point Likert scale comprising of a mean 3 items validated by previous scholars (Bhuasiri et al,. 2016; Wang, 2002; Saade & Bahli, 2004). The taxpayer was asked the extent to which he or she frequently uses e-filing system; may potentially use the e-filing system in future and can recommend the use of e-filing system to others.

3.6.2 Independent Variables

Independent variables include perceived ease of use, perceived usefulness, facilitating conditions and user ability all measured based on previously tested scales of Likert scale ranging from one strongly disagree to five strongly agree.

Perceived ease of use was measured based on a mean of 6 items adopted from Maji & Pal (2017) and Gefen & Straub (2000). The taxpayer was asked the extent to which he or she perceives the system is easy to learn; to use; to become skillful; to interact with; to understand; manipulate.

Perceived usefulness was measured based on a mean of 6 items adopted from Maji & Pal (2003); Lund (2001); Gefen & Straub (2000) and Saade & Bahli, (2004). The taxpayer was asked the extent to which he or she perceives the system improve performance; easier to do work; useful in work; increase productivity; accomplish task quickly; enhance effectiveness.

Facilitating conditions was measured based on a mean of 3 items adopted from Onaolapo & Oyewole, (2018); Venkatesh, (2003); Hamzat & Mabawonku, (2018) and Bhuasiri, Zo, Lee & Ciganek, (2016). The taxpayer was asked the extent to which he or she perceives the system was provide necessary supporting facilities (facilitating conditions); training; resources; technical infrastructure.

User ability was measured based on a mean of 3 items adopted from Onaolapo & Oyewole, (2018); Jankeeparsad, (2016); Hatke, (2000); Tallaha, Shukar & Hassan (2014); and Pratiwi, Hartanto, Gunawan & Denavi, (2018). The taxpayer was asked the extent to which he or she is able to use the system; seek support; accessibility; skills (knowledge).

3.6.3 Control Variables

A control variable is anything that is held constant or limited in a research study. It's a variable that is not of interest to the study's aims, but is controlled because it could influence the outcomes. Anything researcher can measure or control that is not the independent variable or dependent variable has potential to be a control variable. Remember, the independent variable is the one researcher change, the dependent variable is the one researcher measure in response to this change, and the control variables are any other factors researcher control or hold constant so that they can't influence the research study (Bhandari, 2022).

Age differences have been shown to exist in technology adoption contexts (Venkatesh et al., 2003a). Age will be measured based on a mean of 3 items adopted from Dabaj, (2008); Hamzat & Mabawonku, (2018); Onaolapo & Oyewole, (2018); and Altawallbeh, Thiam, Alshourah & Fong, (2015). The taxpayer will be asked the age range; 18-35; 36-60; and above 60.

Defining education, (Colleges, 2020) said, 'Education is the continuous reconstruction of experiences'. Education will be measured based on a mean of 5 items adopted from Bhuasiri, Zo, Lee & Ciganek, (2016); Hamzat & Mabawonku, (2018).

Occupation has been defined by (Wu & Lin, 1999) as " doing culturally meaningful work, play or daily living tasks in the stream of time and in the contexts of one's physical and social world ". Occupation will be measured based on a mean of 4 items adopted from Kielhofner (1995); Bhuasiri, Zo, Lee & Ciganek, (2016); Wu & Lin, (1999).

Table 3.1: Operationalization and Measurement of Variables

Types of variables	**Variables**	**Operational Indicators (Measurements)**	**Data transformation process (Measurement scale)**	**Authors of Measurements**
Independent variable	Perceived Ease of Use (PE)	1. Easy to Learn 2. Easy to use 3. Easy to become skillful 4. Flexible to interact with 5.Clear/Understandable interaction 6. Easy to manipulate	5- point Likert scale	1.Davis, 1989 2.Hendrickson, Massey & Cronan, 1993 3. Maji & Pal, 2017 4. Lund, 2001 5. Wang, 2002 6. Saade & Bahli, 2004 7. Gefen & Straub, 2000 8. Davis, 1987
Independent variable	Perceived Usefulness (PU)	1. Improve performance 2. Easier to do work 3. Useful in work 4. Increase productivity 5. Accomplish task quickly 6. Enhance	5-point Likert scale	1. Davis, 1989 2. Maji & Pal, 2003 3. Lund, 2001 4. Wang, 2002 5. Saade & Bahli, 2004 6. Gefen &

		effectiveness		Straub, 2000 7. Hendrickson, Massey & Cronan, 1993 8. Davis, 1987
Independent variable	Facilitating Conditions (FC)	1.Training 2. Resources (Human & Materials) 3. Technical infrastructure	5-point Likert scale	1. Hamzat & Mabawonku, 2018 2. Onaolapo & Oyewole, 2018 3. Bhuasiri, Zo, Lee & Ciganek, 2016 4. Venkatesh, 2003
Independent variable	User Ability (UA)	1. Seek support 2. Accessibility 3. Skills(knowledge)	5-point Likert scale	1. Pratiwi, Hartanto, Gunawan & Denavi, 2018 2.Jankeeparsad, 2016 3. Tallaha, Shukar & Hassan, 2014 4. Hatke, 2014 5. Onaolapo & Oyewole
Dependent variable	E-filing System Adoption (ESA) among taxpayers	1.Frequent use of e-filing system 2. Use of e-filing system in future 3. Recommending use of e-filing system to others	5-point Likert scale	1. Bhuasiri, Zo, Lee & Ciganek, 2016 2. Maji & Pal, 2017 3. Wang, 2002 4. Saade & Bahli, 2004
Control variable	Age	18 – 35 years. 36 – 60 years. Above 60 years.	Category	1.Hamzat & Mabawonku, (2018); 2.Onaolapo & Oyewole, (2018); 3.Altawallbeh, Thiam,

			4. Alshourah & Fong, (2015).
Level of education	Secondary. College. University. Post graduate. Others.	Category	1.Colleges, (2020) 2.Bhuasiri, Zo, Lee & Ciganek, (2016), 3.Hamzat & Mabawonku, (2018).
Occupation	Employed-Formal sector. Employed-Informal sector. Self-employed. Unemployed.	Category	1.Lee & Ciganek, (2016); 2.Kielhofner (1995); 3. Bhuasiri, Zo, Lee & Ciganek, (2016); 4.Wu & Lin, (1999)

3.7 Data Analysis and Presentation

Collected data was edited to remove errors then coded before being entered into computer software Statistical Package for Social Science (SPSS).Descriptive statistics was used because they were easy to analyze and convenient for both the researcher and the study. For the purpose of describing properties, descriptive statistics was used to measures mean and standard deviation, the data was summarized by the researcher, in a useful way, with the help of numerical and graphical tools such as charts and tables represent data in an accurate way. The data was also to be presented in support of the diagrams, to explain what they were to represent.

