Perceived effects of an electronic filing system on tax compliance in a district municipality, South Africa

PB Mongwaketse
20305966

Mini-dissertation submitted in partial fulfillment of the requirements for the degree Master of Business Administration in the Faculty of Commerce and Administration at the Mafikeng Campus of the North-West University

Supervisor: Professor S.W. Musvoto

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DECLARATION

I Pule Barnett Mongwaketse declare herewith that the mini-dissertation which I herewith submit to the North-West University as partial completion of the requirements set for the MBA degree, is my work and has not already been submitted to this or any other university.

______________________________  NOVEMBER 2015

Signature                  Date
ACKNOWLEDGEMENTS

“I can do things you cannot, you can do things I cannot, but together we can do great things.” Mother Teresa.

This dissertation is the work of one man, supported by many. I owe my sincere gratitude to every single person, my family, friends and respondents who played a role in the successful completion of my MBA. To me, it is not how much that counts, but what those contributions collectively resulted into. I would like to pay special gratitude to the following people:

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“It always seems impossible until it is done.” Nelson Mandela
ABSTRACT

Globally, many countries have taken advantage of electronic tax filing system in order to enhance their effectiveness and efficiencies in the delivery of tax services. In the current environment technology commands organisational strategies and influences operations extensively. The objective of this paper is to examine the perception and attitude of taxpayers in the Dr Ruth Segomotsi Mompati District towards the introduction of e-filing by the South African Revenue Service, and whether the system has any effects on tax compliance. In the quantitative approach of research, a questionnaire was administered among 202 individual taxpayers in the district. The adoption of this tax system has been received differently, in some instances met with taxpayers’ resistance and ignorance, but overall a positive picture has emerged from this study. The results and perceptions of taxpayers are said to be influenced by various factors such as cost-benefits analysis, attitude, perceived usefulness and ease of use, system’s credibility and security.

Research has also reported that many tax authorities that have leveraged on e-filing have experienced a reduction in handling costs of returns, shorter turnaround for processing and assessment of tax returns, and improved tax compliance. The growth in the number of tax compliant taxpayers means there is a decrease in the tax evasion and eventually in the tax gap. In this study, the majority of respondents acknowledge the e-filing benefits such as paying of tax refunds quicker, ease of submission of tax returns, ease of payment of tax liability.

In spite of these results, the South African Revenue Service should continue to raise awareness of uninformed and inexperienced taxpayers to migrate to e-filing through taxpayer education workshops and media campaigns.
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**Definitions**

Taxpayer – is an individual or any legal entity that is liable to pay tax on its income received or accrued during a year of assessment.

IRS - International Revenue Service in the United States of America, which is simply that country’s tax collection authority.

Sole Proprietor – is a business that is owned and operated by a natural person.

Filing Season – It is an open period with a financial which is dedicated to filing tax returns by taxpayers before a set deadline (end of filing season).

Tax Return – is the tax form issued to taxpayers to complete and file their tax affairs with SARS.

**Abbreviations**

ETR – Electronic Tax Register

ICT – Information and Communications Technology

IRS – International Revenue Service

IT – Information Technology

KRA – Kenyan Tax Authority

SARS – South African Revenue Service

TAM – Technology Acceptance Model

TAR – Theory Reasoned Action

TCC – Tax Compliance Costs

VAT – Value Added Tax

PU – Perceived Usefulness
1.1. Introduction

According to Ginberg and Venkatrama (1992: 2) strategy research has only recently begun to shift from a focus on 'tactical' difficulties surrounding the commercialization of new technology to 'strategic' problems of how technology can shape and support corporate strategy. Therefore, business Information systems and Technologies have over the years transformed the business environment to make transacting easier, convenient and faster. There’s so much business done using digital networks and internet such as e-business, e-commerce, e-business, e-filing and even e-government. Pippin and Tuson (2008:119) describe Electronic government (e-government) services as tools to improve democracy, transparency, and accountability as well as possibly government performance. These systems are said to have enhanced relationships between clients and suppliers, logistics partners etc. As a result organisations including governments around the world have increasingly realized the importance of leveraging information technology and the internet to streamline government services and provide better customer services to its people. Fenwick and Browstone (2002;182) argue that adopting e-filing will require fundamental changes in organization, operation, management, and resource utilization by courts, lawyers, clients, citizens, and government entities.

“In countries where e-filing replaces paper-based filing with no additional work required from firms, as was the case in South Africa, e-filing is associated with some savings in Tax Compliance Costs (TCC). On average 22.4% reduction in overall TCC and 21.8% reduction in hours spent for complying with VAT are associated with e-filing usage in South Africa.” (Yilmaz & Coolidge, 2013: 3)

The study intends to assess the impact of the use of electronic filing (e-filing) of tax returns on the compliance behaviour of the taxpayer since it was first introduced in South Africa. The study will be focused in the Dr Ruth Segomotsi Mompati District, in the North West Province.
This chapter commences with an outline of the background and reasons for the study in section 1.2. This is followed by the formulation of the research problem in section 1.3, the aims and objectives of the study are discussed in section 1.4. Then literature review, research methodology and data analysis in sections 1.7, 1.8 and 1.9 respectively.

1.2. **Background**

South African Revenue Service (SARS) is the tax collection authority in the Republic. In terms of SA news (2012), it is an autonomous organ of the state which collects taxes, duties and levies. “The annual submission of tax returns is a requirement by law” (SA news: 2012) The Pre-1994 South African tax system was mainly manual. The SARS has over the past two decades implemented major tax reforms with the aim of broadening tax base, reduce marginal tax rates and improve the administration of tax collection, especially making it easier for taxpayers to honour their obligation. According to the 2006/7 Budget Tax Proposal, SARS developed a framework that supported the goal of reducing the costs of tax compliance for the taxpayers and themselves. Therefore, back in 2001, e-filing service was launched starting with Value Added tax and Provisional tax payments. In 2006 SARS started developments to expand the e-filing system to the filing of Income Tax returns for individuals, and later to companies. According to SA News (2014), SARS only achieved 40 000 returns in that year. However in 2007, this number increased dramatically with close to a million taxpayers submitting their returns electronically. According to the SARS annual report 2011-2012 number of individual taxpayers registered for income tax grew significantly year on year from 10.3 million taxpayers in 2010/11 to 13.7 million taxpayers in 2011/12. The growth in new registration presented the organisation with an opportunity to grow its e-filing users. SARS further introduced additional help for taxpayers called Help-You-e-File service for taxpayers requiring help while completing their tax returns.

The e-filing system is meant to also make submission of tax forms and payment thereto easy and convenient. The taxpayers travelling overseas or even South African citizens living offshore are now able to submit their tax forms without having to apply for extensions or traveling back just to ensure compliance. With a long history of innovation, SARS has a vision indicative of an institution that has its sight firmly on being amongst the best revenue services in the world. In e-filing their ambition is to be able to populate the tax return with all individual’s data, accessed via third parties (e.g.
employer, medical aid companies, banks, insurance companies etc.), such that they would not need to complete any aspect of their forms. (SARS Strategic Plan: 2015/16-2019/20)

With all the innovation, the issue is whether the growing number of compliant taxpayers is anyway related to e-filing. Compliance does not only refer to the submission of tax returns, but most importantly on whether the taxpayers are being honest in the tax declarations, and submitting before deadline.

1.3. Problem statement
Over the past 20 years, the South African Revenue Services (SARS) has introduced many tax reforms with the aim of tightening loopholes in the tax system and encouraging voluntary compliance amongst citizens. And one such reform is electronic filing (e-filing). However even after all that, the tax authority continues to experience non-compliance by different types of taxpayers. In SA News (2012), SARS Group Executive, Mark Kingon says taxpayer compliance has improved, however it continues to remain a challenge with some taxpayers. The SARS Annual Performance Plan 2012/13 has revealed that a substantial number of individual taxpayers, including high net-worth individuals are under-declaring their income and overstating their expenses, resulting in significant revenue losses.

Moreover, even with the introduction of e-filing SARS still continues to experience long queues of taxpayers coming to do submit tax returns at branch offices instead of utilising e-filing from the comfort of their offices or homes to file their tax returns. In SA news (2012), SARS said besides its progress, there are a lot of people out there who can file on a computer but they are too scared to do it.

1.4. Research questions
The study will seek to answer the following questions:

- What are the characteristics of the overall representation of the taxpayer population?
- What is the perception of taxpayers about the use of e-filing to submit tax returns?
To what extent does e-filing have a direct influence in the compliance patterns of taxpayer?

How much do taxpayers know about e-filing?

What is the attitude of taxpayers towards the use of e-filing, and why?

1.5. **Objectives**

*General objective*

The general objective of the study is to obtain the opinion and perception of the taxpayers about the influence of e-filing in their tax compliance patterns.

*Specific Objectives*

The following are the specific objectives of the study:

- To identify personal characteristics of taxpayers.
- To establish and examine the taxpayers’ level of knowledge of about e-filing.
- To determine constraints that lead to taxpayers’ non-compliance.
- To measure taxpayer’s attitude towards the use of e-filing.

1.6. **Scope of the study**

The scope of the study will be concentrated in the Dr. Ruth Segomotsi Mompati District Municipality’s (formerly known as Bophirima) area of jurisdiction. The district is constituted by various areas from the former Transvaal Provincial Administration; Cape Provincial Administration and Bophuthatswana Administration, now collectively referred as North West Province. The district municipality consists of five local municipalities, namely; Naledi, Greater Taung, Mamusa, Kagisano-Molopo and Lekwa-Teemane. According the local government website, the District is spread over 43 700 km² area of land, with estimated population of 463 815.
Figure1-1: Map of Dr Ruth District Municipality
(http://www.localgovernment.co.za/district/view/41/Dr-Ruth-Segomotsi-Mompati-District-Municipality)

Furthermore, the unemployment level in the district is at 35.80%, the majority being amongst the youth. According to South Africa’s Tax Statistics report (2014), Dr Ruth District municipality had a population 19 100 taxpayers in 2013 compared to 20592 in 2012. In the same period the overall national population of taxpayers increased by 1.7 million from 13.7 million. It is further said that South Africa experienced a compounded increase in average taxable income of 12.2% while North West is listed amongst provinces that experienced a decline (Tax Statistics Report, 2014: 41).
1.7. Literature review

Historically, in South Africa the tax returns were filled in manually, mailed to the then Receiver of Revenue office through the Postal Office or hand-delivered to the nearest office. According to the SA News (2013) the SARS highly manual tax system saw it spent significant amount of their payroll budget on handling paper returns and transcribing data to machine readable form. Venkatraman and Kambil (in Ginsberg & Venkatraman, 1991:4) said data transcription procedures were prone to errors leading to costly delays in the processing of returns and refund checks. They further assert that until the mid-1980s, the return preparation market had experienced limited applications of computer and communication technology, and only large corporations ran computerized operations. Fast forward to the 21st century, and any business or organization or government institutions still running manual operating systems is seen as doing injustice to its competitiveness and depriving itself of a potential to grow. Coolidge and Yılmaz (2014:1) are reporting that by 2011 at least 74 economies in the World Bank Group had fully implemented e-filing. In the Tax Stats Report (2014), it is said that less than 1% of taxpayers still use manual paper-based channels to submit their returns. This marks a significant improvement from the 98.8% that used these channels in 2006.

Papazoglou and Ribbers (2010: 2) define e-Business as the method of automating business transacting using electronic communications networks from end to end. They further outline the aim of e-business as to provide a flawless interoperation and interactive links between all the relevant stakeholders of an extended demand and supply chain, including product designers, suppliers, and their partners of end customers. “E-business encompasses sophisticated business to business interactions and collaboration activities at a level of enterprise applications and business processes, enabling business partners to share in-depth business intelligence, which leads in turn to the management and optimization of inter-enterprise processes such as supply chain management” Papazoglou & Ribbers (2010: 2). Norris et al (2000:14) meanwhile describe e-business as a disruptive technology that seeks to improve business performance by using electronic information technology and open standards to link sellers and their clients at every step in the supply chain. They call it disruptive because they believe that it changes the way people live or how they do business. Papazoglou and Ribbers (2010:2) list the types of e-business such as e-Commerce, e-Government,
e-Markets, e-Procurement and e-filing. E-filing is an application of the internet and networking technologies to digitally enable taxpayers and their Accountants or representatives to prepare and electronically file their tax returns. Norris et al (2000:14) say the early stages of this e-business concepts are usually focused on reaching the customer, while the later stages involves streamlining value chain activities to deliver more value to customer.

When it come to the decision whether to use or not to use e-filing, many factors play a role, such as taxpayer knowledge, attitude, experience, environment, etc. Coolidge and Yılmaz (2014:1) agree that taxpayers with certain characteristics are more likely to use e-filing. In the main they argue that large businesses, located in urban areas, operating in capital-intensive sectors, and paying multiple taxes [e.g. income tax, value-added tax (VAT), payroll taxes and excise taxes] are most likely to use e-filing. Therefore, in a similar fashion the taxpayers in the high income bracket, with a complex income structure are also most likely to e-file. In addition the availability of reliable Internet access and electricity, capability in computer usage, awareness of e-filing and knowledge about the process is important for taxpayers’ e-filing decisions, said Coolidge and Yılmaz (2014: 2).

