



ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS

**FACTORS AFFECTING THE ADOPTION OF ELECTRONIC
TAX FILING IN ETHIOPIA: PERCEPTION OF TAXPAYERS'**

BY
ABERA MECHAL

JUNE 2018
ADDIS ABABA, ETHIOPIA



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Ethiopia: Perception of Taxpayers'**

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**A Thesis is submitted to the department of Accounting and
Finance of Addis Ababa University in Partial Fulfillments of
the Requirements for the Degree of Master of Science in
Accounting and Finance**

Addis Ababa University
College of Business and Economics
Department of Accounting and Finance

This is to certify that the thesis prepared by Abera Mechal, entitled: Perception Of Taxpayers' On Factors Affecting The Adoption Of Electronic Tax Filing In Ethiopia and submitted in partial fulfillment of the requirements for the Degree of Master of Science in Accounting and Finance complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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DECLARATION

I, the undersigned, declare that this thesis is my original work; prepared under the guidance of Dr. Wollela Abehodie. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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Acknowledgements

First and foremost, I want to thank the Almighty Lord for endowing me the endurance and courage of going through in my whole life.

Next, I would like to forward my sincere thanks and appreciation to my advisor Wollela Abehodie Yesegat (PhD) for her heartfelt exertion, fruitful support, encouragement and guidance in bringing the thesis work to reality.

I am grateful to the Management, Staff Members and Taxpayers' of the Ethiopian Revenues and Customs Authority, Large Taxpayers' Office, Eastern and Western Addis Ababa branch offices for their cooperation in providing me all the necessary data required for the study.

My special appreciation also goes to my employers; Omega Engineering PLC and TAK Technologies PLC for all kind of support provided to me during my thesis work. I would have never been able to complete this thesis without their kind support.

Finally, I would like to express my appreciation to my families (Almaz Biratu, Mechal Wakenne & My Brother and Sisters) and friends, for their encouragement and consistent support. Besides, my thanks also go to those who commented on my study and provided their assistance in any form during my thesis work.

List of Acronyms

AA	Addis Ababa
CLRM	Classical Linear Regression Model
DW	Durbin-Watson
ERCA	Ethiopian Revenues and Customs Authority
ICT	Information Communication Technology
IDT	Innovation Diffusion Theory
IT	Information Technology
KAP	Knowledge-Attitudes-Practice
LTO	Large Taxpayers' Office
MoCIT	Ministry of Communication and Information Technology
PEOU	Perceived Ease of Use
PR	Perceived Risk
PU	Perceived Usefulness
SMEs	Small and Medium Sized Enterprises
SPSS	Statistical Software Package for Social Science
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
VAT	Value Added Tax

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ABSTRACT

Factors Affecting the Adoption of Electronic Tax Filing in Ethiopia: Perception of Taxpayers'

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Addis Ababa University, 2018.

This study sought to assess perception of taxpayers' on factors affecting the adoption of electronic tax filing system in Ethiopian. The general objective of this study was to assess perception of taxpayers' on factors affecting the adoption of electronic tax filing system in Ethiopia. The study was guided by six specific objectives: (i) to analyze how taxpayers' perceived relative advantage influence electronic tax filing adoption, (ii) to determine the extent to which taxpayers' perceived complexity affect the adoption of electronic tax filing system, (iii) to assess the impact of Compatibility as a factor in influencing electronic tax filing adoption, (iv) to assess how perceived risk influence the adoption of electronic tax filing system, (v) to evaluate the existence of government support to taxpayers' as a factor that affect electronic tax filing adoption and (vi) to analyze how taxpayers' resistance to change affects the adoption of electronic tax filing system. The study combined the technology acceptance model (TAM), innovation diffusion theory (IDT) and the theory of reasoned action (TRA) with perceived risk and resistance to change as another constructs which was covered in the literature to present an extended model. The study was designed as a descriptive study. The study population comprised all electronic tax filing eligible taxpayers' in Ethiopia (35,956). A sample size of 150 was selected for this study. Unstructured in-depth interview and structured survey questionnaire was used to collect data from the respondents'. Random sampling method was used to collect information from the taxpayers'. The Statistical Package for Social Sciences (SPSS) version 23 was used to analyze the feedback and generate descriptive statistics used to make inferences on the population. From the study's findings, respondents' felt the Ethiopian electronic tax filing system was useful with many relative advantages. With regard to the complexity of the system, the study found that the online system at the Ethiopian Revenues and Customs Authority was operationally easy and not complex to be adopted. The study also established that majority of the taxpayers' found the electronic tax filing system compatible and affordable with existing and past trends. The study further found that respondents' felt the usage of the online tax filing system would infringe on their privacy and lack of confidence with the security issue was considered as barrier for the adoption electronic tax filing system in Ethiopia. Regarding government support factor, the study proven that, taxpayers' in Ethiopia are receiving inadequate support from the government which contribute for the low uptake of the system by the taxpayers'. The study finally recommended that the Ethiopian Revenues and Customs Authority (ERCA) should conduct continuous training and sensitization of the online system. There is also the need for policy interventions by the government and other stakeholders to facilitate and equip the electronic tax filing environment with the necessary IT and other infrastructures. The study further recommended that, the Ethiopian Revenues and Customs Authority (ERCA) should reassure taxpayers' of the reliability of the system by including easily visible privacy statements on their sites to decrease perception and fear of risk.

Chapter 1: Introduction

Electronic tax filing is a process where tax documents or tax returns are submitted through the internet, usually without the need to submit any paper return. The system encompasses the use of internet technology, the Worldwide Web and Software for a wide range of tax administration and compliance purposes (David 2015). It is a system for submitting tax documents to a revenue service electronically, often without the need to submit any paper documents. Electronic tax filing system is an electronic government application that is being utilized with increasing frequency all over the world. The development of electronic tax system was first introduced as a pilot test in the United States on the income taxpayers' in the early 1980s (Bojuwon 2015). Due to globalization and technology advancement government from developed and developing countries are implementing different e-application such as; e-commerce, e-business and e-tax system which are a subset of e-government. As one of the e-government initiatives, electronic tax filing is believed to improve the efficiency, effectiveness and convenience of both the taxpayers' and tax authority (Bojuwon 2015).

Although the electronic tax filing system in Ethiopia is just in its infant stage of implementation and are aimed at developing a better and easier system, the acceptance rate for this system is very low and remain under used by the taxpayers'. Simply having the technology available does not automatically yield benefits. Adoption rates must increase for any benefits to be reaped. With this easily accessible online tax submission, the Ethiopian Revenues and Customs Authority (ERCA) indicated that only a small number of its clients (5.1%) used the online tax submission platform in 2016/2017 financial year (ERCA 2017). This low adoption contradicts the promises of faster, cheaper and convenient means of filing taxes online. Despite the benefits of electronic tax filing service and the promotion made by the government and the tax authorities to get more citizens to use the service, there is still poor usage by the taxpayers' and the authority in Ethiopia. There is no question that the rate of electronic tax filing adoption among taxpayers'

must increase for the technology to benefit the stakeholders. Failure to increase the adoption rate among potential users means taxpayers' who could otherwise be filing their taxes online will instead spend extra money and time. Thus, it is important to know the main factors for not putting in to practice this system that will be considered the challenges of the government, the tax authority as well as for taxpayers'. The study therefore sought to establish perceptions on factors affecting the adoption of electronic tax filing system by the Ethiopian Revenues and Customs Authority, Large Taxpayers' Office (LTO), Eastern and Western Addis Ababa branch offices.

Gor (2015) demonstrated that an increase in the relative advantage, compatibility, system support, observability, organizational support and social networks positively influences the adoption of online tax filing system by the taxpayers' in Kenya. Anna and Yusniza (2009) also noted that privacy risk is a significant factor for electronic tax filing adoption; this is because electronic filing involves the transmission of taxpayers' confidential information through the internet. Furthermore, Alice (2017) mentioned that the itax system is useful and beneficial, but high IT (Information Technology) infrastructure set up cost and difficulties in accessing finance to cover these costs negatively influences the adoption of the system. Moreover, taxpayers' IT literacy skills and tax knowledge positively influences the adoption of itax system among Small and Medium Enterprise (SME) taxpayers' in Kenya. Coming back to Ethiopia, Tadesse (2015) studied the practice, challenges, and prospects of e-Government at Ethiopian revenues and customs authority large taxpayers' office (LTO). This study was only based on how well e-Government is recognized and rolled out as a strategic tool to solve drawbacks on existing tax administration systems and did not look at specific electronic filing issues.

Overall, these studies did not identify the specific factors that influence the adoption of electronic tax filing system by Ethiopian taxpayers'. This presented a knowledge gap. The current study therefore sought to fill these gaps by evaluating perceptions on factors affecting the adoption of electronic tax filing system by the Ethiopian Revenues and Customs Authority; Large Taxpayers' Office, Eastern and Western

Addis Ababa branch offices. Therefore, there is a need to understand whether or not taxpayers' have accepted the electronic tax filing system and identify the factors that can affect their decision to use or not to use this system. This is very important because the answer could help the Ethiopian Revenues & Customs Authority & taxpayers' to improve the adoption of electronic tax filing system in the near future.

In this paper, the broad objective was to find taxpayers' perception on factors affecting the proper adoption of electronic tax filing system in Ethiopia. The purpose of this chapter is to provide background information on the thesis. The first section sets out statement of the problem. While the second section presents objective, hypotheses and research question of the study. Significance of the study are presented in the third section. This is followed by scope and limitations of the research in the fourth section. Structure of the thesis is provided at the end of the chapter.

1.1. Statement of the Problem

Electronic tax filing system has the potential to benefit both taxpayers' and the government, but only if it is actually used. Although taxpayers' in Large Taxpayers' office, Eastern and Western Addis Ababa branch offices still have the option to file their tax manually, government aims to have a majority of eligible taxpayers' to adopt the electronic filing system. One of the most important duties of those responsible for organizational innovation is to maximize its adoption rate. Innovation, no matter how well designed, would be perceived as useless if it is not adopted and that one of the steps toward maximizing an innovation's rate of adoption is to understand the factors that influence its adoption. Moreover, despite an organization's decision to adopt an innovation, its actual usage depends on how the end users implement the usage of the innovation. Therefore, it is important to examine the adoption of innovations by the target groups, because if there is no acceptance among users, then the desired benefits associated with innovation cannot be realized.

The national Information Communication Technology (ICT) policy of Ethiopia was prepared in 2009 with a vision “Every Ethiopian life is ICT assisted” and a mission statement “to develop, deploy and use information and communication technology to improve the livelihood of every Ethiopian, and optimize its contribution to the development of the country (Tadesse 2015). In this line, Ethiopian Revenues and Customs Authority launched an online tax filing system in 2012 as a pilot program in Large Taxpayers’ office. The system is now expanded to Eastern and Western Addis Ababa Branch Offices. However, those taxpayers’ outside Large Taxpayers’ office, Eastern& Western Addis Ababa branches still declare and submit their tax returns by filing the forms manually. As per the data obtained from Ethiopian Revenues and Customs Authority by July 2017 there were 35,956 taxpayers’ in the three branches (1,156 in Large Taxpayers’ Office, 20,200 in Eastern Addis Ababa and 14,600 in Western Addis Ababa). Out of this number, only 1,854 (1,156 in Large Taxpayers’ Office, 570 in Eastern Addis Ababa and 128 in Western Addis Ababa branches) filed their tax returns through the online system (ERCA, 2017). This indicates a very low (5.1%) uptake.

Moreover, according to World Bank Group (2015) the in-house cost of compliance for filing taxes in Ethiopia is higher than that of pre-filing and post-filing activities. This in return reveals that taxpayers’ are burdened by the manual filing and payment procedures and the related costs which are likely to increase their costs of doing business.

The above discussed problems coupled with the knowledge gap shown in the literature review necessitated the conduct of this study on perception on factors affecting the adoption of electronic tax filing system in Ethiopia.

1.2. Objective of the study

General and specific objectives are clearly stated in identifying the perception of taxpayers' on factors influencing electronic tax filing adoption in Ethiopian Revenues and Customs Authority; Large Taxpayers' Office (LTO), Eastern and Western Addis Ababa branch offices.

1.2.1. General Objective

The general objective of this mixed method approach study was to identify factors that affect electronic tax filing adoption in Ethiopia.

1.2.2. Specific Objectives

Based on the broad research objective, the following specific research objectives were developed.

- a.** To analyze how taxpayers' perceived relative advantage influence electronic tax filing adoption.
- b.** To determine the extent to which taxpayers' perceived complexity affect the adoption of electronic tax filing system.
- c.** To assess the impact of Compatibility as a factor in influencing electronic tax filing adoption.
- d.** To assess how perceived risk influence the adoption of electronic tax filing system.
- e.** To evaluate the existence of government support to taxpayers' as a factor that affect electronic tax filing adoption.
- f.** To analyze how taxpayers' resistance to change affects the adoption of electronic tax filing system.

In addition, the following research question was developed:

RQ-1. What other factors affect the adoption of electronic tax filing system in Ethiopia?

1.3. Significance of the Study

Apart from its significance for academic requirement, this study is helpful for different Stakeholders. The findings provide Ethiopian Revenues and Customs Authority with useful information to enhance its electronic tax filing administration reform and to make strategic decisions about innovation design and management. The assessment and recommendation forwarded on existing internal work flows and service delivery modalities regarding the system contribute much to the tax authority.

The study also provide information to Ministry of Communication and Information Technology (MoCIT) on the status of electronic tax filing system in the Ethiopian Revenues and Customs Authority as compared to the national ICT Policy and e-Government Strategy and Implementation Plan. Taxpayers' are also expected to benefit from the research by looking at the recommendations forwarded at the end of the thesis. Moreover, it may serve as a source of reference and give some highlights for others who would like to know more about the issue and interested in undertaking further and detail studies in electronic tax filing determinants as a research title.

1.4. Scope of the Study

The technical aspect of electronic tax filing was out of the scope of the thesis. This includes how much focused Ethiopian Revenues and Customs Authority (ERCA) branches are equipped with required hardware and software infrastructure. Moreover, to undertake this study, the researcher was only confine to the examination of perception on factors that affect electronic tax filing adoption in the case of Ethiopia Large Taxpayers' Office, Eastern and Western Addis Ababa branches which the online system was implemented.

1.5. Organization of the Thesis

The study was organized in five chapters. Chapter I is Introduction. In this chapter, the basic framework of the study including background, Statement of the Problem, Objectives and research question with hypothesis, significance of the study, and Scope and Limitations of the study was discussed. In Chapter II, review was made on literatures and related studies. Chapter III presented the research methodology that was used in carrying out the study. Chapter IV presented results and discussion. Finally, chapter V provided concluding remarks and recommendations.

Chapter 2: Literature Review

Electronic tax system is a subset of electronic government, which is the application of electronic means of interaction between taxpayers' and tax administrators through the means of electronic tax software (David 2015). Gekonge et al, (2016) defines electronic tax system as a computerized tax administration system that is especially designed to handle general tax administration from registration, assessment, filing returns and processing of claims and refunds. Gor (2015) stated that business firms as well as government organizations are currently actively involved in the development and adoption of the latest innovations so as to restructure themselves to be ahead in this highly dynamic environment.

This section reviews the basic theoretical and empirical issues related to perception on electronic tax filing system and factors that affect its adoption. Hence, chapter two served as background for this study by describing concepts of electronic tax filing system and factors that could affect electronic tax filing adoption. Subsequent chapters are built on concepts and definitions described here. In light of the above, the purpose of this chapter is to review the literatures related to electronic tax filing and its determinants. The chapter has three sections. Section 2.1 presented the theoretical aspects related to electronic tax filing. This is followed by empirical review in section 2.2. Finally, conclusions on the literature review and knowledge gaps presented in section 2.3.

2.1. Theoretical Review

This section reviews the basic theoretical issues related to electronic tax filing and factors that affect its adoption. Hence, section 2.1.1 presented electronic tax filing concepts. Then, section 2.1.2 presented the theories related to technology adoption. Finally, Section 2.1.3 presented other factors affecting the adoption of electronic tax filing system.

2.1.1. Electronic tax filing

Electronic tax filing is a process where tax documents or tax returns are submitted through the internet, usually without the need to submit any paper return. It is paperless online platform for the lodgment of tax returns and declarations and other tax related services to a revenue authority electronically. Electronic system for filing returns and paying the due taxes, if accepted and adopted by most businesses and individual taxpayers, result in tangible advantages to both the taxpayers' and the government. The government gains in the form of reduced operation costs such as costs associated with submission, storage and handling of returns in addition to saving time which in turn boosts compliance. The taxpayer benefits from the system in the form of reduced calculation errors, preparation and filing time (Odongo 2016).

Electronic tax filing system has different advantages for different role players such as taxpayers', Accountants, the revenue authority and other stakeholders. According to Mongwaketse (2015) referred United States Patent and Trademark Office (USPTO) 'uspto website', some of the advantages for using electronic tax filing includes; for taxpayers' and accountants (for their clients) it increase the speed at which people file their returns by saving their time, and able to file 24 hours a day and seven days a week makes the system convenient. It has also the ability to provide instantaneous feedback to clients or taxpayers'. The system has the advantage of saving taxpayers' and accountants' money by avoiding in person appearance in tax authority offices. The online electronic filing system confirm receipt of all submissions automatically by the clients which avoids back and forth document movement in the case of manual filing. For tax authority, the online tax filing system contribute to the reduction in the workload in the branch offices (e.g. submission of tax directives). Moreover, it enhance uniformity in the treatment of the applications.

Furthermore, as Mongwaketse (2015) stated, all business leaders and managers see the use of technology and continuous ICT development as an issue of organizational strategy, which can influence its business

performance and most importantly its competitiveness in its industry of operation. Almost all company types are liable to one or other tax, which makes the use of electronic filing very relevant to all businesses. Some adopt the use of the system indirectly by outsourcing the tax compliance function to the professional Accounting and Audit firms such as Price Water house Coopers, Ernest & Young, KPMG and many other emerging firms. During the era of the introduction of electronic filing of tax returns, companies were confronted with important questions of whether or not they should aggressively invest in the new information technology or respond slowly and conservatively to reduce the risk and costs or just stick to the old ways of doing things. And for those entities that chose to invest in the system they benefited.

2.1.2. Theories of technology adoption

The literature showed the existence of different theories related to technology adoption. These theories include Technology Acceptance Model (TAM), Innovation Diffusion Theory (IDT) and Theory of Reasoned Action (TRA). The purpose of this section is, hence, to review these theories of technology adoption.

2.1.2.1. Technology Acceptance Model

The technology acceptance model (TAM) states that technological innovation adoption is affected by the perceived usefulness (PU) and the perceived ease of use (PEOU) of the technology (Davis 1989). The model has two fronts. One is the degree to which an individual believes that a particular system would enhance job performance (Relative Advantage) within an organizational context. Secondly, the degree to which an individual believes that using a particular system would be free of effort (Complexity). Thus, the model suggests that the innovation usage is indirectly affected by both PU and PEOU, which form the primary relevance for innovation adoption behaviors (Lee et al. 2011).

Perceived usefulness (PU)

The perceived usefulness (PU) is based on the observation that “people tend to use or not use the application to the extent they believe it will help them perform their job better” which is the relative advantage of the system (Davis 1989). PU directly influences the attitude toward use of the system and indirectly influences behavioral intention to use. Even if an application is perceived as useful, it will only be used if it is perceived as easy to use, that is, benefits of usage outweigh the effort of using the system. Perceived usefulness of the system will intimidate users’ intention to use an information system (Davis 1989). The main reason taxpayers’ take advantage of electronic tax filing system is because they find the system useful in preparing their tax return.

Perceived ease of use (PEOU)

The system ease of use is likely to affect the taxpayers’ perception of risk usage. Systems that are perceived to be complex are likely risky to adopt and use. Taxpayers’ will perceive it as problematic and not free of effort and could plague with performance problems and usage uncertainties. On the contrary, if taxpayers’ perceive the system is easy to use they will believe it will perform well then will evaluate them positively and probable to adopt it. Because the system is highly usable and is less likely to cause usage concerns, therefore perceived ease of use may function as an important risk-reducing factor. Information systems that users perceive easier to use and less complex will increase the likelihood of its adoption and usage (Teo et al., 1999). PEOU has been shown to influence behavior (i.e., IT adoption) through two causal ways: (1) a direct effect on behavior intention and (2) indirect effect on behavior intention via PU.

Gefen and Straub (2000) describe PU and PEOU in terms of intrinsic and extrinsic characteristics. PEOU relates to the “intrinsic characteristics of Information Technology (IT), such as the ease of use, ease of learning, flexibility and clarity of its interface”. PU results from a user’s assessment of IT’s “extrinsic, i.e., task-oriented, outcomes: how IT helps users achieve task-related objectives, such as task efficiency and effectiveness”. In order to promote the usefulness of the system, electronic tax filing system need to

be both easy to learn and easy to use. These two determinants, PU and PEOU, directly influence the user's attitude toward using the new information technology, which in turn leads to the user's behavioral intention to use. PU is defined from the prospective user's point of view. Will the application improve his or her job performance in the organization? Perceived ease of use (PEOU) is a variable that describes the perception of the user that the system will be easy to use.

Adoption of innovation literature finds that complexity, compatibility and relative advantage of the innovation are key factors of TAM. Rogers and Shoemaker's (1971) definition of complexity is similar to PEOU: "the degree to which an innovation is perceived as relatively difficult to understand and use". Davis (1989) points out the convergence of these and other theories support the concepts of PU and PEOU. Moreover, the constructs employed in TAM (PU and PEOU) can be perceived as fundamental subset of innovation characteristics which are captured in the innovation diffusion theory (IDT). According to Lee et al. (2011), the relative advantage construct in innovation diffusion theory (IDT) is similar to the notion of PU in TAM, and the complexity and compatibility constructs in innovation diffusion theory (IDT) captures the PEOU in the TAM.

