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Kunene, Nqobile

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THE PERCEIVED IMPACT OF DIGITAL TRANSFORMATION IN TAX ADMNISTRATION IN ESWATINI

Applied Research Project

Submitted by

Nqobile Kunene

Student Number: 2370999

Tel: +268 76127027

Email: 2370999@students.wits.ac.za

Proposed Supervisor:

Dr. Jacques Totowa

A research project submitted at the University of the Witwatersrand under the Faculty of Commerce, Law and Management, in partial fulfilment of the requirements for the degree of Master of Management in the field of Business Administration

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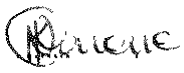
ABSTRACT

The study investigated the perceived impact of digital transformation on tax administration in Eswatini, focusing on tax compliance and taxpayer satisfaction. By studying the experiences and perceptions of taxpayers with a turnover above SZL100 million in, the research aims to identify factors influencing customer perceptions of digital transformation, its effects on tax compliance efficiency, and the benefits and challenges faced by taxpayers. Data collection was conducted using Google Forms, targeting all taxpayers in the large segment, with analysis based on Digital Transformation Theory.

The study highlights factors influencing positive or negative taxpayer perceptions, along with challenges encountered with the E-tax system. Results indicated that digital transformation has notably improved taxpayer compliance behaviour. Further research incorporating the theory of planned behaviour and expanding the survey to the other turnover segments is suggested to comprehensively understand the impact of digital transformation in tax administration. Policy recommendations include regulating data privacy by establishing clear regulations to protect taxpayer data and ensure privacy in digital transactions.

DECLARATION

I Nqobile Kunene, declare that the thesis, which I hereby submit in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, is my work and has not previously been submitted by me for a degree at this or any other tertiary institution.

Signature: 

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DEDICATION

The Almighty God, who has given me the grace to complete this project from the beginning to the present, is the primary beneficiary of this endeavor. I would like to dedicate this project to my parents and family who have provided me with spiritual and emotional support throughout my educational journey. It has not been an easy path, but I appreciate their love, support and prayers.

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1. PROBLEM IDENTIFICATION

1.1 Background of the study

During 2019, the world was infected with Covid-19 pandemic. Lockdown became a norm and daily business operations were changed since then and almost everything came to a standstill except for critical services such as healthcare, food retailers, security services and many more. Despite a notable rise in public expenditure directed toward the health sector and the extension of social protection to less vulnerable populations, government revenue collection has declined, primarily due to the economic downturn (Bracas et al. 2020). The COVID-19 pandemic has significantly fast-tracked digital transformation across business sectors, compelling organisations to adopt digital technologies and platforms to enhance operational efficiency, speed and accuracy in their processes. This rapid shift was not merely a response to crisis conditions but also a strategic adaptation that has reshaped business models and service delivery mechanisms. As Dobrolyubova (2021) highlight, digital transformation has transpired as a central driver of contemporary social and economic development, offering substantial benefits to both citizens and enterprises globally. The pandemic, therefore, has not merely intensified the pace of digital adoption but has also underscored its strategic importance in shaping future-ready institutions.

Over the past decade, African countries have increasingly integrated information and communication technologies (ICTs) into their tax administration systems, aiming to enhance efficiency, transparency, and compliance (Okunogbe & Santoro, 2022; ATAF, 2021). This trend aligns with broader global patterns of digital adoption, as evidenced by World Bank data indicating that, by 2020, approximately 51 percent of the global population had access to the internet. Most tax revenue collection authorities have changed the way of collecting revenue from physical contact to online facilities. The E-Tax online platform for filing and submitting tax returns online was implemented for all taxes in May 2020 in Eswatini. In September 2020, the tax administration company in Eswatini mandated all their clients to file and pay online which eliminated cash from all operations. Asista & Setyowati (2022), defined Electronic Tax system (E-Tax) as a digital platform designed to facilitate the online management of tax - related obligations. It enables taxpayers to access and monitor their account information, submit tax returns, review financial statements, track both overdue and upcoming filing, and utilize various tools aimed at streamlining and expediting the tax filing process. Eswatini is one of the developing countries in the Southern African region and changes in technology has

impacted their clients and business operations just like any other developing country. The impact could either be negative, or positive and this study is undertaken to identify and test the hypothesis.

Eswatini's tax to GDP ratio experienced a marginal increase from 17.9% in 2020 to 18% in 2021, reflecting a slight improvement in the country's capacity to generate revenue through taxation (OECD, 2021). According to OECD report (2023) indicated that the tax-to-GDP ratio serves as a critical indicator of fiscal performance, offering insights into a government's ability to mobilize domestic resources and sustain public expenditure. A higher tax-to-GDP ratio suggests a greater reliance on taxes to fund government expenditure. Vertesy (2024) highlighted that another source of revenue from Eswatini is from the Southern African Customs Union (SACU). Vertesy (2024) highlighted that this is the world's oldest customs union, and it has five member states: Eswatini, Lesotho, Botswana, Namibia and South Africa. Imports between these countries are duty-free, while imports from non-SACU member states are subject to a common customs external tariff. The revenue collected by these duties is combined and allocated in line with an agreed-upon formula.

The digitalization of economies has been developing at an ever-increasing rate, resulting to significant changes in all parts of society. Tax administration, as a basic government function, is not immune to the effects of such transformation. Technological innovation and improvement have led to dynamic and severe changes in the global tax ecosystem. With this advancement, Hendriyetty et al. (2022) highlighted that the digitalization of tax administration is no longer an option, but a requirement; tax authorities cannot fall behind in the use of digital technologies to streamline their operations. Eswatini's tax administration processes include registration of taxpayers for the different tax types such as Income tax, Value Added Tax and Customs (Eswatini Revenue Service website). For Domestic taxes, once a taxpayer is registered, they are required to file returns and pay their taxes when due. When taxpayers have not paid for their returns, they go through the debt collection process. Failure to pay leads to the legal department which includes enforcement and litigation. The audit and data matching process use risk engine to ensure that the correct declaration is filed and if there are any discrepancies, an audit is executed and if there is any fraud element an intelligence and investigation is executed. When a return is filed as a credit, it is verified and processed for payment. The current system that are being used is the Revenue Management System for domestic taxes. On the Customs taxes, Automated System for Customs Data World (ASYCUDA World) is the current system that is used on all customs taxes. Excise duties are

collected at importation into a SACU country or at the place of domestic manufacture of the items mentioned above using a SACU tariff schedule. Post audits and anti-smuggling processes are done to determine whether goods are correctly declared.

Santoro F et al. (2023) highlighted that one of the challenges faced with Eswatini is low tax compliance which results in revenue collection. The primary goal of digitalising tax administration operations is to increase taxpayer compliance rates at a cheaper cost in order to increase revenue collection. Digitalization and technology have the potential to positively alter how tax administration acquire, process, and act on information, thereby improving system efficiency, transparency and equity. Taxpayers benefit from digitalization because it integrates tax compliance into daily business activities. The transition to digital tax administration has encountered several problems in Eswatini. Santoro et al (2023), one of the challenges faced by Eswatini is the lack of technology infrastructure which is a significant barrier. The World Bank Report (2023) concluded that digital infrastructure access remained low. The utilisation disparity was low primarily due to the high costs of both fixed and mobile internet services. Another challenge was the low compliance rate and the use of data to increase tax compliance and streamlining tax compliance processes. To fully exploit the benefits of digitalization, several elements must fit together. The World Bank (2023) assessment revealed that the availability of digital skills in Eswatini remains limited, primarily due to inadequacies in educational curricula and the quality of training programs. In response to this gap, the report recommended that the Eswatini government formulate and implement comprehensive policies and strategic frameworks aimed at fostering digital skills development. Such initiatives are essential for cultivating a digitally literate population and building a workforce equipped to participate effectively the digital economy.

The tax administration in Eswatini implemented the electronic platform in May 2020, E-Tax, which is used for filling returns online, access account information and monitor account history and log queries and seek assistance for the domestic taxes which is one of the digital transformation initiatives completed, (Okunogbe and Santoro, 2023). This initiative reduces the cost of compliance for taxpayers.

1.2 Context of the Study

Vial (2019) defined digital transformation as the thorough integration of digital technologies across all aspects of a business, fundamentally changing operational processes and the way

value is given to customers. When the environment is changing with the emerging technologies, policy makers require to make changes to keep up with the environment. Tax administrations also follow the journey of tax digital transformation. Taxation plays a crucial role in mobilizing public resources and serves as a fundamental instrument through which governments can influence national development and improve socio-economic outcomes for citizens. Tax digitalization administration is a strategy that is used by tax administration to reduce the tax gap between tax administration and taxpayers or clients. According to OECD (2022), Tax administration 3.0 concept of tax digitalization has played a major impact in improving client compliance, speed and efficient in revenue collection in developed countries. Bello et al (2022) stated that many studies have shown that tax digitalization has improved tax compliance by lowering the costs of compliance. It is important because it reduces the cost of compliance to clients. Taxpayer services and outreach have significantly improved the ability to respond more quickly and by providing clients with a more efficient payment system.

This study focuses on the impact and implications that tax digitalization has in Eswatini. Bassongui (2023), highlighted that many studies have focused on the impact tax digitalization has in the Sub-Sahara region and the functionality of tax digitalization. The identified gap from the literature reviews is that there is no research of how tax digitalization has impacted the different clients or taxpayers in the according to the different business categories. This paper seeks to identify whether tax digitalization has a negative or positive impact to the different business categories in Eswatini. The study focuses mainly on corporate taxpayers. The tax administration company in Eswatini is current in the process of upgrading their revenue management system which will enable integration with third party data for information sharing and data matching initiatives to identify taxpayers who are under declaring their revenues. This will assist in increasing revenue collection and increase compliance.

Currently OECD (2021) has updated the tax administration 2.0 to Tax administration 3.0 with the most relevant concept of tools that are used to supporting tax administration with the latest technologies that improves compliance and process transformation efficiently. One of the challenges faced by the Eswatini tax administration is insufficient infrastructure in the country. Eswatini is a developing country and mostly relies on Government IT infrastructure. According to the World Bank Press Release (2023), stated that the penetration rates in the field of digital infrastructure remained low. The disparity in usage is partly caused by the high costs of both fixed and mobile internet services which is due to lack of competition in the broadband market. Therefore, this means that not all taxpayers have access to internet services due to availability

and affordability of the broadband services nationwide. Another challenge is that it is difficult to integrate the tax administration systems with third party external database systems to enhance process improvement and increase efficiencies since most of the systems are manual.

1.3 Research Problem

Bassongui and Houngbedji, (2023) highlighted that many studies have focused on the impact tax digitalization has in the Sub-Sahara region and the functionality of tax digitalization. The identified gap from the literature reviews is that there is no research of how tax digitalization has impacted the different clients or taxpayers according to the different business categories. This study focuses on the impact of tax digitalization in Eswatini on corporate[1] taxpayers. As previously highlighted, Bassongui (2023) stated that many studies have not studied the impact tax digitalization has on taxpayers.

This study intends to investigate the impact of digital transformation on corporate taxpayers with a particular focus on how the adoption of digital tools influences tax compliance. It further seeks to identify the technological and policy instruments necessary to enhance compliance outcomes within the context of a digitally evolving tax administration system.

The rapid revolution of digital technologies has profoundly reshaped numerous sectors, with tax administration being no exception. These advancements have introduced new opportunities for improving efficiency, transparency, and service delivery within tax systems, thereby transforming traditional approaches to revenue collection and taxpayer engagement. However, the perceived impact of these digital transformations on the efficiency, effectiveness, and overall performance of tax administrations remains underexplored. This research seeks to explore the perceived impact of digital transformation with Eswatini's tax administration, focusing on how these changes affect tax compliance and user's satisfaction and how the relevant tools may be required to improve tax compliance.

The Digital Transformation theory is aligned with the research problem as this theory explains how digital technologies fundamentally reshape organizational processes, culture, and value delivery. This theory is central to the research problem, as the study investigates how Eswatini's tax administration transitioned from manual to digital systems. Hence, captures systemic and strategic aspects of digitalization as well as addresses organizational agility and process efficiency. Another theory that supports this research problem is the Diffusion of

[1] Corporate taxpayers are taxpayers with sales revenue above E100 million in Eswatini.

Innovations Theory. This theory explains how innovations spread through populations, categorizing adopters into innovators, early adopters, early majority, late majority, and laggards. It is useful for understanding adoption patterns among different taxpayer segments and identifying barriers to uptake.

1.4 Research objectives

The specific objectives of this study are;

a) To examine the key drivers of effective tax digitalization in tax administration at Eswatini.
b) To determine the benefits of digitalization of the tax system for the stakeholders and identify the challenges of digitalization for the stakeholders.
c) To identify the challenges on digitalization faced by corporate taxpayers and tax administration in Eswatini.
d) To assess the impact of digital transformation on tax compliance whether negative or positive on the corporate taxpayers in Eswatini.

This research study employed both qualitative and quantitative research methodologies. Interviews were used under the qualitative approach and survey questionnaire under quantitative approach. The first three objectives were attained by using quantitative methodology and the last objective was achieved by using qualitative methodology.

1.5 Justification of the study

The rationale of this study is to provide an insight to the tax administration organisation and various stakeholders to understand how corporate taxpayers view tax digitalization and assist in identifying any gaps that requires improvement on the digital transformation tools. The influence of digital transformation on tax administration is crucial and of strategic importance because it can support effective and long-lasting tax changes, ensuring that the digital economy is properly taxed and reduces compliance barriers. In order to minimize compliance and administrative costs, increase revenue collection efficiency, improve taxpayer services and transparency, and handle huge data flows, tax authorities may benefit greatly from digitalization. Jung, Gomez-Bengoechea, (2022) believed that tax digital transformation had an impact on improved compliance, and effective and efficient processes. Digitalization of tax administration plays a significant role in focusing on data collection and tax liability determination, leading into more reliable revenue collection and management of tax revenues.

The Network of Tax Organisation (2023), highlighted that digital transformation can simplify tax operations, improve compliance, improve data management and analysis, and encourage collaboration between tax administrations and other government departments. Digital transformation had an additional advantage of increasing systems efficiency, transparency and equitability. Tax digitalization can streamline tax processes by automating routine tasks, reducing paperwork and minimizing human error. This can improve the accuracy and timeliness of tax data, making it easier for taxpayers in Eswatini to comply with their tax obligations. By examining the impact of tax digitalization, policy makers and tax authorities can assess the extent to which these benefits are being realised in Eswatini. They can identify areas of success in need of improvement, which can inform future policy decisions and resources allocation.

Tax digitalization can enhance tax revenue collection. By leveraging digital technologies, tax authorities can improve compliance through better data analytics and risk assessment. Digitalization can assist in identifying non-compliant taxpayers more efficiently and take targeted enforcement actions. Additionally, digitalization can enable the implementation of online tax filing and payment systems, making it easier and more convenient for Eswatini taxpayers to fulfil their tax obligations. Assessing the impact of tax digitalization in Eswatini will enable tax authorities to measure the effectiveness of the strategies that boost tax revenues and reduce tax evasion.

Tax digitalization can promote transparency and accountability in tax administration. Digital systems can provide an auditable trail of tax transactions, making it easier to detect and prevent fraudulent activities. Increased transparency can help build trust between taxpayers and tax authorities in Eswatini, leading to a more cooperative and compliant taxpayer base. Examining the impact of tax digitalization, Eswatini will be able to evaluate the extent to which transparency and accountability have been enhanced in tax administration and take corrective measures where necessary.

Examining the impact of tax digitalization in Eswatini is crucial to assess its effectiveness in improving tax administration efficiency, enhancing revenue collection, promoting transparency, and aligning with global trends. By understanding the outcomes and challenges associated with tax digitalization, policy makers and tax authorities can make informed decisions to optimize tax administration processes and achieve their revenue objectives effectively. Therefore, the study assists in contributing to a comprehensive understanding of

the impact of digital transformation in tax administration in Eswatini, inform policy decisions and guide future initiatives for enhancing tax administration processes in digital.

1.6 Delimitation of the study

a) *Inadequate data from different participants* - data collection from different key participants on tax administration such as tax administration company and corporate taxpayers was inadequate. Data collection took longer than expected from the key participants since the response rate was low.
b) Some of the participants were not technologically savvy which made it difficult to derive adequate information for the study.
c) Tax subject is a personal matter and therefore the participants were not open with their responses

1.7 Operational definitions

The definitions that are adopted in this paper are**;**

- *Digital Transformation*- Gong and Ribiere (2021) define digital transformation as the process of leveraging digital technologies to create new or modified existing business processes, organizational culture, and customer experience in response to evolving market demands and technological advancement.
- *E-Tax*- Electronic Tax filing system that is used for filing returns.
- *Tax compliance*- According to Safitri (2003) as cited in Oliviandy et al. (2021), tax compliance is characterized by a taxpayer's adherence to all legal tax obligations and the exercise of their rights. It reflects a culture of compliance and awareness, demonstrated through accurate completion of tax forms, timely filing and payment, and a comprehensive understanding of applicable tax laws and regulations. defined as a situation in which the taxpayer fulfils all his tax obligations and exercises his tax rights.