The researcher employed inferential statistics which was based on statistical model of regression analysis. The variable to be predicted was the dependent

variable (outcome variable) which in our case is e-filing system (iTax) adoption while the variables used to predict the value of the dependent variable known as independent variables which are, (Perceived ease of use when using e-filing system, perceived usefulness when utilizing e-filing system, facilitating conditions (supporting facilities) when using e-filing system and user ability when using e-filing system. Multiple regression model was also used to predict the relationship existing between independent variables and dependent variable as follows:

Model Specification

The regression model summary;

Regression Equation

$Y = \beta_0 + \beta_1 PE_1 + \beta_2 PU_2 + \beta_3 FC_3 + \beta_4 UA_4 + \varepsilon$

Where:

γ Represents of E-filing system adoption among taxpayers in Gatundu South Sub-County Kiambu County Kenya

$\mathbf{B_0}$ = is the Y intercept/Constant term

$\boldsymbol{\beta_1}$, $\boldsymbol{\beta_2}$, $\boldsymbol{\beta_3}$ and $\boldsymbol{\beta_4}$ The regression coefficients

$\mathbf{PE_1}$ = perceived ease of use

$\mathbf{PU_2}$ =perceived usefulness

$\mathbf{FC_3}$ = Facilitating conditions (Supporting facilities)

$\mathbf{UA_4}$ = user ability

$\boldsymbol{\varepsilon}$ = The error term or residuals

In order to adopt an appropriate model for the study, necessary diagnostic tests were carried out.

3.8 Test of Regression Assumptions

In order to adopt an appropriate model for the study, necessary diagnostic tests were carried out. These include Linearity test, Normality test, Multicollinearity test and Heteroscedasticity test (M. Williams et al., 2013).

3.8.1 Linearity Test

Linearity concept assumes that the relationship between the independent variables and dependent variable is linear that is there is relationship between the independent variables and dependent variable. This was shown/checked using F statistic in ANOVA. Probability value (p value) < 0.05 implies Linearity Probability value (p value) >0.05 implies that variables are not Linearity related.

3.8.2 Normality Test

The assumption on Normality to hold the residuals (€) should be normally distributed/spread about the predicted dependent variable. Normality of the data was evaluated using Shapiro-Wilk test. Probability value (p value) >0.05 implies that Data is normally distributed and led to rejection of the Null hypothesis (Ho) Probability value (p value) <0.05 implies that Data is not normally distributed and led to not rejecting the Null hypothesis (Ho)

3.8.3 Multicollinearity Test

The multicollinearity test involves the relationship between the independent variables and it exists when the independent variables are highly correlated. Multicollinearity test was carried out using the Variance Inflation Factor (VIF), which was calculated using Statistical Package for Social Science (SPSS)VIF for all independent variables < 10 implies no multicollinearity problem VIF for all independent variables >10 suggest multicollinearity problem.

3.8.4 Homoscedasticity Test

Homoscedasticity means that the variance or spread of errors from the regression line is constant. Lani (2011) notes that in regression, an error is how distant a point deviates from the normal line of regression. The assumption of linear regression is that the spread of the residual or the error term is constant across the graph and if this assumption is violated, the statistical results may not be trustworthy due to biased coefficients. In this research, result of p value >0.05 shows that assumption of homoscedasticity was not violated.

3.8.5 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 that The Durbin-Watson test was conducted to indicate the level of autocorrelation. The 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.

3.9 Ethical Consideration

Ethical considerations in a study are one of the cardinal elements of the research methodology which confirms that the researcher has considered all necessary guidelines that make the research ethically valid (Australian Government, 2010). Ethical considerations form a major element in a research. The researcher needs to adhere to promote the aims of the research imparting authentic knowledge, truth and prevention of error. Furthermore, following ethics enables scholars to deal collaborative approach towards their study with the assistance of their peers, mentors and other contributors to the study. This

requires values alike accountability, trust, mutual respect and fairness among all the parties involved in a study (Chetty, 2016)**.** Before the process of data collection, the researcher obtained permission from the relevant authority (Kenya School of Revenue Administration and National Council for Science and Technology and Innovation Research respondents were briefed about aims/ purposes and objectives before the primary data collection process. To ensure ethical standards is maintained, consent from participants was obtained before involving them in the study. Respondents in the research study were not be subjected to coercion in any way. The data collected from the participants would only be applied for research purposes only.

CHAPTER FOUR

DATA ANALYSIS PRESENTATION AND INTERPRETATION

4.0 Introduction

This chapter describes the findings from the respondents and which linked them to the objectives of the study. It includes the descriptive and inferential statistics of the respondents and views on perceived ease, perceived usefulness, facilitating condition and user ability and E-filing System Adoption

4.1 Response Rate

The researcher distributed 398 questionnaires and 336 were received, 62 questionnaires were rejected due to improper incompletion. Hence, 336 questionnaires were accepted as correctly filled which represent a response rate of 84%. Awino (2011), affirm that a response rate of 70% and above is very good for an objective analysis. The non-response fraction was occasioned by busy schedules of some respondents which made it difficult to avail themselves for the interviews. The high response rate however, was as a result of spirited efforts by the researcher to make regular follow-ups and remind the respondents of the need to fully complete the questionnaires and return them on time. Strict ethical considerations were observed during fieldwork where all the respondents were duly informed about their need to participate in the study and give credible information.

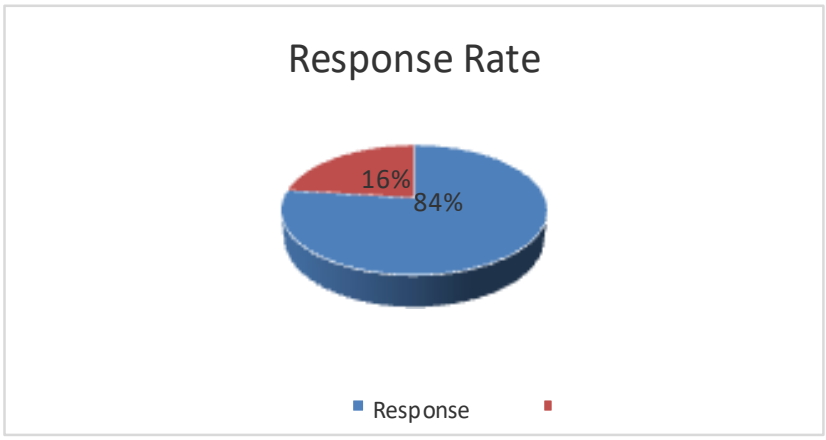

Figure 4.1: Response Rate
Survey Data (2023)

4.2 Reliability Test

The reliability of the study questionnaire was tested after piloting of questionnaires. The instrument was reliable for all the variables since they all had a Cronbach's Alpha value higher than the threshold of 0.7. (Perceived ease α=0.754; perceived usefulness α=0.843; Facilitating condition α=0.972; user ability α=0.719; E-filing adoption α=0.822).