Bee (2008) used the extended version of technology acceptance model (TAM) as a theoretical framework to examine taxpayers' perception of adopting a personal tax electronic filing System with the new construct 'perceived risk'. Moreover, in the works of Hsu and Chiu 2004, Fu et al. 2006, Gallant et al 2007 and Carter et al. 2008, the perceived risk variable was also incorporated into their models. All of the studies have found that perceived risk significantly affects the behavioral intention of current and potential users of e-services including the e-filing system. A perceived risk variable decomposed into its sub-facets is possibly a better measure because it gives insight as to which risk facets are important for potential users (Featherman and Pavlou 2003). Rotchanakitumnuai (2007) investigated the use of three risk facets, namely, privacy risk, performance risk and the fair financial audit risk on the tax electronic tax payment system in Thailand and found that only performance risk and the fair financial audit risk were

significant variables to the adoption of the electronic payment method in Thailand. Therefore, the effect of perceived risk in electronic tax filing adoption will be discussed as follows:

Perceived Risk

Electronic tax filing involve more perceived risk than traditional manual tax filing. It is manifested in taxpayers' concerns that the electronic tax filing system will transfer their personal tax information to third parties without their knowledge or permission. Although this concern also presents in the physical world but then this online issue take a vast importance due to the special characteristics of the Internet (Hoffman et al. 1999 and Friedman et al.2000). Privacy risk in this study refers to, the safeguard of various types of data that are collected during taxpayers' interact with the electronic tax filing system.

On the other hand, performance risk refers to the possibility of the system malfunctioning and not performing as it was designed and advertised and which failing to deliver the desired benefits. The risk factor that taxpayers' perceived to have in the system, which promise to complete their transaction securely and to maintain the privacy of their personal information will affects their voluntary adoption of electronic tax filing system. Thus, for the purpose of this study, perceived risk (PR) is defined as taxpayers' perception on the reliability of the system usefulness/functionality and the control of their personal data information in an online environment.

While the electronic services is convenient and creates efficiencies for their users, little is understood about how consumers perceive them. Furthermore the development of electronic services will increase the trade-off between as the levels of services increase, the level of risk will also increase. These risks are the result of two processes. They are, (a) information that is sent electronically, and (b) information that is stored electronically. In addition to that, the coupling of electronic data is much simpler as compare to traditional types of data storage. This means that third parties can capture, read and modify the

information as they are being transmitted or stored. For example, in the case of electronic burglary, large quantities of subtle information can be obtain or wipe out quickly and easily without the public's consent.

Since risk is difficult to measure objectively, the literature focuses on users' risk perceptions. Perceived risk can be defined as 'the potential for loss in the pursuit of a desired outcome of using an e-services' (Featherman and Pavlou 2003). Perceived risk is composed of behavioral and environmental uncertainty (Pavlou 2003). Behavioral uncertainty occurs because online service providers may behave in an opportunistic manner by taking advantage of the impersonal nature of the electronic environment and the inability of the government to monitor adequately all transactions. Whereas, environmental uncertainty happens is due to the unpredictable nature of Internet-based technology that is beyond the control of the users' or the provider (Pavlou 2003). Although provider play an important role on the security of the transaction medium (encryption, authentication, firewalls), there is still the likelihood of third parties intimidate the transaction process. Perceived risk reduces users' intentions to exchange information and complete transactions (Pavlou 2003). Therefore, it is very common when potential adopters engaged Internet as the transaction medium, their concern on risk will surface and become prominent to them (Hoffman et al. 1999).

However, in Belanger and Carter (2008) study on e-government adoption, perceived risk perception did not decrease citizens' intention to use an e-government service. This finding is incongruent with the e-commerce literature. The argument made was there are differences between commercial businesses and government agencies existence. As for e-commerce it mainly focuses on profit and target market whereas for e-government the focuses are on service and population at large. Their other argument were, maybe the perceived risk construct is more common in e-commerce than in e-government.

2.1.2.2. Innovation Diffusion Theory (IDT)

Innovation is the process of creating a new technology, device or procedure (Rogers 2003). Diffusion is the process of spreading ideas, concepts, skills and knowledge through society. The innovation diffusion theory (IDT) describes how innovations or technology become accepted and spread through societies large or small (Rogers 2003).

In IDT, the process of choosing to use a technology is known as the innovation-decision process. Through this process a person passes from gaining knowledge about the innovation to forming an attitude about the innovation (Demir 2006). Once an attitude is formed an individual makes the decision to accept or reject the innovation. If he/she accepts the innovation, the person implements the innovation and proceeds to confirm their decision. The entire process occurs in five stages, the first being called the Knowledge stage (Demir 2006). During this stage an individual is exposed to the technology and explores how it functions.

Persuasion is the second stage. Individuals at this stage look for information regarding the technology, evaluate which sources of information are credible and evaluate peer attitudes toward the technology. A favorable or unfavorable attitude about a technology does not always lead to acceptance or rejection of the technology. Sometimes an affirmative attitude toward a technology does not point to use, when this happens it is known as the knowledge-attitudes-practice (KAP) gap (Rogers 2003). Decision is the third stage. A person is in the decision stage when they participate in activities that result in acceptance or rejection of the technology or innovation. Individuals often seek a way to adopt the technology in a small way, in effect trying out the technology before fully committing. This gives the individual an opportunity to verify that the technology provides an advantage, which if it does greatly heightens acceptance (Rogers 2003). While overall rejection of a technology happens at this stage, it can occur throughout the process. When this happens the individual either actively rejects, meaning they were going to adopt and changed

their mind, or passively rejects, meaning they never explore what adopting the technology means (Rogers 2003).

If an individual chooses to accept the technology the next stage for him/her is implementation. Implementation is actual use of the technology and many things may occur at this stage resulting in discontinuance of use. Problems in understanding how to fully implement the technology may happen. However, a change agent is helpful in resolving issues and providing education on use. Further, those who find new, or enhanced uses of the technology, called re-inventors, can provide added incentive for adopters struggling with implementation. Re-inventors encourage customization to individual needs and circumstances (Rogers 2003).

Confirmation is the final phase. At this point, the new adopter looks for support regarding their decision to use the technology. Further, the adopter wants to be at peace about their decision and will seek for reinforcement of their choice. However, if they receive too much information incongruent to their action to adopt they may discontinue use. When discontinuance is chosen the adopter either replaces the technology or becomes disenchanted. This is known as disenchantment discontinuance, which happens when the innovation does not meet with the standards and ideas the individual had imagined and he/she simply stops using the technology. Replacement discontinuance happens when the person replaces the technology with a competing innovation that he/she feels is superior to the previous (Rogers 2003). It is also important to consider the specific attributes of a given innovation that could explain the rate of adoption, such as relative advantage, compatibility, complexity, try ability, and observe ability (Rogers 2003).

Relative Advantage

Relative advantage is the perception of how much better the technology is than its predecessor (Rogers 2003). The notion of relative advantage is defined as an idea that is perceived to improve or replace the prevailing innovation (Rogers & Shoemaker 1971 and Rogers 1986). The status of motivation on the perception of any innovation is based on fundamental benefits. The extent of relative advantage is precise in economic terms, while the success of the factor subsidizes, its measure of the level of convenience and benefits derived from the system. The implementation of a new technology does not matter much on the objective (Sahin & Rogers 2006). The important issue is how an individual or organization perceives the online tax system. The development of hypotheses on the innovation factor constructs according to Rogers and Shoemaker (1971) actual adoption of an innovation is the function of either the level of its compatibility and relative advantage derived from the adoption compared to the existing system. Tornatzky and Klein (1982) found that relative advantage are constantly associated with the adoption of the technology. In conclusion, the more individuals and organizations comprehend an innovation, the more the rate of implementation by taxpayers’.

Compatibility

Compatibility is the degree to which the technology is in line with past experience, existing values, and the needs of the person adopting (Rogers 2003). Compatibility is the process by which an invention is perceived as reliable with the present structure, experience and values within the system (Rogers et al. 2004). It refers to the compatibility of the innovation with the prevailing system which includes the software and hardware. The lack of compatibility with the application of any innovation by an organization can affect its implementation (Atif et al. 2012 and Sahin & Rogers 2006). The compatibility of a new system depends on how fast the integration of the new system to the existing practice (Tornatzky & Klein 1982).

In prior research, compatibility has reported significant effect on the user technology acceptance decision (Fu et al. 2005). In Fu et al.'s (2005) opinion, compatibility represented the second largest determinant of behavioral intention. Taxpayers' tend to concentrate on the usefulness of a tax-filing method and may be fairly pragmatic in developing general attitudes towards using it, and the compatibility of a tax filing method with taxpayers' practice is a crucial antecedent to their behavioral intention. Compatibility relates to the person's compatibility in dealing with government either using online or conventional mode, the users feel that the electronic filing services rendered online are compatible with the way of dealing it conventionally, in this perspective, the compatibility of the e-tax service has facilitated the users to continue using the service (Hussein et al., 2010). And Hung et al. (2006) think that adopters ranked higher scores in compatibility than non-adopters did.

Complexity

Complexity is defined as the degree to which new innovation is being perceived as relatively difficult to practice and apprehend (Rogers, 2010). It represents how hard the individual feels it will be to learn and adopt the innovation (Rogers 2003). Complexity is found to have a significant effect on adoption of innovation evidence from the field of information system (Moore & Benbasat 1991 and Venkatesh & Davis 2000). Correspondingly, the adoption of the online tax system by the taxpayers is being perceived to be complex during the adoption of the system with low network connectivity and the process to be followed in filling their data at first.

Try ability

Try ability is how much the individual can experiment with and use the new technology before full adoption (Rogers 2003).

Observability

Observe ability is how much the new technology can be seen in use, allowing members of the social group to witness the effects of the innovation. Also remember that when a technology is more visible, adopters have a greater opportunity to observe its benefits (Rogers 2003). Each of these attributes influences the rate of adoption or how fast adoption happens (Rogers 2003).

In addition to the five attributes listed above there are four variables influencing diffusion. The first attribute describes the type of innovation, whether optional, collective, or authoritative. The second is the communications channel used, such as mass media or interpersonal. The third is the nature of the social system such as degree of interconnectedness, and norms. The fourth is the extent of the change agents' promotion efforts (Rogers 2003). An important factor is if the innovation is being considered for personal use or as a part of an organization. Organizational innovation decisions are normally adopted slower than an individual optional decision. Meaning the more people involved in adoption the slower the rate of adoption. Further, when personal communication is used rather than mass media, adoption rates are slower. Lastly, the degree of interconnectedness, and social norms, as well as the efforts of change agents influence adoption rates at all stages (Rogers 2003).

2.1.2.3. Theory of Reasoned Action (TRA)

The theory of reasoned action (TRA) presents a model for predicting the intention to perform a behavior based on an individual's attitudinal and normative beliefs (Southey 2011). The theory holds that a person's attitude toward a behavior is determined by their salient beliefs about consequences of performing the behavior and an evaluation of the outcome of that behavior (Talukder et al. 2008). Behavioral beliefs in this context define the subjective probability that performing the target behavior will result in consequences while evaluation refers to an implicit evaluative response to the consequence (Talukder et al. 2008). Hence, with respect to adoption of innovation, the adoption decision is influenced

by attitudes toward the use of the innovation and perception of what other people who are important to an individual think about the adoption (Chigona and Licker 2008).

2.1.3. Other factors affecting the adoption of electronic tax filing

Government support

The government which is meant to be a motivator for the income taxpayers' and make the environment conducive has to support them fully in terms of policies and regulations. Hansen et al (2009) examined government support during the start-up the rate that influences the long run of adoption of innovation. In addition, Fernández et al (1996) identify management and sectorial characteristics which determine the range of government support received by innovation users in Spain. The finding showed that sectorial differences were minimal with regard to the importance of government support and it showed a significant correlation with government support.

Resistance to change

The term resistance to change has been identified and clarified mainly in the managerial and organizational setting (Lahteenmaki et al. 2001). This explains resistance to change from the social perspective point of view, to explore the reaction of income taxpayers' to the adoption of an online tax system. Turner and Apelt (2004) highlights the significant importance of exploring the resistance to electronic tax filing system adoption as an innovation. Dent and Goldberg (1999) defined resistance to change as a means to protect the individual from the effect of real changes.

Others

The decision whether to use or not to use electronic tax filing can be influenced by many things such as the type of income earned by a taxpayers', size of the business, location, business sector and other attributes of business. Coolidge and Yilmaz (2014) agree that taxpayers' with certain characteristics are more likely to use electronic filing. In the main large businesses, located in urban areas, operating in

capital-intensive sectors, and paying multiple taxes e.g. income tax, value-added tax (VAT), payroll taxes, and excise taxes are most likely to use electronic tax filing. And in a similar fashion, taxpayers' in the high income bracket, with a complex income structure are most likely to e-file. In addition the availability of reliable Internet access and electricity, capability in computer usage, awareness of electronic filing, and knowledge about the process are important for taxpayers' electronic filing decisions, said Coolidge and Yılmaz (2014). Furthermore, it is also argued that taxpayers' reporting payment of numerous types of taxes or severe political instability are generally more likely to electronic filing, while those experiencing difficulties in access to electricity are less likely to use electronic filing. Taxpayers' who perceive more corruption or informal treatment by government officials also appear more likely to file their tax returns electronically (which allows them to avoid face to-face contact with bureaucrats).

As discussed by Gor (2015), the three theories and other factors discussed above are interrelated in one way or the other. The constructs employed in TAM (PU and PEOU) can be perceived as fundamental subset of innovation characteristics which are captured in the IDT. According to Lee et al. (2011), the relative advantage construct in IDT is similar to the notion of the PU in TAM, and the complexity construct in IDT captures the PEOU in the TAM. Moreover try ability communicates the relative advantage of the innovation, a factor directly linked to PU. Furthermore the TRA also forms a subset of IDT through the social system (e.g. individuals are more likely to perform an act if they perceive the existence of greater social pressure from salient referents to perform that act (Talukder and Licker 2008)).

2.2. Empirical review

Since the development of the above mentioned theories, the question of what determines the adoption of e-tax in general and e-filing in particular has been a major field in finance literature. Since then, several studies have been conducted in developing and developed countries to identify those factors that have an effect on the adoption of electronic tax filing. Given the time constraint, the advancement of technology and the number of empirical literature available on the topic of this research it would have been quite

difficult to present the results of all the studies. Thus, the review of the empirical studies in this section on the determinants of e-filing adoption has a particular focus on those that have been conducted since the 2000s. Although not specifically conducted in Ethiopia, this section highlighted previous studies and some specific finding that deal with electronic tax filing matters.

Gor (2015) conducted the survey on factors influencing the adoption of online tax filing system in Nairobi, Kenya. The researcher investigate factors influencing the adoption of online tax filing systems by the medium tax payers in Kenya. The study combined the innovation diffusion theory (IDT), technology acceptance model (TAM) and the reasoned theory of action (RTA) to present an extended innovation diffusion model. The result of the survey found that positive increase in the relative advantage, complexity, compatibility, system support, observe ability, organizational support, and social networks positively influences the adoption of online tax filing system by the medium tax payers in Kenya. The study further established that these factors considered collectively, supportive social system (measured by observe ability, organizational support, and social networks) has the most significant influence followed by perceived ease of use (measured by complexity, compatibility, and system support) and finally the perceived usefulness (insignificant) of the innovation (measured by relative advantage). The findings suggested a combined approach for evaluating innovation adoption by combining the innovation diffusion theory (IDT), technology acceptance model (TAM) and the reasoned theory of action (TRA) to present an extended innovation diffusion model for adoption of online tax filing systems which can help organization decision makers in planning, evaluating and executing the use of the system.

Wang (2002) conducted an empirical study on the adoption of electronic tax filing systems. Using the technology acceptance model (TAM) as a theoretical framework, this study introduced “perceived credibility” as a new factor that reflects the user’s intrinsic belief in the electronic tax-filing systems, and examines the effect of computer self-efficacy on the intention to use an electronic tax-filing system. Based on a sample of 260 users from a telephone interview, the survey results found that the extended TAM in

predicting the intention of users to adopt electronic tax-filing systems. The results also demonstrate the significant effect that computer self-efficacy has on behavioral intention through perceived ease of use, perceived usefulness, and perceived credibility.

Anna and Yusniza (2009) conducted a conceptual paper on the adoption of tax e-filing aimed to provide insights into its facets, thus, providing useful input on the adoption and evaluation of the e-filing system by users. It is predicted that many of these risk facets will be significant. Among the risks that could possibly be significant are performance risk, psychological risk, time risk and privacy risk. The survey finds that Psychological and time risks could possibly be prevalent for taxpayers' who are not IT literate, they may find themselves frustrated or anxious if a lot of time is spent learning about the e-filing system and then find that the system does not function as they had hoped it would. Privacy risk may possibly be a significant risk for e-filing adoption; this is because e-filing involves the transmission of taxpayers' confidential information through the Internet. The potential benefits of the research as mentioned includes; First, risk-reducing strategies could be formulated to encourage e-filing adoption such as improved security features for the user interface. The risk-reducing strategies could be developed to cater to the facets of risk that are the most prevalent in e-filing adoption. For example, if psychological risk is a significant factor, the tax authorities could develop several methods of helping taxpayers e-file such as an offering a web-based tutorial or a video that guides the taxpayers throughout the e-filing process. Second, this research could identify the demographic characteristics of those with higher or lower inherent e-filing usage risk. By identifying these, different advertising strategies could be targeted to a specific group of people. This research could also be expanded to include different types of respondents such as paid tax preparers and different types of taxpayers. Paid tax preparers are given the rights by their clients to prepare their tax matters. They use the e-filing system for different types of clients and are more frequent users of the e-filing system than taxpayers who file for themselves. It would be interesting to understand which facets of risk are more significant to them. Different types of taxpayers such as companies may

deal with more complex transactions than individual taxpayers, thus, they may emphasize different risk facets when filing in the tax return form electronically.

Most recently, one study was made by Alice (2017) on factors influencing the adoption of the itax online system among Small and Medium-Sized enterprises (SMEs) in Westland's, Nairobi. The main objective of the study was to establish the factors influencing the adoption of the itax online system among SMEs in Westland's, Nairobi County. From the study's findings, the SMEs felt the itax online system was useful. They believed that the introduction of itax was a beneficial idea. The study also found that the SMEs felt the usage of the online system would not infringe on their privacy. Additionally, that the online system would ease the process filing of tax returns. The study also found that majority of the SMEs accessed internet at their business premises and found the monthly cost of internet to be affordable. However, the computer hardware acquisition and maintenance costs were found to be relatively high. Moreover, it was difficult to obtain finances to equip the business with the necessary Information Technology (IT) infrastructure. The study concludes that the SMEs perceive the itax online system to be useful, credible and easy to use, positively influencing its adoption. Another conclusion was that significant gains had been made in Kenya's broadband market to enhance internet penetration and make internet affordable. However, the SMEs are faced with the challenge of high IT infrastructure set up costs and difficulties in accessing finance to cover these costs. Consequently, this negatively influences the adoption of the itax online system. The study also concludes that the commendable IT literacy skills and tax knowledge that SMEs have, positively influences adoption of itax.

Fu et al. (2005) conducted a study on taxpayers' intention on the acceptance of electronic tax filing. Using the filing of personal income tax in Taiwan as an example of e-government services, this study integrated two important theories (TAM and TPB), and discussed the factors affecting the taxpayers' intention to adopt a particular tax filing method (from Manual, two-dimensional barcode, or internet) based on empirical data gathered from a large scale nationwide survey. The survey result founds that taxpayers'

tend to concentrate on the usefulness of a tax filing method and may be fairly pragmatic in developing general attitudes towards using the method. Interestingly, the effects of perceived ease of use, subjective norms, and self-efficacy on behavioral intention were different from manual and electronic tax filers.

Bee (2008) conducted a Study of Taxpayers' Perception of Adopting a Personal Tax E-Filing System in Malaysia. The study's primary goal was to examine taxpayers' perception toward the electronic tax-filing system which will influence their behavioral intention to adopt the system. Using the filing of personal tax as an example, this study explores and understands Malaysian taxpayers' perceptions towards electronic tax-filing system and the impact on their behavioral intention to adopt. Thus, this study integrates constructs from the Technology Acceptance Model (perceived usefulness and perceived ease of use) with the new construct perceived risk. The results indicated that perceived ease of use, perceived usefulness and perceived risk are significant indicators of taxpayers' intention to adopt the electronic tax-filing system. Since there are no prior studies on Malaysian electronic tax-filing system, this research offers an understanding of the relationship among the three constructs in e-government services. Another objective of this paper was to provide the tax authority with a preliminary reference to study the roles of perceived ease of use, perceived usefulness and perceived risk to its electronic tax-filing system. Ease of use, usefulness and risk are integral concepts of electronic tax-filing adoption. With the knowledge of the factors that significantly influence taxpayers' adopting electronic tax-filing system from this study, this will also enable the authority to develop online services that will meet the needs of their taxpayers.

Asianzu and Maiga (2010) conducted a consumer based model for the adoption of e-tax Services in Uganda. This study presented a model for e-tax adoption in Uganda as a developing country. The study indicated that Uganda is one of the countries at the bottom among the developing countries in e-government adoption and this is caused by the governments focus on supply-side factors, therefore, a model needs to be developed to address the demand-side perspective of e- government adoption. The consumer-based model presented in this study outlined the requirements for successful e-government

adoption. Findings show these factors as important for e-government adoption: awareness, accessibility, training, user support, local language, trust, attitudes, benefits, education and compatibility. These requirements are added as external (independent) variables to TAMs perceived usefulness (dependent variable). Theoretically, the model is important to the implementers of e-government services in Uganda. It is hoped that once adopted and applied in Uganda, the adoption rates of e-government services will increase. The model is also generic and can be applied to other developing countries that have similar contexts as Uganda. The study concluded that e-tax adoption rates in developing countries remain low and so its benefits are not fully realized. This is because governments have focused largely on technical supply-side factors with little emphasis on the demand perspective of e-tax adoption.

