

**CHALLENGES AND OPPORTUNITIES OF ADOPTING
ELECTRONIC TAX PAYMENT SYSTEM IN ETHIOPIAN
MINISTRY OF REVENUE**

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**A THESIS SUBMITTED TO ST.MARY'S UNIVERSITY, SCHOOL OF
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FACULTY OF BUSINESS**

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DECLARATION

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

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ENDORSEMENT

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List of Abbreviations and Acronyms

AICPA- American Institution of Public Accountants

CBE- Commercial Bank of Ethiopia

CPA- Certified Public Accountants

EBM- Electronic Billing Machine

ERCA- Ethiopian Revenue and Customs Authority

ICT- Information and Communication Technology

IDT- Innovation Diffusion Theory

LTO- Large Taxpayers branch Office

MOF- Ministry of Finance

MOR- Ministry of Revenue

NBE- National Bank of Ethiopia

PBC- Perceived Behavioral Control

PEOU- Perceived Ease of Use

PU- Perceived Usefulness

RIT- Real Time Information

RRA- Rwanda Revenue Authority

SPSS- Statistical Package for Social Science

TAM- Technology Acceptance Model

TPB- Theory of Planned Behavior

TRA- Theory of Reasoned Action

UTUAT- Unified Theory of Acceptance and Use of Technology Model

Abstract

This research focused on assessing the challenges and opportunities of adopting the E-tax Payment system in Ethiopian Ministry of Revenue (MOR). The study has employed a descriptive research design. In order to gather the required data questionnaire have been used. The study was conducted based on the data gathered from 49 employees of MOR and 213 taxpayers. Responses of survey data were analyzed using SPSS (V.20) software. The result of the study indicated that incorrect data entering into the system, didn't get technical support on time, low level of internet connection, network failures and frequent power interruptions were found as a major challenges of adopting e-tax payment system. However, the cost of IT equipment and cost of the internet was not found as a barrier. The study also identified basic benefits that MOR and taxpayers could attain from the adoption of E-tax payment system such as speed up tax collection process, reduce transaction cost, improve transaction speed, provide timely information on payment, minimizes the risk of cash theft and embezzlement, increases operational efficiency, and create better relationship between taxpayers and tax office. The study recommends that MOR to facilitate proper and continuous training for both employees and taxpayers, create deep awareness about e-tax payment system, MOR should hire more qualified IT staff members, also MOR should work together with other concerned bodies such as Ethio-telecom, Ethiopian electric utility and so on to solve the challenges that hinders e-tax system.

Keywords: e-tax payment, taxpayers

CHAPTER ONE

INTRODUCTION

This research contains issues concerning challenges and opportunities of adopting electronic tax payment system in Ethiopian Ministry of Revenue. This chapter presents information on the background of the study, statement of the problem, objective of the study, significance, scope and limitation of the study.

1.1 Background of the study

Government's usage of information technologies in their activity facilitates better service to citizens. Technologies can help the government to supply best services, to make more efficient management, to reduce corruption and to be more transparent, greater convenience, increased revenue and reduced costs (Taylor, 2003). For delivery of basic facilities and other social services to citizens government spends huge amounts of money for expenditures. To fund those expenditures governments collect tax revenue from citizens through taxation. Taxation is one of the most important elements in managing national income in both developed and developing countries (Lymer & Oats, 2009). Therefore, nowadays to collect this tax from taxpayers governments modernize the payment system by using technology like electronic payment systems.

The electronic payment system allows taxpayers to pay expected taxes via online tax service without visiting a financial institution in person. The system allows taxpayers to transfer payments from an account using internet banking, credit card, mobile banking and so on. After taxpayers finish electronic tax filing, the tax system automatically leads them to the payment screen, where payment is made by entering the bank name and account number and password (Okunogbe & Pouliqen, 2018). Online tax systems are rapidly replacing paper-based tax reporting and paying systems. The online tax system has many advantages than traditional payment methods or paper based tax filing and paying, these systems assure faster process, lower costs, reduce errors and increased efficiency (Pant et al., 2011). Electronic tax filing or e-filing is

a system for declaring tax documents to a revenue service electronically often without the need to submit any paper documents to the tax authority (Lukwata, 2011).

According to Anuar & Radiah, (2010) e-filing enables taxpayers to file their tax declaration electronically while e-payment offers an alternative payment channel for taxpayers to pay their taxes online. Both systems are helping taxpayers to meet their tax obligation hassle free and encourage tax compliance and accordingly increase the tax collection amount. An increase in tax collection amount will contribute to the increment in Government's revenue that is used to fund government expenditures and facilitate better public service.

E-payment systems can provide many benefits to taxpayers, tax consultant and tax administrations, like, convenience e-payment can be accessible at any time 24 hours a day, The system reduces time and effort invested in tax payment, safe and secure payment option, reduced transaction cost, increased customer satisfaction, speedy revenue collections, reduced cash handling costs and provides timely information on payments (Edwards, 2008) with the above benefits of e-tax payment the study assesses challenges and opportunities of e-tax payment system in Ethiopian Ministry of Revenue.

E-tax payment in Ethiopia

Ethiopian Ministry of Revenue (MOR) is committed to provide the best services to taxpayers by making tax compliance easy and convenient. Today's Ministry of Revenue (MOR) then called Ethiopian Revenue and Customs Authority (ERCA) introduced E-tax filing in 2011. Electronic tax Filing (e-tax filing) makes the filing process easier for taxpayers and cuts the time needed for data entry. The purpose of the E-filing system is to transfer business transactions of taxpayers to the server of the Ministry of Revenue (MOR). E-filing system is for the purpose of increasing compliance of taxpayers (Beris, 2017). Also in 2019 the Ministry of Revenue launched an e-tax payment service to help taxpayers use the internet for tax payment and access to clearing services.

According to tax administration proclamation 983/2016 article 111 No. 2 "any taxpayer must start to use the E-filing system and declare taxes by the system". With the aim of modernizing its service MOR operationalize e-payment system. To implement e-payment system MOR collaborated only with Commercial Bank of Ethiopia (CBE). According to Commercial bank of

Ethiopia and Ministry of Revenue conducted training that yield on December 24, 2019 CBE and MOR establish a billing system called DERASH-T24. Derash is an electronic payment system that allows a taxpayer to pay tax from CBE branch or using internet banking. Derash holds tax payment information like the type of tax that taxpayer will pay, the amount of money that the taxpayer will pay, tax identification number of taxpayer (TIN). The system will reduce time and effort invested in tax payment. To register for e-payment system taxpayer need to have CBE account then apply for the service with write formal letter to CBE account holding branch with detail description about account management then fill internet banking application forms after that the branch provides User ID, memorable word and Token (one time password) for tax payer business organization. For one taxpayer business organization there will be two types of users that have different user roles: the Inputter (the one who fills the transaction) and Authorizer (Signatory). To activate and use the service the taxpayer should use a computer or smartphone with an internet connection. For the first time taxpayers can pay at branch or at anywhere else.

The system works after the taxpayer declares tax using an e-filing system, when the taxpayer does e-filing he or she gets a document reference number. Tax payer (inputter) initiates tax payment using the document reference number then the system brings the relevant tax information and the inputter verifies the amount and other information are correct and the taxpayer (Authorizer) approves it. After the taxpayer does the inputting and authorizing process National Bank of Ethiopia (NBE) will give authorization to tax transactions so the taxpayer should view and follow NBE status of paid tax transaction. There are three statuses given by NBE those are 1) WACK: Waiting for NBE acknowledgement 2) ACK: Accepted by NBE and 3) RJCT: Rejected by NBE. Transactions can be rejected by NBE for any reason. If the transactions rejected by NBE, automatically reversed by Derash T24 (CBE) and credited back to the taxpayer account then Derash updates the transaction status from "paid" to "unpaid" status. So taxpayers re-do the transaction until accepted by NBE. After paying the tax MOR send receipts to taxpayers through company's official e-mail address with in short period of time. Finally, they inform that future training will be hailed by MOR's staff members.

The e-payment system excludes employment income tax and pension payable. The reason that employment income tax excluded is because of the payment transfer to account of Addis Ababa city government and pension payable transfer to account of private organizations pension

contribution agency. But other tax types are included in the e-payment system because payments transfer to NBE account. With mentioning the above e-tax payment system this paper assesses the challenge and opportunities of adopting e-tax payment System in Ethiopian Ministry of Revenue.

1.2 Statement of the problem

Tax is a major source of government revenue. This revenue is used to fund public expenditures like roads, power, public services (hospitals, school), and other public infrastructures have favorable results on all families, business enterprises, industries and the general public (Beris, 2017). Tax revenue collection is one of the most important sources of government income. According to Misirak, (2008) Taxation is a system of raising revenue by the government through tax. It is a system of gathering funds by a government from tax sources to finance its operation.

Recently different e-government services have been proposed by the public sector to citizens. E-government services are defined as the selection, implementation, and use of information and communication technologies in government to provide better public services to the citizens (Olaoye & Atilola, 2018). The online tax services are part of e-government internet based activities so it needs basic knowledge of the usage of the internet (Luna-Reyes, Gil-Garcia, & Romero, 2012).

E-tax payment is a facility provided to taxpayers to make their tax obligation using an electronic payment order system that replaces the paper-based Cash Payment Order (CPO). In the past few years, the Ministry of Revenue has been implementing electronic tax reporting and filing of documents with large taxpayers and since end of March 2019 the Ministry of Revenues started operationalizing the electronic payment system with the intention of modernizing its services.

In Ethiopia some studies have been conducted to assess the implementation of E-tax filing system like Ruta (2017) has done study about assessment of electronic tax filing system in selected branch offices of Ethiopian Revenues and Customs Authority (ERCA) , Dagnachew, (2018) studies challenges and opportunities of adopting e-tax system in the case of ERCA (LTO), and also Abera, (2019) studied the influence of electronic tax filing system on tax compliance: the case of large taxpayers' branch office (LTO)

Therefore various studies have been conducted to assess adaptation and implementation of the E-tax filing system in Ethiopia. But since electronic tax payment is a new system for the country and as to the researcher's best knowledge there is no empirical study in the area of electronic payment (e-payment), this study is conducted to fill this gap.

1.3 Research questions

To achieve the studies objective the following key research questions are set

- What is the current situation of the E-tax payment system in the Ministry of Revenue LTO branch?
- What are the benefits of e-tax payment system for MOR?
- What are the challenges that MOR faces while adopting the E-tax Payment system?
- What are the benefits of an e-tax payment system from the viewpoint of taxpayers?
- What are the challenges that taxpayers face while using the e-tax payment system?

1.4 Objective of the study

1.4.1 General objective

- To assess the challenges and opportunities of adopting the E-tax Payment system in the Ministry of Revenue.

1.4.2 Specific objectives

- To assess current practice of the E-tax payment system in the Ministry of Revenue LTO branch.
- To identify the benefit that the Ministry of Revenue gets by adopting an E-tax payment system.
- To identify challenges that the Ministry of Revenue suffers by adopting an E-tax payment system.
- To identify the benefit that taxpayers get by adopting an E-tax payment system.
- To identify challenges that taxpayers suffer by adopting an E-tax payment system.

1.5 Significance of the Study

This research paper is expected to provide empirical evidence on the challenges and opportunities of e-tax payment system in Ethiopian MOR. The study will be helpful for different stakeholders, it contributes as an indicator to MOF (Ministry of finance) that make policies about e-tax payment system and to MOR that provide directives for policies that are provide by MOF and announced the system and collect tax through e-payment with useful information to develop its service delivery system with quality training to MOR employees and to taxpayers and also to facilitate better directives and issue to the commercial bank of Ethiopia and to work together with other banks too for implementing e-tax payment system in a better and suitable way to taxpayers and tax authority. Moreover, it may also be useful to the bank management to make strategic decisions to provide satisfactory and quality service to taxpayers.