The confidentiality of taxpayer information is guaranteed by SARS as contained in section 21 of the Tax Administration Act No. 28 of 2011. Prior to TAA, confidentiality was dealt with under Section 10 of the Income Tax Act No. 58 of 1962. In terms of the section, SARS employees are prohibited from divulging any taxpayer’s information to third parties. The same approach is used in the U.S. their tax administration system regards confidentiality of taxpayer as a basic right, say Laury and Wallace (2005:427). The guidelines in this regard are contained in Section 6103 of Internal Revenue Code. Therefore, since e-filing is a self-assessment system, the taxpayer is empowered to take control of the security of his or her information or data, by securing their login details (login name & password). Niemic (1986: 145) also refers to this as electronic authentication which allows a taxpayer to create a Personal Identification Pin to be used when filing their tax returns electronically. The confidentiality of taxpayer data is thereby guaranteed within the system of tax administration and the SARS also enforces strict disclosure rules for all taxpayer details flowing outside the Tax Authority.
Laudon and Laudon (2013: 245) caution that whenever there’re large amounts of data stored in electronic form, they are vulnerable to many kinds of threats than when they existed in manual form. Furthermore, they also say the potential for unauthorised access, abuse or fraud is not only limited to a single location but can occur at any access point. Therefore it is very critical for SARS to always ensure that e-filing is highly secure as an application that is hosted in its website.

However, security is not only of the software but also of the various hardware devices used by taxpayers to access e-filing. In the sarsefiling website, SARS has thus put a disclaimer under the terms and conditions of e-filing stating that “it is the responsibility of the user to maintain his/her own expense, computer hardware, system and information security, telecommunications lines and access accounts to access the Internet and the SARS e-filing website”. This simply means taxpayers have the responsibility to secure their assets especially mobile ones like cellphones that can be easily stolen.

In the dictionary, Change is simply defined as making the form, nature, content, etc. different from what it is. In any organisation, people who are affected by this will react differently. Ling (2008: 338) says that many studies around the world have shown taxpayer’s resistance to the use of e-filing system, hence a big challenge to the authorities. According to Coolidge and Yilmaz (2014) many in the international donor community supporting tax reforms had assumed that e-filing would reduce tax compliance costs for taxpayers, however their survey evidence from investment climate work conducted by the World Bank Group shows that this is not necessarily the case. SARS also faced big challenges at the development stage, including the software capacity to handle high volumes of submission due to people’s penchant for leaving things to the last minute. In the Finance Online publication, Dwilson (2014) says another challenge with e-file is its inability to provide automated online assistance to a taxpayer with a complex income structure. Therefore for such taxpayer trying to get help on a complicated tax question from a website help desk may not be nearly as useful as getting help from an in-person tax professional.

When e-filing was introduced, SARS did so because it saw the possible benefits that it would bring about, for it and its customers. According to SARS in their e-filing portal, the following are benefits which are available to users and taxpayers:
“e-Filing is a free, simple and secure way of interacting with SARS from the comfort and convenience of your home or office.

No more waiting in queues, finding parking or worrying about office hours. Once registered, e-Filers can submit returns, view their tax status and make payments to SARS electronically 24 hours a day!

e-Filers are also given more time to make their submissions and payments. Individual taxpayers and trusts have more time to submit their returns which means longer to pay any additional income tax. And if you’re a business paying VAT, you get until the last business day of the month to pay it over (rather than the 25th of the month for manual filers)!

You also have a full history of all submissions, payments and electronic correspondence available to you at the click of a button through the innovative reporting tool.

e-Filers can also receive SMS and email notifications to remind you when submissions are due.

The simplicity of the process results in fewer errors and creates a quicker processing cycle for individuals and businesses.”

(http://www.sarsefiling.co.za/Benefits.aspx)

Benjamin (2013) said that South Africa improved its ranking on tax payments from number 32nd to 11th, largely due to the success of e-filing and the way in which returns are filed. She further points out that in South Africa it takes 200 hours for a company to complete and file its tax return, compared to a global average of 268 hours.

1.8. **Research methodology**

Rajasekar, Philominathan and Chinnathambi (2006: 5) define research methodology as a systematic way of solving a problem, also referred to as a science of studying how research is to be executed. The aim of methodology is to provide a structured work plan of research. It is different from research methods which are different procedures, schemes and algorithms used in research. Therefore in this study methodology explains the various procedures that would be followed in doing this research, in a specific sequence as outlined below.
1.8.1 Research design

Van Wyk (2015: 54) explains research design as the overall plan for connecting the conceptual research problems to the pertinent empirical research. The research design will be guided by the type of research one intends to undertake, qualitative or quantitative. Quantitative research is described as a study that is based on the measurement of quantity or amount by Kothari (2005: 3). Meanwhile, Kothari (2005: 3) also defines Qualitative research as a study focusing on qualitative phenomenon, (e.g. investigating reasons for certain human behaviour). Rajasekar et al (2006:9) also confirmed that quantitative research is based on amount while qualitative is based on quality.

Therefore based on these definitions, it is clear that the chosen research design is going to enable me through the evidence obtained to answer the initial question as unambiguously as possible. A quantitative study is used in this research, with utilisation of questionnaires to gather data.

1.8.2 Population

Polit and Hungler (in Mbokane & Ehlers, 2006:45) define population as an aggregate or totality of all the objects, subjects or members that meet certain specifications or characteristics. It is from a population where a sample is selected. Kothari (2004:153) further says that population can either be finite or infinite. He further says that a fixed number of objects or items that can be enumerated are finite, while infinite refers to that group where it is theoretically impossible to count all the elements. The population sample will be limited to the individuals who are working and earning an income, or owning/running a business and liable to pay one or other tax type. The intention is to select a sample of 250 individuals working in the six municipal areas mentioned above.

1.8.3 Sampling Technique

A representative portion of a population is called a sample. It is from this that Yount (2006:7-1) explains sampling as process of selecting a number of subjects who would collectively be representative of a larger population from which it was selected. A sampling technique refers to the method that will be used in determining which individuals are selected to participate in the study. Kothari (2004:15) further says that
samples can be either probability samples or non-probability samples. A probability sampling has been adopted in this study, based on simple random sampling. According to Kothari (2004:15) simple random sampling also known as probability sampling is a sampling technique that presents every subject of the population with equal opportunity of being part of the sample selected.

1.8.4 Method of data collection

According to Kothari (2004; 95) once a research problem and research design plan have been drafted, data collection can be launched. He defines data collection as a systematic gathering of information that addresses research problem using various techniques. According to Sandelowski (2000:250) data collection associated with qualitative research will be unstructured, using open ended and unstructured interviews, while for quantitative research one would follow more structured route using questionnaires. Therefore in this study, in order to address its objective of the study, a questionnaire was designed and distributed to the selected individual taxpayers around the Dr Ruth Mompati District. All the respondents were selected randomly from the five local municipal areas. The most relevant level of measurement that will be used in the study is the one that ranks attributes, which could be either nominal or ordinal. A nominal scale a system that classifies subjects, individual or other entities by placing them in mutually exclusive categories, while ordinal can be explained in terms of its values which represent the rank order of the subjects with respect to the variable being assessed. (Lehman, O'Rourke, Hatcher, Stepanski, 2005)

1.9 Data analysis and discussion of findings

A data analysis will be achieved using the available statistical software. The data analysis can be done using various statistical tools such as Statistical Package for Social Sciences (SPSS), SAS, e-view. In this study statistical analysis was done using SPSS.
1.9.1 **Consistency and replicability**
In the study it is important to give attention to precision and accuracy of measurable features in the study. This can be used with reference to time, instruments or over a group of respondents.

1.9.2 **Ethical consideration**
The study will not impinge on the sensibilities and rights of other people. The study will uphold integrity and ethical standards by maintaining confidentiality over the respondents’ identity or their personal information used in the study.

1.10 **Outline of the study**
The study is limited to the Dr Ruth Segomotsi Mompati District Municipality, but it is relevant to all other municipalities or districts across South Africa.

The study is organized as follows:-

**CHAPTER 1: Introduction**

The introduction section provides a general overview of the study. It specifically outlines the aim of the study, the research problem statement, research question and research objectives.

**CHAPTER 2: Literature review**

It deals with the theoretical overview of various literature sources on the topic that is being researched. The various sources refer to books, internet, journals, newspaper articles etc.

**CHAPTER 3: Research methodology**

It gives details of the research methods that will be used in the study.

**CHAPTER 4: Results Presentation, Analysis and Discussions**

The chapter contains a presentation of the statistical results of the study and detailed discussion thereof.
CHAPTER 5: Summary and conclusion

The findings of the study based on the results are summarised and recommendations made, before drawing a conclusion.
CHAPTER 2
LITERATURE REVIEW

2.1 Introduction
Over the last two decades the SARS tax system has gone through many changes, and all those were introduced with the intention of aligning with international practices, improve efficiency and effectiveness, thus accelerating organisational performance. E-filing happens to be just but one of such changes. Its introduction was ideal to support SARS in pursuing its strategic objectives, almost ten years into democracy. SARS has four core-mandates, one of which is to ‘Increase tax compliance’, and the question is whether e-filing plays any impact, direct or indirect in the achievement of that mandate. (SARS Annual Report: 2013/14)

In this chapter, the concept of compliance is defined and explained in detail in various contexts, including the various factors that influence this behaviour. Furthermore an extensive discussion of e-filing is done by looking at its origin, its advantages and disadvantages, factors influencing its use or non-use, how it influences compliance level and its importance to SARS’ successful implementation of its strategy and achievement of its mandate.

2.2 History of tax submission
The technology we investigate is the electronic filing of tax returns (hereafter, e-filing). According to SARS (2015) historically, in South Africa tax returns were filled in manually and mailed to the then Receiver of Revenue (ROR) office through the Postal Office or hand-delivered to the nearest ROR office. The highly manual system saw SARS spent significant amounts of their payroll budget on handling paper tax returns and transcribing data to machine readable form. Similarly according to Ginsberg and Venkatraman (1992) the U.S. Internal Revenue Service (IRS) spent over $1 billion of its 1985 budget (approximately a third of its budget) on handling paper returns and capturing data on computers. Data transcription procedures were prone to errors leading to costly delays in the processing of returns and refund checks (Venkatraman & Kambil, 1991). Therefore until the mid-1980s, the return preparation market had experienced limited applications of computer and communication technology, and only
large corporations ran computerized operations. The manual processing involves several steps as detailed in Figure 2 below. Before a return is finalised, it has to go through at least twelve different steps, with the possibility of some being repeated in case of errors, detailed by the Gao Report (2002:3).

![Processing Flowchart for Paper and Electronic Returns](image)

Figure 2-1: Processing Flowchart for Paper and Electronic Returns (Gao-02-205; 4: 2002)

Fast forward to the 21\textsuperscript{st} century, and any business or organization or government institutions still running manual operating systems is seen as doing injustice to its competitiveness and depriving itself of a potential to grow. Coolidge and Yılmaz (2014) are reporting that by 2011 at least 74 economies in the World Bank Group had implemented e-filing.
2.3 **Background of South African Revenue Service**

According to the SARS Annual Report (1998) the South African Revenue Service, formerly the Department of Inland Revenue and Department of Customs before their consolidation in 1997, is the tax authority that has been mandated by the Republic to collect tax revenue and ensure tax compliance by all the taxpayers. Okello (2014: 4) defines compliance as the degree to which taxpayers and traders meet their obligations in terms of the legislation administered by SARS. Such obligations include registration to become a taxpayer, filing of tax returns, and filing on time and payment of tax liability due. SARS (2015) say this tax compliance is mainly achievable through enforcement efforts such as Auditing, inspections and tax education. They furthermore explain that various taxes collectable by the organisation are Personal Income Tax, Corporate Taxes on companies (i.e. Income Tax, Dividend Tax), Employees Tax (UIF & PAYE), Customs and Excise Duty, Value Added Tax and other taxes. SARS is also responsible for the control over the import, export, manufacture, movement, storage or use of certain goods.

All this is captured in the vision and mission of SARS as follows: (SARS Annual Report, 2013/14:3)

**Vision:** To be an innovative revenue and customs agency that enhances economic growth and social development, supports integration into the global economy in a way that benefits all South Africa.

**Mission:** To optimise revenue yield, facilitate trade and enlist new tax contributors by promoting awareness of the obligation to comply with South African tax and customs laws, and to provide quality and responsive service to the public.

**Manual Tax System**

Until 2003 SARS, SARS utilize manual system of processing tax returns as described in paragraph 2.2 above. According to Smulders (2014:54) the system was inherited from the previous apartheid regime. She further argues that this system had much inefficiency and was ineffective, amongst other things, the turnaround time between submission of returns and assessment outcome was lengthy, taxpayers had to come to SARS office in order to submit returns or make payments and tax processing was highly labour intensive. The argument is supported by Dowe (2008:4) where she says that most of manual tax administration was costly and inefficient in their processing.
In terms of SARS Annual report 2000/0 (2001:31) the manual filing system created bottlenecks in data processing of taxpayers especially during the filing season. The report further explains that other challenge experienced by SARS was big number of outstanding tax returns, as measurement item is impacted upon by new registrations/de-registrations, extensions requested and granted, and non-compliance with return dates.

The Table 1 shows SARS Stats of Outstanding Tax returns in 2001, based on the 2000/2001 annual report. The figures show a high percentage of returns not submitted by taxpayers in the era prior to introduction of e-filing.

<table>
<thead>
<tr>
<th>Tax Types</th>
<th>Tax Register</th>
<th>Outstanding Returns</th>
<th>% Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>3 181 072</td>
<td>1 745 801</td>
<td>55%</td>
</tr>
<tr>
<td>Company</td>
<td>976 720</td>
<td>871 704</td>
<td>89%</td>
</tr>
<tr>
<td>VAT</td>
<td>450 295</td>
<td>301 807</td>
<td>67%</td>
</tr>
</tbody>
</table>

Table 2-1: 2000/01 Outstanding Returns (Annual Report: 2000-2001)

All these challenges prompted the birth of SARS modernization agenda, which enlisted ICT enhancement one of their major objectives. This eventually, after many years led to SARS to e-filing system, which made it aligned to what other developed countries such as Sweden, the US, New Zealand, Singapore etc. are using.