Table 4.1: Reliability Test

Reliability Statistics		
Variable	**Cronbach's Alpha**	**N of Items**
Perceived ease	0.754	6
Perceived usefulness	0.843	6
Facilitating condition	0.972	3
User ability	0.719	3
E-filing adoption	0.822	3

Survey Data (2023)

4.3 Demographic Information

The study also implored the respondents to state their age bracket. Outcomes in table 4.2 reveal that (43.5%) were aged between 18-35 years, 51.4% were aged between 36-60 years, 5.1% were above 60 years. The result depicts that most of the respondent at Gatundu south Sub -County are middle aged.

The researcher sought to find out on the highest level of education of respondents. The table shows that 25.3% of the respondents had secondary level certificate, this was followed by 36.9% who had attained their college certificate, 19.9% were university degree holders, 4.7% were post graduate holders, while 13.1% had other qualifications.

The survey wanted to determine the occupation in which the taxpayers are involved in. The findings showed that 9.5% have been in employed in formal sector; 30.4% of the taxpayer have been employed in informal sectors, while 34.5% have are self-employed, lastly, 25.6 % of taxpayers are unemployed

Table 4.2: Demographic Information

Characteristics	Percent (%)
Age	
18 – 35 years	43.5
36 – 60 years	51.4
Above 60 years	5.1
Total	**100**
Level of Education	
Secondary	25.3
College	36.9
University	19.9
Post-Graduate	4.7
Others	13.1
Total	**100**
Occupation	
Formal sector	9.5
Informal sector	30.4
Self-employed	34.5
Unemployed	25.6
Total	**100**

Survey Data (2023)

4.4 Descriptive Statistics

The findings are derived from a Likert scale in the questionnaires. The respondents were supposed to indicate their level of agreement or otherwise with a given statement. The descriptive statistics was done based on each independent variable/objective.

4.4.1 Perceived Ease of Use

The study sought to understand the role of perceived ease of use on e-filing system adoption Learning to operate e-filing system would be easy for me (mean = 3.06). Additionally, the survey showed that respondents concurred I would find e-filing system ease to use in my transactions (mean = 3.14). It would be easy for me to become skillful at using e-filing system (mean = 3.01). I would find e-filing system to be flexible to interact with taxpayer (mean = 4.24). My interaction with e-filing system would be clear and understandable (mean = 4.34). I would find it easy to get e-filing system to do what I want (mean = 4.41).

Table 4.3: Descriptive Statistics on Perceived Ease of Use

5 = Strongly Agree 4 **=** Agree **3** = Neutral **2** = Disagree **1**= Strongly Disagree

	Mean	**Std Dev.**	**Skewness**	**Kurtosis**
Learning to operate e-filing system would be easy for me	3.06	1.179	0.230	-1.000
I would find e-filing system ease to use in my transactions	3.14	0.853	-0.150	-0.825
It would be easy for me to become skillful at using e-filing system	3.01	1.223	0.209	-1.934
I would find e-filing system to be flexible to interact with taxpayer	4.24	0.857	-1.064	0.550
My interaction with e-filing system would be clear and understandable	4.34	0.635	-0.986	2.327
I would find it easy to get e-filing system to do what I want	4.41	0.650	-0.651	-0.585

Survey Data (2023)

4.4.2 Perceived Usefulness

The study sought to understand the role of perceived usefulness on e-filing system adoption Using e-filing system would improve my job performance (mean = 4.14). Additionally, using e-filing system would make it easier to file my tax returns (mean = 3.77). I would find e-filing system useful in my job (mean = 4.25 Using e-filing system in my job would Increase my productivity (mean = 4.37). Using e-filing system in my job would enable me to accomplish tasks more quickly (mean = 4.28). Using e-filing system would enhance my effectiveness on the job (mean = 4.19).

Table 4.4: Descriptive Statistics on Perceived Usefulness

5 = Strongly Agree 4 **=** Agree **3** = Neutral **2** = Disagree **1**= Strongly Disagree

	Mean	**Std Dev.**	**Skewness**	**Kurtosis**
Using e-filing system would improve my job performance	4.14	0.929	-0.625	-.841
Using e-filing system would make it easier to file my tax returns	3.77	1.007	0.385	-0.921
I would find e-filing system useful in my job	4.25	0.763	-1.265	-2.074
Using e-filing system in my job would Increase my productivity	4.37	0.773	-2.070	6.520
Using e-filing system in my job would enable me to accomplish tasks more quickly	4.28	0.814	-0.062	1.012
Using e-filing system would enhance my effectiveness on the job	4.19	0.793	-0.830	0.344

Survey Data (2023)

4.4.3 Facilitating Conditions

The study sought to understand the role of Facilitating conditions on e-filing system adoption. I have adequate training on the use of e-filing system by KRA (mean = 3.96). I have the necessary resources to use e-filing system (mean = 4.20). Lastly, I always get assistance/help from KRA when I experience difficulty when filing tax returns online (mean = 3.51).

Table 4. 5: Descriptive Statistics on Facilitating Conditions

5 = Strongly Agree 4 **=** Agree **3** = Neutral **2** = Disagree **1**= Strongly Disagree

	Mean	**Std Dev.**	**Skewness**	**Kurtosis**
I have adequate training on the use of e-filing system by KRA	3.96	0.806	-0.486	0.174
I have the necessary resources to use e-filing system	4.20	0.813	-1.017	1.493
I always get assistance/help from KRA when I experience difficulty when filing tax returns online	3.51	0.784	0.363	-0.424

Survey Data (2023)

4.4.4 User Ability

The study sought to understand the role of user ability on e-filing system adoption. I always seek support to file my tax returns (mean = 4.18). I can access e-filing system easily anytime anywhere (mean = 3.69). Lastly, I have the skills (knowledge) necessary to use e-filing system (mean = 4.26).