Taxpayers are also expected to get benefit from this research. After reading this thesis they will have a good understanding about the new e-tax payment system. Finally the research will also contribute useful thoughts to future researchers because e-tax payment is a new issue for the country, there is a lack of research in the area of e-tax payment system thus future researchers are going to use this research paper.

1.6 Scope of the Study

The scope of the study is limited in assessing benefits and challenging of e tax payment system in Ministry of Revenue (MOR) Large Taxpayers (LTO) branch Office, employees and taxpayers of the branch other MOR branches are out of the scope of this thesis because currently only LTO branch use e-tax payment system. This study also assesses current practice of e-tax payment system in MOR LTO branch, benefits and challenges of the system as per both employees and taxpayers perception and coordination of Commercial Bank of Ethiopia and Ministry of Revenue in implementation of e-tax payment system.

1.7 Limitation of the Study

The focus of this study is on the assessment of the opportunities and challenges for the adoption of e-tax payment in Ethiopian Ministry of Revenue. Due to the newness of the e-tax payment concept and technology in Ethiopia, it was very difficult to get local written documents. Therefore unavailability of local study to support the topic empirically was a major challenge of the study.

The other limitation to the study was non-response. The study relied much on the responses of questionnaires that were filled out and responded by the taxpayers and staff members of the MOR LTO branch. Response get from taxpayers was difficult because they were available at the tax office for a limited period of time therefore it takes more time to get sufficient data.

1.8 Organization of the Study

The study is presented in five chapters. The first chapter which is the introduction covers the background of the study, problem statement, research questions, and objectives of the study, significance of the study, as well as the scope and limitations of the study. This is followed by chapter two which reviewed the theoretical and empirical literature on the subject matter. Chapter three looked at the methodology of the research which includes the research design, the research approach, target population, sample and sampling technique. It also considered methods of data collection and sources of data, methods of data analysis. The fourth chapter concentrated on the major findings from the investigation and discusses them. Finally, chapter five presents summary, conclusions and recommendations based on the study findings.

CHAPTER TWO

LITERATURE REVIEW

This chapter contains theoretical and empirical literature. Theoretical literature deals with concepts and principles of taxation. Linked empirical discoveries present the benefits and challenges of e-tax payment system.

2.1 Theoretical literature

The theoretical literature part of the study covered the definition of taxation, objective of taxation, principles of taxation, technology adoption theories and models and benefits and challenges of e-tax payment system.

2.1.1 Definition of Taxation

Tax is simply defined as a sum of money that is required from individuals and business organizations to achieve economic, political, social and financial goals (Al Baajetal., 2018). Tax revenue is currently the only reliable and justifiable source of government income not like other sources which include debt, aid and fees that are not reliable as they are unpredictable and unsustainable sources of revenue (Akalu, 2016). Adimassu & Jerene, (2016) noted that in previous years taxes purpose is only as a source of government income, but nowadays taxes have other benefits like taxes help in reducing the inequalities between the rich and the poor, taxes help to discourage usage of harmful and luxury products. Tax also plays a major role in encouraging economic growth and reducing poverty. And also taxation is the important element in managing national income.

2.1.2 Objective of taxation

The main purpose of taxation is to generate sufficient revenue to finance public sector activities in an affordable way (Bird & Zolt, 2003). Taxation is a system that controls factors in the level of the achievement of the goals of tax policy. And the tax system is designed to meet the needs

and interest of the society in fulfillment of the political, social, economic and financial conditions of the state and society (Palan et al., 2013).

Adimassu & Jerene (2016); Akalu (2016); Engida & Baisa (2014); Ergo (2018) and Soyode & Kajola (2006) state that a brief discussion on the objectives of taxation as follows

Revenue Generation: The main objective of a modern tax system is rising revenue to support government on finance public sector expenditure. This income is required to meet the expenditure which is providing goods and services for members of the society which cannot afford the price of goods and services and for the federal and state governments to provide services like health services and education (Akalu, 2016).

Redistribution of Income and Wealth: taxation has to be based on ability to pay and redistribution of income and wealth in order to decrease poverty and support social benefit. Taxation can be used as an economic regulator to increase economic stability and sustainable growth. Government also has responsibility for fighting inflation, unemployment and creating a better infrastructure for business. A tax system is the best way of achieving this objective (Engida & Baisa, 2014).

Preventing consumption: Tax can be used to discourage consumption of harmful goods like alcohol and cigarettes. This is done to reduce external costs like health risks and pollution and also discourage luxury goods in order to reduce inequality (Ergo, 2018).

Coordination of Economic Objective: Coordination of various trade or economics have the objective of connecting different countries with a membership base or with other contracts to achieve the philosophy of the single market to provide free movement of goods and services between member states (Adimassu & Jerene 2016).

Provision of commonly used public services: to provide services like Internal security to protection of law and order by police and other security agencies, External security to defend external enemy by Army, Navy and Air Forces, and Establishment of infrastructure (Ergo, 2018).

Encouragement of exports: Governments have an intention of increasing foreign exchange requirements through export. To increase export government provide a certain tax exemption for

exporters and also encourage them with arranging a free trade zones and by making a two-sided and multilateral agreement (Soyode & Kajola, 2006)

Creation of employment opportunities: Countries might reduce unemployment in the country by giving tax concessions to small entrepreneurs and to other industries that create opportunities for large amounts of labor (Adimassu & Jerene 2016).

Reduction in regional imbalances: If there is regional disparity within the country, governments can use taxation to reduce such imbalance through tax exemptions and tax concessions to investors who made investment in underdeveloped regions (Akalu, 2016).

2.1.3 Principles of taxation

The American Institute of Certified Public Accountants (AICPA) publication in 2001 about guiding principles of good taxation notified that the taxation system is to be judged by the standards of equity, efficiency and administrative convenience. Tax system means the set of taxes that are used by a government therefore tax policy is a government program for setting taxes that means tax is the way a Country chooses to allocate tax burdens among its citizens (AICPA, 2001).

Adam Smith, (1776) the father of modern political economy has articulated four principles or canons of taxation in his famous book "Wealth of Nations". These principles are still considered to be the starting point of public finance. Adam Smith's famous canons of taxation are: Canon of equality, Canon of certainty, Canon of economy and Canon of convenience that the tax should be included at the manner which is most appropriate for the taxpayer. The most famous four canons of taxation are:-

Canon of Equity: people should pay taxes in proportion to their incomes, the burden of taxation to be distributed according to the taxpayer's ability to pay as measured by the income earned and also this canon determines that tax that should be fair. This principle points to progressive taxation. A Progressive taxation states that the tax rate or percentage of taxation should increase with higher income and decrease with the lesser income it depends on the ability of each taxpayer. This canon tries to insure the objective of economic justice. It orders that the richer should pay more (Adimassu & Jerene, 2016).

The ability-to-pay principle is according to what they earn and taxpayers who have equal taxable capacity allow the same tax burden but on the other hand benefits principle is applied citizens pay taxes according to identifiable benefits each individual receives from government services. The benefit principle states that taxes should be paid according to the benefits received, that means the one who receive the greatest benefits should pay the most taxes but it is difficult to achieve in practice (Essays, 2018)

Canon of certainty: The Canon of certainty implies that taxpayers should have knowledge regarding the amount which taxpayer is to pay, where to pay and when to pay. Also taxpayers are clearly informed about why and how taxes are levied. If the taxpayer is certain about the amount of the tax and its time of payment taxpayers can adjust their income to expenditure. Certainty principle also helps to reduce misuse of power and corruption on tax authority and increase taxpayer's willingness of tax payment (Soyode and Kajola, 2006)

Certainty canon is that the taxpayer has to know how much tax he or she should pay, the time by when tax payable must be paid and the manner in which the tax must be paid. Therefore, the amount of tax to be paid should not be arbitrary or should be based on the rules and regulations of the tax authority. This canon is very relevant till now for the protection of taxpayers from unnecessary harassment, for tax authority to regulate good standard tax systems, and also reduce corruption in the tax administration and encourage good governance (Ermias, 2016).

Canon of convenience: taxes must be collected in a way and time suitable to the taxpayer. It is related to the ease of compliance to taxpayers. Canon of convenience takes into consideration the interest of taxpayers from the view of payment of tax that the method and timing of the tax should suit the taxpayer. Overall this canon illustrates how simple is the tax payment and collection process (Furnham, 2005).

Canon of Economy: The canon of economy implies that the expenses of collection of taxes should not be unreasonable or expensive. Considering that every tax has a cost of collection, this canon requires the revenue collected should exceed the costs of collection. Administration costs are kept as low as possible. Increase in administrative costs is a reason to decrease in revenue. It also guides that taxes which are too widespread and difficult to administer should not be imposed (Tentim, 2014).

Good tax revenue authorities develop their administration services by adopting appropriate principles that allow revenue authorities to ensure taxpayer compliance with tax laws and increase tax return (Ermias, 2016).

2.1.4 Technology adaptation Theories and Models

Researchers have developed many different models that determine the important factors that affect the attitude, intention, acceptance and use of new technologies. These models include various structures that evaluate the intention of the user's attitude towards it. In the following section those models will be discussed. These models are: 1. Technology Acceptance Model (TAM) 2. Theory of Reasoned Action (TRA) 3. Theory of Planned Behavior (TPB) 4. Innovation Diffusion Theory (IDT) 5. Unified Theory of Acceptance and Use of Technology Model (UTUAT).

2.1.4.1 Technology Acceptance Model (TAM)

Technology acceptance model is a theory that is most widely used to explain an individual's acceptance of an information system. Technology Acceptance Model (TAM) has been developed by Davis (1989). Davis Technology Acceptance Model (TAM) is the most popular research model to forecast usage and acceptance of new information systems and new technology by individual users.

The technology acceptance model (TAM) states that technological innovation adoption is affected by two factors as can be shown in figure 1 perceived usefulness (PU) and perceived ease of use (PEOU) is relevant in computer technology use behaviors. Davis defines perceived usefulness (PU) as the degree to which an individual believes that a specific system would increase job performance or have a relative advantage. Perceived ease of use (PEOU) can be defined as the degree to which the prospective user expects the target system to be free of effort (easy) or no complexity. According to the Technology Acceptance Model (TAM), ease of use and perceived usefulness are the most important determining factors of the actual system use. These two factors are influenced by external variables. The major external factors are political factors, cultural factors and social factors. Social factors include language, skills and facilitating conditions. Political factors are mainly the impact of using technology in political crises and

politics. Thus, the TAM model suggests that the innovation usage is indirectly affected by both PU and PEOU (Lee et al. 2011).