<table>
<thead>
<tr>
<th>Year</th>
<th>Returns Required</th>
<th>Returns on Time</th>
<th>Returns on Time (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/09</td>
<td>4 186 634</td>
<td>2 418 286</td>
<td>57.76%</td>
</tr>
<tr>
<td>2009/10</td>
<td>3 961 391</td>
<td>3 116 024</td>
<td>78.66%</td>
</tr>
<tr>
<td>2010/11</td>
<td>4 084 151</td>
<td>3 296 768</td>
<td>80.72%</td>
</tr>
<tr>
<td>2011/12</td>
<td>4 232 027</td>
<td>3 519 157</td>
<td>63.16%</td>
</tr>
<tr>
<td>2012/13</td>
<td>4 896 969</td>
<td>4 213 996</td>
<td>86.05%</td>
</tr>
</tbody>
</table>

Table 2-2: Outstanding Returns 2008-2013 (Annual Report 2012-2013, 2013:30)

Based on Table 2, there was significant drop in the outstanding returns since 2008/09, SARS Annual Report (2013:30). In 2008/09 42% tax returns were outstanding, and the
number improved significantly by 2012/13 with less than 15% outstanding. The low percentages are experienced in the era of e-filing.

According to Smulders (2014:54) during its transformation journey, SARS lanched a revived journey now termed the “Modernisation Process”. It in this agenda that e-filing was introduced. It was introduced as an answer to some of the challenges experienced in the manual systems as stated above.

In the SARS Annual Report (2009:4) it is confirmed that systems and processes were modernized to ensure that all routine tasks were electronically processed. The report further says that more one million taxpayers embraced e-filing in that 2008 filing season compared to the 30 000 in 2007. In that period SARS reported 98% of government departments were using e-filing.

**Key e-filing statistics are:**

According to the SARS Annual Report of 2009, only 30 000 individual taxpayers registered and submitted their tax returns via e-Filing, and in 2007/08 that number improved significantly to one million taxpayers. By 2013, SARS had 4 896 969 registered for e-filing. But amongst its biggest is the South African government as an employer, with 98% of government department having used and complied with the e-filing timelines for PAYE in 2009.

**Table 2.3: SARS Tax Register – 2009 to 2013**

<table>
<thead>
<tr>
<th>Registered Taxpayers</th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Tax</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Individuals</td>
<td>5 920 612</td>
<td>10 346 175</td>
<td>13 703 717</td>
<td>15 418 920</td>
</tr>
<tr>
<td>E-filing Register</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Individuals</td>
<td>3 961 391</td>
<td>4 084 151</td>
<td>4 232 027</td>
<td>4 896 969</td>
</tr>
<tr>
<td>% Taxpayers on e-Filing</td>
<td>67%</td>
<td>39%</td>
<td>31%</td>
<td>32%</td>
</tr>
</tbody>
</table>
According to SARS 2013/14 Annual Report, the average processing turnaround time for PIT returns stood at 0.26 days in the 2012/13 financial year, and in 2013/14 it is at 0.16 days, thanks to e-filing. The SARS modernisation programme has overhauled PIT administration and improved substantially the processing of PIT returns. In 2007, before the modernisation programme began, only 2.6% of PIT returns were processed within 48 hours. However in 2013/14, 94.5% of all PIT returns filed were processed within three seconds. In 2013/2014 SARS annual report, it is reported that ‘the extensive adoption of electronic submission by taxpayers has enabled SARS to further improve its turnaround times,’ with 99.58% of returns were assessed within 24 hours compared to 98.36% in 2011. It is further stated that 93% of the returns submitted in 2013/2014 were assessed within 3 seconds, finalised with 0.26 days on average.

2.4 Definition and characteristics of SARS e-filing

Fu et al (2006) define e-filing or electronic filing of personal Income Tax (eTax) as an application that automates tax related processes in an attempt to improve efficiency in assessing and collecting tax information. Dowe (2008:6) simply says e-filing is a direct transmission of tax information using the internet. Fenwick and Browstone (2002: 182) concur and define e-filing as the filing of information in electronic form, as opposed to paper form. The system is said to have a potential to improve tax-filing service while at the same time reducing costs to both taxpayers and tax collecting agencies. They also said e-filing will likely have a more pervasive effect on the legal system than did the adoption of administrative procedure acts or codes of civil procedure.

The system was designed for use by all the taxpayer who are obliged by the tax legislation to comply with South African tax laws. In this context taxpayers will include individuals (employees and sole proprietor), companies (private and public), employers, Trusts and all legal entities trading or earning an income or making profit in South Africa.

According to SARS (2015) the taxpayers, SARS agents, Accountants, employers and all the others can use e-filing to do the following:

- The filing of manifest, bills of entry and export documentation; Income Tax, Pay As You Earn (PAYE) and Value Added Tax (VAT) returns,
- Payments received from taxpayers/ traders;
• Procurement from preferred suppliers;
• Interactions with taxpayers and traders to service and education; and
• Taxation of Internet business transactions.

According to SARS Annual Report (2013:8) other additional characteristics of e-filing include a function called ‘SARS Help-You-Easy-file’ which is an online solution that will help the taxpayer complete their individual Income Tax Return (ITR12) by requesting the special trained Contact Centre Agent to guide taxpayer or representative while they are working online on their e-Filing profile. The report also says taxpayer or e-filer “share” your screen with SARS agent who can then help them tackle any difficulties encountered while trying to file the tax return.

Furthermore, the application has a self-service function that allows taxpayers to reset their passwords without calling SARS.

Singh and Singh (2013:131) explain that for a taxpayer to access e-filing they have to first register online.

![Figure 2-2. Steps For e-Filing of Tax return (Singh & Singh, 2013:131)](image)

Based on Singh and Singh (2013:131) Figure 3 above presents a typical e-filing process, where the process is initiated by the taxpayer by logging into the e-filing system, where he downloads a tax form/return. Furthermore, they also explain that in the next step the system gives taxpayers options to select to customize their own forms
by choosing only the fields which they are going to need based on their declaration and nature of their income and deductions. Finally if the taxpayer is satisfied with their declaration, they can upload the form, which would then be assessed immediately. SASR (2015) confirms that the validations and controls are built into the system to protect taxpayers’ identity and ensure that information completed the form matches with the SARS system.

The following are simple step by step process of registering for e-filing or activating taxpayer e-file account, as outlined in the by sarsefiling (2015).

“The next six steps will guide you through our registration process. To comply with the registration requirements we need to get some basic information regarding you and your company.

**Step 1:** Read the Terms and Conditions below carefully and accept these.

**Step 2:** You need to provide us with your login information. You will be able to select your own user-id. For security purposes we will add four additional characters to this ID. You will also be able to select your own password. If you have pre-registered on our site, please provide us with the email address you have used in the pre-registration - this will enable us to pre-populate some of the data fields.

**Step 3:** We need to know a little bit more about who you are. This information is needed for authentication purposes only.

**Step 4:** We need to know a little bit more about your organisation. If you are a tax consultant, please enter your organisation’s details. If you are a full-time/part-time employee, please enter the details of your employer.

**Step 5:** You will have the opportunity to register for e-filing for specific tax returns. We accept activation requests for IT12S, IT12C, PAYE, SDL, VAT and IRP6. Please make sure that you have the relevant tax reference numbers handy.

**Step 6:** Welcome to SARS eFiling! You will have the opportunity to print a summary of your registration details. To ensure your security and privacy of your tax details you will have to send us the following details before we are allowed to activate you as an Electronic Tax Return Filer:

- A copy of your South African ID or South African passport;
- The SARS eFiling summary form.”
2.5 SARS Modernisation Agenda

During the 2000/01 fiscal year, SARS reported in its annual report (2001:18) that it had in 1998 begun to overhaul its Information Technology system, focusing on three principles of Centralising, Standardising and Automating. According to the report the organisation had recognised that both its internal and external environments had changed so drastically, with taxpayer, government, management and internal user needs becoming more sophisticated. Meanwhile SARS was not ready to provide these stakeholders with those ‘sophisticated’ on-line, real time service, hence the agenda to overhaul IT. According to the annual report (2001:19) SARS developed an integrated e-business strategy and signed unique partnership solutions that enhance delivery of electronic services.

Again the 2000/2001 in annual report (2001:19), SARS identified that partnering with technology service providers was important to developing leading edge business solutions for SARS. As a result they took the opportunities of partnering with Indian software houses, accredited tax-agents, skills brokers and academic and training institutions, among others.

The United States of America

Walsh and White (2000) said that in 1986, the IRS responded to the increasing costs of tax collection by offering the capability for professional return-preparers to file returns electronically. They further say that government believed that a system would reduce the entire set of costs of paper handling as well as the need for data transcription (at the IRS end) by capturing the relevant taxpayer information at the time of return-preparation. The technical feasibility of electronic filing was demonstrated in 1986. By 1988, electronic filing had expanded to over a third of the country, and by 1990 it was available nationwide. Both Pippin and Tuson (2008:117) say the introduction of electronic tax administration including electronic tax filing (e-filing) has been one of the most important electronic government (e-government) initiatives in the United States.

In 2007 the IRS embarked on a campaign to encourage more people to efile. According to White and Walsh (2007:406), the tax authority’s approach was to do this by selling and promoting the various benefits of e-filing to Americans which were:
a) Receiving a refund in half the time relative to paper filing,
b) Improved accuracy of the return (reducing the likelihood of an error notice),
c) Proof the return has been accepted,
d) Ability to file the Federal and state tax returns together, and
e) Opportunity to file early while delaying the payment of any balance due until April 15th.

White and Walsh (2000:6) comments that IRS as many options for taxpayers to file such as “electronic filing using a return preparer; or tax preparation software from personal computer at home, or via telephone (TeleFile programme) which is free of charge. They even claim that some companies provide taxpayers with the opportunity to prepare a return online and file it electronically from work, thus indirectly saving the company productions costs and its employees the trouble of having to leave work in order to visit internet shop to file returns.

2.6 Tax compliance
The concept of self-assessment as introduced through e-filing has a lot of implications on compliance. Under self-assessment it is the responsibility of the taxpayer rather the revenue authority to calculate the tax liability and to ensure that the requirements regarding payments are met. (James & Alley: 29). This simply says even though the system automatically calculates the taxpayer’s liability, it is still the onus of the taxpayer to ensure the correct liability is calculated by feeding the accurate financial data onto their tax forms. This approach poses a very high risk of non-compliance, equivalent to tax evasion.

Andreoni, Erard and Feinstein (1998:818) argue that tax compliance is as old as taxes themselves. Compliance for tax purposes can be defined simply as the degree to which taxpayers comply with various tax laws. IRS (1961:8) clearly defines filing compliance as timely filing of tax returns, while reporting compliance is accurate reporting of income and tax liability and lastly payment is simply paying taxes on time when due, (IRS, 1961:8). James and Alley (1999:29) believe that tax compliance can be explained from different angles, such as public finance, law enforcement, organisational design, labour supply or ethics or even a combination of all this.
In their definition, James and Alley (1999: 29) also define compliance in terms of law enforcement, in wider economic definitions, or even broader in terms of the taxpayer’s behaviour and decisions of whether to comply with the wider objectives of society as reflected in the tax policy. Based on all of these definitions, compliance is a behavioural issue, as well as choice. Some taxpayers comply voluntarily while others are persuaded through some measure of enforcement. According to IRS (1961:8) there are three types of voluntary compliance, which are filing compliance, reporting compliance and payment compliance.

Meanwhile, Niemic (1986:429) believes it’s best to explain compliance through examples of non-compliance which are failure to fully disclose total income, to more liberal "interpretations" and reporting of deductions, to outright failure to file tax returns or seeking "underground" employment. According to IRS (1996:1) it is every tax authority’s dream to achieve voluntary compliance by taxpayers. This would save governments costly alternatives of detecting offenders and collecting those unpaid taxes.

James and Alley (1999:29) further suggest that the level of compliance can be measured in terms of the tax gap. The tax gap is the difference between the actual revenue collected and expected revenue collection amount if all taxpayer declared their earnings and did so accurately and honestly (100% compliance). The tax gap is therefore created by non-compliance behaviour. In this area we have intentional non-compliance and those innocent offenders lead by ignorance or lack of knowledge. The two concept used to describe this behaviours are tax avoidance and tax evasion.

**Tax Avoidance vs Tax Evasion**

The difference between these two activities is clarified through legal terms, with avoidance referring to application of legal measures to reduce tax liability and evasion is use of illegal measures.

According to Stiglingh *et al* (2012: 773) tax evasion refers to illegal activities deliberately undertaken by a taxpayer to free himself from a tax burden. Meanwhile Gale and Holtzblatt (2000:7) define tax evasion as a deliberate or unintentional act of not paying taxes that ought to be paid. This kind of behaviour is classified as a serious offence that is subject to severe penalties including imprisonment in terms of the provisions of Tax
Administration Act No. 28 of 2011. Abrie and Doussy (2006:2) say that taxpayer would mostly evade tax by underreporting their income or claiming higher expenses than the taxpayer is entitled to, or simply failing to file tax returns. It is also Gale and Holtzblatt’s (2000: 8) view that tax evaders increase the tax burden of those who are compliant as their actions force authorities to increase tax rates or penalties charged.

