ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF ELECTRONIC TAX FILING SYSTEM IN SELECTED BRANCH OFFICES OF ETHIOPIAN REVENUES AND CUSTOMS AUTHORITY (ERCA)

BY

RUTA YOSEPH

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ASSESSMENT OF ELECTRONIC TAX FILING SYSTEM IN SELECTED BRANCH OFFICES OF ETHIOPIAN REVENUES AND CUSTOMS AUTHORITY (ERCA)

By

RUTA YOSEPH KASSA

APPROVED BY BOARD OF EXAMINERS

Dean, graduate studies	**Signature**
Advisor	**Signature**
External Examiner	**Signature**
Internal Examiner	**Signature**

DECLARATION

I, Ruta Yoseph Kassa declare that this work entitled: "Assessment of Electronic Tax Filing System In Selected Branch Offices Of Ethiopian Revenues And Customs Authority (ERCA)", is the outcome of my own effort and that all source of materials used for the study, to the best of my knowledge, have been duly acknowledged. I have produced it independently except of the guidance and suggestion of my research advisor. This study has not been presented for any other program in this university or any other.

RUTA YOSEPH KASSA

St. Mary's University, Addis Ababa
June, 2017

ENDORSEMENT

This is to certify that this research thesis has been submitted to St. Mary's, School of Graduate Studies for examination with my approval as a university advisor.

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   Advisor   Signature

St. Mary's University, Addis Ababa
June, 2017

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List of Acronyms and Abbreviations

ANOVA - Analysis of Variance

ERCA- Ethiopian Revenues and Customs Authority

E-tax- Electronic Tax

IRS- Internal Revenue Service

ITD- International Tax Dialogue

LTO- Large Taxpayers Office

SIGTAS- Standard Integrated government ax administration system

SPSS– Statistical Package Software for Social Science

TIN- Taxpayer Identification Number

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Abstract

The study focused on assessing E-tax filing system in selected branch offices of Ethiopian Revenues and customs Authority (ERCA). To achieve this objective, a review of relevant literature was done and primary data were gathered using a Likert scale questionnaire format. Data analysis was carried out using descriptive analysis. Findings revealed challenges like taxpayer's attitude, taxpayers fault and governmental problems and benefits which include data handling, accuracy, job performance and tax compliance. In addition, the study found out that E-tax filing system and tax compliance has a positive relationship. The study recommended the organization to improve internet connection by collaborating with Ethio-telecom as well as to create awareness about the system and provide electronically payment system.

Key Words: E-tax filing system, Tax, Tax compliance

CHAPTER ONE
INTRODUCTION

1.1.   Background of the Study

The fact that taxation is essential for sustainable economic development and tax administration is a basic function of a successful state makes tax authority to improve its tax collection service and make tax administration more effective. Taxation helps in making government accountable to its citizens and when governments spend taxpayers' money, they are more accountable to make budget decisions transparent and accessible (Joanna, 2014).

Although, the goal of any tax authority is to establish a system of tax administration that allows for the collection of required taxes at minimum cost, most developing country government departments are characterized by a lot of paper work, long queues, bureaucracy, cramped spaces and a lot of frustrations. With the growing demands of citizens and changing global rules and regulations, governments are under pressure to deliver services at the right time and quality. The desire to ease administrative duties and services offered to citizens is a goal every government. Simplicity can be realized through the use of ICTs like that of electronic filing system (Mutula, 2012).

Even though, in most developing countries manual filing still remains the traditional and most widespread method of submitting tax returns for government revenue services, the world advancing in technology, has made things easily done electronically. As web technology is becoming more and more popular, the introduction of Internet filing has brought fundamental changes to the method of filing tax returns (Hwang, 2000).

According to Cobham (2010), the electronic tax system has been around, globally, for the last 30 years. Its history began in 1986 as a small test program and since then, electronic tax system has grown to become common place, serving millions of taxpayers every year worldwide. By 2012, 76 of the economies measured by *Doing Business* had implemented electronic tax filing and payment systems.

This system makes taxpayers able to submit their tax returns electronically to the tax authorities and it is believed to improve the delivery of public services and the dissemination of public administration information to the public (Anna & Yusniza, 2009).

As for Ethiopia, in February 2013, The Ethiopian Revenue and Customs Authority (ERCA) has brought significant benefits to the business community and Ethiopia's wider economy by developing e-Tax system. Now, taxpayers can file their tax returns online, within one day and with just little procedures (Fortune, 2013).

ERCA is committed to provide first-class services to taxpayers in the country, making tax compliance easy and convenient. One of the initiatives of ERCA was the introduction of Electronic Filing (e- Filing) to make the filing process easier for taxpayers as well as to reduce the time required for data entry on (Fortune, 2015).

Tax systems in developing economies face both new challenges and new possibilities as a result of technological change. ERCA's introduction of electronic tax filing system is no exception. Since electronic filing is relatively new system, there are few studies focusing on the challenge, benefit and effect of electronic filing. Thus, this study is intended to look at the challenges and benefits of e-tax system in Ethiopian Revenue and Customs Authority (ERCA).

1.2. Statement of the Problem

Tax is a compulsory payment to government which imposes a personal obligation on the tax payer without expectation of direct return or benefit to tax payers. Tax revenue is one of the most important sources of government income. It is a powerful instrument for transferring purchasing power from individuals to government (Gebre, 2006).

A tax authority engages in many activities, such as processing returns and related information from taxpayers, entering tax return data into a database, matching returns against filing requirements, processing tax payments and matching them against assessments, and issuing assessments and refunds. One way to boost a tax authority's efficiency is by expanding its use of Information and Communication Technology (ICT). Such technology can facilitate a broad range of services, including registering taxpayers, filing returns, processing payments, issuing assessments and checking against third-party information (Clarke, 2001).

Various survey studies have been conducted to assess the implementation of E-tax filing system. For instance a set of studies have been conducted on the challenges and benefits of adopting E-tax filing system and its effect on tax compliance (Naibei et al., 2011; Gayathri P et al., 2013 Gekonge J et al., 2016; and Harrison et al., 2015).

E-tax filing system is equally important for all countries but as far as the researcher's knowledge there is lack of empirical studies which examine the Ethiopian tax office. The studies conducted in Ethiopia mainly focus on taxpayer's perception (Tadesse et al., 2014; Samson, 2016).

On the other hand, as per Fortune (2015), only 950 large tax payers and 800 medium tax payers in the Western, Eastern and Large tax payers (LTO) branch offices have been using the e-tax filing system.

This study is therefore motivated because of the absence of studies in the area of E-tax filing system: its challenges, benefits and relation with tax compliance in Ethiopian tax offices. Moreover, it is important to notice that Ethiopia's environment is different from the developed countries environment where the E-tax filing system is more enhanced.

Hence, the main aim of this research is to investigate what challenges Ethiopian Revenues and Customs Authority (ERCA) is dealing with, the benefits of implementing e-tax and it's relation with tax compliance.

1.3. Research questions

To achieve the study's objective, the following key research questions are set:

1. What are the benefits of e-tax system for ERCA?
2. What are the challenges that ERCA faces while executing E-tax system?
3. What is the relationship of E-tax filing system and tax compliance in ERCA's?

1.4. Objectives of the study

1.4.1. General objective

The overall purpose of the study is to assess electronic tax filing system by examining the challenges, benefits and its relation with tax compliance in Ethiopian Revenues and Customs Authority (ERCA)

1.4.2. Specific objective

To meet the overall objective of the study, these specific objectives are set:

1. To identify the benefits of e-tax filing system in ERCA.

2. To identify the challenges ERCA faces in executing E-tax filing system.

3. To identify the relationship of e-tax filing system and tax compliance in ERCA's.

1.5. Significance of the Study

The study's output could be significant in various aspects. The result of the study will give insights about the benefits and challenges of E-tax and it's relation with tax compliance. It provides information for ERCA which could help it to re-strategize policies before next declaration. It's believed that the study will stimulate ERCA to take remedial actions for suitable positive results. Furthermore, the result of the study will contribute as a ground for researchers to conduct further study on E-tax filing system.

1.6. Scope of the study

Conceptually, this study is delimited to examining E-tax filing system: the challenges, benefits and relation with tax compliance in selected branch offices of Ethiopian Revenues and Customs Authority (ERCA).

Ethiopian Revenues and Customs Authority (ERCA) can be found throughout Ethiopia. This study does not address all the branch offices. By considering the similarity of the system, Addis Ababa branch offices are assumed to be representative. Therefore, the study is delimited to Addis Ababa branch offices of Ethiopian Revenues and Customs Authority (ERCA).

Thus, the three main branches i.e. Eastern, Western and Large Tax Payers branch offices of ERCA are the main subjects of the study.

1.7. Limitation of the study

This study only depends on ERCA's employee's opinion and does not include taxpayers' perception due to time and resource constraints. If it had incorporated taxpayer's opinion it would have enhanced the generalizability of the study.

1.8. Organization of the Paper

The paper has five chapters. It begins with introductory outlines under which an overview of the topic under study is presented and then description is made on the statement of the problem, the objectives of the study, the research questions, significance of the study, the scope of the study, and limitation of the study and organization of the paper. The second chapter presents review of related literature. The third chapter outlines the research methodology. The fourth chapter is devoted to the data presentation, analysis, and review literature. The final chapter summarize the findings, present the conclusion, and recommendations made by the researcher. Then end of the paper list bibliographies and annexes.

CHAPTER TWO
LITERATURE REVIEW

This chapter contains theoretical and empirical literature. Theoretical literature deals with concepts of e-tax filing and ERCA's e-tax filing system. Related empirical findings present the benefits and challenges of e-tax filing system and its relationship with tax compliance.

2.1 Meaning and concept of Tax

A number of authors have tried to define the term „tax"; however, it is hard to say that these attempts at coming up with a definition for the term have been successful (mainly owing to the fact that too great precision is attempted in a single sentence). The best way to understand the term is to state the fundamental idea of a tax and afterwards to note its leading characteristics. Accordingly, in general terms, tax can be defined as a contribution from individuals out of their private property for the maintenance and defense of government, so that it may perform its functions and the ends of the state be realized (Misrak, 2008).

In similar, Tax is defined as 'a compulsory levy, imposed by government or other tax raising body, on income, expenditure, or capital assets, for which the taxpayer receives expenditure, or capital assets, for which the taxpayer receives nothing specific in return' (Lymer, et al.2009).

Tax administration is a complex and dynamic responsibility. On a regular basis, leaders are faced with new issues, conflicting priorities, taxpayer compliance and emerging commitments (Thomson, 2008). As Berhan and Jenkins (2005) noted, governments of developing countries are eager to create modern tax systems although saddled with weak tax administrations, and sometimes have experimented with tax administration mechanisms that inflict higher compliance costs on the private sector.