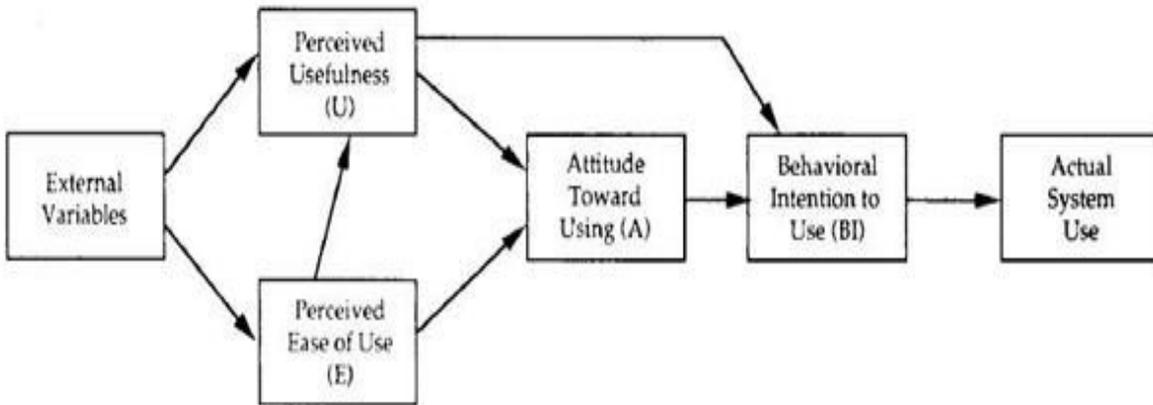


Figure 2. 1: Technology acceptance Model (TAM) Adopted from Davis (1989)

2.1.4.2 Theory of Reasoned Action (TRA)

In the model proposed by Fishbein and Ajzen (1975) suggested that a person's actual behavior is determined by the behavioral intention along with the belief and subjective norms that the person has for the behavior. Subjective norms defined as an individual opinion of others beliefs about his/her particular behavior, if an individual should perform a particular behavior or not. And attitude towards action is defined as a person's positive or negative attitude towards this performed behavior. Thus, TRA is a useful model that can explain the actual behavior of an individual usage of new technology. In 1989 Davis used the same model and linked it to the Technology acceptance Model (TAM).

2.1.4.3 Theory of Planned Behavior (TPB)

Theory of Planned Behavior is an adjoining to TRA, considers one additional concept that is Perceived Behavioral Control (PBC). Perceived behavioral control refers to the people's opinions of their ability to perform a given behavior in a controlled way. PBC is additionally influenced by control beliefs and perceived Power or perceived facilitation. Control beliefs refer to the actual presence of constituents that may help or hinder the execution of the behavior. Perceived power

indicates the power to have the resources that are required to use a specific system (Fishbein and Ajzen, 1975).

2.1.4.4 Innovation Diffusion Theory (IDT)

Rogers (2003) explained the innovation diffusion process as an uncertainty reduction process and he proposes aspects of innovations that help to reduce uncertainty about the innovation. Attributes of innovations include five characteristics of innovations those are Relative advantage as the degree to which an innovation is perceived as being better than the idea it succeeds, Compatibility is the level to which an innovation is perceived as consistent with the existing measurement, past experiences, and needs of potential adopters, Complexity is as the degree to which an innovation is perceived as somewhat difficult to understand and use, Trial ability is the degree to which an innovation may be experimented with on a limited basis & Observable as the degree to which the results of an innovation are visible to others and he also stated that individual's perceptions of these characteristics predict the rate of adoption of innovation and the relative speed with which an innovation is adopted by members of a social system.

2.1.4.5 Unified Theory of Acceptance and Use of Technology Model (UTUAT)

This model is based on the theories of individual acceptance that are made by Venkatesh and Davis, (2000), which includes the Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Model Combining the Technology Acceptance Model and Theory of Planned Behavior (C-TAM-TPB) and Innovation Diffusion Theory (IDT) Venkatesh (2000), UTUAT holds four key constructs those are, Performance expectancy as the degree to which an individual thinks that using the system will help him/her to attain gains in job performance, Effort Expectancy as the degree of ease related with the use of the system, Social Influence as the degree to which an individual perceives what important others thinks he or she should use the new system and Facilitating Conditions as the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system.

2.1.5 E-taxation

Electronic government (e-Government) is the approach of Information and Communication Technologies (ICTs) to government functions and procedures with the aim of increasing efficiency, transparency and citizen participation. E-Government uses technological communication devices to support the development of good governance. The appropriate approach of e-Government allows for higher levels of effectiveness and efficiency in governmental duties and responsibilities, e-government allows improvement of processes and procedures in the country, the system helps to increase the quality of public services, also improves the decision-making processes and allows for better communication among different governmental offices. The e-Government objective is to create a new strong connection between governments and citizens, a system that will become simpler and more participative for the public (Azmi & Bee, 2010).

E-government is a system that helps to modernize government activities and tax administration. Tax administration is an important application of e-government in both developing and developed countries. E-taxation is a process of tax related duties electronically like e-tax filing and e-tax payment and the main purpose is to increase tax revenue collection and create satisfactory service to taxpayers. The E-tax payment system was first in the U.S.A in 1986. In Australia electronic tax payment was introduced in 1987. In 1993, Canada started the usage of electronic tax payment. Other developed countries of the world such as Malaysia and Netherlands introduced electronic payment of tax to their taxpayers in 2009. In Africa, first Uganda introduced an electronic tax payment system in 2009, and then Egypt started in 2013. (Olaoye & Atilola, 2018) .In Ethiopia e-tax payment system was introduced in 2019 by the Ministry of Revenue (MOR).

According to Sifile et al. (2018) Electronic tax payment was introduced to increase revenue Generation and to be easily accessible to taxpayers. And Well-designed electronic tax systems can lower corruption by reducing face to face interactions.

2.1.6 Benefits of e-tax payment

The aim of any tax authority is to create a tax administration system that allows to collect required taxes at minimum cost. Al Baajetal., (2018) mentions the advantages of taxing within the electronic taxation systems that are reduction of expenses for the use of paper, safeguarding cash from loss, theft or embezzlement, saving time and effort in carrying out business and financial operations. E-tax filing systems improve the quality and quantity of data available to tax officers that will support the tax office to complete transactions faster and more accurately, electronically filing has much lower error rates than paper filing. The benefits of e-filing and e-payment systems expand to other electronic operations in the tax authority like e-filing and e-payment allow for better, safer data storage which can be used to implement a risk management system for auditing and enforcement. Computerization helps establish a good system for tracking case files, which is essential for effective auditing and increases the speed and quality of data provided to auditors.

Some of the objectives of e-taxations are make cheaper and easier to pay taxes and claim benefits, tackle tax avoidance and evasion, availability of Real Time Information (RTI) displaying live statistics of the system, create an easy online registration process for new businesses, by moving notification of liability for taxes to online channels, enforce compliance with tax rules and further investigations on tax avoidance and evasion (Onuiri et al., 2015).

Olaoye & Atilola, (2018) point out that electronic taxation has a great impact on reducing the practices of tax evasion, electronic taxation achieves smoothing and facilitating the taxpayers' process with tax departments and also reducing the time needed by the process of taxation among the taxpayers and for the viewpoint of tax assessor on the field work at the process of examination and taxation the system help to reduce routine work that to combine the receipt of supporting documents and also deal with to reduce the methods of tax evasion of taxpayers and companies, reducing conflict between taxpayers and tax authorities and achieving contact status with taxpayers anytime.

2.1.7 Challenges of e-tax payment

The implementation process for e-filing and e-payment systems have some challenges like Government support, the government which is meant to be a motivator for the taxpayers' and make the environment conducive has to support the e-tax system fully in terms of policies, rules and regulations. The other challenge is resistance to change the decision whether to use or not to use electronic tax payment can be influenced by many things such as the type of income earned by a taxpayers', size of the business, location, business sector and other attributes of business (Coolidge and Yilmaz, 2014)

Taxpayers may be loaded by the time and effort spent learning the new system and they may not be cooperative to the implementation of the system or accommodate 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. The other issue is 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 widely known. A credible website needs to safeguard personal information from unauthorized access or disclosure, accidental loss and alteration or destruction (Chang et al., 2005).

Another challenge mentioned by Azmi & Kamarulzaman, (2009) is the technical aspects of e-tax system, like computer and information systems facilitate for the e-tax payment system need to be stable and reliable enough to handle an amount of information processing, especially during the peak period of e-tax filing and particularly as the deadline approaches.

According to the World Bank Doing Business (2014), Sub-Saharan economies face extremely 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) he mentions 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 qualified mostly in academic and professional institutions in developed countries and focus on organizations with relatively abundant resources and other favorable conditions. And they noted that information system development implementations need modification to work in local African conditions. The information system development practices and methodologies being used in developed countries have been designed with a much more rich infrastructures Information system development practices are not universal. To support the e-tax filing and payment system should include persons responsible for IT, business processes, legislative amendments and public education. The administration also requires modern computer equipment and a good IT platform (Edwards, 2008).

2.2 Empirical Review

Most empirical studies on the e-tax payment system are carried out across countries but since e-tax payment system is new for Ethiopia there are shortage of empirical study however there are some studies conducted in Ethiopia in the area of e-tax filing system.

2.2.1 Evidence from other Countries

A study by Ozgen & Turan, (2007) examined usage and adoption of online tax filing and payment system in tax management an empirical assessment with technology acceptance model in Turkey, Integration of e-tax filing and e-tax payment systems has created a new perspective for Turkish tax management system and represents a new as well as good example of application of modern information and communication technologies (ICT) in taxation process in their country Turkey. And they mention three tax payment methods used in Turkey. The first method is the traditional tax collection method, in which the tax-payers pay tax-due at the tax administration office in person. The other two tax payment methods are to use interactive bank accounts on the internet or to use bank ATMs in front of the bank building. These two last methods differ from the traditional method and they are methods of an online tax payment system in Turkey. Two methods of data collection were employed in their study. Initially, textual analysis was applied in order to

examine reports, government policy documents, media releases, journal articles, and other written material. Then, in-depth interviews with the directors of tax administrations and surveys with Certified Public Accountants (CPA) in Turkey were carried out. Government has authorized banks or special financial institutions to collect electronic taxes in Turkey. Ozgen & Turan mention integration of e-tax filing and e-tax payment systems has created a new perspective for Turkish tax management system and represents a new as well as good example of application of new information and communication technologies in the taxation process in Turkey. Finally the study concluded the e-tax payment and filing system offered valuable opportunities for tax authorities to more efficiently manage the tax system in Turkey. And they find tax revenues have increased since the usage of the system.

And also Ndayisenga and Shukla (2016) studied Effect of Electronic Tax Management System of Tax Collection in Rwanda: Case Study of Rwanda Revenue Authority (RRA) the aim of the study was to analyze the Effect of electronic tax management system, effect of internet payment system, mobile payment system and the effect of electronic billing machine on tax collection in Rwanda. Primary data was gathered through structured questionnaires and on the other hand secondary data was collected from RRA reports. and their finding shows that taxpayers pay tax easily from any location by use of electronic tax management system, and the system allow taxpayers to file their tax obligations from any business location by use of electronic billing machine (EBM) and taxpayers get alert message easily from any location by use of EBM and electronic tax management system. The study also stated that e-payment system has made taxpayers pay tax in time, EBM payment system reduced both Rwanda Revenue Authority (RRA) and clients (taxpayers) operational cost, the payment system made good communication collaboration between taxpayers easier, payment system has made tax auditing easier also payment system has increased revenue collection. The researchers conclude that Electronic tax management systems contribute positively to tax collection in Rwanda. The recommendations are RRA and clients should subscribe to reliable internet providers for effective and efficient service delivery, RRA should employ skilled personnel with more experience on network management in order to ensure the reliability of network, RRA management should ensure that there is country wide training to clients on usage of various e-tax applications for efficient revenue collection. Like training on mobile application and EBM usage, RRA management should keep on upgrading their e tax technology in order to have an up to date system for effective service

delivery. And constant power back up should be ensured in order to solve the problems of power interruptions and fluctuations.

Olaoye & Atilola, (2018) done a study titled Effect of E-Tax Payment on Revenue Generation in Nigeria. The main objective of the study was to examine effect of e-tax payment in revenue generation. Nigeria introduced an e-tax payment system in 2015. The study was conducted in secondary data get from Nigerian Federal Inland Revenue Service tax report and Central Bank of Nigeria Statistical report and the data analyzed through comparing pre e-taxation and post e-taxation of quarterly financial Reports of value added tax, company income tax and capital gain tax and the findings was e-tax payment has not contribute significant difference in revenue generation.

