Factors Affecting Customers' Satisfaction on Online Tax Payment in Ethiopia:
An Empirical Study on Ethiopian Large Taxpayers

A Thesis Submitted to St. Mary's University, School of Graduate Studies in
Partial Fulfillment of the Requirements for the Degree of Master of Accounting
and Finance

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APPROVED BY BOARD OF EXAMINERS

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DECLARATION

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

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Name Signature
St. Mary's University Addis Ababa   June, 2020

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of graduate studies for examination with my approval as a university advisor.

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Advisor   Signature

St. Mary's University Addis Ababa   June, 2020

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ACRONYMS

MOR: Ministry of Revenue

TAM: Technology Acceptance Model

LTO: Large Taxpayers Office

SPSS: Software Package for Social Science

Table of Contents

Table and Figures

ABSTRACT

Online tax payment system can play a very crucial role in the tax payment process for the users as well as the organizations. The purpose of this thesis is to assess the factors that affect the customer's satisfaction on online tax payment system in MOR main branch office. This study used explanatory design, with describing, understanding, predicting the factors that affect the satisfaction of online tax payment system in MOR. Both descriptive and regression analysis were employed. In this study, a total of 174 questionnaires are distributed and 145 questionnaires are collected with 83 % response rate. The finding of Pearson correlation analysis reveals that ease of use, usefulness and credibility has a positive relationship with customer satisfaction and significant at the 1% level of significance as well as the relationship between those factors and customer satisfaction were strong. Furthermore, the multiple regression result indicates that adjusted coefficient of determination (R^2) for three factors explained approximately 71.6 % of the variation in customer satisfaction. The model coefficients estimation result tells that all the independent variables i.e. ease of use, usefulness, and creditability are found to be positively significant at 1% significance level. The estimated coefficients for credibility have the highest coefficient value followed by usefulness and ease of use. The model adequacy diagnostic test was conducted and the result shows that the model is adequate and appropriate. Finally, the MOR should be consider credibility as one of the main factor and give high emphasis on online tax payment system such as security and privacy of the system in order to meet customer satisfaction as well as to increase confidence, improve the simplicity or ease of use on the system so that all the customers could be satisfied and update the system to improve the usefulness of the system so that customers would be more satisfied.

Key Words: Ease of Use, Usefulness, Credibility, Multiple Regressions,

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

Properly developed, effective taxation systems are crucial for a well-functioning society. In most economies, taxes are the main source of revenue to fund public spending on education, health care, public transport, infrastructure and social programs, among others. Tax policy is one of the most contentious areas of public policy. A large body of theoretical and empirical work examines the effects of high tax rates and complex fiscal systems. A good tax system should ensure that taxes are proportionate and certain (not arbitrary) and that the method of paying taxes is convenient for taxpayers and easy to administer and collect (World Bank, 2019).

Furthermore, taxation provides governments with the funds needed to invest in development, relieve poverty and deliver public services. It offers a remedy to aid dependence in developing countries and provides fiscal reliance and sustainability that is needed to promote growth. Tax system design is also closely linked to domestic and international investment decisions, including in terms of transparency and fairness. Strengthening domestic resource mobilization is not just a question of raising revenue: it is also about designing a tax system that promotes inclusiveness, encourages good governance, matches society's views on appropriate income and wealth inequalities and promotes social justice (International Monetary Fund and World Bank 2011).

A key problem facing revenue administrations in many developing countries is that they operate manual paper-based recording systems. Revenue leakages are common and occur because of untimely collection, corruption and under-collection. Difficulties emerge in estimating how many

taxpayers are missing from their registered rolls, how many of those who are registered are inactive, and how much is actually being evaded through non-payments, corruption and ineffective billing systems. To address these challenges and with recent advances in information and communications technology (ICT), there has been a strong drive to use ICT across developing economies to increase the efficient collection of tax revenues (WB, 2019).

The level of tax revenues in an economy is influenced by tax policy and tax administration as well as the level of taxpayer compliance and government enforcement. Developments in information and communication technology (ICT) in recent decades, both for electronic filing and payment of taxes, have presented many opportunities for revenue bodies to increase government revenue, improve efficiency, and enhance the quality of services delivered to taxpayers, while at the same time reducing taxpayer compliance burden and government administration costs, and improving enforcement (OECD, 2017).

Accordingly, the Ethiopian government also gives an attention for the development of ICT and under taking substantial reforms to provide equitable, efficient and effective service to taxpayers. Since 2015, Ministry of Revenue has been tested e-tax payment system as pilot for large tax payers. However, after a year of 2018 it becomes fully operational for large tax payers. As the result, Ministry of Revenue has been good progress in the development, delivery and exploitation of electronic services. Ministry of Revenue has been collecting taxes from large tax payers using electronic tax system. Thus, an electronic tax payment system implemented which benefits both tax authorities and customers. Therefore, the aim of this research is to examine factors affecting satisfaction of large tax payer customers who have been using online tax payment system in Ethiopia.

1.2 Statement of the problem

Information Technology is central to the effective administration of taxation systems. Where investment in IT was once seen as a "luxury" by administrations, evolving business practices across the globe now demand an efficient, comprehensive, accurate and interactive capability to deal with administration of the whole revenue system within a country, and, in a rapidly increasing number of cases, across borders as well. Administrations need to be able to deal with increasing numbers of taxpayers and the increasing amount of information required to manage the complexity of their interactions. They also need better transparency of their operations, greater efficiency, and greater responsiveness to the needs of both taxpayers and the government. These needs simply cannot be met by traditional manual means they can only be met by the effective use of IT. Investment in IT capability now forms a significant part of the budget of administrations, and needs to be carefully managed (Cotton and Dark, 2017).

For tax authorities, electronic filing lightens the workload and reduces operational costs such as the costs of processing, storing and handling tax returns. At the same time, it increases tax compliance and saves time. For taxpayers, electronic filing saves time by reducing calculation errors on tax returns and making it easier to prepare, file and pay taxes. The level of tax revenues in an economy is influenced by tax policy and tax administration as well as the level of taxpayer compliance and government enforcement. Developments in information and communication technology (ICT) in recent decades, both for electronic filing and payment of taxes, have presented many opportunities for revenue bodies to increase government revenue, improve efficiency, and enhance the quality of services delivered to taxpayers, while at the same time reducing taxpayer compliance burden and government administration costs, and improving enforcement (OECD, 2017).

Malaysia's experience has shown the opportunities that technology can provide as well as the challenges that may emerge as the users are phasing in the change over time. The benefits of e-filing and e-payment systems extend to other electronic processes in the tax authority. 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. As a whole, well-designed electronic systems can lower corruption by reducing face-to-face interactions. To ensure that taxes are collected efficiently and reduce opportunities for corruption, a generally accepted principle is that tax authorities should not handle money directly. Ideally, tax officials should have little direct contact with taxpayers and so less discretion in deciding how to treat them (Joanna Nasr, 2014).

Samuel E. (2015) assessed the Practice, Challenges, and Prospects of e-Government the case of Ethiopian Revenue and Customs Authority (MOR) Large Taxpayers Office (LTO). According to his study, the overall level of satisfaction of large taxpayers on MOR's website as a primary source of one-stop-shopping portal is also found to be only 52%. In terms of the stage of e-Government, MOR is found at its emerging stage where most of its e-Services are informational (static) than transactional. Benchmarking of its e-Services with selected Sub-Saharan African countries has also revealed that a lot has to be done for MOR to evolve its e-Service to a stage where all its services are integrated in seamless manner; fiscal transparency is enhanced; knowledge management (for example to control tax evasion) is optimized; and e-Payment augments e-Filing.

There are limited studies made on identifying and exploring about the electronic tax payment system operating in Ethiopia. Studies made by (Abera, 2019), (Reddy & Haftay, 2018), (Wollela & Fjeldstad, 2016) are (Dagnachew T., 2018) are among the few researches made on assessment on E-tax payment system. Particularly, the researcher could not get a single research made on identifying and exploring the determinants or factors that affect customers' satisfaction on online tax payment by MOR.

However, tax is the work that done with the participation of the two parties. The tax payers must require to full fill any tax related form that are given by the tax authority offices and the tax collector employees must know what they do. Giving satisfaction for customers need is the best method to get a positive thinking from its customers. Therefore, understanding the factors or determinants of electronic tax collection system and customers satisfaction of the system in Ethiopia is vital. Hence, the focus of this study is to explore and identify the factors of customer satisfaction to fill the gap to examine the perception and satisfaction of customers on online tax payment system of MOR for large tax payers.

1.3 Objectives of the Study

The general objectives this research is examine the factors of customers' satisfaction on online tax payment in MOR's large tax payers at branch office.

1.3.1 Specific Objective of the Study

The specific objectives of this study are:

1. To identify the effect of ease of use on online tax payment customers' satisfaction.

2. To identify the effect of usefulness on online tax payment customers' satisfaction.

3. To identify the effect of credibility on online tax payment customers' satisfaction.

1.4 Research Hypothesis

H_1: Ease of use has an effect on online tax payment customers' satisfaction.

H_2: Usefulness has an effect on online tax payment customers' satisfaction.

H_3: Credibility has an effect on online tax payment customers' satisfaction.

1.5 Significance of the Study

The result of any investigation or study may serve to different parties or individuals whom directly or indirectly benefited. The findings of this study are expected to benefit Ministry of Revenue in two folds. Firstly, this study will provide information to better understand factors that may affect taxpayers' decision whether to transact online or not. Once those factors had been identified, it can be used to explain taxpayers' satisfaction towards online tax payment system. Since MOR is the organization responsible for any income tax matter, the findings of this study can facilitate MOR in improving its electronic services especially online tax payment system in order to increase the usage level of the said system. Secondly, the result of the study will be used as a reference for other researchers to conduct further study.

1.6 Scope of the study

The scope of this study is focuses on the large tax payers at branch office found in Addis Ababa. The large tax payers are selected because of the reason that they are currently paying their tax payment through electronic system what it call online tax payment system. The conducting period of this study is range between January 2020 up to June 2020.

1.7 Limitations of the study

Online payment system is the broad and large subject by itself and need to participate users as well as the system providers, but the researcher is interested to see only the users perspective rather than both the user and the system provider. This would be one of the limitations of this study.