In order to make the multipart tax system relatively successful, it should be approached strategically and realistically in order to maximize taxpayer participation, create an efficient filing and audit administration, and encourage private sector growth. Tax involves every aspects of income generating activities and consumption items, and requires not only administrative capacity of revenue authority but also the involvement of private sectors through proper accounting and reporting (Tadros, 2009).

2.2 Electronic Tax Filing system

Electronic tax system is a system that has been developed to replace manual system. It is a web-enabled and secure application system that provides a fully-integrated and automated solution for administration of domestic taxes. It enables taxpayers to register tax, returns filing, payment registration to allow for tax payments and status inquiries with real-time monitoring of accounts (Waweru 2013).

According to Chang and Hung, (2005) E- tax filing is a system for submitting tax documents to the tax department through the internet or direct connection, usually without the need to submit any paper documents. Various tax return preparation softwares with e-tax filing capabilities are available as standalone programs or through websites or tax professionals or from major software vendors for commercial use. "e - File is the term for electronic filing, or sending your tax from tax software via the Internet to the tax authority".

Chanchal, et al (2013) on their study about the satisfaction level and awareness of tax-payers towards e-filing of income tax return in Moradabad city defined E-filing as the process of filing tax electronically. Taxpayers no longer stand in long queues and no waiting for filing. Customized forms have been devised by the Tax Authority which is available on the site. These

forms have been devised with such details that tax payers need not file any supporting document along with.

According to International Tax Dialogue (ITD) (2010), revenue patterns in most countries show that a small number of large enterprises account for the majority of tax revenue (60-70% of total tax revenue). Usually, this majority of tax revenue is classified/ termed under Large Taxpayers. Due to complexity of large taxpayers and considering their critical role in revenue collection; it is the responsibility of tax administration to be ahead of large tax payers in technology in order to curb cheating (Chatama, 2013). Guiterreze (2010) recommends the adoption of an integrated management model, which presumes use of electronic filing as one system component, for the adequate functioning of tax administration that aims enhanced compliance, evasion reduction, and increase in tax revenue.

McCarten (2014) emphasized that for large tax payers in order to accomplish its intended goal/purpose, countries should work towards, among other strategic interventions, reducing the potential for corruption by automating and restructuring control systems; and simplifying and reducing paper handling through appropriate use of electronic filing.

Mongwaketse (2015), quoting Singh and Singh (2013) explain that for a taxpayer to access e-tax filing they have to first register online and showed the process as follows:

(Filer)

(Department)
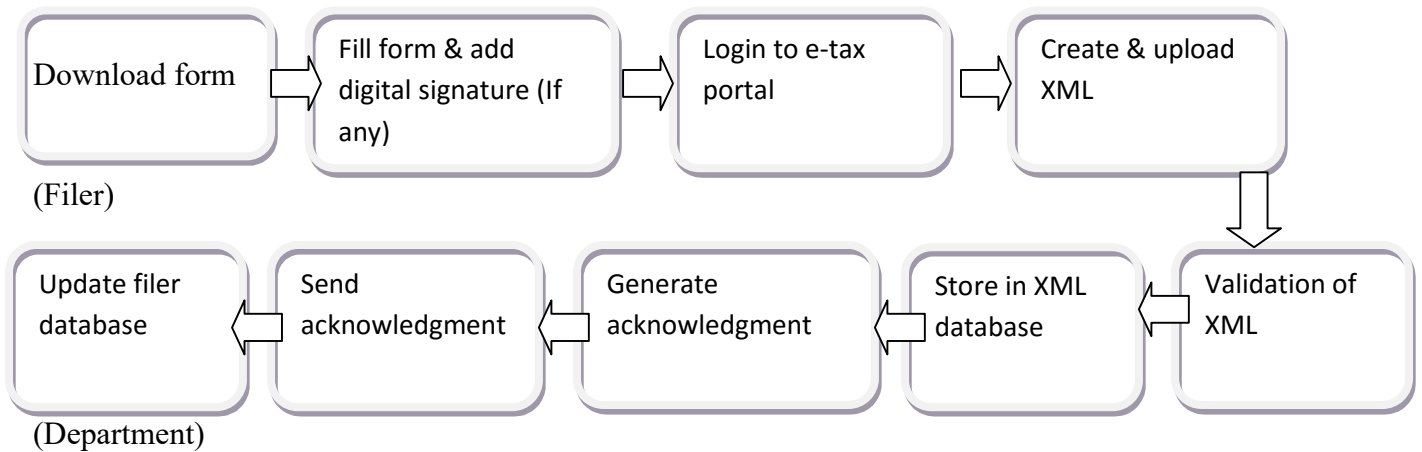
Figure 2-1. Steps For e-tax filing of Tax return (Singh & Singh, 2013)

2.3 E-tax filing system in Ethiopian Revenues and Customs Authority (ERCA)

Historically, in Ethiopia the tax returns were filed manually and hand-delivered to the nearest office. According to Fortune (2013) ERCA's highly manual tax system has spent significant amount of its payroll budget on handling paper returns and transcribing data to machine readable form.

E-tax filing system, which ERCA has been implementing for both large and medium tax payers, was installed in 2009 by CRC Sogema, a consulting firm based in Canada, with a 90,000 dollars financial support from the Investment Climate Facilitation for Africa (ICF). There are two ways in which e-tax filing can be accessed; by directly using the authority's website and authenticating through two security layers and declaring tax (Fortune, 2015).

The World Bank Doing Business (2014) said that, on the online service delivery status ERCA is in its premature stage. Still, the need for manual reporting and appearing to a tax office is unavoidable.

According to Ato Birhanu, Head of Customers Education and Support Team Coordinator, interview with ERCA's official monthly newsletter (Gebi Lelemat #47), e-Tax has the capacity to provide internet/online services via ERCA's website or a dedicated website: www.etax.gov.et. If used at full capability, e-Tax is expected to provide services such as online tax registration (e-Registration), online monthly and annual tax declaration (e-tax filing), online possibility to effect payment through an option called Bank Interface, online tax clearance and tax refund request service (Online e-Service) and online correspondence that help tax payers to request questions and clarification from ERCA.

In the Practice, Challenges, and Prospects of e-Government; the case of ERCA study (Samuel, 2015) E-Tax is described as a large public application designed to work with the Standard Integrated Government Tax Administration System (SIGTAS). It is a product that allows taxpayers to file electronically and to see and print their declarations on line. For security reasons, the e-Tax database is separate from SIGTAS database. An e-Tax user does not have a direct access to SIGTAS database but declaration changes are done in SIGTAS and are automatically reflected in e-Tax. A communication mechanism between the two applications allows data to flow from one database to the other.

The main web page of ERCA has almost all common information for taxpayers. Taxpayers can find all necessary legislation, tax forms and information about main tax procedures. The web page includes a register of VAT taxpayers, public tenders by tax administration, duties and rights of taxpayers, phone numbers, acts on the amounts necessary to calculate tax obligations, short presentations on some taxes and an introduction to the tax administration (its duties, organization, working hours and annual report). It also offers links to other useful web pages (Gebre, 2006).

Gebi Lelemat #47 asserted the confidentiality of the system. ERCA employees are prohibited from divulging any taxpayer's information to third parties. Therefore with electronic filing the taxpayer is empowered to take control of the security of his or her information or data, by securing their login details (login name & password). The confidentiality of taxpayer data is thereby guaranteed within the system of tax administration and ERCA also enforces strict disclosure rules for all taxpayer data for data flowing outside the Tax Authority.

2.4 Empirical evidences
2.4.1 Benefits of using Electronic Tax Filing system
Several benefits of electronic filing system have been discussed in literatures. Anna & Yusniza (2009) conducted a study on Adoption of tax e-tax filing in Malaysia and stated that e-tax filing allows customers to conduct transactions within a few mouse clicks. This convenience can serve as a key driver of e-tax filing adoption. E-tax filing provides many aspects of 'convenience' to taxpayers (that is time to file, place to conduct the filing, ease-confuse, information searching and online transactions) at a degree that is not available through traditional channels. Accessibility is allowed 24x7x365. E-tax filing also offers flexibility of time and reduces calculation error on the tax return form to the taxpayers.

Furthermore, Goolsbee (2002) confer benefits of e-tax filing to service providers, which are the tax authorities. To the service provider, e-tax filing minimizes their workload and operational cost due to the submission of tax returns in a paperless environment. It also reduces the cost of processing, storing and handling of tax returns.

In addition, as Moyi & Ronge (2006) affirmed on their study on Taxation and Tax Modernization in Kenya, e-tax filing enhances administration through measures such as

entrusting sensitive negotiations to special teams; minimizing contacts between tax payers and tax collectors and reducing the discretionary powers of tax officers; setting up supervisory systems with at least three hierarchical levels to reduce benefits for collusion; and devise incentive systems that match public and private interests.

Joanna (2014) in her study on implementing electronic tax filing and payment in Malaysia, stated that E-tax filing system increase the quality and quantity of information available to tax officers, enabling them to complete transactions faster and more accurately. Returns filed electronically have much lower error rates than paper returns and substantially cut the need to impose penalties and other punitive measures to foster compliance. The more efficient handling provided by electronic returns allows tax officers to issue assessments and refunds more quickly, and taxpayers know right away if their returns have been accepted by the tax authorities. E-tax filing lowers the cost of handling returns—allowing administrative resources to be reallocated to other tasks such as auditing, customer services and tracking non-compliance.

The study extends in stating e-tax filings benefits in allowing for better, safer data storage that can be used to implement a risk management system for auditing and enforcement. Automation helps establish a good system for tracking files, which is essential for effective auditing and increases the speed and quality of data provided to auditors. Taxpayers can correct their mistakes or make and save changes many times before the final submission which diminish tax authorities checking work load. Finally, well-designed electronic systems can lower corruption by reducing face-to face interactions.

In addition, Al-Kibsi, et al (2001) in their book "Putting Citizens Online, Not In- line" suggested putting services on-line substantially decreases the processing costs of many activities compared with the manual way of handling operations. For example, it costs the US Inland Revenue

Service $1.60 to process a paper tax form, but only $0.40 to process an electronic form. The appropriate application of e-tax may possibly reduce the number of inefficiencies in processes by allowing file and data sharing across government departments, thereby contributing to the elimination of mistakes from manual procedures, reducing the required time for transactions.

E-tax filing also benefits in better access to information, employee productivity and improved service delivery. Strategic benefits are generally impossible to quantify in monetary terms, but their value is undoubtable. For example Business Analytics is one example where data warehouse that can be queried to collect customized data on segments of constituents available for their decision-making process (Kavanagh, 2007).

By using electronic filing system governments expect to achieve such gains as online data collection to reduce data entry costs and automate error checking, reduce the communication costs with citizens, enhanced uniformity in the treatment of the applications, greater re-use of data, reduce government publication and distribution costs through online publication (OECD 2003).

