A MODEL FOR IMPROVING E-TAX SYSTEMS ADOPTION IN ZAMBIA: A CASE STUDY OF SOLWEZI TOWN OF ZAMBIA

BY

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Dissertation submitted to the University of Zambia in partial fulfillment of the requirements for the award of a Master of Business Administration in Finance

UNIVERSITY OF ZAMBIA

LUSAKA

2019
ACKNOWLEDGEMENTS

This research paper would not have been written without the Wisdom from THE MOST HIGH God and also through the encouragement, help and support of numerous people. My immediate family had been very instrumental, My husband Paul Lukond Kajoba, and our daughter Mapesho Kajoba and son Ethan Kajoba have been fueling my journey and I appreciate it, they surely did suffice to get me to the end.

I appreciate my family, friends and colleagues from the May, 2016 cohort for the support.

My research supervisor had been very supportive even at points where I demonstrated being out of ideas and lost direction of my study, he offered the support and every step all the way and guided me professionally, thank you Dr. Jackson Phiri.
DEDICATION

To my father Dr. Allan Soneka (MHSRIEP) for ever encouraging me to aim high in my academic life. I pushed hard to ensure I got what my father wished me for. I shall forever be grateful. My mother also Judith Meleka for the numerous sacrifices she made aimed at ensuring that she gave me the best she could from the earliest days of my life.
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Signature: -----------------------

Date: ------------------------

Supervisor:

Name: Dr. Jackson Phiri

Signature: -----------------------

Date: ------------------------

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APPROVAL

This document by Patience Njina Soneka has been approved as fulfilling the requirements for the award of the degree of Masters of Business Administration in Finance by the University of Zambia.

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Examiner 2: ........................................ Signature: ............................................... Date: .....................................

Examiner 3: ........................................ Signature: ............................................... Date: .....................................

Chair person: ........................................ Signature: ............................................... Date: .....................................

Board of Examiners

Supervisor: ........................................ Signature: ............................................... Date: .....................................
ABSTRACT

The objective of this study was to assess the factors that influence the level of E-tax systems adoption in Zambia and how E-tax can be enhanced. The study focused on TaxOnline system used by domestic taxes division in Zambia. The study was conducted in Solwezi town of 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 Solwezi internet bureau. 100 semi structured survey questionnaires were distributed with 100% response. The data collected was analyzed using descriptive statistics. The Pearson correlation coefficient and P-values were used to determine the relationship between variables. 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. Therefore, more awareness and taxpayer education must continue to bring everyone on board. E-Tax involves E-Filing and E-Payment which is the process of submitting returns over the internet using an approved E-Tax system. Adoption is the action or fact of choosing to take up or follow something. Technology Acceptance Model is an information system theory that models how users come to accept and use a technology. TaxOnline is a system used in Zambia to file returns and pay taxes online.

Keywords
E-Tax, Adoption, Technology Acceptance model, TaxOnline
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## ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ZRA</td>
<td>Zambia Revenue Authority</td>
</tr>
<tr>
<td>KRA</td>
<td>Kenya Revenue Authority</td>
</tr>
<tr>
<td>TAM</td>
<td>Technology Acceptance Model</td>
</tr>
<tr>
<td>UTAUT</td>
<td>Unified Theory Of Acceptance and Use of Technology</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>IDT</td>
<td>Innovation Diffusion Theory</td>
</tr>
<tr>
<td>ICT</td>
<td>Information Communications Technology</td>
</tr>
<tr>
<td>PU</td>
<td>Perceived Usefulness</td>
</tr>
<tr>
<td>PEOU</td>
<td>Perceived ease-of-use</td>
</tr>
</tbody>
</table>
CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 Introduction
This Chapter talks about taxation in Zambia and generally. It also introduces the focus of the study which is E-Taxation. Taxes worldwide are mainly levied in order to raise revenue to fund government expenditure and to reduce disparity between the rich and the poor and to reduce poverty, Mwila et al (2011). Zambian taxes are broadly categorized into three groups namely: income taxes, consumption taxes and trade taxes Mwila et al (2011). Income taxes comprise of Pay as you earn (PAYE), turnover tax (TOT) withholding tax (WHT), Property transfer tax (PTT) and corporation tax. Consumption taxes include: domestic value added tax, import Value Added Tax and excise duty. Finally but not the least trade taxes comprise of Customs duty and export duty. In Zambia income taxes are the major sources of revenue particularly pay as you earn followed by consumption taxes and trade taxes Mwila et al (2011). Research also undertaken by Mwila et al (2011) also stated that these taxes contribute up to 70 percent of the national budget.

1.2 Background of Study
E-taxation is the submission of Returns and payments of taxes online without the physical interactions with the revenue staff (Lu et al., 2010). Internet and its related technology applications are increasingly popular for business organization and public institutions (Saibon et al., 2016). Governments around the world are increasing the use of information and communication technologies to improve the delivery of services and dissemination of information to the public (Azmai et al., 2009). E-tax system introduction was as a result of the emergence of information technology to improve the level of tax compliance without the physical appearance at the tax office not having contact with the tax officers when filing their tax return (Siti and Bojuwon, 2014). E-tax services, is an important application that enables citizens to file taxes online, (Wang, 2012). Wang also stated that E-tax improves accuracy and efficiency over paper-based filing and lower costs. In Zambia, E-tax (tax online) was introduced in October, 2013 by Zambia Revenue Authority (ZRA).

1.3 Statement of the Problem
E-Tax systems is fairly a new phenomenon in Zambia, taxpayers must adopt it for them to realize the benefits of E-tax system. When a new technology is introduced there is normally a tendency not to use it, because of various reasons, among them is how easy the system is,
whether it is useful and secure. Therefore the purpose of the research is to assess the factors influencing the level of E-tax adoption in Solwezi town and how the adoption can be enhanced.

1.4 Aim of the Study
To assess the factors influencing the e-tax system (Tax Online) adoption in Solwezi town of Zambia based on the Technology Acceptance Model (TAM)

1.5 Study Objectives
i. To carry out a baseline study to assess the level of adoption of E-tax systems in Solwezi.
ii. To assess factors influencing E-tax System adoption in Solwezi town
iii. To develop a model of improving the adoption of E-tax systems based on Technology Acceptance Model (TAM)

1.6 Research Questions
i. What is the level of E-tax systems adoption in Solwezi district of Zambia?
ii. What factors influence E-tax systems adoption in Solwezi town?
iii. How can the level of E-tax systems adoption in Solwezi be enhanced using the Technology Acceptance Model?

1.7 Justification of the Study
The researcher undertook this investigation to assess the level of E-tax systems adoption in Solwezi district of Zambia and how the level of E-tax systems adoption in Solwezi can be enhanced using the Technology Acceptance Model. E-Tax System (Tax Online) is a new phenomenon in Zambia which could pose a challenge to the taxpayer especially those in rural setting. The research added to the body of knowledge through the publication in the Open Journal of Business and Management (Soneka and Phiri, 2019). The researcher had the resources and time to conduct the research in Solwezi district. It is also a requirement to be awarded a Masters of business Administration – Finance

1.8 Scope of Study
For the purpose of this study the researcher focused on Tax Online System used by Domestic taxes division for returns e-filling and online payments. The researcher will limit the research to users of tax online system in Solwezi District of Zambia. This study will mainly focus on
the factors influencing the effectiveness of E-Tax System (Tax Online) in Solwezi. It shall only be based on taxpayers living and doing business in Solwezi district of Zambia. This study is for academic purposes only but could also be used by policy makers in determining effective implementation of e-tax system Zambia

1.9 Organisation of the Dissertation

This chapter introduced the dissertation by outlining the background of the study, the statement of the problem, research objectives, questions and propositions, justification of the research and the scope of the study. The rest of this research paper is structured as follows.

Chapter Two – Literature Review: Reviews the theoretical and empirical literature behind E-tax system adoption

Chapter Three –Methods: gives an outline of the adopted research design and tools that were used to obtain and analyse data for the study.

Chapter Four – Results and Discussion: presents the results in the form of tables and figures (charts and graphs) from the tests for the stated variables. Discussions of Findings are also presented relating the results of the study to the reviewed literature.

Chapter Five –Conclusion and Recommendations: gives closure to the study by giving a summary of the research findings, give some concluding remarks, makes recommendations to the various stakeholders and suggest areas of further research.

1.10 Chapter Summary

This Chapter provided the introduction of the study, defined what E-taxation is. It further outlined the statement of the problem, aim of the study, research objectives, reseach questions were outlined. It also stated the justification of the study and the scope. The objective of this study was to assess the factors that influence the level of E-tax systems adoption in Zambia and how E-tax can be enhanced

The chapter concluded with the organisation of the dissertation.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

World over revenue authorities in conjunction with their governments have worked had to come up with E-tax systems for easy tax administration. This section of the literature review looks at Taxation and E-tax system adoption world over.