1.8 Organization of the study

Generally the next content of this paper is organized into four chapters. The second chapter deals with the literature review, the third chapter discuss about the research methods, research approach, target population, sample size and sampling methods, method of data collection, method of data analysis and data quality assurance, the fourth chapter deals about result and discussion. Finally, the last chapter five discuss about summary of the study, conclusion and recommendation.

CHAPTER TWO

2. LITERATURE REVIEW

This chapter discusses theoretical and empirical literatures related with the topic. Therefore, the primary purpose of this chapter explains about the theoretical and empirical review on the tax payment system and customer satisfaction. More specifically, review of up-to-date related literatures regarding: concept of taxation, principles of taxation, measurement of tax administration performance, electronic filing system and electronic tax payment system.

2.1 Theoretical Review

2.1.1 Customer Satisfaction

Customer satisfaction is identified as one of the most examined constructs in marketing literature. This plays a major role in competitive environment because of its ability to retain the existing customers and to introduce new customers (Tandon et al., 2017). Furthermore, Keller (2012) identified satisfaction as "a person's feeling of pleasure or disappointment which occurs as a result of the comparison between product or service performance and expectation". Another view point was provided by Oliver (2015), where he defined customer satisfaction as the "consumer's fulfillment response. It is a judgment related to a product/service feature, or the product or service has actually provided (or is providing) a pleasurable level of consumption-related fulfillment".

Giese and Cote (2000) stated that customer satisfaction encompasses three basic components: a response (emotional or cognitive) pertaining to a particular focus (expectations, product, consumption experience, etc.) determined at a particular time (after consumption, after choice, based on accumulated experience, etc.).

According to Flavián &Gurrea (2006) user satisfaction depends on the fulfillment of customer expectations. Therefore, it is important to undertake detailed analysis on the requirements of web site user.

2.1.2 Concepts on Tax and Taxation

Tax is a mandatory distribution collected by the Government to meet the expenses of various public functions. Many economists give the unanimous opinion about tax that "the tax is a compulsory payment to the government by tax payer without any expectation of some specified return.'' Accordingly, in general terms, tax can be defined as a contribution from individuals Out of their private property for the maintenance and defense of government, so that it may perform its functions and the ends of the state are realized. Taxes defined to be burdens, or Charges imposed by the legislative power of a state persons or property, "to" raise money for public purposes. It is a power inherent in sovereignty, and without which constitutional government cannot exist. It vested in the Legislature by thegeneralgrantofthelegislativepowerwhetherspeciallyenumeratedin the constitution among the powers to exercise by it or not (Yohannes & Sisay 2009).

Tax is used as meet the expenditures for public welfare. According to Hugh Dalton (1995), 'tax is a compulsory imposed by a public authority irrespective of the exact amount of service rendered to the taxpayer in return and not imposed as penalty for any legal offence. Taxation is used to encourage investment in local industries among others. Taxation is a means of finance that governments used to their expenditure by imposing charges on individual citizens and any business corporate entities. The money that collects because of a system of tax must takes by the government may use to spend in social activities such as education, health and defense. While

taxation is not the only source of government revenues, but it is the large and the most important source in nearly all countries. Government is accountable to its citizens because of taxation, when the government spends the tax collected money; they are more accountable to make budget decisions transparent and accessible (Joanna, 2014).

Although, the goal of any tax authority is to establish a system of tax administration that allows for the collection of required taxes at a minimum cost. In simpler terms, "tax is a financial charge or other levy imposed on an individual or a legal entity by government"

Commonlytax can classify into direct and indirect taxes, based on the nature of taxes and tax payment reason.

A. **Direct tax:** is one for which the formal and economic incidences essentially these i.e. the tax payer is not able to pass the burden to someone else. Accordingly, direct taxes paid entirely by those persons on who imposed. The major types of direct taxes in Ethiopia are personal income tax, rental income tax, business profit tax, withholding tax and such other taxes like taxes from loyalties, from games of chance, dividends or property taxes.

B. **Indirect tax**is a tax where by the tax payer's burden to pay the tax can easily be passed on to another person. Generally, the tax incidence of an indirect tax is on the ultimate consumer; however, sometimes,

C. Sellers might absorb such in direct taxes to be competitive in the market in which they are operating. The major types of indirect taxes in Ethiopia are value added tax, custom duties, stamp duties, excise tax and turn overtax.

2.1.3 Tax Payment System

Any tax system which is designed on the bases of an appropriate principles or rules is called a good tax system. A good tax system should have a balance of interest between the Tax payers and the tax collected authority. Taxation is, by its nature, a complicated subject and most businesses as well as many self-employed individuals use intermediaries, such as accountants, to complete and file their tax returns (Regina & Frank 2008). Tax is the government's main financial source to perform the current affairs and finally giving services to the common people, the way together it can generate the sense of justice between people and also to direct the social, cultural and economic activities in the way of country's development macro plans and goals, In which has a serious impact. One of the main concerns of any government t is to collect taxes rightly.

2.1.4 Electronic Payment

Electronic payment (e-payment) development will strongly contribute to improving countries' competitiveness in many ways(Kamulegeya 2010). E-service experience greatly affects the establishment of trust and relation with customers, and enterprises must pay attention in this regard (Yang and Zeithaml 2001, 2002). Electronic filing system is a filing system of information in the form of electronically with having of more pervasive effect on the legal system than adopting of administrative procedure acts or codes of civil procedure (William and Robert 2003).The World Bank has also suggested on its report that e-payment is crucial for economic development. Its 2014 report states E-payment is able to that rapidly developing and extending digital platforms to provide all the means to increase financial inclusion at the desired scale by providing increased speed, security, transparence and cost efficiencies (World Bank 2014).

Electronic filing is the substitution of an electronic document for a traditional paper document. With the evolution of Internet technology, electronic filing has become a highly secure and reliable method for sending, receiving, and managing legal documents and case in formation. A fully developed electronic filing system includes not only trans mission of pleadings to the Clerk's Office in an electronic format, but also the routine use of electronic documents and the electronic record for case processing, for service on other parties, and for access and use by everyone involved in, or interested in the case (Judge Dennis & Dan Flory, 2006).

E-payment greatly increases payment efficiency by reducing transaction cost and enabling trade in goods and service of very low value. They may also increase the convenience of making payment by enabling them to make swiftly and remotely from various devices connected to global networks (Wondwossen Taddesse, Tsegai G.Kida, 2005,). Thee-filing system is a simple electronic system designed to process files and letters electronically (Wahid, 2017). The use of electronic systems in areas of declaring the taxable income by taxpayers and receiving the levy, play an important role in advancing the goals of e-Government.

Electronic tax system is a web-enabled system that developed to replace manual system. It enables taxpayers to register tax, returns filing, payment registration to allow for tax payments and status inquiries with real-time monitoring of accounts (Waweru 2013). E-revolutionmadesignificantchangestoofferservicestonotonlycustomersbutalsoto the citizens and businesses, being applied now (Akbar & Shahria 2015).Thee-government is also defined as to use electronic information technology and the Internet to improve the efficiency of government

activities(Shelin, 2003). E-Tax filing is a system for submitting tax documents to the tax department through the internet or direct connection, usually without the need to submit any paper documents (ChangandHung, 2005).

2.1.5 Technology Acceptance Model (TAM)

The success of an information system (IS) depends on the continued usage of the system. (Davies, 1989) presents the Technology Acceptance Model (TAM) by explaining the determinants of user's satisfaction. The TAM postulates that user adoption of a new information system is determined by their intention to use the system, which in turn is determined by their beliefs about the system. The TAM further suggests that two beliefs perceived usefulness and perceived ease of useare instrumental in explaining the variance in the users' intention. Perceived usefulness is defined as the extent to which a person believes that using a particular system will enhance his or her job performance, while perceived ease of use is defined as the extent to which a person believes that using a particular system will be free of effort. Among the beliefs, perceived ease of use is hypothesized to be a predictor of perceived usefulness. Furthermore, both types of beliefs are influenced by external variables.

There is a growing body of research being focused on examining the determinants users' satisfaction on information system technology. Among the different models that have been proposed, the Technology Acceptance Model (TAM) appears to be the most widely accepted. According to TAM, adoption behavior is determined by the intention to use a particular system, which in turn is determined by perceived usefulness and perceived ease of use of that system. As Davis noted, future technology acceptance research needs to address how other variables affect usefulness, ease of use, and user acceptance. However, factors affecting the acceptance of a new

IT are likely to vary with the technology, target users, and the context. Recent research has indicated that "credibility" has a striking influence on user willingness to engage in online exchanges of money and personal sensitive information. Therefore, perceived ease of use and perceived usefulness may not properly explain the user's intention to adopt the electronic tax-filing system. Consequently it becomes necessary to search for additional factors that can better predict the acceptance of electronic tax-filing systems such as credibility or security (Wang, 2002).

2.2 Empirical Literatures

Public expenditure and financial Accountability assessment data across 58 developing countries indicates that a well-functioning revenue system is a necessary condition for strong, sustained and inclusive economic development. However, the revenue systems in some developing countries have fundamental shortcomings. Tax reforms or tax system changes need to be made mindful of that current capacity. The optimal choice of tax regime may be different when administrative capacity is low. The increasing globalization of economic activity adds a further layer of complexity that developing countries need to manage in building and maintaining their revenue systems (Carnahan, 2015).

Efunboade (2014) conducted the research on the Impact of ICT on Tax Administration in Nigeria. This study shows clearly that ICT plays an important role in the increase of internally generated revenue in Nigeria by ensuring compliance thereby boosting productivity and economic activities in the country. It is a change agent for accelerated growth and poverty reduction in Nigeria and the whole of African continent at large. The emerging global infrastructure could make it increasingly possible for eligible taxpayers to pay tax online anywhere and anytime. The

establishment of an integrated broadband plan is a positive indicator of the government of Nigeria to provide ambience for enhancing the use of information technology and promoting information transmission and connectivity to the global infrastructure.