2.4.2 Challenges of using Electronic Tax Filing system

Sweeney et al., (1999), on their study about the role of perceived risk in the quality-value relationship substantiate that tax authorities face some major challenges towards the implementation of the e-tax filing system. One such challenge is the public perception of the e-tax filing system. After using an e-service over the Internet, the public may find the e-service system easy and useful or otherwise. Since the public cannot directly communicate with tax personnel, see or touch the tax forms as the service is provided online, the e-tax filing service system delivered to them may not perform as expected. In addition, the public may be burdened

by the time and effort spent learning the new system and accommodating any services failure. Although time is a non-monetary effort and varies among individuals, researchers have recognized that time is a cost that users must pay for any use of services.

Another challenge regarding public perception was stressed out by Chang *et al.* (2005) as perceived credibility on their study about the impact of quality antecedents on tax payers' acceptance of Internet tax-filing systems. The study defined perceived credibility as the extent of users' confidence in the Internet tax-filing system's ability to protect the user's personal information against computer hackers or cyber-crime as it is popularly known. A credible website needs to safeguard personal information from unauthorized access or disclosure, accidental loss and alteration or destruction.

Therefore, as Joanna (2014) said reluctance of taxpayers to abandon paper-based processes because of their perception and shift to electronic system is one of the reasons which make the number of taxpayers using the e-tax filing system remained far below expectations.

Another major challenge supposed by Anna & Yusniza (2009) on their study on the adoption of tax e-tax filing in Malaysia, is to ensure that the system runs smoothly and efficiently during the tax filing period each year. This refers to the technical aspects of e-tax filing, i.e. computer and information systems utilized for the e-tax filing system need to be stable and reliable enough to handle a amount of information processing, especially during the peak period of e-tax filing and particularly as the deadline approaches. The service provider has to ensure that the e-tax filing system can handle the heavy processing of data during the month of tax submission without any glitches. Another critical issue on e-tax filing is that the tax authorities have to ensure that the confidentiality and privacy of the information submitted through the Internet is preserved.

Tamami (2006) on his thesis done in Washington, D.C. titled "An analysis of the effect of electronic filing on individual income tax compliance" stated that since there is no perfect system anywhere, there should be a helpline and other forms of real time support for taxpayers who may encounter problems in using the system. Also there should be detailed help manual on how to complete tax forms. Where necessary there should be free downloadable software on the website for preparing tax returns.

As the study extends it stated that the system be available always. Downtime should be minimized otherwise taxpayers will consider it unreliable and therefore prefer the manual process. This is particularly important during filing and payment deadlines. Given the last minute compliance tendency of most taxpayers the authorities must envisage and cater for the high traffic in and around key tax filing deadlines.

Dwilson (2014) on his study on disadvantages of electronic filing says another challenge with e-tax filing is its inability to provide automated online assistance to a taxpayer with a complex income structure. Therefore for such taxpayers trying to get help on a complicated tax question from a website help-desk may not be nearly as useful as getting help from an in-person tax professional.

According to the World Bank *Doing Business* (2014), Sub-Saharan economies face particularly difficult challenges with implementing electronic systems for filing and paying taxes. These economies are also characterized as part of the world where citizens face limited broadband access, power shortages, slow network speeds and system failures.

Some additional challenges in which tax authorities experience was explained by Layton (2007) on his study on information security: design, implementation, measurement, and compliance, as lack of leaders and management support, resistance to change by staff members who are in their comfort zone in using the manual system and retaining good IT staff members.

Having and retaining good IT staff members was also given emphasis by Korpela et al. (2000) on their study about the commercial scenarios for the web: Opportunities and Challenges. The study implies the methodologies for developing information systems, generally, are taught mostly in academic and professional institutions in developed countries and focus on organizations with relatively abundant resources and other favorable conditions. For example, a group of researchers note that information system development practices need modification to work in local African conditions. "The information system development practices and methodologies being taught and used in industrialized countries have been designed with a much more affluent and less constrained setting in mind than which African information and communication technology (ICT) actors find themselves in. Information system development practices are not universal as such, but need to be adjusted to any given socioeconomic, cultural and organizational setting".

As stated by Mongwaketse (2015) on his MBA paper titled "Perceived effects of an electronic filing system on tax compliance in a district municipality, South Africa", e-tax filing system is not completely independent of human intervention and taxpayers cannot perform certain functions online, and as a result they still need to visit tax offices and queue for assistance. One such example is tax registration. The taxpayer can perform tax registration online, but afterwards is required to visit the office in order to show supporting documents or for payment.

2.4.3. Tax Compliance

Tax compliance is defined as the full payment of all taxes due. Compliance with the tax law typically means true reporting of the tax base, correct computation of the liability, timely filing of the return, and timely payment of the amounts due. The bulk of tax evasion involves the first point. Most evaders either do not declare their liability at all, or declare it only in part (Geetha et al, 2012).

Tax non-compliance is referred to as any difference between the actual amount of taxes paid and the amount of taxes due. This difference occurs because of overstating and understating income, expenses, and deductions. Non-compliance comprises both intentional evasion and unintentional non-compliance, which is due to calculation errors and an inadequate understanding of tax law (David, 2014).

The tax gap or tax revenue gap is defined as the difference between the tax revenue which would be raised under hypothetical, perfect enforcement of taxes and the actual tax revenue. A policy intended to fight tax evasion and avoidance is a policy to narrow the tax gap. Trying to close the tax gap, though, is a pointless task since the necessary administrative cost to detect each and every tax evader would be far higher than the additional tax revenues generated. Empirical evidence about the extent of tax evasion and avoidance for different world regions is also very limited. A new study by Global Financial Integrity (GFI) estimates that African countries have lost US$854 billion in cumulative capital flight over the period 1970-2008 (D'Arcy 2008).

The primary goal of a revenue authority is to collect the taxes and duties payable in accordance with the law and to do this in such manner that will sustain confidence in the tax system and its

administration. The actions of taxpayers whether due to ignorance, carelessness, recklessness, or deliberate evasion as well as weaknesses in a tax administration mean that instances of failure to comply with the law are inevitable. Therefore, tax administration should have in place strategies and structures to ensure that non-compliance with tax law is kept to a minimum (OECD, 2004).

Yousif (2010) on his study titled "A web-based electronic filing system using conversion of image file to text file approach" stated that modern tax administrations have limited resources and recognize that effectively following up with the obligations of every taxpayer is a costly task. Rather than 'policing' tax compliance, modern tax administrations focus on three key objectives: facilitating voluntary compliance, selectively monitoring compliance, and selectively enforcing compliance. With respect to compliance monitoring and enforcement, the 'compliance performance system' of modern IT systems provides support to the tax administration's audit and collections function in collecting and managing information to target areas, where non-compliance poses greatest risks to revenues.

According to Bloomquis (2006), on his overview of recent IRS research on taxpayer compliance behavior in United Kingdom, stated that revenue authorities have a central role (and vested interest) in ensuring that taxpayers and other parties understand their obligations under the revenue laws. For their part, taxpayers and others have an important role to play in meeting their obligations as, in many situations, it is only they who are in a position to know that they may have an obligation under the law.

In addition, he stated that 'Compliance' will essentially relate to the extent to which a taxpayer meets its obligations. These broad categories of taxpayer obligation are registration in the system, timely filing or lodgment of requisite taxation information, reporting of complete and

accurate information (incorporating good record keeping) and payment of taxation obligations on time.

If a taxpayer fails to meet any of the above obligations then they may be considered to be non-compliant. In practice though, says Mazur et al. (2007) in the study titled "Understanding the tax gap", there are many factors that complicate tax compliance and suggest the diversity of taxpayers' compliance behaviors, a lack of knowledge concerning the nature and incidence of non-compliance across the different segments of taxpayers, and the complexity of many taxpayers' tax affairs as an example. For these sorts of reasons the study states revenue bodies require a systematic process for deciding what is important in a tax compliance context and how major compliance risks will be addressed.

Merima et al. (2014) in their thesis study "Factors affecting tax compliant attitude in Africa: Evidence from Kenya, Tanzania, Uganda and South Africa" said since taxes are an involuntary payment for government services, taxpayers have a strong inventive to minimize their tax liabilities either through avoidance (legal) or through evasion (illegal). Tax administration, therefore, has to secure compliance with the laws by applying an array of registration, assessment and collection procedures.

2.4.4. Electronic Tax Filing system and tax compliance

Tax compliance has always been an area of concern to policy makers, tax administrators and society in general. This is mainly because tax compliance affects revenue collection and the ability of the government to achieve its fiscal and social goals (David, 2014).

The influence of electronic filing on filing compliance is expected to be positive. This is because electronic filing is a voluntary system designed to make the tax return filing process simpler and

helps taxpayers complete tax process return more quickly. A number of studies internationally have been done on the role Information Technology plays in Tax compliance. For instance a study of South Korea and Turkey on User evaluation of tax filing web sites was done by Lee et al. (2008), to compare the design and the complexity of the web sites and the ease with taxpayers are able to file tax returns and queries on their tax status. While Turkey had a complex online system, to the contrary Turkish users did not find tax filing system difficult to use and that was attributable to the fact that they relied on accounting professionals to do their tax returns online. On the other hand, South Korean system was considered less complex but few taxpayers were using it as expected. Having in place an electronic tax filing system is one thing, but being able to be used by taxpayers is another thing.

David (2014) on his thesis study titled "The Effect of Online Tax System On Tax Compliance Among Small Taxpayers In East Of Nairobi Tax District" stated that tax compliance is mainly achieved when majority of taxpayers voluntarily file their tax returns and pay resultant tax liabilities as stipulated in the tax laws, without the intervention of the tax authorities through enforcement. However, if the voluntary compliance is low, then enforcement measures like audit and collection are resorted to.

Muita (2011) in her MBA thesis has done a related study on the factors that influence adoption and use of e-tax filing system among Large Taxpayers in Kenya Revenue Authority and found out that paper returns are tedious to file on the part of the taxpayer and in the same magnitude to reconcile on the part of tax authority offices, hence the use of electronic filing, which is aimed at ensuring accuracy and timely reconciliation of the data contained, since Tax systems does automatic reconciliation and validation of the returns. The aim of tax reforms in many countries is therefore, to achieve higher voluntary compliance and one way to do this is by introducing

electronic filing system. Various taxes are filed and remitted by due dates, which are mandatory dates for either tax return or payment thereon, to be remitted to tax authority, failure of which leads to non-compliance and attract penalties.

Coolidge & Yilmaz (2013) on their study, *Does e-tax filing reduce Tax Compliance Costs,* agree that in countries where e-tax filing replaces paper-based filing with no additional work required from firms, e-tax filing is associated with some savings in tax compliance costs. On average 22.4% reduction in overall tax compliance costs and 21.8% reduction in hours spent for complying with VAT are associated with e-tax filing usage in South Africa.