Bojuwon (2015) carried out a survey of factors influencing income taxpayers' reaction towards e-tax system adoption in Nigeria. This study found that taxpayers' trust, ease of use, compatibility, complexity, relative advantage, government support, security and resistance to change are variables that influence taxpayers' reaction towards an e-tax system in Nigeria. The significant factors are presented in the following sequence: ease of use, compatibility, resistance to change, relative advantage security, taxpayers trust, complexity and government support. The result of taxpayers' trust revealed that it is important to integrate the worries of taxpayers' with regard to the security of personal information so as to consider their willingness to engage in the adoption of the e-tax system. This paper presents the significant importance of allowing for the ultimate role of government support when exploring the factors that impact income taxpayer reaction towards adoption of e-tax system. Furthermore, Relative advantage, ease of use, compatibility and complexity variables were recorded with high loading above the threshold of 0.50. The respondents were with little computer skill and are adopters of the e-government on which the itemized survey was conducted. This enables the income taxpayers' to be more capable of assessing how easy is to understand the system, how compatible is it with the existing filing system, how complex is the system and to what extent do e-tax system claim to be more important than the traditional filing

system in interacting with income taxpayers. It was found that relative advantage, ease of use, compatibility and complexity are related to the adoption of a new innovation.

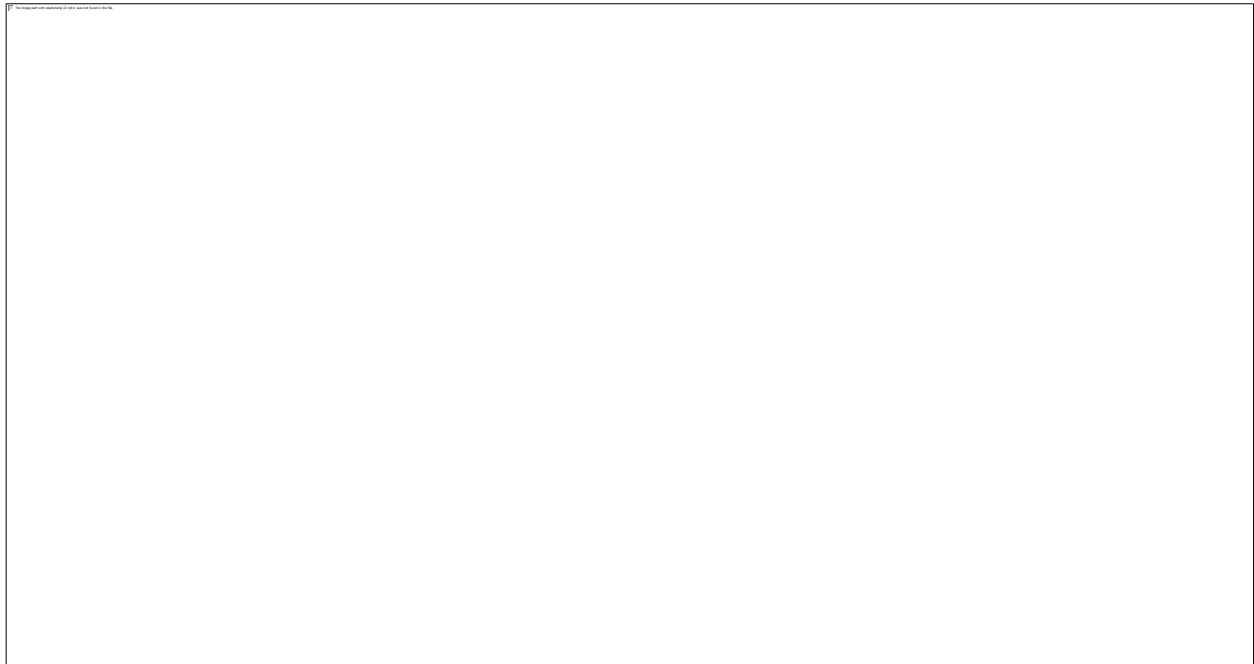
Even though it is not directly related to electronic tax filing, recently in Ethiopia, Tadesse (2015) conducted survey on the Practice, Challenges, and Prospects of e-Government: The case of Ethiopian Revenue and Customs Authority (ERCA) Large Taxpayers Office (LTO). The study aimed to examine how well e-Government is recognized and comprehensively rolled out as a strategic tool to solve such drawbacks on existing tax administration systems at ERCA LTO. As a result, the survey point out that even though ERCA has been investing to reform its tax administration system, the changes made are not harmonized with the national e-Government plan, focusing only to reach around 1,000 large taxpayers' (than its potential capacity to expand the tax base), not striving towards bringing holistic e- Government, and is mostly piecemeal. The overall level of satisfaction of large taxpayers on ERCA's website as a primary source of one-stop-shopping portal is also found to be only 52%. In terms of the stage of e-Government, ERCA is found at its emerging stage where most of its e- Services are informational (static) than transactional. Benchmarking of its e-Services with selected Sub-Saharan African countries has also revealed that a lot has to be done for ERCA to evolve its e- Service to a stage where all its services are integrated in seamless manner; fiscal transparency is enhanced; knowledge management (for example to control tax evasion) is optimized; and e- Payment augments e-Filing.

Conceptual Framework

This study proposed a conceptual framework in which the determinants of electronic tax filing adoption are perceived usefulness (measured by relative advantage); perceived ease of use (measured by complexity and compatibility); and other factors (measured by Perceived risk, government support and taxpayers' resistance to change).

TAM appears to be the most widely accepted model that explain the relationship between technology use and perception. In addition to that, TAM (measured by relative advantage, complexity and compatibility) together with the other factors used in this study because it has been applied in many on-line contexts to determine user perceptions of system use and the probability of adopting an online system. TAM suggested that users' perceptions of both usefulness and ease of use are key determinants of technology adoption (Davis, 1989). Since numerous studies have applied TAM to e-commerce transactions, it may also assist in the understanding of electronic tax filing adoption. In this study, the TAM construct comprises specific attributes to be considered as variables. These includes; relative advantage, compatibility and complexity. So that, the following conceptual framework was formulated based on TAM and other factors:

Figure 2.1: Conceptual Framework



Source: Own classification

2.3. Knowledge gap and conclusion

This chapter presented a review of the available literature on perception on factors influencing the adoption of technology innovation. The review discussed how technological innovation adoption is affected by the perceived usefulness (PU) and the perceived ease of use (PEOU) in the technology acceptance model and how the person's attitude toward a behavior is determined by their salient beliefs about consequences of performing the behavior and an evaluation of the outcome of that behavior in the Theory of Reasoned Action (TRA), and the specific attributes of a given innovation that could explain the rate of adoption, such as relative advantage, compatibility, complexity, try ability, and observability are also discussed in innovation diffusion theory (IDT).

The review of the literature revealed the existence of knowledge gaps in respect of perception on factors affecting the adoption of electronic tax filing system in Ethiopia. In the context of Ethiopia, the related study conducted by Tadesse (2015) mainly assessed the practice, challenges, and prospects of e-Government in Ethiopian Revenue and Customs Authority Large Taxpayers Office. Even if it tried to identify the challenges of e-Government adoption in Ethiopia, this study failed to identify most of the specific factors that affect electronic tax filing adoption significantly, because the main focus was an assessment of e-Government aspects in Ethiopia. That means this study clearly fails to fill the knowledge gap that exists in the area as far as it considers on the wide issue of e-government.

As per the review of the literature most of the empirical studies that have been conducted with the aim of identifying factors affecting electronic tax filing adoption belong to other African and some Asian countries. Furthermore, so far as the review of the literature discloses, since the introduction of electronic tax filing system and subsequent initiatives done by Ethiopian Revenues and Customs Authority, no studies have been conducted in Ethiopia to determine perception on the specific factors influencing the adoption of electronic tax filing system. This could shed light on any challenges they may be facing in adopting the electronic system hence necessitating this study. To the knowledge of the researcher, there

appear to be no studies on factors that affect the adoption of electronic tax filing in Ethiopia. This gap in knowledge together with the problems identified earlier necessitated the conduct of this study on perception factors affecting the adoption of electronic tax filing in Ethiopia.

Chapter 3: Research methodology

The preceding chapter presented the review of existing evidence on perception of taxpayers' on factors affecting the adoption of electronic tax filing system. The results from a review of the literature was used to establish different determinants of electronic tax filing adoption. The purpose of this chapter is to discuss the research methodology along with the detailed methods used in the study. The required data for this study was collected using structured survey method and unstructured in-depth interview. It is selected on the assumption that it helps to gather adequate information and is more relevant to determine opinions of the taxpayers' and helps to obtain the knowledge and experience from those taxpayers' who are familiar with the issue to identify the factors affecting electronic tax filing system based in Ethiopian Revenues and Customs Authority.

The research describes the perception of different taxpayers' and tax authority officials towards electronic tax filing adoption factors. Hence, it is categorized as descriptive research. Data for this research was collected from primary sources. Survey method and interview was employed in collecting primary data. Survey is one method of descriptive research method that helps to gather data at a particular point in time with the intention of describing the nature of existing conditions. Therefore, the adoption of survey design in the study is helpful in order to represent a wider population; provides descriptive and explanatory information and gathering of information that will not available from archive records. Questionnaire was distributed to taxpayers' found in Large Taxpayers' Office, Eastern and Western Addis Ababa branch offices. In addition to these, taxpayers' and tax authority officials were interviewed.

Hence, this chapter is organized as follows. The first section 3.1 presents the broad objective of the research along with the specific research objectives. Section 3.2 discusses the research approaches while section 3.3 presents the method adopted in the study. Finally, conclusions and the relation between research objectives/question and the different data sources are presented in section 3.4.

3.1. Objective of the study

As already shown in the first chapter, the broad objective of this research was to assess perception of taxpayers' on factors that affect the adoption of electronic tax filing system at the Ethiopian Revenue and Customs Authority; Large Taxpayers' Office, Eastern and Western Addis Ababa branch offices. In line with the broad purpose statement six specific research objectives and one research question were formulated for investigation purpose.

Specific Objectives

- a. To analyze how taxpayers' perceived relative advantage influence electronic tax filing adoption.
- b. To determine the extent to which taxpayers' perceived complexity affect the adoption of electronic tax filing system.
- c. To assess the impact of Compatibility as a factor in influencing electronic tax filing adoption.
- d. To assess how perceived risk influence the adoption of electronic tax filing system.
- e. To evaluate the existence of government support to taxpayers' as a factor that affect electronic tax filing adoption.
- f. To analyze how taxpayers' resistance to change affects the adoption of electronic tax filing system.

In addition, the following research question was developed:

RQ-1. What other factors affect the adoption of electronic tax filing system in Ethiopia?

3.2. Research approaches

Research approach can be regarded as a blue print, a master plan that specifies the methods (Leedy & Ormrod 2013). Thus, every research requires a research design that is carefully tailored to the exact needs of the problem under investigation (Creswell 2009). Therefore, the philosophy of different methods approaches were discussed in the next paragraphs.

Quantitative research, in this approach, an investigator relies on numerical data (Creswell 2003). Researcher uses postpositive claims for developing knowledge, such as cause and effect thinking, reduction to specific variables, hypotheses and questions, use of measurement and observation, and the test of theories. The main advantage of this approach is that numbers are easy to work with data are readily collected, coded, summarized, and analyzed. In addition, data collection is relatively quick and less time consuming and free from bias. But, in this approach researchers know much about the collective or average experience of research participants, and focus on theory or hypothesis testing rather than on theory or hypothesis generation (Creswell 2003).

Qualitative research, on the other hand, is “an inquiry process of understanding” where the researcher develops a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting (Creswell 2009). In this approach, the researcher makes knowledge claims based on the constructivist (Creswell 2009) perspectives. This has advantage of design results mainly from its flexibility to follow unexpected ideas during research and to explore processes effectively. However, knowledge produced may not be generalized to other people or other settings and it is also difficult to make quantitative predictions and to test hypotheses and theories.

The third research methods approach is **mixed method approach** in which the researchers build the knowledge on pragmatic grounds (Creswell 2003). A major tenet of pragmatism is that quantitative and qualitative methods are compatible which can help better understanding of the research problem. It is an approach that combines or associates both qualitative and quantitative forms (Creswell 2009). Besides, as an additional merit, the approach is not limited to one method or the researcher is not committed to only one method which means the investigator is flexible. Considering the research problem and objective along with the philosophy of the different research approaches, mixed research approach was found to be

appropriate for this study. That is, to get the benefits of a mixed methods approach and to mitigate the bias in adopting only either quantitative or qualitative approach.

3.3. Research Method adopted

As far as the purpose of this study was to assess perception of taxpayers' on factors that affect the adoption of electronic tax filing system in Ethiopia and the researcher wants to generalize the findings to a population, the current study adopted mixed methods approach. Abera (2012) noted that mixed method approach focuses on collecting, analyzing and mixing both quantitative and qualitative data. The use of both quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach achieves alone. Mixed method research involves both collecting and analyzing quantitative and qualitative data either sequentially or concurrently.

This study, therefore, consist of two phases in which a sequential mixed method characterized by the collection and analysis of qualitative data in the first phase of research followed by the collection and analysis of quantitative data in second phase. Qualitative data was used initially to have a better insight and gain a richer understanding about the research problem. Moreover, it is believed that using the qualitative method first (unstructured in-depth interview with tax authority officials and taxpayers') lead the researcher to consider other factors that could affect the adoption of electronic tax filing system beside those determinants found in the literature. The qualitative data provides a supportive role in the study. Weight typically was given to the quantitative data, and the mixing of data occurs when the initial qualitative results informs the secondary quantitative data collection.

Therefore, in this study, the first phase was qualitative where its results used to inform the quantitative components. In qualitative aspect, data was collected on factors that affect electronic tax filing adoption and other potential country specific determinants through individual in-depth unstructured interview.

Then, sequentially in the second phase quantitative data was collected through structured questionnaire. The subsequent section presents the qualitative and quantitative aspects of the study.

3.3.1. Research Method: Qualitative Aspect

The purpose of the qualitative component was to understand the perception of taxpayers' and tax authority officials' on the electronic taxation environment in Ethiopia and the factors affecting its adoption. The rationale for qualitative aspect is to provide a general picture about the research problem initially and to aid the quantitative method by exploring participants' views in more depth. The qualitative data was used to inform the quantitative component to be gathered next. In-depth unstructured interviews was the primary data collection technique in this study for gathering data in qualitative methodologies. The interview was conducted with 5 taxpayers' from the three branches which totaled 15 responses. Moreover, the interview was also conducted with 15 tax authority officials' from the three branches working in positions of customer service, electronic tax filing section and IT department. The interview was also conducted to identify factors affecting the adoption of electronic tax filing system in Ethiopia and to what extent these determinants exert impact on electronic tax filing system. During the interview, the tax authority officials was asked about the major determinant factors, the measures taken to reduce the effect of these factors, and their opinion regarding the matter.

The use of interviews is appropriate in obtaining either multifaceted or sensitive information, as well as understanding concepts that require detail elaboration (Hair et al. 2007). Unstructured in-depth interview was applied to this study, which both interviewer and interviewee initiate questions and discuss topics, possibly less asymmetrical structure. It anticipated that this approach provided the researcher a more accurate data to enhance the findings for this study. Twelve questions were developed as a guide for the unstructured interview sessions, six for taxpayers' and six for tax authority officials. However, these are not the only questions asked. These questions were formulated with reference to the topic under study,

that is: perception on determinants of electronic tax filing adoption. The unstructured in-depth interview questions are attached in the last section appendix 1.

With regards to participant selection, inexpensive convenient sampling method known as ‘Random sampling’ method was employed in the study to gain insight into information from a particular target group of the respondent. It is a data collection methods of a qualitative research approach which typically involves in-depth interview, group discussion, projective techniques and observation without formal measurement. Initially, tax authority officers (IT, electronic tax section and customer service experts) and taxpayers’ were contacted and briefed about the aim of the thesis. Accordingly, the interview was conducted with fifteen tax authority officials in all the three branches and fifteen taxpayers’ from respective branches. Each interview were conducted individually (independently).

3.3.2. Research Method: Quantitative Aspect

The quantitative aspect of the research method was intended to obtain data needed to generalize about perception on factors that determine the adoption of electronic tax filing system in Ethiopia. Specifically, the current study employed a survey design. Creswell (2003) stated that the purpose of survey is to generalize description of trends, attitudes, or opinions from a sample to a population so that inferences can be made about some characteristic, attitude, or behavior of this population. Moreover, as noted in Fowler (1984 cited in Tsige 2013) it is also reasonable to use survey designs because of its benefits such as the economy of the design and the rapid turnaround in data collection and identifying attributes of a large population from a small group of individuals. Therefore, the adoption of survey design in this study was helpful in order to represents a wider population, provides descriptive, inferential and explanatory information, gather data on a one-shot basis, or gathering of information that will not available from archive records (Yesegat 2009). The following subsections presents the main aspects of the survey design, namely, population and sampling design, instrument design and actual conduct of the survey.

3.3.2.1. Population and Sampling design

For this study, the target population was all 35,956 taxpayers' from the three branch offices (1,156 from large taxpayers' office, 20,200 from East and 14,600 from West Addis Ababa branches) in Ethiopia who are eligible for the online tax filing as the information gathered from respective branches in July 2017. The intentions of the study was to generalize the findings to all eligible electronic tax filing users in Ethiopia. Therefore, sample selection was needed to conduct the study. A sample selection about broader potential respondents giving equal chance of selection is vital to increasing the representativeness of the sample (Yesegat 2009).

Cooper and Schindler (2014) deem a sample frame to be a listing of all population elements from which the sample will be drawn. In a study with the intention of statistically generalizing about large number of taxpayers', the sample frame from which potential respondents to be chosen have to be representative of the population. Therefore, the target for the sample includes population consists of all taxpayers' in Ethiopian Revenues and Customs Authority Large Taxpayers' Office, Eastern and Western Addis Ababa branch offices. There are 35,956 (1,156 from large taxpayers' office, 20,200 from East and 14,600 from West) taxpayers' in the three branches as the information gathered from respective branches in July 2017. Therefore, the sampling frame for this study was all 35,956 taxpayers' in the three branch offices.

The choice of a sample size has an effect on the reliability of a study. However, this does not mean that large sample size always leads to high level of accuracy rather it is to indicate that sample size is one of the factors that contribute to the credibility of a survey estimate. For the choice of sample size, different researchers give different ideas. For example, Alreck and Settle (1995) noted that the choice of sample size is normally made after considering statistical precision, practical issues and available resources (e.g. cost and time). Fowler (1984 cited in Gebremeskel 2011) noted that there is no a single precise way for the determinations of sample size hence there are a number of inadequacy for deciding on sample size.

Therefore, it is better to see the sample size used by other researchers, because the sample size to be decided is by considering the different goals to be achieved by a particular study.

The aforementioned points help us to consider different conditions in deciding on the desired sample size like the availability of time and resources, and the aim of the research. However, if the final condition is employed, Fowler (1984 cited in Gebremeskel 2011) indicated that, the level of precision increases steadily up to sample sizes of 150 to 200. If the desire is to increase the sample size beyond this limit, there is much more gain that is modest. In this regard, taking the available resources, time, budget, data, and geographic distances into account, a sample size of 150 was feasible and taken from the 35,956 three branch taxpayers’.

A sampling technique is the method of selecting some part of a population to be able to observe it and infer something about the entire population (Thompson 2012). With regards to participant selection, ‘Random sampling’ method was employed in the study. Random sampling technique was selected because during the study period there was no readily available list of all taxpayers’ categorized as users and non-users of electronic tax filing system in the Ethiopian revenues and customs authority office. Hence, initially the researcher classified 150 total samples in to 75 users of electronic tax filing system and 75 non-users. Then, they were stratified by branches, namely, large taxpayers’ office, Eastern and Western Addis Ababa branches. After categorizing the total sample in to 50% users of electronic tax filing (75 samples) and 50% non-users of the system (75 samples), multi-stage-probability sampling technique has been applied to make sure that all characteristics in the population are reflected in the samples drawn from the three branches. The following table shows Sample size selection procedures by using partial multi-stage-probability sampling.

Table: 3.1. Sample size selection procedures by using stratified-multi-stage-probability sampling

Branch	Total Populat ion	Population (Users)		Sample (Users)		Population (Non-Users)		Sample (Non-Users)	
		Total Users	%age	Frequ ency	%age	Total Non-Users	%age	Freq uen cy	%age
Eastern AA Branch Office	20,200	570	31%	23	31%	19,630	58%	43	58%
Western AA Branch Office	14,600	128	7%	5	7%	14,472	42%	32	42%
Large Taxpayers' Office (LTO)	1,156	1,156	62%	47	62%	0	0%	0	0%
Total	35,956	1,854	100%	75	100%	34,102	100%	75	100%

Source: Ethiopian Revenue and Custom Authority and own computation

3.3.2.2. Survey Instrument Design

The adoption of the survey instrument is helpful to represents a wide target population, and generates numerical data as well as to gather information that would not available from archive records. Gebremeskel (2011) noted that in designing survey instruments caution needs to exercise in preparing instructions and wording of questions to avoid ambiguity and enable the collection of the relevant data for the research. The survey instruments that was used in this study was prepared in the form of structured self-administered questionnaire served as the measuring instrument for the study. The survey questionnaire consisted entirely closed ended questions designed to investigate perception on factors that affect the adoption of electronic tax filing system in Ethiopia. The questionnaires was initially prepared in English and then translated into Amharic. Copies of the English and Amharic versions of the taxpayers' survey instrument along with the covering letters are presented at Appendices 2 and 3, respectively.

There are two parts to the questionnaire. The first part intended to gather background information about respondents. While the second section concerned with questions related to perception on factors that influence the adoption of electronic tax filing system specifically determinants of electronic tax filing such as relative advantage, complexity, compatibility, perceive risk, government support and resistance to change which measures variables of the study. In order to measure the items, the researcher used a

Likert-type scale questions (i.e., “Strongly disagree” to “Strongly agree”) to provide respondents a wider range of alternative where the level of agreements are represent by 1 to 5. Strongly agree to 5, agree to 4, neutral to 3, disagree to 2, and strongly disagree to 1.