Wang (2002) discussed the factors affecting the adoption of electronic tax-filing systems in Taiwan. Using the technology acceptance model (TAM) as a theoretical framework, this study introduces "perceived credibility" as a new factor that reflects the user's intrinsic belief in the electronic tax-filing systems, and examines the effect of computer self-efficacy on the intention to use an electronic tax-filing system. Based on a sample of users from a telephone interview, the results strongly support the extended Technology Acceptance Model (TAM) in predicting the intention of users to adopt electronic tax-filing systems. The results also demonstrate the significant effect that computer self-efficacy has on behavioral intention through perceived ease of use, perceived usefulness, and perceived credibility. Based on the findings of this study, implications for electronic tax filing in particular and for e-government services in general are discussed.

Soneka &Phiri (2019) assessed the factors that influence the level of e-tax systems adoption in Zambia. The study focused on Tax Online system used by domestic taxes division in Zambia. In this study, the researcher used Technology Acceptance Model (TAM). The sample size was purposively selected from various taxpayers who were coming through to Zambia Revenue Authority. The results showed that, E-tax system in Zambia is useful, easy to use and also secure. Based on the findings, majority of the taxpayers are filing their returns and paying taxes online. However, there are few taxpayers who still feel E-tax is not useful, easy to use and secure.

Sheikh (2015) explains that as with any new system, there have been numerous teething problems with the electronic system. First, there are two concurrent tax systems manual and e-Tax systems without either system recognizing the other. Taxpayers are also receiving demand emails from the Integrated Tax Management System. This is bound to create discrepancies in taxpayers' records, especially with regards to payment of tax obligations as well as submitting returns. For instance, in the current setup, if a taxpayer pays taxes manually, the e-Tax system will not recognize the payment. Instead, the system automatically calculates penalties and interest on the perceived missed‖ tax payments thereby leading to potential disputes between the tax office and the taxpayer. Second, the e-Tax system lacks historical records of taxpayers. Its record keeping is a going forward‖ type in that it only stores tax records of taxpayers from the time of registering for e-Tax onwards.

Deyalageand Kulathunga (2019)investigatefactors affecting online customer satisfaction in case of Sri Lankan. In this study, the authors proposed a conceptual model of customer satisfaction in the online context by identifying the key factors proposed by previous studies, and hypotheses were developed accordingly. The hypotheses were tested through multiple regression analysis, based on a sample of 150 online customers. The study found that customer service, website design and security perception were significantly associated with online customer satisfaction.

Chen (2010), examined the impact of the quality factors on taxpayers' satisfaction from online tax filing system in Taiwan in which the quality of the online tax filing system consists of data quality, system quality, and service quality showing the record of users' satisfaction of each. The results are as follows: Since about 75 % of all income taxes in Taiwan comes from wages and salaries of blue and white collar workers. Therefore, the personal income report for most

Taiwanese taxpayers is not overly complicated. In fact, they pay more attention to exemptions' and deductions' data (cost of rent, insurance, tuition, and fees and grants to nonprofit Organizations or charitable organizations) than to non-deductible income data. If online tax filing system is capable of keeping the taxpayers' information about exemption up-to-date, filing the income tax returns will be less tiring. The availability feature in system quality should be strengthened. If 25 to 30 percent of the taxpayers decide to file their income tax returns in the last 3 days prior to the deadline, the pressure will explode beyond the capacity of the system. When taxpayers are forced to wait for their turn in a queue in the system, the availability feature which is a part of system quality is being threatened .Expanding the capacity of the tax filing system is a solution. However, a more efficient financial option could include solving the problem of having access through appropriate management.

Tella (2012) assessed the determinants of E-Payment systems success in Nigeria. In the study, the Technology Acceptance Model by Davies (1989) was extended. The paper synthesized the technology acceptance model (TAM) to explain and predict the success of e-payment system using users' satisfaction as dependent variable. The hypothesized model was validated empirically using a sample data collected from of a modified e-payment questionnaire. The results revealed correlation among perceived benefits, perceive enjoyment, speed; service quality, perceive ease of use and actual use and e-payment success. Moreover, all the seven e-payment predictive factors together made 69% of e-payment system success. Similarly perceived benefits, perceive enjoyment, speed; service quality, perceive ease of use and actual use are good predictors of e-payment system success. One of the implications pointed out by the study is that the measures for the construct of e-payment system success used are self-reported.

Ayodeji (2014) looked at the Impact of electronic tax systems on Tax Administration in Nigeria. He argued that the dwindling global fortune occasioned by the fall in the price of crude oil, the major source of wealth for Nigeria shifted the attention of the government and major stakeholders in the country to the revenue generated locally. But the daunting task of boosting the Internally Generated Revenue necessitates the adoption of electronic tax systems technologies to drive Tax administration and concluded that electronic tax systems plays an important role in the increase of internally generated revenue in Nigeria by ensuring compliance thereby boosting productivity and economic activities in the country. It is a change agent for accelerated growth and poverty reduction in Nigeria and the whole of African continent at large. The major recommendation from their study will that necessary laws and regulations have to be passed by the appropriate authorities to reduce or abolish import taxes on information technology hardware such as computers, Servers, printers, biometric scanners and other devices

Experimental evidence from Ethiopia show that the available data is still not used to its full potential, despite modern ICT systems in place. And also they find that a technological innovation, the introduction of electronic sales registration machines, had a positive impact both on tax revenue and on the accuracy of tax records. However, taxpayers responded to the machines by simultaneously adjusting both reported income and deductible costs, thus reducing the potential revenue gains. The main mechanism through which the machines increase tax revenue is tax compliance, rather than any change in real business activity (Mascagni et.al, 2018).

Dagnachew(2018) assessed the challenges and opportunities of adopting E-Tax system in case of MOR Large Tax Payers Office. Population of the study consist Ethiopian Revenue and Customs Authority LTO staff. The result of the study indicated that, the major challenges of MOR faces in the adoption and development of E-Tax system are; lack of customer awareness, limitation in

network infrastructure and internet related support services. The study identified operational and services benefits from adopting and developing of E-Tax system such as increase productivity, reduces paper work, reduce transaction cost, increase reliability and reducing errors. Among the different driving forces that initiate MOR to adopt E-Tax system include desire to improve the relationship with customers, desire to build organizational reputation, and desire to keep tax payer information safely.

Though the studies are conducted in Ethiopia related with E-tax system in the case of MOR large tax payers office, they are not investigate the factors based on statistical tests as well as specified factors. This is therefore, there is a gap in the previous studies and this study will fill such gaps by introducing different factors and analysis using statistical tests.

2.3 Conceptual Model

For the purpose of this research, the research will consider different studies to construct the conceptual model. The proposed research model includes the factors such as ease of use, usefulness and credibility. The conceptual model is depicted as follow:
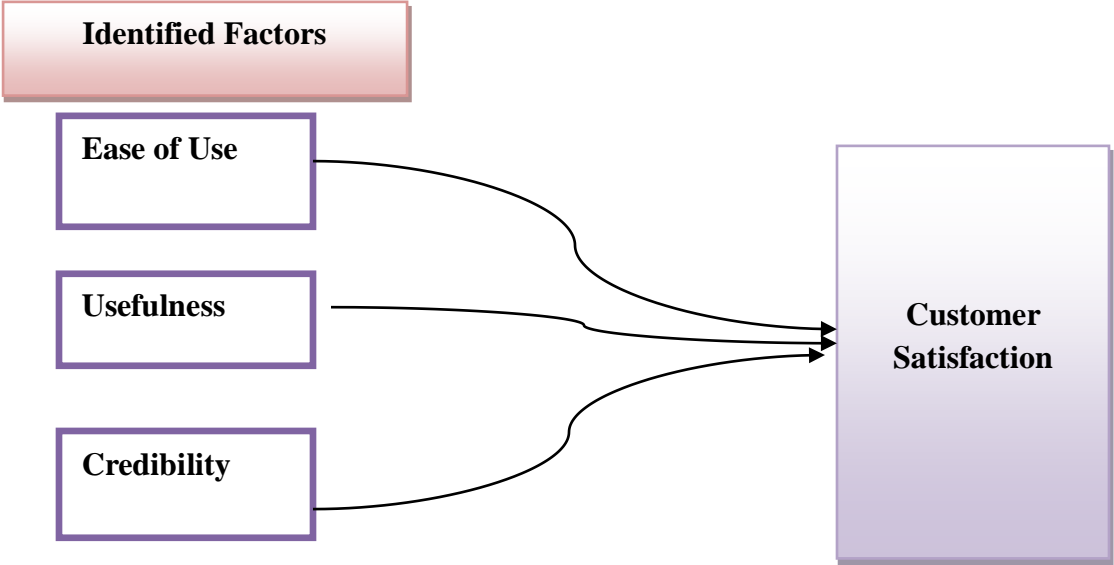

Figure 1: Research Model Adapted from literatures

2.3.1 Ease of Use

Perceived ease of use (PEOU) is defined as the degree to which a potential adopter views the usage of the target technology to be relatively free of effort (Davis, 1989). Innovations that are perceived to be easier to use and less complex have a higher likelihood of being accepted and used by potential users (Agarwal and Prasad, 1999). This has been widely investigated as a determinant of information technology adoption because of its wide use by researchers. Davis (1989) identified Perceived ease of use as a primary determinant of IS adoption at the pre implementation stage.

2.3.2 Usefulness

Perceived usefulness (PU) is defined according to Lu, et al. (2000) as a prospective user's which is subjective or with the likelihood of using a specific innovation to enhance it processes. Jiang, et al. (2000) explores more of perceived usefulness on the development and utilization of the internet technologist model to explore the ways by which it is being implemented. With the above definition perceived usefulness is accomplished by being used as advantages for easy application of a new innovation. In an organization context users of any innovation are reinforced by their performance in the use of any technology by giving bonuses. More so when a system is perceived by high users believe in the existence of positive user perception is said to be an innovation of good performance base on their benefits.

2.3.3 Credibility

Besides the ease of use and usefulness beliefs, the usage intention of electronic tax-payment systems could be affected by users' perceptions of credibility regarding security and privacy issues. Users are concerned about the level of security present when providing sensitive information on-line and will perform transactions only when they develop a certain level of trust.