Nero & Amrizah (2005) in their research dealt with tax literacy and tax awareness and revealed that the possibility that tax knowledge may be an additional factor that influences E-tax filing usage since tax knowledge has been found to influence tax compliance in many countries. It is expected that the more complicated is a tax system, the lower taxpayers' voluntary tax compliance will be. Since the implementation of E-tax filing is primarily to increase tax compliance, it is critical to understand that tax knowledge influences E-tax filing usage among taxpayers and potential taxpayers. Therefore, a modern tax administration system should rely on a system of voluntary compliance, where taxpayers pay what is due, when it is due, and without coercion.

Kamau et al., (2014) looked at the factors that facilitate the successful adoption of technology as a tax compliance enhancement tool. In his study, he concluded that three factors must be in place to realize this objective, namely: flexible Information Technology structure, competent IT skill base and strong customer orientation. They concluded that indeed the adoption of technology has an impact on the tax compliance levels of taxpayers.

Harrison & Nahashon (2015) did a study on effects of online tax system on tax compliance among small taxpayers in Meru County, Kenya. The main objective of this research was to find out whether the online tax registration, online tax return filing and online tax remittance affect the tax compliance in Meru County. It was found out that online tax system significantly positively affects the tax compliance among the small tax payers in Meru County. A multiple linear regression and correlation analysis reveal a strong linear relationship between online tax system and tax compliance. This implies that the effect of online tax system on tax compliance is positive and significant.

2.5 Research Gap

Most of the studies discussed above shows that there exist challenges and benefits of electronic tax system. However, most of these studies were conducted outside of Ethiopia.

In Kenya, especially in Kenya Revenue Authority, different studies have been done on the subject of technology and tax compliance with specific reference to tax filing. Makanga (2010) did a study on the adoption of technology as a strategic tool for enhancing tax compliance in Kenya. Muita (2010) in her MBA thesis has also done a related study on the factors that influence adoption and use of e-tax filing system among Large Taxpayers in Kenya. The study examined the skills required by the users of e-tax filing, the technology required and the tax authority's preparedness in enhancing the adoption of tax compliance based technology. The study found that for e-tax filing to effectively take off in Kenya skills, infrastructure and a conducive business environment are needed.

As per knowledge of the researcher, In Ethiopia's context, electronic tax filing system has been addressed by few studies such as Practice, Challenges, and Prospects of e-Government; the case

of ERCA (Samuel, 2015), Information technology and fiscal capacity in a developing country: evidence from Ethiopia (Merima et al., 2014) and Factors Influencing taxpayers' compliance with the tax system: An empirical study in Mekelle City, Ethiopia (Tadesse et al., 2014). Most of the studies carried out discussed taxpayer's perception instead of the tax authority. Therefore, this study is motivated because of the absence of studies in the area of benefit and challenges of e-tax filing system in Ethiopian Revenues and Customs Authority (ERCA) and seeks to fill the gap.

<div align="center">

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

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This chapter deals with the research methodology that is used in the study. It contains the research design, population, sources of data, data gathering instruments, and methods & data presentation and analysis procedures.

3.1. Research design and Methodology

This study focuses on assessing the benefits, challenges and tax compliance relation of electronic tax filing system in ERCA. To this effect, descriptive survey method is employed with the assumption that it can help to describe the current benefits and challenges of e-tax filing system and its relation with tax compliance in ERCA. According to Creswel (2004), a descriptive study research refers to a body of techniques for collecting data and obtaining responses from individuals to a set of prepared questions. Descriptive study technique with self-administered questionnaires as the survey instrument is considered appropriate for this study in order to provide a quantitative or numeric description of trends, attitudes, or opinions of the population.

3.2. Research participants

Based on ERCA's information, there are departments which deal with electronic tax filing, data encoding and customer service. Therefore, the researcher addressed all employees which are assigned in these departments as population of this study.

In addition, Managerial and administrative staffs of each branch offices are subject for the study. These staff members mainly consists supervisors who interact daily with tax payers.

According to the HR department of ERCA (Eastern, Western & LTO) the number of employees who are engaged in these departments and supervisors who facilitate the day to day activity are 56. As a result, the total population of the study is 56.

Table 3.1, Total Number of Population

No.	ERCA Branch Office	E-tax officers	Managerial and Administrative (Supervisors)	Data encoding officers	Customer Service officers	Total
1	Eastern	4	5	6	3	18
2	Western	5	6	4	3	18
3	LTO	7	4	5	4	20
	Total	**16**	**15**	**15**	**10**	**56**
	Percentage	**28.5%**	**26.8%**	**26.8%**	**17.8%**	

Source: ERCA Human Resource Management

3.3. Data Sources

Both primary and secondary data sources were used in order to generate relevant information to the research. Primary data was gathered from informants who are employees of ERCA that are grouped in job categories and include: E-tax and data encoding officers, managerial and administrative and customer service workers. As to the secondary data, ERCA's website, reports and other related documents were consulted in order to seek information about the e-tax filing practice of the branch offices.

3.4. Data Collection Instruments

The primary data of this study were collected using a structured self-administered five point Likert scale questionnaire. The questionnaire had five sections. The first section composed questions which ask about the general information of the respondents. The remaining sections included close-ended questions to determine the level of agreement or disagreement of

employees about the different issues related to e-tax filing's benefits, challenges and it's relation with tax compliance.

3.5. Data Collection Procedure

As to the primary data the questionnaire were distributed to employees who deal with e-tax filing directly. Mainly ERCA's website and other related documents ERCA provides regarding e-tax filing and seasonally published reports were referred as a secondary data source to get information about e-tax filing system of ERCA.

3.6. Data Analysis Method

The respondents' data were statistically analyzed using Statistical Package for Social Science (SPSS) version 16. Tables were mainly used to ensure easy and quick interpretation of data. Descriptive statistics was used to analyze all data gathered in the form of frequencies, percentages, mean and standard deviations. In addition, correlation analysis was conducted to test the relationship between electronic tax filing system and tax compliance.

3.7. Validity and Reliability of the Study

3.7.1. Validity

According to Creswel (2004), validity refers to the extent to which the measurement instrument actually measures what it intended to measure. It is used to suggest determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers an account. In order to ensure the quality of this research design content validity of the research instrument were checked. The content validity was verified by the advisor of this research, who looks into the appropriateness of questions and the scales of measurement. This was done to ensure the instrument measures what it is meant to measure and also to check the clarity.

3.7.2. Reliability

As shown in the table below (see table 3.2), each items (questions) under the study shows a good and acceptable reliability. Therefore, the result indicated that the questionnaire of the study was internally consistent by 72.6 percent.

Table 3.2: *Cronbach's Alpha Results.*

Cronbach's Alpha	N of Items
.726	49

Source: Own Survey Data, 2017

3.8. Ethical Considerations

Involved respondents were entitled to the right of privacy and dignity. Information obtained from respondents was handled confidentially. Respondents were not required to mention their name in the questionnaire. In addition, Willingness of the participants in the data gathering process was prerequisite for the study. The data obtained from the participants was not used for other purpose. Furthermore, the findings of this study were reported in aggregated form, thus no individual respondent can be identified.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

This chapter deals with presentation, analysis and interpretation of data gathered from employees. Data was collected and analyzed in order to assess the benefit and challenges of e-tax filing system in ERCA. In this study, 56 questionnaires were distributed to the respondents and only 49 questionnaires were returned. That means the response rate was 87.5% which is assumed to be suitable for further analysis. Before analysis, the data was checked for completeness and basic assumptions. The following tables and figures reveal the total background profiles of the respondents.

4.1. Demographic Characteristics

The first part of the questionnaire addresses the general information of the respondents. It consists of items like gender, age, educational qualification, current post and year of service. The following tables reveal the total demographic characteristics of the respondents. As depicted in the below table, in terms of gender, 34.7%% were male and 65.3% were female participants which may indicate that men are relatively less represented.

Table 4.1: Demographic Profiles & Employment Characteristics of Respondents

Variables	Category	Frequency	Percent
Gender	Male	17	34.7%
	Female	32	65.3%
	Total	**49**	**100%**
Age	<25	3	6%
	25-30	18	36.7%
	31-35	13	26.5%
	36-40	9	18.6%
	41-45	4	8.2%
	>45	2	4%
	Total	**49**	**100%**
Educational background	High School	11	22.4%
	Diploma	26	53%
	BA Degree	12	24.6%
	Total	**49**	**100%**
Current Position	E-tax Officers	14	28.5%
	Supervisors	13	26.5%
	Data encoders	12	24.6%
	Customer Service	10	20.4%
	Total	**49**	**100%**
Year of Service	2-5 years	18	36.7%
	6-10 years	21	43%
	11-15 years	7	14.3%
	>15 years	3	6%
	Total	**49**	**100%**

Source: Own Survey Data, 2017

Regarding respondents` age range, 18 (36.7%) the majority of the respondents fall under the age range of 25-30. Followed by 13 (26.5%) and 9 (18.6%) fall under age range of 31-35 and 36-40 respectively. The remaining 4 (8.2%), 3 (6%) and 2 (4%) were under the age range of 41-45,

below 25 and above 45 years respectively. From this it can fairly be concluded that the majority of the employees are young or below age 35.

As demonstrated in the table 4.1, 53% out of the total respondents were holders of diploma, followed by first degree (24.6 %) and (22.4%) finished only high school. None of the respondents are MA/above holders. From this it can be fairly deduced that majority of employee's are diploma holders.

As shown in table 4.1, regarding the position of respondents, the majorities 14 (28.5%) are in the job category of e-tax officer, followed by 13(26.5%) supervisory job category and the remaining 12 (24.6%) and 10(20.4%) fall under the job category of data encoder and customer service worker respectively.

Accordingly, the tenure of respondents, 21(43%) of the respondents have service year of 6-10 years, followed by 18 (36.7%) respondents with having length of service from 2-5 years and the other 7 (14.3 %) fall under the category of having year of service 11-15 years. The remaining 3 (6%) and respondents belong to groups above 15 years. This shows that most of the respondents have been working in the tax office for long time, know both the manual and e-tax filing system which makes them appropriate for the study in order to compare both systems.

4.2 Assessment on E-tax filing practice

The second section of the study instrument was designed to assess the practice of e-tax filing system in Ethiopian Revenues and Customs Authority (ERCA). The respondents were asked to rate varied types of e-tax practices using a five Likert scale.