1.8 Structure of the dissertation

This research study is divided into five sections, starting with Chapter one which introduces the background of the study, context of the study, the research problem, research objectives, delimitations of the study, justification of the study and the operational definitions that were used in the study. Chapter two offers a thorough examination of previous research,

commencing with an introduction and followed by a critical analysis of existing scholarly work relevant to digital transformation and tax administration. It also outlines the theoretical and conceptual framework guiding the study. Chapter three details the research methodology, including the research design, data collection methods, sampling techniques, and the analytical procedures used to achieve the study's objectives. Chapter four presents the results derived from data analysis and offers an interpretation of the findings in relation to the research questions and objectives. Lastly, chapter five concludes the study by summarizing key findings and offering recommendations based on evidence gathered and the implications of the study for policy and practice.

2. LITERATURE REVIEW

2.1 Introduction

The two main purposes of the literature review focus, firstly, to provide empirical evidence provided in the literature that is related to the impact of tax digital transformation. The aim of the empirical research is to assess and evaluate the research gaps from previous studies. The purpose is to investigate the impact of tax digital transformation operates and generates tax revenues. The study provides a description of tax digital transformation, the benefits and challenges of tax digital transformation. Secondly, the literature review focuses on a conceptual framework that is used as a theoretical review of models in this study. The literature review focused on the concept of digital transformation in tax administration. The chapter literature review concentrates on the digitalisation in tax administration and the benefits and challenges of tax digital transformation in tax administration. A systematic literature review anticipates answering the review question; ***"How does tax digital transformation influence corporate taxpayers towards revenue collection within the environment of Eswatini in order to improve tax compliance?"*** The rationale is that tax digital transformation has an effect towards revenue collection and compliance in tax administration. The chapter focuses on both perspectives, namely, corporate taxpayers and the tax administration. The aim of the systematic literature review is to identify, evaluate and summarize the findings from corporate taxpayers over the effects of tax digital transformation on revenue collection and tax compliance.

2.1.1 Evolution of Digitalization in Tax administration

Tax administrations have been executing their tasks and processes manually and that has always made their processes inefficient and made tax evasion and corruption easier for the taxpayers and administrators. The COVID-19 pandemic has technology's adoption across all

sectors and impacted tax administration too. Empirical evidence from Indonesia (Meita & Malaua, 2023), indicated that digital transformation in tax administration led to increased taxpayer compliance, as reflected in the rising number of annual tax returns submitted by corporate taxpayers. This supports the broader understanding that digitalization enhances transparency and efficiency in tax systems. According to Widnyani, Astitiani and Putri (2021), digital transformation is often driven by technological advancements and evolving organizational and environmental conditions.

The OECD report (2021) highlighted that the tax administrations have recently become digital, with the application of Artificial Intelligence, Internet of Things (IoT), cloud computing, blockchain technology, and other technologies to various tax activities. According to an OECD survey report (2021) involving fifty-nine tax administrations concluded that a significant majority had adopted advanced digital tools: 80% reported using data analytics, 75% had implemented machine learning capabilities, and 50% utilized digital assistant technologies. These advancements were supported by substantial capital investments, with approximately 50% of ICT budgets allocated to infrastructure development. However, despite these technological strides, there was limited empirical evidence to conclusively demonstrate that ICT development consistently led to improved efficiency, effectiveness, or taxpayer satisfaction (Mallick, 2021). According to Omar, Weerakkody, and Daowd (2020), despite significant financial investment, most ICT projects on the developed countries failed to meet their objectives. In developing countries, a similar situation existed (Heeks, 2005). Certainly, despite the world's developed countries high e-filling rate, e-filling rates in the developing world remain low (Mashabela & Kekwaletswe, 2020). Some argued that technology by itself cannot lead to the success of a tax administration that is highly dependent on its ecosystem (Kochanova, Hasnain, & Larson, 2020). According to Safitri (2003, as cited in Oliviandy et al., 2021), taxpayer compliance is defined as a condition in which the taxpayer fulfil all their tax obligations and exercise their rights in accordance with applicable laws. This reflects a culture of compliance and awareness, demonstrated through accurate completion of tax returns forms, timely filing and payment of returns, and a clear understanding of tax regulations. Supporting this perspective, Dao and Hang's research (2022) concluded that digital transformation has an impact on tax compliance. By streamlining processes, enhancing transparency, and improving access to tax related information, digital systems contribute to increased voluntary compliance.

2.1.2 Digital Tools to Enhance Strategies

Haider et al., (2015) conducted a study that focused on a comprehensive conceptual framework designed to support that successful implementation of digital services in tax administration. The framework served as a strategic reference point for developing and embedding digital service initiatives within tax systems, with the overarching goal of enhancing taxpayer experience. As tax administrations become increasingly digitalised, the emphasis has shifted toward not only technological adoption but also the strategic integration of digital services into core business functions. Future studies also proposed that the conceptual framework to assist in advancing the understanding of digital services in tax administration beyond technology acceptance models.

2.1.3 Digital Transformation of Tax Administration

Nazaro, Mikhalev, and Chernousova, (2019) conducted a study that examined the role of advanced technologies in the modernization of tax administration. The research focused on analysing the effective utilization of modern technologies and identifying the key factors of that influence their success in enhancing tax system efficiency. Digital transformation improved process efficiency and effectiveness of revenue collection which resulted to taxpayer compliance. Nazaro, Mikhalev & Chernousova' s study, (2019) was limited to the tax administration's perspective and ignored how the modern technology impacted the taxpayers. The study focused on the efficiency and effectiveness of tax administration processes and how it improved the business processes. Digitalization also enhanced organisational performance with the improved processes.

2.1.4 Drivers of Digitalization

This study focused on the factors and drivers that influenced digitalization in an organisation (Jung, Gomez-Bengoechea, 2022). The factors were linked to digital adoption of individuals, organisations, environment and economic factors. The study indicated that digitalization of processes was associated with several transformations that occurred using four main channels which were communication costs, data analysis, operational transformation and lower entry barriers. The changes were associated with improved firm performance in terms of innovation, cost reduction and new business models. Most empirical estimates at the firm level support digitalization's positive impacted on business performance. However, the findings were not universal, and some studies have failed to confirm these positive effects.

2.1.5 Impact of digitalization on Tax User Satisfaction

Ait Lhassan et al. (2022) examined the impact of digital transformation on user satisfaction with government services, with a particular focus on tax administration in Morocco. The research concluded that the success of digitalization programs required active commitment and engagement of all relevant stakeholders. The study further highlighted that perceived ease of use was a crucial determinant of user acceptance, serving not only as an indicator for measuring technology adoption but also as a strong powerful motivator impacting user's willingness to engage with digital systems (Amin, Rezaei, & Abolghamesi, 2014). The limitation with this study was that tax administration needed to stay relevant to keep up with the relevant trends of technology to provide quality services in real time which met the expectations of users in real time.

2.2 Theoretical Review

2.2.1 The Digital Transformation Theory

The theory of digital transformation dated back from the 1940s, which is shown in figure 2.1. Digital transformation theory posited that advancements in digital technologies fundamentally reshaped organizations, processes, and societal structures, driving innovation, efficiency, and value creation (Roth, 2019). Applied to tax systems, the theory underscored how digitalization revolutionized tax administration, compliance, and governance, that led to profound changes in how taxes were collected, reported, and enforced. At its core, digital transformation in tax systems involved the integration of digital technologies, such as data analytics, artificial intelligence, and cloud computing, to modernized tax processes and enhanced service delivery (Roth, 2019).

Markus & Rowe, (2021) asserted that the revolution allowed governments to transition from conventional, paper-based tax systems to digital platforms, hence enabling online tax filing, electronic payment systems, and real-time data sharing between taxpayers and tax authorities. By embracing digital transformation principles, tax systems evolved into agile, data-driven ecosystems that optimized compliance, enhanced transparency, and promoted trust between taxpayers and tax authorities. However, realizing the full potential of digital transformation necessitated strategic planning, investment in digital infrastructure, capacity building, and stakeholder engagement to surmount obstacles and exploit the advantages of digitalization in tax administration.

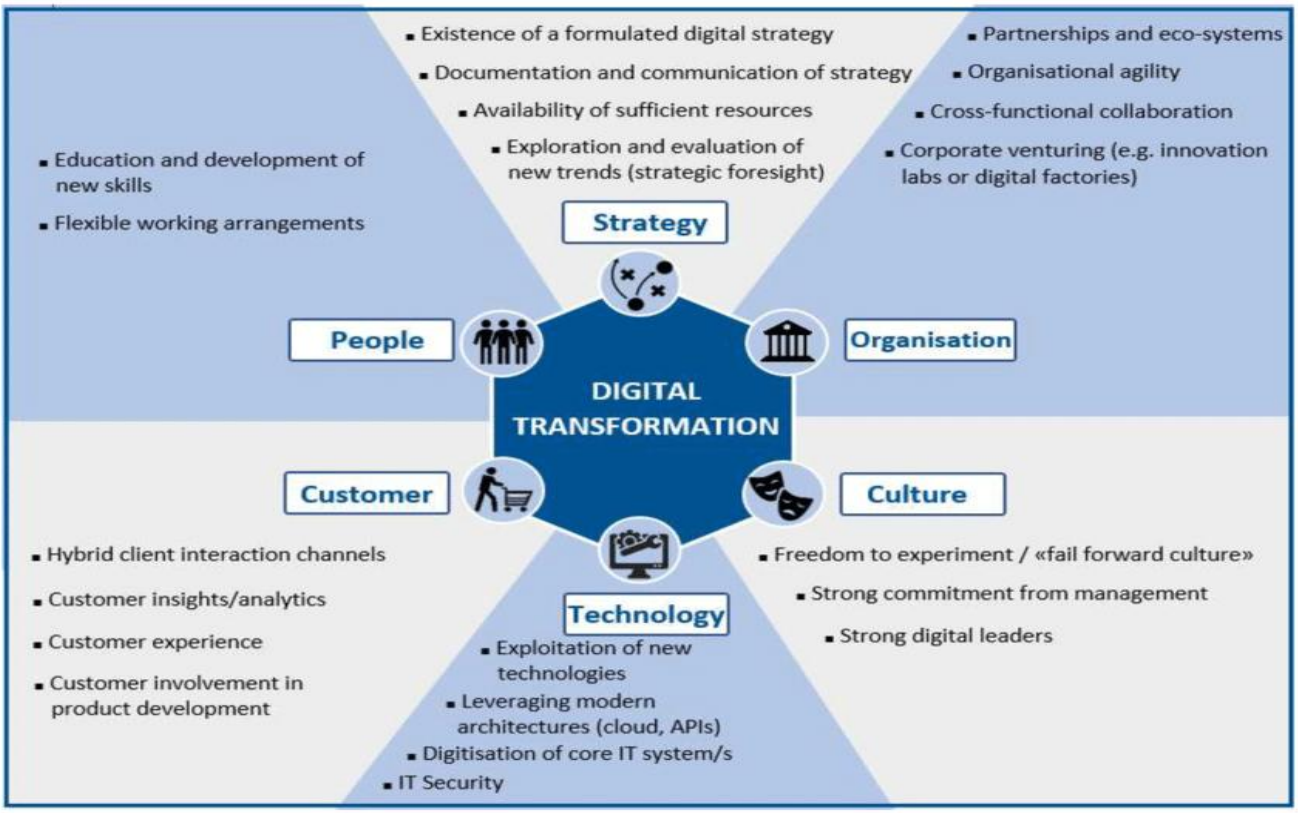

Figure 2.1 *Digital Transformation Theory (Source: ResearchGate, 2025)*

2.2.2 Perceived Ease of Use Theory

The perceived ease of use theory is defined as the degree to which a user perceives a system is simple to understand and easy to operate (Wulandari & Dasman, 2023). The concept was an essential to the Technology Acceptance Model (TAM), which proposed that the intention to accept or reject a certain technology was influenced by a balance between the perceived benefits of the system and complexity associated with its use. Wulandari & Dasman (2023) explored the relationship between digital taxation and tax compliance, concluding that the ease of use significantly affects user acceptance and engagement with internet-based systems. Ajzen (2020) further emphasized that the perceived ease of use theory was one of the most prominent models in the study of Information and Communication Technology (ICT) adoption. It has been widely applied in research investigations aimed at understanding individual level acceptance of digital tools.

Sadress and Juma (2020) the Unified Theory of Acceptance and Use of Technology theory (UTAUT) argued that the actual use of technology was determined by the behavioural intention. The theory's primary elements, perceived ease of use and usefulness, were

significant predictors of behavioural intention and actual system usage, making it a viable paradigm for studying the adoption of digital technology in tax administration. The Theory's core constructs, perceived ease of use and perceived usefulness, served as key predictors of behavioural intention and actual system usage, making it a valuable framework for analysing the adoption of digital technologies in tax administration. According to the UTAUT framework, the actual use of technology was primarily influenced by an individual's behavioural intention, which was shaped by four core constructs: performance expectancy, effort expectancy, social influence and facilitating conditions.

- Performance expectancy refers to the degree to which an individual believes that using the technology improves their performance.
- Effort expectancy relates to the perceived ease associated with using the technology.
- Social influence captured the extent to which individuals perceive that others are important because they use technology.
- Facilitating conditions involve the availability of resources and support necessary to use the technology effectively.

The UTAUT model demonstrated how these constructs collectively influenced both the intention to adopt and the actual usage of technological systems. This model was valuable in the study because it demonstrated how variables like performance expectations, effort expectations, social influence and facilitating conditions influenced the adoption and usage of new technologies for tax administration in Eswatini. Intentions showed an individual's commitment to a specific activity and was defined as an individual's enthusiasm to pursue a given behaviour. Ajzen, (2020) defined behavioural intentions as the anticipated likelihood of performing target behaviour.

A taxpayer's behavioural intentions were determined by how the individual perceived himself or herself to act in relation to the digital tax system. The behavioural intentions examined the taxpayer's attitude towards using the tax system; thus, his/ her conduct was determined by their assessment of whether engaging in an activity resulted in a negative or positive way. According to Trafimow, (2024), the Technology Acceptance Model (TAM), defines behavioural intention as the extent to which an individual has made a conscious decision to perform or not to perform a particular behaviour. For instance, if a taxpayer did not follow the tax laws, it was a conscious decision made by himself or herself. As a result, the taxpayer's approach to his obligation was well planned. Depending on how a taxpayer chooses to act or behave, they may or may not

comply with the tax requirements. Ma and Liu (2024) discovered that behavioural intention was internally oriented. Individual's behavioural intentions were determined by their general belief, which served as the internalised framework of their external reality. Individuals provided subjective evaluations of the system's impact on taxpayers' overall behavioural intentions towards E-tax system adoption.

The conceptual framework presented was based on the Technology Acceptance Model (TAM) in Figure 2.2 which was developed by Davis in 1989. Nwankwo & Okoroji (2021) defined TAM as a commonly used theoretical framework for the assessment of how individuals make decisions regarding new technology adoption. TAM has frequently been used for information systems and other fields. The main feature of this model was the emphasis on perception of a potential user.

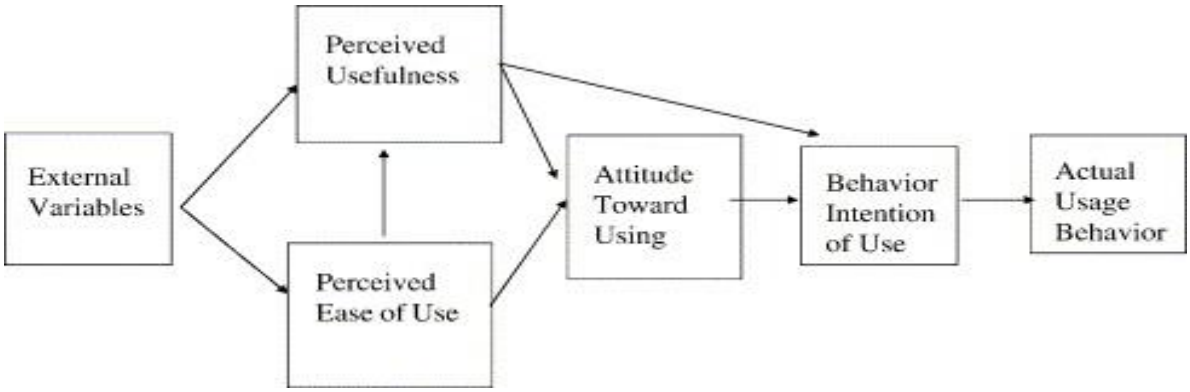

Figure 2.2: *Technology Acceptance Model. Adapted from Davis & Venkatesh, 1996, p. 20.*

The TAM model has four construct components which are as follows;

- *Perceived ease of use*- is the degree to which consumers believed that the benefits of employing new technology improved the work performance. A system with a high perceived utility in the context of information system adoption was the belief that it yielded favourable benefits from its use. According to several research, perceived utility had a direct impact to adopting new technologies.