Stiglingh et al (2012:773) then define tax avoidance as referring to a situation in which the taxpayer has arranged his affairs in a perfectly legal manner, with the result that he has either reduced his income or has no income which attracts liability. This practice is acceptable and no taxpayer is obliged to pay greater tax than is legally due under the Tax Act.

But the reality is that more often than not, taxpayers choose to practice tax evasion and not avoidance, which then creates a tax gap. Andreoni et al (1996:819) argues the tax gap is mainly influenced by the magnitude of tax evasion. Tax authorities are then responsible to close this gap. According to Stiglingh et al (2012:773) the tax Administration Act (TAA) list sections 234 and 235 as penal provisions against anyone practising tax evasion. There also other less severe penal provision which levy administrative penalties and interest as a way to discourage non-compliance.

For an example, In South Africa, non-filing of tax return attracts a monthly penalty of R250 that accumulates in each year the return remains outstanding.

2.6.1 Factors affecting Tax Compliance
The taxpayer’s choice to comply or not is influenced by many factors, both internally and external. The following are some of the factors that have been found and considered in this study:

Psychological Factors
Fiscal Psychology Model
Azjen (1991) (Peter, 2012:14) assumes that psychological factors such as moral and ethical concerns play an important role in influencing taxpayer behaviour. Planned theory of behaviour was developed by Azjen in 1991. Peter (2012:15) says this theory says that behaviours of taxpayers is influenced by definite factors which originate from
certain reason and emerge in a planned way. Based on the theory, Peter suggests that compliance is not affected even when the chances of detection are low.

**Economic factors**
Loo (2006:96) describes economic factors as cost and benefits variables that are directly influenced by taxpayers’ actions relating to compliance. Below we discuss in detail the economic factors that influence the compliance levels amongst taxpayers.

*Economic deterrence model*
The theory of economic deterrence intends to discourage non-compliance by putting restrictive and even punitive measures in place which outweighs the benefits of committing crime. (Peter, 2009:15 and Enigma & Baisa, 2014:434). Therefore, this simply means individuals compare consequences and benefits before choosing whether or not to comply. The theory is also apparently based on the hypothesis that every individual knows the difference between right and wrong. Meanwhile Hasseldine (in Engida & Baisa, 2014:434) assumes that taxpayers are rational economic evaders who would probably compare costs and benefits of evasion.

*Tax audits, government spending and tax rate*
The other economic factors that influence tax compliance are listed by Engida and Baisa (2014:435) as tax audits, perception of government spending and tax rates. They believe that the primary goal of *tax audits* is to encourage voluntary compliance. And moreover, audits should be more frequent and conducted with thoroughness to discourage the thought under declaring income and/or over-deduction of expenses, and encourage taxpayers to be prudent in their declarations, says Pilil (2010:185).

According Engida and Baisa (2014:435) taxpayers are more likely to declare voluntarily if they see government utilising national revenue wisely by spending on education, health, safety, public transportation and any basic services for its citizens.

At the same time Abrie and Doussy (2006:3) also present a theory that compliance or non-compliance is influenced by tax rates and chances of being detected by the system. They believe that high tax rates, penalties and efficiency of the auditing division play a big role is compliance patterns.
In the 2012/2013 SARS Annual report also attributes non-compliance to the adverse economic conditions which tempt taxpayers to boost their cash flows by under-declaring some of their earnings. SARS’ approach of improving service, expanding education and increasing outreach activities together with effective enforcement actions made it clear to taxpayers and traders that non-compliance will not be tolerated and that there are severe consequences for those that are non-compliant. Therefore effective tax administration plays an important role in enhancing compliance because it is said to encourage voluntary compliance.

**Socio-psychological factors**

In his lecture Milgram (2010:1) says social psychology deals with how individuals think about, are influenced by, and relate to one another. Meanwhile Devos (2014:21) says that social psychology examines the attitude and beliefs of taxpayers in order to understand and predict human behaviour in respond to social norms. Wenzel (2005) confirms the role of social norms in compliance, what other people are doing and what other people expect of you is very important.

**Personal financial constraints**

According to Engida and Baisa (2014:437) the choice between paying for basic survival needs (such as food, clothing, accommodation) and paying ones’ taxes in the midst of financial constraints can possibly drive one to engage in tax evasion. Therefore these people are seen to be more vulnerable and more likely to evade tax.

**Compliance costs**

Loo *et al* (2010:153) are the costs incurred by taxpayers during a process of tax compliance. Eichfelder and Schorn (2009:2) also agree that compliance cost sare linked to compliance levels, hence the high costs can escalate the level of tax evasion. The cost can be internal or external. Loo *et al* (2010:153) maintain that internal and external costs are mostly relevant in business, with internal cost relating to time spend by staff preparing tax returns, IT equipment cost (indirect), while external mainly relates to hiring of Accountants for tax advice and completion of tax returns. All these costs in monetary terms refer to hiring of tax advisers, purchase of taxation books, internet costs, computer costs, record keeping etc. (Loo, 2010:153). For individuals compliance costs are a bit moderate though, especially because they have an opportunity of simply visit
the SARS office to be assisted by tax advisors there. However otherwise they will incur a consultancy fee or internet cost for those preparing tax returns themselves. Therefore this simply means the higher the cost of compliance the greater the possibility of tax evasion. Okello (2014:16) argues that modern innovations in the tax environment should thus be exploited to improve the business operations and reduce the cost of compliance. (e.g. e-filing)

**Tax education**

Eriksen and Fallan (1996, in Engida & Baisa, 2014:437) describe education as the individual's level of understanding about taxation especially the laws and regulations. Peter (2009:20) says that attitude towards tax compliance can be improved by enhancing taxpayers' knowledge.

**Simplicity of tax returns and administration**

Palil (2010:192) argues that complexity of tax returns and tax administration has over time had a negative impact of tax compliance behaviour. According to Loo (2010:150) studies had proved that tax laws that are exasperatingly complex, confusing and change frequently can lead to increased non-compliance which may be largely unintentional. Therefore Palil’s (2010:192) solution to this is to introduce simple but detailed tax returns to make it easy for taxpayers to complete their returns and complete them accurately. Okello (2014:16) further says that tax forms must be simple, with clear instructions on how to complete them. In addition, filing of returns of taxes should be through ways that are convenient to the taxpayers, and e-filing is one such example. This idea is mainly there to assist those with less tax knowledge or education level. In a similar fashion has also reduced individual taxpayers’ returns pages from fourteen pages to merely seven or less pages currently. This system is, however, dependent on the complexity of taxpayer's income sources or structure.

### 2.7 Concept of e-Business vs e-filing

Papazoglou and Ribbers (2010:2) define e-Business as the method of automating business transacting using electronic communications networks from end to end. The aim of e-business is to provide a flawless interoperation and interactive links between all the relevant stakeholders of an extended demand and supply chain, including product designers, suppliers, and their partners of end customers. “E-business encompasses
sophisticated business to business interactions and collaboration activities at a level of enterprise applications and business processes, enabling business partners to share in-depth business intelligence, which leads in turn to the management and optimization of inter-enterprise processes such as supply chain management”, said Papazoglou and Ribbers (2010: 2). There are many other types of e-business systems such as e-Commerce, e-Government, e-Markets, e-Procurement etc. And it is from this concepts that e-filing was also born. E-filing is an application of the internet and networking technologies to digitally enable taxpayers and their accountants or representatives to prepare and electronically file their tax returns. Wedick (1986) also defines it as a fundamental technological departure from the traditional paper-based process to a system founded on computer-to-computer exchange of data between the taxpaying community and the IRS. Dowe (2008:6) defines e-filing as the transmission of tax information directly to the tax administration using the internet. Electronic filing options include the following:

- “online, self-prepared return, using a personal computer and tax preparation software,
- online submission of returns using a tax professional’s computer and tax preparation software.
- Electronic filing may take place at the taxpayer’s home, a volunteer site, the library, a financial institution, the workplace, malls and stores, or a tax professional’s place of business.”

This method of enabling citizens to comply with the tax laws is accessible to a wide-ranging tax paying consumer base. In order for this system to be successful Coolidge and Yılmaz (2014) believe that its implementation must be supported with relevant policy. South Africa is one of the few countries to have managed its policies effectively compared to Ukraine and Uganda, and as a result its e-filing has been more successful. Another reason that led to failure in the system in the other two countries was their adoption of it as a mandatory, thus mixing it with manual submissions.

2.8 Advantages of e-filing

E-filing has different advantages for different role players such taxpayers, SARS other stakeholder such as Accountants, and the Revenue Authority itself. According to the ‘uspto website’ the following are some of the advantages for using e-filing:
For Taxpayers and accountants (for their clients)

- An increase in the speed at which people file their returns, thus saving time. The concept of saving time benefits everyone. For taxpayers this means one does not have to take annual leave in order to spend that day on the queue at SARS. For employers, this is equivalent to more hours of productions, thus increasing productivity.
- The convenience of being able to file 24 hours a day, seven days a week.
- The ability to provide instantaneous feedback to clients or taxpayers.
- There’s flexibility with regard to the types of payments methods clients can use such as credit-card, built-in e-filing payment application,
- Saving the taxpayer a lot of money in postage and fax costs since everything is done via internet.
- There’s an automatic confirmation of receipt of all submissions.
- According to sars.gov.za, SARS e-filing Mobisite application, users are able to submit their Income Tax Return (ITR12), view their notice of assessment (ITA34), view their Income Tax Statement Account (ITSA), view their tax calculator and if applicable immediately pay SARS online. The application is even accessible on a cellphone, especially taking into consideration the fact that many do not have computers, but most have cellphones.
- Unlike in the US where the free online filing service is only limited to the people of a certain income bracket, in South Africa it is still free to all taxpayers.
- The faster turnaround time in assessing returns leads to quicker payments of refunds to taxpayers. In 2013/2014, SARS Annual Report it is said that 94.5% of all refunds were paid within 72 hours. This figure used to be very low, with most refunds paid after 21 days.
- Peterson (2014: 12) sees e-filing as one of the best paperless system that enhances company balance sheet. Due to it being paperless, he finds it a more secure system that helps protect clients and firms’ and their bottom line. Finally it reduces the risk arising from non-compliance and regulatory requirements.

For tax authority

- It contributed to a reduction in the workload in the branch offices (e.g. submission of tax directives)
• Enhanced uniformity in the treatment of the applications.
• However, in all the advantages to the accountant and taxpayers, the tax authority is the eventual benefactor as these advantages mean if taxpayers perceive them in the same light, it might influence their behaviours and attitude positively. If that happens, the tax authority is able to achieve its strategic goals amongst other things.

In addition Coolidge and Yılmaz (2014) also consider the following advantages to be beneficial to the the tax authorities:

• It is clear that e-filing can reduce errors in taxpayer self-assessment and the processing of tax returns by revenue authorities;
• Another important advantage is the reduction in face-to-face interactions between taxpayers and tax officials, which should reduce opportunities for corruption.

2.9 **Factors influencing use of e-filing**

Besides all the advantages listed above, the decision to use e-filing is not an obvious one for taxpayers. The following are some of the factors that influence the use or non-use of e-filing by taxpayers as discussed by Ilias, Suki and Yasoa (2008):

**Challenges**

One of the first challenges of e-filing is security of personal data and tax data as already discussed in the previous paragraph. Many other taxpayers still reject the idea of using e-filing due to the risk perception associated with it. According to Tan and Foo (2012), this risk perception could significantly influence the taxpayer’s or users’ intention to use it. The most widely known risk that everyone refers to is lack of internet security. Another risk which Tan and Foo (2012) talk about is the possibility that confidential personal information could be intercepted and stolen by fraudster during transmission. Therefore, in this case taxpayers demanded an assurance for the security of their systems, especially in the internet.

Secondly, there's resistance to the use of e-filing. Ling (2008) confirms this by saying that many studies around the world have shown the taxpayer’s resistances to the use of e-filing system, hence it is a big challenge to the authorities. The next challenge is related to limited cost saving. According to Coolidge and Yılmaz (2014) many in the
international donor community supporting tax reforms had assumed that e-filing would reduce tax compliance costs for taxpayers, however their survey evidence from investment climate work conducted by the World Bank Group shows that this is not necessarily the case. According to Röcker (2009: 1053) many acceptance theories such as technology acceptance Model (TAM) and Theory Reasoned Action (TRA) assumed that taxpayers could choose to adopt certain technologies based on individual cost benefit considerations.

The next challenge which SARS faced at the development stage, was the software capacity to handle high volumes of submissions due to people’s penchant for leaving things to the last minute. Dwilson (2014) says another challenge with e-filing is its inability to provide automated online assistance to a taxpayer with a complex income structure. Therefore for such taxpayers trying to get help on a complicated tax question from a website help-desk may not be nearly as useful as getting help from an in-person tax professional.

The system is not completely independent of human intervention and taxpayers cannot perform certain functions online, and as result they still need to visit SARS office and queue for assistance, SARS (2015). One such as example is tax registration. The taxpayer can perform tax registration online, but afterwards is required to visit the office with supporting documents for bank confirmation (e.g. original bank statement, Certified ID Copy) details, according to SARS. However these extra processes have been put in place in order to minimise fraud and increase taxpayer confidence in SARS systems.

Some people would generally not be interested in e-filing because of a lack of computer knowledge. This was confirmed by Crews (2013:82), with references to some of the lawyers in Florida who did not want to use e-filing in their law firms due to lack of basic computer knowledge. It also confirms that e-filing is not only limited to use by tax authorities but has been adopted by the judiciary to make document management simple and quicker for lawyers.