E-tax payment system is a best opportunity to do business in a suitable way but sometimes taxpayers will not accept this opportunity according to this Anuar & Radiah, (2010) studied determinants of online tax payment system in Malaysia. The main objective of the study was to identify factors affecting taxpayer's acceptance of online tax payment system in Malaysia. They discuss an online tax payment system that is delivered to facilitate the taxpayers to pay their taxes electronically via the tax authority website. But, the taxpayers are not using the system even with two year existence in the community. Thus, identifying factors contributing to the taxpayers' acceptance of the system are very important so that the online tax payment system can be further enhanced and will accordingly lead to the increase of its usage level in Malaysia.

2.2.2 Evidence from Ethiopia

Some research has been conducted about e-tax filing system in Ethiopia by different researchers. Abera, (2018) did a study on factors affecting the adoption of electronic tax filing in Ethiopia: perception of taxpayers'. The aim of the study was to identify factors that affect electronic tax filing adoption in Ethiopia. The researcher concludes that Ethiopian electronic tax filing system was useful with many relative advantages. An e-tax filing system operationally easy and not complex to be adopted. The study also identified that the majority of the taxpayers' found the electronic tax filing system compatible and affordable with existing and past trends. Although the researcher found a challenge for the adoption of electronic tax filing, taxpayers think the usage

of the online tax filing system would have privacy problems and lack of confidence with the security issue. The researcher also recommended that ERCA should conduct continuous training about online system additionally he recommended that ERCA should reassure taxpayers' of the reliability of the system by including easily visible privacy statements on their sites to decrease perception and fear of risk.

Another research is done by Dagnachew, (2018) on challenges and opportunities of adopting e-tax system in the case of ERCA (LTO), the goal of the study was to assess the challenges and opportunities of adopting e-tax system in Ethiopia Revenue and Customs Authority (ERCA). Accordingly the researcher concluded that adopting the system ERCA realized benefits like, facilitate development of new system, improve customer service, increase accessibility of taxpayer services, improving transaction speed and create good relations among taxpayers and perceiving both operations. Then he's study shows that limitations in network infrastructure and internet related support services, low levels of computer literacy, frequent power disruption are considered as basic external challenges facing the implementation of E-Tax system. Finally Dagnachew recommended the authority should facilitate proper and continuous training courses to its employees and to large taxpayers, and ERCA should work together with Ethio-telecom, Ethiopian electric utility and other concerned bodies.

Ruta, (2017) has done study about assessment of electronic tax filing system in selected branch offices of Ethiopian Revenues and Customs Authority (ERCA) and she discovered challenges like taxpayer's attitude, taxpayers fault and governmental problems. And benefits like data handling, accuracy, job performance and tax compliance. And her study found that the E-tax filing system and tax compliance has a positive relationship.

Abera, (2019) has also conducted research on the influence of electronic tax filing system on tax compliance in the case of large taxpayers' branch office (LTO). This study examined the influence of the electronic tax filing system on tax compliance of large taxpayers' branch offices. The research finds taxpayers had limited internet access to connect to ERCA E-tax servers. ERCA's technology system could not handle the huge overcrowding of tax returns, especially in the few days just before the deadline. The research recommends that ERCA should continuously upgrade its electronic system and the electronic tax filing process should be simplified with clear

instructions and guidelines. Also tax consultation centers should be increased in the country where taxpayers can acquire knowledge and filing skills.

2.3 Summary and research gap

As per knowledge of the researcher, In Ethiopia's context, electronic tax filing system has been addressed by few studies such as the influence of electronic tax filing system on tax compliance the case of large taxpayers' branch office (Abera, 2019), assessment of electronic tax filing system in selected branch offices of Ethiopian Revenues and Customs Authority (ERCA) (Ruta, 2017) and factors affecting the adoption of electronic tax filing in Ethiopia: perception of taxpayers' (Abera, 2018). The studies are discussed about e-tax filing system. Therefore, there is an absence of studies in the area of challenges and opportunities of adopting electronic tax payment system in the Ministry of Revenue and the aim of this study is to fill the gap.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter contains research methodology that includes research design, population, sampling and sample size, method of data collection and sources of data and method of data analysis. The purpose of this study is to assess the opportunity and challenge of adopting an e-tax payment system in the Ministry of Revenue (MOR).

3.1 Research Design

This study focuses on assessing the benefits and challenges of adopting e-tax payment system in Ethiopian Ministry of Revenue. To this effect, a descriptive survey method is employed with the assumption that it can help to describe the current benefits and challenges of e-tax payment system in MOR. According to Creswell (2007), descriptive research is mainly concerned with describing the nature or situation and the detail degree of the current position. Descriptive method of research is used to gather information about the present or existing condition and mostly used in business research and used to answer who, what, where, how much and how many questions (Creswell, 2009).

3.2 Research Approach

There are three approaches available for researchers namely quantitative, qualitative and mixed methods research approaches (Khotari, 2004). Qualitative research is a method of inquiry that develops understanding on human and social sciences, to find the way people feel and think. This research method is used when there is a need to understand how issues or factors are related and to obtain in-depth information to answer research objectives (Creswell and Clark, 2007). Qualitative research methods provide more emphasis on interpretation and providing consumers with complete views, looking at contexts, environmental immersions and a profundity of understanding of concepts. It is more suitable for studying a new problem in its early stage or for exploring new factors of an existing problem (Creswell, 2009).

Quantitative research is a research method that is used to generate numerical data and hard facts, by employing statistical, logical and mathematical technique and view the relationship between theory and research as deductive, this type of research can be characterized as linear series of steps moving from theory to conclusions, and its measurement process entails the search for indicators. A quantitative approach also requires the use of standardized measures (Creswell, 2009).

Creswell and Clark (2007, p. 5) defined mixed methods research as “Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone.” Therefore in order to achieve the objectives of this study, the research method followed was both quantitative and qualitative, mixed research approach the qualitative help to gather varieties of data on adoption of e-tax payment system and quantitative design used to measure the frequency of the views of respondent that help to measure and achieve the result.

3.3 Target Population

A population in statistics is the specific parameter about which information is desired and it may include a set of people, services, elements and events, group of things or households, etc. that are being investigated (Kothari, 2004). According to the Ministry of Revenue LTO branch human resource department currently there are 457 employees and from this total no of 40 employees working in tax filing and processing process department, 13 employees are working in revenue accounts administration process department and 6 employees are working in taxpayer education and information supply process department. Therefore the target population is 59 staff of the MOR LTO branch. And according to the MOR website currently there are 770 taxpayers in Ethiopian Ministry of Revenue LTO branch which contribute 70% of the total tax income of the

country and MOR fully operationalize e-tax payment system for all of 770 taxpayers so the target population is 770 MOR LTO branch taxpayers.

3.4 Sampling and Sample size determination

According to Etikan, (2016) sampling is the act of selecting some of the elements (portion) in a population and conclusions can be drawn about the entire population. Therefore, the researcher used a non-probability sampling approach, specifically a convenience sampling method to select respondents from these target populations those respondents were available in a certain time and place. Convenience sampling is a type of nonprobability or nonrandom sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study (Etikan, 2016). The sample size of 263 taxpayers was determined from a population of 770 taxpayers. The sample size is determined using the formula developed by Yemane, (1967) at a confidence of 95%.

$$n = N / (1 + N(e)^2) = 770 / (1 + 770(0.05)^2) = 263$$

Where n = sample size

N = population size

e = level of precision

By using the formula 263 taxpayers selected from the total population and all target population which is 59 staff members of MOR LTO branch are taken for the study.

3.5 Method of data collection and Source of Data

This study conducts in primary sources of data. Primary data are collected from the respondents based on structurally designed questionnaires. In order to collect sufficient data, the researcher uses both open and close ended questionnaires for the customers (taxpayers who use e-tax payment system) and for employees of MOR whose works are related to the e-tax payment system. Structured questionnaires are useful in order to give specific responses to the research

questions. Thus in order to get sufficient and reliable data the researcher uses primary data. Both questionnaires are designed in five main categories: the first one emphasized on the background of respondents, the second one focused on current practice of e-tax payment system in MOR; the third one examined the benefits of e-tax payment system; the fourth one assess challenges of the system, and the fifth one was about the collaboration of CBE & MOR. The researcher used is a 5 point Likert scale ranging from (1) “strongly disagree” to (5) “strongly agree”.

3.6 Method of data analysis

The responses were analyzed using Statistical Package for Social Science (SPSS) version 20 software to summarize the findings of the study. SPSS is a system for statistical analysis and helps to display findings by generating charts and tables. It is one of the most widely used computer software packages for analysis of quantitative data for social scientists. In order to achieve the outcomes and results for the study the research uses descriptive analysis.

CHAPTER FOUR

RESULTS AND ANALYSIS

This chapter provides a description of the results and data analyses of survey results gathered from employees of MOR and taxpayers of MOR and it includes general information, current practice, opportunities, challenges of the system and coordination of CBE and MOR and it presents in descriptive statistics, such as means, standard deviations and Percentage, followed by detailed analysis of the research questions and result interpretations. The chapter discusses the opportunity and challenge of adopting an e-tax payment system in the Ministry of Revenue (MOR).

4.1 Survey results of MOR staff's

Before distributing the questionnaire to the target population, the researcher checked a pilot test from 7 respondents (3 MOR staff members and 4 taxpayers of MOR LTO branch) to check the validity, and excluded from the analysis. After checking the pilot test total of Fifty nine (59) questionnaires were distributed purposely to employees of MOR out of the Fifty nine (59) questionnaires distributed to MOR staff's Forty nine (49) which is 83% were successfully completed returned and used for the study.

4.1.1 General information

The first part of the questionnaire addresses the general information of the respondents. It considers whether the respondents give training about the e-tax payment system to taxpayers or not. As shown in chapter one employees of MOR were trained by CBE officers then some of them expected to give training to taxpayers so as presented in the below table, from total of 49 respondents 67.3% give training to taxpayers and 32.7% are not give training which indicates that training givers are more represented so it implies respondents have adequate knowledge about the system.

Table 4.1 General Information on e-tax payment training

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	33	67.3	67.3	67.3
Valid No	16	32.7	32.7	100.0
Total	49	100.0	100.0	

Source: Own Survey Data, 2020

As proved in the table 4.1 from total 49 participants 67.3 which is 33 respondents give trainings to taxpayers. As presented below in table 4.2 from 33 respondents which gives trainings to taxpayers 75.8% or 25 respondents say that taxpayers understand the training that provides by MOR but 24.2% or 8 respondents say that taxpayers did not understand the training. From this it can fairly be concluded that the majority of taxpayers did understand the training and MOR have enough staff members that are able to give training to taxpayers.

Table 4.2 General Information on understanding of the training

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	25	51.0	75.8	75.8
Valid No	8	16.3	24.2	100.0
Total	33	67.3	100.0	
Missing System	16	32.7		
Total	49	100.0		

Source: Own Survey Data, 2020

4.1.2 Current practice of E-tax payment system as per MOR staff's perception

The second section of the study is designed to assess the current practice of e-tax payment system in the Ministry of Revenue (MOR) as per MOR staff's perception. The respondents were asked to rate the following statements presented in table 4.3 using a five Likert scale.