➤ **Questionnaire reliability test (Cronbach’s α test)**

Reliability test was carried out on the data collected through survey questionnaire used in this research. The Cronbach’s alpha value was used to test the reliability of the items measuring each variable: relative advantage, complexity, compatibility, perceived risk, Government support, resistance to change and intention of taxpayers’ on electronic tax filing adoption. According to Hair et al. (2003), values of a Cronbach’s alpha less than 0.6 is poor, 0.6 to 0.7 is moderate, 0.7 to 0.8 is good, 0.8 to 0.9 is very good and above 0.9 is excellent. The results obtained as shown in table 3.1 indicates that the Cronbach’s alpha value for the measuring items of independent variables and dependent variables. The Cronbach’s alpha for relative advantage was low (0.675) compared with other variables, and was accepted base on the minimum Cronbach’s alpha value. Table 3.2 and 3.3 below showed that the values of Cronbach’s alpha for the items in the survey indicates that all the factors that influence electronic tax filing adoption are above 60%, in addition the total reliability of the questionnaire was around 85.5%. Therefore, the research tool was reliable and none of the items were deleted in the test, as the reliability of items was high.

Table 3.2: Total Reliability Statistics of the Questionnaire

Cronbach Alpha	Number of Items
.855	46

Source: Survey results and own computation

Table 3.3: Cronbach's Alpha for each item

Items	Number of items	Cronbach's Alpha
Perceived Electronic Tax Filing Adoption	.798	3
Perceived Relative Advantage	.675	9
Perceived Complexity	.782	7
Compatibility	.904	6
Perceived Risk	.834	8
Government Support	.869	8
Resistance to Change	.791	5

Source: Survey results and own computation

3.3.2.3. Actual conduct of the survey

In this study, self-administered, structured questionnaire was used. The reason behind this is that the self-administered questionnaires have the advantage of scanning a wide field of issues, population and programs with low cost. The survey questionnaire have a cover letter which explain the purpose of the study to encourage candidate response to the study. The letter also explain the anonymity of the respondents would be maintained. Therefore, confidentiality and/or anonymity of the respondents' was assured as the respondents' are not requested to provide their names or any other information that could be used to identify them in person in the questionnaire and the research report. One hundred fifty survey questionnaires was distributed to randomly selected taxpayers' in the three branches. The survey was conducted between October and November 2017. The responses helped in gaining an in-depth understanding of perception on factors influencing the adoption of electronic tax filing system by the taxpayers'.

Following is a brief discussion of the response rate, non-response bias test and response representativeness.

Response rate, Non-response bias and response representativeness for quantitative aspect

The result of the study about the response rate, non-response bias and response representativeness is presented as follows:

Response rate

The survey was conducted between October and November 2017. Questioners were distributed to 150 randomly chosen taxpayers'. All the taxpayers' survey respondents were located in Addis Ababa City. Most of the respondents filled and returned the questionnaire on the spot, and some requested to return in one-week period and through email. To increase the response rate, follow up reminder and telephone call were made to the respondents requesting to remind them to return the questionnaires. Out of this sample, 22 questionnaires were not returned. One possible reason for not completing the questionnaires is the subject of research itself (tax related) considered as difficult subject. This is based on the comment given by the respondents through telephone when the researcher asks them to return the questionnaire.

Overall, 128 responses were received, giving a response rate of 85%. This shows that the response rate considered as fair. Dillman (2007) suggests that the response rate for a personal delivery approach varies considerably from the lower of 28 percent to the highest of 50 percent.

Non-response bias

To test if there is any non-response bias on the samples, a significance test analysis was performed comparing the early responses to responses generated after follow-ups (Dillman, 1992). Therefore, in order to decide whether the groups were significantly different from each other, the p-value was examined. The result showed that 50 percent of the items have a p-value of less than 0.05, indicating that the groups are not significantly different. While the results provide an indication that there was no problem of response bias among the early and late responses in the Ethiopian Revenues and Customs

Authority Large Taxpayers' Office, Eastern and Western Addis Ababa branch office taxpayers' sample. It is important to note that they do not guarantee that the sample is free of non-response bias considering the 85% rate achieved.

Response representativeness

One method of establishing response representativeness is by comparing the respondent profile with the entire population (McInnis, 2006). In this study, the responses were compared based on turnover and work sector. The majority of the respondent in the survey responses was under the annual turnover of below 1,000,000.00 Ethiopian birr. In terms of working sector, however, the percentage of the survey responses was comparable to the total population. The majority of them are service. In sum, comparing the survey responses with the total population on two criteria signifies no major differences. Thus, it can conclude that the responses are representative of the total population (Ethiopian Revenues and Customs Authority Large Taxpayers' office, Eastern and Western Addis Ababa branch office taxpayers').

3.4. Data Analysis

In assessing electronic tax filing adoption the data analysis is based on the reply by the respondents' on their degree of agreement or disagreement with each of the questions on a five-point Likert response scale (Likert, 1932) that ranged from 5 "strongly agree" (scored as 5) to "strongly disagree" (scored as 1). The expected mean for an agreement to the statement of electronic tax filing adoption components is 5 or close to 5. However the analysis is based on how the mean response of the respondents' is close to this expected value. A large amount of researchers use this methodology, because it is relatively easy for respondents to use, and responses from such a scale are likely to be reliable (Balzan & Baldacchino 2007; Lam & Kolic 2008).

For all questions a positive mean response more than 3 statistically suggests agreement with the statement/question, a positive mean response less than 3 implies disagreement and a mean response of 3

indicates indifferent or offsetting differences. All of the questions are coded in such a way that a positive mean response of 4 and greater display that this component of electronic tax filing system adequately contributed to the adoption of electronic tax filing system in Ethiopian Revenues and Customs Authority, while a positive mean response less than 4 reveals that this component of electronic tax filing not adequately contributed to the adoption of the system (Joseph, 2007). Even though the mean response between 3 and 4 indicates the agreement with the statement, the interpretation implies, these areas are the room for improvement of electronic tax filing system. The analysis involves instruments of descriptive statistics like means, Standard deviation, frequencies and percentages.

Finally, the qualitative data gathered through interview is presented separately from the quantitative approach and to be combined to analyze and conclude the results.

3.5. Conclusion and relation between research objectives and the different data sources

This chapter presented the research objectives and the method adopted to address them. It also explained the quantitative, qualitative and mixed research approach with the method adopted for this study. In connection to this, based on the underlying principles of research methods and the research problem mixed methods approach has been chosen as appropriate to this research. Beside, this chapter puts forward the necessary information about the sampling design and the data collection instrument. Finally, the analysis techniques used in this study were presented. The link between research objectives and different data sources on the other hand are presented in table 3.4 below.

Table 3.4: Link between research questions/ hypotheses, name of variables and the different data sources

Research Question /Objective	Items in the self-administered questionnaires and in-depth interviews
<i>RQ1- What other factors affect the adoption of electronic tax filing system in Ethiopia?</i>	In-depth unstructured face-to-face interviews with Ethiopian revenues and customs authority officials and taxpayers'
<i>To analyze how taxpayers' perceived relative advantage influence electronic tax filing adoption.</i>	Structured Self-administered questionnaires (Questions,1,2,3,4,5,6,7,8, and 9)
<i>To determine the extent to which taxpayers' perceived complexity affect the adoption of electronic tax filing system.</i>	Structured Self-administered questionnaires (Questions, 10,11,12,13,14,15, and 16)
<i>To assess the impact of Compatibility as a factor in influencing electronic tax filing adoption.</i>	Structured Self-administered questionnaires (Questions, 17,18,19,20,21, and 22)
<i>To assess how perceived risk influence the adoption of electronic tax filing system.</i>	Structured Self-administered questionnaires (Questions, 23,24,25,26,27,28,29 and 30)
<i>To evaluate the existence of government support to taxpayers' as a factor that affect electronic tax filing adoption.</i>	Structured Self-administered questionnaires (Questions, 31,32,33,34,35,36,37, and 38)
<i>To analyze how taxpayers' resistance to change affects the adoption of electronic tax filing system.</i>	Structured Self-administered questionnaires (Questions, 39,40,41,42, and 43)

Chapter 4: Results and analysis

The previous chapter presented the methodology used in the thesis. More specifically, the chapter showed the different research approaches, methods of data collection and analysis adopted. This chapter presents the results of the various data collection methods and analysis in the context of the existing knowledge as reviewed in chapter two. As already shown in the first chapter, the broad objective of this research was to assess perception of taxpayers' on factors that affect the adoption of electronic tax filing system at the Ethiopian Revenue and Customs Authority; Large Taxpayers' Office, Eastern and Western Addis Ababa branch offices. In line with the broad purpose statement six specific research objectives and one research question were formulated for investigation purpose.

The study sampled 150 taxpayers' in Ethiopian Revenues and Customs Authority; Large Taxpayers' Office, Eastern and Western Addis Ababa branch offices. The results are based on 128 questionnaires collected from the taxpayers' and interviews made with taxpayers' and tax authority officials. The responses of taxpayers' gathered through questionnaire were encoded in SPSS version 23 software. In this case, each factor collected from the respondents' was given a particular code. After the descriptive analysis was made, the results are presented using percentages, mean and tables. Accordingly, this chapter is arranged into four sections; the first section (4.1) presents survey result. Section (4.2) discusses the interview result. This is followed by the analysis of results in section (4.3). Finally, conclusion for the chapter presented in section (4.4).

4.1. Survey Results

This section presents the result and analyzes the data collected using self-administered questionnaire from sample of 128 taxpayers' of Ethiopian Revenues and Customs Authority; Large Taxpayers' Office (LTO), Eastern and Western Addis Ababa branch offices. The section will be categorized as 4.1.1 backgrounds of the respondents' and their Company and 4.1.2 Survey result on electronic tax filing adoption.

4.1.1. Backgrounds of the respondents' and Company profile

The purpose of this section is to show the demographic background of the respondents' and their Company profile from the survey result that conducted in Ethiopian Revenues and Customs Authority; Large Taxpayers' Office (LTO), Eastern and Western Addis Ababa branch office taxpayers'. The following discussion presents the results of the survey as follows. Section 4.1.1.1 covers the respondents' profile. Section 4.1.1.2 presents Company profile of the respondents'.

4.1.1.1. Respondents' profile

The respondents' characteristic whose perception was sought is outlined in table 4.1. It was observed that there were more female than male with a ratio of 54.7:45.3. A greater part of the respondents' was between the age of 18 to 29 years and holds 57.8% of total respondents. This implies majority of respondents are in the active age that can easily learn and understand electronic tax filing services if the necessary infrastructures are put in place. In case of the educational qualification of respondents, the survey revealed that about 75.8% of the respondents had bachelor degree while 17.2% had diploma and 3.1% had Master's degree and above. Nearly 4% of respondents indicated that they were below grade 12. This result supports the findings of a lot of studies on technology acceptance, where users tended to be young and had at least secondary school level of education. Obviously the respondents with knowledge of accounting understands the concept and usage of electronic tax filing system than others. Thus, the survey made to assess the areas of qualification of the respondents presented in table 4.1 indicated that 71.9% of the respondents were qualified in accounting while management and economics qualified respondents were 5.5% each. The rest 1.6% and 15.6% were qualified in business administration and other fields, respectively. This means that majority of the respondents had at least the theoretical education on the concept of electronic tax filing. In respect of knowing the position of the respondents, the result showed that about 55.5% and 14.8% of the respondents, respectively were Accountants and Finance head while 7.8% of the respondents were both owners and others. The rest, owner& manager and manager were 7.0% each. In terms of Internet experience, the study found that 10.9% of respondents have no internet

experience at all. The rest 89.1% have the trend of using internet, of course with different years of experience. As indicated above 10.9% of the respondents have no internet experience, 54.7% used internet for more than 5 year, while 7.8%, 10.9% and 15.6% used internet for below 1 year, 1 to 2 years and 2 to 5 years, respectively.

Table 4.1: Demographic Characteristics of Respondents (Source: From Questionnaire)

Qn. No.	VARIABLES	CLASSIFICATION OF VARIABLES	FREQUENCY	PERCENTAGE
1	Gender	Male	58	45.3%
		Female	70	54.7%
2	Age	Below 18	0	0.0%
		18-29	74	57.8%
		30-55	49	38.3%
		Above 55	5	3.9%
3	Education	No formal schooling	0	0.0%
		Below 12 grade	5	3.9%
		12 grade complete	0	0.0%
		Diploma	22	17.2%
		Bachelor degree	97	75.8%
		Master or above	4	3.1%
4	Field of Study	Accounting	92	71.9%
		Management	7	5.5%
		Economics	7	5.5%
		Business Administration	2	1.6%
		Others	20	15.6%
5	Position in the Company	Owners	10	7.8%
		Owner and Manager	9	7.0%
		Manager	9	7.0%
		Accountant	71	55.5%
		Finance and Accounts Head	19	14.8%
		Others	10	7.8%
6	Internet usage practice	Yes	114	89.1%
		No	14	10.9%
7	Internet Usage years	Do not use	14	10.9%
		Under 1 year	10	7.8%
		1-2 years	14	10.9%
		2-5 Years	20	15.6%
		Over 5 Years	70	54.7%

Source: Taxpayers survey and own computation

4.1.1.2. Company Profile

Apart from the respondents' profile presented above, table 4.2 below showed company summary of the respondents. Accordingly, examination of survey respondents in terms of their company annual turnover in the fiscal year 2009 E.C showed that majority of the respondents (33.6 %) had a total turnover of less than 1,000,000 Ethiopian birr (ETB) and 20.3% had turnover more than ETB 1,000,000, while 18.8% and 11.7% of the respondents had a total turnover between 1,000,001 to 5,000,000 and 5,000,001 to 10,000,000, respectively. According to Income Tax Regulation No. 78/2002, there are different categories of business sectors. For this study, the sectors distribution of respondents was summarized in table 4.2. As per the outcomes of the survey, about 60.2% of the respondents were engaged in service giving activities, while 22.7% and 7.8% were engaged in merchandising/trade and manufacturing sectors respectively. The rest (9.4%), were engaged in other business activities. The number of years a company has been in business has an influence on its experience and level of usage of electronic tax filing system. For those engaged in business for long implies they probably aware the existence of electronic tax filing system. Accordingly, the respondents were required to indicate the number of years they have been in business and findings of the survey showed that 46.9% of the respondents indicated that they had 1 to 5 years of experience in business, 28.1 % of the survey respondents indicated that they had 5 to 10 years of work experience, while 3.9% had less than 1 year of experience, the rest (21.1%) had more than 10 years of experience in the business. In addition to the taxpayers' years of existence in the business, the survey result showed that 16.4% of the respondents are using electronic tax filing system to file their taxes, while 49.2% of respondents are filing their tax returns manually. The rest (34.4%) are using both the electronic and manual ways to file their tax returns. Moreover, among the electronic filing users, 33.8% of them used the system for 1 to 3 years, 26.2% between 3 to 5 years and the rest 18.5% and 21.5% used electronic tax filing method less than 1 year and more than 5 years, respectively. Finally, based on the results shown in table 4.2 below, 54.7% of respondents aware the existence of electronic tax filing system in Ethiopia while 45.3% of the respondents' doesn't know about the existence of electronic tax filing system in Ethiopia.

Table 4.2: Company profile of Respondents (Source: From Questionnaire)

Qn. No.	VARIABLES	CLASSIFICATION OF VARIABLES	FREQUENCY	PERCENTAGE
1	Annual Turnover (ETB)	Up to 1,000,000.00	43	33.6%
		1,000,001.00 – 5,000,000.00	24	18.8%
		5,000,001.00 – 10,000,000.00	15	11.7%
		Above 10,000,000.00	26	20.3%
		Other	20	15.6%
2	Business Activity	Manufacturing	10	7.8%
		General Merchandise/Trade	29	22.7%
		Service	77	60.2%
		Others	12	9.4%
3	Years in the business	Less than 1 year	5	3.9%
		1-5 Years	60	46.9%
		5-10 Years	36	28.1%
		More than 10 Years	27	21.1%
		Other	0	0.0%
4	Tax filing Method	Manual	63	49.2%
		Electronic filing	21	16.4%
		Both Methods	44	34.4%
5	Years of using Electronic tax filing	Less than 1 Year	12	18.5%
		1-3 Years	22	33.8%
		3-5 Years	17	26.2%
		More than 5 years	14	21.5%
6	E-tax filing Awareness	Yes	70	54.7%
		No	58	45.3%

Source: Taxpayers survey and own computation

4.1.2. Examining determinants of electronic tax filing adoption

Enterprises in business, whether small or big, strive to survive and prosper in the market. To help achieve these goals, businesses must adopt proper strategies. “One of the major developments of our time that could provide the means for businesses to arrive at their desired goals is information and communication technology (ICT) and the Internet” (Hassen & Svensson 2014). In this regard, the effective functioning of electronic tax filing system provides a reasonable assurance regarding achievement of stated objectives to ensure high levels of organizational performance to all the stakeholders. The proper assessment of each factors of electronic tax filing adoption affect the overall effectiveness of the system. As indicated in the literature section of this study the adoption of electronic tax filing system is determined by perceived

relative advantage of the system, perceived complexity, compatibility with prevailing trend, perceived risk, government support and resistance to change by the taxpayers'. Hence, the general objective of this study was to assess the perception of taxpayers' on those factors that affect the adoption of electronic tax filing system in Ethiopia. Therefore, based on the survey instrument through questionnaire, respondents' were asked to scale their degree of agreement whether each items affect electronic tax filing adoption at the Ethiopian Revenues and Customs Authority. The results are presented and analyzed as follows:

4.1.2.1. Perceived relative advantage as a factor influencing electronic tax filing adoption

The degree of relative advantage is expressed as economic profitability, social prestige, ease, control, efficiency, convenience, usefulness, time saving, or in other ways. The survey made was based on those components of relative advantage and the result is scaled as follows.

Table 4.3: Respondents' perception on relative advantage of electronic tax filing system

No.	Statements	N	Min	Max	Mean	S.D
1	Electronic tax filing make it easier to prepare tax return.	128	1	5	4.19	.929
2	Electronic tax filing allow to file tax returns without the hassle of queues and waiting at the Income tax office.	126	1	5	3.93	1.201
3	Online filing of tax is beneficial.	125	1	5	4.22	.999
4	Electronic filing of tax gives greater control over preparation and filing of tax return.	128	1	5	4.05	1.096
5	Electronic filing of tax allow to prepare tax return more efficiently and effectively.	128	1	5	3.94	1.114
6	Electronic filing of tax is a more convenient way to prepare tax return.	127	1	5	3.86	1.220
7	Using Electronic filing of tax save our time.	126	1	5	4.25	.987
8	Using Electronic tax Filing speed up the tax-filing process.	127	1	5	4.27	.849
9	Using Electronic filing help to reduce errors in preparing tax return	126	1	5	3.62	1.379
	Valid N (list wise)	118				

Source: Survey Results and Own Computation

As indicated in the above table the mean value of the response computed based on Likert scale indicated the average agreement of respondents' on relative advantage of electronic tax filing system. The overall mean of perceived relative advantage can be approximated to 4.04 which indicate an agreement in the existence of relative advantage.

The highest mean 4.27 indicates that, majority of respondents' agreed that using electronic tax filing system speed up the tax-filing process in their respective tax authority office. In electronic tax filing environment, time saving is one of the relative advantage to be enjoyed by users of the system. The result of the survey was also in line with this theory which is indicated by mean value of 4.25. This means majority of the respondents' agreed that using of electronic tax filing save taxpayers' time at the Ethiopian Revenues and Customs Authority (ERCA).

The above table also indicated two areas where the electronic tax filing system of the Ethiopian Revenues and Customs Authority needs improvement. The least mean 3.62 indicated that some of the respondents' disagreed that using electronic tax filing help to reduce errors in preparing tax return. In percentiles 21.4% of respondents' disagreed and strongly disagreed with this statement while 15.9% of the respondents' undecided or indifferent about the statement, and the remaining 62.7% of respondents' either agreed or strongly agreed that using the online system help to reduce mistakes in preparing tax return in Ethiopia. This element of perceived relative advantage factor also indicated the highest standard deviation (1.379). (Appendix IV, RA09).

4.1.2.2. Perceived Complexity as a factor influencing electronic tax filing adoption

Perceived complexity factor of electronic tax filing system includes; the required mental effort, difficulty of the system, simplicity, and other characteristics. The result of the survey indicated in the table below showed that the degree of agreement ranged from 1 to 5 by respondents' in all criteria's of complexity

variable. The overall mean of the complexity for the seven questions can be estimated to be 3.65, which is relatively good. The highest standard deviation (1.214) of the response was shown in question number 15 which is about ‘the easiness of electronic tax filing system instructions to follow and use’. The highest mean value of 3.80 indicated on table 4.4 confirm that majority of respondents’ agreed that the electronic tax filing system at the Ethiopian Revenues and Customs Authority is not difficult to operate.

Subsequently, the mean value of 3.71 for two scales indicated on the table also confirm that majority of the respondents’ agreed that using electronic tax filing is not complex and learning to use the system is easy, respectively.

Table 4.4: Respondents’ perception on perceived complexity of electronic tax filing system

No.	Statements	N	Min	Max	Mean	S.D
10	Using Electronic tax Filing is not difficult to operate.	128	1	5	3.80	.905
11	Using Electronic tax Filing is not complex.	126	1	5	3.71	.937
12	Using Electronic tax Filing doesn't requires a lot of mental effort.	126	1	5	3.62	1.109
13	Learning to use Electronic tax Filing is easy.	126	1	5	3.71	1.153
14	It is easy to input and modify data using Electronic tax Filing method.	126	1	5	3.52	1.185
15	Instructions for using Electronic tax filing system is easy to follow.	127	1	5	3.63	1.214
16	Interaction with Electronic tax filing process is clear and understandable.	125	1	5	3.58	1.179
	Valid N (list wise)	116				

Source: Survey Results and Own Computation

The lowest mean value of 3.52 indicated that encoding and modifying data through electronic tax filing method is easy under the Ethiopian Revenues and Customs Authority electronic tax filing system package. In this regard, a total of 20.6% respondents’ disagreed and strongly disagreed while 16.7% undecided on the matter (Appendix IV, CL05). Another lowest mean values of 3.62 and 3.63 indicated

that using electronic tax system filing doesn't require a lot of mental effort and instructions for using electronic tax filing system is easy to follow in Ethiopian Revenues and Customs Authority electronic tax filing system, respectively. This implies, relatively most of the respondents' disagreed on this statement which the overall system instruction and effort requirement needs improvement.