Therefore, perceived credibility refers to the two important dimensions – security and privacy – that are identified in most studies as affecting the users' intention to adopt the on-line transaction systems.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 Introductions

According to Kothari (2004) research methodology has been defined as a systematic way to solve research problem and consists of systematic observation, classification and interpretation of the study findings. In this section the research design, the research approach, sampling size and sampling technique, the size of population, data collection methods and the method of data presentation, reliability and validity of data and ethical consideration were applied throughout the research. Finally the descriptive, factor and multiple regression analysis are used for data analysis which is applicable for this study.

3.2 Research Design

A research design is the procedures for collecting, analyzing, interpreting and reporting data in research studies (Creswell & Plano Clark, 2007). It is the overall plan for connecting the conceptual research problems with the pertinent (and achievable) empirical research. In other words, the research design sets the procedure on the required data, the methods to be applied to collect and analyze this data, and how all of this is going to answer the research question (Grey, 2014).

This study used the explanatory design, with describing, understanding, predicting the factors that affect the satisfaction of online tax payment system in MOR. The factors are ease of use, usefulness and credibility.

3.3 Research Approach

There are three research methods or approaches: these are qualitative, quantitative and mixed research method. This study was used both qualitative and quantitative method which is named as mixed research method. According to Creswell (2014) mixed method research is a methodology for conducting research that involves collecting, analyzing and integrating quantitative (experiment or surveys) and qualitative (example focus groups, interviews) research. As many scholars explained as quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires and surveys or by manipulating pre-existing statistical data using computational techniques.

According to Mugenda & Mugenda (2003) quantitative study describes as a research approach explaining phenomena by collecting numerical data that are analyzed using statistical approaches. It is an approach in which the investigator employs strategies of inquiry such as experiments and surveys and collects data on predetermined instruments that yield statistical data (Creswell, 2003). Quantitative research designs are either descriptive or experimental studies. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon.

3.4. Population of the Study

The study of population is a well-defined or specified set of people, group of things, households, firms, services, elements or events which are being investigated. The population should be acceptable for a certain project, which the researcher is studying. The target population is one that the researcher wants to generalize the result of the study. The target population of this study includes 1200 customers of large tax payer's branch office.

3.5 Sample size and Sampling Technique

It is a technique of gathering valid information which matches to researchers' research proposal. It is important to select a representative sample through making a sampling framework. In this study, the sample size consider as representative of the tax payers of the branch office and this was expected to be large enough to allow precision, confidence and to generalize the research finding. The researcher use Kothari sample size determination formula developed by (Kothari, 2004) because it is a standard formula and is used in different related studies it is calculated as follows:

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

Where;

N: Designate total number of customers on large tax payers branch office

e: Designates maximum variability or margin of error 7% (0.07).

1: Designates the probability of the event occurring.

$$n = \frac{1200}{1 + 1200 * (0.07)^2}$$

n= 174

Therefore, the sample size for this study is 174 large tax payers.

3.5 Sampling Techniques

From the population study frame work, the required number of respondents was selected in order to make a sample. For this study, purposive sampling was employed. According to Lavrakaz (2008) purposive sampling referred to as a judgmental or expert sample, it is a type of non-probability sample. In this study, sample units 174 (selected tax payers) of the research were chosen based on the non-probability sampling method of purposive sampling. This sampling method was utilized for a reason that since the aim of the researcher is to collect

reliable information from the sources having relevant knowledge and/or experience directly related to the subject of the study.

3.6 The Source of Data

The sources of data were collected from primary and secondary data. The most common primary data collection instrument is questionnaire. Questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents.

According to Bulmer (2004), the questionnaire is a well-established tool for a social science research to obtaining information on participant social characteristics, present and past behavior, standards of behavior or attitudes and their beliefs and reasons for action with respect to the topic under investigation. The questionnaires were designed as close ended questions used in the form of five point Likert-Scales to collect data from the sample respondents. The questionnaire were rating scales ranging from 1-strongly agree to 5-strongly disagree. However the analysis is based on how the mean response of the respondent closed to this expected value. A number of researchers use this methodology, because it is relatively easy for respondent to answer the question and responses. This scale is likely to be reliable (Balzanand, 2007).

Data gather through questionnaires is simple and clear to analyses and it allows for tabulation of responses and quantitatively analyzes a certain factors. The questionnaires were structured in such a way that it includes all components (ease of use, usefulness and credibility) which enable the researcher to critically assess the research questions.

As a secondary data source, the researcher was review different MOR's annual reports and other relevant documents.

3.7 Methods of Data Analysis

Data analysis refers to the computation of certain measures along with searching for patterns of relationships that exist among data groups (Kothari, 2009). It implies examining what has been collected in a survey or experiments and making deductions and inferences (Kombo and Tromp, 2011). The process of data analysis aims at determining whether the observations support the research questions that will be formulated before going into the field to collect the information.

With regards to this study, after the data was collected, it was coded and edited for accuracy and completeness before the data was subjected to analysis. In analyzing the data, answers from different respondents and information obtains from documents and questioners, this data were carefully checked out and compares to establish their validity. Analysis of data basically based on the research objectives and questions.

The collected data was analyzed using descriptive statistics and multiple regressions. The statistical package for social scientists SPSS-20 was used. The descriptive analysis was presented using statistical analysis such as frequencies, percentages, means and standard deviations while, the inferential analysis was done using multiple regression.

3.8 Multiple Regression

In addition to the above factor analysis, a multiple regression analysis is also the most commonly used multivariate procedures and is used to build models for predicting scores on one variable, the dependent variable, from scores on a number of other variables, the independent variables Terre Blanche, et al, (2006). The researcher tried to predict the model in terms of customer satisfaction (dependent) variable from independent variables such ease of use, usefulness and credibility.

To figure out the effect of independent variables the researcher tried to specify the multiple regression method as follows:

$$CS = f(EU, USF, CR)$$

$$CS = c + \beta_1 EU + \beta_2 USF + \beta_3 CR + \varepsilon ....Eq(1)$$

Where
CS= Customer Satisfaction

EU =Ease of Use Control Environment,

USF= Usefulness,

CR = Credibility,

β : Coefficient of the factor

c : Constant and

ε : Residual

3.10 Reliability and Validity of Data

Reliability estimates the consistency of the measurements or more simply, the degree of uniformity of the results obtained from repeated measurements. Reliability is essentially about consistency (Adams, et al, 2007, P, 235). According to Joppe (2000, p.1) pointed that an accurate representation of the total population under study is referred to as reliable if the results of a study can be reproduced under a similar methodology. Reliability, by definition, refers to the extent to which studies can be regularity. In order to satisfy the criterion of reliability in a piece of research no matter it is quantitative or qualitative it is important for the researcher to document the research procedure explicitly (Kirk and Miller, 1986). This is what Franklin and Ballan (2001) called the 'audit trail', which is important to provide a basis for checking the researcher's dependability.

Reliability or internal consistency can be measured in different ways. In this study the reliability was assessed by means of the Cronbach Alpha. The generally agreed lower limit, to be able to claim an instrument to be reliable, for the Cronbach Alpha coefficient is 0.70, although the limit may be lowered to 0.60 in the case of explanatory research (Hair et al., 1988).

According to Enon (1998) Validity is defined as the extent to which a concept is accurately measured in a quantitative study. He further stated that validity Refers to the quality that a procedure or an instrument used in the research is accurate, true, and meaningful and right.

Validity is conceptualized as the degree to which the researcher is confident about the conclusion/inferences of the causal relationship between variables/events (Tashakkori and Teddlie, 1998). By doing so, it is possible to achieve consistency in some findings, and thus would increases the validity of the overall research. In addition, the use of purposive sampling in a research enhances the generalization of result.

3.11 Regression Model Diagnostics Tests

3.11.1 Test of Normality

In regression analysis there are several assumptions that must be met before analysis has been carried out. The first procedure in regression analysis is a test of normality (linearity) of the data. Parametric tests, say regression analysis assumes a Gaussian (normality) distribution of the continuous data. As the result, checking the normality of the residual of the model estimated is important. In this study the normality test is done by observing the distribution of the residuals whether they are distributed normally or not.

3.11.2 Multicollinearity

When choosing a predictor variable you should select one that might be correlated with the criterion variable, but that is not strongly correlated with the other predictor variables. The term multicollinearity is used to describe the situation when a high correlation is detected between two or more predictor variables. The predictor variables model has experienced the problem of multicollinearity when the correlation matrix of any independent variables that correlates above some level with one another. The multicollinearity test is conducted using a basis of VIF value. If the VIF value lies between 1 and 10, then there is no mulicollinearity. However, If the VIF value is less than 1 or greater than 10, there is mulicollinearity.

3.11.3 Autocorrelation

Another important tool used to diagnose OLS estimation model fit the data well is the absence of autocorrelation in the datasets. Autocorrelation occurs when the residuals are not independent from each other. Autocorrelation in multiple linear regression models was tested using Durbin-Watson test. Durbin-Watson's tests the null hypothesis that the residuals are not linearly auto-correlated. While can assume values between 0 and 4. As a rule of thumb values of $1.5 < d < 2.5$ show that there is no auto-correlation in the multiple linear regression data.

3.11.4 Model Adequacy

Model adequacy is a situation of checking by how much the model fitted describes the collected data. In the OLS estimation method, R-square (R2) and Adjusted R-square are commonly used techniques to check the fitness of the model (Wooldridge, 2002). R-square is the measure of the "Goodness-of-fit" of the fitted regression model and is calculated by the ratio of the explained to the total variation. It describes how much of the variation in the dependent variable is explained

by the included factors or explanatory variables in the model. In social science low R-square in regression is common, especially for cross-sectional analysis (Wooldridge, 2002).

3.12 Ethical Consideration

Before engaging in data gathering, the study was secured ethical issues by informing the respondent for the purpose of the study. During such process, the participants will properly informed the purpose of the study and will confirm the confidentiality of their responses. This included briefly explain for non-disclosure of individual identity and their liberty from any liability or risk arising from the study or the response. The required information was collected only from the interested participants and they had been informed to have a right to withdraw at any time when felt inconvenience of participation. The study acknowledges all contributors to this study and provides proper credits to those scholars immediately and list of references was attached. At most effort, this study was applied free from bias, abuse, misconduct and fraudulent acts and practices.

CHAPTER FOUR

4. RESULT AND DISCUSSION

4.1 Introduction

In this section response rate, demographic characteristics of the respondent, perception of the respondent on online tax payment system and inferential statistics (correlation and multiple regressions) are discussed in detail.