2.2 E- Taxation

Internet and its related technology applications are increasingly popular for business organisations and public institutions (Saibon, Nawawi and Salin, 2016). Saibon et al also stated that this gives motivation to the government to provide information and deliver service to citizens and business partners through internet. Due to this, many government transactions that previously done on physical way are executed using internet-based transactions, well known as e-government (Wu & Chen, as cited in Saibon et al). E-filling is one of the E-government services that have been adopted by, many developed countries today where the public has to discharge their responsibility to the government, via online tax filling (Alibasha, Kumar J. K. and Kumar N., 2016). E-filing allows taxpayers to file taxes online so that they can receive a quicker refund or pay owed taxes online as demonstrated (Alibasha et al, 2016).

In recent times, one prominent type of e-Government services has been the introduction of the e-filing system for income tax, otherwise known as the e-Tax services (Azmi and Kamarulzaman, 2010). Through this system, taxpayers are able to submit their tax returns electronically to the proper government authorities by preparing, reporting and paying their taxes online (Azmi and Kamarulzaman, 2010). The E-tax service has been implemented with the goal of easing the burden on the taxpayer and increase compliance of tax filing through the innovative use of technology (Schaupp et al., 2009). Administratively, E-tax offers a potential benefit to the government as well because the process of tax return by the citizens can now be managed effectively via the enabling of technologies (Fu et al., 2006). Fu et al also stated that E-tax service is thus an important application that automates tax related processes in an attempt to improve efficiency in assessing and collecting tax information. It has the potential to improve tax-filing service while at the same time reducing costs to both taxpayers and tax collecting agencies (Fu et al., 2006).

Generally, such a service has been initiated by the government in many developed and developing countries in order to improve information flow and processes, along with the
speed and quality of policy development, coordination and enforcement related to income tax filing (Suki and Ramayah, 2010; Hussein et al., 2010). It has enabled many governments to become more responsive to the needs of its citizens, ultimately resulting in less corruption, increased transparency, greater convenience, revenue growth and/or cost reductions (Suki and Ramayah, 2010; Hussein et al., 2010).

Although the adoption of E-tax filing is potentially a route to the provision of better services delivered to citizens at a lower cost, there is a low level of acceptance or adoption of such services in many developing countries even today (Carter and Belanger, 2005; Alzahrani and Goodwin, 2012).

This is because the success of service like E-tax largely depends on the importance that citizens’ place on factors such as convenience and usefulness of the offered services (Hussein et al., 2010). Moreover, since income tax filing is somewhat confidential, taxpayers remain concerned about the use of technology to file income tax returns due to the lack of innovativeness, privacy or trust for any such online transactions (Hussein et al., 2010). As a result, many individual taxpayers in developing countries opt for manual tax filing rather than the use of technology like E-tax services (Hussein et al., 2010).

The E-taxation is not a new system, but a rather local solution to a problem with global purview. The E tax system looks at how tax payment can be encouraged through simplification and increased efficiency in payment processing,(Onuiri et al ,2015)

Tax system is an oil well having no end, because it comes out from the community and is spent there (Barati , Bakhshayesh 2015). Barati and bakhshayesh also stated that you can't find a country that is wealthy, but the tax system is not correct. On the other hand, you can't find a poor country having a good tax system (Barati , Bakhshayesh 2015). This suggests that the computerized and integrated tax system is, makes the country rich and prosperous(Barati , Bakhshayesh 2015). Generally, modifying the tax system through setting up E-taxation system not only prevents tax evasion efficiently, but also it is a big barrier against injustice and ineffectiveness in tax system regarding income tax.( Barati , Bakhshayesh 2015)

Electronic government refers to the use of information technologies (IT) to improve the efficiency, effectiveness, transparency and responsibility of public governments (Kraemer and King, 2003; World Bank, 2000). Viewed as radical, yet unavoidable transformation projects (Jaeger, 2003), the implementation of e-government systems has been attracting increased research interest, and is believed to constitute one of the most important IT
implementation and organizational change challenges of the future (Warkentin et al., 2002; Marche and McNiven, 2003). According to some estimates, e-government systems are already helping save 2% of the annual US GDP (UNDP, 2001). However, the realized savings are still far less than what is potentially possible. For example, World Bank (2000) figures indicate that even the countries that are most advanced in the implementation of e-government systems are able to capture only 20% of their real savings potential.

Moreover, implementation failures of e-Government systems are also common and often lead to adverse financial consequences (e.g. the Gires project in Québec or the Canadian Firearms Registry which cost 400M$ and 1 billion $, respectively) (Radio Canada, 2003).

Despite the potentially significant impacts of e-government systems on public administrations, organizations, individuals and society, there is presently a dearth of systematic and thorough studies on the subject (Jaeger, 2003; Kraemer and King, 2003, p.12).

In addition, the research themes, as well as the research approaches and perspectives employed in the study of e-government implementations also exhibit significant diversity, making it difficult to reach conceptual clarity on the subject (Grönlund, 2005a).

Several authors remain skeptical (Kallinikos, 2003 and 2004; Kraemer and King, 2003) regarding the relevance of a radical transformation of the public bureaucratic model, with others seriously questioning the viability of the outcomes that result from IT-led transformations of institutionalized governmental processes (Ciborra, 2005)

2.2.1 Implementing Electronic Tax filing and Payments in Malaysia

Taxation is essential for sustainable economic development, and tax administration is a basic function of a successful state (Joanna, 2014). It was stated that taxation also helps make a government accountable to its citizens. When governments spend taxpayers’ money, they are more accountable to make budget decisions transparent and accessible (Joanna, 2014).

By 2012, 76 of the economies measured by doing business had implemented electronic tax filing and payment systems. This case study examines Malaysia’s experience with modernizing manual tax filing and payment and moving to a paperless online system (Joanna, 2014). Malaysia shows the opportunities that technology can provide to taxpayers and governments—as well as the challenges that may emerge during the transition (Joanna, 2014).
In 2004 Malaysia’s Inland Revenue Board (IRB) spearheaded an initiative to implement a system for filing and paying taxes that would promote electronic, paperless transactions (Joanna, 2014). Joanna stated that IRB’s goal was to become a global leader in tax administration. It sought to shift from the conventional way of submitting paper forms to earn the public’s trust and confidence (Joanna, 2014).

Joanna also stated that tax systems in developing economies, like those in more developed ones, face both new challenges and new possibilities as a result of technological change. Malaysia’s ongoing reform of its electronic tax filing and payment system shows how and under what conditions technology can benefit both tax authorities and taxpayers (Joanna, 2014).

The goal of any tax authority is to establish a system of tax administration that allows for the collection of required taxes at minimum cost (Joanna, 2014). A tax authority engages in many activities, such as processing returns and related information from taxpayers, entering tax return data into a database, matching returns against filing requirements, processing tax payments and matching them against assessments, and issuing assessments and refunds (Joanna, 2014). The researcher stated that one way to boost a tax authority’s efficiency is by expanding its use of information and communication technology. Such technology can facilitate a broad range of services, including registering taxpayers, filing returns, processing payments, issuing assessments and checking against third-party information (Joanna, 2014).

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

The benefits of e-filing and e-payment systems extend to other electronic processes in the tax authority (Joanna, 2014). He further stated that 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 (Joaanna, 2014).

2.2.2 Factors Influencing The Adoption of Online Tax Filing Systems in Nairobi, Kenya

Adopting new innovations has the potential of enhancing operational efficiency and effectiveness and thus change the way businesses compete, create strategic opportunity and redraw competitive boundaries (Lee, Hsieh, & Hsu, 2011) as cited by Gor, 2015.

The Kenyan Government underscored the importance of innovation in its developed agenda by entrenching innovation in its long term objective, “Vision 2030” (Gor 2015). Gor also stated that the Vision aims to establish a nation that harnesses science, technology and innovation to foster global competitiveness for wealth creation, national prosperity and a high quality of life for its people. He also stated that the Kenyan government further went ahead to establish the electronic government platform for various government departments and agencies to revolutionize how the government renders services to the citizen and give it more opportunities to come up with innovative ways of service delivery.