Table 4.3 Current practice of E-tax payment system as per MOR staff's perception

No	Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		N	Mean	Std. Deviation
		F	%	F	%	F	%	F	%	F	%			
1	MOR is doing its best to create awareness about e-tax payment.	2	4.1			3	6.1	22	44.9	22	44.9	49	4.27	.908
2	The branch office's taxpayers are well done payments through e-tax payment system.	2	4.1	2	4.1	11	22.4	21	42.9	13	26.5	49	3.84	1.007
3	There are enough computers and necessary materials to do e-tax payment related tasks in MOR.	1	2.0	3	6.1	3	6.1	21	42.9	21	42.9	49	4.18	.950
4	E-tax payment system offers guideline which help users	1	2.0			13	26.5	25	51.0	10	20.4	49	3.88	.807
5	I am well trained by MOR to do e-tax payment related tasks.	2	4.1	2	4.1	7	14.3	19	38.8	19	38.8	49	4.04	1.040

Source: Own Survey Data, 2020

As table 4.3 indicates, the average mean score for awareness creation about e-tax payment has highest mean of 4.27 and standard deviation of 0.908 indicating that it has deviation from the mean and in percentile 89.8% respondents either agree or strongly agree that MOR create awareness about e-tax payment system. This means that MOR's employees strongly consider that MOR is doing its best to create awareness and taxpayers of their branch office are aware of the e-tax payment system as they should have been.

The above table also indicated the taxpayer's usage of an e-tax payment system. The average mean of 3.84 indicated that some of the respondents' said that taxpayers using the electronic tax payment system is not satisfactory and the high standard deviation of 1.007 implies that there is a high level of variation from the mean. In percentiles 8.2% of respondents' disagreed and strongly disagreed with this statement while 22.4% of the respondents' undecided or indifferent about the statement, and the remaining 69.4% of respondents' either agreed or strongly agreed that taxpayers well done payments through the system. This means that the online payment system is utilized as an additional device of the tax payment system in Ethiopia and taxpayers are well done. Similarly the

study of Ndayisenga, (2016) shows that the internet payment system is a tool used for tax payment in Rwanda.

Since e-tax payment system is done electronically the other practice question was about availability of necessary materials to do e-tax payment related tasks in MOR. Most respondents which is 85.8% of respondents said that there are enough computers and necessary materials to do e-tax payment related tasks. It is also evident by high mean value of 4.18 and standard deviation of 0.950 indicating that it has an average dispersion from the mean. The result implies that the MOR is well equipped to modernize the tax payment system. Absence of facilitating environments and resources like computers and software would obstruct usage of the electronic tax declaration and payment system (Ozgen & Turan, 2007).

Respondents also asked about user guidelines and 51% of respondents agreed and 20.4% respondents strongly agreed only 2% of respondents strongly disagreed with the statement. Also has an average mean value of 3.88 and had the least dispersion from the mean with the lowest standard deviation of 0.087. It can be realized that most of the employees believe the guideline that MOR offers to users is helpful. In tax offices taxpayer Support Call Centers established to provide assistance, orientation, and legal guidance to taxpayers on their tax obligations (Jimenez et al., 2013).

Finally, the employees were asked if they were trained by MOR to do e-tax payment related tasks. The response in the above table shown 4.04 high mean implies respondent's agreement and the statement and 1.040 standard deviation implies that there is a big variation. In percentile 77.6% respondents agree or strongly agree that they are trained by MOR. This means that taxpayers were well trained by the organization in order to perform e-tax payment related tasks.

4.1.3 Benefits of e-tax payment system as per MOR staff's perception

The third section of the study is designed to assess the benefits of the e-tax payment system as per MOR staff's perception. The main purpose is to get responses computed based on five Likert scale agreement levels of respondents on the advantage of electronic tax Payment system.

Table 4.4 Benefits of e-tax payment system as per MOR staff's perception

No	Statement	Strongly Disagreed		Disagree		Neutral		Agree		Strongly agree		N	Mean	Std. Deviation
		F	%	F	%	F	%	F	%	F	%			
1	E-tax payment system is speedup tax collection process than manual system	2	4.1	1	2.0	8	16.3	19	38.8	19	38.8	49	4.06	1.008
2	E-tax payment system is more accurate than the manual system.					3	6.1	21	42.9	25	51.0	49	4.45	.614
3	Using e-tax payment system in my job enable me to accomplish tasks more quickly			1	2.0	4	8.2	29	59.2	15	30.6	49	4.18	.667
4	E-tax payment system allows me to do my job more effectively			1	2.0	4	8.2	33	67.3	11	22.4	49	4.10	.621
5	E-tax payment system reduces time spent on auditing taxpayer's data.			2	4.1	3	6.1	33	67.3	11	22.4	49	4.08	.672
6	E-tax payment system gives greater control over tax collection			2	4.1	5	10.2	32	65.3	10	20.4	49	4.02	.692
7	E-tax payment system has a positive effect on controlling tax evasion			3	6.1	8	16.3	22	44.9	16	32.7	49	4.04	.865
8	E-tax payment system significantly reduces MOR's operational cost.			3	6.1	7	14.3	25	51.1	14	28.6	49	4.02	.829
9	Data loss is less likely in e-tax payment system than manual.			1	2.0	3	6.1	28	57.1	17	34.7	49	4.24	.662
10	E-tax payment system users follow procedures correctly than manual users.			1	2.0	6	12.2	33	67.3	9	18.4	49	4.02	.629
11	Taxpayers' make less error while using e-tax payment system than manual			2	4.1	14	28.6	29	59.2	4	8.2	49	3.71	.677

Source: Own Survey Data, 2020

Table 4.4 shows from all respondents majority of the respondents which are 38 (77.6%) of respondents strongly agree or agree that e-tax payment system is faster than manual system. 8 (16.3%) of the respondents undecided or indifferent about the statement, and the remaining 3 (6.1%) respondents disagree. According to the respondents the e-tax payment system increases tax collection activity. Similarly respondents agreed with the fact that e-tax payment system gives greater control over tax collection. This fact proof with high mean value of 4.02 and lowest standard deviation of 0.692 implies least deviation from the mean. And in percent 85.7% of MOR employees strongly agreed or agreed about this issue, another 10.2% were neutral about this stand.

Overall results indicate that the e-tax payment system reduces time spent in revenue collection activity and the system facilitates better control over tax collection in the Ministry of Revenue. Development of an electronic taxation system assists government bodies with convenient tax collection. The system makes it easier to get information from taxpayers so it allows the tax office to control which taxpayer pays the tax on time and that will maximize revenue collection (OECD, 2017).

Also other two questions were raised about the advantage of the system to respondents; those are about accuracy and error reduction. As shown in the above table the average mean of 4.45 & 3.71 indicate respondents agreement and low standard deviations of 0.614 & 0.677 respectively implies there is least dispersion from the mean and in percentiles 93.9% respondents agree or strongly agree, only 6.1% respondents undecided or indifferent about the statement, and there is no disagreement about the first statement. That means using an e-tax payment system helps to reduce error and also the system is more accurate than manual system. E-tax improves on convenience to the clients as well as it ensures accuracy and timely reconciliations of data captured also confirms that e-tax improves efficiency and reduces errors (Muturi and Kiarie, 2015).

Table 4.4 also mentions transaction speed and job efficiency and staff of MOR agree to this fact. This is evidenced by the data collected from the respondents with high mean of 4.48 and 4.10 and low standard deviation 0.667 & 0.621 respectively. And as per their respond only 2% of participants disagree or say that using e-tax payment system doesn't help them to accomplish their job timely and effectively and 8.2 % participants indifferent about the statements but majority of respondents which is 89.8% participants agree or strongly agree that using e-tax payment system help them to accomplish their job more quickly and effectively. "The E-Taxation system offers multiple solutions to both sides of the taxation system. The tax collector's job is more effectively carried out as access to data required to determine the volume of taxes currently paid is readily available and can confidently estimate deficits" (Onuiru et al., 2015 p 75).

Table 4.4 shows employee's response on e-tax payment system benefit on auditing taxpayer's data. The average mean 4.08 and had the least dispersion from the mean with the lowest standard deviation of 0.672. The result implies that the e-tax payment system is advantageous for employees by saving their time while auditing taxpayer's data. E-filing and e-payment allow 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 case files, which is essential for effective auditing and increases the speed and quality of data provided to auditors (Jimenez et al., 2013).

MOR employees also agree with the following four benefits of e-tax payment system the statements mention issues like controlling tax evasion, reduces MOR’s operational cost, data loss and users follow procedures .This is evidenced by the data collected from the respondents with mean score value of 4.04, 4.02, 4.24 and 4.02 respectively. It implies that the e-tax payment system has a benefit in controlling tax evasion, reduces cost and data loss and also helps taxpayers to follow procedures. Technological innovations provide a lot of benefits to the tax revenue authorities and customers (taxpayers) reducing data loss, tax evasion and cost are some benefits of the system.

4.1.4 Challenges of adopting e-tax payment system in MOR as per MOR staff’s perception

The fourth section of the study is designed to assess challenges of adopting the e-tax payment system in MOR as per MOR staff’s perception. The respondents were asked to rate the following statements presented in table 4.5 using a five Likert scale.

Table 4.5 Challenges of adopting e-tax payment system in MOR as per MOR staff’s perception

No	Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		N	Mean	Std. Deviation
		F	%	F	%	F	%	F	%	F	%			
1	Taxpayer’s incorrect data encoding makes e-tax system less effective.			5	10.2	3	6.1	29	59.2	12	24.5	49	3.98	.854
2	The work load is the same after e-tax payment system introduced.	1	2.0	29	59.2	8	16.3	8	16.3	3	6.1	49	2.65	.991
3	There is lack of government support while implementing e-tax payment.	5	10.2	31	63.3	3	6.1	7	14.3	3	6.1	49	2.43	1.061
4	There is lack of good IT staff members who facilitate e-tax system.	3	6.1	23	46.9	8	16.3	9	18.4	6	12.2	49	2.84	1.179
5	Taxpayers don’t want to shift from manual system to e-tax payment system.			10	20.4	6	12.2	21	42.9	12	24.5	49	3.71	1.061
6	Taxpayer’s attitude is not as positive as I expected towards e-tax payment system.			7	14.3	5	10.2	24	49.0	13	26.5	49	3.88	.971
7	In general, e-tax payment system is not effective as it should be in MOR	8	16.3	18	36.7	6	12.2	11	22.4	6	12.2	49	2.78	1.311

Source: Own Survey Data, 2020

Tables 4.5 shows that Taxpayer's incorrect data encoding makes the e-tax system less effective. In which the mean score and standard deviation were found 3.98 and 0.854 respectively and in percentile 84% of MOR employees agree or strongly agree that incorrect data entry is a challenge of e-tax payment system. Besides this the respondents forwarded their responses on the open ended questions taxpayers forgetting their password is another main challenge therefore e-tax users still visiting tax offices to reset the password and to correct the wrong data.

Employees of the organization were asked if the e-tax payment system has affected their workload. The response shows that most of the respondents reacted negatively to the question "The workload is the same after e-tax payment system introduced", an average mean of 2.65 and standard deviation 0.991. It can be seen that as per the employees' perception work load is not the same after e-tax payment is implemented or e-tax payment system reduces employee's workload. "The use of the computer effects on the form and nature of the documentary set in the electronic system. Additionally, it is regarded as an extension of the work performed by the human being but it is marked as being fast and highly efficient in the completion of the work" (Al Baaj et al., 2018 p12).

The other raised issue was government support. Respondents were asked if there is lack of government support and they disagree. This is evidenced by the data collected from the respondents with lowest mean value of 2.43 and high standard deviation 1.061 implies there is high variation from the mean and in percentiles 73.5% which is majority of participants disagree or strongly disagree with the statement. The results imply that the government supports implementation of e-tax payment. Government support includes creating a suitable environment to taxpayers and employees and in terms of providing better policies, rules and regulations.