4.2. Response Rate

In order to meet the objective of this study a total of 174questionnaires were distributed to the target samples of customers. Out of this distributed questionnaires, 145 were returned which implies that a response rate was about 83%. This response rate indicated appropriate to conduct research. And this is supported by the literature of Mugenda (1999), that a response rate of 50% is adequate for analysis and reporting, a rate of 60% is generally good while a response rate of above 70% is excellent, and this also asserted by Babbie (2010) that 70% is excellent.

4.3 Reliability and Validity Test

Conducting a reliability and validity test is very important to check the dataset consistency. In this study, the reliability or internal consistency test is conducted using Cronbach Alpha, Table 4.1 provides the Cronbach Alpha scores for the items. The Cronbach's Alpha recorded scores for groups as well as in total was greater than the threshold value of 0.7, resulting that all questionnaire items could be considered as reliable as a group as well as in total.

Table 4.1: Reliability Statistics

Items by group	Cronbach's Alpha	N of Items
Ease of Use	0.868	5
Usefulness	0.895	5
Credibility	0.706	5
Satisfaction	0.760	3
Total	0.830	18

4.4 Demographic Characteristics of the Respondent

In this research the demographic factors of the respondents included gender, age, educational back ground and duration of usage.

Figure 1: Gender distribution of the respondents
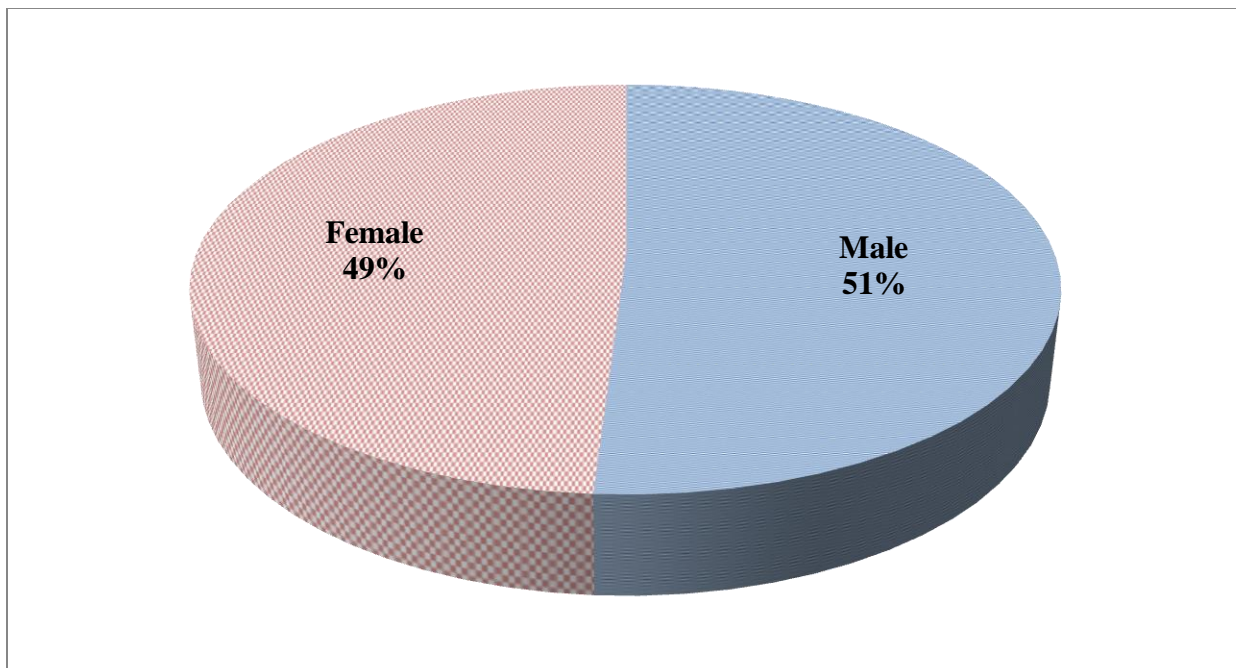
As can be seen from figure 1above, from the total 145 respondents participated under the survey, about 51 % of the respondents were male, while the remaining 49 % were female. The finding indicates that most of the participants' gender is male.

Figure 2: Age distribution of the respondents
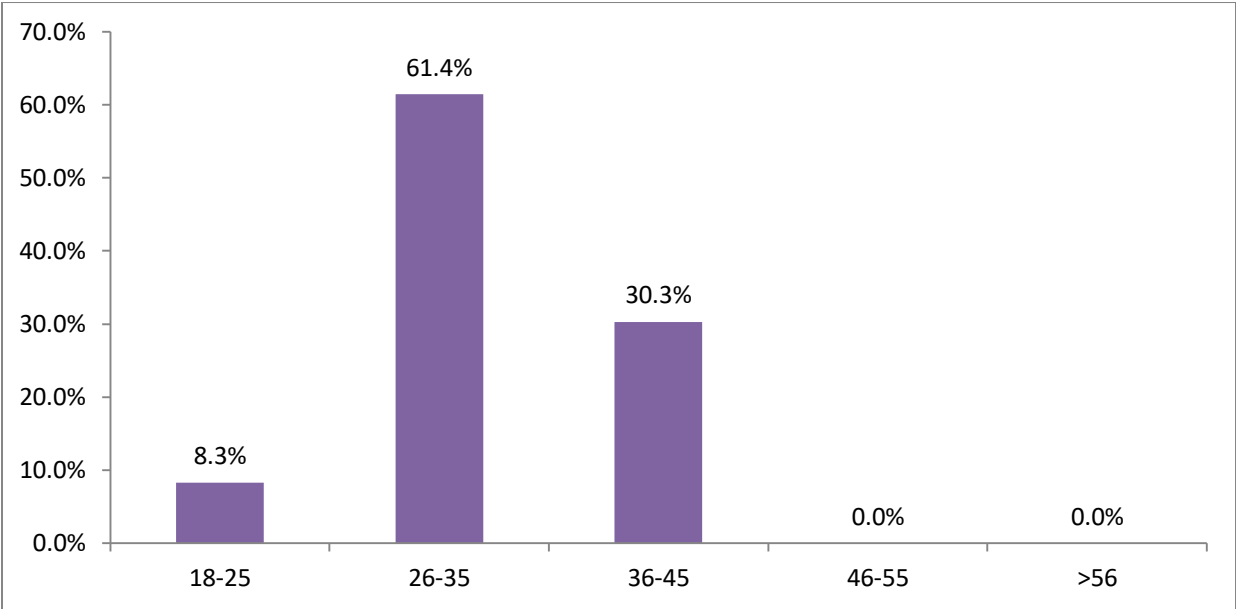
Regarding the age distribution, the sample age categories were divided with five age categories. Accordingly, the results showed that out of the total 145 participants, majority of respondents (61.4%) were aged between 26 and 35 years old followed by aged between 36 and 45 years (30.3 %) and aged between 18 and 25 years (8.3 %). This is an indication that most taxpayers are in the survey are young (Figure 2).

Figure 3: Education Level of the respondents
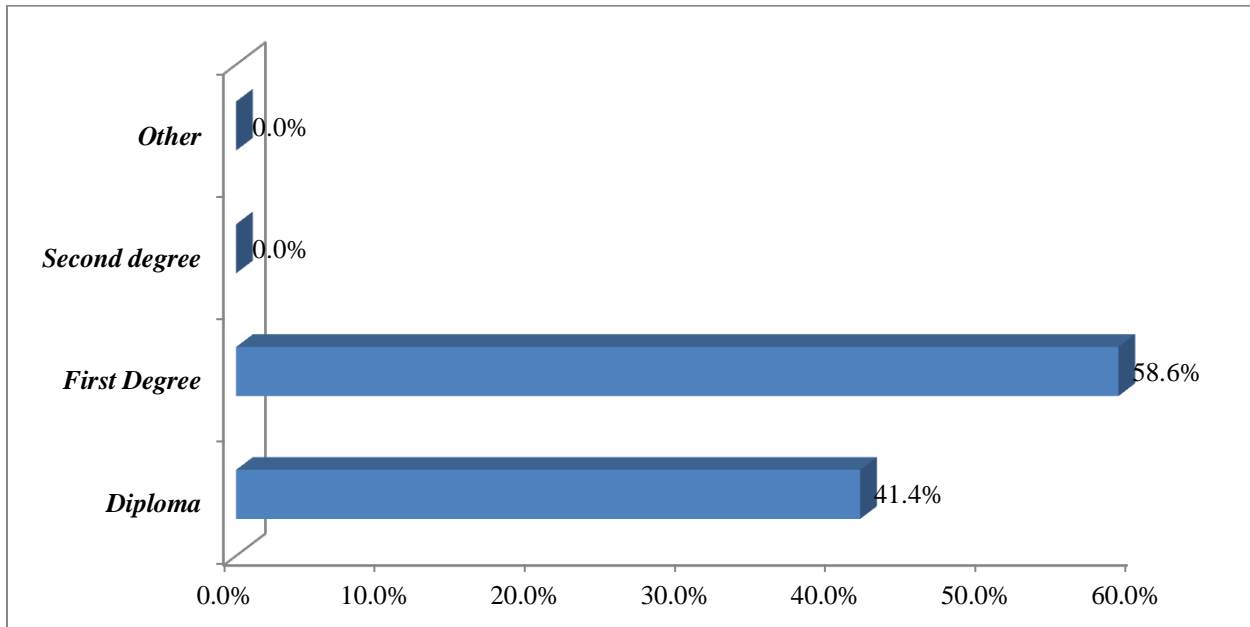
Looking at the education level of the respondents, from the total of 145 participants in the survey, 41.4 % of the respondents have diploma and the remaining 58.6 % of the respondents have first degree. Thus, it is possible to say that approximately all the respondents had good education background resulting they would well educated to know the online tax system (Figure 3).