In this line, Kenya revenue Authority (KRA), the body responsible for collecting revenue on behalf of the Government of Kenya in October 2013 launched a new online tax filing system to enhance tax collection and limit tax evasions so as to effectively execute its mandate (Gor, 2015). He stated that the mandate of KRA which was established by an Act of parliament 1995 is key to the country’s economic development as taxes collected by KRA funds over 70% of the Kenya National Budget and hence the need to increase revenue through continuous improvement on tax collection processes (Weru, Kamaara, & Weru, 2013) as cited by Gor. In Kenya, there are potential 11 million formal tax payers (Gor, 2015). Out of this number, only 2 million filed their taxes through the online system by June 30, 2015 (KRA, 2015, as cited by Gor). This indicates a very low (18%) uptake (Gor, 2015).

KRA divides taxpayers into three main categories for ease of tax Administration and efficient service delivery to taxpayers (Gor, 2015). That is, Large Tax Payers, Medium Taxpayers and Small Taxpayers. These categories are further re-classified into four main sectors; Agriculture & Manufacturing; Distributors; Finance and Construction; and Services (KRA, 2015 as stated by Gor, 2015).
With a robust and easily accessible online tax submission, the authority indicates that only a small number of KRA clients [18%] used the online tax submission platform in 2014/2015 financial year (Gor, 2015). This low adoption contradicts the promises of faster, cheaper and convenient means of filing taxes online (Gor, 2015). The study therefore sought to establish the factors influencing the adoption of the online tax filing system by the Kenyan medium tax payers.

His findings were that combined model established that increase in perceived usefulness, perceived easy of use and social systems positively influence the adoption of online tax filing system by Medium taxpayers.

Literature on innovation has underscored the importance of innovation as a competitive weapon crucial in developing a sustainable competitive advantage. In fact innovation has been touted as the primary management tool in competitive market to enhance the competitiveness of firms as well as productivity and flexibility (Moghavvemi et al., 2012). This recognition has driven the desire to understand perceptions of the the end users as well as understand the factors that influence the adoption of innovations.

Several studies have explored the adoption of innovation through varied conceptual frameworks (Gor 2015). Chigona, as cited by Gor used diffusion of innovations theory framework to explain communal computing facilities adoption among the urban poor Cape Town South Africa. (Lee, Hsieh, and Hsu as cited by Gor, 2015, explored the behavioral intentions to use the E-learning system by combining the innovation diffusion theory (IDT) with the technology acceptance model (TAM). Buabeng-Andoh (2012) studied the factors influencing teacher’s adoption and integration of information communication technology in teaching by looking at personal, institutional and technological factors. Talukder (2012) as cited by Gor modelled the understanding of factors affecting the adoption of technological innovation by individuals around the organizational factors; individual factors and the social factors.

2.3 E-Tax Systems in Zambia

The implementation of E tax in Zambia by the Zambia Revenue Authority started in 2013. In order to make tax administration easier and less costly for both the taxpayer and the tax collector Zambia Revenue Authority continued the roll new and robust ICT and business system namely Tax online and ASYCUDA world, which cover the administration of
domestic and trade taxes, respectively. These systems are web based thus enabling the taxpayers to access them on a 24 hrs basis from anywhere with internet connect-The Zambia Revenue Authority (2014:6) Annual Report.

2.3.1 Taxonline Return Filling Status Report for North-Western Province

The Figures 1 to 6 below highlights the methods taxpayers used to submit their tax returns from the year 2013 to 2018 as generated from the Zambia Revenue Authority taxonline system. It was observed that the manual filing has been reducing while the e-returns filing has been increasing. The trend highlights how well the E-tax system has been adopted.

![Return Details by Filing Method Report](image)

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Tax Office</th>
<th>No. of Returns - Office</th>
<th>No. of Returns - Mail</th>
<th>No. of Returns - Dropbox</th>
<th>No. of Returns - e-Return</th>
<th>No. of Returns - Envelope</th>
<th>No. of Returns - e-Mail</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>ALL</td>
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<td>0</td>
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<td>2933</td>
<td>0</td>
<td>1</td>
<td>3015</td>
</tr>
<tr>
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<td>32</td>
<td>2953</td>
<td>0</td>
<td>0</td>
<td>3015</td>
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<td>Current Page Total</td>
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<td>2953</td>
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<td>0</td>
<td>3015</td>
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<td>Grand Total</td>
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<td>32</td>
<td>2953</td>
<td>0</td>
<td>0</td>
<td>3015</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Manual and E-tax returns report for 2013

As shown from Figure 1 above the number of manual returns were 2030 and 2953 for the e-returns in 2013 when Taxonline was just introduced.
Figure 2: Manual and E-tax returns report for 2014

As shown from Figure 2 above the number of manual returns were 5910 and 16702 for the e-returns in 2014.

Figure 3: Manual and E-tax returns report for 2015

As shown from Figure 3 above the number of manual returns were 6523 and 28063 for the e-returns in 2015.
Figure 4: Manual and E-tax returns report for 2016

As shown from Figure 4 above the number of manual returns were 1274 and 31876 for the e-returns in 2016.

Figure 5: Manual and E-tax returns report for 2017

As shown from Figure 5 above the number of manual returns were 829 and 33157 for the e-returns in 2017.
Figure 6: Manual and E-tax returns report for 2018

As shown from Figure 6 above the number of manual returns were 415 and 30681 for the e-returns in 2018.

2.4 Technology Acceptance Model (TAM)

The technology acceptance model (TAM) is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it, notably:

- Perceived usefulness (PU) – This was defined by Fred Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance".
- Perceived ease-of-use (PEOU) – Davis defined this as "the degree to which a person believes that using a particular system would be free from effort" (Davis 1989).

Figure 7 below shows the Technology Acceptance Model by Davis (1989). It shows the variables that influence users intentions to use technology.
The TAM has been continuously studied and expanded—the two major upgrades being the TAM 2 (Venkatesh & Davis 2000 & Venkatesh 2000) and the Unified Theory of Acceptance and Use of Technology (or UTAUT, Venkatesh et al. 2003).

A TAM 3 has also been proposed in the context of e-commerce with an inclusion of the effects of trust and perceived risk on system use (Venkatesh & 2008).

Davis, Bagozzi, and Warshaw (1989) propose TAM to explain the conceptual model that users’ intention or accept degree toward information system or new technology. As shown in Figure 7 TAM is constructed on the foundations of perceived usefulness and perceived ease of use. Perceived usefulness refers individual believe improve the degree of job performance through using particular new technology and information system. Perceived ease of use indicates how ease individual learn how to operate or use new technology or information system (Davis et al., 1989; Gefen et al., 2003). The model place more emphasis on perceived ease of use would positively affect perceived usefulness. Exogenous variables such as environment are also the antecedent that induces perceived usefulness and perceived ease of use (Davis et al., 1989; Gefen et al., 2003). They stated therefore that TAM is based on both important perceptive factors as perceived usefulness and perceived ease of use. TAM is widely applied on the researches of information technology. (Liu and Arnett, 2000) examine the significant variables to build a successful website based on TAM theory. Gefen et al. combine TAM and trust to propose an integrate model for explaining online consumer behavior.
(Pavlou, 2003) proposes e-commerce acceptance model of online consumers by separating applying experiment designs and survey. Follow-up studies such as Horst, Kuttschreuter and (Gutteling, 2007) discuss whether or not the government of Netherlands should serve the public with electronic government like other countries do. The study integrates TAM factors, the experiences of the public, perceived risk and faith. The empirical results show that the premise of e-government is that people fully trust the governmental organization and that they highly identify with information technology (Davis et al., 1989) As the result of the empirical study, scholars find TAM is not only to apply to examine new information technology accept intention or behavior, and further to ensure TAM suitable for the explanation of online user behavior issues (Liu and Arnett, 2000; Gefen et al., 2003; Pavlou, 2003; Horst et al., 2007).

2.5 Delone and Mclean Model

This model suggests that to the measurement of information system there may be need to separate success measures for each of the levels of information. The effectiveness or influence level, to yield six distinct categories or aspects of information systems. These are system quality, information quality, intention to use/use, user satisfaction, individual impact and organizational impact.

Figure 8 below shows the Delone and Mclean model of information system success, it highlights the qualities needed for users of information system.