- *Perceived ease of usefulness*- refers to the user's belief that technology reduced their physical and mental effort required to submit their returns (Alharbi & Drew, 2019). In conventional or other modified Technology Acceptance Models, this attribute was one of the primary behavioural assumptions that impacted users' desire to accept information technology. According to Meske et al. (2019) perceived ease of use influenced behavioural intention in two ways. The first was a direct

effect and the second was an indirect perceived utility. Users adopted and used the system if it was advantageous to them.

- *Attitudes*- The more positive the attitude about technology, the higher the actual usage Afrizal, et al. (2020). Honaker et al. (2025) emphasized that it was crucial to highlight that the external circumstances shaped a person's perceived ease of use and utility of technology, and these forces might have had a negative impact on attitudes. Limited training on new systems, user age, bandwidth challenges, slow data access, time delays in filling tax returns and limited equipment led to a negative impact on the attitude on the use of tax system.

- *Actual behaviours*- According to Soneka & Phiri (2019), internet experience influenced the adoption of an E-tax system; the more individuals were familiar with internet, the more they were keen to utilize and experience it and the more likely that they found it easy to adopt an E-tax system.

2.2.3 Hypothesis Testing

The hypotheses tests of this study aligned with the research objectives are:

Research Objective 1: To examine the key drivers of effective tax digitalization in tax administration at Eswatini.

H_0= There is no significant relationship between key drivers and the effectiveness of tax digitalization in Eswatini's tax administration.

H_1= There is a significant relationship between key drivers and the effectiveness of tax digitalization in Eswatini's tax administration.

Research Objective 2: To ascertain the benefits of digitalization of the tax system for stakeholders and identify the challenges of digitalization for stakeholders.

H_0= There are no significant benefits associated with digitalization for corporate taxpayers and tax administration.

H_1= There are significant benefits associated with digitalization for corporate taxpayers and tax administration.

Research Objective 3: To identify the challenges of digitalization for the corporate taxpayers and tax administration

H_0= There are no significant challenges associated with digitalization for corporate taxpayers and tax administration.

H_1= There are significant challenges associated with digitalization for corporate taxpayers and tax administration.

Research Objective 4: To assess the impact of digital transformation on tax compliance of the corporate taxpayers in Eswatini.

H_0= Digital transformation has no impact on tax compliance of the corporate taxpayers in Eswatini.

H_1= Digital transformation has an impact on tax compliance on tax compliance of the corporate taxpayers in Eswatini.

2.2.4 Diffusions of Innovation Theory

The Diffusion of Innovations theory, conceived by Everett Rogers offered a comprehensive lens for understanding how innovations, such as the E-Tax platform, diffused through a population. According to Guo and Huang, (2024) the theory categorized adopters into innovators, early adopters, early majority, late majority, and laggards, each representing different stages of adoption. By exploring the motivations and characteristics of these groups, the theory was used to identify the factors influencing the adoption of the digital transformation in Eswatini. Innovators and early adopters provided insights into early adoption drivers, while the early and late majority, as well as laggards, revealed specific barriers at different stages.

It was possible to apply the diffusion of innovations theory to marketing plans for novel items, including electronic systems. It was also used in disciplines including communications, criminal justice, and public health. Even with its limitations, it was nevertheless a useful tool for understanding the diffusion of ideas, goods, services, technology, and habits among a community. Nonetheless, this theory had certain drawbacks, such as its failure to promote a collaborative approach to adoption. Secondly, it was more effective with behaviour adoption

than with behaviour cessation or prevention. It was not considered an individual's resources or social support to embrace the new behaviour (or innovation) (García-Avilés, 2020).

2.3 Empirical Literature Review

The empirical literature review adopted in this study, was the perspective that tax digital transformation had an impact either negative or positive in tax administration. Previous literatures indicated or reflected that the use of digital technologies in tax administration increased the level of compliance and reduced the cost of compliance for taxpayers. Many studies have been conducted to investigate the impact of Information and Communication technology on African economic growth (Adeleye & Eboagu; Chimbo, 2020; Myovella et al. 2020; Solomon & van Klyton 2020). However, little was known about the impact of digital technology on tax revenue generation across the continent. The digital economy produced activities based on digital computing technologies and the internet, as a result Sub-Saharan country enhanced domestic resource mobilisation in order to achieve long term-goals, including alleviating extreme poverty (Bassongui, 2023).

2.3.1 Tax System Digital Transformation

Tax system digitalization refers to the process of leveraging digital technologies to modernize and streamline tax administration processes. This transformation encompassed various aspects of tax collection, reporting, compliance, and enforcement, aimed at enhancing efficiency, accuracy, and transparency within the tax system (Cipek & Ljutic, 2021). Key components of tax system. Digitalization included the development of online tax filing portals, electronic payment systems, data analytics tools, and digital communication channels between taxpayers and tax authorities. Perekrestova and Nadtochiy (2020) postulated that by digitized tax processes, governments improved taxpayer services, simplified compliance requirements, and strengthened revenue collection efforts. Digitalization also enabled tax authorities to leverage data-driven insights for risk assessment, fraud detection, and enforcement activities.

However, tax system digitalization presented challenges related to data security, privacy, accessibility, and technological infrastructure (Devereux & Vella, 2020). The authors further stated that addressing these challenges required careful planning, investment in digital infrastructure, and collaboration between government agencies, taxpayers, and technology

providers. Overall, tax system digitalization represented a transformative shift towards a more efficient, responsive, and equitable tax administration framework in the digital age.

Decman et al. (2019) demonstrated that digitalization had a wide range of implications for taxation, influencing tax policy and tax administration at both the domestic and international level, offered new tools and introduced new challenges. As a result, the tax policy implications of digitalization have been at the centre of the recent global debate over whether the international tax rules continued to be fit for purpose in a rapidly changing environment.

Tax administration had recently become digital, with the application of Artificial Intelligence (AI), Internet of Things (IoT), cloud computing, block chain technology, and other technologies to various tax processes. According to an OECD survey (2021), 80% of fifty-nine tax administrations studied used data analytics tools, 75% had machine learning capabilities, and 50% had digital assistant tools, which competed for 50% of capital investment on ICT infrastructure. However, there was no solid evidence that suggested conclusively that ICT development achieved a pre-determined outcome of efficiency, effectiveness and taxpayer satisfaction (Mallick, 2021). According to Omar et al. (2020), despite significant financial investment, most ICT projects on the developed world failed to meet their objectives.

Positively, despite the world's developed countries had high e-filling rate, e-filling rates while in the developing countries remain low (Mashabela & Kekwaletswe, 2020). Some argued that technology by itself cannot lead to the success of a tax administration that was highly dependent on its ecosystem Kochanova et al. (2020). According to the research, tax compliance is defined as a circumstance in which the taxpayers satisfied all his tax duties and utilized his tax rights. It reflected a culture of compliance and awareness of tax obligations, as displayed by completely filling out tax forms, sending and settling taxes, and understanding all tax laws and regulations.

2.3.2 Benefits of Digital Transformation

Digital transformation resulted in increased efficiency. With digitalization, revenue authorities automated many of the tasks that were done manually, such as tax filing and payment. This freed up staff time for other activities, such as compliance monitoring and enforcement. A study carried out by IMF (2022) found that digitalization assisted tax administrations in reducing the cost of collecting taxes by up to 30%. Digitalization also led to improved accuracy. Hendriyetty et al. (2022) emphasized the importance of digital technology in improving tax administration accuracy by streamlining operations and making it easier to share information.

That is, digital transformation assisted tax administrations to improve the accuracy and timeliness of tax collection (OECD, 2022).

In accordance with the OECD (2021), digitalization held the promise of improved tax enforcement technology of the government. Digital transformation allowed the government to process more data on taxpayer's various economic results, including as earnings, capital income, consumer expenditures, gifts, and donations. Information from various sources were used to easily identify taxpayers who evaded taxes. Consequently, if digital transformation improved the enforcement technology, digitalization also lowered tax evasion. Digital transformation has contributed significantly to enhancing government revenue collection without altering the statutory tax structure. By enabling the integration and linkage of various data registers including those related to wealth, capital income, savings, publicly traded and closely held assets, homeownership, pensions, and estates tax authorities have gained improved visibility into taxpayers' financial profiles. This integration has facilitated the reduction of tax avoidance and evasion through more comprehensive and accurate data matching.

Moreover, digital systems have provided tax authorities with streamlined access to information on individual pension entitlements and benefits, particularly within public pension schemes. As a result, governments have been better equipped to verify total capital income and wealth levels, thereby improving the effectiveness of taxation on capital and wealth. These advancements underscore the transformative role of digital technologies in strengthening tax compliance and revenue mobilization. Additional benefit of digital transformation was reduced fraud and errors. Digital systems assisted in reducing fraud and errors by verifying taxpayer information and tracking tax payments. For example, a study by the World Bank (2020) found that digitalization helped tax administrations to increase tax revenue by up to 10 percent. Enhanced transparency and accountability are also achieved as another benefit of digitalization. That is, digital systems assist in improving transparency and accountability by making it easier to track and monitor tax transactions.

There were numerous digital transformation options for tax purposes, ranging from process optimization to risk identification and process automation. Emerging technologies create opportunities such as the ability to provide better and more efficient e-services, analysis of large amounts of data, improved risk management, and automate tax processes, among others. Chernousova (2021) stated that the tax systems in developing countries were characterized by high tax declaration costs which may discourage taxpayers from paying taxes. Bassongui &

Houngbedji (2023) further highlighted that the new tool of tax system technologies reduced time and costs of tax declarations. The frequency on in-person interactions between taxpayers and tax collectors promoted corruption in the manual tax systems.

Bassongui & Houngbedji (2023) emphasized that the digitalization of the tax system included a variety of features, such as electronic tax filing, which referred to the online submission of tax declarations. According to the 2016 World Bank report on digital dividends, 85% of the developed countries and 65% of emerging countries used electronic tax filing (World Bank, 2023). Bassongui & Houngbedji (2023) further emphasized that the use of electronic fiscal machines had increased over the years. These machines sent all information to tax authorities about enterprise invoices, such as buyers, value and number of transactions. The machines recorded and monitored Value Added Tax (VAT) compliance which was a primary advantage. This improved the accuracy of declarations of the returns and eliminated incorrect declarations of return forms.

2.3.3 The Challenges of Digital Transformation

Tax system's digital transformation entails numerous benefits, but it also presents a set of challenges for both revenue services and taxpayers. Here, the challenges are explored and highlighted multifaceted nature and potential implications.

One major challenge of digitalization is resistance to change. Some taxpayers are resistant to change and preferred to continue using traditional methods. Overall, digitalization is a challenging process for revenue authorities. Berberov and Milogolov (2020) asserted that for revenue authorities, one primary challenge lied in the complexity of transitioning from traditional, paper-based systems to digital platforms. The implementation of new technologies requires substantial investments in infrastructure, software, and training. Legacy systems often pose integration hurdles, necessitation of careful planning and execution to ensure seamless operations. Moreover, ensuring data security and privacy has become paramount, with digital transformation exposing sensitive taxpayer information to cyber threats and breaches.

The research further stipulated that another significant challenge was navigating the legal and regulatory landscape surrounding the tax system digital transformation. Tax laws and regulations must evolve to accommodate digital transactions, cross-border commerce, and emerging technologies like block chain and crypto currency. Harmonizing international tax frameworks further complicates matters, requiring cooperation and coordination among multiple districts. Compliance with data protection laws adds another layer of complexity, as

revenue services must safeguard taxpayer data while complying with stringent privacy regulations.

Digital transformation worsened existing issues of accessibility and equity within the tax system (Ihnatišinová, 2021). While digital platforms offer convenience and efficiency, they may exclude sectors of the population with limited internet access or digital literacy. This digital divide can widen disparities in tax compliance and access to government services, potentially undermining the fairness and inclusiveness of the tax system. Revenue authorities should address these disparities through targeted outreach, education, and alternative service channels to ensure equitable access for all taxpayers.

Vial (2020) stated that taxpayers faced their own set of challenges in adapting to digital tax systems. One concern is the burden of compliance, as taxpayers must navigate complex online portals, submit digital forms, and reconcile disparate data sources. The transition to digital filing and payment methods may also entail a learning curve, particularly for older or less tech-savvy individuals and small businesses. Ensuring user-friendly interfaces and comprehensive support services becomes essential to mitigate frustration and enhance taxpayer satisfaction.

Tripathy (2024) detailed that as tax-related information became increasingly digitized and interconnected, the potential for cyber-attacks and data breaches escalated. Taxpayers must exercise vigilance in safeguarding their personal and financial information, implementing robust cyber security measures, and staying informed about emerging threats. Additionally, the study asserted that concerns about privacy and surveillance arise as governments collect and analyze vast amounts of taxpayer data for compliance and enforcement purposes. Taxpayers may fear intrusive scrutiny and misuse of their information, eroding trust in the tax system and government authorities. Balancing the need for data-driven tax administration with respect for individual privacy rights becomes a delicate task for revenue services, requiring transparent policies and safeguards to protect taxpayer confidentiality.

2.3.4 Strategies to Overcome the Challenges of Digitalization

World Bank (2019) found out that tax administrations that invested in training and support for taxpayers and tax officials were more successful in implementing digitalization. The report stated that it was important to invest in training and support for taxpayers and tax officials who use the digital systems. This helped to ensure that the taxpayers were able to use the systems effectively and that they were comfortable with the systems. ENISA (2020) stated that tax

administrations that addressed security and privacy concerns were more successful in implementing digitalization. This implied that, the revenue authorities should also address security and privacy concerns. It is important to address security and privacy concerns before implementing digitalization. This can be done by implementing appropriate security measures and by ensuring that taxpayer data is protected. Another way to overcome the challenges of digitalization is to get buy-in from stakeholders. It is important to get buy-in from all stakeholders, including taxpayers, tax officials, and politicians, before implementing digitalization. This helped to ensure that the implementation is successful and that there is support for it. OECD (2019) then asserted that tax administrations that got buy-in from stakeholders were more successful in implementing digitalization.

According to Bobek and Horvat (2023); overcoming the challenges of tax system digital transformation required a multifaceted approach that addressed technological, regulatory, organizational, and societal dimensions. Firstly, revenue services can invest in robust infrastructure and modernize legacy systems to support seamless integration of digital platforms. Comprehensive training programs should be implemented to enhance staff competencies in utilizing new technologies effectively. Additionally, Gertzen et al. (2022) suggested that policymakers must enact flexible and adaptive regulatory frameworks that accommodate digital transactions, protect taxpayer rights, and ensure data privacy and security. International cooperation is essential to harmonize tax laws and facilitate cross-border tax compliance in an increasingly digitized global economy.

Tax Administrations should prioritize user-centric design principles to enhance the accessibility and usability of digital tax services for all taxpayers. Tailored outreach and support initiatives can help bridge the digital divide and empower underserved communities to participate in the digital economy (Fjord & Schmidt, 2023). Fostering a culture of innovation and collaboration within revenue services can drive continuous improvement and enable agile responses to emerging challenges. By leveraging partnerships with technology providers, academia, and civil society, revenue services can harness the full potential of digital transformation to build a more efficient, equitable, and resilient tax system for the future.

According to Lhassan et al. (2022) highlighted that numerous studies have been conducted to investigate the impact of ICT on African economic growth. However, there was insufficient information about the implications of digital technology for tax revenue generation on the continent. The digital economy created activities based on digital computing technologies and

the internet, as a result Sub-Saharan country must improve domestic resource mobilisation in order to achieve long term-goals, particularly alleviating extreme poverty (Solomon & Van Klyton, 2020).

The research study was aimed at improving the tax management system to provide a better service for the taxpayers and identifying issues that taxpayers might require improvements. Table 2.1 below, summarises some related literature.

Table 2.1 Empirical Literature

Theme	**No. of Articles**	**References**	**Research Gap**
Digital Tools to enhance taxpayer experience	3	(Bassey et al. 2022)	• Limited impact is focusing on enhancing taxpayer experience. • Focus is limited to developing strategies to embed digital services in tax administration.
Digital transformation of Tax Administration	4	(Nazarov et al. 2019)	• Advanced technologies continue to develop and contribute to modernization of taxation. • The paper does not explore how tax Digitalization transformation affects the different categories of taxpayers.
Impacts and Drivers of Tax Digitalization	2	(Jung and Gomez-Bengoechea, 2022)	• Analysis of factors and drivers of firm Digitalization.
Impact of Tax Digitalization on User Satisfaction	1	(Ait Lhassan, et al. 2022)	• Explores the impact of digital transformation on user satisfaction.