Figure 4: Duration of time using online tax payment system
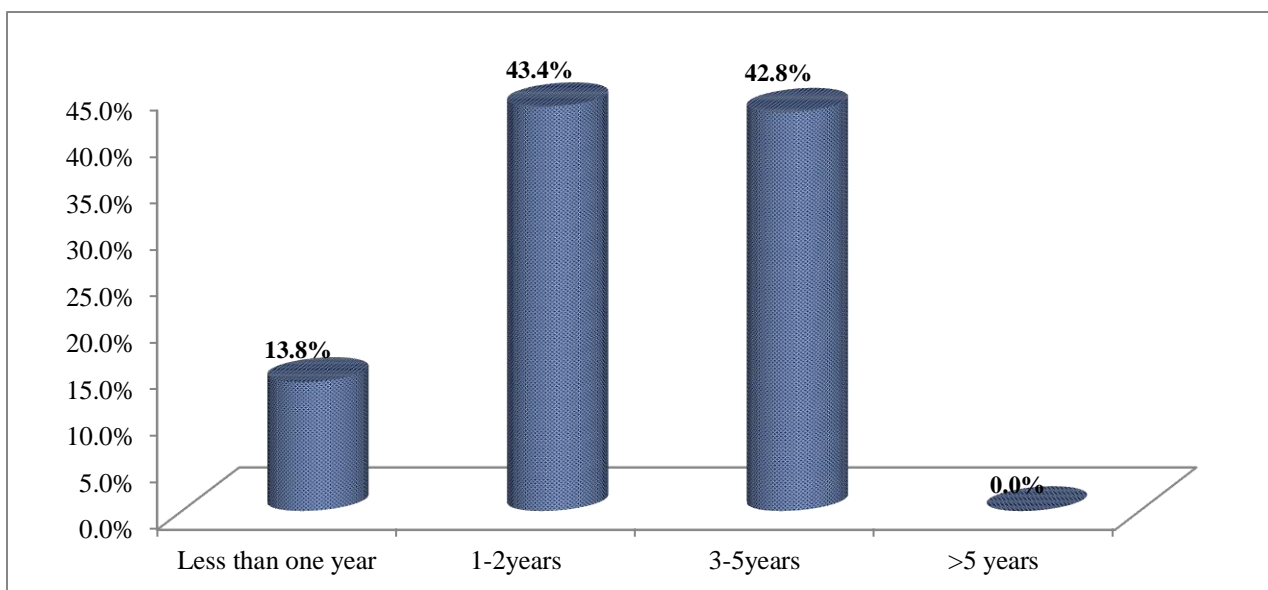
The respondents were also asked to indicate the duration of time they have been using internet as a tax payment system. It became embarked that out of 145 participants, 43.4 % indicated that they use the internet as a tax payment system for 1 and 2 years and the remaining 42.8 % of the respondents use for 3 and 5 years (Figure 4).

4.5 Perception of Respondents towards Factors

In order to assess the perception of respondents towards online tax payment system factors related with ease of use, usefulness and creditability, the respondents were asked to indicate their extent of agreement or disagreement with some statements relating to some of the factors that influence ones' view on online tax system. The respondents were requested to rate each item using five scale liker-scaling, ranging from strongly disagree to strongly agree. The following statistics are used as a common measurement in interpreting the results of the study: 1.00 – 1.80 "Strongly disagree/very dissatisfied", 1.81 – 2.60 "Disagree/dissatisfied, 2.61 – 3.40 "Moderate agreement/moderately satisfied", 3.41 – 4.20 "Agree/satisfied", 4.21 – 5.00, and "Strongly agree/very satisfied". Moreover, the researcher tried to calculate the mean and standard deviation for each items.

4.5.1 Perception of Respondents on Ease of Use

Perceived ease of use is defined as the level at which someone believes he or she can use information technology with ease and without any problem (Venkatesh& Davis 2000). Davis (1989) suggests that the perceived ease of use has a small impact, but is still significant and can change over time in terms of its influence to ward someone's intention to use a system. In this sub section, a total of five questions were questioned to understand the level of perception on ease of use.

Table 4.2: Perception on Ease of Use

Items	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	Standard Deviation
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent			
I find online tax payment system is not an easy system to learn.	6	4.1%	67	46.2%	27	18.6%	26	17.9%	19	13.1%	145	2.9	1.2
I find online tax payment system is not an easy system to use.	10	6.9%	48	33.1%	32	22.1%	37	25.5%	18	12.4%	145	3.0	1.2
It is not easy to become skillful in using online tax payment system.	9	6.2%	66	45.5%	26	17.9%	35	24.1%	9	6.2%	145	2.8	1.1
Online tax payment system instructions are not easy to follow.	8	5.5%	61	42.1%	24	16.6%	45	31.0%	7	4.8%	145	2.9	1.1
The structure and contents of the web site are not easy to understand.	8	5.5%	53	36.6%	30	20.7%	41	28.3%	13	9.0%	145	3.0	1

Source: SPSS Output

The standard deviations of respondent response were around 1, which indicates that the respondent perceptions were almost close to one another. Moreover, most of the mean values were between 2.8 and 3.0, which imply that on average the respondents moderately agreed that the online tax payment system is not an easy system to learn, is not an easy system to use, system instruction are not easy to follow and the structure and contents of the web site are not easy to understand. Therefore, an improvement of the system as well as enhance the simplicity on the system is very important so that all the customers could be satisfied (Table 4.2).

4.5.2 Perception on Usefulness

Perceived usefulness is defined as the level of taxpayers' perception of how far online tax payment system can increase their work performance (Davis 1989).Under this sub section, a total of five questions were covered to realize the perception on usefulness.

Table 4.3: Perception on Usefulness

Items	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	Standard Deviation
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent			
Using online tax payment system does not speed up my tax payment process.	26	17.9%	31	21.4%	30	20.7%	30	20.7%	28	19.3%	145	3.0	1.4
Using online tax payment system would not help me reduce errors in payment process.	3	2.1%	41	28.3%	44	30.3%	48	33.1%	9	6.2%	145	3.1	1.0
Using online tax payment system does not helps me to reduce my time consumption.	4	2.8%	43	29.7%	44	30.3%	36	24.8%	18	12.4%	145	3.1	1.1
An online tax payment system is not flexible.	4	2.8%	49	33.8%	44	30.3%	34	23.4%	14	9.7%	145	3.0	1.0
Overall the disadvantage of online tax payment system will outweigh the advantages.	4	2.8%	43	29.7%	51	35.2%	36	24.8%	11	7.6%	145	3.0	1.0

Source: SPSS Output

For the meantime, the standard deviation of respondents response were almost one, which indicates that the respondent's perception were close to one another. Furthermore, the respondent's average response about usefulness reveals that most of the values were between 3.0 and 3.1, this indicates that the respondents were moderately agreed that using online tax payment system does not speed up their tax payment process and would not help to reduce errors (Table 4.3).

4.5.3 Perception on Credibility

According to Wang et al. (2003), perceived credibility consists of two important elements namely privacy and security. Security and privacy can be associated with trust and perceived risk where users will only perform transactions through internet system if they develop a certain level of trust and low level of perceived risk. If users have a higher level of trust on the information system, they will perceive the risk associated with the system at the minimum level and vice versa.

Table 4.4: Perception on Credibility

Items	Strongly		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	Standard Deviation
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent			
I am not feel secure and comfortable using the online tax payment system.	6	4.1%	79	54.5%	37	25.5%	13	9.0%	10	6.9%	145	2.6	1.0
ERCA's electronic tax application has no credibly security features.	11	7.6%	74	51.0%	49	33.8%	9	6.2%	2	1.4%	145	2.4	0.8
The privacy and integrity of my personal information would not managed securely.	18	12.4%	58	40.0%	41	28.3%	26	17.9%	1	0.7%	144	2.5	1.0
Information provided by the website is not credible and consistent.	8	5.5%	44	30.3%	47	32.4%	33	22.8%	13	9.0%	145	3.0	1.1
ERCA's electronic tax application has no modern-looking equipment.	13	9.0%	48	33.1%	49	33.8%	31	21.4%	4	2.8%	145	2.8	1.0

In order to examine the perception of customers on online tax payment system credibility, in this study, a total of five questions were covered. The standard deviation of respondents response were one, which indicates that the respondent's perception were close to one another. Furthermore, the respondent's average mean values were mixed result that disagree and moderately agree on the credibility of the online system (Table 4.4).

4.5.3 Perception on Satisfaction

As it can be seen from Table 4.6 result, the mean values of the respondent for satisfaction level were between 2.4 and 2.9. Thus we can conclude that respondents were moderately satisfied with the online tax payment system related with ease of use, usefulness and credibility (Table 4.5).

Table 4.5: Customer Satisfaction

Items	Strongly		Disagree		Neutral		Agree		Strongly Agree		Total	Mean	Standard Deviation
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent			
ERCA's online tax payment is not ease to use and I am not satisfied.	28	19.3%	22	15.2%	40	27.6%	52	35.9%	3	2.1%	145	2.9	1.2
ERCA's online tax payment system is not useful and I am not satisfied.	40	27.6%	39	26.9%	35	24.1%	26	17.9%	5	3.4%	145	2.4	1.2
ERCA's online tax payment system is not credibly and I am not satisfied.	36	24.8%	32	22.1%	42	29.0%	31	21.4%	4	2.8%	145	2.6	1.2

Source: SPSS Output

4.7 Correlation Analysis

To find the relationship between dependent and independent variables, correlation analysis is employed. The results were analyzed based on correlation analysis rule as follows: -1 to -0.5 or 1.0 to 0.5 strong, -0.5 to -0.3 or 0.3 to 0.5 moderate, -0.3 to -0.1 or 0.1 to 0.3 weak and -0.1 to 0.1 none or very weak. The correlation coefficients between independent variables and dependent variables are shown in Table 4.6.

Table 4.6: Correlation Matrix Result

		Ease of Use	Usefulness	Credibility	User Satisfaction
Ease of Use	Pearson Correlation	1	.205*	.435**	**.536****
	Sig. (2-tailed)		.014	.000	.000
	N	145	145	145	145
Usefulness	Pearson Correlation	.205*	1	.259**	**.555****
	Sig. (2-tailed)	.014		.002	.000
	N	145	145	145	145
Credibility	Pearson Correlation	.435**	.259**	1	**.733****
	Sig. (2-tailed)	.000	.002		.000
	N	145	145	145	145
User Satisfaction	Pearson Correlation	.536**	.555**	.733**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	145	145	145	145

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

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

Source: SPSS Output

As shown in Table 4.6, ease of use, usefulness and credibility has a positive relationship with customer satisfaction and significant at the 1% level of significance. The Pearson correlation coefficient values between; ease of use and customer satisfaction, usefulness and customer satisfaction and credibility and customer satisfaction were 0.536, 0.555 and 0.733, respectively.