Figure 8: Delone & Mclean (2003) Model of information System success
Looking at the first of these categories, some I/S researchers have chosen to focus on the desired characteristics of the information system itself which produces the information (SYSTEM QUALITY) (Delone and Mclean, 2003). Others have chosen to study the information product for desired characteristics such as accuracy, meaningfulness, and timeliness (INFORMATION QUALITY). In the influence level, some researchers have analyzed the interaction of the information product with its recipients, the users and/or Decision makers, by measuring USE or USER SATISFACTION (Delone and Mclean, 2003). Delone and Mclean also stated that there are still other researchers who have been interested in the influence which the information product has on management decisions (INDIVIDUAL IMPACT). Finally, some I/S researchers, and to a larger extent I/S practitioners, have been concerned with the effect of the information product on organizational performance which is ORGANIZATIONAL IMPACT (Delone and Mclean, 2003). Once this expanded view of I/S success is recognized, it is not surprising to find that there are so many different measures of this success in the literature, depending upon which aspect of I/S the researcher has focused his or her attention (Delone and Mclean, 2003). They stated that some of these measures have been merely identified, but never used empirically. Others have been used, but have employed different measurement instruments, making comparisons among studies difficult (Delone and Mclean, 2003). Two previous articles have made extensive reviews of the research literature and have reported on the measurement of MIS success that had been used in empirical Studies up until that time (Delone and Mclean, 2003).
2.6 Literature Review and Gaps

Table 1 below is a summary of literature review and the gaps of similar researches.

**Table 1: Literature Review and Gaps**

<table>
<thead>
<tr>
<th>Author</th>
<th>Topic</th>
<th>Findings</th>
<th>Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davis, F. D. (1989)</td>
<td>Perceived usefulness, perceived ease of use, and user acceptance of information technology</td>
<td>Perceived usefulness and perceived ease of use has a positive correlation with user acceptance of information technology</td>
<td>In TAM Intentions are made prior to taking action</td>
</tr>
<tr>
<td>Davis, Bagozzi, and Warshaw (1989)</td>
<td>User Acceptance of Computer Technology</td>
<td>Perceived usefulness refers individual believe improve the degree of job performance through using particular new technology and information system. Perceived ease of use indicates how ease individual learn how to operate or use new technology or information system</td>
<td>TAM explicitly focuses on end state goals/objectives of technology use</td>
</tr>
<tr>
<td>Azmi and Bee (2010)</td>
<td>The Acceptance of the e-Filing System by Malaysian Taxpayers: A Simplified Model</td>
<td>This study suggests a model consisting of three constructs, including perceived usefulness, perceived ease of use, perceived risk. The researchers proposed model is a simpler model than any other form of electronic records.</td>
<td>The model is too simplified to to capture the influencing factors to technology adoption.</td>
</tr>
<tr>
<td>Parmita S, Nath A K and Salehi S E (2012)</td>
<td>Evaluation of government e tax websites: an information quality and system quality approach</td>
<td>Interacting with citizens can be a valuable input to improve the quality of the system</td>
<td>Tax authorities faced problems and issues in implementing the system</td>
</tr>
<tr>
<td>Authors (Year)</td>
<td>Title</td>
<td>Summary</td>
<td>Methodology</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Asianzu E &amp; Maiga G. (2012)</td>
<td>A consumer based model for adoption of E-Tax services in Uganda</td>
<td>Findings point to lack of awareness as limiting e-government adoption in Uganda. In early stages of implementing it, awareness contributes to a willingness to adopt new technologies.</td>
<td>What is offered is different from what is consumed—Based on consumer.</td>
</tr>
<tr>
<td>Anna, A., Azmi, C. &amp; Kamarulzama (2010)</td>
<td>Adoption of tax E-Filing: A conceptual paper</td>
<td>In addition to TAM constructs, the influence of seven different facets of perceived risk also influence an individual to adopt an e-filing system.</td>
<td>Conceptual model to further understand the role of perceived risk in influencing customer behaviour.</td>
</tr>
<tr>
<td>Vankatesh, V. (2000)</td>
<td>Determinants of perceived ease of use; Integrating control, intrinsic motivation and emotion into the technology acceptance model</td>
<td>The model proposes control (internal and external), intrinsic motivation (computer playfulness), and emotion (conceptualized as computer anxiety) as anchors that determine early perceptions about the ease of use of a new system.</td>
<td>Gaps in time can be too large with many intervening steps.</td>
</tr>
<tr>
<td>Lu, C., Huang, S. &amp; Yen Lo, P. (2010)</td>
<td>An empirical study of online tax filing acceptance model: Integrating TAM and TPB</td>
<td>Perceived usefulness and perceived ease of use have a significant positive effect on perceived behavioural control.</td>
<td>Other researchers overlooked the influence of perceived usefulness and perceived ease of use on perceived behavioural control.</td>
</tr>
<tr>
<td>Anna A Azmi C Kamarulzamay and Hamid N (2012)</td>
<td>Perceived risk and Adoption of Tax E-Filing</td>
<td>The facets of perceived risk have a positive relationship with the adoption of tax e-filing whereas perceived ease of use of the system does not have a positive relation then adoption.</td>
<td>Measured only the effect of overall risk on behavioural intentions.</td>
</tr>
<tr>
<td>Wang X (2012)</td>
<td>Factors influencing citizen Adoption of government E-Tax Service</td>
<td>Analysis of TAM, TPB and other two factors in the decomposed TPB Model-Compatibility</td>
<td>Used literature study.</td>
</tr>
<tr>
<td>Source</td>
<td>Title</td>
<td>Findings</td>
<td>Notes</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>Saibon Et al (2016)</td>
<td>E-Filing Acceptance by the individual Taxpayers- A preliminary Analysis</td>
<td>The respondents find e-filing to be user friendly and ease to use</td>
<td>The sample was small and the research only conducted descriptive research</td>
</tr>
<tr>
<td>Nakanya C (2014)</td>
<td>Factors influencing user satisfaction of E-tax Filing in Thailand. The study of small and medium enterprises (SME’s)</td>
<td>The researchers found that information quality, system quality in terms of functionality, system quality in terms of usefulness, service quality and trust have positive and significant impact on users satisfaction</td>
<td>The study concentrated on the samples in Bangkok and the vicinity only</td>
</tr>
<tr>
<td>Mustapha B (2015)</td>
<td>Evaluation of E-Tax Quality implementation criteria: The case of self-employed Taxpayers</td>
<td>The Study showed that six component generated from the exploratory factor analysis are important criteria in the sequence of comparability, reliability and ease of use</td>
<td>Only used the quantitative method of analysis and the population is limited to individual income of taxpayers who are self-employed - also used a small sample size.</td>
</tr>
</tbody>
</table>

### 2.7 Related Works on E-Taxation

Several studies have carried on world over in relation to electronic tax system. This section of the literature review examines related works on e-tax system.

#### 2.7.1 Electronic Tax System And The Facing Challenges (Case Study: Kermanshah Province Tax Payers)

Tax system is an oil well having no end, because it comes out from the community and is spent there (Barati and Bakhshayesh, 2015). Barati and Bakhshayesh stated that you can't find a country that is wealthy, but the tax system is not correct. On the other hand, you can't find a poor country having a good tax system. This suggests that the computerized and integrated tax system is, makes the country rich and prosperous (Barati and Bakhshayesh, 2015).
Generally, modifying the tax system through setting up E-taxation system not only prevents tax evasion efficiently, but also it is a big barrier against injustice and ineffectiveness in tax system regarding income tax (Barati and Bakhshayesh, 2015). Therefore in the present study, either in the form of descriptive – survey like, trying to study e-tax implementing problems and barriers in the framework of a case study (Barati and Bakhshayesh, 2015). The sample mass has been performed by using the koori sampling and collected data analysis from the population, in the framework of analytic statistics and in the form of both descriptive – inferential (Barati and Bakhshayesh, 2015). The relationships between the variables in the conceptual model were investigated and through suitable statistical models, the hypotheses were examined (Barati and Bakhshayesh, 2015). Passing over the above mentioned steps requires using suitable statistical models like chronbac α, Spearman correlation coefficient, variance analysis, superiority indexes, the agent exploring analysis, structural equations model and being sure about these inferences precision and accuracy, in which high sensitivity is used to check their compliance and review (Barati and Bakhshayesh, 2015).

Results show that: technical and infrastructural variables (95/0), social influence (90/0), the expected effort (51/0), legal issues (40/0), expected performance (32/0), information access (18/0) and perceived risk (11/0) having a factor of importance and more influence on the affecting factors for the adoption of electronic tax, respectively. (Barati and Bakhshayesh, 2015)

2.7.2 Evaluation of E-Tax Quality Implementation Criteria: The Case of Self-Employed Taxpayers

This paper examined the significant E-tax quality implementation criteria within the emerging economy by precisely focusing on self-employed taxpayers in Nigeria (Mustapha, 2015). This study employed quantitative method of analysis. A total of 181 data collected through convenience sampling was used for the analysis (Mustapha, 2015). The psychometric properties were assessed firstly using exploratory factor analysis in identifying the component, followed by confirmatory factor analysis to check for reliability and cross validation of the items (Mustapha, 2015). The result shows that the six components generated from the exploratory factor analysis are important criteria to the E-tax quality implementation. Criteria in the sequence of Compatibility, Tangible, Complexity, Reliability, and Ease of use and Affordability in Nigeria. The limitations are that this paper uses only quantitative method of analysis and the population is limited to individual income taxpayers who are self-employed (Mustapha, 2015). Also a small sample size is used for the study. The
practical implication is for tax authority to consider the effective use of E-tax quality implementation criteria in Nigeria (Mustapha, 2015). Further study could consider extending to other taxpayers, such as corporate taxpayers and also increasing the sample size (Mustapha, 2015).