As table 4.5 indicates, the average mean score for the statement there is a lack of good IT staff members who facilitate the e-tax system. Has 2.84 mean and 1.179 standard deviation and in percentile 53% respondents either disagree or strongly disagree, 16.3% respondents were neutral about this stand and only 30.6% respondents agree. Since the e-tax payment system needs computers, electronic devices and internet MOR need to have qualified employees in order to install the system, support the system and if problems happen to repair and maintain it. Therefore the result implies that MOR has good staff members who facilitate the e-tax payment system.

The respondent also asked their agreement level for the following two statements about taxpayer's attitude towards e-tax payment system willingness to shift from manual system to e-tax payment system. The result has an average mean of 3.88 & 3.71 and 75.5% and 67.4% of respondents agree or strongly agree that taxpayer's attitude is not positive to e-tax payment system and taxpayers don't want to shift from manual system to electronic system. "It is a challenge moving away from the comfort zone (the manual system) into a new unfamiliar IT environment. Furthermore, it is necessary to review and change the underlying business processes to avoid the automation a problem that persists with automation in revenue administration reforms" (Edwards, 2008 p11)

Finally employees were asked their agreement level in the statement "In general, e-tax payment system is not effective as it should be in MOR" and 34.6% respondents agree or strongly agree, 12.2% respondents undecided or indifferent about the statement, and there 53% respondents disagree or strongly disagree about the statement. Electronic tax payment system in Ethiopia is just in its infant stage of implementation but as per the above table survey result most respondents say that e-tax payment system implement effectively in MOR and it is a good start.

4.1.5 Coordination of commercial banks and MOR in the process of e-tax Payment system as per MOR staff's perception

The fifth section of the study is designed to assess coordination of commercial banks and the Ministry of Revenue in the process of E-tax Payment system as per MOR staff's perception. The respondents were asked to rate the following statements presented in table 4.6 using a five Likert scale.

Table 4.6 Coordination of commercial banks and MOR in the process of e-tax payment system as per MOR staff's perception

No	Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		N	Mean	Std. Deviation
		F	%	F	%	F	%	F	%	F	%			
1	Employee of CBE have adequate knowledge about e-tax payment system	2	4.1	12	24.5	22	44.9	11	22.4	2	4.1	49	2.98	.901
2	CBE give adequate training about e-tax payment system to employees of MOR that help employees to give trainings to taxpayers			7	14.3	7	14.3	24	49.0	11	22.4	49	3.80	.957
3	MOR can easily collect tax revenue since e-tax payment system implement.			3	6.1	7	14.3	26	53.1	13	26.5	49	4.00	.816
4	MOR can easily get cash collection reports since e-tax payment system implement.			2	4.1	10	20.4	21	42.9	16	32.7	49	4.04	.841
5	CBE and MOR work more closely to give better service to taxpayers					9	18.4	26	53.1	14	28.6	49	4.10	.684

Source: Own Survey Data, 2020

Table 4.6 shows that most respondents of MOR are neutral about the statement “Employees of CBE have adequate knowledge about e-tax payment systems”. In which the mean score and standard deviation were found 2.98 and 0.901 respectively and in percentile 44.9% of MOR employees indifferent about the statements. It implies that employees of MOR have no intention about knowledge of CBE staff about the e-tax payment system.

The above table also mentions training programs that are facilitated by CBE to MOR staff members (trainers). And respondents agree that training conducted by CBE helps employees to teach taxpayers this proof by the mean value of 3.80 and 0.957 standard deviation or in present 71.4% of respondents agree that the training is helpful.

Respondents also asked their agreement level for the following two statements: MOR can easily collect tax revenue since e-tax payment system implement and MOR can easily get cash collection reports since e-tax payment system implement. Only 6.1% & 4.1% of respondents disagree to the statements and 14.3% & 20.4% of respondents are neutral about the statements but 79.6% & 75.6% of respondents agree or strongly agree to the statements. This implies that the implementation of the e-tax payment system simplifies the tax collection process and helps to get a cash collection report easily.

Finally, respondents were asked whether CBE and MOR work more closely to give better service to taxpayers and the survey data showed that 81.6% of respondents agree or strongly agree with the statement and other 18.4% respondents indifferent and there is no disagreement about this statement this means Commercial bank of Ethiopia (CBE) and MOR work jointly to facilitate the e-tax payment process and to give satisfactory service to taxpayers.

4.2 Survey results of taxpayers

In this part data collected from taxpayers of MOR through questionnaires were analyzed. A total of two hundred sixty three (263) questionnaires were distributed purposely to respondents (MOR LTO branch office Taxpayers) out of this 263 questionnaires distributed to taxpayers two hundred thirteen (213) which is 81% were successfully completed returned and used for the study.

4.2.1 General information of taxpayers

This section of the questionnaire addresses the general information of the respondents. It considered business sectors distribution of respondents and it summarized in table 4.7 as per the outcomes of the survey about 28.2% of the respondents were engaged in the manufacturing sector while 38.5% and 30% were engaged in merchandising (trade) and service giving activities respectively. The rest 3.3%, were engaged in other business activities. This implies that respondents are from different business sectors thus, the findings will indicate mixed results.

Table 4.7 Business activity of taxpayers

	Frequency	Percent	Valid Percent	Cumulative Percent
Manufacturing	60	28.2	28.2	28.2
Merchandise	82	38.5	38.5	66.7
Valid Service giving	64	30.0	30.0	96.7
Other	7	3.3	3.3	100.0
Total	213	100.0	100.0	

Source: Own Survey Data, 2020

As part of general information section, the respondents work position presented in Table 4.8 the result showed that about 51.6% and 23% of the respondents were Accountants and Finance head respectively while 19.7% of respondents were Owner & Manager and the rest 5.6% respondents engaged in other positions like consultant, tax heads and others it implies that the participants have good knowledge about e-tax payment system.

Table 4.8 Position of taxpayers

	Frequency	Percent	Valid Percent	Cumulative Percent
Owner	1	.5	.5	.5
Manager	29	13.6	13.6	14.1
Owner and Manager	12	5.6	5.6	19.7
Valid Accountant	110	51.6	51.6	71.4
Finance and Accounts head	49	23.0	23.0	94.4
Other	12	5.6	5.6	100.0
Total	213	100.0	100.0	

Source: Own Survey Data, 2020

4.2.2 Current practice of E-tax payment system as per taxpayer's perception

This section of the study is designed to assess the current practice of e-tax payment system in the Ministry of Revenue (MOR) as per taxpayer's perception. The respondents were asked to rate the following statements presented in table 4.9 using a five Likert scale.

Table 4.9 Current practice of E-tax payment system as per taxpayer's perception

No	Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		N	Mean	Std. Deviation
		F	%	F	%	F	%	F	%	F	%			
1	E-tax payment system is easy to learn			13	6.1	6	2.8	95	44.6	99	46.5	213	4.31	.801
2	E-tax payment system is easy to use	2	0.9	24	11.3	3	1.4	106	49.8	78	36.6	213	4.10	.954
3	I have good knowledge about e-tax payment system	2	0.9	29	13.6	6	2.8	104	48.8	72	33.8	213	4.01	1.000
4	E-tax payment system is easy to teach new users	5	2.3	26	12.2	12	5.6	125	58.7	45	21.1	213	3.84	.973
5	Employees of MOR have willingness to help taxpayers in related to e-tax payment.			16	7.5	12	5.6	140	65.7	45	21.1	213	4.00	.755

Source: Own Survey Data, 2020

As table 4.9 indicates, the average mean score for e-tax payment system is easy to learn and easy to use has 4.31 & 4.10 mean and 0.801 & 0.954 standard deviation respectively and in percentile 91.1% & 86.4% respondents either agree or strongly agree that electronic tax payment system is easy to use and learn. Respondents also asked if they have good knowledge about the e-tax payment system and majority of respondents say I have good knowledge about the system it confirmed with the survey data result of 82.6% of agreement. Additionally taxpayers agree that e-tax payment system is easy to teach new users it evaded by the mean value of 3.84 and in percent 79.8% of participants agree or strongly agree that the system is easy to give training to new users. In general the results of the above table implies that taxpayers have a good understanding of e-tax payment systems. Also the system is easy to learn, use and to teach new users. Also from the results it can be said that e-tax payment system gets accepted with taxpayers and it meets Davis's, (1989) TAM technology acceptance model perceived ease of use (PEOU) that is defined as the degree to which the system is free of effort (easy) or not complex.

Also taxpayers were asked their agreement about employees of MOR's willingness to help taxpayers in e-tax payment related tasks and majority of respondents which is 86.8% of taxpayers agree or strongly agree with the statement while 5.6% of respondents indifferent and only 7.5% of respondents disagree to the statement. It implies that employees of MOR have a good response to taxpayers' requests that are gone to create a better relationship between taxpayers and MOR.

4.2.3 Benefits of e-tax payment system as per taxpayer's perception

In this section respondents were asked their agreement level for the following fifteen statements that are concerned on the benefits of the e-tax payment system. As indicated in table 4.10 the mean value and percentile scale of the response computed based on Likert scale.

Table 4.10 Benefits of e-tax payment system as per taxpayer's perception

No	Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		N	Mean	Std. Deviation
		F	%	F	%	F	%	F	%	F	%			
1	E-tax payment system makes work simple compared to the manual system	2	0.9	10	4.7	15	7.0	121	56.8	65	30.5	213	4.11	.799
2	E-tax payment system reduces transaction cost	2	0.9	18	8.5	9	4.2	140	65.7	44	20.7	213	3.97	.821
3	E-tax payment system improves transaction speeds			8	3.8	10	4.7	87	40.8	108	50.7	213	4.38	.747
4	E-tax payment system reduces paper work	2	0.9	25	11.7	17	8.0	133	62.4	36	16.9	213	3.83	.881
5	E-tax payment system reduce corruption	10	4.7	24	11.3	7	3.3	154	72.3	18	8.5	213	3.69	.947
6	Instruction of e-tax payment process is clear			7	3.3			112	52.6	94	44.1	213	4.38	.659
7	Instructions for using e-tax payment system are easy to follow			4	1.9	6	2.8	99	46.5	104	48.8	213	4.42	.644
8	Data loss is less likely in e-tax payment system than manual	2	0.9	8	3.8	13	6.1	92	43.2	98	46.0	213	4.30	.819
9	E-tax payment system safeguarding cash from loss, theft or embezzlement	2	0.9	14	6.6			109	51.2	88	41.3	213	4.25	.836
10	E-tax payment system create better relationship between MOR and clients	2	0.9	12	5.6	10	4.7	167	78.4	22	10.3	213	3.92	.675
11	E-tax payment system increases reliability	2	0.9	11	5.2	16	7.5	107	50.2	77	36.2	213	4.15	.841
12	E-tax payment system reduces errors			24	11.3	14	6.6	101	47.4	74	34.7	213	4.06	.930
13	MOR provide sufficient technical support for effective functioning of the system	2	0.9	46	21.6	25	11.7	138	64.8	2	0.9	213	3.43	.869
14	MOR provide fast technical support for effective functioning of the system	18	8.5	85	33.9	21	9.9	87	40.8	2	0.9	213	2.86	1.081
15	Overall, I'm satisfied by using E-tax payment at my work place	15	7.0	11	5.2	32	15.0	153	71.8	2	0.9	213	3.54	.892

Source: Own Survey Data, 2020

As indicated in the above table respondents were asked whether e-tax payment system makes work simple and the result shows high mean value of 4.11 and low standard deviation 0.799 implies lowest variation from the mean. And in the percentile majority of respondents which is 87.3% of taxpayers agree or strongly agree with the statement while 7% of respondents indifferent and only 5.6% of respondents disagree with the statement. It means that the e-tax payment system helps taxpayers by reducing workload and making work simpler than the manual system.