The study by Nazarov et al. (2019) focused on how the development and contribution of advanced technologies to the modernization of taxation. This study examined the effective use of modern technologies in tax administration and identified the important aspects that determine its efficacy. Digital transformation improves process efficiency and effectiveness of revenue collection which results to taxpayer compliance. However, the study was limited to the tax administration's perspective and overlooking how the modern technology impacts the taxpayers. The study focused on the efficiency and effectiveness of tax administration processes and how it improves the business processes. Digital transformation also enhances organisational performance with the improved processes.

Then, Jung and Gomez-Bengoechea (2022) focused on the factors and drivers that influence digital transformation in an organisation. The factors were linked to digital adoption of individuals, organisations, environment and economic factors. This study indicated that digital transformation of processes was associated with several transformations that occurred using four main channels which were communication costs, data analysis, operational transformation and lower entry barriers. The changes were associated with improved firm performance in terms of innovation, cost reduction and new business models. Most empirical estimated at the firm level support digitalization's positive impact on business performance. However, the findings were not universal, and some studies have been unsuccessful in confirming these positive effects.

Ait Lhassan et al. (2022) concentrated on the effects of digital transformation on user satisfaction on government services particularly on tax administration in Morocco. The success of the digitization of the administration was conditioned by the commitment and involvement of all stakeholders. Perceived ease of use is a key indicator for assessing and analysing user acceptance of a specific technology or system. It is also a powerful motivator for user to use technology. The limitation of the study was that tax administration needed to stay relevant to keep up with the relevant trends of technology to provide quality services in real time which meets the expectations of users in real time.

Asista & Setyowati, 2022) observed that there was a link between attitudes towards electronic taxation and tax compliance. The substantial association between the perception of online tax filling in terms of ease and simplicity, as well as the system being safe, which enhanced tax

compliance levels. Furthermore, the research concluded that taxpayers were uneasy with using an electronic system when compared to the manual system.

2.4 Chapter Summary

In summary, this chapter focused on the literature review that provided empirical evidence on the impact of digital transformation. The empirical research assessed and evaluated the research gaps from previous studies. Furthermore, the rationale that tax digitalization transformation influences revenue collection and tax compliance and the benefits and challenges of tax digital transformation. The empirical literature review indicated that the use of digital technology in tax administration had increased the level of compliance and reduced the cost of compliance. However, little was known about the implication of digital technology for tax revenue on the continent. A theoretical framework was used in this study to demonstrate how variables like performance, social influence and facilitation conditions influence the adoption and usage of new technology in tax administration.

3. RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used to investigate the perceived impact of digital transformation in the tax administration of Eswatini. This chapter explored into a quantitative method that was used as a questionnaire to investigate taxpayer's experiences during an empirical and theoretical review. It outlined all the significant elements in the research process as well as the methods that were applied in the study. This chapter provided an overview of the methodology, including a descriptive of the study, study design, intended target group, data methods, sampling procedures, data collection procedures and data analysis techniques. The methods and methodology utilized in a quantitative study were to understand corporate taxpayer's experiences on digital transformation in Eswatini while conducting an empirical and theoretical review are described technique chapter. The systematic process was used to develop, conduct and analyse research projects to produce accurate and reliable results is known as research methodology (University of Jedda & Alasmari, 2020). Tabuena et al. (2002) define research methodology as "all the procedures, tools and techniques used to collect and analyse data in order to answer research questions or test hypotheses." There are different research methods used in research, and the method to be utilised is determined by the nature of the study issue and the goal of the research. The two most common research approaches are qualitative and quantitative. The quantitative research methodology was used to acquire data for this research project. Data was collected to develop the theory using an inductive research approach (Cohen Miller & Pate, 2019). This chapter detailed the research methodology, population study, data gathering procedures, and data analysis strategies used in the study.

3.2 Research Approach

The application of a deductive approach, an inductive approach or a combination of the two approaches determined the design of a research project (Rezigalla, 2020). The inductive approach was used in qualitative research studies, with the end goal of developing a theory that provided an explanation of a situation (Otani.2017). According to Otani (2017), qualitative is a method of investigating and understanding human experiences, behaviours and attitudes through the collection and analysis of non-numerical data. The method for conducting a qualitative study was flexible and iterative, with a focus on understanding the participant's experiences and views (Jameel et al., 2018). The implementation of the most recent technologies that allowed for the identification of specific elements that affected the efficiency of tax administration may be evaluated. This can be done by using a quantitative research

design to observe the potential technologies for the organisation of tax administration procedures. This study used a quantitative technique to acquire a more detailed knowledge of corporate taxpayer's perception and experiences towards digital transformation in tax administration. The quantitative research was an appropriate method for this study because it provided for in-depth analysis of the participants experiences, perception, attitudes and insights that was derived from the questionnaire survey. The chapter of this project utilized the deductive approach by constructing a model based on the theoretical study in the literature review component. The concept was subsequently to put to test by undertaking a questionnaire survey of sampled corporate taxpayer categories and interview a senior member of the tax administration. The empirical findings were quantified and analysed in order to derive conclusions.

3.3 Research Design

The study utilised a cross-sectional survey design and adopted a quantitative approach. A cross-sectional research design is an observational study that involves collecting data from a sample of participants at a single point in time (Setia, 2020). A quantitative approach is a research methodology that involves the collection and analysis of numerical data to answer research questions and test hypotheses. This approach emphasized: measurement, statistical analysis, and objectivity.

The deductive research methodology is grounded in the evaluation of established theoretical constructs to determine their validity across varying contexts. This approach begins with a general theory and proceeds to formulate specific hypotheses that can be empirically tested. Deductive reasoning operates from the general to the, enabling researchers to assess whether theoretical relationships such as causality or correlation are consistently observable in broader settings. The process involves deriving testable propositions from theoretical premises, thereby allowing for systematic validation. Unlike inductive reasoning, which seeks patterns within data to generate theory, deduction involves testing anticipated patterns against empirical observations to confirm or challenge theoretical expectations.

In constructing a model based on the theoretical study, the questionnaire survey and interview tested this model by using deductive reasoning to test the validity of the theory in the digital transformation.

The following benefits of the deductive methods are;

a) The ability to delineate casual links between ideas and factors.

b) Possibility of quantitative evaluating concepts.

c) Possibility of broadly interpreting research results.

3.4 Population of the study

Population may be defined as the number of units (individuals, organisations, events, objects, or items form which samples are selected for measurement (Shukla, 2020). The population of the study comprised of large taxpayers in terms of company turnover as shown in Table 3.1 below.

Table 3.1 Taxpayer Segmentation

Segment	Turnover Band
Corporate Taxpayers (Large)	Above SZL100 Million
Large-medium	SZL25 Million – SZL100 Million
Medium	SZL6 Million - SZL25 Million
Small	SZL500 Thousands – SZL6 Million
Micro	Less than SZL500 Thousands

(Source: African Multidisciplinary Tax Journal)

The study employed a census methodology, a method that entailed gathering information from everyone in a population. With this probability sampling technique, every individual or element in the population had an equal chance of being included in the sample (Noor & Tajik, 2022). This approach was ideal because, with 240 taxpayers in the corporate taxpayer population, a representative of the corporate taxpayer population was presented and had an equal chance of being included in the sample in the event of non-response. The sample size of this research was 100 respondents for corporate taxpayers with margin error 0.05 for quantitative research and one senior representative of the tax administration which resulted to the overall population of 101.

The corporate taxpayers (those with a turnover above SZL100 million) were the main focus in the study as about 95% of tax revenue was collected from these taxpayers. The size of the sample was determined using an online sample size calculator.

The parameters were as follows:

A. Sampling Criteria

i. Companies in the large segment.

ii. Companies who are residence in Eswatini.

iii. Companies who have been active in their tax obligation for three (3) years or more.

B. Exclusion criteria

i. Companies not in the large segment.

ii. Companies who were not residence in Eswatini.

iii. Companies who have been active in their tax obligation for less than three (3) years.

To select the sample for this study, a census sampling technique, a form of probability sampling was utilised. Census sampling involves collecting data from the entire population, aiming for a complete enumeration. In this case, the survey questionnaire was distributed to all registered corporate taxpayers. However, for analytical purposes, the final sample size was limited to 100 respondents, representing a subset of the broader population. Census eliminates sampling error because every population is represented. This was critical especially when studying policy-sensitive topics like tax administration, where even small biases can distort findings. It gave equal opportunity for each member of the population to participate in the research. Errors resulting to random sampling were unavoidable when utilising a portion of the overall population and increased the level of accuracy. The justification for using 100 sample was that for any population under 10,000, a sample of 100 provides a confidence level of 95% with a margin of error of approximately ±10%, which is acceptable for exploratory studies. The sample size also balances accuracy with feasibility in terms of time and cost. It also ensured that inclusion of multiple corporate taxpayers from different industries perspectives without were included and providing diversity overcomplicating data collection. In this study, the population sample was on corporate taxpayers rather than focusing on all taxpayers. By specifying the margin of error, indicated how much error was intended to be permitted for the sample mean to differ from the population mean.

3.5 Data Collection Methods

Data collection was gathered from primary sources. Taherdoost (2021) defined primary data as information that had not been published or edited by anyone. There are various methods of collecting data thus this study used Google forms to gather and collect primary data for specific research. As a result, primary data had higher validity, dependability, objectivity and

authentication than secondary data. According to Taherdoost (2021), using primary sources helped in gathering high quality data, which can improve outcomes, and it also allowed the participants to submit more information.

Data was collected directly from the corporate taxpayers, with a focus on their experiences of electronic tax platform. A questionnaire survey (Annexure A) has been made, that the respondents answered with a series of questions and providing secure responses to supply the research with information. The questionnaire survey was distributed to respondents digitally via a shared link on e-mail. The questionnaire comprised of structured and unstructured questions. The questionnaire survey was a hybrid of open-ended and closed-ended questions to elicit in depth responses from corporate taxpayers about their perspectives, experiences and narratives. According to Taherdoost (2019), qualitative is open-ended. This category's responses are divided into a response scale. As a result, closed-ended questions are pre-coded to enable for faster data analysis. On the questionnaire survey, closed-ended questions were utilised to collect specific, unique information. The reason for using the questionnaire survey was because they were less expensive and more convenient and non-biased. An online survey through Google forms was be used to gather data. The geographic reach, good data management, cost-effectiveness, structure, and standardization of this data collection approach was the deciding factors in the selection.

The study used structured questionnaire with both closed ended and Likert-scale items to measure the following construct:

- Digital adoption of new technologies which used indicators such as the frequency interactions of the tax administration, frequent use of E-Tax systems and digital tools.
- User-friendliness of digital tools which used indicators on how easy and difficult were to use the digital tools. The ratings scale is 1 being poor to 10 being excellent.
- User satisfaction of the digital tools which used indicators on ease of use, accessibility, and perceived reliability of digital platforms. The scales used were extremely not useful to extremely useful on percentage change reported by respondents.
- Digital impact on compliance behaviour which used indicators in increased timely filing, reduction in non-compliance cases, timely payment of taxes and accurate

declarations of returns. The scale ratings that were used was the percentage change reported by respondents from significantly impacted from the worst to significantly impacted for the better.

These measures directly aligned with the research objectives of assessing the impact on efficiency, compliance, user experience and the impact of digital transformation on tax compliance whether negative or positive on the corporate taxpayers in Eswatini. They are quantifiable, enabling statistical analysis (e.g., correlation, regression) to determine relationships between digital transformation and tax administration performance.

Pilot research was carried out to evaluate the questions' reliability before the online questionnaire was fully implemented. A limited sample of participants were given the questionnaire as part of the pilot study in order to identify any ambiguities, unclear language, as well as other possible problems with question comprehension. The pilot study's feedback then guided the necessary modifications to improve the survey instrument's efficacy and intelligibility. An interview was carried out (Annexure B) with one senior member of the tax administration company in Eswatini.

Throughout the pilot project, Cronbach's alpha was used to gauge the reliability of internal consistency. This statistical metric evaluated the validity of a group of survey items or questions. Greater internal consistency is shown by a high Cronbach's alpha, indicating that the survey instrument's questions were consistently measuring the same underlying construct. Through the use of this metric, the study sought to guarantee that the questions were dependable and consistent in gauging the targeted elements impacting E-tax user satisfaction.

The measurement of the questions used Likert scale. Jebb, A.T (2021) highlighted that the Likert provides a convenient way to measure unobservable constructs. It was in the interest of the research in how the Likert scale was used to assess the descriptive data once it had been through several summing up steps and associated central tendency procedures.

Before administering the questionnaire to a larger base, a pilot test was conducted on 10 participants. The pilot study was the ability for the researcher to test the survey in a controlled setting to highlight areas of improvements that were needed before distribution to a larger audience Anupama et al. (2023). Furthermore, it provided a warning if the proposed methods and instruments would possibly fail.

3.6 Data Analysis Technique

Google forms collection system automatically collected the data and transferred it to an Excel file. Any anomalies discovered in the data were cleaned up for consistency. The following procedure was followed in order to conduct data analysis on STATA ver.17. Data collected involved the use of non-numerical data in order to explore and understand aspects of the problem statement. This type of research focused mainly on collecting subjective and open-ended that guided the researcher in coming up with possible propositions.

To analyze the qualitative data collected through open-ended survey responses, the study employed content analysis, with a specific focus on thematic analysis. Content analysis enabled the systematic examination of textual data by categorizing information into meaningful units such as words, concepts, and themes. This approach facilitated the identification of recurring patterns and the organization of data into coherent categories. Within this framework, thematic analysis was utilized to interpret the underlying meanings embedded in the language used by respondents. By identifying and analyzing repeated themes across the dataset, the study was able to extract key insights into taxpayer perceptions and experiences. These themes were further enriched through sentiment analysis, which provided additional context regarding the emotional tone and attitudes expressed in the responses. The analytical process was guided by a coding framework, which structured the data into distinct codes or categories. This framework served as a tool for organizing and interpreting the qualitative findings, ensuring consistency and rigor in the analysis. Therefore, the process of thematic analysis is also referred to as “coding”. According to Yan & Jin (2025) thematic Analysis (TA) was utilised to examine the qualitative information from the responses. This analysis was used to recognize, study, classify, define, and report patterns in the data, and one of the strengths of the tool was that it was easy to use (Dawit, 2020) . Process of the TA is best described in five steps namely compiling, disassembling, reassembling, interpreting, and concluding.

1. Being able to compile and organise the data into a useable form is a critical step in finding answers to the research question/s. Process involved in compiling the data is transcribing the data from the excel sheet (organising it into uniformed cells under the correct headings/questions asked in the questionnaire) to make it easier to see the data. This step enabled the researcher to be familiar with meanings of any phrases and specific terms used by the participants that responded to gain a greater understanding.

2. Directly after compiling, the following step is to separate the data. This step is referred to as disassembling which involves separating the data and creating similar groupings. Similar groups are established by the identification of themes, concepts or ideas that are similar in nature. This is also referred to as coding where the researcher identifies similarities and differences within the data in an organized manner. This was key in being able to retrieve and categorize similar data so that the researcher can go back and examine the coded data across the dataset that were associated with the coding used.

3. Following the coding process, this is then mapped/grouped and then categorized into meaningful themes. The purpose of having a theme is to ensure that it captures something meaningful about the data with respect to the research question and represents some level of perceived response or specific meaning that the data is trying to reveal. That is, Byrne, (2022) explained that themes as simply patterns established in the codes where they take numerous organized related data in order to illustrate a bigger picture that the data is trying to reveal.

4. The fourth step is interpreting the data which involves making informed conclusions based on the data presented as meaningful themes. This process happens in conjunction with the other first three steps – it is not isolated. Dawadi (2020) highlighted that there is no specific method for a great interpretation technique but does highlight that there are five qualities which should be adhered to when looking at qualitative interpretations. First, the interpretation is to have a beginning and an end meaning that it should be complete and easy for readers to follow. Second, the interpretations should not be bias meaning that if other researchers analyse the same data, they should reach a similar interpretation. Third, the interpretation should be factually correct and be representative of the raw data. Fourth, the sole purpose of the interpretation of the data is to assist with the research question and provide meaningful propositions. Fifth, the way that the interpretation is presented should be in a formal and acceptable manner to ensure it remains credible to other fellow researchers.

5. Following the interpretation of the data/themes then conclusions were made in response to the research questions or purpose of this study. In some cases, the conclusion provides a new perspective to the research question (Castleberry, 2018).

3.7 Reliability

Reliability defined by Andersson et al. (2024) as the consistency with which an instrument measures the characteristic that it is intended to measure. By reducing causes of measurement error such data collection bias, reliability can also be guaranteed. By administering the

questionnaires and standardizing conditions like displaying identical qualities to all respondents as friendliness and support, data collection bias was reduced. By assuring privacy, secrecy, and general physical comfort, the place where data was collected must be comfortable. Reliability in this study was ensured by minimizing potential sources of measurement error, particularly those arising from data collector bias. Standardized procedures were followed during data collection to maintain consistency across all responses. Additionally, the use of a structured survey instrument helped reduce variability in interpretation, thereby enhancing the reliability and replicability of the findings. To maintain confidentiality, Participants did not write their names on the questionnaires and personal details such as Tax Identification Number (TIN) were not incorporated on the questionnaire. Participants had the right to voluntary participation in this study. Data management was significant, and the data collected is protected and guarded to ensure that it was used only for the purpose of this study.