4.8 Multiple Regression Analysis

Multiple regression analysis is one of the most commonly used multivariate procedures and is used to build models for predicting scores on one variable, the dependent variable, from scores on a number of other variables, the independent variables Terre Blanche, et al, (2006). As the result, in this study, the researcher tried to predict the effect of each independent variable using a multiple regression model in terms of customer satisfaction (dependent) variable from independent variables such as ease of use, usefulness and credibility.

Table 4.7: Regression Model Summary Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.850[a]	.722	.716	.3323	1.785

a. Predictors: (Constant), Credibility, Usefulness, Ease of Use

b. Dependent Variable: User Satisfaction

Based on the cross section data, multiple regression method is applied to empirically investigate the effect to which ease of use, usefulness and credibility can predict the variable customer satisfaction of online tax payment system. The adjusted coefficient of determination (R^2) shows that the three factors explained approximately 71.6 % of the variation in customer satisfaction. This gives almost the same and consistence with factor analysis obtained in the above (Table 4.7).

Table 4.8: Model Coefficients Estimation Result

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.539	.134		4.012	.000
	Ease of Use	.152	.033	.227	4.571	.000
	Usefulness	.279	.035	.369	7.986	.000
	Credibility	.421	.039	.539	10.723	.000

a. Dependent Variable: User Satisfaction

The model coefficients estimation result in the above Table 4.13reveals that all the independent variables i.e. ease of use, usefulness, and creditability are found to be positively significant at 1% significance level.

The result indicates that ease of use has a positive and statistically significant effect on online tax payment system customer's satisfaction. The estimated coefficient for ease of use found to be 0.152 which is small compared with other two factors usefulness and credibility. This finding is also consistent with other studies such as Hung et al. (2006) and Venkatesh & Davis (2000) find perceived ease of use has a significant association with someone's intention to use information technology and satisfaction level.

In addition usefulness is found to be positive and significant with the coefficient value of 0.279 which is also small effect compared with credibility. However, it has higher effect compared with ease of use. This result is also consistent with other prior studies provide evidence that usefulness shows a positive association with someone's intention to use an information technology as well as satisfaction (Hu et al. 1999; Venkatesh et al. 2003).

For the meantime, the estimated result for credibility is also found to be positive and significant with the coefficient value of 0.421which is higher than bout ease of use and usefulness variables. As the result credibility has a great effect on online tax payment system customer's satisfaction. This also consistent with Venkatesh & Davis (2000) study finding they found significant direct effects of credibility on online system user satisfaction.

A multiple regression equation that was specified under section three can be written based on the above estimation result as follow:

$$CS = 0.539 + 0.152EU + 0.279USF + 0.421CR$$

As a final point, by considering the above regression results, the revised theoretical model is depicted as follow:
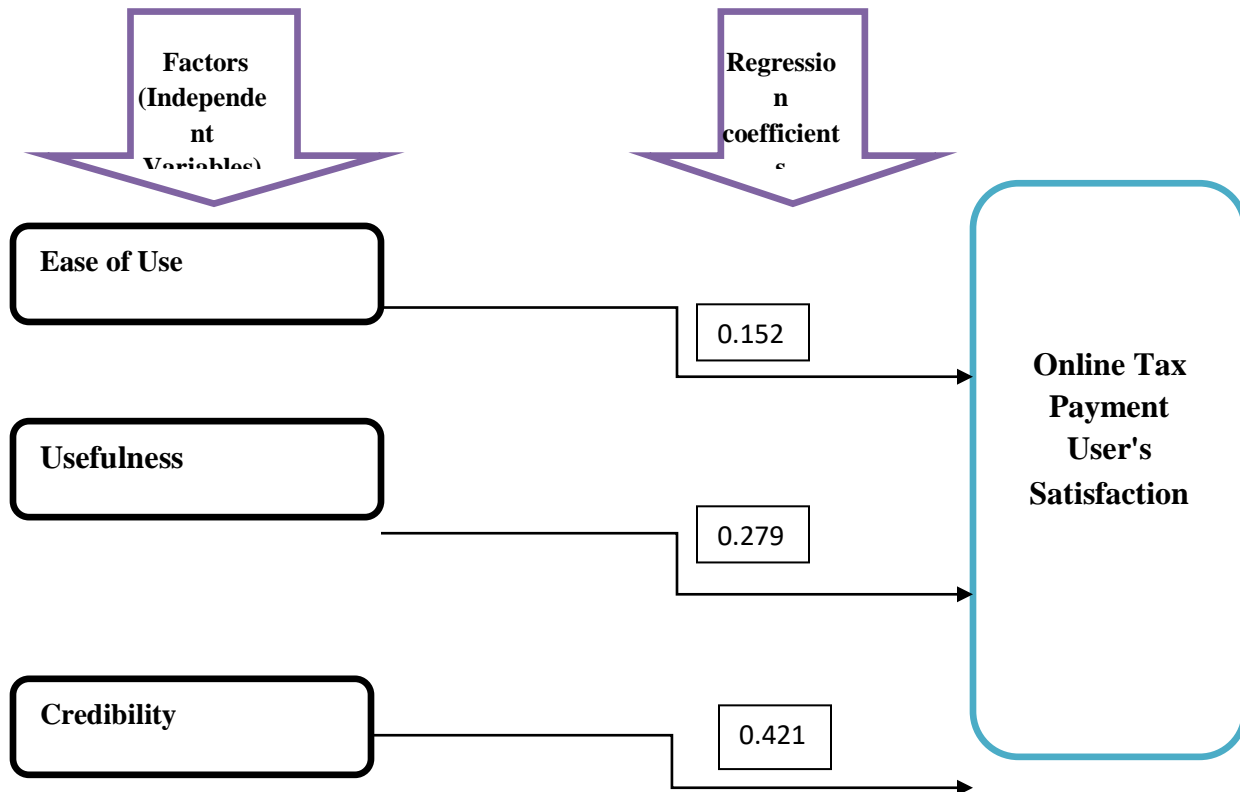

Figure 5: *Theoretical model after model estimation*

4.8.1 Regression Model Diagnostics Result

Normality Test

One of the assumption of linear regression model is the residual values are need to be normally distributed. As the result, checking the normality of the residual of the model estimated in the above is important. The distribution of the residuals are illustrated in the below figure.
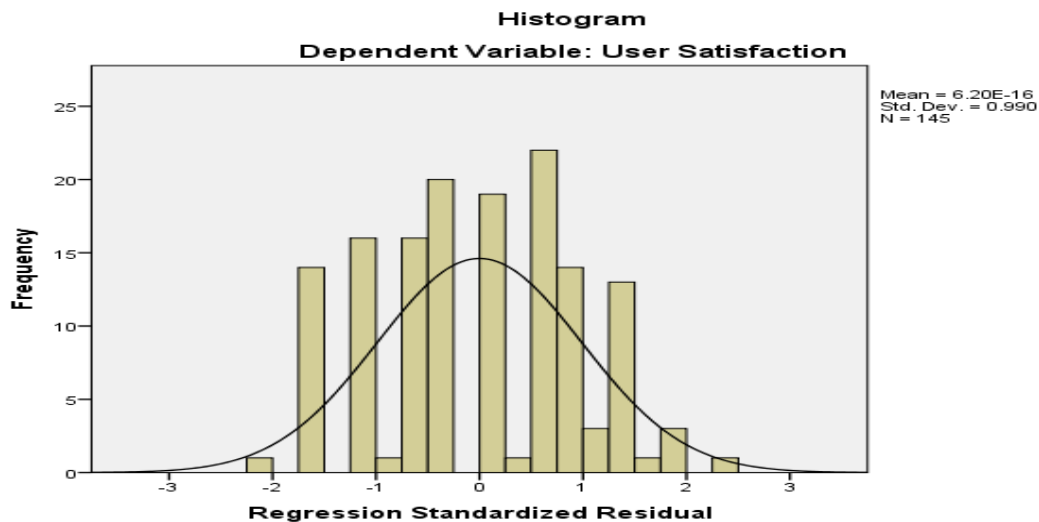

Histogram
Dependent Variable: User Satisfaction

Mean = 6.20E-16
Std. Dev. = 0.990
N = 145

Figure 6*: Normal Test Result*

As it can be seen from the above figure, the shape of the histogram follows the shape of the normal curve fairly well; there are no residuals out of the normal curve. As the result, we can conclude that the residuals are normally distributed and the model is appropriate (Figure 6).

Multicollinearity Test

After the normality test in the regression model, it is important to conduct multicollinearity test. The multicollinearity test is conducted using a basis of VIF value. If the VIF value lies between 1

and 10, then there is no mulicollinearity. However, If the VIF value is less than 1 or greater than 10, there is mulicollinearity. The multicollinearity test is depicted in the bellow table.

Table 4.9 : Multicollinearity Test Result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.539	.134		4.012	.000		
1 Ease of Use	.152	.033	.227	4.571	.000	.802	1.247
Usefulness	.279	.035	.369	7.986	.000	.922	1.084
Credibility	.421	.039	.539	10.723	.000	.781	1.281

a. Dependent Variable: User Satisfaction

Based on the above Table 4.9 output, co linearity statistics of VIF, obtained is between 1.084 and 1.247, meaning that the VIF value obtained is between 1 and 10 and it can be conclude that there is no mulicollinearity symptom between the independent variables.

Autocorrelation Test Result

After the test of mulicollinearity completed it is important to examine whether there was no correlation between residual by way of autocorrelation test.

Table 4.10: Autocorrelation Test Result

Durbin-Watson
1.785

a. Predictors: (Constant), Credibility, Usefulness, Ease of Use

b. Dependent Variable: User Satisfaction

Durbin Watson statistics tests for autocorrelation value ranges from 0 to 4 and as a rule of thumb, the value should be between 1.5 and 2.5 to indicate independent of observations (Garson, G.