To see the cost minimization aspect of the system respondents were asked two questions those are e-tax payment system reduces transaction cost and paperwork and with an average mean of 3.97 & 3.83 and standard deviation of 0.821 & 0.881 respectively says the system helps in reducing transaction cost and paperwork. The results imply that the e-payment system plays its role in cost minimization.

Time saving is one advantage to be enjoyed by users of the system so taxpayers were asked if their agreed for e-tax payment system improves transaction speeds. The result of the survey has a high mean value of 4.38 and in present 91.5% of respondents agree. This means the majority of the respondents agreed that using electronic tax payment improves transaction speed and saves taxpayers time spent on the tax payment process.

Taxpayers agree that the e-tax payment system reduces corruption. This is evident by the average mean value of 3.69 or in present 16% respondents disagree 3.3% undecided or indifferent but majority or 80.8% of respondents either agree or strongly agree that e-payment system reduces corruption. In the absence of e-tax system firms submit their tax declarations and pay taxes in person at local tax offices and for those reasons taxpayer's visits to the tax office frequently and this frequent connection create opportunity for corruption. But well-designed electronic systems can reduce corruption by decreasing face-to face interactions (Okunogbe & Pouliquen, 2018).

Also the above table rise question about clarity and easiness of e-tax payment system instruction and 96.7% of respondents say instruction of the system is clear also 95.3% of respondents say it is easy to follow instruction and highest mean values 4.38 & 4.42 indicates that respondents agreed on clarity and easiness of instruction. The results implies the government set up simple and understandable instruction thus taxpayers can access the system easily.

Another issue was data protection, as presented in the above table 4.10 majority which is 89.2% of taxpayers agree that data loss is less risky in e-tax payment system than manual system. Respondents also agree that adaptation of e-tax payment system create better relationship between MOR and clients this evident by the survey result mean value of 3.92 and lowest standard deviation of 0.675 and in present 88.7% of respondents agree that MOR and taxpayers create better relation through adaptation and implementation of e-tax payment system. The results indicate that the electronic tax system is advantageous in diminishing risk of data loss than manual system. And

MOR can protect taxpayers' confidential data by minimizing data loss and this creates better relationships among tax offices and taxpayers.

Table 4.10 also mentions cash protection. The highest mean 4.25 indicates that majority of respondents which is 92.5% agreed that using e-tax payment system helps to protect cash and lowest standard deviation of 0.836 indicates there is a list variance from the mean. Therefore the survey result indicates that since electronic payment system is a system that provides payments electronically and no need to hold paper cash there is no risk of losing cash so using e-tax payment system safeguarding cash from loss, theft or embezzlement.

The above table also indicated two areas that the e-tax payment system increases reliability and reduces errors. The highest mean values 4.15 And 4.06 indicated that respondents agreed that using electronic tax help to increase reliability and reduce errors. In percentiles 6.1% & 11.3% of respondents' respectively disagreed and strongly disagreed with these statements while 7.5% & 6.6% of the respondents' undecided or indifferent about the statements, and the remaining 86.4% & 82.1% of respondents respectively either agreed or strongly agreed on error reduction. Increase trustworthiness and reduce errors is a major benefit of e-government activities therefore using a tax online system in MOR helps to reduce mistakes and increase reliability.

Also respondents are asked two questions about MORs technical support which are MOR provide sufficient technical support for effective functioning of the system for this statement 65.7% of respondents either agree or strongly agree while 11.7 % of respondents undecided or indifferent and the remaining 22.5% respondents either disagree or strongly disagree. And for the second statement MOR provides fast technical support for effective functioning of the system 41.7% of respondents either agree or strongly agree while 9.9 % of respondents undecided or indifferent and the remaining 42.4% respondents either disagree or strongly disagree. Technical supports need on monitoring and maintaining an organization's computer systems and networks or software faults. The survey result indicates that MOR provides sufficient technical support but it is not fast, technicians didn't provide the service on time.

Finally taxpayers were asked their agreement level in the statement "Overall, I'm satisfied by using E-tax payment at my workplace" and 72.7% respondents neither agree or strongly agree, 15.0% respondents undecided or indifferent about the statement, and other 12.2% respondents disagree

or strongly disagree about the statement and also the statement has 3.54 average mean and 0.892 standard deviation. Survey results imply that even if the system is in the infant stage and has some problems respondents are happy and satisfied about using e-tax payment system.

4.2.4 Challenges of adopting e-tax payment system in MOR as per taxpayer's perception

In this section respondents were asked their agreement level for the following eight statements that are concerned with challenges of the e-tax payment system. As indicated in table 4.11 the mean value and percentile scale of the response computed based on Likert scale.

Table 4.11 Challenges of adopting e-tax payment system in MOR as per taxpayer's perception

No	Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		N	Mean	Std. Deviation
		F	%	F	%	F	%	F	%	F	%			
		1	E-tax payment system requires additional effort to enter the data than manual system	48	22.5	76	35.7	12	5.6	58	27.2			
2	There is high cost of implementation of E-tax system, such as cost of ICT equipment and network	29	13.6	73	34.3	11	5.2	82	38.5	18	8.5	213	2.94	1.271
3	The awareness creation program is not sufficient to improve compliance	7	3.3	54	25.4	15	7.0	113	53.1	24	11.3	213	3.44	1.087
4	Poor intranet connection affect e-tax payment system			10	4.7			74	34.7	129	60.6	213	4.51	.731
5	Frequent power interruption affect e-tax payment system					3	1.4	122	57.3	88	41.3	213	4.40	.519
6	Internet hackers might take control of tax information in e-tax payment system	10	4.7	102	47.9	64	30.0	31	14.6	6	2.8	213	2.63	.889
7	The security system built into the e-tax payment system is strong enough to protect our company account	8	3.8	21	9.9	12	5.6	145	68.1	27	12.7	213	3.76	.929
8	I do not have any problem with using the electronic tax payment system	24	11.3	127	59.6	22	10.6	40	18.8			213	2.37	.915

Source: Own Survey Data, 2020

Tables 4.11 shows that whether e-tax payment system requires additional effort or not and the result shows the low mean value of 2.64 indicates no need of additional effort and standard deviation of 1.330 indicates there is a high variation from the mean. Also in percentile 36.1% of

taxpayers agree or strongly agree that it needs additional effort while 5.6% of respondents are indifferent about the statement. Majority of respondents which is 58.2% of taxpayers disagree or strongly disagree with the statement so the survey implies that the e-tax payment system is easy as manual and it didn't need additional effort. Therefore the electronic tax payment system in MOR is not complicated.

Also in the above table respondents asked about cost of implementation, such as cost of ICT equipment and network. In which the mean score and standard deviation were found 2.94 and 1.271 respectively. And in the percentile majority of respondents which is 47.9% of taxpayers either disagree or strongly disagree. If there is no computer equipment available or internet available or there is no such technical support, taxpayers would be unwilling or even incapable to use the electronic tax declaration or payment system (Ozgen & Turan, 2007). But the survey result in MOR indicates that cost of ICT equipment and network is not a major challenge for implementation of e-tax payment System.

Respondents say that the awareness creation program in MOR is not sufficient to improve compliance. This is evident by 28.6% disagreement 7.0% undecided or indifferent but majority or 64.4% of respondents either agree or strongly agree that awareness creation program is not enough. This implies that MOR did not prepare frequent awareness creation and training programs.

Since e-tax payment system need internet connection and electric power respondents were asked two questions does poor internet connection affect e-tax payment system and frequent power interruption affect e-tax payment system and as shown in the above table.4.11 majority of taxpayers strongly agree for both statements this also evident by survey result of 4.51 & 4.40 high mean value it means majority respondents agree and 0.731 & 0.519 lowest standard deviation respectively it implies that poor internet connection and electric disconnections are major challenges of e-tax payment system. Frequent power interruption, limitation in network infrastructure and internet related support services is a major obstacle to effectively deliver of e-taxing services (Manaye et al., 2019)

Table 4.11 also raised security issues thus respondents asked their agreement on Internet hackers might take control of tax information in the e-tax payment system and as a result 52.6% of respondents negatively responded to the statement that means taxpayers didn't have a problem

about internet hackers. Furthermore respondents agree that the security system built into the e-tax payment system is strong enough to protect their company account and It evaded by survey result of 80.8% of taxpayers agreed that e-tax payment system has a strong security system.

Lastly taxpayers were asked their agreement level in the statement “I do not have any problem with using the electronic tax payment system” and 70.9% respondents neither agree or strongly agree, 10.6% respondents undecided or indifferent about the statement, and other 18.8% respondents disagree or strongly disagree about the statement and also the statement has 2.37 mean and 0.915 standard deviation.it implies that e-tax payment system is not hassle free so taxpayers face problems through using e-tax system.

4.2.5 Coordination of commercial banks and MOR in the process of e-tax payment system as per taxpayer’s perception

This section is designed to assess coordination of commercial banks and the Ministry of Revenue in the process of E-tax Payment system as per taxpayer’s perception. The respondents were asked to rate the following statements presented in table 4.12 using a five Likert scale.

Table 4.12 Coordination of commercial banks and MOR in the process of e-tax payment system as per taxpayer’s perception

No	Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		N	Mean	Std. Deviation
		F	%	F	%	F	%	F	%	F	%			
1	E-tax payment registration process in CBE is easy	8	3.8	30	14.1	4	1.9	145	68.1	26	12.2	213	3.71	.981
2	E-tax payment registration process in CBE is fast	16	7.5	132	62.0	15	7.0	46	21.6	4	1.9	213	2.48	.974
3	Employee of CBE have adequate knowledge about e-tax payment system			8	3.8	71	33.3	127	59.6	7	3.3	213	3.62	.614
4	CBE give adequate training about e-tax payment system to taxpayers	8	3.8	7	3.3	33	15.5	128	60.1	37	17.4	213	3.84	.881
5	Employee of CBE have willingness to give information and support taxpayers	8	3.8	18	8.5	11	5.2	125	58.7	51	23.9	213	3.91	.981
6	CBE gives satisfactory service to taxpayers	8	3.8	19	8.9	23	10.8	121	56.8	42	19.7	213	3.80	.982

Source: Own Survey Data, 2020

In table 4.12 respondents were asked if they agree about e-tax payment registration process in CBE is easy and majority or 80.3% of participants agree or strongly agree that registration process is easy and also they asked if they think e-tax payment registration process in CBE is fast but 69.5% of respondents disagree so they think registration process is not fast. Then, as per survey results obtained from the above table e-tax payment registration process in Commercial Bank of Ethiopia (CBE) is easy, but it consumes more time. Besides this the respondents forwarded their responses to the open ended questions registration and payment authorization process that is performed by National Bank of Ethiopia take days.

Tables 4.12 shows that most respondents of taxpayers agree about the following three statements “Employee of CBE have adequate knowledge about e-tax payment system”, “Employee of CBE have willingness to give information and support taxpayers” and “CBE give adequate training about e-tax payment system to taxpayers”. This was evaded by the mean score value of 3.62, 3.91 & 3.84 and low standard deviation of 0.614, 0.981 & 0.881 respectively. Standard deviations indicate that there is lowest variation from the mean. and in percentile 62.9%, 82.6% & 78.5% of taxpayers respectively either agree or strongly agree to the above three statement. It implies that Commercial Bank of Ethiopia employees have good knowledge of the system and they have readiness to help taxpayers. Also taxpayers appreciate the training program provided by the bank therefore CBE gives satisfactory service to taxpayers.