The Cronbach's alpha formula is:

$$\alpha = \frac{N\bar{c}}{\bar{v}+(N-1)\bar{c}} \qquad (1)$$

Where:

$\bar{v}$ = Average variance

$\bar{c}$ = Average interitem covariance

N= Number of items

The table below indicates the interpretation of the Cronbach's alpha. Values significantly greater than 0.9 were considered important, as they signal that several traits were too comparable therefore may provide the same result.

Table 3.2 Cronbach's Alpha Range

Cronbach's Alpha	Interpretation
Greater than 0.9	Excellent
0.8-0.89	Good
0.7-0.79	Acceptable
0.6-0.69	Moderate
0.5-0.59	Poor
Less than 0.5	Unacceptable

(Source: International Journal of African Reflection)

3.8 Validity

Validity refers to the extent to which a research instrument accurately measures the concept it is intended to assess. According to Sürücü and Maslakçı (2020), an instrument's validity is determined by its ability to capture the true essence of the phenomenon under investigation. In this study, content validity was prioritized to ensure that the survey instrument adequately represented the key constructs related to the adoption and usage of electronic tax platforms. To achieve content validity, the questionnaire was carefully designed to include a diverse range of items that assessed respondents' knowledge, perceptions, and experiences with the electronic tax system. These items were aligned with the study's objectives and theoretical framework, thereby enhancing the instrument's relevance and comprehensiveness.

Content validity relates to how well an instrument represents the factors under consideration in this study. To ensure content validity, survey questionnaires included a variety of questions on the knowledge of electronic tax platform and its usage. The questions were based on information acquired throughout the literature review to ensure that they accurately represented the participant's understanding about digital transformation in tax administration. All questionnaires were distributed to all subjects. The questions were formulated in a simple language for clarity and ease of understanding. Clear instructions were issued to the subjects and for those that could not read, the researcher completed on their behalf.

In addition, permission was requested from the tax administration organisation. The participants provided permission/consent before the survey. The administration of the questionnaires and the creation of the reports, confidentiality, self-determination and anonymity were maintained. By pre-testing the survey, reliability and validity were further strengthened. A qualitative, descriptive survey design was utilised in this study. A questionnaire and interview were presented to the 156 participants of all corporate taxpayers in Eswatini in order to gather the data. Both closed and open-ended questions were included in the survey. A senior member of the tax administration organisation in Eswatini undertook an interview. Permission was requested from the tax administration organisation. The participants were given permission or consent before the survey. The administration of the questionnaires and the creation of the reports, confidentiality, self-determination and anonymity were always maintained. To establish validity, individuals were given questionnaire surveys and a survey guide. By pretesting the survey, reliability and validity were further strengthened. In summary, this chapter defined the research methodology, including the population, sample, data

collection instruments as well as strategies used to ensure the ethical standards, reliability and validity of the study.

3.9 Research Paradigm

The research adopted a positivist paradigm as its primary philosophical stance, complemented by interpretivist elements to enrich contextual understanding. The positivist orientation is justified by the study's emphasis on objectivity, measurement, and hypothesis testing. The investigation sought to determine the relationship between digital transformation and tax compliance among corporate taxpayers in Eswatini, employing established theoretical frameworks such as the Digital Transformation Theory, Technology Acceptance Model (TAM), and Diffusion of Innovations Theory. These theories provided a deductive foundation for formulating hypotheses, which were subsequently tested through empirical data collection and statistical analysis. Positivism was therefore appropriate because it assumes that social phenomena, such as compliance behaviour, can be observed, quantified, and analysed to reveal generalisable patterns.

While the study was predominantly positivist, an interpretivist lens was incorporated through qualitative inquiry to capture the exact perceptions and experiences of taxpayers and tax administrators. This practical stance acknowledges that understanding the complexities of digital adoption requires both measurable constructs and subjective insights.

The research employed a mixed-method design, integrating quantitative and qualitative approaches to achieve methodological triangulation. The quantitative component utilised a cross-sectional survey design, administered via Google Forms to a census sample of corporate taxpayers with annual turnover exceeding SZL100 million. This design enabled the collection of standardised data at a single point in time, facilitating statistical analysis of relationships among variables such as user-friendliness, perceived usefulness, and compliance behaviour. Likert-scale items were employed to measure attitudes and perceptions, and data were analysed using STATA software through descriptive statistics, correlation analysis, and reliability testing (Cronbach's alpha).

The qualitative component comprised a semi-structured interview with a senior tax administrator and open-ended survey questions. These were analysed using thematic analysis to identify recurring patterns and contextual factors influencing digital adoption. The inclusion of qualitative data enhanced the depth of understanding and provided explanatory insights into challenges and attitudes that quantitative measures alone could not capture.

In summary, the choice of a positivist paradigm with a mixed-method design was appropriate for this study because it allowed for rigorous hypothesis testing while accommodating the interpretive exploration of taxpayer experiences. This approach ensured validity, reliability, and comprehensive insights, thereby aligning with the research objectives and contributing to evidence-based policy recommendations. Through pilot testing, internal consistency checks, expert validation, and triangulation, the study ensured that the findings are both reliable and valid. These measures collectively enhance the robustness of the research and support the credibility of conclusions drawn.

3.10 Ethical Considerations

This study was considerate of the ethical conduct. Ethical considerations are paramount in research involving human participants. In the study, the following ethical principles were adhered to:

i. **Informed Consent**: Participants were properly informed about the purpose of the study, the nature of their participation, and the potential risks and benefits. Consent was obtained before participants take part in the online questionnaire.

ii. **Anonymity and Confidentiality**: Participants' identities were kept confidential, and the data collected was anonymised. Only aggregate data was presented in the final report to ensure the privacy of individual participants.

iii. **Voluntary Participation**: Participation in the study was completely voluntary, and participants were able to cancel any stage without facing any consequences or being penalised.

iv. **Avoidance of Harm**: Measures were taken to minimize any potential harm to participants, both physical and psychological. This included careful wording of questions and providing support resources in case participants experience discomfort.

iv. **Approval from Ethical Review Board**: The researcher sought for ethical approval from the Wits Business School Ethics Committee.

3.11 Chapter Summary

This chapter defined the research methodology, including the population, sample, data collection instruments that were used in the study. A structured questionnaire was developed and administered via Google Forms to corporate taxpayers with an annual turnover above SZL100 million and STATA software was used to analyse the data. This measure was justified because it directly addressed objectives related to taxpayer perceptions, usability of digital

platforms, and compliance behaviour. Closed-ended questions using a Likert scale (that is a 5-point scale for usefulness, ease of navigation, and willingness to adopt new technologies) allowed for consistent measurement and statistical analysis. The Likert scale was used to measure constructs such as user-friendliness of digital platforms, perceived usefulness of digital tools and the impact on compliance behaviour. This measure was justified because Likert scales are widely recognized for assessing attitudes and perceptions, providing ordinal data suitable for descriptive and inferential analysis. For a depth of insight, open-ended questions complemented quantitative data by capturing nuanced experiences and recommendations, enhancing the richness of findings. A pilot test was conducted to refine ambiguous questions. Additionally, a semi-structured interview was conducted with a senior member of the tax administration to triangulate survey findings and capture institutional perspectives. This measure was justified because it; provided qualitative insights into implementation challenges and strategies. Also, it enhanced the credibility of findings through multiple data sources. Descriptive statistics and correlation analysis were performed using STATA to examine relationships among variables. Then, with qualitative analysis, thematic analysis was applied to open-ended responses and interview data to identify recurring patterns and themes.

To ensure reliability, the study employed standardised data collection procedures through Google forms, pilot testing to refine ambiguous questions, and internal consistency checks using Cronbach's alpha, which indicated acceptable reliability. Structured Likert-scale items further minimised variability in responses. Validity was enhanced through content alignment with established theories, expert review of the instrument, and construct validation via correlation analysis. Methodological triangulation combining quantitative survey data with qualitative interviews strengthened interpretive depth and supported findings. Ethical safeguards, including informed consent and anonymity, reduced bias and encouraged honest responses. These measures collectively ensured that the research findings are both credible and robust.

4. DATA ANALYSIS

4.1 Introduction

This chapter presents the results of the primary data collected for the study from entities in the large segment. The main objective of the study was to investigate the impact of digital transformation of the tax administration in Eswatini. The chapter begins with descriptive statistics to help understand the population structure to identify a fair representation of what was achieved. The chapter provides an analysis of the key drivers of tax digitalization, which are presented and analysed in detail. The result analysed the impact between tax digitalization and taxpayer compliance in the large segment. Finally, the chapter provides a summary of the results. The findings of the study are discussed below.

4.2 Composition of Respondents

4.2.1 Corporate Taxpayers by Sector

The study's population consists of taxpayers in Eswatini with an annual turnover above SZL100 million. Figure 4.1 depicts the various industries that the respondents represent. The results in Figure 4.1 showed that out of the sample; Other service activities and Financial and insurance activities dominate the data, making up 25% and 23%, respectively. This suggested that these sectors are the most significant in terms of proportion. Then, Wholesale and retail trade, transportation and storage, accommodation, and food service activities sector also has a notable share at 10%. Professional, scientific, and technical activities sector account for 9%, indicating a strong presence of these sectors. The Agricultural sector recorded a proportion of 8%. The data shows a diverse distribution across various sectors, with a significant concentration in service-related activities. The relatively lower proportions in sectors such as Construction (4%) and Manufacturing, mining, and quarrying (3%) suggest these are less dominant in the context provided.

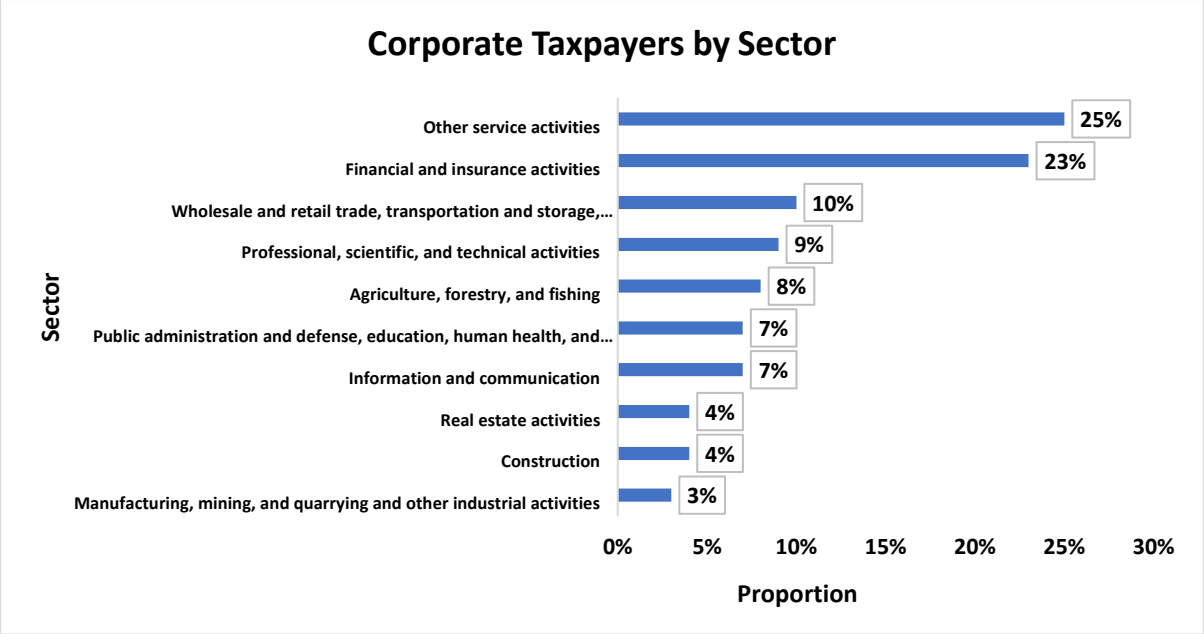

Figure 4.1 *Corporate Taxpayer by Sector*

4.2.2 Corporate Taxpayer by Interaction

Then, on the interaction with the tax administration, majority of taxpayers of about 51% interact with the tax administration on a monthly basis. This suggests that many taxpayers have regular, ongoing needs or obligations that require frequent contact. A significant portion of about 19% of taxpayers interact daily, indicating a high level of engagement or possibly complex tax situations that necessitate constant communication. Also, 15% of taxpayers indicated that they have weekly contact with the tax administration which also shows a relatively high frequency of engagement. Similarly, 10% of taxpayers interact yearly, likely aligning with annual tax filing requirements. Nonetheless, only 5% of taxpayers interact rarely, suggesting that most taxpayers have some level of regular interaction with the tax authority.

The high frequency of monthly and daily interactions indicates that the tax administration plays a crucial role in the daily and monthly activities of many taxpayers. The relatively low percentage of yearly and rare interactions suggests that most taxpayers do not limit their interactions to just annual filings or occasional needs. Therefore, given the high frequency of interactions, the tax authority should ensure robust support services are available to handle daily and monthly inquiries efficiently. In addition, regular communication and educational programs help reduce the need for frequent interactions by providing taxpayers with the knowledge and tools they need to manage their taxes more independently. Not only that but,

the tax organisation may need to allocate resources to ensure that both high-frequency and low-frequency interactions are managed effectively, ensuring all taxpayers receive timely and accurate support.

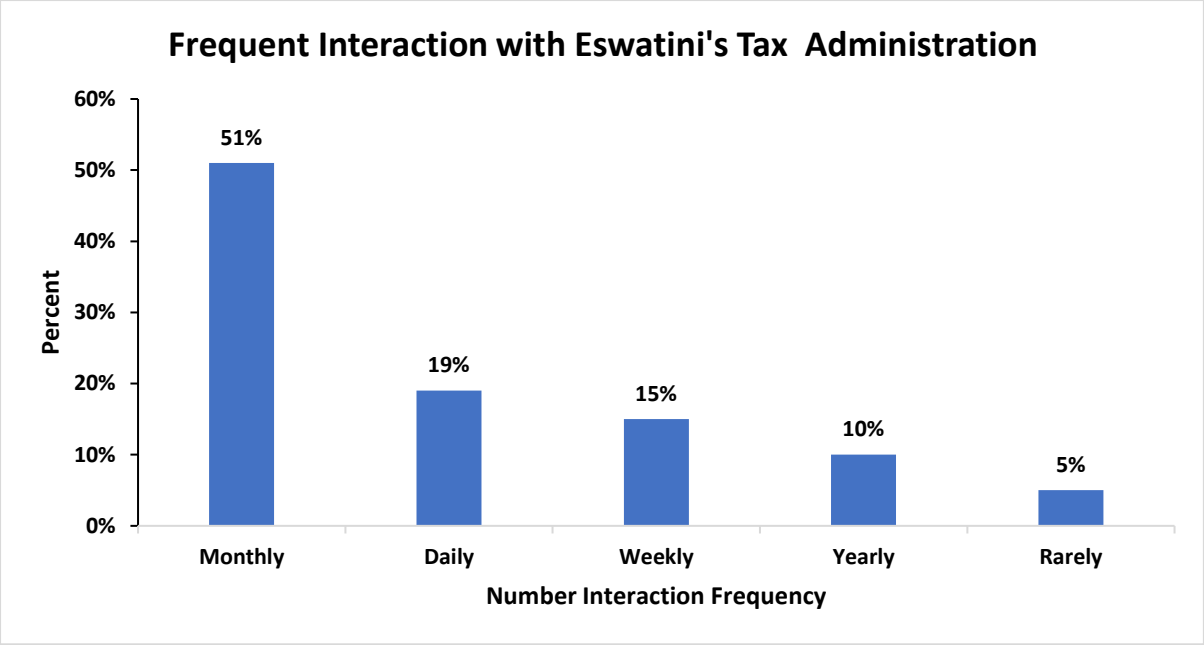

Figure 4.2 *Frequency of Interaction with the Tax Administration*

The most preferred interaction mode helps in understanding the suitable interactions entities are more content with. Table 4.1 below displays the different platforms the tax administration offers to clients. The most preferred method, with 36% proportion of the sample favoured the E-tax platform which is a self-service platform that is accessed 24 hours. This indicates a strong preference for digital, self-service solutions that allow taxpayers to manage their taxes independently. Close behind, with 35% of respondents preferring emails and WhatsApp as their communication channels. This suggests that many taxpayers value direct, written communication that can be easily accessed and referenced. Then, 19% of respondents prefer in-person interactions, highlighting the importance of personal contact and the need for physical service centres. In Addition, 7% of respondents indicated that they prefer mostly utilising platforms such as social media (for instance Facebook) and the tax administration website demonstrating a smaller but notable group that engages with the tax authority through more public or informational channels. Moreover, 3% of respondents prefer other methods, which could include phone calls and postal mail. The high preference for E-Tax Platform, emails and WhatsApp suggests that digital and remote communication methods offered by the tax administration are highly valued by taxpayers. The significant proportion of taxpayers who

prefer physical interactions by visiting the service centres indicates that there is still a need for traditional, in-person services. Finally, the lower preference for other platforms such as the website suggests that these platforms are less commonly used for direct communication with the tax administration but may still play a role in providing information and updates.