4.1.2.3. Perceived Compatibility as a factor influencing electronic tax filing adoption

Compatibility of electronic tax filing system with present structure, past experience and values within the system become an integral part of electronic tax filing system adoption. The bodies' in charge of information technology implementation are responsible to see the specific features of the system in order to identify problems caused by failure of compatibility. Table 4.5 below presents the descriptive parameters after an analysis of the responses to statements relating to the compatibility of electronic tax filing system. The survey result and analysis on this issue therefore; is presented as follows.

Table 4.5: Respondents' perception on perceived compatibility of electronic tax filing system

No.	Statements	N	Min	Max	Mean	S.D
17	The cost of purchasing a computer for electronic tax filing is not too high.	126	1	5	3.70	1.037
18	Using Electronic tax filing method fits well with the way our company work style.	127	1	5	3.45	1.173
19	We are very skilled at using the Internet.	126	1	5	3.40	1.303
20	We know about using the Internet than most users.	125	1	5	3.10	1.373
21	The monthly internet cost of electronic tax filing is greater than the manual filing method.	124	1	5	3.27	1.205
22	The thought of using a computer to do electronic tax filing do not make to feel apprehensive.	126	2	5	4.10	.919
	Valid N (list wise)	114				

Source: Survey Results and Own Computation

Based on the findings presented in table 4.6 above, the overall mean value was found to be 3.49. This implies that, the compatibility of electronic tax filing system with present structure and past experience needs improvement. Respondents' were asked to honestly access their level of internet usage skills. The questionnaire required them to indicate their own assessment of internet competency level. Table 4.5 above showed that majority of the respondents' were not confident about their internet skills forming a lowest mean value of 3.10. Moreover, the mean result of 3.27 showed that, taxpayers' doesn't believe the monthly internet cost for electronic tax filing users is greater than the manual method. The survey result also confirmed that, about 62.7% of respondents' were collectively either agreed or strongly agreed that the cost of purchasing a computer for electronic tax filing is not too high with a relatively highest mean value of 3.70 (Appendix IV CP01).

4.1.2.4. Perceived Risk as a factor influencing electronic tax filing adoption

Risk become an integral part of the electronic tax filing environment for adopters of the service have than non-adopter. Fu et al. (2006) indicated that taxpayers' may not adopt a system if they perceive that the electronic filing system is lacking in security features. In technology adoption researches and theoretical academic literatures, perceived risk has been considered as a significant factor for technology adoption. The tax authority is responsible to identify and assess risk factors caused by the adoption of electronic tax filing system. There should be strategies of identifying risk, system to respond to risk and reduce the risk. Table 4.6 below presents the descriptive statistics after an analysis of the responses to statements relating to perceived risk associated with electronic tax filing adoption by the taxpayers'.

Table 4.6: Respondents' perception on perceived risk of electronic tax filing system

No.	Statements	N	Min	Max	Mean	S.D
23	Private information could be logged by unauthorized parties and subsequently disclosed without our consent when using electronic tax filing system.	127	1	5	3.10	1.167
24	The security system built into the Electronic tax filing system is not strong enough to protect our company account.	124	1	5	3.45	1.077
25	We are not confident over the security aspects of Electronic tax Filing.	125	1	5	3.22	1.182
26	Privacy is not well maintained with Electronic tax Filing system.	124	1	5	3.24	1.143
27	By using Electronic tax Filing system tax information will be used by others without our knowledge.	123	1	5	3.28	1.177
28	Internet hackers might take control of tax information if we use Electronic tax Filing system.	124	1	5	3.20	1.182
29	Considering the expected level of service performance of the Electronic tax Filing system, using it will be risky.	126	1	5	3.27	1.148
30	Electronic tax Filing system server is not perform well and process data transmission incorrectly.	125	1	5	3.20	1.122
	Valid N (list wise)	102				

Source: Survey Results and Own Computation

As summarized in the above table, the minimum response to each items of risk is 1 and the maximum is 5. Risk is comparatively the third factor that have a minimum overall mean value (3.23) next to resistance to change and government support factors. Respondents' were relatively agreed that the security system built into the electronic tax filing system is not strong enough to protect their Company information. 50.8% of the respondents' strongly agreed and agreed, 19.3% replied disagreed and strongly disagreed, and 29.8% were indifferent on the statement with a mean value of 3.45. The survey result also indicated that 59.8% of respondents' strongly disagreed, disagreed or undecided, and the remaining 40.2% agreed or strongly agreed that private information could be logged by unauthorized parties and subsequently disclosed without their consent when using electronic tax filing system mean with a mean score of 3.10.

(Appendix IV, PR01). This element of perceived risk degree of agreement varied among respondents' with a standard deviation of 1.167.

The mean value of other items in the risk component of electronic tax filing system, except, the highest and the lowest scores falls between 3.20 and 3.28 which indicates that there is a room for improvement regarding the perception of taxpayers' on the risk of adopting electronic tax filing system in Ethiopia.

4.1.2.5. Government Support as a factor influencing electronic tax filing adoption

An ongoing support and monitoring of electronic tax filing system is vital to ensure whether the implemented system is achieving desired objectives. This is about the government to motivate taxpayers' for the adoption of the system and make the environment conducive in terms of policies and regulations. Government facilitating conditions encompasses resource and other provisions such as internet connection and training. Government provisions of resources and training on how to file tax returns online could lead to increased adoption rate which ultimately facilitates the diffusion and utilization of the system. The result and interpretation of the survey is presented as follows.

Table 4.7: Respondents' perception on government support aspect of electronic tax filing system

No.	Statements	N	Min	Max	Mean	S.D
31	It is easy to get support from the authority if we need help in using Electronic tax filing system.	127	1	5	3.29	1.298
32	There is responsible body or department in charge of controlling the electronic tax filing activity in ERCA.	127	1	5	3.49	1.097
33	The tax authority has provided enough training on electronic tax filing system.	126	1	5	2.79	1.209
34	Due to weak internet connection, it is difficult to file tax electronically.	127	1	5	3.63	1.246
35	The tax authority facilitate conditions in implementing rules and regulations of electronic tax within the legal framework?	125	1	5	2.90	1.084
36	There is much done by the authority on follow-up issues regarding electronic tax filing system.	123	1	5	2.89	1.118

37	Our company believe that the government has enough resource to implement the system.	125	1	5	3.17	1.287
38	The tax authority put in place enough measures to ensure that taxpayers' know how to use the online tax filing system.	127	1	5	2.83	1.352
	Valid N (list wise)	111				

Source: Survey Results and Own Computation

An overall mean result of government support components in the above table (Mean=3.12) indicated that there are possible areas of improvements. The highest mean of 3.63 indicates that, relatively majority of respondents' agreed that the existence of weak internet connection make electronic tax filing process difficult in Ethiopia, which needs improvement. In an effective deployment of any system, existence of responsible body or department in charge of controlling the electronic tax filing activity leads to obtain organizational objectives. In this regard, respondents' were asked to indicate their view on the availability of assigned body or department at the tax office. Majority of the respondents' (53.5%) strongly agreed and agreed on the statement that the tax office has enough staff in charge of controlling the electronic tax activity, only 10.2% and 6.3% of the respondents disagreed and strongly disagreed. 29.9% of the respondents' were neutral on the statement. This result was in line with this theory which is indicated by mean value of 3.49. This means, majority of the respondents' agreed that the tax office have separate section which enables it to achieve its objectives.

The above table also indicated three areas; where the support from government in an electronic tax filing environment of Ethiopian Revenues and Customs Authority is not satisfactory. The least mean 2.79 indicated that majority of the respondents' disagreed that the tax authority has provided enough training on electronic tax filing system. In percentiles, 40.5% of respondents' disagreed with this statement while 30.2% of respondents' either agreed or strongly agreed. This implies, there were few respondents' that strongly agreed and agreed with the provision of enough training in Ethiopia. The remaining 29.4% were indifferent about the statement. (Appendix IV, GS03).

From the table it is also indicated that there is a doubt by the respondents' whether the tax authority put in place enough measures to ensure that taxpayers' know how to use the online tax filing system (mean 2.83) and this element also indicated the highest standard deviation (1.352). Finally, the mean value of 2.89 implies that majority of respondents' were not agreed that the tax authority have done much on follow-up issues regarding electronic tax filing system at the Ethiopian Revenues and Customs Authority.

4.1.2.6. Resistance to Change as a factor influencing electronic tax filing adoption

Resistance to change represents the reaction of taxpayers' to the adoption of an online tax filing system without tangible reason. Or, it is the intention of individual's to perform something based on an attitudinal and normative beliefs. The survey result from the respondents' on resistance to change is presented as follows.

Table 4.8: Respondents' perception on resistance to change factor of electronic tax filing system

No.	Statements	N	Min	Max	Mean	S.D
39	It is better the tax authority makes usage of electronic tax filing mandatory.	126	1	5	3.22	1.436
40	Our company is using electronic filing because most companies we know use the system.	125	1	5	2.66	1.257
41	Our company get enough convincing reason from the authority to use electronic Filing for our tax return.	125	1	5	3.06	1.328
42	We can correctly calculate the taxes we should pay to ERCA manually than electronics system.	126	1	5	3.06	1.355
43	We have reason for using electronic tax filing.	125	1	5	2.94	1.300
	Valid N (list wise)	115				

Source: Survey Results and Own Computation

Table 4.8 provides the results of the responses on statements seeking to find out the perception of taxpayers' towards the resistance of adopters for system change. The highest mean (3.22) implies that, majority of respondents' believe that the tax authority should make usage of electronic tax filing system

mandatory for all eligible taxpayers'. In the other word, the tax authority achieve its objective when all the branches avoid manual filing of tax returns. Cumulatively 54.0% of the respondents' strongly agreed and agreed that it is better the tax authority makes usage of electronic tax filing system mandatory. Only 19.0% of the respondents' were strongly disagreed, 15.1% disagreed and 11.9% of the respondents' were neutral on the statement.

Respondents were also asked how other companies they know influence them to use or not use electronic tax filing system. Majority of the respondents' (50.4%) strongly disagree and disagree on the statement; only 12.0% and 12.0% of the respondents' strongly agree and agree. The rest (25.6%) of the respondents' were neutral on the statement. In the same accord, the respondents' were asked if they got enough convincing reason from the tax office to use electronic tax filing system. Accordingly, 40.8% of the respondents' were strongly agree and agree that the tax office provide substantial reason to use the system. 43.2% of the respondents' were strongly disagree and disagree on the statement. The rest (16.0%) of the respondents' were neutral on the statement. With regard to the accuracy of the system, respondents' were asked to indicate their perception on how the system accurately calculate tax returns than manual way of filing. Then, the survey data showed that, 46.8% of the respondents' strongly agree and agree that they can correctly calculate tax returns they pay manually than the electronic filing system with a mean value of 3.06. 38.1% of the respondents' were strongly disagree and disagree, while the rest (15.1%) were neutral on the statement. Likewise, 38.4% of the respondents' indicated that they have reason for using/not using the system with a mean score value of 2.94. 12.0% and 36.0% of the respondents' were strongly disagree & disagree respectively on the statement. The rest (13.6%) were indifferent on the statement.

4.2. Interview Results

In depth interviews were conducted with ten taxpayers' and tax authority officials' in each branches independently at different times. This aimed at obtaining the respondents' perception on electronic tax

filing system. Moreover, it is believed that using unstructured in-depth interview with tax authority officials and taxpayers' lead to consider other factors that could affect the adoption of electronic tax filing system beside those determinants found in the literature. The interview questions were fully unstructured and focused on the identification of respondents' perception on factors affecting the adoption of electronic tax filing system in general. More specifically, it focused on how those factors can influence system adoption and expected benefits from the electronic tax filing system. Therefore, the following section presents the results of in-depth interview.

Factors affecting the adoption of electronic tax filing system

According to an interview with taxpayers' and tax authority officials, the factors that affect electronic tax filing adoption can be grouped as environmental, security and human resource. The determinants classified under the environmental category includes factors such as lack of legal and regulatory framework and lack of adequate ICT infrastructure. The security category includes the relative disadvantages (perceived risk) associated with the adoption of electronic tax filing system. The last human resource factor includes lack of capable staff members who can properly file tax returns properly.

As per the interview conducted with taxpayers' and tax authority officials, among the environmental factors listed above, lack of legal and regulatory framework about electronic tax filing adoption significantly contribute for lower uptake of the system in spite of the authorities' focus towards increasing the adoption rate. Electronic tax filing system is not currently covered in Ethiopian legal system. Lack of such legal framework may thus hinder the introduction of cost effective modern technologies of such type. It is obvious that, the existence of an adequate legal structure and security framework could encourage and/or enforce users to be aligned with the requirements. However, respondents' especially Customs officials revealed that lack of such framework which could make usage of the system mandatory was considered as barriers faced by the tax authority for the adoption of electronic tax filing system in Ethiopia. Likewise, as per the interview conducted with one of the electronic tax filing section head prove

the same that, Ethiopia does not have special legal framework on the usage of electronic tax filing system or it is not yet included in the tax regulation which directly results a very low acceptance rate. Since there was no such legal framework in the country, taxpayers' cannot be enforced to implement the system. So, lack of legal and regulatory framework about electronic tax filing system in Ethiopia was one basic barrier or factor that affect its adoption rate.

In addition, the other environmental factor which was lack of adequate ICT infrastructure also affects the adoption of electronic tax filing system. An interview script revealed by respondents' indicate that, despite the recent improvements made by Ethiopian government on the national infrastructure, the overall ICT infrastructure in Ethiopia remains inadequate. Significant challenges to these plans include, lack of adequate financial and telecommunication infrastructure for the adoption of new technologies. The poor quality of telecommunication network service was a major obstacle to effectively deliver electronic tax filing services. The current ICT infrastructure and internet access in Ethiopia is not sufficient to use electronic tax filing system. Due to such problem, users of electronic tax filing system are filing their tax manually by shifting from the electronic service, and some of the electronic tax filing users also file their tax through the help of tax authority officials via government computer at the end of each month, which makes taxpayers' to feel risk of exposing their company data. Government initiatives are the most significant and major driving factor determining the extent and deployment of electronic tax filing system adoption. Moreover, as per the interview conducted with the head of electronic tax section at the Ethiopian Revenues and Customs Authority Western Addis Ababa branch office confirm that, the functional limitation of the current internet infrastructure is still a challenge experienced by many taxpayers' and the authority which needs to be addressed by the Government of the country. And the largest number of interview respondents' prove that, the government was not doing much on the entire electronic tax filing system compared with the national ICT policy, global technology advancement and the excess number of years since the introduction of the system in the country. Therefore, lack of such

infrastructure to use electronic tax filing system also recorded as one factor that affect its adoption adversely.

The interview result also shown that, relative disadvantages (perceived risk) of security factor was one of the determinant of electronic tax filing adoption in Ethiopia. Respondents' participated in this interview were asked whether security issue is raised with the use of technological facility. Accordingly, most of the taxpayers' who were not using the system stated that, security is the main concern that hinders their company from using technological facilities. Moreover, those taxpayers' that are using the system are also in fear of security risk which might expose their financial information. Therefore, fear of risk is one of the factor that hinders the adoption of electronic tax filing system in the country. Similarly, lack of confidence with the security issue is considered as a barrier for the adoption electronic tax filing system. This result indicates, security risk as hindrance factor for the adoption of electronic tax filing system in Ethiopia.

The basic issue related with human resource factor for the adoption of electronic tax filing system is the absence of capable staff in charge of implementing and using the system. The largest number of interviewed taxpayers' and customs officials revealed that, this factor have its own impact on the adoption the electronic tax filing system. The interview result showed that, unfamiliarity with the service provided through electronic tax filing system, resignation of already trained employees, lack of technical and managerial skills on the use of technological innovation and absence of skills to implement electronic tax filing system are considered as barriers for its accurate adoption in Ethiopia. Moreover, as a major human factor, those individuals hired by the taxpayers' to file monthly tax return doesn't need the system fearing loss of their job if their employers decided to implement the system. Correspondingly, most of these individuals lack awareness about technology as well as technical terminologies which considered as barriers to the adoption of electronic tax filing system in Ethiopia.

Expected benefits from electronic tax filing system

As per the interview conducted with taxpayers' and tax authority officials, an advantage that is expected to be gained from the adoption of electronic tax filing system covers both direct and indirect benefits. Direct benefit includes; savings on operational cost, improved organizational functionality, productivity gain, improved efficiency, saving of time and increased profitability. Indirect benefit includes; the opportunity or intangible benefits such as improved taxpayers' satisfaction through improved services by the tax authority. In this interview two basic electronic tax filing adoption benefits are indicated, these are ease of use and system usefulness.

Ease of use

One of the basic benefit related with the use of electronic tax filing system is ease of use. Electronic tax filing service reduce the workload over the tax authority staffs compared with the traditional manual filing. On the other hand, electronic tax filing service enables taxpayers' to file their tax in a more convenient way. An interview result conducted with tax authority officials indicated that, ease of use as a benefit of implementing electronic tax filing system, simplified their tax filing tasks, which almost all the tax authority interview respondents' considered the system as an option less tool that directly improve customer satisfaction. Moreover, all have agreed on the importance of electronic tax filing service because of its easiness to deliver service to taxpayers'. On the other hand, taxpayers' have also shared the tax authority respondents' view that through electronic tax filing system they can simply file their tax online with just a click of mouse and a touch of button. In this interview, taxpayers' also confirmed that, electronic tax filing system provides all the users with freedom of location. Also, it was suggested that, the more complex a new technology is perceived to be, the less likely it will be adopted and the more ease of use the more likely to be adopted.

System usefulness

Usefulness is a good factor to measure the success of electronic tax filing adoption. Perceived relative advantage has a positive influence on the adoption of electronic tax filing system. In this interview two basic electronic tax system adoption usefulness benefits with some other associated benefits are indicated, these are time and cost.

Time saving

According to an interview result, one of the basic benefits considered in the adoption of electronic tax filing system was that it saves time to accomplish tax activities both for the tax authority as well to taxpayers'. Taxpayers' have confirmed that, keeping all the challenges, by using the system, taxpayers' can get the service of Ethiopian Revenues and Customs Authority instantly and available 24 hours a day and 7 days a week and let them to make transactions from their home which indicates that, without visiting the tax office taxpayers' can get the tax authority service by using electronic tax filing system. Time saving was considered as a major benefit of electronic tax filing system adoption by all the respondents'. The largest number of tax authority officials' agreed that, using electronic tax filing system helps them to perform activities within a short period of time. One of the implications of electronic tax filing system is that it should reduce the need to visit tax authority branches to get services.

Cost saving

Cost minimization is an important goal for most business organization in addition to profit maximization. According to the interview, cost minimization as an advantage of using the system can be seen from two perspectives. First, from the government perspectives, by using electronic tax filing system Ethiopian Revenues and Customs Authority save a lot of costs. In the long run the tax authority can save money by decreasing branch employees. This way of cutting transaction cost results in higher profit margin for the government. It is noted that, the combination of higher technology and higher skills results higher turnover for the government as they have been able to provide better customer support and manage their

assets as well. Second, taxpayers' can get services at lower costs compared with traditional manual method, because, it is inexpensive to make transaction over electronic tax filing system.

According to the interview result, tax filing through electronic method was at a lower cost. These result implies, using of technological tools such as internet resulted in performing of tax filing duties at lower cost. Similarly, it was pointed that, the basic benefit a taxpayer could gain from the adoption of electronic tax filing system is cost minimization, in which all of whom found, cost minimization as an important factor for the adoption of electronic tax filing system.

Other Benefits

In addition to the benefits stated above, there are also different benefits which the government and taxpayers' can attain from the adoption of online electronic tax filing system. The other benefits of electronic tax filing system identified in the interview are improving of customer satisfaction through enhancing speed and efficiency, reduce number of customers come to the tax authority hall, reduce the work load of Ethiopian Revenues and Customs Authority staffs, increase the government productivity by increasing reliability and accessibility of services and create better relationship among stakeholders. Moreover, if the tax authority can use sufficient technological tools to deliver services, it would not be limited by geographical location to provide its service.

4.3. Analysis

As stated in chapter 2 the broad objective of this thesis was, *“To identify factors that affect electronic tax filing adoption in Ethiopia”*. Accordingly, based on the outputs presented previously, this section presents the discussion of survey results along with the interview result.

The analysis of results was based on the theoretical framework and the data collected through the data collection instruments. The data was analyzed in light of the broad research objective, specific objectives

and research question stated. Hence, the analysis focuses on the results of the survey for the selected technology/innovation adoption factors that have an impact on electronic tax filing adoption. These selected factors are perceived relative advantage, perceived complexity, compatibility, perceived risk, government support and resistance to change. Moreover, the study also analyzed the results of the interviews in combination with the quantitative output.

Hence, relying on the survey responses of taxpayers' and interview result with tax authority officials and taxpayers', the researcher came up with findings which were used to make conclusions and the related recommendations.

4.3.1. Perceived Relative Advantage

Concerning perceived relative advantage, majority of the respondents' strongly agree and agree that relative advantages of electronic tax filing system (like; help to prepare tax returns easily, give greater control over preparation and filing of tax returns, helps to prepare tax return more efficiently and effectively, convenient way to prepare tax return, time saving, reduce error, etc.) positively influence the adoption of electronic tax filing system in Ethiopia. The survey result indicated in table 4.3 on the perception of taxpayers' regarding the relative advantage of electronic tax filing system have an overall mean value of 4.04. This indicates that, most of the taxpayers' agreed with the existence of relative advantages associated with the introduction of electronic tax filing system in Ethiopia. On the other hand, there are relatively two areas of deficiencies in perceived relative advantage with a mean value close to 3.00 but above. First, not all taxpayers' perceive using electronic tax filing help to reduce errors in preparing tax return (mean 3.62), and electronic filing of tax is a more convenient way to prepare tax returns (3.86). The findings of this study agreed with those of other researchers as discussed in the literature review. According to Rogers (2003) the more an individual perceives an innovation provides them with a relative advantage, for example economic profitability, social prestige, or in other ways, the more likely they are to adopt it. It is expected that if an innovation is perceived as being better than the

idea it supersedes, it is assumed that adoption rate will increase. This factor can be exploited to improve electronic tax filing adoption. In contrast, if taxpayers' perceive that electronic tax filing doesn't have any related advantage, they might continue using the manual way of tax filing and attempt to avoid the electronic system. Most of prior literature has shown that perceived relative advantage positively related to the adoption of new innovations (For instance, Barros 2010 and Bojuwon 2015). Therefore, the result of this research was consistent with previous researches that shown a positive relation between relative advantage and electronic tax filing adoption.