CHAPTER FIVE

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

This chapter provides the summary of the findings of the study, makes conclusions and presents the recommendations for further research in the subject area.

5.1 Summary and Conclusion

Based on the analysis made in chapter four the following conclusions are made on the assessment of the opportunities and challenges for the adoption of e-tax payment system in MOR. The current e-tax payment practices based on the employees and taxpayer's perception are that the system is easy and desirable for both staff members of MOR & taxpayers. Also necessary equipment is supplied in the MOR office to operate the system smoothly, the organization is attempting to create awareness of the system and MOR provide useful guidelines to employees & taxpayers. Additionally both taxpayers and staff of MOR are well trained to perform e-tax jobs. E-tax payment system used as an additional device tax payment in the Ethiopian Ministry of Revenue (MOR).

Challenges were investigated from taxpayers, from the MOR office, from bank and infrastructural problems. From taxpayers' viewpoint incorrect data entering into the system and taxpayers forgetting passwords are found as a major challenge. And from the MOR office the office provides good technical support on the e-tax payment system but taxpayers didn't get the support on time. Issues related to Commercial Bank of Ethiopia is the registration method registration process is easy but it takes a lot of time. In the case of infrastructural barriers it was found that low level of internet connection, network failures and frequent power interruptions are major challenges of adopting the e-tax payment system. However, the cost of IT equipment and cost internet was not found to be a barrier.

The study also identified basic benefits that taxpayers and the MOR office could get from the adoption of the e-tax pavement system. Those benefits were considered as a driving force for the adoption of the e-tax payment system. Regarding the survey result identified benefits for MOR

and clients was found that e-tax payment speed up tax collection process, reduce transaction cost and paperwork, improve transaction speed, it is very convenient to collect cash, make payments easily from everywhere, the system allows to get information easily and it help better control over payment, minimizes the risk of carrying cash & reduce cash theft and embezzlement, reduce data loss and tax evasion, increases operational efficiency, improves service quality, and create better relationship between taxpayers and tax office.

5.2 Recommendations

Based on the study conducted using survey methods in the adoption of the electronic tax payment system in MOR were identified several challenges. And the researcher conducts possible recommendations that would be useful to the tax authority and other concerned parties.

- ✓ As it was explained from the research findings, it is difficult to get technical support on time and to avoid this challenge Ministry of Revenues should hire more qualified employees in the area of IT and related fields in order to install the system, support the system and if problems happen to repair and maintain it and MOR should facilitate better education and trainings for these employees also the authority is better to conduct technical support team.
- ✓ Ethiopian Ministry of Revenue should formulate a better and continues training program to both the staff members and taxpayers about the electronic payment system. This will reduce incorrect usage of the system and will increase willingness of taxpayers to use the e-tax payment system. Additionally, MOR needs to work together with the Ministry of Education (MOE) to expand the teaching program, electronic tax system education better to be included in the accounting field curriculum or better to launch electronic tax training centers.
- ✓ Low internet infrastructure and disconnection of internet connection discussed above, since tax is a major source of government revenue MOR should work more closely with other stakeholders like Ethio-telecom and Ethiopian electric utility. The government (Ethio-telecom) needs more investment in the electronic tax structure in the country and needs to provide satisfactory telecommunication service to all taxpayers. Also electric power interruption is a major challenge for adaptation of e-tax payment system, thus the

government (Ethiopian Electric Utility) should provide sufficient power for the uninterrupted and efficient implementation of e-tax payment service. On the other hand taxpayers should use other sources to reduce electric interruption like automatic generator.

- ✓ In order to successfully facilitate e-tax payment adoption in Ethiopia, National Bank of Ethiopia (NBE) better to establish a fast set of responses to commercial banks and commercial banks should provide fast and best service to taxpayers and also they have to conduct better continued training programs to taxpayers.
- ✓ For further researchers who have interests on the same research topic this study only assess MOR's large taxpayer's branch office, but after start doing this researcher the system state implement in medium taxpayers branch office and for the future MOR and MOF announce to expand electronic payment system to all branches of MOR offices. Thus the researcher would like to recommend future research direction that should be among small and medium taxpayers as well as individual taxpayers.

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APPENDIX 1. Questionnaire

St. Mary University
School of Graduate Studies
Department of Accounting and Finance
Questionnaire to be filled by Employees of MOR

Dear Participants,

This study is entitled “**Challenges and Opportunities of Adopting E-TAX Payment System in MOR**” and conducted in partial fulfilment of the requirements for the Master’s Degree in Accounting & Finance at St. Mary University. Its main objective is to assess the opportunities and challenges of adapting the E-TAX Payment System in MOR.

The purpose of this questionnaire is to obtain your opinion about the general implementation of the E-Tax payment system. 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.

I thank you very much, in advance, for your cooperation

For any comment and questions, please contact me: Tel- (+251913603640)

Email - hiwot01234@gmail.com

Hiwot Muluken

Part I: General Information:

1. Did you give trainings about e-tax payment system to taxpayers?
 Yes No
2. If your answer is yes to question no.1 does the taxpayer’s understand the training easily?
 Yes No
3. If the taxpayers did not understand the training easily what is/are the reasons? Please Specify

4. Please indicate your current position: _____

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

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

Please put “√” mark in the box to the appropriate choice of your response that shows your level of agreement and disagreement to the statement provided

Part II: Current practice of e-tax payment system in Ministry of Revenue

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	MOR is doing its best to create awareness about e-tax payment.					
2	The branch office’s taxpayers are well done payments through e-tax payment system.					
3	There are enough computers and necessary materials to do e-tax payment related tasks in MOR.					
4	E-tax payment system guidelines are helpful for users					
5	I am well trained by MOR to do e-tax payment related tasks.					

If you have any suggestion or comment about current practice of e-tax payment system in Ministry of Revenue please specify _____

Part III: Benefit of adopting E-tax payment system

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	E-tax payment system speeds up tax collection process than manual system					
2	E-tax payment system is more accurate than the manual system.					
3	Using e-tax payment system in my job enable me to accomplish tasks more quickly					
4	E-tax payment system allows me to do my job more effectively					
5	E-tax payment system reduces time spent on auditing taxpayer’s data.					
6	E-tax payment system gives greater control over tax collection					
7	E-tax payment system has a positive effect on controlling tax evasion					
8	E-tax payment system significantly reduces MOR’s operational cost.					
9	Data loss is less likely in e-tax payment system than manual.					
10	E-tax payment system users follow procedures correctly than manual users.					
11	Taxpayers’ make less error while using e-tax payment system than manual					

If you get any other benefit by using e-tax payment system in Ministry of Revenue please specify

Part IV: Challenges of adopting E-tax payment system.

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Taxpayer's incorrect data encoding makes e-tax system less effective.					
2	The work load is the same after e-tax payment system introduced.					
3	There is lack of government support while implementing e-tax payment.					
4	There is lack of good IT staff members who facilitate e-tax system.					
5	Taxpayers don't want to shift from manual system to e-tax payment system.					
6	Taxpayer's attitude is not as positive as I expected towards e-tax payment system.					
7	In general, e-tax payment system is not effective as it should be in MOR.					

If you experience any other challenge through using e-tax payment system in Ministry of Revenue please specify _____

If there is any other complaint raised by taxpayers please specify _____

Part IV: Coordination of Commercial Banks and Ministry of Revenue in the process of e-tax Payment system.

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Employee of CBE have adequate knowledge about e-tax payment system					
2	CBE give adequate training about e-tax payment system to employees of MOR that help employees to give trainings to taxpayers					
3	MOR can easily collect tax revenue since e-tax payment system implement.					
4	MOR can easily get cash collection reports since e-tax payment system implement.					
5	CBE and MOR work more closely to give better service to taxpayers					

If you have any suggestion or comment about coordination of commercial banks and Ministry of Revenue in the process of E-tax Payment system. Please specify _____

Thank you very much for your cooperation!!!!

St. Mary University
School of Graduate Studies
Department of Accounting and Finance
Questionnaire to be filled by Taxpayers of MOR

Dear Participants,

This study is entitled “**Challenges and Opportunities of Adopting E-TAX Payment System in MOR**” and conducted in partial fulfilment of the requirements for the Master’s Degree in Accounting & Finance at St. Mary University. Its main objective is to assess the opportunities and challenges of adapting the E-TAX Payment System in MOR.

The purpose of this questionnaire is to obtain your opinion about the general implementation of the E-Tax payment system. 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.

I thank you very much, in advance, for your cooperation
For any comment and questions, please contact me: Tel- (+251913603640)
Email - hiwot01234@gmail.com

Hiwot Muluken

Part I: General Information:

1. What is your company main business activity?

- 1. Manufacturing
- 2. General Merchandise and Trade
- 3. Services Giving
- 4. Other, please specify _____

2. What is your position in the company?

- 1. Owners
- 2. Manager
- 3. Owner and Manager
- 4. Accountant
- 5. Finance and Accounts Head
- 6. Other responsibilities, please specify _____

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

- 1. Strongly disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly agree

Please put “√” mark in the box to the appropriate choice of your response that shows your level of agreement and disagreement to the statement provided

Part II: Current practice of e-tax payment system in Ministry of Revenue

N O	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	E-tax payment system is easy to learn					
2	E-tax payment system is easy to use					
3	I have good knowledge about e-tax payment system					
4	E-tax payment system is easy to teach new users					
5	Employees of MOR have willingness to help taxpayers in related to e-tax payment.					

If you have any suggestion or comment about current practice of e-tax payment system in Ministry of Revenue please specify _____

Part III: Benefit of adopting E-tax payment system

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	E-tax payment system makes work simple compared to the manual system					
2	E-tax payment system reduces transaction cost					
3	E-tax payment system improves transaction speeds					
4	E-tax payment system reduces paper work					
5	E-tax payment system reduce corruption					
6	Instruction of e-tax payment process is clear					
7	Instructions for using e-tax payment system are easy to follow					
8	Data loss is less likely in e-tax payment system than manual					
9	E-tax payment system safeguarding cash from loss, theft or embezzlement					
10	E-tax payment system create better relationship between MOR and clients					
11	E-tax payment system increases reliability					
12	E-tax payment system reduces errors					
13	MOR provide sufficient technical support for effective functioning of the system					
14	MOR provide fast technical support for effective functioning of the system					
15	Overall, I'm satisfied by using E-tax payment at my work place.					

If you get any other benefit by using e-tax payment system in Ministry of Revenue please specify

Part IV: challenges of adopting E-tax payment system

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	E-tax payment system requires additional effort to enter the data than manual system					
2	There is high cost of implementation of E-tax system, such as cost of ICT equipment and network					
3	The awareness creation program is not sufficient to improve compliance					
4	Poor intranet connection affect e-tax payment system					
5	Frequent power interruption affect e-tax payment system					
6	Internet hackers might take control of tax information in e-tax payment system.					
7	The security system built into the e-tax payment system is strong enough to protect our company account.					
8	I do not have any problem with using the electronic tax filing system					

If you experience any other challenge through using e-tax payment system in Ministry of Revenue please specify _____

Part V: Coordination of commercial banks and Ministry of Revenue in the process of E-tax Payment system.

No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	E-tax payment registration process in CBE is easy					
2	E-tax payment registration process in CBE is fast					
3	Employee of CBE have adequate knowledge about e-tax payment system					
4	CBE give adequate training about e-tax payment system to taxpayers					
5	Employee of CBE have willingness to give information and support taxpayers					
6	CBE gives satisfactory service to taxpayers					

If you have any suggestion or comment about coordination of commercial banks and Ministry of Revenue in the process of E-tax Payment system. Please specify _____

Thank you very much for your cooperation!!!!