Table 4.1 Preferred Interaction Mode

Preferred Interaction	Frequency	Percent	Cumulative Frequency
Self Service/ E-Tax Platform	36	36%	36
E-mail/ WhatsApp	35	35%	71
Service Centre/ Face to Face	19	19%	90
Social media/ Website	7	7%	97
Other	3	3%	100
Total	**100**	**100%**	

The corporate taxpayers were requested to indicate if they faced any navigation challenges while using the digital technologies. The aim of this question was to determine the efficiency of the digital technologies of the tax administration. Nearly half of the corporate taxpayers' face navigation challenges. That is, 48% of respondents have encountered challenges or issues with the digital services. This indicates that a significant portion of taxpayers experience difficulties, which impacts their overall satisfaction and efficiency in managing their tax obligations. Some of the reasons stated include; the system not been user-friendly, not easy to navigate and inefficient navigation guidelines, difficulties in attaching supporting documents since the system icons were not easily accessible along with inaccurate account statements. On the contrary, a slight majority do not face challenges which is 52% of respondents have not faced challenges, suggesting that the digital services are functioning well for just over half of the users.

From this distribution, it is observed that the close split between those who have faced challenges and those who have not highlighted the need for continuous improvement in the digital services offered by the tax administration. Additionally, understanding the specific challenges faced by the 48% who reported issues that provided valuable insights into areas that need enhancement. This implied that the tax administration needs to conduct a user feedback

mechanism and conduct regular updates and maintenance of the digital platforms based on the user feedback.

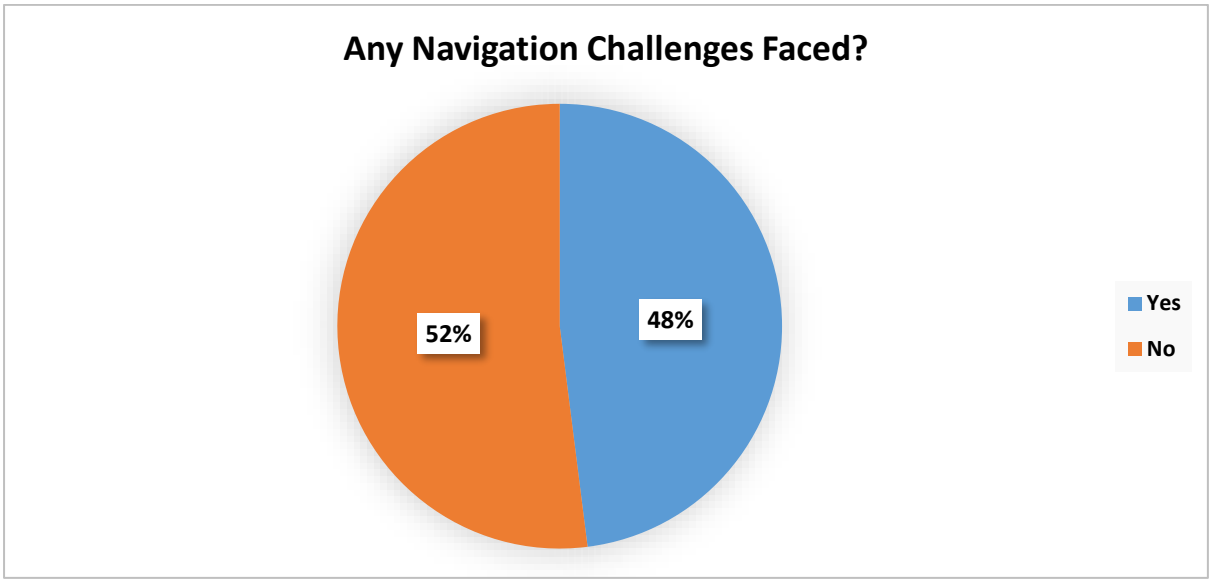

Figure 4.3 *Proportion of taxpayers with digital services navigation challenges*

4.2.3 Navigation of the Digital Tools

When it comes to the navigation of the digital tools, a majority of respondents find the navigation of digital platforms easy, with 36% rating it as "Extremely Easy" and 46% as "Somewhat Easy." This totals to 82% of respondents who have a positive experience. Then, 4% of respondents find the navigation "Somewhat Not Easy," and 1% found it "Extremely Not Easy." This indicates that negative experiences are extremely limited. Additionally, 13% of respondents are neutral, suggesting that while they do not find the navigation particularly easy, they also do not find it difficult. This highlights that high percentage of positive feedback emphasises the effectiveness and user-friendliness of the digital platforms, the minimal negative feedback suggests that the platforms are generally well-designed and accessible, and the neutral responses indicate that there is still room for improvement to enhance the user experience further.

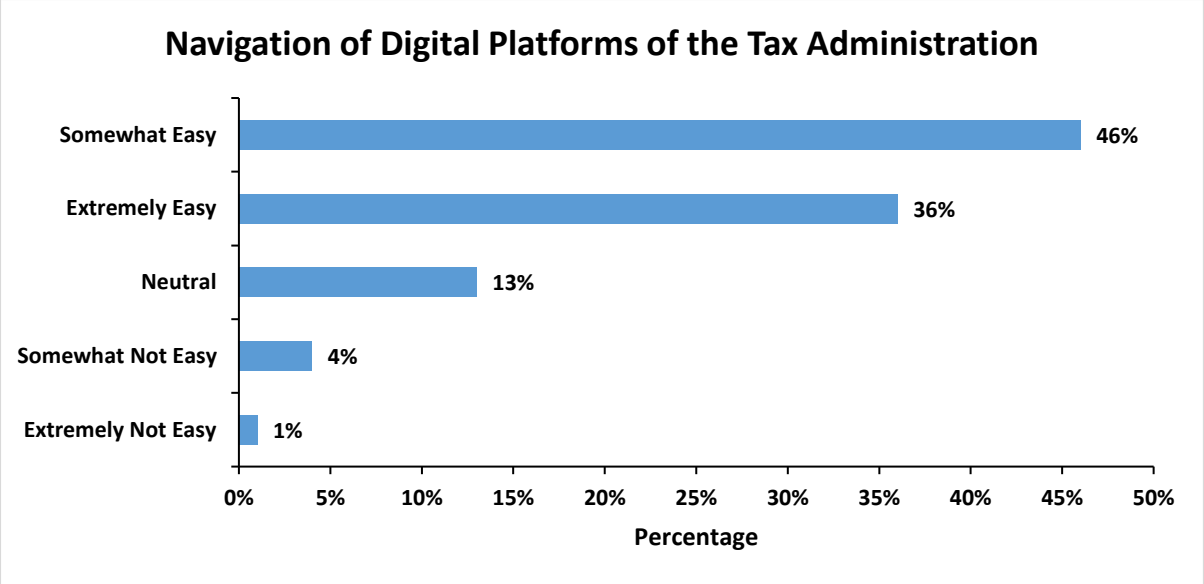

Figure 4.4 *Satisfaction with the digital tools*

4.2.4 Usefulness of digital Tools

A significant majority of respondents find the digital tools useful, with 50% rating them as "Extremely useful" and 41% as "Somewhat useful." This indicates that 91% of respondents see a positive impact on their tax compliance due to these tools. Only 1% of respondents find the digital tools "Somewhat not useful," and none found them "Extremely not useful." This suggests that negative experiences with the digital tools are minimal. Then, 8% of respondents are neutral, indicating that they neither find the tools effective nor ineffective when it relates to the compliance of their tax obligations.

Therefore, it is observed that the considerably positive feedback highlights the effectiveness of the digital tools in aiding tax compliance. However, minimal negative feedback and neutral responses suggest that there is still room for improvement to convert neutral users into satisfied users. As the study hypothesised that there is no significant impact of digitalization on tax compliance. The null hypothesis is rejected and conclude that tax digitalization has an impact on tax compliance.

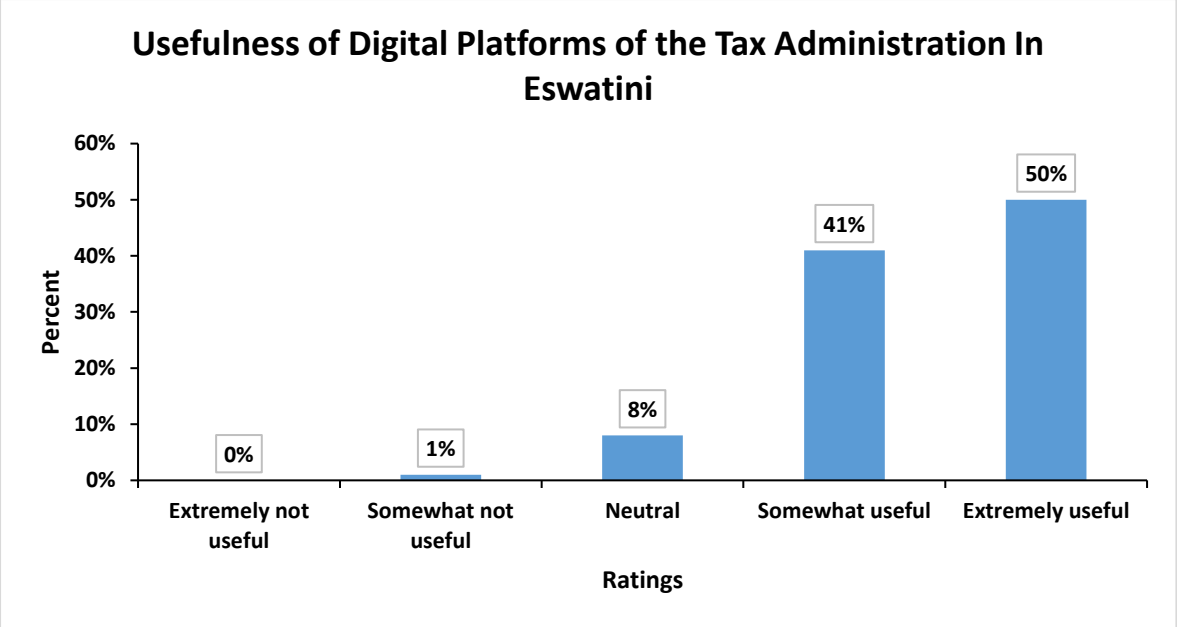

Figure 4.5 *Usefulness of the Digital Tools*

4.2.5 Willingness to Adopt new technologies

Relating to the willingness to adopt new technologies; a significant majority (83%) of respondents are willing to continue or migrate to a completely digitalized tax administration. This indicates strong support for digital transformation within the tax administration. This was due to the respondents stating that digital tools were extremely useful since it saves time, making it a lot more efficient and less costly to meet their tax obligations which makes it easier for them to comply. The respondents further highlighted that submission of returns have been made easier and convenient as they submit their returns in the comfort of their own offices which resulted to the avoidance of long queues at the service centres thus influencing their filing compliance. Only 4% of respondents are not willing to digitalise, suggesting minimal resistance to the shift towards digital services. These respondents stated that they faced internet issues thus have a challenge when accessing the digital platforms. The rest of the respondents were uncertain with the full digitalization of the tax administration, stating that while they are not opposed to digitalization, they may have concerns or need more information before fully committing.

Therefore, substantial willingness to embrace digitalization highlights the positive reception of digital tools and services among taxpayers and the small percentage of taxpayers with a discomfort suggests that any barriers to digitalization are likely manageable. The uncertainty among some respondents points to the need for further engagement and reassurance to address any concerns they may have. Hence, the tax administration needs to promote the digital

benefits, engage with the 13% of uncertain respondents to understand their concerns and provide targeted information or support to address these issues as well as identify and mitigate any barriers that the 4% of dissatisfied respondents may face, such as lack of digital literacy or access to technology.

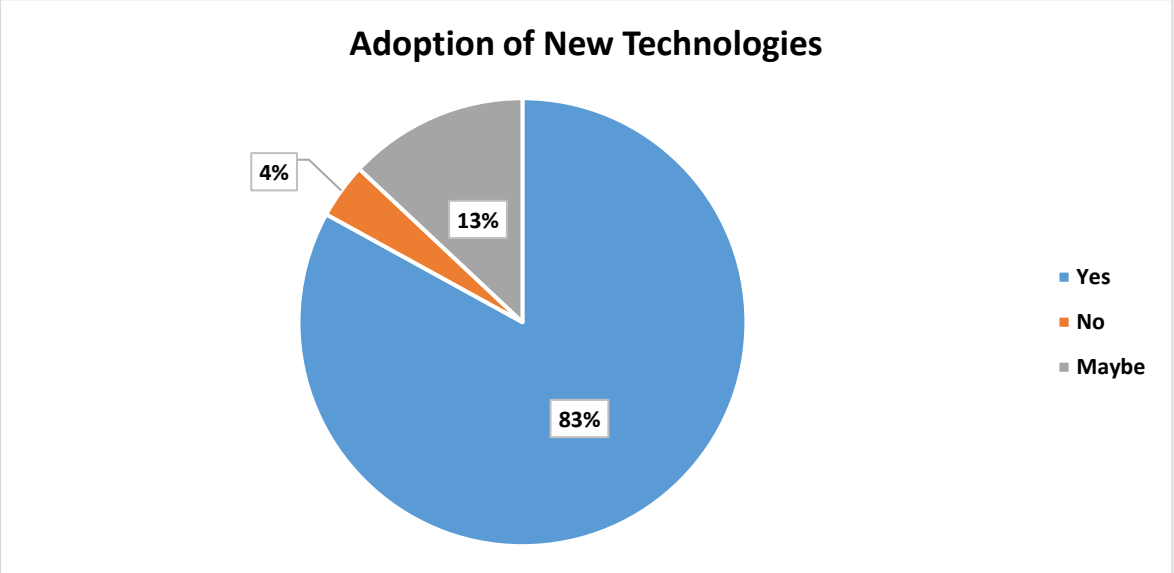

Figure 4.6 *Adoption of new Technologies*

4.2.6 User Friendliness of Digital Tools

Moreover, most of the sampled taxpayers indicated that the digital tools were user friendly. A significant majority of respondents find the digital platforms user-friendly, with 20% rating them as "Very Easy" and 60% as "Easy." This totals 80% of respondents who have a positive experience. 17% of respondents are neutral, indicating that while they do not find the platforms particularly easy, they also do not find them difficult. Only 2% of respondents find the platforms "Hard," and 1% found them "Very Hard." This indicates that negative experiences are extremely limited. Hence, it is observed that the high percentage of positive feedback highlights the effectiveness and user-friendliness of the digital platforms, the minimal negative feedback suggests that the platforms are generally well-designed and accessible, and the neutral responses indicate that there is still room for improvement to enhance the user experience further.

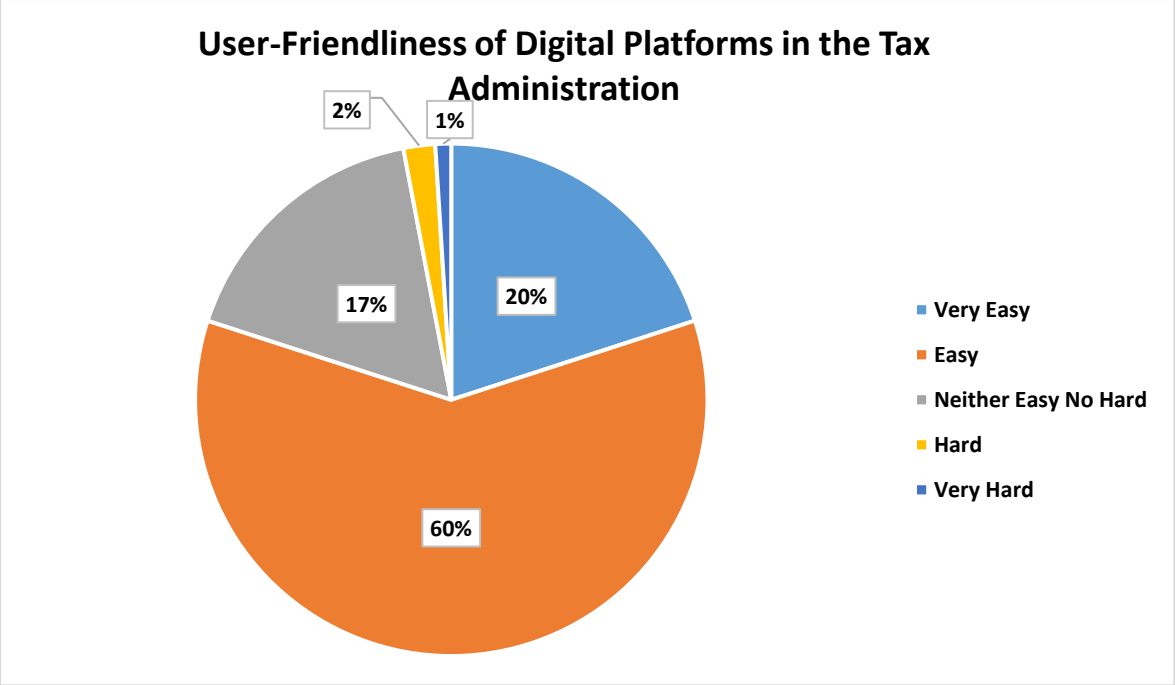

Figure 4.7 *User-Friendliness of Digital Platforms*

4.2.7 Digital Tool Ratings

The respondents were then requested to rate the digital tools of the tax administration. This helps in understanding the user experience, evaluating the efficiency of the digital services and to determine whether it enhances tax compliance. The results in figure 4.8 below reflects the distribution of the rating in a scale of 1-10 (1-being poor and 10-being excellent). The majority of respondents rated the digital services as a 6 (39%), indicating a moderate level of satisfaction. A significant portion of respondents rated the services between 7 and 8 scores, with 12% giving a 7 score and 24% giving an 8. This suggests that many users find the services to be above average. Only a small percentage of respondents rated the services poorly, with 2% giving a 1, 4% giving a 3, and 4% giving a 4 score. Then, 10% of respondents rated the services as a 5, indicating a neutral stance and a small percentage of respondents rated the services as excellent, with 2% giving a 9 score and 2% giving a 10 score.