Table 4.2 Employees response on E-tax filing practice

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	E-tax filing system is easy to learn and use by staff members.	-	-	4	8.2	2	4.1	25	51	18	36.7	49	4.16	.85
2	E-tax filing system is stable and reliable.	-	-	11	22.4	8	16.3	13	246.5	17	34.7	49	3.73	1.169
3	E-tax filing has a strong security system to protect taxpayer's information	-	-	6	12.2	2	4.1	19	38.8	22	44.9	49	4.16	.986
4	ERCA's regulations are inviting for tax payers to use E-tax filing.	9	18.4	23	46.9	1	2.0	16	32.7	-	-	49	2.49	1.139
5	ERCA is doing its best to create awareness about E-tax filing.	1	2.0	7	14.3	3	6.1	19	38.8	19	38.8	49	3.98	1.108
6	The branch office's taxpayers are well aware of E-tax filing.	14	28.6	17	34.7	2	4.1	9	18.4	7	14.3	49	2.55	1.444
7	There are enough computers and necessary materials to do E-tax filing related tasks in ERCA.	2	4.1	8	16.3	1	2.0	14	28.6	24	49.0	49	4.02	1.250
8	The website offers guidelines which help users and staffs.	7	14.3	17	34.7	3	6.1	12	24.5	10	20.4	49	3.02	1.421
9	I am well trained by ERCA to do E-tax filing related tasks.	6	12.2	11	22.4	10	20.4	11	22.4	11	22.4	49	3.20	1.354

Source: Own Survey Data, 2017

As table 4.2 indicates, the average mean score for the easiness of e-tax filing system to be learned and used by staff members is 4.16 average mean and .85 in standard deviation which reflects that the respondents perceived that the system is not complex and complicated but could

be understood with ease. This means the staff members can adapt to the system easily and can help taxpayer's to do so.

From the table, it can be seen that most of the employees believe the stability and reliability of e-tax filing system. While none of the respondents strongly disagreed about this issue, most of them agreed which made the average mean 3.73 and the standard deviation 1.169. This clearly indicates that ERCA's employees highly trust e-tax filing system. This trust can motivate employees to initiate taxpayers to change from the manual system.

As the security of information is the main issue for all tax payers, ERCA's employees were asked about E-tax filing's security system. The table shows, when 44.9% of the respondents strongly agreed about the strength of the security system 38.8% agreed on it which makes the average mean as 4.16 and the standard deviation 0.986. This explains respondents significantly believe that taxpayer's information is secured and protected which implies that with such believe employees can change the negative opinions of taxpayers about the system.

The table above also depicts ERCA's endeavor to make e-tax filing as popular as the manual and most of the respondents (46.9%) disagreed on the organization's effort to make its regulations inviting for tax payers to use E-tax filing. The average mean is 2.49 and the standard deviation is 1.139 which is very less than the moderate extent. It implies therefore that, as per ERCA's employees' opinion the organization's regulations are not as appealing as it should be.

Awareness about e-tax filing system makes it preferable than the manual and as a tax authority office ERCA should create great awareness about this system so that taxpayers would choose it over the traditional. Regarding this, the respondents agreed that ERCA is doing its best at creating awareness about the system. An average mean of 3.98 and 1.108 standard deviation

demonstrate that most of ERCA's employees suppose that the organization's exertion on creating awareness is sound.

Though, ERCA, as said above, tries to create awareness about the system, are the taxpayers' really aware of e-tax filing system? The respondents reacted negatively to this question. While 28.6% strongly disagreed about the awareness of taxpayers about the system 34.7% disagreed which made the average mean 2.55 and the standard deviation 1.444. This means that ERCA's employees strongly consider that taxpayers of their branch office are not aware of e-tax filing system as they should have been.

Since e-tax filing system is done electronically the next practice question was about facilitation of necessary equipments. Most respondents said that there are enough computers and necessary materials to do E-tax filing related tasks. 4.02 average mean and 1.250 standard deviation indicates that ERCA is well equipped.

As can be seen from the above table, respondents reply to the website's arrangement. While 14.3% strongly disagreed and 34.7% disagreed on the website's guideline and help for both staff members and users 24.5% agreed and 20.4% strongly agreed about the help it offers. This made the average mean 3.02, moderate state and the standard deviation 1.421. Based on the reply one can see that the website could be more helpful to users and employees if ERCA revise and upgrade it.

Finally, the employees were asked if they were trained by ERCA to do E-tax filing related tasks. The response, as shown above, is 3.20 average mean and 1.354 standard deviation. This means that most of the respondents have got training by the organization in order to execute E-tax

related work and face little or no problems in handling e-tax related tasks since they're well trained. In addition, well trained means solving taxpayer's problems which increase satisfaction.

4.3 Benefits of E-tax filing

The third section of the research instrument consisted questions which investigate the benefits of e-tax filing system in Ethiopian Revenues and Customs Authority (ERCA). The following tables demonstrate employees' perception towards the benefit of e-tax filing. The first table discuss about the benefit of E-tax filing system on data handling.

Table 4.3.1 Benefit on data handling

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	E-tax filing makes it easier for data filing.	2	4.1	9	18.4	1	2.0	20	40.8	17	34.7	49	3.84	1.214
2	E-tax filing system makes data storage safer.	2	4.1	6	12.2	3	6.1	21	42.9	17	34.7	49	3.92	1.134
3	Data loss is less risky in E-tax filing than manual.	1	2.0	8	16.3	3	6.1	16	32.7	21	42.9	49	3.98	1.164

Source: Own Survey Data, 2017

For the question whether E-tax filing system makes data filing easier, large number of respondents showed their agreement. Out of the total 49 respondents, 20(40.8%) agreed and 17(34.7%) strongly agreed. This made the average mean 3.84 and the standard deviation 1.214, showing, major number of employees' are benefiting from E-tax since it makes data filing simple.

For the second item the majority of the respondents i.e. 21 (42.9%) showed their agreement and 17 (34.7%) strongly agreed, with average mean 3.92 and the standard deviation 1.134 it can be

said that data storage is safer in E-tax filing system and employees of ERCA can be relieved from losing taxpayers data and waste time on searching for it.

The last item is whether data loss is less risky in E-tax filing system than the manual. In this regard the response got an average mean of 3.98 and a standard deviation of 1.164, most respondents 21 (42.9%) strongly agreed and 16(32.7%) agreed. This implies that E-tax filing is beneficial in diminishing risk of data loss than manual system. And ERCA by minimizing the risk of data loss can protect taxpayers' confidential data and be trustworthy.

Table 4.3.2 Benefit on accuracy and related issues

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	E-tax filing reduces time spent on auditing taxpayer's data.	-	-	3	6.1	6	12.2	21	42.9	19	38.8	49	4.14	.866
2	E-tax filing is fast and accurate than the manual system.	4	8.2	7	14.3	1	2.0	18	36.7	19	38.8	49	3.84	1.313
3	Taxpayers' make less error in using E-tax filing than manual.	3	6.1	6	12.2	5	10.2	16	32.7	19	38.8	49	3.86	1.242
4	After the introduction of E-tax filing penalty has decreased.	2	4.1	10	20.4	12	24.5	12	24.5	13	26.5	49	3.49	1.210
5	After the introduction of E-tax filing corruption has decreased.	7	14.3	10	20.4	18	36.7	6	12.2	8	16.3	49	2.96	1.258

Source: Own Survey Data, 2017

Table 4.3.2; illustrate employee's response on e-tax filling system's benefit on accuracy and related issues. The average mean and the standard deviation of the benefit E-tax filing has in reducing time spent on auditing taxpayer's data is 4.14 and .866 respectively. The result implies

that E-tax filing is advantageous for employees by saving their time while auditing taxpayer's data. This increase the effectiveness of the organization.

Respondents were asked if e-tax filing is faster and more accurate than the manual and as shown in Table 4.3.2 above, the mean score is 3.84 and the standard deviation is 1.313, 38.8% of the respondents strongly agreeing which means they, the respondents, believe that e-tax filing system is better than the manual in accuracy and saving time.

The next item was about whether taxpayers' make less error in E-tax filing than manual. Respondents strongly agreed (38.8%) which makes the average mean 3.86 and the standard deviation 1.242. This means that as ERCA's employee's perception; E-tax filing users don't make mistakes as manual users do which can improve tax compliance.

Respondents agreed with the fact that after the introduction of E-tax filing penalty has decreased. When 26.5% of ERCA's employee's strongly agreed and 24.5%of them agreed about this issue, another 26.5% were neutral about this stand, but in overall with average mean of 3.49 and standard deviation of 1.210, it can be said that most respondents think that after e-tax has been launched penalty has reduced. This implies the more e-tax users the less the penalty which can motivate taxpayer's to shift from manual to e-tax filing.

Regarding E-tax filing's benefit on the reduction of corruption, the employee's took a slightly fair stand with an average mean of 2.96 and standard deviation of 1.258. Most of the respondents, 36.7% of them, choose to stay neutral about it and the other 20.4% disagreed. It can be said that ERCA's employees opinion is more of that the beginning of e-tax filing system doesn't really improve corruption setback that the organization faces.

Table 4.3.3 Benefit on job performance

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	E-tax filing has decreased my work load.	4	8.2	5	10.2	4	8.2	19	38.8	17	34.7	49	3.82	1.253
2	E-tax filing allows me to do my job more effectively and efficiently.	5	10.2	6	12.2	1	2.0	15	30.6	22	44.9	49	3.88	1.379

Source: Own Survey Data, 2017

The above table, table 4.3.3, shows ERCA's employees view on e-tax filing system's benefit on job performance. Most of the responses regarding the first item, "E-tax filing has decreased my work load." were 38.8% agree and 34.7% strongly agree, in average mean 3.82 and standard deviation 1.253. This data indicates that e-tax has improved employees work load which helps them to do their job competently by giving attention to details.

Regarding the effectiveness and efficiency of their job 44.9 % of the respondents strongly agreed and 30.6% of them agreed saying that after e-tax filing has been set up it has as allowed them to do their job more effectively and efficiently. With the average mean of 3.88 and standard deviation of 1.379, it's clear to see that e-tax filing system is helpful in making the job performance of employees more effectual.

Table 4.3.4 Benefit on tax compliance

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	E-tax filing gives greater control over tax declaration.	4	8.2	6	12.2	1	2.0	20	40.8	18	36.7	49	3.86	1.275
2	E-tax filing has a positive effect on controlling tax evasion.	-	-	7	14.3	4	8.2	29	59.2	9	18.4	49	3.82	.905
3	E-tax filing has improved control over tax revenue.	5	10.2	6	12.2	5	10.2	13	26.5	20	40.8	49	3.76	1.377
4	E-tax improves tax compliance because taxpayers report timely.	1	2.0	4	8.2	8	16.3	19	38.8	17	34.7	49	3.96	1.020
5	E-tax filing users follow procedures & regulations correctly than manual users.	2	4.1	6	12.2	3	6.1	16	32.7	22	44.9	49	4.02	1.181
6	E-tax filing users calculate tax more accurately than manual users.	-	-	5	10.2	2	4.1	13	26.5	29	59.2	49	4.35	.969
7	E-tax filing users comply with law than manual users.	3	6.1	7	14.3	1	2.0	21	42.9	17	34.7	49	3.86	1.225

Source: Own Survey Data, 2017

Table 4.3.4 is about e-tax benefit up on tax compliance. The first item, which was about E-tax giving greater control over tax declaration, got an affirmative opinion (40.8% strongly agreed and 36.7% agreed) with an average mean of 3.86 and standard deviation 1.275. This show, ERCA's employees believe that tax declaration is better controlled in e-tax filing system.