Similarly, the interview result with taxpayers' and tax authority officials support the above findings that relative advantage is one of the major factor that affect electronic tax filing adoption positively. Taxpayers' and tax authority officials expressed the relative advantages of electronic tax filing adoption in terms of ease of use and system usefulness. More specifically, respondents' confirmed that, electronic tax filing system reduce the workload over the tax authority staffs compared with the traditional manual filing, it makes service delivery to taxpayers' easy, enables taxpayers' to file their tax in a more convenient way, provides taxpayers' with freedom of location, saves time to accomplish tax activities both for the tax authority as well to taxpayers', let taxpayers' to get the service of Ethiopian Revenues and Customs Authority instantly and make transactions from their home. These all indicates, an increase in relative advantage of the system lead to an increase in the adoption rate.

The implications of interview result indicates relative advantage as one key factor that influence the adoption of electronic tax filing system in Ethiopia. Even though the coefficient of regression result was not positive as expected, most of the interview respondents' confirm relative advantage as a significant predictor of electronic tax filing adoption explained by time saving, cost minimization, efficiency, etc. Knowing this information is valuable to advocates of the system because it helps them understand what attributes of electronic tax filing system will persuade more members of eligible taxpayers' to adopt the program. If adoption rates increase, it is assumed taxpayer's will save money and so will the government.

Furthermore, according to interview response, the degree of relative advantage was expressed as economic profitability, effectiveness, social prestige, greater control of finances, ability to manage more efficiently, usefulness, how much advantage and convenience it offer to users and how it makes conducting tax transactions easily. In general, users of the system are enjoying the convenience of being able to perform transactions online from home, work, or wherever is convenient at a reduced cost and at any time of the day.

In general, perception of taxpayers' on the relative advantage of electronic tax filing system in Ethiopia can be ascertained as one of the determinant factor which affect online tax filing adoption positively because the system makes tax return preparation easy, enhance control over transactions, allow efficient tax return preparation, convenient, useful and save time that result in more users adoption to achieve set objectives.

4.3.2. Perceived Complexity

Perceived complexity represents how hard the individual feels it will be to learn and adopt the innovation or it is the level of difficulty the taxpayer' perceives to use electronic tax filing (Rogers 2003). The results of the survey respondents' of this study showed that learning, using, following instructions, interactions, encoding and modifying data through electronic tax filing is not difficult/complex, doesn't requires a lot of mental effort, easy and understandable to taxpayers' at the Ethiopian Revenues and Customs Authority. The survey result also showed the majority of taxpayers' feel that the electronic tax filing system implemented in the country is not difficult to operate and it doesn't affects their decision to adopt and/or continue to use the system with an overall mean of 3.65. As presented on table 4.4 majority of respondents' believed that using electronic tax filing is not difficult to operate. Gilbert and Balestrini (2004) stated that the individual's decision on whether to use or not to use the technology is based on perception of the technology's complexity. Its implication is that when the complexity of the system increases its adoption rate decreases. This result was in consistent with many previous studies, e.g.

Bojuwon (2015), Barros (2010) and Gor (2015) all found support for negative relation between a user's level of perceived complexity and their level of electronic tax filing system adoption.

The result generated through interview also supports the above fact. Taxpayers' suggest that the electronic tax filing system should be easily adaptable. Respondents' revealed that Ethiopian electronic tax filing system is somehow user-friendly and easy to use containing clear instructions, except, certain features that needs users to have the skill to perform transactions. In general, during the interview period, respondents' confirm that, Ethiopian electronic tax filing system is not difficulty to operate, complex and require more mental effort. This result ratify the notion that lower levels of perceived complexity would lead to a larger likelihood of adopting electronic tax filing system. Therefore, complexity is one major determinant factor that influence electronic tax filing in Ethiopia.

As clearly indicated from both results the electronic tax filing system implemented in the country is not difficult/complex to operate which still needs improvement.

4.3.3. Perceived Compatibility

Compatibility relates to the person's compatibility in dealing with government either using online or conventional mode, the users feel that the electronic filing services rendered online are compatible with the way of dealing it conventionally, in this perspective, the compatibility of the electronic tax service has facilitated the users to continue using the service (Hussein et al. 2010). With regard to compatibility of the system, the survey result confirmed that the electronic tax filing system implemented in the country is compatible with existing values, past experiences, present structure and in need of potential adopters but needs improvement. The compatibility of a new system depends on how fast the integration of the new system to the existing practice. The mean value of compatibility was 3.49 which is more than its moderate level 3 and its standard deviation was 0.98. So its implication is that, Ethiopian Revenues and Customs Authority electronic tax filing system and its procedures are consistent with existing and past trends

which still needs enhancement. The result further showed that compatibility positively related with electronic tax filing system adoption. The study result also showed that compatibility of electronic tax filing system has reported as significant effect on technology acceptance decision. This result was also consistent with the previous findings of Black et al. (2001). Barros (2010) conclude that compatibility as a significant predictors of intention to adopt electronic tax filing. Elizabeth (2008) finding showed that compatibility and technology adoption are positively related. Therefore, most of the research findings in the literature found compatibility has impact on the adoption of electronic tax filing.

The result generated from interview also indicated compatibility as one major determinants of electronic tax filing adoption in Ethiopia. Interview respondents' perceive that the current Ethiopian electronic tax filing system is consistent with the most popular manual tax filing practice in terms of the forms similarity. Moreover, respondents' also suggested that if taxpayers' perceive the electronic tax filing system to be inconsistent with prevailing trend, they would tend to be more uncertain about the expected benefits associated with its adoption which directly leads to low rate of usage.

Thus, even if it is possible to conclude that the electronic tax filing system implemented in the country is perceived as compatible with past experience and current trend, there are areas which needs to be improved.

4.3.4. Perceived Risk

It is the perception of an individual of the adverse effect, consequences and the uncertainty that may occur by engaging in the particular behavior or activity (Dowling & Staelin, 1994). Citizens perceived less risk when they report the tax manually, but when it comes to the online filing and payment, the level of perceived risk could be higher resulting less intention to use the system in the future (Hussein et al. 2010). The survey response of taxpayers' indicated that, most of them are uncertain about possible negative consequences associated with the adoption of electronic tax filing system in Ethiopia, the descriptive

statistics overall result gives mean and standard deviation of 3.23 and 0.79, respectively, that means the respondent's perception on risk factors of electronic tax filing system was on average low, therefore fear of risk is one of the factor that affect the adoption of electronic tax filing system in the country. Similarly, the result revealed that lack of confidence with the security issue is considered as barrier for the adoption electronic tax filing system. The survey response of taxpayers' indicated that, they hesitate to use the electronic tax service since they do not feel enough security about the electronic tax service.

This result was consistent with previous studies which showed a negative relation between these two variables. In Hung et al.'s (2006) research, perceived risk significantly influence adopters' attitudes toward the electronic tax service. Barros (2010), Chow et al. (2005), Rotchanakitumnuai & Speece (2003), all found a negative relationship between perceived risk and electronic tax filing adoption which implies, taxpayers' who regard electronic tax filing as low risk would have a tendency to accept and use the system. However, there were no prior literatures studying the inverse relationship between perceived risk and technology adoption.

Similarly, the interview result revealed that perceived risk as one of the major determinants of electronic tax filing adoption in Ethiopia. Interview respondents' disclosed that, the lack of security and privacy over the electronic tax filing system in Ethiopia led many taxpayers' to view its adoption as a risky undertakings. Respondents' believe that electronic tax filing involve more perceived risk than traditional manual tax filing and the system will transfer their tax information to third parties without their knowledge or permission. Moreover, they also believe that the tax authority might use such information for year-end tax assessment purpose without considering their accounting book. This causes potential adopters to postpone the decision to adopt and reject the innovation. Respondents' suggested that, the tax authority office should work on awareness creation through different mechanism and let know taxpayers' the electronic tax filing system related advantages outweigh the risk associated with its implementation. Therefore, perceived risk is one of the determinants of electronic tax filing adoption in Ethiopia.

In general, perception of respondents' on the risk factor of electronic tax filing system is statistically weak to conclude as there is no fear of risk among taxpayers' on electronic tax filing adoption. The survey and interview results confirm there are areas to be improved by the tax authority office.

4.3.5. Government support

The range of government support received by innovation users was determined by management and sectorial characteristics. The mean value of Government support variable was 3.12 and standard deviation of 0.89. This result revealed that, taxpayers' in Ethiopia are receiving inadequate support from the government which signifies the importance of management support for the execution of electronic tax filing system in the country. Based on the survey results, most of the respondents' are not satisfied with services delivered by the Ethiopian Revenues and Customs Authority in respect of electronic tax filing system. Lack of support from the tax authority, absence of responsible body or department in charge of controlling the electronic tax filing activity, non-existence of enough training, weak internet connection, lack of legal framework, lack of follow-up, scarcity of resources, etc. are considered as barriers faced by taxpayers' for the adoption and/or use of electronic tax filing system in Ethiopia.

Bojuwon (2015) in his research concludes that government support is one of the main factor that influence income taxpayers' reaction towards electronic tax system adoption. Therefore, it is expected that existence of government support is found to be positively related to the adoption of electronic tax filing system. Most of the respondents' explained that there is no timely and quality service given by the branches of the Ethiopian Revenues and Customs Offices. Taxpayers' spent too much time to file monthly returns using the electronic method due to weak internet connection. The Ethiopian Revenues and Customs Authority is not efficient in dealing with the taxpayers' such as solving problems of tax filing related issues timely and correctly and delivering regular electronic tax filing training and education. These problems are attributed to lack of staff motivation to serve the taxpayers'. As a result,

the taxpayers' could not get timely and quality services; inconsistent and incomplete solutions are given for different problems encountered by the taxpayers'.

The interview result with taxpayers' and tax authority officials also confirm the presence of the above problems. Respondents' disclosed that the current internet infrastructure and its functional strength are not capable to serve and process a large number of taxpayers' transactions at the same time. Such factors as the number of log-in attempts, speed of service operations and several others contributed to low system adoption rate in the country. Moreover, the number of users of the service grows just before submission deadlines, which is at the end of each month so that at those times internet quality decreases due to congestion. This means, if the present internet strength couldn't serve even at 5.1% current up take level, it will be a challenge for the tax authority when more taxpayers' are going to adopt the system in the future unless the Government take some measures to correct the problem. Respondents' also confirm that this poor internet quality have affected both users' decision in terms of adopting the system in the current year, switching to paper mode in the following year and satisfaction rate. This may be explained by the fact that during peak times the system probably underperformed which considerably affect users' satisfaction.

4.3.6. Resistance to change

Resistance to change is the reaction of taxpayers' from the effect of real changes. The mean value of resistance to change was 2.98 and standard deviation of 1.00. This explains, taxpayers' are not resist the adoption of electronic tax filing system in Ethiopia without any reason when explained by this specific variable. Bojuwon (2015) in his research conclude that, as the resistance by taxpayers' for the electronic tax filing system increases its adoption rate decreases. Many studies around the world have shown taxpayer's resistance to the use of electronic tax filing system, hence it is a big challenge to the authorities.

The finding of the survey result was not in consistent to the results of interview. According to the interview with tax authority officials, Ethiopian Revenues and Customs Authority has also faced big challenges even at the current development stage. They said that, the filing of tax returns through online method is seen by many taxpayers' as a burden that sometimes leads to resistance and non-compliance. On the other hand, most of the taxpayers' revealed that, if the tax authority work hard to get more users of the system, there is no way to resist any technological innovation without any ground.

4.4. Conclusion

In general, so far, the survey result analysis which includes descriptive statistics have been presented. The discussions in this chapter endeavored to integrate the results of the quantitative and qualitative methods so as to address the broad and specific research objectives as well as the research question and achieve the objectives of the research holistically.

The data gathered through questionnaire were tested to verify reliability of the instrument; and subsequently analyzed using descriptive statistics on assessing each factors of electronic tax filing adoption. The descriptive statistics indicated a mean value of each factors of electronic tax filing adoption less than 4, except, relative advantage with a mean value of 4.04. Taxpayers' and tax authority officials' also responded to the interview on this area and identified specific factors affecting the adoption of electronic tax filing system. Interview respondents' had forwarded recommendation to Ethiopian government on how to improve the effectiveness of electronic tax filing system in order to get increase the adoption rate. As a final point, using both approaches of research, areas were identified as a major determinants of electronic tax filing adoption in Ethiopia. Particularly, perceived risk and government support are found to be the main components. The subsequent chapter, thus, presents the strengths and weaknesses of the study coupled with implications to the tax authorities, and the literature with future research directions.

Chapter 5: Conclusions and Recommendations

The previous chapter presented result and analysis of the findings, while this chapter deals with the conclusions and recommendations provided based on the findings of the study. Accordingly, this chapter is organized into three subsections. The first section presents the conclusions whereas, the second section presents the recommendations and the last section presents limitations of the research.

5.1. Conclusions

This study aims to identify perception of taxpayers' on factors that affect electronic tax filing adoption in Ethiopia and to what extent these determinants exert impact on system adoption. In doing so, previous studies on innovation adoption in general and electronic tax filing adoption in specific have been reviewed. In electronic tax filing adoption, a number of studies in abroad had undertaken. In Ethiopia, there were no study available, thus requiring more research in this area. Therefore, the researcher has a research gap that needs to be investigated on the perception of taxpayers' on factors that affect the adoption of electronic tax filing system in Ethiopia. The identified research gap leads to the formation of broad research objective in this study. i.e., to assess perception of taxpayers' on factors affecting the adoption of electronic tax filing system in Ethiopia. Thus, the purpose of this study was to assess perception of taxpayers' on factors affecting electronic tax filing adoption using statistical analysis. The specific objectives were as follows: to analyze how taxpayers' perceived relative advantage influence electronic tax filing adoption, to determine the extent to which taxpayers' perceived complexity affect the adoption of electronic tax filing system, to assess the impact of Compatibility as a factor in influencing electronic tax filing adoption, to assess how perceived risk influence the adoption of electronic tax filing system, to evaluate the existence of government support to taxpayers' as a factor that affect electronic tax filing adoption and to analyze how taxpayers' resistance to change affects the adoption of electronic tax filing system.

The study adopted the descriptive research design. In order to achieve the research objectives, collection of primary data was important to as to get the original and accurate perceptions from the targeted respondents'. Primary data was collected through the use of questionnaires and unstructured interview. A sample of 150 taxpayers' within the Ethiopian Revenues and Customs Authority; Large Taxpayers' Office (LTO), Eastern and Western Addis Ababa branch offices in Ethiopia was drawn from a population of 35,956 taxpayers' as a representative of the total population. A total of 128 sampled respondents' completed the questionnaires translating to an 85% response rate. Data from the completed questionnaires was summarized in Microsoft Excel and coded so as to run descriptive statistics. The study used SPSS Version 23 to analyze the feedback and generate descriptive statistics which were used to make inferences on the population based on the results obtained. Descriptive statistics obtained included mean, standard deviation, frequencies and percentages. These were presented in tables. On the other hand, the qualitative data were collected through unstructured interview conducted with Ethiopian Revenues and Customs Authority Officials and taxpayers'.

Based on the review on previous studies and technology adoption related theories, the present study investigated the impact of some selected innovation adoption factors on electronic tax filing adoption in Ethiopia. These factors that were used in this study include determinants such as relative advantage, complexity, compatibility, risk, government support and resistance to change. The study applied mixed approach to get advantage on draw backs of using one approach. In chapter four, the data instruments (questionnaire and in-depth interview) has been analyzed and interpreted in relation with the statement of the problem and objectives of the study.

The results of the study showed that the female respondents' were more than the male respondents'. Over 96% of the respondents' had achieved secondary education and above hence giving an indication that they understood the questionnaires for purposes of collecting the data. Most of the respondents' (Their Company) engaged in service giving activities. In addition, more than 55% of the respondents' were

Accountants in their profession. The results showed the existence of the following relationship between electronic tax filing adoption and the six determinants.

First, with regard to the taxpayers' perceptions towards the relative advantage of electronic tax filing system, the study revealed that a significant number of respondents' strongly believed that electronic tax filing system was a beneficial and advantageous idea with an overall mean score value of more than 4. The respondents' strongly agreed that the introduction of electronic tax filing system made tax return preparation easier with a mean score value of 4.19. A significant percent (77.0%) of respondents' confirmed that electronic tax filing allowed them to file tax returns without the hassle of queues and waiting at the tax authority office. 82.8% of respondents' also confirmed that electronic filing of taxes gives greater control over preparation and filing of tax returns. At the same time, 88.1% of the respondents' indicated that using electronic tax filing system have the advantage of saving their time.

Second, the study further revealed that the electronic tax filing system implemented in the country was relatively easy to operate with an overall mean value of 3.65. The results of the survey and interview respondents' of this study showed that learning, using, following instructions, interactions, encoding and modifying data through electronic tax filing is not difficult/complex, doesn't requires a lot of mental effort, easy and understandable to taxpayers' at the Ethiopian Revenues and Customs Authority. This showed that, minimizing system complexity would certainly increase electronic tax filing adoption by the taxpayers' in Ethiopia.

Third, the study also revealed that most respondents' agreed that the electronic tax filing system implemented in the country is compatible with existing values, past experiences, present structure and in need of potential adopters but needs improvement. The overall mean score value of compatibility was 3.49. So its implication is that, Ethiopian Revenues and Customs Authority electronic tax filing system and its procedures are consistent with existing and past trend. More than 62% of the respondents'

indicated that the costs of purchasing the computer hardware, maintaining it and the initial internet set up costs are generally not inhibitive factor. The results also showed that the respondents' strongly agreed that using electronic tax filing method fits well with the way their company work style with a mean score value of 3.45. In the same breadth, the respondents' indicated that they knew how to use internet and file tax returns with a mean score value of 3.4. This result was in line with previous studies, as an innovation with a sound features that are compatible with existing trend is able to be adopted by users more effectively, thus achieving increased adoption rate.

Fourth, the survey response of taxpayers' indicated that, most of them are uncertain about possible negative consequences associated with the adoption of electronic tax filing system in Ethiopia, the descriptive statistics overall result gives mean and standard deviation of 3.23 and 0.79, respectively, that means the respondent's perception on risk factors of electronic tax filing system was on average low, therefore fear of risk was one of the factor that affect the adoption of electronic tax filing system in the country.

Fifth, the provision of training and other facilities provided by the government to the taxpayers' will definitely result in enhancing use/adoption of electronic tax filing system. The overall mean score value of government support factor was 3.12 and standard deviation of 0.89. This result revealed that, taxpayers' in Ethiopia are receiving inadequate support from the government which signifies the importance of management support for the execution of electronic tax filing system in the country. Based on the survey results, most of the respondents' were not satisfied with services delivered by the Ethiopian Revenues and Customs Authority in respect of electronic tax filing system. Lack of support from the tax authority, absence of responsible body or department in charge of controlling the electronic tax filing activity, non-existence of enough training, weak internet connection, lack of legal framework, lack of follow-up, scarcity of resources, etc. are considered as barriers faced by taxpayers' for the adoption and/or use of electronic tax filing system in Ethiopia.

Finally, most of the respondents' were not resist the adoption of electronic tax filing system in Ethiopia without any reason. In contrary to the finding of the survey result, the result of interview with tax authority officials revealed that, Ethiopian Revenues and Customs Authority has faced big challenges even at the current development stage. They said that, the filing of tax returns through online method was seen by many taxpayers' as a burden that sometimes leads to resistance and non-compliance.

To sum up, the findings of this study has indicated perceived risk and government support as significant factors influencing electronic tax filing adoption in Ethiopia. As explained earlier, lack of confidence with the security issue was considered as barrier for the adoption electronic tax filing system in Ethiopia. The survey response of taxpayers' indicated that, they hesitate to use the electronic tax service since they do not feel enough security about the electronic tax services provided by the Ethiopian Revenues and Customs Authority. On the other hand, most of the respondents' are not satisfied with services delivered by the Ethiopian Revenues and Customs Authority in respect of electronic tax filing system.

5.2. Recommendations

Based on the study conducted using survey method and in depth interview factors affecting the adoption of electronic tax filing system were identified and possible recommendations would be forwarded so that it may help the tax authority and other policy makers to approach the issue accordingly. Accordingly, the contributions are discussed below:

To the tax authorities

As it was explained from the research findings, government support and perceived risk play significant role on electronic tax filing adoption. The tax authority office should emphasize on these two predictors.

- ✓ More awareness and training needs to be done to bring more taxpayers' on board. When the tax authority sensitized on the advantages of using electronic tax filing system as opposed to the

manual system, this will encourage adoption. As a result, more taxpayers' will be looped into the online system and tax compliance will also be enhanced at the same time.