It is observed that, the majority of ratings fall in the mid to high range (6-8), indicating that most users find the digital services to be satisfactory to good. Therefore, given the moderate satisfaction levels, there is an opportunity to enhance the digital services to move more users from a 6 to higher ratings.

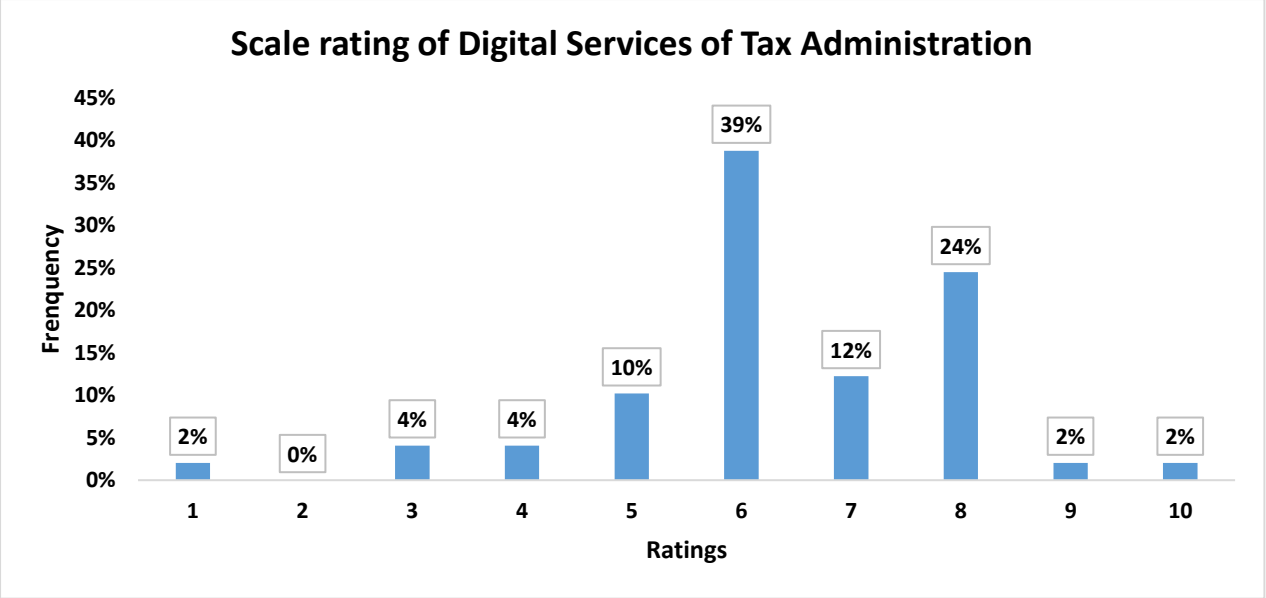

Figure 4.8 *Level of Satisfaction Rating*

To ascertain the impact of tax digitalization on tax collection, a Likert Scale to solicit the opinions of taxpayers regarding the extent to which digitalization has enhanced tax compliance. The corporate taxpayers believe that efficiency and effectiveness of digital services have a positive impact on their payment compliance behaviour. The largest group, 47%, shows that that digital technologies have significantly improved their compliance behaviour. This highlights a strong positive impact. A significant portion, 40%, demonstrates that digital technologies have moderately improved their compliance behaviour. This suggests a notable positive influence. Furthermore, about 8% of respondents stated that digital technologies have had no impact on their compliance behaviour. This shows that a small segment remains neutral. However, 3% of respondents declared that digital technologies have moderately worsened their compliance behaviour. This adds a slight concern but remains relatively insignificant.

4.2.8 Digital Impact on Compliance Behaviour

The overall interpretation suggests that the digital transformation of the tax administration has been largely beneficial, with 87% of respondents reporting an improvement in their compliance behaviour. Only a small fraction (5%) perceives a negative impact, and 8% remain unaffected. This means that the digital tools have positively impacted the payment process which has a positive impact on the taxpayer compliance. With the introduction of TaxEase system which is a replacement of the E-Tax system, taxpayers can file returns and make payment from anywhere if they have internet connection. Previously, taxpayers had to submit returns and

make payments by visiting service centres or the tax administration headquarters which was not cost-effective.

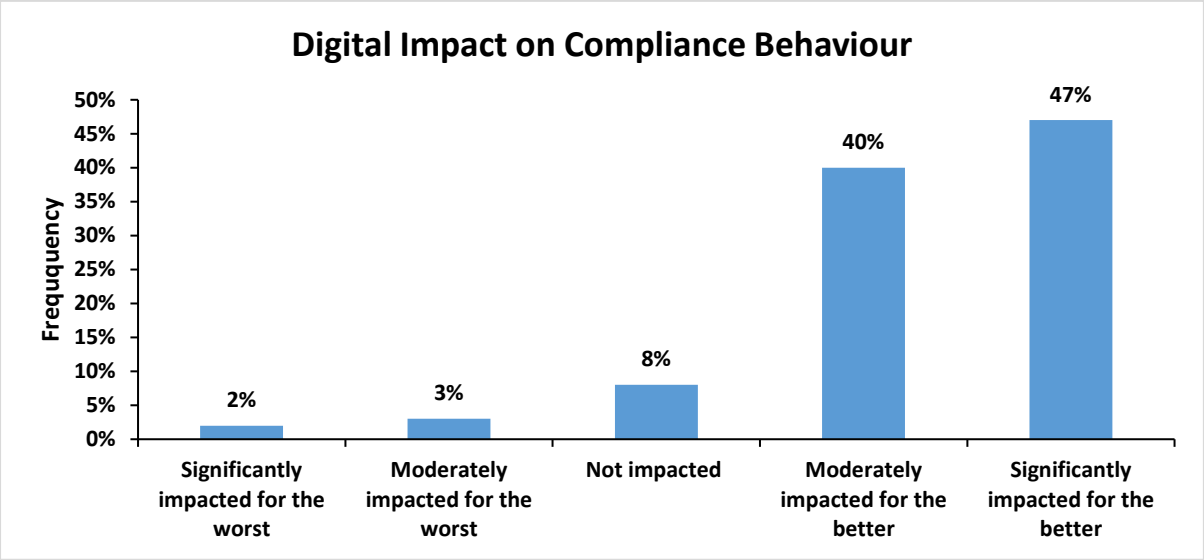

Figure 4.9 *Digital Impact on Compliance Behaviour*

4.3 Descriptive Data Presentation

4.3.1 Validity and Reliability Tests

It is essential to conduct a validity and reliability tests. The correlation matrix was used to assess the validity of data.

Table 4.2 Correlation Matrix

	Frequent interaction with the tax admin	User-friendliness of the digital services	Improvement in Compliance	Challenges faced	Usefulness of digital platforms	Navigation of the digital platforms	Willingness to migrate to new system
Frequent interaction with the tax admin	1						

User-friendliness of the digital services	0.2428	1					
Improvement in Compliance	0.2389	0.5114	1				
Challenges faced	0.0025	-0.3022	-0.1353	1			
Usefulness of digital platforms	0.2682	0.4742	0.5386	-0.301	1		
Navigation of the digital platforms	0.2622	0.5093	0.4432	-0.3588	0.6328	1	
Willingness to migrate to new system	0.1709	0.1975	0.2362	-0.1103	0.2709	0.2319	1

The table above (Table 4.2) displays the correlation between the variables. Interaction frequency with the tax administration has a weak positive correlation with most variables except with the variables that states that taxpayers face challenges with the tax digital systems. The highest correlation is with the usefulness of the digital systems at 0.268 and ease of navigating the digital platforms 0.262. Next, user friendliness of the digital systems has a moderate positive correlation with improvement in tax compliance (0.5114), usefulness of digital platforms (0.4742), and the navigating the digital platforms (0.5093). However, user friendliness has a weak negative correlation with challenges faced in system navigation (-0.3022). This implies that the corporate taxpayers that find the systems user friendly are less

likely to encounter difficulties when using the Eswatini's tax administration's digital services and vice versa.

Moreover, the improvement in tax compliance has a moderate positive correlation with user-friendliness of the digital systems at 0.5114, usefulness of the digital platforms at 0.5386, and navigation of the digital systems at 0.4432. However, the data indicates that improvement in tax compliance has a weak negative correlation with challenges faced with the digital transformation of the tax administration at -0.1353.

The overall implications of the correlation matrix are that the strong positive correlations between usefulness of digital platforms and ease of navigation suggest that the participants who find digital platforms useful also find them easy to navigate. Then, the moderate positive correlations between user-friendliness of the digital platforms and improvement in compliance indicate that user-friendly platforms may positively impact compliance behaviour. Furthermore, the weak negative correlations between incidents of challenges faced and other variables suggest that facing challenges with digital services may slightly hinder the perceived usefulness and ease of navigation of the digital platforms offered by the tax administration. Overall, the data indicates that improving user-friendliness and navigation of digital platforms could enhance their perceived usefulness and positively impact compliance behaviour.

Table 4.3 Cronbach's Alpha Results

Component	Value
Average interitem covariance	0.1532
Scale reliability coefficient	0.7434

Cronbach's alpha is a measure of internal consistency reliability, indicating how well the items in the scale measure the same underlying construct. The average interitem covariance from this study is 0.1532. This value represents the average covariance between pairs of items in the scale. A higher covariance indicates that the items are more closely related to each other. The overall reliability of this study is 0.7434. This value suggests that the scale has good reliability. This implies that the responses are reliable and can be trusted to reflect the participants' true opinions.

4.3.2 Perceived Key Drivers of Effective Tax Digitalization in Tax Administration

The digital transformation of tax administration has become a pivotal key focus for governments worldwide, aiming worldwide to enhance improve efficiency, transparency, and compliance. In Eswatini, the adoption introduction of digital technologies in tax administration presents offers unique opportunities and challenges. This section of the study explores the main perceived key drivers of effective tax digitalization within Eswatini's tax administration framework. This section delves into addresses various factors that influence the success of digitalization in Eswatini that is user experience, integration, cybersecurity and data privacy technological infrastructure, taxpayer engagement, inclusivity, and capacity building. By examining these drivers, factors, the research study aims to provide a comprehensive understanding of how digitalization is used to improve tax administration in Eswatini. The results offer provide valuable insights for policymakers, tax authorities, and other stakeholders involved in the digital transformation journey. The study of questionnaire responses provides a thorough picture of the perceived drivers and impediments to efficient tax digitalization from the perspectives of corporate taxpayers and tax administrators.

4.3.2.1 Corporate Taxpayers' Perspective

4.3.2.1.1Key Driver 1: Taxpayer Experience

The research outcomes indicate that, according to the responses received from the taxpayers, the taxpayer experience constitutes a fundamental determinant of the successful digital transformation of tax administration in Eswatini.

- *Digital Speed and Usability*: Corporate taxpayers emphasized the importance of aligning the digital speed with clients' understanding and usability. They suggested that the pace of digital changes should be moderate to ensure every individual remains satisfied. The reliability of digital platforms was highlighted as crucial, with a call for simplifying the tax administration website to make it intuitive for all users.
- *Customer Support and Service*: Feedback from some of the corporate taxpayers highlighted that, while digital technologies offer numerous benefits, they should not entirely replace human interaction. Respondent number 100 indicated that: "*Digital technologies should not replace humans; human touch is key in building relationships.*" Corporate taxpayers also emphasized that the digital platforms

should be designed to be more user-friendly, with intuitive navigation and clear, accessible information on the tax administration website.

- *Information Accessibility*: Corporate taxpayers responses emphasized the need for more accessible tax information, particularly on new digital tax systems. The respondents also indicated that training and user manuals should be provided to help users navigate these digital platforms. Participant 49 responded to the question by saying "*More information should be readily available on the digital platforms*".

From the responses above, it is concluded that providing appropriate and accessible digital platform for taxpayers may enhance overall user experience and compliance. Simplified processes and clear instructions can enhance assist taxpayers to fulfil their obligations.

4.3.2.1.2 Key Driver 2: Taxpayer Engagement and Education

The findings suggest that corporate taxpayers underscored the necessity for tax administration to engage in taxpayer interaction and education initiatives aimed at enhancing awareness regarding digital technologies. Acknowledging that the adoption of such technologies may require a considerable duration due to varying maturity levels among taxpayers, corporate taxpayers recommended the implementation of a phased approach that incorporates an appropriate degree of awareness and educational efforts. The participants asserted that the socialization of novel technologies is imperative for users, and it is essential for tax administration to prioritize this socialization by collaborating with key stakeholders through outreach workshops, stakeholder engagements, instructional manuals, audiovisual materials, and the promotion of new platforms to ensure adequate buy-in and acceptance of technological advancements. Providing education to taxpayers concerning the benefits and applications of digital technologies can significantly enhance compliance and diminish resistance to transformative changes. The outcome of this research is in line with the literature that the integration of digital technologies such as mobile applications, digital platforms, and self-service systems has the potential to establish a novel paradigm in the communication and engagement of taxpayers with tax authorities (Stetsenko, 2021) (Medynska, 2022).

4.3.2.1.3 Key Driver 3: Integration

The respondents highlighted that the integration of the tax administration with other systems can eliminate manual interventions. Participant 16 suggested that the streamline of EXCON applications and tracking of post approvals with other systems will reduce manual intervention and the cost of trade. The corporate taxpayers suggested that the tax administration should

invest a lot on the integration which will reduce the burden from taxpayers and ensures smooth data exchange and processing. The respondents emphasized that the integration makes it easier to fill tax returns which are prepopulated. Integrating information into a single system from multiple sources presents a thorough understanding of taxpayer data, increasing tax collection accuracy and efficiency. From the conclusion of the findings, integration ensures a smooth communication and data exchange between various digital platforms and systems that corporate taxpayers, and tax administration use guarantees efficient data processing and reduces the burden on taxpayers.

4.3.2.1.4 Key Driver 4: Cybersecurity and Data Privacy

The corporate taxpayers suggested that the tax administration needs to ensure that their data is protected and secured. The respondents emphasized that the tax administration should have restricted access to the data that is handled since they deal with sensitive information. Providing protection from cyber threats will build trust between corporate taxpayers and the tax administration and the accuracy of data. In the digital age, information is becoming more accessible. Real time and transparent financial data using digital technology can improve tax compliance. This also raises concerns about data privacy and security that must be addressed in tax regulations (Sadiq,2021).

4.3.2.1.5 Key Driver 5: Digital Infrastructure

Feedback from the some of the respondents indicated that digital infrastructure is a key driver towards effective digitalization of tax administration. The findings from the research identified that:

- *Network Systems*: Respondents indicated that network systems must be available to ensure that corporate taxpayers are able to file returns and complete declarations without anomality's. They further suggested that an improvement on the network infrastructure will ensure that the use the digital technologies is effectively and will ensure accessibility and enhance user experience and compliance.
- *Digital technologies*: the respondents emphasized that the use of robotics process automation (RPA), artificial intelligence (AI), data analytics and platforms can enhance the processing of returns and declarations such as detecting errors and fraud. The responses emphasized that the digital technologies could create an incentive of being a self-monitoring compliance.

They further suggested that simplified platforms and processes with clear guidance can make it easier for corporate taxpayers to fulfil their obligations.

Findings from the responses above, conclude that a digital infrastructure is a key driver towards an effective digital tax administration. Reliable infrastructure such internet access, cloud computing and secure data storage options are critical in implementation of technology. A strong digital infrastructure enables tax systems to manage massive amounts of data efficiently and securely.