Table 4. 6: Descriptive Statistics on User Ability

5 = Strongly Agree 4 **=** Agree **3** = Neutral **2** = Disagree **1**= Strongly Disagree

	Mean	**Std Dev.**	**Skewness**	**Kurtosis**
I always seek support to file my tax returns	4.18	0.902	-0.691	-.692
I can access e-filing system easily anytime anywhere	3.69	1.062	-0.319	-1.115
I have the skills (knowledge) necessary to use e-filing system	4.26	0.722	-1.247	2.476

Survey Data (2023)

4.4.5 E-filing System Adoption

The study sought to understand the role of e-filing system adoption. I frequently use e-filing tax system to file my tax returns online (mean = 4.19). I would be using e-filing system to file my tax returns in future (mean = 4.21). Lastly, I will recommend others to use e-filing system to file their tax returns (mean = 3.93).

Table 4.7: Descriptive Statistics on E-filing System Adoption

5 = Strongly Agree 4 **=** Agree **3** = Neutral **2** = Disagree **1**= Strongly Disagree

	Mean	**Std Dev.**	**Skewness**	**Kurtosis**
I frequently use e-filing tax system to file my tax returns online	4.19	0.963	-1.184	.487
I would be using e-filing system to file my tax returns in future	4.21	0.785	0.398	-1.274
I will recommend others to use e-filing system to file their tax returns	3.93	0.872	0.797	0.191

Survey Data (2023)

4.5 Factor Analysis

Table 4.8 reveals factor loadings of validity test which gives values over 0.5 implying linear relationship, interval to test the construct validity of the study instrument. Kervin (2009) suggested that any factor loading below 0.4 is weak and those between 0.5 and 0.6 are moderate. While values which are below 0.3, the outcomes of the factor analysis probably will not be very practical in the research. Thus, from results of the all the questionnaire was able to meet a significant value in the research findings.

Table 4.8: Factor Analysis

	PE	PU	FC	UA	ESA
Perceived Ease					
Learning to operate e-filing system….	0.662				
I would find e-filing system ease…	0.871				
It would be easy for me to become skillful	0.616				
I would find e-filing system to be flexible…	0.588				
My interaction with e-filing system….	0.976				
It easy to get e-filing to do what I want….	0.638				
Perceived Usefulness					
E-filing system would improve performance...		0.809			
E-filing system would make it easier…		0.919			
E-filing system useful in my job…...		0.660			
E-filing system would increase my productivity….		0.735			
E-filing system would enable to accomplish tasks .		0.918			
E-filing system would enhance my effectiveness….		0.754			
Facilitating Conditions					
I have adequate training…			0.813		
I have the necessary resources…			0.721		
I always get assistance from KRA…			0.692		
User Ability					
I always seek support to file…				0.717	
I can access e-filing system easily…				0.800	
I have the skills necessary to use e-filing…				0.934	
E-filling System Adoption					
Frequently use e-filing tax system …					0.736
E-filing system to file my tax returns in future …					0.863
Recommend others to use e-filing …					0.848

Extraction Method: Principal Component Analysis

Survey Data (2023)

4.6 Statistical Assumptions

Statistical tests rely upon certain assumptions about the variables used in the analysis. Osborne and Waters (2014), opine 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. Testing for assumptions is beneficial as it ensures that an analysis meets the associated assumptions and helps avoid type I and II errors (Osborne and Waters, 2014; Owino, 2014). Prior to data analysis, assumptions for linear regression were checked together with multicollinearity and normality.

4.6.1 Test of Normality

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 less than 0.05 implies that there is significant deviation of data from a normal distribution. P-values for the Shapiro-Wilk tests were 0.53 for perceived ease, 0.71 for perceived usefulness, 0.201 for facilitating condition and 0.79 for user ability. Since all the p-values were greater than the cutoff point of 0.05 at 95% confidence level, this confirms that that data was collected from a population which is normally distributed.

Table 4.9: Tests of Normality

	Shapiro-Wilk	
	Statistic	**Sig**
Perceived ease	.934	.053
Perceived usefulness	.919	.071
Facilitating condition	.991	.201
User ability	.883	.079

Source: Research Data, 2023

4.6.2 Multicollinearity Test

Multicollinearity is a phenomenon whereby high correlation exists between the independent variables. It occurs in a multiple regression model when high correlation exists between these predictor variables leading to unreliable estimates of regression coefficients. This leads to strange results when attempts are made to determine the extent to which individual independent variables contribute to the understanding of dependent variable (Creswell, 2014).

The consequences of Multicollinearity are increased standard error of estimates of the Betas, meaning decreased reliability and often confusing and misleading results. Multicollinearity test was conducted to assess whether high correlation existed between one or more variables in the study with one or more of the other independent variables. Variance Inflation Factor (VIF) measured correlation level between the predictor variables and estimated the inflated variances due to linear

dependence with other explanatory variables. It was tested by computing the Variance Inflation Factors (VIF) and its reciprocal, the tolerance.

Results were presented in Table 4.10. A variance inflation factor test was conducted to test for multicollinearity of the predictors and a value less than 10 is acceptable Perceived ease had V.I.F value of 1.041 which is less than 10 implying there is no multicollinearity. Perceived usefulness had a V.I. F value of 1.102. The results indicated that facilitating of conditions had a V.I.F value of 1.095. Lastly, the results indicated that user ability had a V.I.F value of 1.013. Implying there is no multicollinearity since VIF is less than 10."

Table 4.10: Multicollinearity Test

(Constant)	**Collinearity Statistics**	
	Tolerance	**VIF**
Perceived ease	0.962	1.041
Perceived usefulness	0.907	1.102
Facilitating conditions	0.913	1.095
User ability	0.987	1.013

Dependent Variable: E-filing System Adoption

4.6.3 Homoscedasticity Test

Homoscedasticity means that the variance or spread of errors from the regression line is constant. Lani (2011) notes that in regression, an error is how distant a point deviates from the normal line of regression. The assumption of linear regression is that the spread of the residual or the error term is constant across the graph and if this assumption is violated, the statistical results may not be trustworthy due to biased coefficients. The results from the homoscedasticity test showed F-statistic 1.10034 p value >0.05. The test results concluded that the assumption for homoscedasticity is not violated.

Table 4.11: Homoscedasticity Test

		Prob. F
F-statistic	1.10034	0.418

Survey Data (2023)

4.6.4 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 of one another and uncorrelated. Marshall (2018) explained that The Durbin-Watson test was conducted to indicate the level of autocorrelation. The 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. Results from the Durbin Watson test showed the Durbin Watson result of 2.136 which is between 1.5 and 2.5 thus this indicated no autocorrelation exists in the data set.