Tax evasion, a major problem in making tax system non-compliance, was addressed in the second question and a large amount of the respondents confirmed that e-tax filing has a positive effect on controlling tax evasion. 59.2% of the employees agree and 18.4% of them strongly

agreed on the item which made the average mean 3.82 and the standard deviation .905. This means that e-tax is improving tax compliance by facilitating tax evasion control.

The average mean for the item "E-tax filing has improved control over tax revenue" is 3.76 and the standard deviation 1.377 (40.8% strongly agrees and 26.5% agrees). This implies that e-tax filing system has enhanced tax revenue control in ERCA, one of the key objectives of the tax office.

Respondents were asked whether e-tax filing taxpayers report their tax timely and 38.8% of them agreed and the in addition 34.7% strongly agreed. With an average mean 3.96 and a standard deviation 1.020, it is evident for the fact that e-tax improves tax compliance since taxpayers report timely.

Table 4.3.4 depicts, the majority of respondents gave more favorable responses to procedures & regulations of the organization to be more acknowledged by e-tax filing users than manual users. While 44.9% strongly agreed, 32.7% agreed, in average mean 4.02 and 1.181 standard deviation, it can be said that as ERCA's employee's opinion, e-tax has made its user's tax compliant by helping them abide to the rules and regulations of the organization.

In response to the item dedicated to tax calculate accuracy, the majority of respondents were approving that e-tax filing users calculate tax more accurately than manual users. 59.2% strongly agreed and 26.5% agreed on the matter, which makes the average mean higher than any other's item average mean, 4.35 and standard deviation 0.969. This implies that e-tax helps taxpayer's to be more accurate which in result decrease tax incompliance.

42.9% of the employees agreed that e-tax filing users comply with law than manual users and 34.7% strongly agrees on the subject, and with an average mean of 3.86 and standard deviation 1.225, apparently taxpayer's which use e-tax system comply with law than manual users.

Table 4.3.5 Overall benefit

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	E-tax filing has reduced ERCA's operational cost.	1	2.0	3	6.1	1	2.0	19	38.8	25	51.0	49	4.31	.940
2	E-tax filing has improved the administration of ERCA.	1	2.0	5	10.2	2	4.1	19	38.8	22	44.9	49	4.14	1.041
3	E-tax filing is much better compared to manual for my job performance.	2	4.1	3	6.1	1	2.0	23	46.9	20	40.8	49	4.14	1.021
4	Overall, I'm satisfied by using E-tax filing at my work place.	2	4.1	4	8.2	12	24.5	21	42.8	10	20.4	49	3.67	1.029

Source: Own Survey Data, 2017

Table 4.3.5 attends the overall benefit of e-tax filing system. The first question was about whether e-tax has reduced the operational cost of the organization or not. As it can be seen above, 51%, more than half of the respondents strongly agreed that the system has reduced ERCA's operational cost and 38.8% agreed also on the idea. This made the average mean 4.31 and the standard deviation 0.940, from this it's clear to see that most ERCA's employees believe that e-tax reduces the organization's cost. Since ERCA is a governmental office and budget can be short to execute all costs, this is one of the major benefits e-tax proved for the tax office.

In addition, an average mean of 4.14 and a standard deviation of 1.041 explain that the respondents highly believe that ERCA's administration has improved after e-tax filing was introduced.

Employees were asked if e-tax filing system is better compared to the manual system for their job performance. Their response was positive, as the table shows 4.14 is the average mean and 1.021 the standard deviation which explains that most employees feels that e-tax is better for their job performance than the manual. This implies that job performance of each employee has improved which makes the overall tax office's job performance progress.

Under the overall e-tax filing system satisfaction question, respondents', as shown on the above table, agreed (42.8%) and strongly agreed (20.4%). With the average mean score 3.67 and the standard deviation 1.029 it can be said that the respondents are satisfied with the system. Being satisfied can drive employees to be productive and helps them to influence taxpayer's to shift from manual to e-tax.

4.4 Challenges of E-tax filing

Below is table which shows the response of ERCA's employees relating to the challenges e-tax filing system is facing. The questions tried to address the practical challenges, challenges caused by taxpayers, attitudes of taxpayers and other related issues.

Table 4.4.1 Practical challenges

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	E-tax filing requires a lot of mental effort.	13	26.5	28	57.1	2	4.1	6	12.2	-	-	49	2.02	.901
2	E-tax filing is difficult to operate.	15	30.6	21	42.9	3	6.1	10	20.4	-	-	49	2.16	1.087

Source: Own Survey Data, 2017

As table 4.4.1 shows employees were asked if e-tax filing system requires more mental effort and in their response, most of them (57.1%) disagrees. Which made the average mean 2.02 and the standard deviation 0.901. This means that manual tax filing system requires more mental effort than e-tax filing system to ERCA's employees.

In addition, the next item asked whether e-tax filing is difficult to operate and 42.9% (disagrees) and 30.6% (strongly disagree) of the respondents said that it's not. With an average mean 2.16 and standard deviation 1.087, it can be said that e-tax can be functioned easily.

Table 4.4.2 Challenges caused by taxpayers

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	E-tax filing is less effective because taxpayers forget their password.	1	2.0	4	8.2	2	4.1	11	22.4	31	63.3	49	4.37	1.035
2	Taxpayer's incorrect data encoding makes E-tax filing less effective.	3	6.1	10	20.4	15	30.6	14	29.2	7	13.7	49	3.27	1.128
3	Taxpayers make error while using E-tax filing than manual.	8	16.3	19	38.8	9	18.4	8	16.3	5	10.2	49	2.65	1.234
4	Taxpayers still need to come to office even if they use E-tax.	1	2.0	5	10.2	2	4.1	19	38.8	22	44.9	49	4.14	1.041

Source: Own Survey Data, 2017

As shown in Table 4.4.2, respondents were required to express their feelings towards challenges caused by taxpayers. The first question was about if taxpayers forget their password, which makes e-tax filing less effective, while 63.3% of respondents strongly agreed 22.4% agreed. 4.37 is the average mean and 1.035 is the standard deviation of this item. This indicates that password forgetfulness is one of the challenges that the tax office faces.

To make e-tax filing more effective, accurate data encoding is necessary but literatures suggest that e-tax users might encode data incorrectly making e-tax filing less effective. Thus, the next question addressed if that was the case for ERCA too and the response shows that it's no different with an average mean 3.27 and standard deviation 1.128. If data is encoded incorrectly it has to be reversed and adjusted which consumes time and make employees engage in extra work.

Respondents disagreed on the question "taxpayers make error while using E-tax filing than manual". With an average mean 2.65 and standard deviation 1.234, it's stated that manual users make more error than that of e-tax filing system users.

Last but not least, ERCA's employees were asked whether e-tax users still need to come to the branch offices. 4.14 averaged mean and standard deviation of 1.041, most of the respondents strongly agreed (44.9%) and agreed (38.8%). Though users file their taxes from their offices electronically, they still visit tax offices which can be discouraging and less motivating to use e-tax in the first place.

Table 4.4.3 Overall challenges

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	Internet system makes it difficult to operate E-tax filing.	1	2.0	-	-	3	6.1	11	22.4	34	69.4	49	4.57	.791
2	Power interruption makes E-tax filing less effective.	-	-	5	10.2	2	4.1	13	26.5	29	59.2	49	4.35	.969
3	The work load is the same after E-tax filing is introduced.	13	26.5	22	44.9	2	4.1	6	12.2	6	12.2	49	2.39	1.336
4	There is lack of management support while implementing E-tax filing.	7	14.3	6	12.2	6	12.2	20	40.8	10	20.4	49	3.41	1.337
5	There is lack of good IT staff members who facilitate E-tax filing.	3	6.1	3	6.1	9	18.4	20	40.8	14	28.6	49	3.80	1.118

Source: Own Survey Data, 2017

Table 4.4.3 portrays different kinds of challenges ERCA faces in implementing e-tax filing system. The first challenge raised was internet connection. Since e-tax is a web based system internet connection is very essential in order to perform any activity related to it. ERCA's employees were asked if internet system makes it difficult to function and 69.4% of them strongly agreed. In addition, 22.4% agreed on the issue which makes the average mean 4.57 and the standard deviation 0.791. This shows that most respondents feel that internet is a challenge in implementing e-tax filing system. Connection problem discourage both employees and taxpayers to choose e-tax from manual.

The other necessity in order to implement e-tax is power supply. The second question addressed this factor by asking if e-tax filing is less effective because of power interruption. As the table shows, an average mean of 4.35 and 0.969 standard deviation resulted because 59.2% strongly agreed and 26.5% agreed. This implies power supply interruption is another major challenge that

the tax office is dealing with which decreases the effectiveness of the system as well as the office.

Employees of the organization were asked if e-tax has affected their work load. The response shows that most of the respondents reacted negatively to the question "The work load is the same after e-tax filing is introduced", an average mean of 2.39 and standard deviation 1.336. It can be seen that as per the employees' perception work load is not the same after e-tax is implemented.

The other issue raised as table 4.4.3 shows is management support. Average mean of 3.41 and standard deviation 1.337 shows that the respondents positively replied to the lack of management support while e-tax is implemented. Another challenge the tax office face in order to make e-tax effective is therefore lack of management support. Supporting employees especially when there is a change can improve productivity so lack of management support can hinder it.

On the last item, 40.8% of the respondents agreed and 28.6% strongly agreed on the fact that lack of good IT staff members is a challenge for ERCA. An average mean 3.80, and a standard deviation 1.118, shows that most respondents believe that the problem exists. Since e-tax is computer based system good IT staff members are the key human resources therefore, lack of effective IT staff members means hardship in operating the system and helping taxpayers.

Table 4.4.4 Taxpayers attitude

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	Taxpayers don't trust E-tax filing system.	5	10.2	7	14.3	1	2.0	27	55.1	9	18.4	49	3.57	1.242
2	Taxpayers don't want to shift from manual system to E-tax filing.	3	6.1	4	8.2	3	6.1	24	49.0	15	30.6	49	3.90	1.123
3	Taxpayers attitude is not as good as I expected towards E-tax filing.	6	12.2	12	24.5	2	4.1	18	36.7	11	22.4	49	3.33	1.390
4	In general, E-tax filing is not efficient and effective as it should be in ERCA.	7	14.3	16	32.7	1	2.0	13	26.5	12	24.5	49	3.14	1.472

Source: Own Survey Data, 2017

Table 4.4.4, deals about challenges regarding taxpayer's attitude. The first item as shown above, asked negatively about taxpayers trust towards e-tax. The employee's response was highly positive, 3.57 average mean and the standard deviation 1.242, saying that taxpayers don't trust e-tax filing system. This implies that lack of trust is one of the main reasons why taxpayers are not shifting from the manual system.