**Attitude**

In terms of individual preferences and interests regarding the use of Internet tax-filing system, Fu *et al* (2006) say attitude reflects a positive feeling towards behaviour. Mahadeo (2009:396) says attitude can be defined as “the degree to which a person has
a favourable or unfavourable evaluation or appraisal of the behaviour”. It apparently increases the level of behavioural intention among taxpayers. Chang et al. (2006) agree with that view and stated that attitude has a significant impact on behavioural intention (BI) of using the system, and therefore for taxpayers with negative attitude towards the use of e-filing are most likely find any reason not to use the technology. However, Röcker (2009: 1053) argues that attitude is directly influenced by concepts of perceived usefulness and perceived ease of use (discussed in detail below), which in turn influences actual intention to use.

Social influence
Schaupp et al (2010: 637) describe social influence as the degree to which the e-filing user perceives that others who are deemed important to them believe that they should use the system. Therefore the users are influenced by their peers’ perception of them using the technology. Schaupp et al (2010: 638) say “the social influence construct contains the explicit or implicit notion that people’s behaviour is influenced by the way in which they believe others will view them as a result of having used the technology.”

Perceived usefulness
Fu et al. (2006) define perceived usefulness as the user’s subjective probability that using a specific system will increase his or her performance. This belief is said to have an influence on behavioural intention. However, Fu et al. (2006) study has found that perceived usefulness has no direct impact on behaviour intention but has significant impact on attitude, which consequently has an impact on behavioural intention of using the system. Röcker (2009: 1053) concurs by saying that perceived usefulness could outweigh people’s negative attitude towards technology, thus leading to positive usage intention.

Taxpayers are most likely to use e-filing system if they are convinced that it will benefit them in their work performance either as an accountant or bookkeeper or as individual taxpayer attempting to comply. Mahadeo (2009:393) makes an affirmation that research has proven that perceived usefulness PU is a strong determinant of user acceptance, adoption, and usage behaviour toward technology.
Perceived ease of use
Perceived ease of use was defined as the degree to which a user expects the target system (e-filing) to be free of effort, as per Fu et al. (2006). In Davis (1989:320), perceived ease of use had a smaller but significant effect that subsided over time. Davis (1989:320) further says perceived ease of use has a direct effect on the users’ perceived usefulness, thus their intentions. It is therefore clear that the three concepts, attitude, perceived usefulness and ease of use are strongly related especially through their impact of intention. Certain individual variables such as individuals’ abilities and personal constraints have an indirect impact on technology and perceived ease of use, argues Röcker (2009:1053).

Perceived risk
In the context of e-filing technology perceived risk is taxpayer’s belief that they will incur losses while trying to achieve compliance, said Schaupp et al. (2010: 638). They further explain that trust in the internet influences perceived risk. Furthermore, perceived risk can be split into two, behavioural and environmental uncertainty. The difference between the two is the fact that behavioural uncertainty is caused by the impersonal nature of the internet, while the other arises due to the unpredictable nature of Internet-based technology.

Information system quality
Quality means different things to different people under different contexts. According to De Lone and McLean (2003), information system quality is associated with the issue of whether the technical components delivered provide the quality of information and service required by stakeholders. Besides, information system quality was defined by the degree to which the technical components of Internet tax-filing provide the quality information and service required by users (Chang et al., 2005).

Information quality
There’s then the issue of information quality provided by SARS to taxpayers or vice versa. Chang et al. (2005) define information quality as the degree to which users are provided with quality information regarding their needs. Information quality also represents the users’ perception of the output quality generated by an information system and includes such issues as the relevance, timeliness and accuracy (De Lone
and McLean, 2003). In this context information quality simply refers to accurate records, complete tax information to be used as input to one’s tax return. The higher the quality of information the more enhanced is the taxpayer’s tax filing output, more compliant.

Perceived credibility
According to Wang (2002) perceived credibility is defined as the extent of users’ confidence in the Internet tax-filing system’s ability to protect the user’s personal information against computer hackers or cyber-crime as it is popularly known. According to Chang et al. (2005), a credible website needs to safeguard personal information from unauthorized access or disclosure, accidental loss and alteration or destruction. In the study Lai et al. (2004) some of the respondents specifically expressed that they would only use the e-Filing system if the IRB could assure them that the e-Filing system was safe and secure, and if the usability and reliability of the e-Filing system were fully tested and well-documented.

Other
The decision whether to use or not to use e-filing can be influenced by many things such as the type of income earned by a taxpayer, size of the business, location, business sector and other attributes of business. Coolidge and Yiılmaz (2014) agree that taxpayers with certain characteristics are more likely to use e-filing. In the main large businesses, located in urban areas, operating in capital-intensive sectors, and paying multiple taxes [e.g. income tax, value-added tax (VAT), payroll taxes, and excise taxes are most likely to use e-filing. And in a similar fashion the taxpayer in the high income bracket, with a complex income structure is most likely to e-file. In addition the availability of reliable Internet access and electricity, capability in computer usage, awareness of e-filing, and knowledge about the process are important for taxpayers’ e-filing decisions, said Coolidge and Yiılmaz, (2014: 2). Furthermore it is also argued that taxpayers reporting payment of numerous types of taxes or severe political instability are generally more likely to e-file, while those experiencing difficulties in access to electricity are less likely to e-file. Taxpayers who perceive more corruption or informal treatment by government officials also appear more likely to file their tax returns electronically (which allows them to avoid face-to-face contact with bureaucrats).
2.10 **E-filing as a competitive advantage**

Many businesses recognise that the discussions have changed from 'tactical' difficulties surrounding the commercialization of new technology to 'strategic' problems of how technology can shape and support corporate strategy (Ari Ginsberg & Venkatraman: 37). Therefore business leaders and managers see the use of technology and continuous ICT development as an issue of organizational strategy, which can influence its business performance and most importantly its competitiveness in its industry of operation. Almost all company types are liable to one or other tax, which makes the use of e-filing very relevant to all businesses. Some adopt the use of the system indirectly by outsourcing the tax compliance function to the professional Accounting and Audit firms such as PriceWaterhouseCoopers, Ernst & Young, KPMG and many other emerging firms. During the era of the introduction of electronic filing of tax returns, companies were confronted with important questions of whether or not they should aggressively invest in the new information technology or respond slowly and conservatively to reduce the risk and costs or whether to just stick to the old ways of doing things. And for those entities that chose to invest in the system they benefited.

Electronic filing offers firms a chance to redefine the characteristics of products and services and to create new sources of competitive advantage (Venkatraman & Kambil, 1991). They further explain that it does this by creating the potential to offer new technology-based products (e.g. refund-anticipation loans, tax planning, investment services) and the opportunity for new entrants to compete in the market (e.g. retail banks and credit card issuing institutions). In the South African context it also makes paying SARS easy through its ‘easy pay’ functions. Easy pay does not require a taxpayer to have registered for internet banking in order to use it, plus it still allows payment to and through any local bank.

2.11 **Security of e-filing and confidentiality of taxpayer data**

The confidentiality of taxpayer information is guaranteed by SARS and contained in Section 21 of the Tax Administration Act No. 28 of 2011. It is a clause that has existed and many years which taxpayers appreciate very much. In terms of the section, SARS employees are prohibited from divulging any taxpayer’s information to third parties. Therefore with electronic filing the taxpayer is empowered to take control of the security of his or her information or data, by securing their login details (login name & password).
The confidentiality of taxpayer data is thereby guaranteed within the system of tax administration and the SARS also enforces strict disclosure rules for all taxpayer data for data flowing outside the Tax Authority.

The confidentiality of taxpayer data is not only highlighted in the South Africa context, but it is important in many countries. According to Laury and Wallace (2005), confidentiality of the individual taxpayer data is a long held basic right of the U.S. of tax administration.

Laudon and Laudon (2013) caution that whenever there’re large amounts of data stored in electronic form, they are vulnerable to many more kinds of threats than when they existed in manual form. Furthermore, the potential for unauthorised access, abuse or fraud is not only limited to a single location but can occur at any access point. Therefore it is very critical for SARS to always ensure that e-filing is highly secure as an application that is hosted in its website. IT fraud is evolving and is becoming more sophisticated. The assurance by SARS of the security of its e-filing application will encourage more taxpayer to trust the system and use it instead. In SA news, Mark Kingon, Group Executive at SARS concedes that to get people to trust the e-filing platform was probably the biggest challenge which they achieved eventually. He further says that SARS continues to run pilot projects on its technologies before going live.

However, security is not only of the software but also of the various hardware devices used by taxpayers to access e-filing. Taxpayers have the responsibility to secure their assets especially mobile ones like cellphones that can be easily stolen or accessed illegally.

Crews (2013:84) recommends that users avoid the use of free public Wi-Fi as it is prone to data interception during by third parties during processing. Therefore the use of secure internet connection (e.g. virtual private network, ‘https’ connection) is very vital for e-filing users.

2.12 The outcomes of e-filing

The filing of tax returns is seen by many taxpayers as a burden that sometimes leads to resistance and non-compliance. According to Bankman (2008), technology has the potential of reducing tax filing burdens on the upper end of the income spectrum even
more, to the extent that we weight taxpayer time by an implicit wage rate and measure simplification in dollars. He further says that government can reduce the filing burdens for its citizens by requesting and making of use of third-party reported data on time.

Benjamin (2013) said that South Africa improved its ranking on tax payments from number 32nd to 11th, largely due to the success of e-filing and the way in which returns are filed. She further points out that in South Africa it takes 200 hours for a company to complete and file its tax return, compared to a global average of 268 hours.

In the 2002/03 SARS annual report, it is reported that the percentage revised assessments occurring as a result of an assessment error or reworks, has declined significantly. During the previous tax cycle, approximately 13,3% of all assessments raised were reworked or revised. A steady decline of four per cent has been detected regarding the revised assessments raised during 2002/03 cycle. This trend could be ascribed to several factors such as the emphasis on use of e-filing, taxpayer education and consultant awareness.

The introduction of e-filing has brought about a reduction in the tax compliance costs for taxpayers in South Africa; however, in other countries the opposite happened. Yilmaz and Coolidge (2013) estimate about a 34% decrease in TCC associated with e-filing usage in Nepal, where the policy was mandatory for all firms. In the Ukraine there has a 25% increase in similar costs, mainly due to some taxpayers doing double filing as a result of lack of trust on the system.

**Dealing with challenges**

For every challenge there are possible solutions.

Crews (2013:82) said the following for lawyers who feared using e-filing due to lack of compute knowledge 'the best way to reduce anxiety is to gain comfort with the use of e-filing systems and develop a strong network of tech-savvy assistants or peers. This comfort level can be developed with education and support."

Furthermore he encourages users to take online training that is provided by the authorities. In addition the website have numerous resources, manual and in-house training facilitated by SARS officials for no fee.
The e-filing system or similar electronic submission methods have been adopted by many other countries around the globe. America was one of the major economies to adopt e-government, including e-filing. According to the policy implementation in the South Africa, e-filing is voluntary and e-filers are not required to file paper returns once the process is completed electronically. But for countries such as Ukraine e-filing was made mandatory.

Mativo, Muturi and Nyang‘au (2015) say that the business people in Kenya were initially controversially resistant towards the adoption of e-filing citing high implementation costs which are not recoverable for tax purposes. And some ETRs malfunctioned and suppliers were not responsive. KRA responded with determination, but also with an aggressive information, education and communication program to promote the use of ETRs and a facilitation scheme under which taxpayers acquired ETRs, and then obtained refunds through the VAT system.

### 2.13 Conclusion

E-filing is a necessary technology that is adopted internationally by many tax authorities in order to enhance their efficiency and effectiveness in delivering on their mandates. Therefore, in 2003 SARS officially migrated from manual filing to electronic filing of returns. The system is commended by many for reduction of compliance costs, quick turnaround time for assessments of returns and release of refunds to taxpayers, the convenience of being able to file anytime and anywhere, plus the fact that it is paperless.

However besides all the benefits the introduction of e-filing, just like any change was met with mixed reactions ranging from fear, resistance and ultimately support by taxpayers. The targeted users were influenced by many factors ranging from attitude, whether the technology would be useful, whether it was easy to use and if it was reliable and secured amongst other things. Security of personal data came up as a valuable and top priority for users.

At the end, it is clear that e-filing did not only better tax authorities’ operations but benefitted taxpayers in many ways.
Chapter 3
Research Methodology

3.1 Introduction
The chapter introduces the research methods that are considered suitable for conducting the research. The research methods simply are used to assist in achieving the research objectives. They are essentially planned, scientific and value-neutral. It is very important to select compatible methods that will best suit the data collection and analysis.

Rajasekar et al (2013) define Research Methodology as procedures, schemes and algorithms by which researchers go about their work of describing, explaining and predicting phenomena. The method of collecting or gathering information will be quantitative in nature. The quantitative study will be focusing on statistical evidence that will be collected using a questionnaire.

Therefore, the initial phase was to design a questionnaire with questions that seek answers that would directly address the research questions and objectives. The questionnaires were then distributed among the population of taxpayers around the Dr Ruth Mompati District. After collecting the questionnaires, data was processed and analysed, then interpreted into findings before writing a final conclusion as will be seen below.

3.2 Research Design
Research design is also referred to as a researcher's work plan. Kothari (2004:31) defines research design as “the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.” It is in fact a blueprint of data collection, its measurement and analysis making it a conceptual structure that houses research process, says Kothari (2004:31). Finally the design gives direction on how questions such as what, where, when, how much, by what means concerning an inquiry or a research will be addressed.

According to the social research website (2014), it is also said that research design is utilized to structure the research, to show how all of the major parts of the research
project such as samples or groups, measure, treatment or programs, and methods of assignment work together to try address the central research questions. Therefore it really assists in eliminating any ambiguity in how the research question is addressed. The research method used in the study is those compliant with quantitative study.