Numbers between 1.5 and 2.5 indicates no autocorrelation.

Table 4.12: Durbin Watson Test

Model	**Durbin-Watson**
1	2.136

a. Predictors: (Constant), Perceived Ease of Use, Perceived Usefulness, Facilitating Conditions and User Ability

b. Dependent Variable: E-filing System Adoption

4.6.5 Linearity Test

In order establish that the correlation of the dependent and independent variables is linear, linearity tests were carried out. Linearity is determined by looking at the deviation of a variable from the linearity metric that has an alpha of 0.05.

According to Csörgő (1985), if the p value of deviation from linearity is >0.05 the assumption of linearity is not violated, if the p value is <=0.05 the assumption for linearity has been violated.

Table 4.13: Linearity Test

			Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Adoption of e-filing system*	Between Groups	(Combined)	8.324	13	.640	1.740	.062
		Linearity	.435	1	.435	1.180	.278
		Deviation from Linearity	7.890	12	.657	1.786	.079
	Within Groups		118.525	323	.366		
	Total		**126.849**	**336**			

Source: Field data (2023)

4.6.6 Correlation Analysis

The Table 4.14 below presents the results of the correlation analysis. The results presented in the Table 4.14 shows that perceived ease are positively and significantly associated with e-filing system adoption as shown r=0.285, p=0.002. The results also show that perceived usefulness are positively and significantly associated with e-filing system adoption as shown r=0.201, p=0.000. Further, results show that Facilitating conditions are positively and significantly associated with e-filing system adoption as shown r=0.234, p=0.000. Lastly, results show that user ability are positively and significantly associated with e-filing system adoption as shown r=0.205, p=0.000. The control variable age has a positive and statistically significant correlation to e-filing system adoption r=0.042, p =0.046, Education show a positive and statistically significant correlation to e-filing

system adoption r=0.055, p =0.016. Lastly occupation shows a positive and statistically significant correlation to e-filing system adoption r=0.022, p =0.002.

Table 4.14: Correlation Analysis

	1	2	3	4	5	6	7	8
Adoption-e-filing systems	1							
Perceived Ease	.285**	1						
Sig.(2-tailed)	.002							
Perceived Usefulness	.201**	.227**	1					
Sig.(2-tailed)	.000							
Facilitating Conditions	.234**	.384**	.249**	1				
Sig.(2-tailed)	.000							
User Ability	.205**	.211**	.322**	.260**	1			
Sig.(2-tailed)	.000							
Age	.042**	.010	.043	.046	.026	1		
Sig.(2-tailed)	.046							
Education	.055**	.025	.007	.040	-.011	.016	1	
Sig.(2-tailed)	.016							
Occupation	.022**	.004	.089	-.053	-.015	.002	.122	1
Sig.(2-tailed)	.002							

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

Source: Research Data, (2023)

4.7 Regression Analysis

The broad objective of the study was to examine the determinants of e-filing system adoption among taxpayers in Gatundu South Sub-County in Kiambu County.To achieve this objective, four specific objectives and four corresponding hypotheses were set and formulated respectively. Subsequently, to achieve the set objectives the study used various inferential statistical tools and Multiple regression analyses was used.

4.7.0 Model Summary

The results in Table 4.15 model 1 indicated that perceived ease, perceive usefulness. Facilitating conditions and user ability had a positive correlation with e-filling system adoption up to 52.3% or (R= 0.523). These results indicate that the independent variable, perceived ease, perceive usefulness, facilitating conditions and user ability caused a variation of 27.3% (R^2=0.273). This implies that 72.7% of the change in e-filing system adoption was caused by other factors which were not included in the model. The findings further reveal that even if the results adjust, the model would still account for 26.6% (AdjustedR^2, 0.266) variation of e-filing system adoption.

Table 4.15: Control effect of Age, Education and occupation on the effect of Perceived Ease, Perceived Usefulness, Facilitating Conditions & User Ability on E-Filing System Adoption

Model				Std.	Change Statistics				
	R	R Square	Adjusted R Square	Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.523[b]	.273	.266	.423	.007	1.012	3	326	.000

a. **Predictors: (Constant), Perceived Ease of Use, Perceived Usefulness, Facilitating Conditions, User Ability, Age, Education, Occupation,**

4.7.1 Analysis of Variance

ANOVA findings in table 4.16 show that there is a strong significant relationship between the independent variables (perceived ease, perceive usefulness Facilitating conditions and user ability) and the dependent variable adoption of e-filing system. The findings from Table 4.16 model 1 show an F statistics value of 17.562 with a significance level of 0.000 which was less than the conventional probability of 0.05 significant levels. The finding established the model is statistically significant. The implication is that each independent variable contributes significantly to changes in the dependent variable.

Table 4.16: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	22.044	7	3.149	17.562	.000[c]
	Residual	58.456	326	.179		
	Total	80.500	333			

a. Dependent Variable: E-filing system adoption

a. Predictors: (Constant), Perceived Ease of Use, Perceived Usefulness, Facilitating Conditions, User Ability,Age,Education, Occupation

4.7.2 The Overall Effect of Perceived Ease of Use, Perceive Usefulness, Facilitating Conditions and User Ability on E-Filing System Adoption.

Regression was carried out to determine the effect of e-filing system adoption among taxpayers in Gatundu South Sub-County in Kiambu County.

Table 4.17: Regression Coefficients

Model	Standardized Coefficients		Unstandardized Coefficients	T	Sig.
	Beta	**Std. Error**	**Beta**		
(Constant)	6.743	.640		10.529	.000
Age	.042	.000	.070	5.586	.000
Education	.002	.000	.006	4.144	.000
Occupation	.006	.000	.014	3.314	.001
Perceived Ease	.395	.086	.736	4.593	.000
Perceived usefulness	.227	.062	.401	3.661	.000
Facilitating conditions	.264	.047	.262	5.617	.000
User Ability	.009	.001	.009	9.00	.000

a. Dependent Variable: E-Filing System Adoption

Regression Equation

$Y = \beta_0 + \beta_1 PE_1 + \beta_2 PU_2 + \beta_3 FC_3 + \beta_4 UA_4 + \varepsilon$

Where:

γ Represents of e-filing system adoption

$\beta_1, \beta_2 \beta_3$ and β_4 The regression coefficients

PE_1 =perceived ease of use

PU_2 =perceived usefulness

FC_3 = Facilitating conditions

UA_4 = user ability

ε = The error term or residuals

Régression Equation

$Y = 6.743 + .395*PE_1 + .227*PU_2 + .264*FC_3 + .009*UA_4 + \varepsilon$

The regression equation shows that the independent variables and dependent vazriable were statistically significant. A unit change in perceived ease of use increases adoption of e-filling system by 0.395. A unit change in perceived usefulness increases adoption of e-filling system by 0.227. A unit change in Facilitating conditions increases adoption of e-filling system by 0.264. A unit change in user ability increases adoption of e-filling system by .009.