- ✓ Taxpayers' should be equipped through continuous IT and tax trainings and seminars. This will sharpen their IT skills and enhance their tax knowledge in a bid to enhance increased adoption of electronic tax filing system. These initiatives should be spearheaded by the tax authority and Ministry of Communication and Information Technology (MoCIT) to increase the adoption of electronic tax filing system in the Ethiopian Revenues and Customs Authority. This should be done periodically to ensure taxpayers' awareness of their tax obligations and know how to use electronic tax filing system. During the research period, surprisingly it was noticed that most of the taxpayers' doesn't know even the implementation of electronic tax filing system in Ethiopia.
- ✓ While significant changes have been observed with regard to internet usage and infrastructure in the country over the last 10 years, the functional limitation of the current internet infrastructure is still a challenge experienced by many taxpayers' which needs to be addressed by the Government of the country. This can be done by enhancing the existing internet quality and providing cheap internet infrastructure in collaboration with Ethio-Telecom. This will ensure that taxpayers' could able to adopt the electronic tax filing system easily. In the long run, highest tax compliance level will be achieved thus ensuring higher revenue inflows for the Government.
- ✓ Apart from the low internet infrastructure and functional limitation discussed above, the government needs more investment in the electronic tax structure in the country to accommodate all taxpayers'. This can be done by investing on capable IT infrastructures like; data server and high precision computers. The government also needs to launch electronic tax training centers that provide training not only on electronic filing system but also on electronic payment method so that taxpayers' who use electronic tax filing can pay their tax returns electronically without

visiting tax offices. Moreover, the government should also hire and train more IT staff members to support e-tax filing system specially those who are engaging in e-tax filing tasks so that the system becomes more effective and efficient. Finally, separate and accountable e-tax department has be formed in each branches of the tax authority office in order to enhance all the activities of electronic tax filing operation.

- ✓ The tax authority should make the electronic tax filing system compatible with the current popular manual filing method. The design of the system must be harmonious with the current trend particularly in terms of forms used for tax return submission. Then, after getting more users the tax authority can improve the system by adding more features through time.
- ✓ Ethiopian Revenues and Customs Authority should formulate legal and regulatory framework about electronic tax filing adoption. This will reduce taxpayers' potential risk of information security and privacy. As a result of such construct, electronic tax filing adoption rate will be improved at the same time.
- ✓ The increase feeling of discomfort and anxiety caused by an increased risk perceptions would cause the potential adopter to devalue the usefulness of the electronic services. With respect to perception of risk of the electronic tax filing system, taxpayers' who perceive the security of the system to be low will be less likely to adopt the system. To decrease perception of risk, the Ethiopian Revenues and Customs Authority (ERCA) should reassure taxpayers' of the reliability of the system by including easily visible privacy statements on their sites. If taxpayers' have a positive experience with the system, they will be more likely to use the service again. In addition, they will possibly share this positive experience with others, thereby encouraging adoption.

- ✓ Finally, Ethiopian Revenues and Customs Authority office should formally be involved in future research to enable a nationwide survey to be conducted which provides a better representation of the population and a larger sample size. Taxpayers' surveys should be introduced to find out the view of taxpayers' and obtain regular feedbacks on electronic tax filing system. This would help in identifying areas of weaknesses so as to devise means for improvement.

To the literature

This study focused on factors influencing the adoption of electronic tax filing system by taxpayers' and a sample drawn from the target population in Ethiopia Large Taxpayers' office, Eastern and Western Addis Ababa branch office taxpayers'. Future studies should measure the intention of taxpayers' in each eligible branches separately to determine if intention are similar across each branches. The current study was taken limited samples from the three large branches due to time constraints and limited resources.

Future studies can expand this study to include the effect of time and experience on the adoption of electronic tax filing system in Ethiopia. Moreover, future studies should improve the study by incorporating other relevant determinant factors based on available theories and new findings from latest literatures.

5.3. Limitations of the research

Notwithstanding the significant contributions of this study, it also has a number of limitations. The first is the inherent weaknesses with the survey approach itself, like the respondents' differing interpretation of the questions. However, acknowledged that these weaknesses may remain to some extent. For example, In terms of the different interpretation of the questions by respondents, the researcher has made reasonable efforts to ensure the wording and sentences were straightforward and precise.

The time allotted by the department for the accomplishment of this paper is not sufficient. Beside this, the lack of even single research on the topic in the country made the work more complex. Unless the undying effort of the researcher exerted for each of the protracted problems the paper would not been reaching to this status.

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APPENDICES

APPENDIX I: IN-DEPTH INTERVIEW QUESTIONS

Addis Ababa University

College of Business and Economics

Department of Accounting and Finance

Section One: Interview questionnaires designed for taxpayers'

1. In your opinion, what are the key factors that push your company to adopt electronic tax filing system?
2. In your opinion, what are the key factors that hinder your company to adopt electronic tax filing system?
3. In your opinion, what are the advantages that you consider of implementing electronic tax filing system?
4. Do you see any Social, Economic and legal barriers to the adoption of electronic tax filing system in your company?
5. Do you think that government policy have impact on the adoption of electronic tax filing system? (Please Specify/explain)
6. What sort of support would you expect from the government in relation to the electronic tax filing system improvement in Ethiopia?

Section Two: Interview questionnaires designed for ERCA tax authority officials'

1. What are the basic barriers of adopting new technological innovations like electronic tax filing system?
2. Do you see any Social, Economic and legal barriers to the adoption of electronic tax filing in ERCA?
3. Do you think that government policy have impact on the adoption of electronic tax filing system? (Please Specify/explain)
4. What are the benefits you gained from the adoption of electronic tax filing system in the delivery of service to customers and in simplifying your task?
5. Is there any legal frameworks at head office to use electronic tax filing system?
6. Is there any special rule that guide branch offices in implementation of electronic tax filing system?

APPENDIX II: TAXPAYERS SURVEY INSTRUMENT (ENGLISH VERSION)

ADDIS ABABA UNIVERSITY

College of Business and Economics

Department of Accounting and Finance

Dear Participant

This project is entitled “Factors affecting the adoption of electronic tax filing system in Ethiopia: Taxpayers’ Perception”. The investigator is Abera Mechal Wakenne who is currently an MSc (in Accounting and Finance) student at the Addis Ababa University.

The aim of this project is to investigate factors that affect the adoption of electronic tax filing system in Ethiopia. To supplement the data obtained from in-depth interviews with purposively selected business profit taxpayers’ and tax authority officials at the Ethiopian Revenues and Customs Authority, Large Taxpayers’ Office, Eastern and Western Addis Ababa branch offices, the investigator seeks to gather relevant information from randomly selected taxpayers’ by means of self-administered questionnaire.

Participation in this project is completely based on your willingness. The self-administered questionnaire results will be recorded anonymously and strict confidentiality will be maintained. Individual responses will not be identified in the investigator’s MSc thesis.

For further information, please contact Abera Mechal Wakenne by the following address:

Tel: +251-912 76 42 31 or +251-989 16 47 36

E-mail: abramechale89@gmail.com or amechale@yahoo.com

Section I: Background information

Please tick (✓) where appropriate

1. Gender
 1. ☐ Male
 2. ☐ Female

2. Age:
 1. ☐ Below 18 years old
 2. ☐ Between 18 – 29 years old
 3. ☐ Between 30 – 55 years old
 4. ☐ Above 55 years old

3. What is your level of education?
 1. ☐ Below 12 grade
 2. ☐ 12 grade completed
 3. ☐ Diploma
 4. ☐ Bachelor degree
 5. ☐ Masters or above
 6. Other, Please specify

4. What is your field of study?
 1. ☐ Accounting
 2. ☐ Management
 3. ☐ Economics
 4. ☐ Business administration
 5. Other, Please specify

5. What was the approximate turnover/birr value of sales that your company made during last tax reporting period?
 1. ☐ Under Birr 1,000,000
 2. ☐ Birr 1,000,001 – Birr 5,000,000
 3. ☐ Birr 5,000,001 – Birr 10,000,000
 4. ☐ More than Birr10,000,000
 5. If your turnover was more than Birr 10,000,001, please state the approximate turnover in 2009 EC fiscal year: Birr.....

6. What is your position in the company?
 1. ☐ Owners
 2. ☐ Owner and Manager
 3. ☐ Manager
 4. ☐ Accountant
 5. ☐ Finance and Accounts Head
 6. Other responsibilities, please specify.....

7. What is your company main business activity?
 1. ☐ Manufacturing

2. ☐ General Merchandise and Trade
 3. ☐ Services i.e., professional etc.
 4. Other, please specify.....
8. How long have you been in this business?
1. ☐ Less than 1 year
 2. ☐ 1-5 Years
 3. ☐ 5-10 Years
 4. ☐ More than 10 Years
 5. Other, Please specify.....
9. Which method did your company use to file your taxes?
1. ☐ Manual
 2. ☐ Electronic-filing
 3. ☐ Both Methods
10. If the answer to question 9 is electronic filing, how long have you been using it?
1. ☐ Less than 1 year
 2. ☐ 1-3 Years
 3. ☐ 3-5 Years
 4. Other, Please specify.....
11. Do you use the internet?
1. ☐ Yes
 2. ☐ No
12. How long have you been using the Internet?
1. ☐ Do Not use
 2. ☐ Under 1 year
 3. ☐ 1-2 years
 4. ☐ 2-5 years
 5. ☐ Over 5 years
13. Before today, were your company aware of Electronic tax filing?
1. ☐ Yes
 2. ☐ No

Section II: Questions related to factors that affect the adoption of Electronic tax filing

These questions should be answered from your perceptions and experiences with online electronic tax filing or your perceptions of what online electronic tax filing system could be like.

No.	A) Relative Advantage	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	Electronic tax filing make it easier to prepare tax return.					
2	Electronic tax filing allow to file tax returns without the hassle of queues and waiting at the Income tax office.					
3	Online filing of tax is beneficial.					
4	Electronic filing of tax gives greater control over preparation and filing of tax return.					
5	Electronic filing of tax allow to prepare tax return more efficiently and effectively.					
6	Electronic filing of tax is a more convenient way to prepare tax return.					
7	Using Electronic filing of tax save our time.					
8	Using Electronic tax Filing speed up the tax-filing process.					
9	Using Electronic filing help to reduce errors in preparing tax return					

No.	B) Complexity	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
10	Using Electronic tax Filing is difficult to operate.					
11	Using Electronic tax Filing is complex.					
12	Using Electronic tax Filing requires a lot of mental effort.					
13	Learning to use Electronic tax Filing is easy.					
14	It is easy to input and modify data using Electronic tax Filing method.					
15	Instructions for using Electronic tax filing system is easy to follow.					
16	Interaction with Electronic tax filing process is clear and understandable.					

No.	C) Compatibility	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
17	The cost of purchasing a computer for electronic tax filing is too high.					
18	Using Electronic tax filing method fits well with the way our company work style.					
19	We are very skilled at using the Internet.					
20	We know less about using the Internet than most users.					
21	The monthly internet cost of electronic tax filing is greater than the manual filing method.					
22	The thought of using a computer to do electronic tax filing makes to feel apprehensive.					

No.	D) Perceived Risk	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
23	Private information could be logged by unauthorized parties and subsequently disclosed without consent when using electronic tax filing system.					
24	The security system built into the Electronic tax filing system is not strong enough to protect our company account.					
25	We are confident over the security aspects of Electronic tax Filing.					
26	Privacy is not well maintained with Electronic tax Filing system.					
27	By using Electronic tax Filing system tax information will be used by others without our knowledge.					
28	Internet hackers might take control of tax information if we use Electronic tax Filing system.					
29	Considering the expected level of service performance of the Electronic tax Filing system, using it will be risky.					
30	Electronic tax Filing system server is not perform well and process data transmission incorrectly.					

No.	E) Government Support	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
31	It is easy to get support from the authority if we need help in using Electronic tax filing system.					
32	There is no responsible body or department in charge of controlling the electronic tax filing activity in ERCA.					
33	The tax authority has provided enough training on electronic tax filing system.					
34	Due to weak internet connection, it is difficult to file tax electronically.					
35	The tax authority facilitate conditions in implementing rules and regulations of electronic tax within the legal framework?					
36	There is nothing done by the authority on follow-up issues regarding electronic tax filing system.					
37	Our company believe that the government has enough resource to implement the system.					
38	The tax authority is not put in place enough measures to ensure that taxpayers' know how to use the online tax filing system.					

No.	F) Resistance to Change	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
39	It is better the tax authority makes usage of electronic tax filing mandatory.					
40	Our company is using electronic filing because most companies we know use the system.					
41	Our company couldn't get enough convincing reason from the authority to use electronic Filing for our tax return.					
42	We can correctly calculate the taxes we should pay to ERCA manually than electronics system.					
43	We have no reason for not using electronic tax filing.					

No.	G) Intention	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
44	Our company intend to use electronic tax filing system in the future.					
45	Our company intend to increase use of electronic tax filing system in the future.					
46	Our company will probably use electronic tax filing system next year.					

Your contribution to this research is greatly appreciated.

Thank you!

APPENDIX III: TAXPAYERS SURVEY INSTRUMENT (AMHARIC VERSION)

አዲስ አበባ ዩኒቨርሲቲ

ቢዝነስ እና ኢኮኖሚክስ ኮሌጅ

አካውንቲንግ እና ፋይናንስ ት/ክፍል

የኤሌክትሮኒክ ታክስ ፋይሊንግ (E-Filing) ጥናት መጠየቅ

የተከበሩ የጥናቱ ተሳታፊ?

የዚህ ጥናት ርዕስ “Factors Affecting the adoption of Electronic tax filing in Ethiopia: Taxpayers’ Perception ” ነው፡፡ አጥኚው አበራ መቻል ዋኬኔ ስሆን በአሁን ጊዜ በአዲስ አበባ ዩኒቨርሲቲ በቢዝነስ እና ኢኮኖሚክስ ኮሌጅ በአካውንቲንግ እና ፋይናንስ ት/ክፍል የማስተርስ ተማሪ ነኝ፡፡ ይህ መጠይቅ በአዲስ አበባ ዩኒቨርሲቲ የሚሰጠውን የአካውንቲንግ እና ፋይናንስ ማስተርስ መመሪያ ፕሮጀክት (Masters in Accounting and Finance) የማሟያ ፅሁፍ ለማጠናቀቅ ታስቦ ከኢትዮጵያ ገቢዎች እና ጉምሩክ ባለስልጣን መ/ቤት ግብር ከፋዮች እና ሰራተኞች መረጃ ለመሰብሰብ የተዘጋጀ ነው፡፡

የጥናቱ ዓላማ የኤሌክትሮኒክ ታክስ ፋይሊንግ (E-tax Filing) አጠቃቀምን የሚወስኑ ሁኔታዎችን ለመዳሰስ ከግብር ከፋዮች እና ሰራተኞች መረጃ መሰብሰብ ሲሆን ለዚህም ሲባል በአዲስ አበባ የሚገኙ እና ሲስተሙ ተዘርግቶ የተተገበረባቸው 3 ቅርንጫፎች (ከፍተኛ ግብር ከፋዮች ቅርንጫፍ፣ ምስራቅ አዲስ አበባ ቅርንጫፍ እና ምዕራብ አዲስ አበባ ቅርንጫፍ) ግብር ከፋዮች እና ሰራተኞች በናሙናነት ተወስደዋል፡፡

በዚህም መጠይቅ ላይ መሳተፍ በሙሉ ፍቃድኝነት ላይ የተመሰረተ ሲሆን የጥያቄዎቹን መልስ በተመለከተ የተሳታፊው ማንነት ሳይገለፅ ይመዘገብና ጥብቅ በሆነ ሚስጥርነት ለጥናቱ ዓላማ ብቻ ይውላል፡፡ ከላይ እንደተገለጸው ጥናቱ የሚካሄደው ለትምህርት ማሟያ ፅሁፍ ለመጻፍ ብቻ ሲሆን የእያንዳንዱ ተሳታፊ መልሶኝ በአጥኚው ፅሁፍ ወይም በማናቸውም ሥራ ላይ የመላሹ ማንነት ተገልጦ አይቀመጥም፡፡ በመጨረሻም የጥናቱ ግኝት ጠቅላላ መግለጫ አጥኚው ጥናቱን ከጨረሰ በኋላ ቢጠይቁ ሊያገኙ ይችላሉ፡፡

ለተጨማሪ መረጃ አበራ መቻል ዋኬኔ በሚከተለው አድራሻ ማግኘት ይችላሉ፡፡

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amechale@yahoo.com

ክፍል 1 አጠቃላይ መረጃ

1. ጾታ

1. ☐ ወንድ

2. ☐ ሴት

2. ዕድሜ

1. ☐ ከ18 በታች

2. ☐ ከ18-29

3. ☐ ከ30-55

4. ☐ ከ55 ዓመት በላይ

3. የትምህርት ደረጃ

1. ☐ ከ12 ክፍል በላይ

2. ☐ 12 ክፍል ያጠናቀቀ/ች

3. ☐ ዲፕሎማ

4. ☐ የመጀመሪያ ዲግሪ

5. ☐ ሁለተኛ ዲግሪና ከዛ በላይ

6. ሌላ (እባክዎን ያብራሯቸው) _____

4. ያጠኑት የትምህርት መስክ

1. ☐ አካውንቲንግ

2. ☐ ማኔጅመንት

3. ☐ ኢኮኖምክስ

4. ☐ ቢዝነስ አድሚኒስትሬሽን

5. ሌላ (እባክዎን ያብራሯቸው) _____

5. በ2009 ዓ.ም የበጀት ዓመት በግምት ድርጅትዎ ምን ያህል ሽያጭ ነበረው?

1. ☐ ከብር 1,000,000 በታች

2. ☐ ከብር 1,000,000 - ብር 5,000,000

3. ☐ ከብር 5,000,001 - ብር 10,000,000

4. ☐ ከብር 10,000,000 በላይ

5. ከብር 10,000,000 በላይ ከሆነ እባክዎ መጠኑን በግምት ይግለጹልን ብር _____

6. በድርጅቱ ውስጥ ያለዎት ድርሻ ምንድነው?

1. ☐ ባለቤት

2. ☐ ባለቤት እና አስተዳዳሪ

3. ☐ አስተዳዳሪ

4. ☐ አካውንታንት

5. ☐ የፋይናንስ እና አካውንቲንግ ኃላፊ

7. የድርጅትዎ ዋና የስራ እንቅስቃሴ ምንድነው?
- ☐ ማምረት
 - ☐ የንግድስራ
 - ☐ የአገልግሎትስራ
 - ሌላ ከሆነ (እባክዎ ይግለጹልን) _____
8. በዚህ የስራ መስክ ድርጅትዎ ምን ያህል ጊዜ ቆየ?
- ☐ ከ1 ዓመትበታች
 - ☐ ከ1-5 ዓመት
 - ☐ ከ 5-10 ዓመት
 - ☐ ከ10 ዓመትበላይ
 - ሌላ ከሆነ (እባክዎ ይግለጹልን) _____
9. ድርጅትዎ በባለፈው የበጀት ዓመት የትኛውን ታክስ ፋይል ማድረጊያ መንገድ ተጠቀመ?
- ☐ ማኑዋል
 - ☐ ኤሌክትሮኒክስፋይሊንግ
 - ☐ ሁለቱንም
10. ለጥያቄ ቁጥር 9 መልስዎ ኤሌክትሮኒክስ ፋይሊንግ ከሆነ ለምን ያህል ጊዜ ተጠቀሙት?
- ☐ ከ 1 ዓመትበታች
 - ☐ ከ 1-3 ዓመት
 - ☐ ከ 3-5 ዓመት
 - ሌላ ከሆነ (እባክዎ ይግለጹልን) _____
11. ኢንተርኔት ተጠቅመው ያውቃሉ?
- ☐ አዎን
 - ☐ አላውቅም
12. ኢንተርኔት መጠቀም ከጀመሩ ምን ያህል ጊዜ ይሆንዎታል?
- ☐ አልጠቀምም
 - ☐ ከ1 ዓመትበታች
 - ☐ ከ1-2 ዓመት
 - ☐ ከ2-5 ዓመት
 - ☐ ከ5 ዓመትበላይ
13. ከዛሬ በፊት ድርጅትዎ ስለ ኤሌክትሮኒክስ ታክስ ፋይሊንግ (E-filing) ግንዛቤ ነበረው?
- ☐ አዎ
 - ☐ አይደለም

ክፍል 2: የኤሌክትሮኒክ ታክስ ፋይሊንግ ትግበራን የሚወስኑ ነገሮችን በተመለከተ

ቀጥሎ የተዘረዘሩትን ጥያቄዎች በኤሌክትሮኒክ ታክስ ፋይሊንግ (E-filing) ላይ ካለዎት ተሞክሮ አልያም ደግሞ ይህ ቴክኖሎጂ ወይም አገልግሎት ቢሆን ይሻላል ብለው በሚያምኑት አመለካከት ላይ የተመሰረተ ነው

ተ.ቁ	A) ተጓዳኝ ጠቀሜታ (Relative Advantage)	1 በጣም አልስማማም	2 አልስማማም	3 ገለልተኛ-ነኝ	4 እስማማለሁ	5 በጣም እስማማለሁ
1	ኤሌክትሮኒክ ፋይሊንግ የታክስ አሞላል እና አዘገጃጀት ቀላል ያደርጋል					
2	ኤሌክትሮኒክ ፋይሊንግ ገቢዎች ቢሮ ሳይሰለፉ እና ሳይጨነቁ ፋይል ማድረግን ይፈቅዳል					
3	ኤሌክትሮኒክ ፋይሊንግ በአጠቃላይ ጠቃሚ ሀሳብ ነው					
4	ኤሌክትሮኒክ ፋይሊንግ በታክስ አዘገጃጀትና አሞላል ላይ ከፍተኛ ሚና (control) ይሰጣል					
5	ኤሌክትሮኒክ ፋይሊንግ በአግባቡና በበቂ ሁኔታ ታክስን ለማዘጋጀት ይረዳል					
6	ኤሌክትሮኒክ ፋይሊንግ አመቺ የታክስ ክፍያ መንገድን ያመለክታል					
7	ኤሌክትሮኒክ ፋይሊንግ መጠቀም ጊዜን ይቆጥባል					
8	ኤሌክትሮኒክ ፋይሊንግ መጠቀም የታክስ ማሳወቂያ ሂደትን ያፈጥናል					
9	ኤሌክትሮኒክ ፋይሊንግን መጠቀም የታክስ ክፍያ አዘገጃጀት ላይ ያሉ ስህተቶችን ይቀንሳል					