**Quantitative and qualitative research**

The quantitative approach of research follows a systematic approach of enquiry where the objectives, design, sample and questions that should be asked to the respondents is predetermined. By contrast, qualitative approach is unstructured but allows the researcher a complete flexibility in all these aspects of the process. A combination of these two methods is referred to as a mixed method approach.

Kumar (2014:14) defines a **quantitative approach** as a philosophy of rationalism that follows strict, systematic and predetermined set of procedures to explore. Du Plessis (2015:3) says quantitative approaches address the ‘what’ of the problem, and uses a systematic standardised approach to get answers to that question. The following are some of its characteristics:

- Aims to quantify the extent of variation in a phenomenon
- Emphasises the measurement of variables and the objectives of the process
- Believes in substantiation on the basis of a large sample size
- Regards reliability and validity of findings as important
- Communicates findings in an analytical and aggregate manner, and
- Makes conclusions and inferences that can be generalized.

Of the qualitative approach, Kumar (2014: 14) says it is embedded in the philosophy of empiricism which follows an open, flexible and unstructured approach to enquiry. The following are the characteristics:

- Aims to explore diversity rather than quantify
- Emphasises the description and narration of feelings, perceptions and experiences not their measurement
- It communicates findings in a descriptive and narrative rather than analytical manner, placing no or less emphasis on generalisation
According to Johnston and Vanderstoep (2009:7), the advantage of this quantitative research method is that its findings of the selected sample show a more accurate reflection or thinking of the overall population under the study. In addition Du Plessis (2015:2) list three benefits other benefits of the study as follows:

- It is cheaper to administer,
- It is standardised and thus relationships can be determined, and
- The size of the effect can be measured.

On the downside, Johnston and Vanderstoep (2009:7) also point out that the approach is unable to give much depth in its outcomes based on the answers given by participants. This is mainly due to the specific way in which questions are structured (i.e. can't be too narrative), thus giving superficial results. However, this short coming can be overcome by combining quantitative survey with qualitative approach.

3.3 Population

3.3.1 Defining population
A population is defined as any group, could be people, animals, objects or anything that is the subject of research interest as defined by Melville et al (1995:28). They further say that studying the entire population is often practically impossible, hence a sampling is usually a tool that is used to work around that. The researcher has the responsibility to select the most relevant population for the study in order to achieve his objectives. Therefore the population is a very critical part of the study.

In this research, the population is limited to a group of individual taxpayers who are working and earning an income, or owning some kind of business as sole proprietors and liable to pay one or other tax type. A taxpayer is someone or an entity that earns taxable income as defined and chargeable with tax under the Income Tax Act No. 58 of 1962. (LexisNexis Editorial Staff, 2012: 41)

3.3.2 Sampling
A sample defines a group drawn from the larger population and was selected for use to estimate the characteristics of the whole population. It is the researcher who decides who or what will form part of the sample. According to Kothari (2004:55) technically the selected respondents would be referred to a ‘sample’ while the process of choosing a sample is called sampling technique.
Johnston et al. (2009:26) further say that sampling enable the researcher to claim
generalizability which they define as the level or extent to the findings from the current
sample represents the behaviour or views of the entire population.

Cohen (2000:92) emphasizes that there are four key factors in sampling namely,
sample size, the representativeness and parameters of the sample, access to the
sample and the sampling technique to be used. And Kothari (2004:58) further says that,
on a representation basis, one can use probability or non-probability sampling. A
probability sampling is based on random selection while non-probability is based on
specific sampling selection.

Therefore, in this study a probability sampling method was adopted, most specifically a
simple random sampling method. In simple random sampling, each and every member
of the population has an equal chance of being selected.

Sample size

According to Cohen et al (2004:93) a sample is depended on the type of study, its
purpose and the nature of population under study. They further argue that 30 is a
minimum size of a sample recommended by many as reasonable for a study involving
statistical analysis. Johnston et al. (2009) say a sample size represents the exact
number of people from the total population that will form part of the study. The sample
size will be formed by sampling frame. Johnston et al. (2009) refer to sampling frame as
eligible members of the population. They also advise that the sampling frame must be
bigger than the sample in case some people are not available at the time of contact or
choose not to participate in the study for one or other reasons.

The sample size of the research is comprised of 202 individuals working in the six
municipal areas mentioned above. The sample is made up of individual taxpayers who
are either employees or business owners. The respondents were selected randomly.

Sampling methods

As already mentioned above the method of sampling used in this study is simple
random sampling. This method involves picking a certain number of participants out of
the total number of possible participant in the sample frame randomly without applying any specific pattern of choosing, say Johnston and Vanderstoep (2009:29). This method calculates the sample frame by applying a fixed percentage to the total population. Theory says that the larger the sample, the more closely it will mirror the percentages in the overall population. However, a margin of error is used to assess how close the sample is to the population and this margin of error will give an idea of the extent to which repeated random samples will deviate from the population. In this study we are working with 0.05 margin of error.

3.4 Method of data collection

There are various tools or equipment that can be utilized to collect data for purposes of analysis in research. Such instruments or tools are expected to meet the two most fundamental important criteria, which are reliability and validity, say Melville et al. (1995:37). When collecting data from people the most common instruments used in this regard are tests, interviews and questionnaires. There various tools collection for Quantitative and qualitative, and this tests are relevant in both studies. Reliability in these tools can be measured using three approaches (Melville, 1995:42)

- The test-retest approach says that one should utilise the same tool or instrument at a later time on the same respondents and see whether the outcome will the same. However, the time lapse usually sees respondents answers change.
- The equivalent form approach – is where questions of the original questionnaire are rephrased, resulting into two questionnaires that look different by effectively ask the same questions.
- Split-half approach – is a modified version of equivalent form where the questions of the original and rephrased questionnaires are combined into one.

On the other hand, validity can be measured as follows:

- Criterion-related validity – measures whether a tool predicts or diagnoses some particular variable accurately.
- Construct validity – “if there are existing tools that measures something which is known to be closely related to the thing you want to measure, compare the results obtained by the new tool with that of the old and check if there is a high correlation”. (Melville & Goddard; 1996:43)
• Content validity – says if no related instrument exists, then get the expert opinion on each question on an instrument to determine whether or not each question was actually tested as it is supposed to be done.

The following are various methods of data collection in a qualitative research, namely; Interviews and focus groups, says Gill et al. (2008:291). Du Plessis (2015:3) defines interviews as a process involving interviewer asking questions and getting answers from participants in the study. The process can be face to face, telephonic or even in a group set-up. According to Gill et al. (2008: 291), there are different types of interviews, structured, semi-structured and unstructured. With regard to focus groups Gill et al. (2008:293) explain it as a group discussion organised by a researcher on a specific topic related to their study. The discussion is directed, recorded and monitored by researcher.

In her study guide, Du Plessis (2015:4) names questionnaires, interviews, computer assisted and web-based surveys, and telephone surveys as various methods of data collection in quantitative survey. She further recommends questionnaires as the most popular instruments used to collect data in a survey search. It is also important to note that some of the methods can be used in both quantitative and qualitative, such as interviews (already discussed above).

In this study a questionnaire is the best tool for gathering data. Kumar (2014:178) defines a questionnaire as a written list of questions, which are supposed to be answered by the respondent being research. It is recommended that questions should be structured in a simple and easy way for respondent to understand as the researcher would normally not be around to explain or assist in completing it. Melville (1996:42) asserts that ease-of-use has a major impact on the reliability of the questionnaire.

The use of questionnaires is supported by its advantages of being less expensive and offers respondents the comfort of being anonymous. Kumar (2014:181) argues that it saves cost because the researcher does not have to interview every respondent, thus saving time, human and financial resources. However this lack of contact with respondents can be a disadvantage as it denies researcher as opportunity to clarify the issues to the respondent.

A questionnaire was designed and distributed to the sample frame as a process of collecting data for the study. The most relevant level of measurement that was used in
the study is the one that ranks attributes, which could be either nominal or ordinal. During the questionnaire, it was split into three parts, Part A for demographics, Part B and Part C was made up of structured questions. All questions are closed-ended. The ordinal ranking attributes method was used to rank respondents perception on various compliance questions.

The questionnaires were distributed via emails and hand delivered to all respondents. The questionnaire is worded in English as the most common language used by all South African of all ethnic groups which is a language accepted in South Africa as universal.

3.5 Data analysis method

Data analysis is the process of identifying the main themes that come from descriptions given by respondents in answer to questions. And Kumar (2014: 297) says once the main frames are identified, they can be dealt with in one of the following ways:

i. Examine verbatim responses and integrate them into the text of the report to either support or contradict your argument.

ii. Assign a code to each theme and count how frequently each has occurred, or

iii. Combine both methods (i & ii) to communicate the findings.

However prior to all this, the raw data that has been collected requires some kind of processing to ensure that it is free from inconsistencies and incompleteness, and this is called editing as explained by Kumar (2014:296). The editing will address challenges such as respondents ‘wrongly classifying response’ or ‘writing only half a response’ or writing illegibly. After editing, the data is then coded. The quantitative information should go through a process that is primarily aimed at transforming the information into numerical values, called codes, which makes it easy for the information to be analysed, either manually or by computer.

All this editing, coding and analysis are steps that can be started and completed on a computer using various software that are available, including statistical packages for social sciences or SAS or E-view and many others as might be applicable to the study.
3.6 **Consistency and replicability**

In the study it is important to give attention to precision and accuracy of measurable features in the study. This can be used with reference to time, instruments or over a group of respondents.

3.7 **Ethical considerations**

The next issue for consideration is ethical concerns. Flick (2006: 44) explains that research has become an ethics issue on a wider scale to the extent that in several countries Codes of ethics have been developed and ethics committees established (e.g. in medical research). The main intention of this is mainly to protect the interests of the respondents in the study or avoid scandals arising from data manipulation. The participation of respondent in the study should be voluntary as per the principles of informed consent.

The study does not impinge on the sensibilities and rights of other people. The study upholds integrity and ethical standards. All the participants in research did so under consensus, with sworn confidentiality from the researcher.

3.8 **Data analysis and discussion of findings**

The data analysis can be done using various statistical tools such as Statistical Package for Social Sciences (SPSS), SAS, E-view. The independence of variables was tested using an inferential statistical technique called chi-square test. In addition a descriptive statistics technique was also used to design frequency tables and graphs.
Chapter 4

Findings, analysis and interpretation

4.1 Introduction

In this chapter we analyse various outcomes from the statistical analysis of data collected. The data of the study was collected using a questionnaire as the most relevant method in this regard. The questions asked were split into two, with one section focusing on the taxpayers' tax knowledge and their perception of e-filing, while the other section was addressing their compliance level.

In this study 225 questionnaires were distributed randomly to taxpayers across the Dr Ruth Mompati District Municipality, of which 214 were received back with twelve spoiled, and eleven did not return the questionnaires mainly due to being uncomfortable doing it since it is about SARS. However besides that, the number of respondents who returned them was found to be representative of the population. The district has a population 19100 individual taxpayers who were assessed in terms of the Stats SA 2014 report. A modern software called Statistical Package for Social Sciences (SPSS22) was used to carry out a statistical analysis. The data was first captured in a spreadsheet in tabular format with various variables from the questionnaire. SPSS was the used to extract results and present them in tables and graphical format. The demographic variable such as age, gender, tax knowledge, type of income and types of tax one is registered were measured using frequency procedures.

4.2 Demographics

The demographics is split into various characteristics based on gender, age, tax knowledge, source of income earned and types of taxes respondents are registered for. All respondents to the study are registered taxpayers who were picked randomly around the five municipalities of the Dr Ruth Segomotsi Mompati, in the North West Province.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>89</td>
<td>44.1</td>
</tr>
<tr>
<td>Female</td>
<td>113</td>
<td>55.9</td>
</tr>
<tr>
<td>Total</td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 4.1: Gender

According to table 4.1 above, the total number of respondents who completed and returned questionnaires was 202, of which the majority were females at 113 (56%) and the rest being males at 89 (44%). The split is further shown on Figure 4.1. It is clear that the difference in the frequency of male and female respondent is not significant. Therefore the study is balanced between males and females.

In the next table and graph below the respondent population if split into age group ranging from 30 years and below to 61 years and above.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 years and below</td>
<td>24</td>
<td>11.8</td>
</tr>
<tr>
<td>31 to 40 years</td>
<td>76</td>
<td>37.4</td>
</tr>
<tr>
<td>41 to 50 years</td>
<td>80</td>
<td>39.4</td>
</tr>
<tr>
<td>51 to 60 years</td>
<td>20</td>
<td>9.9</td>
</tr>
<tr>
<td>61 years and above</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>203</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.2: Age group
Figure 4.2: Age group

Table 4.2 indicates that twenty four (11.8%) of respondents are aged 30 years and below, seventy six (37.4%) were aged between 31 and 40 years; eighty (39.4) of which were aged between 41 and 50 years; twenty (9.9%), twenty (9.9%) were between 51 and 60 years and 3 (1.5%) were aged 61 years and above. The numbers indicates that most respondents were aged between 31 and 50 years of age (76.8%). The similar gender results are further presented in graphical format on Figure 4.2.

We now move to graph and table representing the level of tax knowledge of the respondents.