Controlling effect of Age increased adoption of e-filling system by 0.042. Control effect of education increased adoption of e-filling system by 0.002 and control effect of occupation increased adoption of e-filling system by 0.006.

4.7.3 Hypotheses Testing

A hypothesis can be tested using regression analysis by ascertaining the independent variables that contribute substantively to the regression model's capability to explain the variability in the dependent variable. In this study, the independent variables; perceived ease, perceive usefulness facilitating conditions and user ability were singled out and formed the basis for hypothesis testing. The test was done to validate or invalidate the hypotheses.

4.7.4 Test of Hypotheses

The first hypothesis stated that **H_{o1}:** Perceived ease of use has no significant effect on e- filing system adoption among taxpayers in Gatundu South in Kiambu County. Perceived ease of use has a relationship on e-filling system adoption among taxpayers in Gatundu South in Kiambu County. The study results on Table 4.18 rejected the hypothesis as evidence of, $\beta_{1=}$ 0.395, ρ=0.000which is less than $\rho<0.05$.

The second hypothesis stated that **H_{o2}:** Perceived usefulness has no significant effect on e- filing system adoption among taxpayers in Gatundu South in Kiambu County. Perceived usefulness has a relationship on e-filling system adoption among taxpayers in Gatundu South in Kiambu County. The study results on Table 4.18 rejected the hypothesis as evidence of $\beta_{2=}$ 0.227, ρ=0.000 which is less than ρ<0.05.

The third hypothesis stated that **H_{o3}:** Facilitating conditions has no significant effect on e- filing system adoption among taxpayers in Gatundu South in Kiambu County. Facilitating conditions has a relationship on e-filling system adoption among taxpayers in Gatundu South in Kiambu County. The study results on Table 4.18 rejected the hypothesis as evidence of, $\beta_{3=}$ 0.264, ρ=0.000 which is less than ρ<0.05.

The fourth hypothesis stated that **H_{o4}:** User ability has no significant effect on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. User ability has a relationship on e-filling system adoption among taxpayers in Gatundu South in Kiambu County. The study results on Table 4.18 rejected the hypothesis as evidence of $\beta_{4=}$ 0.009, ρ=0.000 which is less than ρ<0.05.

Table 4.18: Summary of Hypothesis Testing

Hypothesis	P-value	Decision
H_{01} Perceived ease of use has no significant effect on e- filing system adoption among taxpayers in Gatundu South in Kiambu County	0.000	Reject
H_{02} Perceived usefulness has no significant effect on e- filing system	0.000	Reject

adoption among taxpayers in Gatundu South in Kiambu County.		
H_{03} Facilitating conditions has no significant effect on e- filing system adoption among taxpayers in Gatundu South in Kiambu County	0.000	Reject
H_{04} User ability has no significant effect on e- filing system adoption among taxpayers in Gatundu South in Kiambu County	0.000	Reject

Source: Research, 2023

4.8 Discussion of Findings

4.8.1 Perceived Ease of use on E-filing System Adoption

The first objective was to determine the effect of perceived ease of use on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. Correlation results showed that perceived ease of use had a positive and significant association with e-filling system adoption (r=0. 285, p=0.002). Regression results showed that that perceived ease had a positive and also significant relationship on e-filing system adoption (β=0.395), p=0.000).The study was in agreement that If taxpayers feel that e-filing is easy to use, then the level of intention to it using is also increasing (Tahar et al., 2020)

4.8.2 Perceived Usefulness on E-filing System Adoption

The second objective was to establish the effect of perceived usefulness on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

Correlation results showed that perceived usefulness had a positive and significant association with e-filling system adoption (r=0.201, p=0.000). Regression results showed that that perceived usefulness had a positive and also significant relationship on e-filing system adoption (β=0.227, p=0.000).The study was in agreement that The success of e-filing depends on the citizens' (taxpayers) view of the convenience and usefulness of such services (A. A. C. Azmi et al., 2012).The ultimate reason that people exploit electronic tax-filing systems is that they find the systems useful to their tax return preparation (Wang, 2003a).

4.8.3 Facilitating Conditions on E-filing System Adoption

The third objective was to examine the effect of facilitating conditions on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. Correlation results showed that facilitating conditions had a positive and significant association with e-filling system adoption (r=0. 234, p=0.000). Regression results showed that that facilitating conditions had a positive and also significant relationship on e-filing system adoption (β=0.264, p=0.000).The study was in agreement with statement that facilitating conditions such as resources availability, skills as well as technical infrastructure could play a significant role towards e-filing use among taxpayers (Hamzat & Mabawonku, 2018).Facilitating conditions(supporting facilities) could be said to play a critical role and have direct impact on the use of any system.

4.8.4 User Ability on E-filing System Adoption

The fourth objective was to analyze the effect of user ability on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. Correlation results showed that user ability had a positive and significant association with e-filling system adoption ($r=0.205$, $p=0.000$). Regression results showed that that user ability had a positive and also significant relationship on e-filing system adoption ($\beta=0.009$, $p=0.000$).The study concurred that The higher the user ability to use an information systems, the higher the acceptance of e-Filing system in place (Pratiwi et al., 2018).Taxpayer who has confidence in his ability to use computer systems and various software applications will be more willing to use the e Filing system (Jankeeparsad, 2016). This confidence is most likely to grow based on the taxpayer's past experiences/skills with computers and information systems.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the research findings, gives conclusions and outlines recommendations based on the objectives of the study. The chapter also gives suggestions for further studies

5.2 Summary of the Findings

The main objective of the study was to examine the determinants of e-filing system adoption among taxpayers in Gatundu South Sub-County Kiambu County, Kenya. The study sought to determine the effect of perceived ease of use on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. To establish the effect of perceived usefulness on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. To examine the effect of facilitating conditions on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. To analyze the effect of user ability on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. Questionnaires were used to collect data and was analyzed using both descriptive and inferential statistics. A Multiple linear regression model was used to establish the strength of the relationship between independent and dependent variables.