2.7.3 A Consumer Based Model for Adoption of E-Tax Services in Uganda

The benefits of e-tax services are linked to its adoption and usage (Asianzu and Maiga, 2012). Asianzu and Maiga also stated that E-tax adoption rates in developing countries remain low and so its benefits are not fully realized. This is because governments have focused largely on technical supply-side factors with little emphasis on the demand perspective of e-tax adoption (Asianzu and Maiga, 2012). The result has been a gap between what is offered and what is consumed (Asianzu and Maiga, 2012). This paper presents a model for E-tax adoption as an attempt to bridge this gap for a Uganda as a developing country (Asianzu and Maiga, 2012). Requirements for the model elicited in a field study were used to extend the Technology Acceptance Model in order to derive one that emphasizes consumer-based factors for E-tax adoption. The extended model has dimensions of adoption benefits, trust, attitudes, education, compatibility, awareness, accessibility, training, user support and local language use. It is generic and reusable for other developing countries (Asianzu and Maiga, 2012).

2.7.4 Evaluation Of Government E Tax Websites: An Information Quality And System Quality Approach

Examples of data collection, in the data of this study, only experienced citizens, in the field of E-taxes services were collected (Parmita et al., 2012). Parmita et al stated that tax authority was not effective in the process of data collection by him. Tax authorities faced problems and issues in implementing the system and interaction with citizens can be a valuable input to improve the quality of the system (Parmita et al., 2012). Therefore, a second study is suggested to assess of the quality from the service provider's perspective (Parmita et al., 2012).

2.7.5 E-Government Application: An Integrated Model On G2C Adoption Of Online Tax

This study has several limitations. First, this study only has chosen Malaysia's university educated staff as sample (Ramlah et al., 2010). Thus, the sample of respondents in the various fields of the citizens may be able to provide a clearer picture of acceptance of e-government. Second, the study focused on only the E-filing acceptors (Ramlah et al., 2010).
2.7.6 Developments In Tax E-Filing: Practical Views From The Coalface

This article has partly built on the work of Walsh and White, who use Moore’s “Technology Adoption Life Cycle” to examine e-filing adoption by taxpayers and tax preparers in the USA (Andy et al., 2012). However, this article uses a mixed methodology that the authors argue is more suitable for the wider issues found in the UK (Andy et al., 2012).

The results confirm that small/medium sized tax agent firms are more likely to be technology enthusiasts/early adopters of e-filing for their individual clients (Andy et al., 2012). As their business policies are more likely to be directly driven by technology enthusiasts, they have fewer issues with the incomplete e-filing system available at the early stages of its roll out and were more motivated by the visible benefits available from adopting e-filing (Andy et al., 2012). They stated that larger firms have been slower and appeared more reluctant to embrace e-filing of personal tax returns being concerned that engaging in HM Revenue and Customs controlled systems and targets would compromise their internal systems, ICT integrity and control of complex tax cases (Andy et al., 2012).

2.7.7 Adoption Of E-Government Services: An Empirical Study Of The Online Tax Filing System In Taiwan

The purpose of this paper is to investigate the factors that influence the willingness of the public to adopt online tax filing services.

An online survey was conducted from which 400 valid questionnaires were recovered. The questionnaire data were used to research the degree of acceptance among Taiwanese taxpayers with regard to the online tax filing system (Shih-wu and Hsi-peng Lu, 2013). Respondents were classified into existing users (who were sub-categorised into early adopters and late adopters) and potential adopters (Shih-wu and Hsi-peng Lu, 2013). The results demonstrate that the perceived attributes of trialability and observability significantly influence the adoption intention of late adopters. However, these attributes did not have a significant influence on early adopters (Shih-wu and Hsi-peng Lu, 2013). Social norms and the perceived attributes of relative advantage, compatibility, and complexity significantly influence the adoption intention of current users. For potential adopters, only social norms had a significant effect on their intention to use the online tax filing system (Shih-wu and Hsi-peng Lu, 2013).
2.7.8 Electronic Tax Filing: The Impact Of Reputation And Security On Adoption
Results of structural equation modeling indicate that reputation, credit and perceived security control have a significant impact on risk perception (Ludwig et al., 2010). Also, perceived risk expected performance and social influence all have a significant impact on intention to use e-filing system, and their effects are discussed in this paper (Ludwig et al., 2010).

2.7.9 The Acceptance Of The E-Filing System By Malaysian Taxpayers: A Simplified Model
This study suggests a model consisting of three constructs, including perceived usefulness, perceived ease of use, perceived risk (Azmi and Bee, 2010). The researchers proposed model is a simpler model than any other form of electronic records. Exploratory factor analysis shows that the model is good enough (Azmi and Bee, 2010).

2.7.10 Trust Challenges And Issues Of E-Government: E-Tax Prospective
This research has demonstrated that trust occurs when only appropriate security is guaranteed (Dinara et al., 2010). As a solution to meet the needs of the trust, using the general TPM technology online service for the security data were proposed (Dinara et al., 2010). This method's low cost and security robustness is more attractive than other available security technologies in online services (Dinara et al., 2010).

2.7.11 Impact Of Quality Antecedents On Taxpayer Satisfaction With Online Tax-Filing Systems—An Empirical Study
Analysis using structural equations modeling showed that tax payers satisfaction quality records affects the online filling strongly (Ching-Wen, 2010). In addition, the informing agents and the system quality were more important than the output of the system and its ability to process, to measure taxpayer satisfaction (Ching-Wen, 2010).

2.7.12 Continued Usage Intention Of E-Filing System In Malaysia: The Role Of Optimism Bias
E-Filing which was introduced by the Malaysian government in 2006 is gaining its popularity in the past 5 years (Santhanamery and Ramayah, 2012). They stated however, that an information system implementation can be considered a great success only when the users move beyond the initial adoption to a long term usage (Santhanamery and Ramayah, 2012). Previous studies in Malaysia have found a significant relationship between perceived risk and
intention to use e-filing system (Santhanamery and Ramayah, 2012). Thus this paper is a conceptual paper proposed to investigate the role of optimism bias on this phenomenon. The self administered survey will be carried out on the individual salaried taxpayers who have used the e-filing system at least once in five main cities in Malaysia (Santhanamery and Ramayah, 2012)

2.8 Chapter Summary

From the above literature review, the researcher has seen that many researchers have researched on E-Tax system with different objectives and different findings. The gaps in research still exits which needs to be filled in by future researchers. It's imperative that the topic of E-tax system adoption is not looked at in isolation but in comparison with the works that other researchers have done in order to have a broad and extensive perspective of e-tax system adoption.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction
This Chapter describes the Research design that was used for the study, the procedures used to collect and analyse data. The chapter state the population, sampling method, sample size, data collection and analysis tools used in the study. Smith (2008) describes methodology as a set of tools and devices to be used at each time; why and how such tools and devises ought to be used. A research design is a course of action that guides a researcher in collecting, analysing and interpreting data and observations to find answers to research questions (Creswell, 2013).

3.2 Research Design
The study adopted a descriptive survey design. Descriptive studies are usually the best methods for collecting information that will demonstrate relationships and describe the world as it exist (Maxwell as cited by Gor, 2015) This study used quantitative method. According to Trochim (2006) quantitative research often translates into the use of statistical analysis to make the connection between what is known and what can be learned through research. This allows the researcher to examine the relation between independent variables (perceived Easy of Use, perceived Usefulness and Perceived security) and dependent variables (E-tax adoption). It also helped to determine the correlation between independent and dependent variables. whereas qualitative is defined as a study which is conducted in a natural setting (Creswell, 2005) Qualitative research approach will provide an enquiry for understanding a social or human problem based on building a complex, holistic picture, formed with words, reporting detailed views of information and conducting it in a natural environment.