The second item which is "Taxpayers don't want to shift from manual system to E-tax filing" got an average mean 3.90 and standard deviation of 1.123. In addition, the third item which asks the opinion of ERCA's employees about the attitude of taxpayer's, obtained 3.33 average mean and 1.390 standard deviation, showing that the respondents feel that taxpayers attitude is not as good as they expected towards e-tax.

Lastly, respondents thought were measured regarding the efficiency and effectiveness of e-tax in ERCA. The respondents agreed, average mean 3.14 and standard deviation 1.472 that the system is not as effective and efficient as it should be in the organization.

4.5 Tax compliance

The following table is about respondents view on tax compliance. To find whether ERCA helps

its taxpayers to be tax compliant four general questions were asked.

Table 4.5 Response on tax compliance

No	Item	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	SD
		F	%	F	%	F	%	F	%	F	%			
1	ERCA facilitate for taxpayers to report & pay tax voluntarily.	2	4.1	5	10.2	1	2.0	17	34.7	24	49.0	49	4.14	1.137
2	Low level of tax evasion and avoidance exists because of ERCA's strong tax control.	8	16.3	15	30.6	3	6.1	13	26.5	10	20.4	49	3.04	.882
3	ERCA assists its taxpayers in reporting tax timely & accurately.	2	4.1	9	18.4	2	4.1	14	28.6	22	44.9	49	3.92	1.272
4	ERCA's law & regulation are easy to follow.	-	-	5	10.2	-	-	25	51.0	19	38.8	49	4.18	1.443

Source: Own Survey Data, 2017

In the first question respondents were asked if ERCA facilitate voluntary reporting and payment

of tax and the response was 49% in strong agreement, 34.7% agreed, which make the average

mean 4.14 and the standard deviation 1.137. This shows that the tax office let taxpayer's to be

compliant by appreciating voluntary tax reporting.

The second question was if tax evasion and avoidance is low because of strong tax control of the

organization and the response was neutral. While 30.6% disagreed and 26.5% agreed, with the

average mean 3.04 and the standard deviation 0.882, it can be said that it's fair.

The third question was about if ERCA assists its taxpayers in reporting tax timely & accurately.

The response was 44.9% in strong agreement and 28.6% agreed which make the average mean

3.92 and the standard deviation 1.272 which shows that the tax office endeavor to help taxpayers in being timely and accurate while reporting.

In the forth question respondents were asked whether ERCA's law and regulations are easy to follow by taxpayers and 51% agree and 38.8% strongly agree which makes the average mean 4.18 and the standard deviation 1.443. It's clear to see that the tax office is helping taxpayer's to be tax compliant by making it's law and regulations easy to understand and follow.

4.6 Correlation Analysis

Correlation test (Pearson correlation) is used to examine relationships between two or more variables. It measures the strength and direction of a relationship between variables. The correlation coefficient of e-tax filing system and tax compliance was computed and presented below:

Table 4.6 Correlation analysis

		Etax	Tax_Com
Etax	Pearson Correlation	1	.923**
	Sig. (2-tailed)		.000
	N	49	49
Tax_Com	Pearson Correlation	.923**	1
	Sig. (2-tailed)	.000	
	N	49	49

**. Correlation is significant at the 0.01 level (2tailed).

The result on the above table shows that e-tax filing system (r=0.923, p<0.01) is positively and significantly related with tax compliance. This means e-tax filing system can bring corresponding change in tax compliance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with summary of major findings of the study, conclusions and recommendations of possible solutions for the problems identified.

5.1. SUMMARY OF MAJOR FINDINGS

The main findings can be summarized as follows:-

➢ The demographic result of the study indicates that in terms of gender female were the majority that is 65.3% and regarding respondent's age range, 36.7% of the respondents fall under the age range of 25-30, which implies majority of the employees are below 30 years. The study also indicates the educational background of the respondents. Accordingly, 53% of the total respondents were diploma holders which indicates majority of the employees are fairly educated.

➢ The respondents were asked about the current e-tax filing system practices in ERCA. The results show that e-tax filing system is easy to learn, stable and reliable. It has a strong security and the website provides guideline. In addition, results depicts that the organization's regulations are not as appealing as they should be and taxpayer's awareness about the system is very low.

➢ The descriptive statistics result of the study has shown that employees of ERCA believe that e-tax is beneficial. The average mean of items presented under benefit assessing questions prove that e-tax is benefiting ERCA in data handling, accuracy, job performance and tax compliance. In addition, challenges ERCA face in conducting e-tax includes taxpayer's attitude, taxpayers fault and governmental problems.

> The Pearson's Product Moment Correlation Coefficient as presented in table 4.6, shows a positive and statistically significant relationship between e-tax and tax compliance.

5.2. CONCLUSION

In the present world new technologies are introduced very fast in all fields. New technology has been gifted to tax payers for filing their tax returns through online. The main purpose of this study was to show an insight about the current e-tax filing system practices by addressing the benefit, challenges and relation with tax compliance in Ethiopian Revenues and Customs Authority (ERCA).

The current e-tax filing practices, based on the employees' assessment, are stable & reliable. All necessary equipments help employees to function smoothly, the organization is trying to create awareness of the system and the employees are well trained by ERCA to do e-tax tasks.

As literatures stated, the study also shows e-tax filing system benefits, mainly, making data filing easier, making data storage safer, making data loss less risky, reduces time spent on auditing taxpayer's data, faster and more accurate with less error, decrease penalty, decrease corruption, decrease work load, make tasks more effective and efficient, gives greater control over tax declaration, affect tax evasion controlling positively, improved control over tax revenue, makes taxpayers tax compliant by facilitating timely report and helping them to abide to the law, reduces ERCA's operational cost and also improves ERCA administration.

The survey result also shows various e-tax filing system implementation challenges in ERCA. Main challenges identified includes taxpayers forgetting their password, incorrect data encoding by new e-tax users, e-tax users still visiting tax offices, slow and interrupted internet system,

power disruption, lack of management support, lack of IT staff members, taxpayers not trusting the system and not being willing to shift from the manual system.

The Pearson correlation depicts the relationship of e-tax filing system and tax compliance as positive and significant, which can be concluded that e-tax filing system has a positive and affirmative relationship with tax compliance. Thus, e-tax filing system improves tax compliance of ERCA.

5.3. RECOMMENDATIONS

Depending on findings, the researcher has forwarded the following recommendations for ERCA.

➢ ERCA should increase the quality of the system. Formulation of information-related laws, enhancement of people's concept regarding information security and privacy should be constructed.

➢ The organization should provide not only electronically filing system but also electronically payment method so that taxpayers who use e-tax filing can pay electronically without visiting tax offices.

➢ ERCA should enhance internet connectivity. This can be done by enterprise collaboration with Ethio-telecom.

➢ ERCA should manage power interruption by using other options like generator and backups so that online users won't miss their data while using e-tax.

➢ ERCA's management should support its employees specially those who are engaged in e-tax filing tasks so that the system becomes more effective and efficient. In addition, ERCA should hire and train more IT staff members to support e-tax filing system.

- ERCA's regulations should be encouraging and stimulating so that taxpayers shift from manual to e-tax filing system.

- The tax authority should step up to its duty of promoting awareness. The awareness should not be about penalties alone but also benefits of e-tax filing. This could be done by printing magazines, giving trainings and advertising the features of e-tax filing system.

- Customer surveys should be introduced to find out the view of taxpayers and obtain regular feedbacks on e-tax. This would help in identifying areas of weaknesses so as to devise means for improvement.

- Effective incentives motivate taxpayers. Therefore, ERCA should arrange new or different incentives to convert e-filing holdouts.

5.4. Direction for further studies

It is highly recommended for further researches to study in depth about the effect of e-tax filing system in Ethiopian tax system and examine different factors which affect the implementation of the system. In addition, the researcher recommends future researches to expand the scope to cover other branch offices of ERCA for better understanding of e-tax filing system throughout Ethiopia.

References

Alba J, Lynch J, Weitz B, Janiszewski C, Lutz R, Sawyer A, Wood S (1997). Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces. J. Mark. 61(3): 38-53.

Al-Kibsi, G., De Boer, K., Mourshed, M. and Rea, P.R. (2001) Putting Citizens Online, Not In-line, The McKinsey Quarterly, 2.

Anna & Yusniza, 2009). Adoption of tax e-tax filing: A conceptual paper, Faculty of Business and Accountancy, University of Malaya, 50603, Kuala Lumpur, Malaysia.

Berhan, B A and G P. Jenkins (2005), The high costs of controlling GST and VAT evasion", Vol. 53, no 3

Bloomquist, K. (2006). An overview of some recent IRS research on taxpayer compliance behavior. In Further Global Challenges in Tax Administration, M. McKerchar and M. Walpole, (Eds.) Birmingham, UK: Fiscal Publications.

Chanchal C, Vipin J, and Vinayak G (2013). A study of satisfaction level and awareness of tax payers towards e-filing of income tax return – with reference to Moradabad city

Chang I, Li Y, Hung W, Hung H (2005). An empirical study on the impact of quality antecedents on taxpayers' acceptance of Internet tax filing systems. Gov. Inf. Q. 22(3): 389-410.

Chatama, Y. J. (2013). The impact of ICT on Taxation: the case of Large Taxpayer Department of Tanzania Revenue Authority. The Information Society, 18:101–112, 2002

Clarke, D. (2001). E-governance in Ghana: National Information Clearing House. Montego Bay, Jamaica, International Institute for Communication and Development

Cobham, A. (2010) Tax evasion, tax avoidance and development finance. Oxford University.

Coolidge, J. & Yılmaz, F., (2014). Does e-tax filing reduce Tax Compliance Costs, s.l.: World Bank Group.

Creswel, J. W. (2004). Researh Design: Qualitative, Quantitative and Mixed Methods Approaches;2nd ed. London: Sage publications.

D'Arcy B. (2008). The Impact of Electronic Tax Return Filing on Tax Compliance

David Wasao (2014) The Effect of online tax system on tax compliance among small taxpayers in East of Nairobi tax district

Dwilson, S.D. (2014) Disadvantages of Electronic Filing. [Online] Available from: http://www.finance.zacks.com/disadvantage-electronic-filing-7553.html [Accessed: 15-10-2014].

Fortune, (2013, February 22), Ethiopia develops an e-tax filing system, pp 2-5

Fortune, (2015, August), Electronic payment system to move forward in Tax Authority, pp 3-6

Gayathri P, Kavitha Jayakumar (2013), A Study on Tax Payer's Perception Towards E-Filing of Income Tax Returns with Reference to Teachers in Bengaluru East, Karnataka

Gebi lelemat #47 (2012). Ethiopian Revenues and Customs Authority Magazine,

Gebre,W (2006), Tax Accounting System of Ethiopia, 2nd edition.