5.2.1 Perceived Ease of Use

The first objective of this study was to determine the effect of perceived ease of use on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. Correlation results showed that perceived ease of use had a positive and significant association with e-filling system adoption ($r=0.\ 285$, $p=0.002$). Regression results showed that that perceived ease had a positive and also significant relationship on e-filing system adoption ($\beta=0.395$, $p=0.000$) Perceived

ease was found to be satisfactory in explaining perceived ease of use on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

5.2.2 Perceived Usefulness

The second objective of this study was to establish the effect of perceived usefulness on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. Correlation results showed that perceived usefulness had a positive and significant association with e-filling system adoption (r=0.201, p=0.000). Regression results showed that that perceived usefulness had a positive and also significant relationship on e-filing system adoption (β=0.227, p=0.000). Perceived usefulness was found to be satisfactory in explaining perceived usefulness on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

5.2.3 Facilitating Conditions

The third objective of this study was to examine the effect of facilitating conditions on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. Correlation results showed that facilitating conditions had a positive and significant association with e-filling system adoption (r=0. 234, p=0.000). Regression results showed that that facilitating conditions had a positive and also significant relationship on e-filing system adoption (β=0.264, p=0.000).Facilitating conditions was found to be satisfactory in explaining facilitating conditions on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

5.2.4 User Ability

The fourth objective of this study was to analyze the effect of user ability on e-filing system adoption among taxpayers in Gatundu South in Kiambu County. Correlation results showed that user ability had a positive and significant

association with e-filling system adoption (r=0. 205, p=0.000). Regression results showed that that user ability had a positive and also significant relationship on e-filing system adoption (β=0.009, p=0.000).User ability was found to be satisfactory in explaining user ability of use on e-filing system adoption among taxpayers in Gatundu South in Kiambu County

5.3 Conclusion

Based on the foregoing findings, the study concludes that perceived ease has a significant effect on e-filing system adoption among taxpayers in Gatundu South in Kiambu County, Respondents agreed they would find e-filing system to be flexible to interact with and interaction with e-filing system would be clear and understandable. The respondent also would find it easy to get e-filing system to do what I want.

In conclusion on the second objective, the study shows that perceived usefulness has a significant effect on e-filing system adoption among taxpayers in Gatundu South Sub- County in Kiambu County, Respondent agreed to large extent that using e-filing system in my job would Increase my productivity and using e-filing system in my job would enable me to accomplish tasks more quickly, using e-filing system would enhance their effectiveness on the job.

In relation to the third objective, the study made a conclusion that facilitating conditions has a significant effect on e-filing system adoption among taxpayers in Gatundu South Sub-County in Kiambu County. Majority of respondent were in agreement that I have adequate training on the use of e-filing system by KRA and they have the necessary resources to use e-filing system.

The fourth objective concluded that user ability has a significant effect on e-filing system adoption among taxpayers in Gatundu South in Kiambu County.

Respondent agreed that they always seek support to file my tax returns and respondent have the skills (knowledge) necessary to use e-filing system.

The last objective conclude that the controlling effect of Age, education and occupation on the effect of perceived ease of use, perceived usefulness, facilitating conditions and user ability on e-filing system adoption among taxpayers in Gatundu South Sub-County in Kiambu County was statistically significant.

5.4 Recommendations

Based on findings of the study, the following recommendations were given:

5.4.1 Implications to Policy Makers

The findings revealed statistically significant relationship of perceived ease of use, perceive usefulness, facilitating conditions and user ability on e-filing system adoption the findings will be beneficial to policy makers especially Kenya Revenue Authority (KRA) is currently promoting the use of e-filing. Therefore, the study recommends that KRA to plan a more effective strategy and formulate policies of promoting e-filing usage among individual taxpayers in Kenya to improve iTax by eliminating challenges experienced by taxpayers while filing tax returns and to make i-Tax to be user friendly, fast, effective, efficient and convenient to the taxpayers since there is a common problem countrywide experienced as cutoff time for filing of tax returns draws near, long queues are apparent at KRA workplaces (service-centers, huduma-centres) and cyber cafes countrywide with taxpayers requesting for support/assistance with filing their tax returns, this is in spite of existence of iTax framework meant to encourage filing of tax returns among taxpayers on their own.

5.4.2 Implication to Theory and Academics

This study adds on the existing empirical studies on the extent to which perceived ease of use, perceive usefulness, facilitating conditions and user ability influences e-filling system adoption. This study is useful in academics as it gives insight and knowledge which confirmed various theories of Technology Acceptance Model (TAM), the Unified Theory of Acceptance &Use of Technology (UTAUT) and Diffusion of Innovation (DOI) theory to explain the empirical relationship on factors influencing the e-filing system adoption and advances support for the relationships hypothesized.

5.5 Limitations of the Study

Major challenge was faced during data collection, where respondents were reluctant to provide information especially when they realized that the study was tax related. This was mitigated by the researcher pledging that the information was solely to be used for academic reasons and that confidentiality was guaranteed. With this assurance, field work exercise was made possible. An introduction letter from Moi University was attached to the questionnaires to affirm confidentiality. The study was further limited by the availability of the respondent, who were too busy during working hours to reply to the study research questionnaires. To mitigate this problem, the researcher made numerous phone calls to increase the response rate.

5.6 Suggestions for Further Research

The study concentrated on the relationship between the determinants and e-filing system adoption among taxpayers in Gatundu South Sub-county Kiambu County, Kenya. The specific variables that the study utilized were perceived ease of use, perceived usefulness, facilitating conditions (supporting facilities) and user ability. Therefore, future study should be extended to taxpayers in other Counties

within the country using other variables not utilized in this study to find out what drives/invokes them to resort to KRA work-places (service centers, huduma-centers and contact centre) and professionals for support/ help in filing their tax returns. This will enable Revenue body to know which areas of iTax should be improved for it to be more user friendly, fast, effective, efficient and convenient to the taxpayers since there is a common problem countrywide experienced as cutoff time for filing of the tax returns draws near, long queues are experienced at KRA workplaces and cyber cafes countrywide with taxpayers requesting for support/assistance while filing their tax returns, this is in spite of existence of iTax framework meant to encourage filing of tax returns among taxpayers on their own. Once these problems/challenges in iTax are identified and necessary correction made this will enable KRA to minimize tax evasion and help to increase tax base since the e-filing system (iTax) will be user friendly to the taxpayers and there will be less or no more requests for support/assistance while filing their tax returns which in returns will enable Kenyan taxpayers to be filing tax returns early, beginning January of every calendar year, to avoid extension of tax returns filing time and system overload that is caused by too many taxpayers using the e-filing system (iTax) to file tax returns at the same time during the due date of 30th June deadline every calendar year which always forces KRA to operate for longer hours both in weekdays and weekends in order to support /assist/help taxpayers in filing their tax returns.