3.3 Population
Population refer is the aggregate or totality of all objects, subjects or members that conform to a set of specifications (Polit and Hungler 1999). Population can also be defined as the total number of units from which data can be collected”, such as individuals, artifacts, events or organisations. In this study the population comprised of taxpayers who are based in Solwezi district. At the time of my research the population was 4593 active taxpayers on the register.
3.4 Sample Size
The sample was purposively selected from various taxpayers that walked in Solwezi Zambia Revenue Authority internet bureau. This was to ensure that only taxpayers using E-tax system were included in the sample size. The sample size was determined by using the formula \( n = \frac{N}{1 + N(e^2)} \) with 10% error. This gave a sample size of 99. 100 questionnaires were distributed with 100% response.

3.5 Data Collection Tools
Primary data was collected by use of a semi-structured questionnaire. Secondly data was obtained from literature review of similar studies.

3.6 Data Analysis Tools
The researcher used Excel to analyze data collected. Tables and pie charts, line graphs and bar charts were used to present the findings. The Pearson correlation coefficient and P-values were used to determine the relationship between variables.

3.7 Research Model
Figure 9 below is a research model developed in this research, it shows the variables for E-tax adoption success.

Figure 9: Research Model

Figure 9 above illustrates the model used in this research. It highlights the relationship between the three variables; perceived usefulness, perceived ease of use and perceived risk to E tax adoption. In this research these three variables were used to explain how these variables affect the adoption of E tax system in Solwezi town of Zambia. The research showed that
perceived usefulness was 63%, perceived ease of use 65% and Perceived security 62%. This showed that E-tax is well adopted in Solwezi town of Zambia.

### 3.8 Research Methodology Used

Table 2 below is the research design matrix used which shows the objectives, research questions and methodology.

**Table 2: Research Design Matrix**

<table>
<thead>
<tr>
<th>#</th>
<th>Objectives</th>
<th>Research Questions</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To carry out a baseline study to assess the level of adoption of E-tax system in Solwezi.</td>
<td>What is the level of E-tax system adoption in Solwezi district of Zambia?</td>
<td>Questionnaire</td>
</tr>
<tr>
<td>2</td>
<td>To assess factors influencing E-tax System adoption in Solwezi town</td>
<td>What factors influence E-tax systems adoption in Solwezi town?</td>
<td>Questionnaire</td>
</tr>
<tr>
<td>3</td>
<td>To propose the ways of improving the adoption of E-tax system based on Technology Acceptance Model (TAM)</td>
<td>How can the level of E-tax system adoption in Solwezi be enhanced using the Technology Acceptance Model?</td>
<td>Questionnaire</td>
</tr>
</tbody>
</table>

### 3.9 Reliability and Validity

#### 3.9.1 Validity

Kumar (2011: 216) citing (Smith, 1991: 106) and Kerlinger, 1973:457) defines validity as the degree to which the researcher has measured what he/she has set out to measure. The commonest definition of validity is epitomized by the question: Are we measuring what we think we are measuring?

Therefore, data validity determines the degree to which the research is measuring what it claims to be measuring. The data that will be obtained will be analysed and revised for the main study so that the internal validity and reliability is maximised; if there will be any ambiguity it will be uncovered (Kumar, 2011:215). There are two perspectives on validity:

- Is the research investigation providing answers to the research questions for which it was undertaken?
• If so, is it providing these answers using appropriate methods and procedures?

The results from the tools used in this study was cross checked to make sure the questions used answered what was required to be obtained. Data validity of the results from the tools employed in the study was measured by content validity through the extent to which the test items represent research questions (research being measured).

3.9.2 Reliability
Veal, (2006:41) asserts that the data reliability is the extent when the research findings would be the same, if the research was repeated. However, it is very rare that the results would be exactly the same in social sciences because human beings change and differ in social situations.

Results from the tools which was used were cross checked with reality. It was done by comparing the results of the outcome of similar individuals in similar scenarios and same setting.

3.10 Ethical Consideration
Ethics refers to discussions around what is considered acceptable or justifiable behavior in the practice of social research (Makhanya, 2006: 28). That said ethical issues was observed and guided by ethical guidelines of the University of Zambia in conducting this research.

• The researcher applied for consent and permission was granted by UNZA to conduct the study in Solwezi
• Respondents participated in the survey voluntarily.
• Questionnaire did not contain offensive, discriminatory, or other unacceptable language
• The works of other authors used in this study were acknowledged by referencing system

3.11 Chapter Summary
This chapter outlined the methods used to gather data, the sampling method used, the population and the sample size adopted in this study. The chapter also presented the research model and the research design matrix. It also considers validity, reliability and ethical considerations considered when doing this research.
CHAPTER FOUR: RESEARCH RESULTS

4.1 Introduction
The previous chapter discussed data collection: this chapter will discuss and present the findings as regard to a model for improving E Tax Systems adoption in Zambia: A case study of Solwezi town of Zambia. The chapter will as well interpret the results in the context of the research problem statement and objective. The key results are outlined below.

4.2 Bio Data
4.2.1 Gender
Table 3 below shows the distribution of gender of the taxpayers who participated in the study.

Table 3: Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Female</td>
<td>52</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 10 below show the percentage of gender of taxpayers who participated in the study

Among the respondents 48% were male and 52% were female.
4.2.2 Age

Table 4 shows the age distribution of taxpayers who participated in the study.

**Table 4: Age**

<table>
<thead>
<tr>
<th>Age</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 65</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>56-65</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>46-55</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>36-45</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>18-35</td>
<td>44</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 11 shows the age distribution in percentage of taxpayers who participated in the study.

Among the respondent, the majority were between the age of 18-35 years, followed by those between the age of 46-55 and the least were between the ages of 56-65. This shows that Taxonline is mostly adopted by taxpayers between the age of 18-35 years old.
4.2.3 Business Classification

Table 5 shows the business classification of taxpayers who participated in the study.

Table 5: Business Classification

<table>
<thead>
<tr>
<th>Business Classification</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Business Name</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Corporate</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Partnership</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Corporate Other</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 12 shows the frequency in percentage of business classification of taxpayers who participated in the study.

![Business Classification Graph](image-url)

Figure 12: Business Classification
Among the respondents, the majority were individuals in business who represented 43% of the sample size, followed by corporate institutions which represented 25% of the sample size and the least were those in partnership which represented 7% of the sample size.

4.2.4 Educational Level

Table 6 below shows the education level of taxpayers who participated in the study.

**Table 6: Educational Level**

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s Degree</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Diploma</td>
<td>33</td>
<td>33</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Certificate</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Secondary</td>
<td>32</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 13 below shows the frequency in percentage of education level of taxpayers who participated in the study.

![Educational Level](image)

**Figure 13: Education Level**

Among the respondent, 33% representing those with diploma’s was the highest followed 32% representing those with just secondary school education and least was 3 % representing Master’s Degree holders.

### 4.2.5 Position Held

Table 7 below shows the positions held by taxpayers who participated in the study.

#### Table 7: Position Held

<table>
<thead>
<tr>
<th>Position Held</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>36</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Admin Officer</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Accountant</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Manager</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Director</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 14 below shows in percentage the positions held by taxpayers who participated in the study.

![Position Held Diagram](image)

**Figure 14: Position Held**

Among the respondents, the majorities were individuals in business who represented 36% of the sample size, followed by directors which represented 25% of the sample size and the least were accountants and managers which each was represented 9% of the sample size.

4.3 Computer, Internet and E-Tax System (Tax Online) Experience

4.3.1 Computer Experience

Table 8 below shows computer experience in years of taxpayers who participated in the study

<table>
<thead>
<tr>
<th>Computer Experience</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Experience</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Less than 1 Year</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>1 To 3 Years</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>3 To 7 Years</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>More Than 7 Years</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 15 below shows percentages in computer experience of taxpayers who participated in the study.

![Computer Experience Graph]

**Figure 15: Computer Experience**

Computer experience has an effect on the adoption of E Tax system; the more people are experienced with computers the more likely that people will find it easy to adopt an E-tax system. Among the respondents, the majority had computer experience ranging from 1 to 3 years which represents 27% of the sample size, followed by those without computer experience which represented 24% of the sample size and the least were those with computer experience ranging from 3 to 7 years which represented 12% of the sample size.

### 4.3.2 Internet Experience

Table 9 below shows internet experience in years of taxpayers who participated in the study

<table>
<thead>
<tr>
<th>Internet Experience</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Experience</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Less than 1 Year</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>1 To 3 Years</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>3 To 7 Years</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>More Than 7 Years</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

35
Figure 16 below shows the frequency in percentage of internet experience of taxpayers who participated in the study.

![Internet Experience](image)

Figure 16: Internet Experience

Internet experience has an effect on the adoption of E-Tax system; the more people are experienced with computers the more likely that people will find it easy to adopt an E tax system. Among the respondents, the majority had no internet experience which represents 30% of the sample size, followed by those who had 1-3 years internet experience which represented 25% of the sample size and the least were those with computer experience of less than one year which represented 11% of the sample size.