Geetha R., Sekar M. (2012) E-Filing of Income Tax: Awareness and Satisfaction level of individual Tax payers in Coimbatore city, India

Goolsbee Austan (2002), The Turbo Tax Revolution? Evaluating the Ability of Technology to Solve the Tax Complexity Dilemma, University of Chicago

Hoffman DL, Novak TP, Chatterjee P (1995). Commercial Scenarios for the Web: Opportunities and Challenges. J. Comput. Mediated Commun. 1(3): 58-62.

Harrison Mwangi Muturi, Nahashon Kiarie (2015). Effects of Online tax system on tax compliance among small taxpayers in Meru county,

Hwang, Jin Young (2000). Tax enforcement and Restatements, Master Accounting, Tilburg University

Internal Revenue Services (1996) The Determination of Individual Income Tax Compliance: Estimating the Impacts of Tax Policy, Enforcement, and IRS Responsiveness. Washington DC.

Joanna N (2014), Implementing electronic tax filing and payment in Malaysia

Kamau E. ,Nyakang'o, Karingi, S. A , Wanjala, A. A. Mwangi, M. Muhoro, and J. Nyamunga (2014): "Fiscal Architecture and Revenue Capacity in Kenya," KIPPRA Discussion Paper DP/45/2004, Nairobi, Kenya.

Kavangah, S. (Ed.). (2007). Revolutionizing Constituent Relationship: The Promise of CRM Systems for the Public Sector. Chicago: Government Finance Officers Association.

Korpela, M., H. A. Soriyan, et al. (2000). Made-in-Nigeria Systems Development Methodologies: An Action Research Project in the Health Sector. Information Technology in Context: Studies from the Perspectives of Developing Countries. C. Avgerou and G. Walsham. Burlington, VT

Layton, T, (2007). Information Security: Design, Implementation, Measurement, and Compliance. Boca Raton, FL: Auerbach publications

Lee, Kun Chang, Melih Kirlidog, Sangjae Lee, Gyoo Gun Lim (2008). User evaluations of tax filing web sites: A comparative study of South Korea and Turkey

Lymer, A., and Oats, L. (2009). Taxation: Policy and Practice. 16th ed. Birmin Fiscal Publications.

Makanga S. (2010) The adoption of technology as a strategic tool for enhancing tax compliance in Kenya

Mazur, M. & Plumley, A. (2007). Understanding the tax gap. National Tax Journal 60, 569–576.

McCarten, W. (2014). Focusing on the Few: The Role of Large Taxpayer Units in the Revenue Strategies of Developing Countries. Retrieved November 10, 2014,

Merima A, Odd-Helge F, Ingrid Hoem S (2014) Factors affecting tax compliant attitude in Africa: Evidence from Kenya, Tanzania, Uganda and South Africa

Misrak Tesfay (2008): Ethiopian tax accounting: Theory and practice

Mongwaketse PB (2015). Perceived effects of an electronic filing system on tax compliance in a district municipality, South Africa

Moyi, E. and Ronge, E. (2006). Taxation and Tax Modernization in Kenya: A Diagnosis of Performance and Options for Further Reform, Institute of Economic Affairs, Kenya

Muita, E.W. (2011) Factors that Influence Adoption and Use of E-tax filing System of Kenya Revenue Authority Among The Large Taxpayers, Unpublished MBA Project submitted to the JKUAT Nairobi Central Business District Campus

Mutula, S. M. (2012). "E-Government's Role in Poverty Alleviation: Case Study of South Africa" In R. Lekoko, & L. Semali (Eds.), Cases on Developing Countries and ICT Integration: Rural Community Development (pp. 104-122). doi:10.4018/978-1-60960-117-1.ch011

Naibei, K. I. & Siringi, E. M. (2011) "Impact of Electronic Tax Registers on VAT Compliance: A Study of Private Business Firms"

Nero, M. & Amrizah, K. 2005. Tax literacy and tax awareness of salaried individuals in Sabah and Sarawak. National Accounting Research Journal 3(5): 71-89.

OECD E Government Task Force. (2003). The E Government. OEDCD Journal on Budgeting, Vol.2 No 2.

OECD E Government Task Force. (2014). The E Government Imperative. OEDCD Journal on Budgeting, Vol.3 No 1.

Samuel E. (2015). The Practice, Challenges, and Prospects of e-Government: The case of Ethiopian Revenue and Customs Authority (ERCA) Large Taxpayers Office (LTO)

Sweeney JC, Soutar GN, Johnson LW (1999). The Role of Perceived Risk in the Quality-Value Relationship: A Study in a Retail Environment. J. Retailing 75(1): 771-705.

Tadros, F (2009), „Introducing the Value-Added Tax: Considerations for implementation", In practice Business Taxation Notes, No.4

Tamami Matsuka (2006). An Analysis of the Effect of Electronic Filing on Individual Income Tax Compliance, A Thesis submitted to the Graduate School of Arts and Sciences at Georgetown University

Thomson, R (2008). Strengthening Risk Management and Audit Strategies to Improve Compliance", Paper presented at Caribbean Organization of Tax Administration (COTA) General Assembly, July 2008, CARTAC, Belize

Waweru F. (2013). Automating Public Financial Management in Developing Countries, Faculty Research Working Paper Series, John F. Kennedy School of Government, Harvard University, Cambridge, MA.

World Bank. (2014). Doing Business 2014. Retrieved November 10, 2014, from http://www.doingbusiness.org/reports

Yousif N.Y. (2010). A web-based electronic filing system using conversion of image file to text file approach, MBA Project submitted to the University of Malaya Kuala Lumpur

St. Mary's University
School of Graduate Studies
Department of Accounting and Finance
Questionnaire to Be Filled By Employees of ERCA

Dear Participant,

I am Ruta Yoseph, MBA student in St. Mary's University and this questionnaire is set up to collect primary data for thesis entitled **_"Assessment of Electronic Tax Filing System in Selected Branch Offices of Ethiopian Revenues and Customs Authority (ERCA)"._** The research is conducted in partial fulfillment of the requirement for MBA in Accounting and Finance department.

Your participation in giving reliable information is important for the success of this study and it will be a great contribution if you may complete all the items covered in the questionnaire. I respectfully request your kind cooperation in answering the questions as clearly as possible. I would like to assure you that the information you provide will be used for academic purpose only and all responses will be treated in strict confidentiality.

Note
- No need to write your name
- Please put "√" mark in the box to the point which highly reflect your idea;

Thank you very much, in advance, for your sincere cooperation.

For any comment and questions, please contact me: Tel- (+251910215442)

Email -(rutayos@yahoo.com)

Ruta Yoseph

Part I: **General Information**:

1. Sex : Male ☐   Female ☐

2. Age : Under 25 ☐   25-30 ☐   31-35 ☐
    36-40 ☐   41-45 ☐   above 45 ☐

3. Education level : High school ☐   University bachelor degree ☐
    College diploma ☐   Master's Degree or above ☐

4. Please indicate your current position: _____

5. Year of service in ERCA: Below 2 years ☐ 2-5 year ☐ 5-10 year ☐
    11-15 years ☐ above 15 years ☐

The following questions are presented on a five point Likert scale.

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

Part II: **E-tax filing system practice**

No	Descriptions	5	4	3	2	1
1	E-tax filing system is easy to learn and use by staff members.					
2	E-tax filing system is stable and reliable.					
3	E-tax filing has a strong security system to protect taxpayer's information					
4	ERCA's regulations are inviting for tax payers to use E-tax filing.					
5	ERCA is doing its best to create awareness about E-tax filing.					
6	The branch office's taxpayers are well aware of E-tax filing.					
7	There are enough computers and necessary materials to do E-tax filing related tasks in ERCA.					
8	The website offers guidelines which help users and staffs.					
9	I am well trained by ERCA to do E-tax filing related tasks.					

Part III: E-tax filing Benefits

No	Descriptions	5	4	3	2	1
1	E-tax filing makes it easier for data filing.					
2	E-tax filing system makes data storage safer.					
3	Data loss is less risky in E-tax filing than manual.					
4	E-tax filing reduces time spent on auditing taxpayer's data.					
5	E-tax filing is fast and accurate than the manual system.					
6	Taxpayers' make less error in using E-tax filing than manual.					
7	After the introduction of E-tax filing penalty has decreased.					
8	After the introduction of E-tax filing corruption has decreased.					
9	E-tax filing has decreased my work load.					
10	E-tax filing allows me to do my job more effectively and efficiently.					
11	E-tax filing gives greater control over tax declaration.					
12	E-tax filing has a positive effect on controlling tax evasion.					
13	E-tax filing has improved control over tax revenue.					
14	E-tax improves tax compliance because taxpayers report timely.					
15	E-tax filing users follow procedures & regulations correctly than manual users.					
16	E-tax filing users calculate tax more accurately than manual users.					
17	E-tax filing users comply with law than manual users.					
18	E-tax filing has reduced ERCA's operational cost.					
19	E-tax filing has improved the administration of ERCA.					
20	E-tax filing is much better compared to manual for my job performance.					
21	Overall, I'm satisfied by using E-tax filing at my work place.					

Part IV: E-tax filing Challenges

No	Descriptions	5	4	3	2	1
1	E-tax filing requires a lot of mental effort.					
2	E-tax filing is difficult to operate.					
3	E-tax filing is less effective because taxpayers forget their password.					
4	Taxpayer's incorrect data encoding makes E-tax filing less effective.					
5	Taxpayers make error while using E-tax filing than manual.					
6	Taxpayers still need to come to office even if they use E-tax.					
7	Internet system makes it difficult to operate E-tax filing.					
8	Power interruption makes E-tax filing less effective.					
9	The work load is the same after E-tax filing is introduced.					
10	There is lack of management support while implementing E-tax filing.					
11	There is lack of good IT staff members who facilitate E-tax filing.					
12	Taxpayers don't trust E-tax filing system.					
13	Taxpayers don't want to shift from manual system to E-tax filing.					
14	Taxpayers attitude is not as good as I expected towards E-tax filing.					
15	In general, E-tax filing is not efficient and effective as it should be in ERCA.					

Part V: Tax compliance

No	Descriptions	5	4	3	2	1
1	ERCA facilitate for taxpayers to report & pay tax voluntarily.					
2	Low level of tax evasion and avoidance exists because of ERCA's strong tax control.					
3	ERCA assists its taxpayers in reporting tax timely & accurately.					
4	ERCA's law & regulation are easy to follow.					

Thank you!

APPENDIX 2. Correlation output

Correlation

		Etax	Tax_Com
Etax	Pearson Correlation	1	.923**
	Sig. (2-tailed)		.000
	N	49	49
Tax_Com	Pearson Correlation	.923**	1
	Sig. (2-tailed)	.000	
	N	49	49

**. Correlation is significant at the 0.01 level (2-tailed).