<table>
<thead>
<tr>
<th>Taxation knowledge</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below average</td>
<td>43</td>
<td>21.3</td>
</tr>
<tr>
<td>Average</td>
<td>75</td>
<td>37.1</td>
</tr>
<tr>
<td>Good</td>
<td>68</td>
<td>33.7</td>
</tr>
<tr>
<td>Excellent</td>
<td>16</td>
<td>7.9</td>
</tr>
<tr>
<td>Total</td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.3: Taxation knowledge
Figure 4.3: Taxation knowledge

In terms of Table 4.3, forty three (21.3%) respondents possess a below average knowledge about tax, seventy five (37.1%) have average tax knowledge, while sixty eight (33.7%) of them have a good tax knowledge and only sixteen (7.9%) possess excellent tax knowledge. Peter (2009) claims that tax knowledge can improve tax compliance attitude. The tax knowledge level will be analysed in terms of respondents’ age later in the interpretation.

The respondents have various sources of income, and some respondents possibly having multiple sources of income as seen in the next set of graph and table.

<table>
<thead>
<tr>
<th>Type of Income</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Income</td>
<td>157</td>
<td>77.3</td>
</tr>
<tr>
<td>Business Income</td>
<td>33</td>
<td>16.3</td>
</tr>
<tr>
<td>Investment Income</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td>Other Income</td>
<td>8</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>203</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Table 4.4: Type of Income*
Figure 4.4: Types of Income

Therefore Table 4.4 shows that one hundred and fifty seven (77.3%) respondents were salary income earners, which means this group provides their labour skills to someone (employer) in return for remuneration. The rest of the respondents were thirty three (16.3%) who earned business income; five (2.5%) earned investment income and lastly eight (3.9%) had other income sources. From this table, it shows a total of 203 respondents while only 202 people returned the questionnaires, which means one person from the population earned income from more than one source. Figure 4.4 represents the same outcomes in graphical form.

<table>
<thead>
<tr>
<th>Type of Taxes</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Tax</td>
<td>162</td>
<td>86.2</td>
</tr>
<tr>
<td>Value Added Tax</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td>Pay As You Earn</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>188</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.5: Tax Types Registered
Table 4.5 above shows the spread on various tax type for which respondents are registered for with SARS. From the total respondents of 202, only 188 made a selection of tax types that they are liable for. A total of one hundred and sixty two (86.2%) respondents are registered for Income Tax, two (1.1%) are registered for VAT, 17 (9%) and lastly 7 (3.7%) are liable for other tax types.

### 4.3 Results of research

<table>
<thead>
<tr>
<th>Tax Knowledge and Perceptions</th>
<th>Agree (%)</th>
<th>Strongly Agree (%)</th>
<th>Neutral (%)</th>
<th>Disagree (%)</th>
<th>Strongly Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have basic Income tax knowledge. (N = 201)</td>
<td>54.2</td>
<td>25.9</td>
<td>10.4</td>
<td>5.5</td>
<td>4</td>
</tr>
<tr>
<td>2. I have basic computer skills and knowledge. (N = 202)</td>
<td>33.2</td>
<td>42.1</td>
<td>11.9</td>
<td>6.4</td>
<td>6.4</td>
</tr>
<tr>
<td>3. I know and understand how to use efiling. (N = 199)</td>
<td>30.2</td>
<td>28.1</td>
<td>22.6</td>
<td>14.6</td>
<td>4.5</td>
</tr>
<tr>
<td>4. I use the services of a tax consultant in order to file my tax return(s) due to lack tax knowledge. (N = 201)</td>
<td>15.9</td>
<td>19.4</td>
<td>16.9</td>
<td>27.9</td>
<td>19.9</td>
</tr>
<tr>
<td>5. E-filing is simple, easy to understand and use without assistance. (N = 200)</td>
<td>37.5</td>
<td>30</td>
<td>19</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td>6. Using efiling makes submission of my tax return(s) easy. (N = 199)</td>
<td>32.7</td>
<td>32.2</td>
<td>20.1</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>
7. The introduction of efiling has encouraged me to want to take personal responsibility for my tax affairs. (N = 201)  
   Agree (%)  | Strongly Agree (%)  | Neutral (%)  | Disagree (%)  | Strongly Disagree (%)  
   36.3  | 33.3  | 20.9  | 6.5  | 3  

8. I trust the outcome/assessment of my tax submission from efiling. (N = 203)  
   Agree (%)  | Strongly Agree (%)  | Neutral (%)  | Disagree (%)  | Strongly Disagree (%)  
   36.4  | 30.5  | 15.8  | 14.3  | 3  

9. Since efiling was introduced SARS pays out refunds quicker than before. (N = 197)  
   Agree (%)  | Strongly Agree (%)  | Neutral (%)  | Disagree (%)  | Strongly Disagree (%)  
   37.6  | 24.9  | 21.8  | 11.7  | 4  

10. Lack of access to personal computer and internet discourages my use of efiling. (N = 198)  
    Agree (%)  | Strongly Agree (%)  | Neutral (%)  | Disagree (%)  | Strongly Disagree (%)  
    16.7  | 20.7  | 21.2  | 24.7  | 16.7  

11. I prefer doing manual tax submission of queueing at SARS office as opposed to efiling. (N = 193)  
    Agree (%)  | Strongly Agree (%)  | Neutral (%)  | Disagree (%)  | Strongly Disagree (%)  
    23.8  | 14.5  | 15  | 24.9  | 21.8  

12. The use of efiling saves me the cost of complying with SARS tax legislation. (e.g. penalty, interest, drive to SARS office. etc). (N = 201)  
    Agree (%)  | Strongly Agree (%)  | Neutral (%)  | Disagree (%)  | Strongly Disagree (%)  
    35.8  | 36.8  | 14.9  | 10  | 4.5  

13. The introduction of efiling was the best way to improve efficiency of SARS systems and encourage Taxpayers to comply. (N = 201)  
    Agree (%)  | Strongly Agree (%)  | Neutral (%)  | Disagree (%)  | Strongly Disagree (%)  
    34.8  | 36.8  | 10.9  | 10.9  | 6.4  

Table 4.6: Tax knowledge and perception

<table>
<thead>
<tr>
<th>Compliance Level</th>
<th>Agree (%)</th>
<th>Strongly Agree (%)</th>
<th>Neutral (%)</th>
<th>Disagree (%)</th>
<th>Strongly Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Since using efiling I’m able to submit my return(s) timeously. (N=204)</td>
<td>47.8</td>
<td>25.6</td>
<td>16.3</td>
<td>5.9</td>
<td>4.4</td>
</tr>
<tr>
<td>15. The use of efiling to submit my tax return(s) has assisted me to declare income accurately. (N = 203)</td>
<td>36</td>
<td>34</td>
<td>17.7</td>
<td>8.4</td>
<td>3.9</td>
</tr>
<tr>
<td>16. I’m able to pay my tax liability faster and easier since I started using efiling. (N = 202)</td>
<td>38.1</td>
<td>31.2</td>
<td>17.3</td>
<td>7.4</td>
<td>5.9</td>
</tr>
<tr>
<td>17. The use of efiling has improved my level of tax tax compliance with SARS legislation. (N = 203)</td>
<td>32</td>
<td>31</td>
<td>13.3</td>
<td>12.3</td>
<td>11.3</td>
</tr>
</tbody>
</table>
Table 4.7: Compliance Level

Table 4.6 indicates the spread of respondents’ participation on each question in the questionnaire. The scale of measurement used on respondents’ perception is called interval data. The scale range from extreme positive (strongly agree) to extreme negative (strongly disagree). The results on the table above are presented in percentages.

Based on the table the majority (80.10%) of respondents have some basic tax knowledge. On the contrary though, at least 35.3% of the respondent would still utilize tax consultant in spite of their tax knowledge, while 47.8% would not. Taxpayer might opt for tax consultants services due to lack of confidence to file returns themselves, especially for those who are first time e-filers. But it could also be simply because the taxpayer can afford the services of tax consultant, thus ensuring they comply at all costs. However it was mainly to reduce such costs that e-filing was introduce to avoid tax evasion as discussed by Okello (2014:16) above. On the other hand it could not possibly be due to respondent having complex tax structure because most of respondent are salary earners, therefore easy to complete the form and file.

Furthermore, it could not be due to lack of computer knowledge because the study revealed that most of the respondents (75.3%) have some basic computer knowledge. Only 58.3% of the respondents said they know and understand how to use e-filing. But a significant number of respondents agreed that e-filing was easy to use (67.5%) and that it made tax submission easy (64.7%). This shows that some people do not necessarily need to have used e-filing in order to have experienced it, hence more of them are able to say it easy to use and understand. In paragraph 2.9 above Davis (1989:320) emphasizes the important of perceived ease of use on the intentions of taxpayers to use e-filing. As such it is 38.3% of the respondents who would use manual tax filing instead of e-filing. Moreover a further 66.9% of the respondents have confidence in the e-filing outcomes.

The next set of questions was used to evaluate respondents’ perceptions on e-filing benefits. And it is 62.5% of the respondents who agreed that SARS refunded them faster since e-filing, but a notable number (21.8%) remained neutral. The reason for
that could simply be that those people’s tax accounts have never been in a refund position, hence they can’t relate. Then a significant 72.6% believe that e-filing saved them costs related to compliance. The respondents also recognized the benefits that come with e-filing especially around shorter turn around on refunds pay-out. The majority is also saying that lack of access to computer plays no role in their compliance patterns; therefore it is not a constraint to their compliance. The respondents recognize the fact that one can use other public areas like Internet café, or even work computer or their own smartphones to transact with SARS. Taxpayers are also revealing that tax compliance used to be expensive prior to introduction of e-filing. The forms were not easy to follow and such one needed to utilize tax consultants who would file it via post or one had to go join the long queues at SARS offices in the scorching African sun or freezing winter cold. Palil (2010) confirms that complex tax forms slowed down the levels compliance. If one takes the SARS office visit option, annual leave would be necessary since SARS officially operates during weekdays, plus incur some transport costs, food etc. All this were costs of compliance which are not there with e-filing.

Most of the respondents (73.6%) said that e-filing assisted them in submitting their returns on time, while 16.3% were neutral. A further 70% agreed that the system helped them to declare their tax affairs accurately, while 69.3% were able to pay their taxes faster and easier as a result. Overall, at least 63% of respondents believe that e-filing has enhanced their compliance behaviour in a positive way. The respondents are confirming a significant role played by e-filing in boosting tax compliance levels. The timeous submission of tax returns, payments of tax liability before it starts to accumulate interest and penalties are vital elements of compliance, and most respondents achieving this due to e-filing. This means prior to e-filing system respondents could not always file their returns on time, and if they did it was after going through a long and cumbersome process, the same with payment of tax liability. The previous manual system required the taxpayer to travel to SARS or post office in order to submit their tax returns. If respondents wanted to pay tax liability they had to either come to SARS’ Cash office or go to the bank, in both instances they need to queue. And with e-filing they don’t even need to leave the office or home when filing returns. All that is needed is a computer or smartphone and internet access, they can do everything online.
Chi-square Test of Independence

This test of independence is concerned with the relationship between two different factors (or categories) in a population under study. There is a significant relationship between the two categories if the probability value (p-value) is less than 0.05 level of significance.

Table 4.8: Cross-tabulation of perceptions (opinions) of respondents about outcome/assessment of tax submission from e-filing by gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>26</td>
<td>42</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>89</td>
</tr>
<tr>
<td>Female</td>
<td>36</td>
<td>32</td>
<td>20</td>
<td>22</td>
<td>3</td>
<td>113</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>74</td>
<td>32</td>
<td>29</td>
<td>5</td>
<td>202</td>
</tr>
</tbody>
</table>

P-value = 0.037  Chi-square statistic = 10.22  df = 4

SPSS 22 software package was used to perform a chi-square test of independence for the data in Table 4.8. The chi-square statistic and the p-value with 4 degrees of freedom in Table 4.8 are 10.22 and 0.037, respectively. Since the p-value is less than the 0.05 level of significance, then the perception of respondents about the outcome/assessment of tax submission from e-filing is significantly dependent on their gender. It means that the majority (36/113 = 32%) of female respondents tend to strongly agree, whereas the majority (42/89 = 47%) of the male respondents tend to agree (see Figure 4.6 below). However, the issue of more females trusting was not tested, therefore the reason for that could be anything. The high level of trust could also be due to the fact that most of respondents found e-filing easy to use and understand, hence it was easy to trust it. This trust is also borne from their perception the system produce relevant and accurate output, discussed by De Lone and McLean (2003).
Table 4.9: Cross-tabulation of perceptions of respondents about lack of access to personal computer and internet by gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
<td>16</td>
<td>25</td>
<td>17</td>
<td>9</td>
<td>85</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>17</td>
<td>16</td>
<td>32</td>
<td>24</td>
<td>112</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>33</td>
<td>41</td>
<td>49</td>
<td>33</td>
<td>197</td>
</tr>
</tbody>
</table>

The chi-square statistic and the p-value with 4 degrees of freedom in Table 4.9 are 10.52 and 0.032, respectively. Since the p-value is less than 0.05 level of significance, then the perception of respondents about lack of access to personal computer and internet is significantly dependent on their gender. It means that the majority (32/112 = 29%) of female respondents tend to disagree, whereas the majority (25/85 = 29%) of the male respondents tend to be neutral (see Figure 4.7 below). The reasons for most men being neutral could be lack of knowledge or awareness of alternative means to access e-filing. At the same it might also just mean women are doing better in this area because most of them have taken particular interest in being personally responsible for their taxes after introduction of e-filing. Taking personal responsible would require one to read more and learn more about e-filing.