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APPENDICES

APPENDIX 1: INTRODUCTORY LETTER TO THE RESEARCH RESPONDENTS

JESSE NJERU NJUGUNA

P. O. BOX 332-01001

KALIMONI, JUJA TOWN

5th November, 2022

Dear Respondent,

RE: REQUEST TO FILL THE QUESTIONNAIRE

I am a postgraduate student of Masters in Tax and Customs at Kenya School of Revenue and Administration in collaboration with Moi University, School of Business and Economics. I am currently on research work and the questionnaire has been designed to collect information on: ***Determinants of e-filing system adoption among taxpayers in Gatundu South Sub-county Kiambu County, Kenya.***

The information you provide will be used only for academic purposes and shall be kept strictly confidential. Therefore, you are kindly requested to give accurate information.

Thank you for your cooperation.

JESSE NJERU NJUGUNA

MU/KESRA105/0014/2019

APPENDIX II: QUESTIONNAIRE

This questionnaire was designed to collect information on **"DETERMINANTS OF E-FILING SYSTEM ADOPTION AMONG TAXPAYERS IN GATUNDU SOUTH SUB-COUNTY KIAMBU COUNTY, KENYA".** Kindly answer the following questions honestly and accurately as possible. The information given will be treated with a lot of confidentiality. Please do not write your name anywhere on this questionnaire.

SECTION A: E-FILING SYSTEM ADOPTION

Please tick (√) the extent of agreement to each of the statements provided below:

Key: SA *-Strongly Agree,* ***A****-Agree,* ***N****-Neutral,* ***D****-Disagree,* ***SD****- Strongly Disagree*

S/N		**SA**	**A**	**N**	**D**	**SD**
ESA1	I frequently use e-filing tax system to file my tax returns online					
ESA2	I would be using e-filing system to file my tax returns in future					
ESA3	I will recommend others to use e-filing system to file their tax returns					

SECTION B: PERCEIVED EASE OF USE

Please tick (√) the extent of agreement to each of the statements provided below:

Key: SA *-Strongly Agree,* ***A****-Agree,* ***N****-Neutral,* ***D****-Disagree,* ***SD****- Strongly Disagree*

S/N		**SA**	**A**	**N**	**D**	**SD**
PE1	Learning to operate e-filing system would be easy for me					
PE2	I would find e-filing system ease to use in my transactions					
PE3	It would be easy for me to become skillful at using e-filing system					
PE4	I would find e-filing system to be flexible to interact with					
PE5	My interaction with e-filing system would be clear and understandable					
PE6	I would find it easy to get e-filing system to do what I want					

SECTION C: PERCEIVED USE FULLNESS

Please tick (√) the extent of agreement to each of the statements provided below:

Key: SA *-Strongly Agree,* ***A****-Agree,* ***N****-Neutral,* ***D****-Disagree,* ***SD****- Strongly Disagree*

S/N		**SA**	**A**	**N**	**D**	**SD**
PU1	Using e-filing system would improve my job performance					
PU2	Using e-filing system would make it easier to file my tax returns					
PU3	I would find e-filing system useful in my job					
PU4	Using e-filing system in my job would increase my productivity					
PU5	Using e-filing system in my job would enable me to accomplish tasks more quickly					
PUC6	Using e-filing system would enhance my effectiveness on the job					

SECTION D: FACILITATING CONDITIONS

Please tick (√) the extent of agreement to each of the statements provided below:

Key: SA *-Strongly Agree,* ***A****-Agree,* ***N****-Neutral,* ***D****-Disagree,* ***SD****- Strongly Disagree*

S/N		**SA**	**A**	**N**	**D**	**SD**
FC1	I have adequate training on the use of e-filing system by KRA					
FC2	I have the necessary resources to use e-filing system					
FC3	I always get assistance/help from KRA when I experience difficulty when filing tax returns online					

SECTION E: USER ABILITY

Please tick (√) the extent of agreement to each of the statements provided below:

Key: SA *-Strongly Agree,* ***A****-Agree,* ***N****-Neutral,* ***D****-Disagree,* ***SD****- Strongly Disagree*

S/N		**SA**	**A**	**N**	**D**	**SD**
UA1	I always seek support to file my tax returns					
UA2	I can access e-filing system easily anytime anywhere					
UA3	I have the skills (knowledge) necessary to use e-filing system					

SECTION F: CONTROL VARIABLE

Please tick (√) where appropriate in the boxes provided below:

1. What is your age bracket?

a) 18-35 ☐

b) 36-60 ☐

c) Above 60 ☐

2. What is your highest level of education?

a) Secondary ☐

b) College ☐

c) University ☐

d) Post Graduate ☐

e) Others ☐

3. What is your occupation?

a) Employed – formal sector ☐

b) Employed – informal sector ☐

c) Self-employed ☐

d) Unemployed ☐

APPENDIX III: CAMPUS RESEARCH LETTER

Kenya School of Revenue Administration

KENYA REVENUE AUTHORITY

ISO 9001:2015 CERTIFIED

REF: KESRA/NBI/036

7rd November 2022

TO: WHOM IT MAY CONCERN

RE: RESEARCH STUDENT-DATA COLLECTION PERMIT

NAMES: JESSE NJERU NJUGUNA
REGISTRATION NO.: MU/KESRA105/0014/2019

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 Custom Administration undertaking research on **"Determinants Of E-Filing System Adoption Among Taxpayers In Gatundu South Sub-County Kiambu County. Kenya."**

The purpose of this letter is to request your good office to allow the student access your offices, assist him with the relevant information, accept to be interviewed and provide any other relevant information related to the study to enable him finalize the project.

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

Thank you.

SCHOOL OF REVENUE ADMINISTRATION
DEAN OF STUDIES
07 NOV 2022
ACADEMIC AFFAIRS DIVISION

Damaerine Masira,
Manager Academic Research,
KESRA

APPENDIX IV: NACOSTI RESEARCH LICENCE

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **993694**

Date of Issue: **25/November/2022**

RESEARCH LICENSE

This is to Certify that Mr.. Jesse Njeru Njuguna of Kenya School of Revenue Administration, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kiambu on the topic: "Determinants of E-filing System Adoption Among Taxpayers In Gatundu South Sub-County Kiambu County, Kenya" for the period ending : 25/November/2023.

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APPENDIX V: PLAGIARISM REPORT