David, 2010). Therefore, the Durbin Watson value 1.785 reveals that there is no autocorrelation and implies that independent of observation and the model is adequate. In general, the diagnostics test result indicates that the model is appropriate and fulfills all the assumptions of classical linear model (Table 4.10).

Heteroskedasticity Test Result

It is important to examine whether there was a difference of residual variance observed by way of heteroskedasticity test. The result is depicted in the below figure.
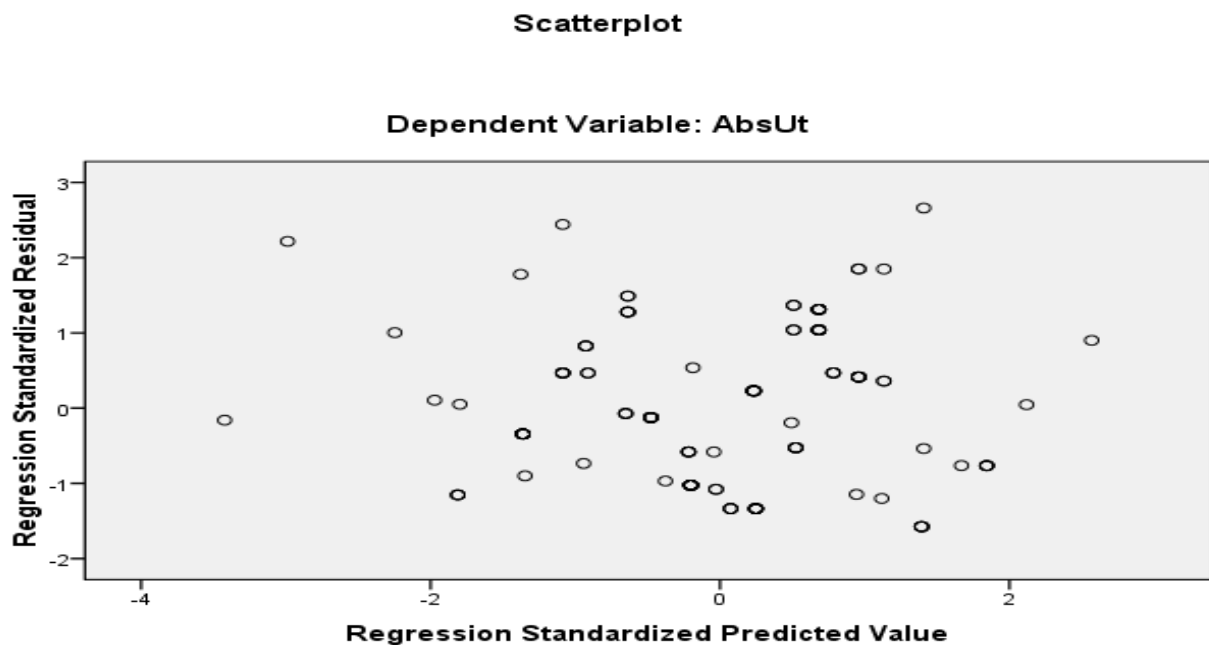

Figure 7*: Heteroskedasticity Test Result*

Based on the Scatter plot output above, it appears that the spots are diffused and do not form a clear specific one pattern, meaning that there was a difference of residuals. So it can be concluding that regression model does not occur heteroskedastisiy problem (Figure 7).

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summaries of Major Findings

In order to meet the objective of this study a total of 174questionnaires were distributed to the target samples of customers. Out of this distributed questionnaires, 145 were returned which implies that a response rate was about 83% which it was good enough and appropriate to precede the next steps. Both descriptive and inferential statistics were applied. From descriptive analysis percentage, mean and standard deviation were used to know the data characteristics of the factors affecting effectiveness of internal control system, whilst regression analyses were employed for inferential statistics. The reliability of the questionnaire was tested by means of Cronbach's Alpha test and the data set was reliable and acceptable with Cronbach's Alpha average result.

The descriptive analysis related with perception of customers on ease of use indicates that most of the mean values were between 2.8 and 3.0, which entail that on average the respondents moderately agreed that the online tax payment system is not an easy system to learn, is not an easy system to use, system instruction are not easy to follow and the structure and contents of the web site are not easy to understand. For the meantime, the respondents' average response about usefulness reveals that most of the values were between 3.0 and 3.1; this indicates that the respondents were moderately agreed that using online tax payment system does not speed up their tax payment process and would not help to reduce errors. Likewise, In order to examine the perception of customers on online tax payment system credibility, a total of five questions were covered. The respondent's average mean value was mixed result that disagrees and moderately

agrees on the credibility of the online system. Regarding, customers' satisfaction on online tax payment system were moderately satisfied related with ease of use, usefulness and credibility.

Likewise, The Pearson correlation analysis reveals that ease of use, usefulness and credibility has a positive relationship with customer satisfaction and significant at the 1% level of significance. The Pearson correlation coefficient values between; ease of use and customer satisfaction, usefulness and customer satisfaction and credibility and customer satisfaction were 0.536, 0.555 and 0.733, respectively. Thus, the relationship between ease of use and customer satisfaction, usefulness and customer satisfaction and credibility and customer satisfaction were strong.

Furthermore, the multiple regression method is applied to empirically investigate the effect to which ease of use, usefulness and credibility can predict the variable customer satisfaction of online tax payment system. The adjusted coefficient of determination (R^2) shows that the three factors explained approximately 71.6 % of the variation in customer satisfaction. This gives almost the same and consistence with factor analysis obtained. The model coefficients estimation result tells that all the independent variables i.e. ease of use, usefulness, and creditability are found to be positively significant at 1% significance level. It implies that independent variables have significant effect on customer satisfaction of online tax payment system. The estimated coefficients for credibility has the highest coefficient value of 0.421 followed by usefulness (0.279) and ease of use (0.152). Finally, the model adequacy diagnostic test was conducted and the result shows that the model is adequate and appropriate.

5.2 Conclusion

This study was conducted with the intention to examine factors affecting satisfaction of customers on online tax payment quality in MOR's large tax payers' branch office. Based on the finding most of the respondents explained factors such as ease of use, usefulness and credibility has an effect for their satisfaction of online tax payment system.

Similarly, a correlation and multiple regression analysis reveal that ease of use usefulness and credibility has an effect on customer satisfaction of online tax payment. Positive and significant values in the coefficients indicate that all three independent variables namely; ease of use, usefulness and credibility have positive relationship towards customer satisfaction of online tax payment system.

5.3 Recommendations

The following recommendations are forwarded with the basis of the research findings.

- The finding investigated that credibility is found to be direct, positive and significant effect towards customer satisfaction in online tax payment system. Most of the customers are also moderately satisfied with the credibility of the online payment system. Therefore, the MOR should be consider this important factor and give high emphasis on the credibility of online tax payment system such as security and privacy of the system in order to meet customer satisfaction as well as to increase confidence.

- The finding also indicates that ease of use has a direct effect on customer's satisfaction and most of the customers are moderately satisfied with the ease of use of online tax

payment system. Therefore, the MOR should improve the simplicity or ease of use on the system by introducing new technology so that all the customers could be satisfied.

- For the meantime, the finding revels usefulness has an effect on the customer satisfaction and most of the customers are moderately satisfied with the usefulness of the system meaning that customers find it difficult to speed up their tax payment process and to reduce errors. As the result, the MOR need to update the system to improve the usefulness of the system by checking the progress and assessing the status of the system so that customers would be more satisfied.

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Questionnaire

St. Mary's University

Department of Accounting and Finance

Dear Respondent

This questionnaire is designed to gather information on "Factors Affecting Customers' Satisfaction on Online Tax Payment in Ethiopia: An Empirical Study on Ethiopian Large Taxpayers" .The purpose of the study is to fulfill a thesis requirement for the Masters of Accounting and Finance at St. Mary's University. Your highly esteemed responses for the questions are extremely important for successful completion of my thesis. The information that you provide will be used only for the purpose of the study and will be kept strictly confidential. You do not need to write your name. Finally, I would like to thank you very much for your cooperation and sparing your valuable time for my request.

Instruction: Please read each statement carefully and put a tick mark under the number that most describes each respondent's opinion.

Part one: Background Information

1) **Gender**

   ☐ Female   Male   ☐

2) **Age**

   ☐ 18 – 25   ☐ 26 - 35

   ☐ 36 - 45   ☐ 46 – 55   Over 56   ☐

3) **Your Education level**

   ☐   Diploma   ☐   1st Degree

   ☐ Degree   Other   ☐

4) **How long have you been using the internet as a payment system?**

   ☐ Less than one year   ☐ 3 – 5 Years

   ☐ 1-2 Years   ☐   More than five years

Part Two: Factors affecting online tax payment customers' satisfaction

In this section you are scale up question related to factors that affecting customer's satisfaction using online tax payment system in MOR. Please use a tick mark on your right response.

No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Ease of Use					
1	I find online tax payment system is not an easy system to learn.					
2	I find online tax payment system is not an easy system to use.					
3	It is not easy to become skillful in using online tax payment system.					
4	Online tax payment system instructions are not easy to follow.					
5	The structure and contents of the web site are not easy to understand.					
	Usefulness					
6	Using online tax payment system does not speed up my tax paymentprocess.usf					
7	Using online tax payment system would not help me reduce errors in payment process.usf					
8	Using online tax payment system does not helps me to reduce my time consumption.usf					
9	An online tax payment system is not flexible.usf					
10	Overall the disadvantage of online tax payment system will outweigh the advantages.usf					

No.	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	Credibility					
11	I am not feeling secure and comfortable using the online tax payment system.					
12	MOR's electronic tax application has no credibly security features.					
13	The privacy and integrity of my personal information would not manage securely.					
14	Information provided by the website is not credible and consistent.					
15	MOR's electronic tax application has no modern-looking equipment.					

Part Three: Online tax payment customers' satisfaction level

In this section you are scale up question related to customer's satisfaction using online tax payment system in MOR. Please use a tick mark on your right response.

No	Items	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	User satisfaction					
1	MOR's online tax payment is not ease to use and I am not satisfied.					
2	MOR's online tax payment system is not useful and I am not satisfied.					
3	MOR's online tax payment system is not credibly and I am not satisfied.					