4.3.3 Heard about E-Tax System (Tax Online)

Table 10 below shows the numbers of respondents who have heard about E-tax system.

**Table 10: Heard about E-Tax System**

<table>
<thead>
<tr>
<th>Heard About E-Tax System (Tax Online)</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>77</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Not Sure</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 17 below shows the frequency in percentage of respondents who have heard about E-tax system.

![Heard of E-Tax System](image)

Figure 17: Heard of E-Tax System

Among the respondents, the majority have heard about E-Tax system (Tax Online) and these represented 77% of the sample size, followed by those who have never heard about E-tax system and these represented 21% of the sample size and the least were those who were not sure of hearing about E-tax system and these represented 2% of the sample size. This shows that a majority have already heard about E-tax system (Tax Online)

4.3.4 How Tax returns are submitted

Table 11 below shows the methods used by taxpayers to submit their tax returns.

**Table 11: How Tax returns are submitted**

<table>
<thead>
<tr>
<th>How Returns Are Submitted</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manually</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Using Tax Online</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
<tr>
<td>I Don’t Submit</td>
<td>37</td>
<td>37</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 18 below shows the percentage of methods used by taxpayers to submit their tax returns.

![How returns are submitted](image)

Figure 18: How Returns are Submitted

When asked how the respondents submit their tax returns, the majority (57%) indicated that they submitted their tax returns online using Tax Online, 37% indicated that they don’t submit their tax returns and 6% indicated that they submit manually.

### 4.3.5 Has Tax online been Useful?

Table 12 below shows usefulness of Taxonline system to taxpayers in the study.

<table>
<thead>
<tr>
<th>Has Tax Online Been Useful</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>63</td>
<td>63</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Not Sure</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 19 below shows usefulness of Taxonline system in percentage to taxpayers in the study.

![Has TaxOnline been useful](image)

**Figure 19: Has TaxOnline Been Useful**

When asked whether Tax online has been useful to the respondents, the majority (63%) indicated that Tax online has been useful to them and this means they are using it, while 25% felt it has not been useful which means they are still struggling and 12% were not sure, meaning they neither consider Taxonline useful or not useful.

Among the reasons cited by those who felt it has been useful were that; It’s affordable to file returns using Tax online, it’s convenient, saves time and money.

### 4.3.6 Has Tax online been ease to use

Table 13 below shows the of responses on how easy to use taxonline system is to taxpayers in the study.

<table>
<thead>
<tr>
<th>Has TaxOnline Been Ease To Use</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>No</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Not Sure</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 20 below shows the percentages on how easy to use tax online system is to taxpayers in the study.

![Has TaxOnline been easy to use](image)

**Figure 20: Has TaxOnline Been Easy to Use**

When asked whether Tax online has been easy to use by the respondents, a majority (65%) indicated that Tax online has been easy to use, while 28 % felt it has not been easy to use and 7% were not sure.

Among the reasons cited by those who feel it has been easy to use were that; Its not complicated to file returns using Tax online.

**4.3.7 Has Tax online been Secure to Use**

Table 14 below shows responses on how secure Taxonline system is to taxpayers in the study.

<table>
<thead>
<tr>
<th>Has Tax Online Been Secure</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>62</td>
<td>62</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>No</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Not Sure</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 14: Has Tax online been Secure to use
Figure 21 below shows responses in percentage of how secure tax online system is to taxpayer in the study.

![Has Tax Online been secure](image)

Figure 21: Has TaxOnline been Secure

When asked whether Tax online has been secure to use by the respondents, the majority (62%) indicated that Tax online has been secure to use, while 27% felt it has not been secure to use and 11% were not sure.

Among the reasons cited by those who felt it has been secure to use were that; the system prompts and allows them to change password from time to time.

4.3.8 Main reasons for using Tax Online

Table 15 below shows the main reasons why taxpayers in the study use Taxonline system

<table>
<thead>
<tr>
<th>Main Reason For Using Tax Online</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save Time</td>
<td>60</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Save Money</td>
<td>50</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Convenience</td>
<td>54</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>No Other Option</td>
<td>16</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Not Sure</td>
<td>36</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>216</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 22 below shows the main reasons in percentage why taxpayers in the study use Taxonline system.

When asked the main reason for using Tax online, the majority (28%) indicated that Tax online Saves time, while 25% indicated that its convenience and 23% felt that it saves money.

4.3.9 Data Correlation

Table 16 below shows the analysis of the variables used in the study using Pearson correlation coefficient and P-values.

Table 16: Pearson Correlation coefficient and P-Values

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th>Useful</th>
<th>Ease To Use</th>
<th>Secure</th>
<th>Useful</th>
<th>Ease To Use</th>
<th>Secure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.997956613</td>
<td>1</td>
<td>63</td>
<td>65</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>R Square</td>
<td>0.995917402</td>
<td>0.993063</td>
<td>1</td>
<td>25</td>
<td>28</td>
<td>27</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.991834805</td>
<td>0.997957</td>
<td>0.998546619</td>
<td>1</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Standard Error</td>
<td>2.394721044</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
<th>Lower 95.0%</th>
<th>Upper 95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.465458109</td>
<td>2.567970161</td>
<td>-0.18126</td>
<td>-33.09461273</td>
<td>32.1637</td>
<td>-33.09461273</td>
<td>32.16369651</td>
</tr>
<tr>
<td>Variables</td>
<td>1.013963743</td>
<td>0.064920082</td>
<td>15.61865</td>
<td>0.189075894</td>
<td>1.838852</td>
<td>0.189075894</td>
<td>1.838851593</td>
</tr>
</tbody>
</table>
Table 16 above highlights the pearson correlation and p-values for the variables used in this research; Percieved usefulness, Percieved ease of use and perceived risk.

### 4.3.10 Correlation Coefficient

In statistics, the correlation coefficient $r$ measures the strength and direction of a linear relationship between two variables on a scatterplot. The value of $r$ is always between +1 and –1. To interpret its value, see which of the following values your correlation $r$ is closest to:

- **Exactly –1.** A perfect downhill (negative) linear relationship
- **–0.70.** A strong downhill (negative) linear relationship
- **–0.50.** A moderate downhill (negative) relationship
- **–0.30.** A weak downhill (negative) linear relationship
- **0.** No linear relationship
- **+0.30.** A weak uphill (positive) linear relationship
- **+0.50.** A moderate uphill (positive) relationship
- **+0.70.** A strong uphill (positive) linear relationship
- **Exactly +1.** A perfect uphill (positive) linear relationship

From this study we are able to see that the correlation coefficient(r) is 0.9979 ($r=0.9979$) which indicates a stronger positive statistical relationship between usefulness, ease of use and risk.

### 4.3.11 Statistical Significant (P-Values)

All hypothesis tests ultimately use a $p$-value to weigh the strength of the evidence (what the data is telling you about the population). The $p$-value is a number between 0 and 1 and interpreted in the following way:

- A small $p$-value (typically ≤ 0.05) indicates strong evidence against the null hypothesis, so you reject the null hypothesis.
- A large $p$-value (> 0.05) indicates weak evidence against the null hypothesis, so you fail to reject the null hypothesis.
- \( p \)-values very close to the cutoff (0.05) are considered to be marginal (could go either way). Always report the \( p \)-value so your readers can draw their own conclusions.

From this study we are able to see that the \( P \)-value is 0.0407 (\( P \leq 0.05 \)) which indicates a significant positive statistical relationship between usefulness, ease of use and risk of E-tax system.

**4.4 Discussion**

The results shows that E-tax systems in Solwezi town is well adopted, Perceived Usefulness is 63%. Perceived Ease of Use is 65% and Perceived security is 62%. This is consistent with the study that was conducted by Gor Kenneth from Kenya on factors influencing the adoption of online tax filing systems in Nairobi, however for this research the study was conducted in Solwezi which is rural. It was found that combined model established that increase in perceived usefulness, perceived easy of use and social systems positively influence the adoption of online tax filing system by medium taxpayers (Gor, 2015). Data collection is consistent with Mustapha who did a research on Evaluation of E-tax Quality Implementation criteria, the study also employed quantitatitave method of Analysis.

It is also noted that the trend of online tax filing has been increasing in Solwezi town since the inception of E-tax(TaxOnline) in 2013.

The study also used Pearson correlation and \( P \)-values for the variables used in this research; Perceived usefulness, Perceived ease of use and perceived risk. In statistics, the correlation coefficient \( r \) measures the strength and direction of a linear relationship between two variables on a scatterplot.