The chi-square statistic and the p-value with 4 degrees of freedom in Table 4.9 are 10.52 and 0.032, respectively. Since the p-value is less than 0.05 level of significance, then the perception of respondents about lack of access to personal computer and internet is significantly dependent on their gender. It means that the majority (32/112 = 29%) of female respondents tend to disagree, whereas the majority (25/85 = 29%) of the male respondents tend to be neutral (see Figure 4.7 below). The reasons for most men being neutral could be lack of knowledge or awareness of alternative means to access e-filing. At the same it might also just mean women are doing better in this area because most of them have taken particular interest in being personally responsible for their taxes after introduction of e-filing. Taking personal responsible would require one to read more and learn more about e-filing.

The chi-square statistic and the p-value with 4 degrees of freedom in Table 4.9 are 10.52 and 0.032, respectively. Since the p-value is less than 0.05 level of significance, then the perception of respondents about lack of access to personal computer and internet is significantly dependent on their gender. It means that the majority (32/112 = 29%) of female respondents tend to disagree, whereas the majority (25/85 = 29%) of the male respondents tend to be neutral (see Figure 4.7 below). The reasons for most men being neutral could be lack of knowledge or awareness of alternative means to access e-filing. At the same it might also just mean women are doing better in this area because most of them have taken particular interest in being personally responsible for their taxes after introduction of e-filing. Taking personal responsible would require one to read more and learn more about e-filing.
Figure 4.7

Table 4.10: Cross-tabulation of perceptions of respondents about the use of e-filing by gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>28</td>
<td>37</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>89</td>
</tr>
<tr>
<td>Female</td>
<td>35</td>
<td>28</td>
<td>20</td>
<td>17</td>
<td>13</td>
<td>113</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>65</td>
<td>27</td>
<td>25</td>
<td>22</td>
<td>202</td>
</tr>
</tbody>
</table>

p-value = 0.049  
chi-square statistic = 9.53  
df = 4

The chi-square statistic and the p-value with 4 degrees of freedom in Table 4.10 are 9.53 and 0.049, respectively. Since the p-value is less than 0.05 level of significance, then the perception of respondents about the use of e-filing is significantly dependent on their gender. It means that the majority (35/113 = 31%) of female respondents tend to strongly agree, whereas the majority (37/89 = 42%) of the male respondents tend to agree (see Figure 4.8 below). Besides believing that access to a computer was a constraint to use of e-filing, males still display confidence in the impact of this technology in their compliance levels. Therefore I would say the issue about access to computer does not necessarily influence respondents’ compliance perceptions negatively.
The introduction of e-filing has encouraged me to want to take personal responsibility for my tax affairs

<table>
<thead>
<tr>
<th>Age group</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>40yrs and below</td>
<td>26</td>
<td>39</td>
<td>28</td>
<td>4</td>
<td>3</td>
<td>100</td>
</tr>
<tr>
<td>Above 40yrs</td>
<td>41</td>
<td>34</td>
<td>14</td>
<td>9</td>
<td>3</td>
<td>101</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>73</td>
<td>42</td>
<td>13</td>
<td>6</td>
<td>201</td>
</tr>
</tbody>
</table>

The chi-square statistic and the p-value with 4 degrees of freedom in Table 4.11 are 10.29 and 0.036, respectively. Since the p-value is less than 0.05 level of significance, then the perception of respondents about the introduction of e-filing is significantly dependent on the age group. It means that the majority (39/100 = 39%) of the respondents who are at most 40 years of age tend to agree, whereas the majority (41/101 = 41%) of the respondents over the age of 40 tend to strongly agree (see Figure 4.9 below). According to table 4.12 below, the under 40 year olds have the least tax knowledge, which could be a reason why they would have less interest in the taking responsibility for their tax affairs. But most importantly it could also be an issue of varying levels of maturity between the two age groups, with over 40 years old generally being more mature and more responsible.
Table 4.12: Cross-tabulation of perceptions of respondents about taxation knowledge by age group.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Below average</th>
<th>Average</th>
<th>Good</th>
<th>Excellent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>40yrs and below</td>
<td>30</td>
<td>35</td>
<td>26</td>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>Above 40yrs</td>
<td>13</td>
<td>40</td>
<td>41</td>
<td>7</td>
<td>101</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>75</td>
<td>67</td>
<td>16</td>
<td>201</td>
</tr>
</tbody>
</table>

The chi-square statistic and the p-value with 4 degrees of freedom in Table 4.12 are 10.66 and 0.014, respectively. Since the p-value is less than 0.05 level of significance, then the perception of respondents about taxation knowledge is significantly dependent on the age group. It means that the majority (35/100 = 35%) of the respondents who are at most 40 years of age tend to be average in taxation knowledge whereas the majority (41/101 = 41%) of the respondents over the age of 40 tend to be good in taxation knowledge (see Figure 4.10 below). The over 40s could have more tax knowledge than younger ones because of their long years of experience as taxpayers, as a general expectation. Their age makes them more responsible especially around tax planning as they are nearing retirement hence their better tax knowledge in this instance.
Part D: Reliability analysis

Cronbach’s alpha ($\alpha$) reliability coefficient, whose numerical value ranges from 0 to 1, measures the reliability (or internal consistency) of the items in the Likert scale. A high value (close to 1) for Cronbach’s alpha reliability coefficient indicates good internal consistency of the items in the scale.

Table 4.13

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cronbach’s Alpha ($\alpha$)</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax knowledge</td>
<td>0.811</td>
<td>13</td>
</tr>
<tr>
<td>Compliance level</td>
<td>0.746</td>
<td>5</td>
</tr>
</tbody>
</table>

The Cronbach’s alpha coefficients in Table 4.13 above are close to 1, suggesting that the items in the scale have relatively high internal consistency.

4.4 Conclusion

In conclusion, the respondents’ replies to the questionnaires were analysed using the SPSS tool, mainly using tables and graphs to present results. The number of respondents who participated in the study displayed that there’s was a level of relationship between their responses and their gender status. In addition the age of participants did not play such a significant role in their response, meaning a lot of responses were independent of people’s ages. In our analysis of relationship between
different variables, we have only considered those that showed a level of significance that is below 0.05, and ignored those above.
Chapter 5

Conclusion and Recommendations

5.1 Introduction

This chapter seeks to combine all the discussions in the literature review with the outcomes of our data analysis in order to make a final conclusion and present some recommendations. The study was commissioned to evaluate how influential e-filing is in taxpayers’ compliance behaviour in the Dr Ruth Segomotsi Mompati District Municipality.

Furthermore, also report on whether the research questions were addressed. Some of the questions that needed to be addressed is whether e-filing has any impact on tax compliance, what people’s perceptions and attitude were about e-filing, and whether they were knowledgeable about tax. The importance of this is simply to assess whether e-filing is serving the purpose which SARS thought it would when it first decided to adopt it. The e-filing was lounged in order to enhance SARS efficiency and effectiveness in their delivery of the Treasury mandate, part of which is to ensure tax compliance by all taxpayers.

5.2 Tax compliance

Tax compliance is the underlying factor that drives SARS revenue collection. Tax compliance is the degree to which taxpayers comply with tax laws or as James and Alley (1999:29) put it, as being the taxpayer’s behaviour that is seen in the decision of whether to comply with wider societal objectives reflected in the tax policy. The SARS would like to reduce the tax gap by increasing tax compliance. The objective can be achieved by encouraging tax avoidance and eliminating tax evasion.

Tax compliance can be influenced by various factors, some internal and others external. The efficiency of tax systems such as e-filing can enhance compliance. The costs of compliance and one’s personal financial constraints are seen as threats to taxpayer compliance.

In order to encourage improved compliance Engida and Baisa (2014:435) are advocating for more tax compliance and enforcement at frequent intervals. In addition to this, the use of technology has now been introduced to improve efficiency and effectiveness. E-filing is an internet application that is used to enable taxpayers and accountants to file their tax return electronically. The application comes with many advantages such as reduction of costs of
compliance, convenience of filing returns anytime of the day from the comfort of one’s home or office, quick response by tax authorities and many others.

The use of e-filing is, however, also influenced by many factors such as attitude, perceived ease of use, perceived usefulness and quality of information just to mention a few. Above all these factors, the taxpayer has to make a comparison between the costs and benefits of e-filing and make a rational decision.

5.3 Research design and methodology
A quantitative method of research was decided upon as it was considered the most relevant to use is extracting perceptions of a large population. Furthermore, with quantitative method it is easy to establish the relationships between different variables and how they impact or relate to perceptions and attitudes of taxpayers. The data collection instrument (relevant to quantitative study) used in the study was a questionnaire, which was made up of eighteen closed-ended questions. The 225 questionnaires that were handed with 95.2% of the returned, and only 12 were not completed properly, thus counted as spoiled. The spoiled questionnaires are as a result of people having ticked more than one answer for some questions, and some left some pages not filled at all.

The questionnaires were distributed randomly amongst taxpayers of all genders, various age groups, with varying tax knowledge and employed in different industries of the district economy.

5.4 Summary of findings
The main intention of the study was simply to establish whether e-filing had an impact of tax compliance. The answer to this question was to be achieved by asking the relevant questions to relevant people, which is exactly what was done through a questionnaire. The first point is having tax knowledge could have an important impact in a person’s attitude about something, knowing chases away the fear. In the study the majority of respondent had basic tax knowledge, though an unusually big percentage still opted for the use of tax consultant as opposed to e-filing personally. It is strange also because most of the participants in the study were salaried individuals, which eliminates the possibility of using complex tax structure as a reason for using tax consultants. Therefore it could also be caused by fear of making mistakes or lack of confidence, especially for first time users. Another reason could be that taxpayer can afford tax
consultants, which could mean that for them the benefits of using tax consultants is higher than the risk of doing e-filing themselves. But at the end the majority of respondents indicated that they would not use tax consultant.

However, a high percentage had a positive attitude and perception about e-filing, such as considering it as easy to use and understand without external assistance. Furthermore, the taxpayers trust the system and its assessment outcomes. This is something that can only be expressed by someone with direct or indirect experience with using e-filing. And the lack of access to personal computer is not a deterrent for wanting to use e-filing. This means taxpayers use other alternative to access computer and internet, such as work computer, Smartphones, internet café and tax consultants to ensure that they are tax compliant. This shows positive attitude towards e-filing by respondents.

The overall picture deduced from questions directly relating to compliance activities, is that respondents have a perception that e-filing plays a role in their compliance behaviour. The majority of taxpayers are more compliant in their tax matters due to e-filing. The respondent taxpayers are able to submit their returns and pay their tax liability on time. The previous manual tax system at SARS was using very long and intricate tax forms even for simply salary employee with medical aid, pension and travel allowance. And as such ordinary taxpayers (not tax professionals) were prone to make errors when completing them. But with e-filing that has introduced less complex forms that are as easy to follow the majority are able to declare accurately. Overall majority believe that e-filing was the best system introduced by SARS as it has enhanced their tax compliance patterns. It is also important to note that even they people who disagree with this point are not necessarily saying e-filing has not had an impact on them, but they could be people who were tax compliant even before e-filing was introduced.

5.5 Limitations
The study was conducted only in the Dr Ruth Segomotsi Mompati District Municipality focusing only on individual taxpayers. It would also be of great interest to find out how other taxpayers such as companies, trust, small businesses, partnerships etc. perceive the impact of e-filing in their operations and tax compliance. There’s a also an opportunity to conduct a similar study in other Municipal Districts of North West to eventually have a picture of the tax compliance patterns in the whole province.
5.6 Recommendations

The number of people using e-filing personally needs to increase and as such there should be measures implemented to increase this. This could be through offering door-step assistance by SARS officially to guide people on how to file. SARS can even hire students from university as seasonal staff to specifically work during tax filing season to out on the field and assist more people to file, and to file for them.

The reason why usage of tax consultancy is an issue is because it increases costs of compliance for taxpayer, especially those with very simple tax structures. In the future when these individuals cannot afford tax consultants anymore, they might end up avoiding compliance, thus evading tax.

The SARS target is to get 100% taxpayer on e-filing, but the number of taxpayer who are still prefer to go queue at SARS office to file their returns is very high at 38.3%, with majority of this being females. The reasons for this percentage need to be investigated and develop possible solutions for that. The problem could be anything from people being unable to afford tax consultancy fees, lack of access to computers and internet, fear of change and many others. SARS can create self-service computer points inside their offices for those taxpayers who are constraint by that computer access problem.

5.7 Conclusion

A quantitative study was conducted on the perceived effect of e-filing on tax compliance in the five municipal areas of the Dr Ruth Segomotsi Mompati District. The outcomes of the study revealed that the majority of taxpayers have positive experiences about e-filing and recognise its benefits. It is benefits like cost saving, quick turn-around times on refund and ease of transacting with SARS (filing and payment) which encourage taxpayers to use e-filing. However at the same time the challenge of a high percentage of people preferring visiting SARS office in order to file clearly shows the bigger challenge that lies ahead for SARS before it can get all users to personally file their returns. SARS can focus on the 15% of the undecided group before progressing to change the mind-set and perception of the 46.7% that prefers queuing at SARS offices as opposed to e-filing. Based on the research question on whether the introduction of e-filing assisted in improving taxpayer's tax compliance, 73% of the male population responded positively while on 56% of women did, making the latter less compliant.
However, most importantly the majority (63%) of the respondents of the study have a perception that the use of e-filing has improved the tax compliance patterns. E-filing is a necessary technology, which is used internationally by many countries, and is going to evolve over time. The South African Revenue Service is fortunately in a position to influence those changes in line with their compliance objectives and government mandate. Based on the positive results from this study, e-filing will continue to enhance tax compliance not only around the Dr Ruth Segomotsi Mompati District but around North West Province and hopefully across a greater South African population of taxpayers.
6. **Bibliography**


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