ተ.ቁ	B) ውስብስብነት (Complexity)	1 በጣም አልስማማም	2 አልስማማም	3 ገለልተኛ-ነኝ	4 እስማማለሁ	5 በጣም እስማማለሁ
10	የኤሌክትሮኒክ ፋይሊንግ አጠቃቀም ከባድ ነው					
11	የኤሌክትሮኒክ ፋይሊንግ አጠቃቀም ውስብስብ ነው					
12	ኤሌክትሮኒክ ፋይሊንግ ለመጠቀም ከፍተኛ የማሰብ ችሎታን ይጠይቃል					
13	ኤሌክትሮኒክ ፋይሊንግ አጠቃቀምን መማር ቀላል ነው					
14	ኤሌክትሮኒክ ፋይሊንግ ዳታ ማስገባትና ማስተካከል ቀላል ሂደት ነው					
15	የኤሌክትሮኒክ ፋይሊንግ አጠቃቀም መመሪያን መከተል ቀላል ነው					
16	ኤሌክትሮኒክ ፋይሊንግ ሲሰተም ላይ መሰራት ግልጽ እና በቀላሉ የሚረዱት ሂደት ነው					

ተ.ቁ	A) ተዛማጅነት (Compatibility)	1 በጣም አልሰማ ማም	2 አልስ ማማም	3 ገለልተ ኛ-ነኝ	4 እስማማ ለው	5 በጣም እስማ ማለው
17	የኤሌክትሮኒክ ፋይሊንግን ለመጠቀም የሚያስችለውን ኮምፒውተር መግዣ ወጪ ብዙ ነው					
18	የኤሌክትሮኒክ ፋይሊንግ አሰራር ድርጅታችን ካለው የሥራ አካሄድ ጋር ተዛማጅ ነው					
19	ድርጅታችን ውስጥ ያለው የኢንተርኔት አጠቃቀም ችሎታ ከፍተኛ ነው					
20	ድርጅታችን ውስጥ ያለው የኢንተርኔት አጠቃቀም ብቃት ከሌሎች ተጠቃሚዎች አንፃር አነስተኛና ደካማ ነው					
21	የኤሌክትሮኒክ ፋይሊንግ ኢንተርኔት ወጪ ከፍተኛ ነው					
22	ታክስን ኮምፒውተር ተጠቅሞ የመሙላትና የማሳወቅ መንገድ ሀሳብ ያበሣጫል					

ተ.ቁ	B) የሚጠበቁ ስጋቶች (Perceived risk)	1 በጣም አልሰማ ማም	2 አልስ ማማም	3 ገለልተ ኛ-ነኝ	4 እስማማ ለው	5 በጣም እስማ ማለው
23	የኤሌክትሮኒክ ታክስ ፋይሊንግን መጠቀም የግል መረጃ በቀላሉ ባልተፈቀደላቸው ሰዎች የመታየት እና የከፍላጎት ወደሌሎች መሰራጨትን ሊያስከትል ይችላል					
24	በኤሌክትሮኒክ ፋይሊንግ ውስጥ ያለው የደህንነት መጠበቂያ (Security system) የድርጅትን ምስጢራዊ መረጃ ለመጠበቅ ጠንካራ አይደለም፡፡					
25	ድርጅታችን በኤሌክትሮኒክ ፋይሊንግ ላይ ባለው የደህንነት (ሰከደራቴ) ሲስተም ይተማመናል					
26	የኤሌክትሮኒክ ፋይሊንግን ስንጠቀም የመረጃ ምስጢራዊነት ይጠበቃል ብለን አናስብም					
27	ኤሌክትሮኒክ ፋይሊንግን ስንጠቀም ሌሎች አካላት በቀላሉ የታክስ መረጃችንን አግኝተው ሊጠቀሙበት ይችላሉ					
28	ኤሌክትሮኒክ ፋይሊንግን ብንጠቀም የመረጃ ጠላፊዎች (Internet hackers) የታክስ መረጃችንን ሊቆጣጠሩ ይችላሉ					
29	የኤሌክትሮኒክ ፋይሊንግ ከሚሰጠው ጠቀሜታ ይልቅ ተያይዘው የሚመጡት ስጋቶች (Risks) የላቁ ናቸው					
30	የኤሌክትሮኒክ ፋይሊንግ የመረጃ ቋት (server) ከንዋኔ አነስተኛ ሲሆን የተሳሳተ መረጃንም ያስተላልፋል					

ተ.ቁ	C) የመንግሥት እርዳታን በተመለከተ (Gov't Support)	1 በጣም አልስማማም	2 አልስማማም	3 ገለልተኛ-ነኝ	4 እስማማለሁ	5 በጣም እስማማለሁ
31	የኤሌክትሮኒክ ፋይሊንግን እንዴት መጠቀም እንደምንችል የባለስልጣን መ/ቤቱን ብንጠይቅ በቀላሉ ማግኘት እንችላለን					
32	የባለስልጣን መስሪያ ቤቱ የኤሌክትሮኒክ ፋይሊንግ ጉዳይን በኃላፊነት የሚቆጣጠር አካል ወይም ክፍል የለውም					
33	የባለስልጣን መ/ቤቱ ኤሌክትሮኒክ ፋይሊንግን በተመለከተ በቂ ስልጠና እየሰጠ ይገኛል					
34	የኢንተርኔት ግንኙነት በጣም አናሳ ስለሆነ (weak Internet Connection) ታክስን በኤሌክትሮኒክ ፋይሊንግ ማሳወቅ ከባድ ነው					
35	የባለስልጣን መ/ቤቱ በኤሌክትሮኒክ ፋይሊንግ ዙሪያ ያለውን የህግ ማዕቀፍ ደንብና መመሪያዎች እንዲተገበሩ አመቻችቷል					
36	የባለስልጣን መ/ቤቱ ኤሌክትሮኒክ ፋይሊንግ አሰራርን በተመለከተ ክትትል እያደረገ አይደለም					
37	ድርጅታችን የባለስልጣን መ/ቤቱ የኤሌክትሮኒክ ፋይሊንግን ለመተግበር የሚያስችል በቂ ሀብት (resource) አለው ብሎ ያምናል					
38	የባለስልጣን መ/ቤቱ የኤሌክትሮኒክ ፋይሊንግ እንዴት እንደሚሰራ ለግብር ከፋዮች ከማስተማር አንፃር ምንም እርምጃ እየወሰደ አይደለም					

ተ.ቁ	D) ለውጥን ስላለመቀበል (Resistance to change)	1 በጣም አልስማማም	2 አልስማማም	3 ገለልተኛ-ነኝ	4 እስማማለሁ	5 በጣም እስማማለሁ
39	የባለስልጣን መ/ቤቱ ሁሉም ግብር ከፋዮች የኤሌክትሮኒክ ፋይሊንግን እንዲጠቀሙ ቢያስገድድ መልካም ነው					
40	ድርጅታን ኤሌክትሮኒክ ታክስ ፋይሊንግ የሚጠቀመው (ሊጠቀም የሚችለው) ሌሎች የምናውቃቸው ድርጅቶች ስለሚጠቀሙት ነው					
41	ድርጅታችን ኤሌክትሮኒክ ፋይሊንግን እንዲጠቀሙ የባለስልጣን መ/ቤቱ በቂና አሳማኝ ምክንያት አይደለም					
42	ማኑዋል ሲስተም በመጠቀም ለመንግሥት መክፈል ያለብንን ግብር ከኤሌክትሮኒክ ፋይሊንግ በተሻለ ያለስህተት ማሳወቅ እንችላለን					
43	ኤሌክትሮኒክ ፋይሊንግን ላለመጠቀማችን ምንም ምክንያት የለንም					

ተ.ቁ	E) ፍላጎት(Intention)	1 በጣም አልስማማም	2 አልስማማም	3 ገለልተኛ-ነኝ	4 እስማማለሁ	5 በጣም እስማማለሁ
44	ድርጅታችን ወደፊት ኤሌክትሮኒክ ታክስ ፋይሊንግን (E-filing) መጠቀም ይፈልጋል					
45	ድርጅታችን ወደፊት ኤሌክትሮኒክ ታክስ ፋይሊንግን (E-filing) የመጠቀም ልምድን ማሳደግ ይፈልጋል					
46	ድርጅታችን በሚቀጥለው ዓመት የኤሌትሮኒክ ታክስ ፋይሊንግን (E-filing) ሊጠቀም ይችላል					

በዚህ ጥናት ላይ ተገቢውን ትብብር ስላደረጉልኝ ትብብርዎት በጣም አመሰግናለሁ!!

APPENDIX IV: FREQUENCY TABLES

RA01. Electronic tax filing make it easier to prepare tax return.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	4.7	4.7	4.7
	Neutral	9	7.0	7.0	11.7
	Agree	62	48.4	48.4	60.2
	Strongly agree	51	39.8	39.8	100.0
	Total	128	100.0	100.0	

RA02. Electronic tax filing allow to file tax returns without the hassle of queues and waiting at the Income tax office.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	9.4	9.5	9.5
	Disagree	3	2.3	2.4	11.9
	Neutral	14	10.9	11.1	23.0
	Agree	50	39.1	39.7	62.7
	Strongly agree	47	36.7	37.3	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

RA03. Online filing of tax is beneficial.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	5.5	5.6	5.6
	Neutral	9	7.0	7.2	12.8
	Agree	51	39.8	40.8	53.6
	Strongly agree	58	45.3	46.4	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

RA04. Electronic filing of tax gives greater control over preparation and filing of tax return.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	9	7.0	7.0	7.0
	Disagree	3	2.3	2.3	9.4
	Neutral	10	7.8	7.8	17.2
	Agree	56	43.8	43.8	60.9
	Strongly agree	50	39.1	39.1	100.0
	Total	128	100.0	100.0	

RA05. Electronic filing of tax allow to prepare tax return more efficiently and effectively.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	9	7.0	7.0	7.0
	Disagree	5	3.9	3.9	10.9
	Neutral	14	10.9	10.9	21.9
	Agree	57	44.5	44.5	66.4
	Strongly agree	43	33.6	33.6	100.0
	Total	128	100.0	100.0	

RA06. Electronic filing of tax is a more convenient way to prepare tax return.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	9.4	9.4	9.4
	Disagree	7	5.5	5.5	15.0
	Neutral	11	8.6	8.7	23.6
	Agree	54	42.2	42.5	66.1
	Strongly agree	43	33.6	33.9	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

RA07. Using Electronic filing of tax save our time.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	6	4.7	4.8	4.8
	Disagree	2	1.6	1.6	6.3
	Neutral	7	5.5	5.6	11.9
	Agree	50	39.1	39.7	51.6
	Strongly agree	61	47.7	48.4	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

RA08. Using Electronic tax Filing speed up the tax-filing process.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	2.3	2.4	2.4
	Disagree	2	1.6	1.6	3.9
	Neutral	9	7.0	7.1	11.0
	Agree	57	44.5	44.9	55.9
	Strongly agree	56	43.8	44.1	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

RA09. Using Electronic filing help to reduce errors in preparing tax return

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	17	13.3	13.5	13.5
	Disagree	10	7.8	7.9	21.4
	Neutral	20	15.6	15.9	37.3
	Agree	36	28.1	28.6	65.9
	Strongly agree	43	33.6	34.1	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

CL01. Using Electronic tax Filing is not difficult to operate.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	1.6	1.6	1.6
	Disagree	12	9.4	9.4	10.9
	Neutral	19	14.8	14.8	25.8
	Agree	71	55.5	55.5	81.3
	Strongly agree	24	18.8	18.8	100.0
	Total	128	100.0	100.0	

CL02. Using Electronic tax Filing is not complex.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	1.6	1.6	1.6
	Disagree	14	10.9	11.1	12.7
	Neutral	24	18.8	19.0	31.7
	Agree	64	50.0	50.8	82.5
	Strongly agree	22	17.2	17.5	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

CL03. Using Electronic tax Filing doesn't requires a lot of mental effort.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	2.3	2.4	2.4
	Disagree	24	18.8	19.0	21.4
	Neutral	20	15.6	15.9	37.3
	Agree	50	39.1	39.7	77.0
	Strongly agree	29	22.7	23.0	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

CL04. Learning to use Electronic tax Filing is easy.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	9	7.0	7.1	7.1
	Disagree	15	11.7	11.9	19.0
	Neutral	8	6.3	6.3	25.4
	Agree	66	51.6	52.4	77.8
	Strongly agree	28	21.9	22.2	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

CL05. It is easy to input and modify data using Electronic tax Filing method.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	11	8.6	8.7	8.7
	Disagree	15	11.7	11.9	20.6
	Neutral	21	16.4	16.7	37.3
	Agree	55	43.0	43.7	81.0
	Strongly agree	24	18.8	19.0	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

CL06. Instructions for using Electronic tax filing system is easy to follow.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	9.4	9.4	9.4
	Disagree	12	9.4	9.4	18.9
	Neutral	17	13.3	13.4	32.3
	Agree	56	43.8	44.1	76.4
	Strongly agree	30	23.4	23.6	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

CL07. Interaction with Electronic tax filing process is clear and understandable.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	9.4	9.6	9.6
	Disagree	9	7.0	7.2	16.8
	Neutral	24	18.8	19.2	36.0
	Agree	54	42.2	43.2	79.2
	Strongly agree	26	20.3	20.8	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

CP01. The cost of purchasing a computer for electronic tax filing is too high.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	2.3	2.4	2.4
	Disagree	15	11.7	11.9	14.3
	Neutral	29	22.7	23.0	37.3
	Agree	49	38.3	38.9	76.2
	Strongly agree	30	23.4	23.8	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

CP02. Using Electronic tax filing method fits well with the way our company work style.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	11	8.6	8.7	8.7
	Disagree	17	13.3	13.4	22.0
	Neutral	24	18.8	18.9	40.9
	Agree	54	42.2	42.5	83.5
	Strongly agree	21	16.4	16.5	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

CP03. We are very skilled at using the Internet.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	19	14.8	15.1	15.1
	Disagree	11	8.6	8.7	23.8
	Neutral	20	15.6	15.9	39.7
	Agree	53	41.4	42.1	81.7
	Strongly agree	23	18.0	18.3	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

CP04. We know about using the Internet than most users.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	21	16.4	16.8	16.8
	Disagree	27	21.1	21.6	38.4
	Neutral	16	12.5	12.8	51.2
	Agree	40	31.3	32.0	83.2
	Strongly agree	21	16.4	16.8	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

CP05. The monthly internet cost of electronic tax filing is greater than the manual filing method.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	9.4	9.7	9.7
	Disagree	19	14.8	15.3	25.0
	Neutral	38	29.7	30.6	55.6
	Agree	33	25.8	26.6	82.3
	Strongly agree	22	17.2	17.7	100.0
	Total	124	96.9	100.0	
Missing	System	4	3.1		
Total		128	100.0		

CP06. The thought of using a computer to do electronic tax filing do not make to feel apprehensive.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	8	6.3	6.3	6.3
	Neutral	23	18.0	18.3	24.6
	Agree	43	33.6	34.1	58.7
	Strongly agree	52	40.6	41.3	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

PR01. Private information could be logged by unauthorized parties and subsequently disclosed without consent when using electronic tax filing system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	9.4	9.4	9.4
	Disagree	29	22.7	22.8	32.3
	Neutral	35	27.3	27.6	59.8
	Agree	36	28.1	28.3	88.2
	Strongly agree	15	11.7	11.8	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

PR02. The security system built into the Electronic tax filing system is not strong enough to protect our company account.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	3.9	4.0	4.0
	Disagree	19	14.8	15.3	19.4
	Neutral	37	28.9	29.8	49.2
	Agree	41	32.0	33.1	82.3
	Strongly agree	22	17.2	17.7	100.0
	Total	124	96.9	100.0	
Missing	System	4	3.1		
Total		128	100.0		

PR03. We are not confident over the security aspects of Electronic tax Filing.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	15	11.7	12.0	12.0
	Disagree	16	12.5	12.8	24.8
	Neutral	36	28.1	28.8	53.6
	Agree	43	33.6	34.4	88.0
	Strongly agree	15	11.7	12.0	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

PR04. Privacy is not well maintained with Electronic tax Filing system

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	9	7.0	7.3	7.3
	Disagree	24	18.8	19.4	26.6
	Neutral	37	28.9	29.8	56.5
	Agree	36	28.1	29.0	85.5
	Strongly agree	18	14.1	14.5	100.0
	Total	124	96.9	100.0	
Missing	System	4	3.1		
Total		128	100.0		

PR05. By using Electronic tax Filing system tax information will be used by others without our knowledge.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	7.8	8.1	8.1
	Disagree	21	16.4	17.1	25.2
	Neutral	37	28.9	30.1	55.3
	Agree	34	26.6	27.6	82.9
	Strongly agree	21	16.4	17.1	100.0
	Total	123	96.1	100.0	
Missing	System	5	3.9		
Total		128	100.0		

PR06. Internet hackers might take control of tax information if we use Electronic tax Filing system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	5.5	5.6	5.6
	Disagree	32	25.0	25.8	31.5
	Neutral	37	28.9	29.8	61.3
	Agree	25	19.5	20.2	81.5
	Strongly agree	23	18.0	18.5	100.0
	Total	124	96.9	100.0	
Missing	System	4	3.1		
Total		128	100.0		

PR07. Considering the expected level of service performance of the Electronic tax Filing system, using it will be risky.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	5.5	5.6	5.6
	Disagree	27	21.1	21.4	27.0
	Neutral	39	30.5	31.0	57.9
	Agree	31	24.2	24.6	82.5
	Strongly agree	22	17.2	17.5	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

PR08. Electronic tax Filing system server is not perform well and process data transmission incorrectly.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	7.8	8.0	8.0
	Disagree	23	18.0	18.4	26.4
	Neutral	39	30.5	31.2	57.6
	Agree	38	29.7	30.4	88.0
	Strongly agree	15	11.7	12.0	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

GS01. It is easy to get support from the authority if we need help in using Electronic tax filing system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	19	14.8	15.0	15.0
	Disagree	19	14.8	15.0	29.9
	Neutral	12	9.4	9.4	39.4
	Agree	60	46.9	47.2	86.6
	Strongly agree	17	13.3	13.4	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

GS02. There is responsible body or department in charge of controlling the electronic tax filing activity in ERCA.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	8	6.3	6.3	6.3
	Disagree	13	10.2	10.2	16.5
	Neutral	38	29.7	29.9	46.5
	Agree	45	35.2	35.4	81.9
	Strongly agree	23	18.0	18.1	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

GS03. The tax authority has provided enough training on electronic tax filing system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	23	18.0	18.3	18.3
	Disagree	28	21.9	22.2	40.5
	Neutral	37	28.9	29.4	69.8
	Agree	28	21.9	22.2	92.1
	Strongly agree	10	7.8	7.9	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

GS04. Due to weak internet connection, it is difficult to file tax electronically.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	5.5	5.5	5.5
	Disagree	26	20.3	20.5	26.0
	Neutral	10	7.8	7.9	33.9
	Agree	48	37.5	37.8	71.7
	Strongly agree	36	28.1	28.3	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

GS05. The tax authority facilitate conditions in implementing rules and regulations of electronic tax within the legal framework?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	15	11.7	12.0	12.0
	Disagree	27	21.1	21.6	33.6
	Neutral	47	36.7	37.6	71.2
	Agree	28	21.9	22.4	93.6
	Strongly agree	8	6.3	6.4	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

GS06. There is much done by the authority on follow-up issues regarding electronic tax filing system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	13	10.2	10.6	10.6
	Disagree	32	25.0	26.0	36.6
	Neutral	47	36.7	38.2	74.8
	Agree	18	14.1	14.6	89.4
	Strongly agree	13	10.2	10.6	100.0
	Total	123	96.1	100.0	
Missing	System	5	3.9		
Total		128	100.0		

GS07. Our company believe that the government has enough resource to implement the system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	20	15.6	16.0	16.0
	Disagree	15	11.7	12.0	28.0
	Neutral	33	25.8	26.4	54.4
	Agree	38	29.7	30.4	84.8
	Strongly agree	19	14.8	15.2	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

GS08. The tax authority put in place enough measures to ensure that taxpayers' know how to use the online tax filing system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	23	18.0	18.1	18.1
	Disagree	40	31.3	31.5	49.6
	Neutral	19	14.8	15.0	64.6
	Agree	26	20.3	20.5	85.0
	Strongly agree	19	14.8	15.0	100.0
	Total	127	99.2	100.0	
Missing	System	1	.8		
Total		128	100.0		

RC01. It is better the tax authority makes usage of electronic tax filing mandatory.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	24	18.8	19.0	19.0
	Disagree	19	14.8	15.1	34.1
	Neutral	15	11.7	11.9	46.0
	Agree	41	32.0	32.5	78.6
	Strongly agree	27	21.1	21.4	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

RC02. Our company is using electronic filing because most companies we know use the system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	24	18.8	19.2	19.2
	Disagree	39	30.5	31.2	50.4
	Neutral	32	25.0	25.6	76.0
	Agree	15	11.7	12.0	88.0
	Strongly agree	15	11.7	12.0	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

RC03. Our company get enough convincing reason from the authority to use electronic Filing for our tax return.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	14	10.9	11.2	11.2
	Disagree	40	31.3	32.0	43.2
	Neutral	20	15.6	16.0	59.2
	Agree	27	21.1	21.6	80.8
	Strongly agree	24	18.8	19.2	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		

RC04. We can correctly calculate the taxes we should pay to ERCA manually than electronics system.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	22	17.2	17.5	17.5
	Disagree	26	20.3	20.6	38.1
	Neutral	19	14.8	15.1	53.2
	Agree	40	31.3	31.7	84.9
	Strongly agree	19	14.8	15.1	100.0
	Total	126	98.4	100.0	
Missing	System	2	1.6		
Total		128	100.0		

RC05. We have reason for using electronic tax filing.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	15	11.7	12.0	12.0
	Disagree	45	35.2	36.0	48.0
	Neutral	17	13.3	13.6	61.6
	Agree	29	22.7	23.2	84.8
	Strongly agree	19	14.8	15.2	100.0
	Total	125	97.7	100.0	
Missing	System	3	2.3		
Total		128	100.0		