The study shows that the correlation coefficient \( (r) \) is 0.9979 (\( r=0.9979 \)) which indicates a stronger positive statistical relationship between usefulness, ease of use and risk.

The study also shows the \( P \)-value is 0.0407 (\( P \leq 0.05 \)) which indicates a significant positive statistical relationship between Usefulness, Ease of use and risk of E-tax system.
4.5 Chapter Summary

This chapter discussed the results of this study. It heighted the variables that influence E-tax adoption. These variables include: Perceived Easy of use, Perceived usefulness and perceived security. It found that there is a positive stastical relationship between ease of use, usefulness, risk and E-Tax adoption. This shows that E-tax is well adopted in Solwezi Town of Zambia.
CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter summarizes the findings of this study and gives recommendations on what needs to be done to improve E-tax adoption in Zambia.

5.2 General Findings
The foregoing research has achieved the following objectives

5.1.1 To carry out a baseline study to assess the level of adoption of E-tax system in Solwezi.

5.1.2 To assess factors influencing E-tax system adoption in Solwezi town

5.1.3 To propose the ways of improving the adoption of E-tax system based on Technology Acceptance Model (TAM)

5.3 Level of adoption of E-Tax system
The research revealed that the level of E Tax system (Tax online) adoption in Solwezi town of Zambia is on the higher side though there is still more to be done to help taxpayers appreciate the usefulness of E-Tax system and adopt it fully.

Among the respondents, the majority have heard about E-Tax system(Tax Online) and these represented 77% of my sample size, followed by those who has never heard about E-tax system and these represented 21% of the sample size and the least were those who were not sure of hearing about E-tax system and these represented 2% of the sample size. This shows that a majority has already heard about E tax system (Tax Online) .This kind of awareness, increases the chances of adopting the E-Tax system in Solwezi.

When asked how the respondents submit their tax returns, a majority(57%) indicated that they submitted their tax returns online using Tax Online,37 % indicated that they do not submit their tax returns and 6% indicated that they submit manually. The fact that the majority are filling returns using E-Tax system is an indication of a good level of adoption of E-Tax system in Solwezi.
5.4 Conclusion

The main purpose of this study was to develop a model of improving E- Tax systems adoption in Solwezi town of Zambia. In this paper, the literature review looked at E-Tax generally and in Zambia. The model used was Technology Acceptance Model (TAM). The paper adopted descriptive and quantitative survey design and used purposive sampling methods, because the sample was based on taxpayer who have used TaxOnline before or who intended to use TaxOnline. The research revealed that the level of E-tax system (Tax online) adoption in Solwezi town of Zambia is on the higher side though there is still more to be done to help taxpayers appreciate the usefulness of E-tax system and adopt it fully. It also shows a strong relationship between Ease of use, Usefulness, Risk and E- tax Adoption in Solwezi town of Zambia.

This study also encountered some limitations. Limitations of the study refer to those factors of research design or methodology that can influence the interpretation or application of the findings of the study (Yin, 2009).

The method of sampling used was purposive sampling which is prone to the following limitations; sample may not be a representation of the population, samples are likely to be prone to errors thus limiting the generalizability of the findings. The sample size used was 100 taxpayers which could not be enough. The research was conducted in Solwezi town of Zambia which is rural and focused on TaxOnline used by domestic taxes division.

5.5 Opportunities for future Research

Considering the findings of this study as well as limitations highlighted some further research should be carried out in order to gain a deeper insight into the topic. Further studies could include:

A study can be undertaken to cover other parts of the country other than solwezi town to understand if the results are applicable across Zambia. Sample size can be determined using random sampling to enable generalization of research findings. A mixed method study approach can be selected for future research as current research used descriptive survey and results may be limited.
5.6 Recommendations on how to improve the adoption of E-tax system based on Technology Acceptance Model (TAM)

The study revealed that the level of E-Tax system (TaxOnline) adoption in Solwezi town of Zambia is on the higher side though there is need to continue sensitizing and educating taxpayers for them to appreciate the usefulness of E-Tax system and adopt it fully. The research results showed that there is a small number of taxpayers who still perceive E-tax system (TaxOnline) not to be useful. The study showed that there is a small number of taxpayers who still perceive E-tax system (TaxOnline) as not Ease to use and also a few felt that E-tax System is not secure, therefore:

i. The recommendation to Zambia Revenue Authority is that they should increase the awareness on the usefulness of Tax online when it comes to electronic returns and payments and how taxpayers work will be reduced if they submit their returns electronically as opposed to manually.

ii. The recommendation to Zambia Revenue Authority is that they should increase the trainings and taxpayer education on how to use TaxOnline.

iii. It would also help to increase the adoption of E-Tax system (Tax online) if the system can be simplified further to accommodate those who still feel TaxOnline is complicated to use.
REFERENCES


Appendix 1: Interview Questions

The University of Zambia
Graduate School of Business

A MODEL FOR IMPROVING E-TAX SYSTEMS ADOPTION IN ZAMBIA: A CASE STUDY OF SOLWEZI TOWN OF ZAMBIA

By Patience Soneka (GSB 150481)

For more information or any queries, kindly get in touch on 0979-470947
Dear Respondent,

I am a student at the University of Zambia in my final stage pursuing a Master of Business Administration in Finance. As partial fulfillment for the award of a Master of Business Administration in Finance, I am conducting a baseline study on: “A MODEL FOR IMPROVING E-TAX SYSTEMS ADOPTION IN ZAMBIA: A CASE STUDY OF SOLWEZI TOWN OF ZAMBIA”

You have been purposively sampled to provide information for the topic indicated above. The information being collected is purely for academic purposes as such, it will be treated with maximum confidentiality. Subsequently, you are not supposed to indicate your name or any personal information that can lead to revealing of your identity.

Your co-operation will be greatly appreciated.

For more information or any queries, kindly get in touch with the following:

**Project Supervisor:** Dr. Jackson Phiri (0966 693 731) or

**GSB Coordinator:** Dr. Chowa (0977 010 922)
SECTION A: BIO DATA

Please tell us about yourself:

1. Gender:

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
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<tbody>
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<td></td>
<td></td>
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</tbody>
</table>

2. Age:

<table>
<thead>
<tr>
<th>18-35</th>
<th>36-45</th>
<th>46-55</th>
<th>56-65</th>
<th>Above 65</th>
</tr>
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<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

3. Business Classification (check one):

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<thead>
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<th>Corporate</th>
<th>Other</th>
<th>Partnership</th>
<th>Corporate</th>
<th>Business Name</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

4. Education Level:

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<th>Certificate</th>
<th>Diploma</th>
<th>Bachelor's Degree</th>
<th>Master's Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
5. Position Held:

<table>
<thead>
<tr>
<th>Director</th>
<th>Manager</th>
<th>Accountant</th>
<th>Administration Officer</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
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</tbody>
</table>

Specify:

SECTION B

For the questions below, please fill in the box by marking with an “x” where appropriate.

6. What is your computer experience?
   - [ ] I have no experience with computers
   - [ ] Less than one year
   - [ ] Between 1-3 Years
   - [ ] Between 3-7 Years
   - [ ] More than 7 Years

7. What is your experience with the internet?
   - [ ] I have no experience with the internet
   - [ ] Less than one year
   - [ ] Between 1-3 Years
   - [ ] Between 3-7 Years
   - [ ] More than 7 Years
8. Have you ever heard of E-Tax System (Taxonline)?

☐ Yes
☐ No
☐ Not Sure

9. How do you submit your tax returns?

☐ Manually
☐ Using Tax Online
☐ I don’t submit

10. Has E-Tax system (Tax Online) been useful to you?

☐ Yes
☐ No
☐ Not Sure

Kindly give a reason for your answer...

11. Do you find it easy to use E-Tax system (Tax Online) ?

☐ Yes
☐ No
☐ Not Sure

Kindly give a reason for your answer...

12. Do you feel secure using E-Tax system (Tax Online) ?

☐ Yes
13. What is the main reason(s) why you use E-Tax system (Tax Online)? You can choose more than one answer.

☐ Save time
☐ Save money
☐ Convenience
☐ I have no option but use Tax Online
☐ Not Sure

Kindly give a reason for your answer .................................................................
.....................................................................................................................
.....................................................................................................................

SECTION C: RECOMMENDATIONS

14. Is there any additional support, technology, or training you feel could be provided that could help with the use of E Tax system (Tax Online)?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>

15. If yes, List as required.
<table>
<thead>
<tr>
<th>No</th>
<th>Additional Requirements</th>
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<tr>
<td>1</td>
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<tr>
<td>2</td>
<td></td>
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<td></td>
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<tr>
<td>4</td>
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</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

16  Any other useful information?

Thank You

End