4.3.2.1.6 Key Driver 6: Inclusivity

The results indicated that the importance of inclusion of all kinds of corporate taxpayers regardless of their background or abilities can enhance the use of the digital technologies. Respondent number 43 emphasized by stating that "*The tax administration should be more accommodative when rolling out new technologies since some of the corporate taxpayers may not be tech savvy*." Participant 59 added that "The *digital platforms should be in Siswati language*". The inclusion of the home language on the tax platform ensures that all corporate taxpayers can access and understand the information and service they need. Most respondents further suggested that the introduction of new technologies must be gradual so that it allows the taxpayers to familiarize with the usability which will lead to more adoption of the technologies. Participant 10 emphasized that when developing a new technology, stakeholder involvement is essential in providing an insight from a taxpayer perspective. This will increase the adopting of the new technology and will make them feel they are part of the change. The inclusion will not only foster transparency but will also create a more collaborative relationship between tax administrations and taxpayers. From the responses above, it can be concluded that inclusivity is a key driver for tax effective digitalization in tax administration. Through emphasizing inclusion, tax administration may foster a more equal and efficient digital tax environment. The result additionally promotes compliance and foster satisfaction with corporate taxpayers.

4.3.2.1.7 Key Driver 7: Tax Administration Capacity Building

The results indicates that the importance of skilled and knowledgeable workforce when introducing a new technology. Participant 20 highlighted that "*The tax administration staff should be very well equipped on all aspects of new technology or at least be clear on where proper assistance should be obtained.*" The responses are in line with Novita et al. (2023) that Tax professional must comprehend and master emerging technologies to optimise the positive

effects of digital transformation. As digitalization reshapes the face of taxation, there arises a crucial need to for tax professionals to adapt and develop competence in emerging technologies. The incorporation of digital technologies, artificial intelligence, and data analytics into tax processes requires a workforce proficient in the knowledge and abilities to properly employ these technologies and provide support to the corporate taxpayers. The response of these findings supports the literature that states that technology is effective solely when managed by adequately skilled individual and integrated into the organization's workflow.

4.3.2.2 Perspective of the Tax Administration on Digital Transformation

A member of the executive management was interviewed to ascertain the perspective of the tax administration. This entails taxpayer education; digital infrastructure and compliance and challenges faced in the digital transformation journey.

4.3.2.2.1 Taxpayer Education

The participant indicated that one of the challenges in Eswatini, is that some taxpayers lack technological proficiency, tax education and essential instruments, such as computers and laptops that can assist in filing of tax returns. The tax administration participant emphasized that, to accommodate all different calibre of taxpayers, the tax administration has provided all service centres with kiosks and designated personnel to assist when required. This is aimed at building relationships, improving compliance and including all kinds of taxpayers. This finding of this study corresponds with the literature that the implementation of digital technologies such as mobile applications, digital frameworks, and self-service providers has the potential to establish a novel paradigm in the communication and engagement of taxpayers with tax authorities (Stetsenko, 2021) (Medynska, 2022).

4.3.2.2.2 Digital Infrastructure

The tax administration representative asserted that with the implementation of TaxEase, it has eliminated the returns processing process, enabling corporate taxpayers to file on time, anytime and anywhere. Therefore, this has improved on the time taken to process the tax returns and reduces the cost of compliance for the corporate taxpayers. Therefore, the tax workforce that was responsible for capturing the returns has been transferred to other functions such as audit. The tax administration participant further emphasized that the TaxEase platform has minimal human intervention and therefore it is accurate and efficient. A well-established digital

infrastructure guarantees that taxation systems possess the capacity to manage substantial quantities of data both effectively and securely. The findings of this study are in line with the literature that digital infrastructure is a key driver of effective tax digitalization by enhancing tax collection, compliance, and administration (Nose & Mengistu, 2023). Digitalization allows governments to link existing information to better detect evasion or avoidance.

4.3.2.2.3 Tax Compliance

The optimization of data collection, processing, and analytical methodologies through digital technologies significantly improves the efficiency of data acquisition. Therefore, this increases transparency and trust between the tax administration and corporate taxpayers by simplifying the monitoring and authentication of tax liabilities. This means that digital technologies contribute to the diminishment of tax evasion and the promotion of equitable tax collection which impacts positively on taxpayer compliance.

4.3.2.2.4 Challenges Faced

To comprehend the obstacles encountered by tax administration in Eswatini during the implementation of digital technologies, specific strategies are proposed that include the augmentation of technological innovation, the enhancement of legislative and regulatory frameworks, and the promotion of social awareness and training initiatives, all of which aim to furnish substantial support for the sustainable advancement of digital tax collection and administration. The tax participant also indicated that significant challenges in Eswatini when executing the implementation of digital technologies are encountered, particularly because certain taxpayers exhibit a deficiency in computer literacy and a lack of comprehension regarding their tax obligations. Notwithstanding the difficulties articulated by the corporate taxpayers concerning unstable network issues that hinder their ability to file returns, the tax administration participant contended that there exists robust network coverage throughout the country, presenting a substantial opportunity for the adoption of digital technologies.

4.3.2.2.5 Strategies

In response to the challenges, the tax administration has established kiosks equipped with computers and has appointed specialized tax personnel to assist taxpayers in navigating the filing process. This initiative is aimed at facilitating corporate taxpayers in submitting their tax returns punctually and without undue complications. Furthermore, the tax administration has constituted a taxpayer education team tasked with informing and engaging corporate taxpayers about their tax obligations, which is anticipated to significantly enhance their adherence to tax

compliance. The tax administration has set up a fully-fledged call centre aimed at providing any assistance to all taxpayers and visual studio to provide educational videos to social media platforms.

4.4 Effects of tax digitalization on the efficiency of tax collection

The digitalization of tax systems has become an essential variable in improving the efficiency of collections. Technology is seen as an effective instrument when utilised appropriately; conversely it can also present challenges that require resolution rather than serving as a remedy. This section of the study focuses on the findings of how tax digitalization has influence on the efficiency of tax digitalization of tax collection form the corporate taxpayer's and tax administration's perspective.

4.4.1 Tax Administration Perspective

To further establish that the implementation of digital tools influences the efficiency and effectiveness of the payment process, tax administration participant stated that digitalization has significantly enhanced the efficiency of tax collection. The tax administration participant responded by saying "*The introduction of TaxEase in 2024 has an effect of creating transparency to the taxpayers. There is a functionality where taxpayers can view their statements which allows them to track and monitor their tax obligation, which is available 24/7, anytime and anywhere."* Therefore, this increases transparency and trust between the tax administration and corporate taxpayers by simplifying the monitoring and authentication of tax liabilities. This means that digital technologies contribute to the diminishment of tax evasion and the promotion of equitable tax collection which impacts positively on taxpayer compliance. The corporate taxpayer is aware of their actual liabilities and fulfil them. The findings from this study, are in line with the literature that digital technologies are revolutionizing tax systems to improve compliance, efficiency, and transparency (2024). However, respondents 4 and 18 highlighted that there are improvements that the tax administration should consider implementing such as automated reminder text messages on tax obligation matters which can also assist in reminding their obligations which increases their tax compliance.

The optimization of data collection, processing, and analytical methodologies through digital technologies significantly improves the efficiency of data acquisition. A participant from the tax administration further articulated that the deployment of TaxEase has resulted in enhanced operational efficiencies. In the past, corporate taxpayers were required to submit income tax returns manually, subsequently awaiting the tax administration's manual processing of these

returns before the actual tax liability could be disclosed. Following this communication, the corporate taxpayer was then obliged to remit the tax liability. This procedure led to protracted delays in revenue collection and the allocation of resources towards the routine and repetitive task of data capture. The participant from the tax administration indicated that the advent of digital technologies has precipitated improved operational efficiencies and a reallocation of resources, which has positively and immediately influenced revenue collection. Consequently, these modifications have facilitated the automation of routine functions, thereby empowering tax authorities to direct resources towards more complex issues. The empirical evidence substantiates that the implementation of digital technologies has demonstrably enhanced revenue collection. This improvement arises from the superior capability of digital systems to identify and capture taxes that might otherwise remain uncollected.

4.5 Faced Challenges by corporate taxpayers

The corporate taxpayers have encountered challenges with the implementation and adoption of digital technologies. The corporate taxpayers have explained that they experience unstable network and network congestion mostly during the filing period which makes it difficult for file returns online which has a negative impact on compliance. Lack of sufficient support has made corporate taxpayers face navigation of the new digital platform (TaxEase) not easy to navigate. Inadequate socialisation of the new digital platform (TaxEase) has resulted to the corporate taxpayers indicating that the new digital platform is not user friendly with many technical problems and requires more technical support. Response from participants further indicated that there is no clear direction on where to navigate, lack of filing history and complicated statements. The statements are difficult to understand which makes it difficult for the corporate taxpayer to manage their tax obligations and balance to pay. Limitation of services that are available on the digital platform have a significant impact on the corporate taxpayers since it requires them to physically attend to the tax administration office.

4.6 Faced Challenges by tax administration

To comprehend the obstacles encountered by tax administration in Eswatini during the implementation of digital technologies, specific strategies are proposed that include the augmentation of technological innovation, the enhancement of legislative and regulatory frameworks, and the promotion of social awareness and training initiatives, all of which aim to

furnish substantial support for the sustainable advancement of digital tax collection and administration.

The tax administration had indicated that they encountered significant challenges in Eswatini when executing the implementation of digital technologies, particularly because certain corporate taxpayers exhibit a deficiency in computer literacy and a lack of comprehension regarding their tax obligations. Notwithstanding the difficulties articulated by the corporate taxpayers concerning unstable network issues that hinder their ability to file returns, the tax administration participant contended that there exists robust network coverage throughout the country, presenting a substantial opportunity for the adoption of digital technologies. In response to this challenge, the tax administration has established kiosks equipped with computers and has appointed specialized tax personnel to assist taxpayers in navigating the filing process. This initiative is aimed at facilitating corporate taxpayers in submitting their tax returns punctually and without undue complications. Consequently, this has exerted a positive influence on their overall compliance. Furthermore, the tax administration has constituted a taxpayer education team tasked with informing and engaging corporate taxpayers about their tax obligations, which is anticipated to significantly enhance their adherence to tax compliance. The tax administration has set up a fully-fledged call centre aimed at providing any assistance to all taxpayers and visual studio to provide educational videos to social media platforms.

4.7 Chapter Summary

This chapter presented the findings and discussions on the perceived impact of digital transformation in the tax administration in Eswatini. A census technique of the taxpayers in the large segment was used as participants in this study. Google forms were utilized to gather data, and the sample size and digital transformation theory was applied to examine how the digitalization was perceived by the public. The study concentrated on elements affecting consumers' opinions whether constructive or adverse as well as the difficulties they encountered utilizing the digital systems. In addition, all the dimensions of an information systems success model were discussed. The findings stated that the; majority of large taxpayers quantified that the system quality is particularly good, service quality is moderately user-friendly, and user-satisfaction is satisfactory thus the overall net system benefits is satisfactory. In conclusion, the research project found that large taxpayers generally have a satisfactory perception of the digital systems, the contribution of digital transformation to efficiency and effectiveness of tax collection indicated an increase in taxpayer compliance and taxpayer satisfaction. The discussion focused on the perceived impact of digital transformation on

taxpayer compliance, which resulted in a reduction in the cost of compliance for taxpayers. Lastly, the challenges experienced by large taxpayers were presented in this chapter and reliability test was conducted which inferred that the responses are reliable and reflect the participants' true opinions.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the conclusions of the study together with the recommendations that the tax administration could incorporate in the digital transformation journey, policy recommendation for Eswatini and future research studies.

5.2 Summary and Findings

It is crucial to understand how taxpayers perceive the digital transformation of the tax administration in order to identify if it has a positive or negative impact on tax compliance and hence revenue collection to finance government expenditure. To that end, a survey was performed on taxpayers in the large segment to assess out how taxpayers consider this development. Data was gathered using Google forms. Based on the sample size and the digital transformation theory the results demonstrate a satisfactory perception, and digitalization has led to the improvement of tax compliance.

In comparison to existing literature on this topic, the results align with the general understanding that the view of digital transformation is influenced by factors such as information. Then, the research indicated that while the digital system (E-Tax system) is generally user-friendly, there are specific industries that may require more targeted customer education. Also, the thesis emphasized how crucial service quality is in shaping customers' perceptions of the digital transformation.

5.3 Conclusion

The research hypothesized that there would be no significant impact of digital transformation on tax compliance. The null hypothesis that digital transformation has no impact on compliance is rejected and the study concluded that digitalization has a positive impact on tax compliance. The majority of taxpayers supported the tax administration’s development and advancements of digital technologies. The overall interpretation suggests that the digital transformation of the tax administration has been largely beneficial, with 87% of respondents reporting an improvement in their compliance behaviour. Only a small fraction (5%) perceives a negative impact, and 8% remain unaffected.

From the findings above, it is concluded that providing appropriate and accessible digital platform for taxpayers may enhance overall user experience and compliance. Simplified processes and clear instructions can enhance assist taxpayers to fulfil their obligations. In addition, the reliability results using the Cronbach's alpha demonstrated that the items are well-

designed and relevant to the topic being studied, such as the usefulness of digital platforms, navigation ease, and willingness to migrate to a digitalized state of tax administration. As a result, the outcomes can be utilised to draw insightful judgements and draw meaningful conclusions and informed decisions about the effects of Eswatini's digital transformation in tax administration.

5.4 Recommendations to the Tax Administration

The result of the study has a significant impact on how the tax administration operates. That is; to attain full acceptance of the organisation's digital transformation, the tax administration needs to enhance digital platforms by investing in and continuously improve self-service and E-tax platform to ensuring that they are user-friendly, reliable, and capable of handling a wide range of taxpayer needs. The tax administration also needs to strengthen remote communication channels by ensuring that e-mails and WhatsApp communication channels are well-supported, with timely responses and clear guidelines for taxpayers in both English and SiSwati (native) languages while maintaining physical service centres. In addition, the study recommends minimising barriers, providing taxpayer education and assist users in navigating the digital platforms more effectively. Finally, the tax administration should conduct regular updates and testing of the digital platforms to incorporate user feedback, fix any technological issues, and introduce new features that enhance usability.

5.5 Recommendations to taxpayers

For the taxpayers, the study recommends that they stay informed. That is, the taxpayers are relevant and are up to date with the latest digital tools and platforms provided by the tax administration to streamline tax filing and compliance. Second recommendation is utilising digital resources. This entails taking advantage of online resources and tools offered by the tax administration to simplify tax-related tasks. Another recommendation for taxpayers is ensuring data security by protecting personal and financial information through using secure passwords and being cautious of phishing frauds.

5.6 Policy Recommendations

The policy recommendations include the government of Eswatini regulating data privacy by establishing clear regulations to protect taxpayer data and ensure privacy in digital transactions. The study also recommends the implementation of policies that encourage digital literacy among taxpayers to ensure they can effectively use digital tax systems and provide incentives for the development and adoption of innovative technologies in tax administration.

5.7 Recommendations of Further Studies

To fully understand and measure how new developments such as digitalization are perceived, further research is advised. To determine the attitude toward technology the researcher recommends incorporating the theory of planned behaviour[2]. Additionally, the study focused on corporate taxpayers with a turnover above SZL100 million. The research also recommends the survey to be broadened and carried out to the rest of the segments [3] as they may exhibit different adoption patterns and compliance behaviours. Future research on comparative studies across all taxpayer categories to assess equity, accessibility, and digital divide implications could be carried out.

[2] This theory states that human behavior is driven by intention, which is influenced by attitude, subjective norms, and perceived behavioral control.
[3] Table 3.1

REFERENCES

Afrizal, T., Alden, R., Hafiez, S., & Eko, P. (2020). Perceived Ease of Use, Perceived Usefulness, Perceived Security and Intention to Use E-Filing: The Role of Technology Readiness. *The Journal of Asian Finance, Economics and Business, 7*(9), 62.

Ait Lhassan, I., Bedraoui, O., Akhannich, O., (2022), The Impact of Digital Transformation on the Satisfaction of Tax Administration Users in Morocco During the Covid3-19 Pandemic: An Empirical Study, *European Journal of Management Issues*, Volume 30 (1), Page 48-57

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Handbook of theories of social psychology, 1*, 179.

Alharbi, S., & Drew, S. (2019). The Role of Self-efficacy in Technology Acceptance. *International Journal of Advanced Computer Science and Applications, 1*.

Andersson, M., Boateng, K., & Abos, P. (2024). Validity and Reliability: The extent to which your research findings are accurate and consistent. 10-13.

Andrina, A. A., Kurniadi, C. J., Kenang, I. H., & Sutrisno, T. (2022). The role of technology acceptance model factors on purchase intention in e-commerce. *BISMA, 14*(2), 160-176.

Anupama, K., Chaudhary, P., & Lakshmi, T. (2023). Introduction of a Pilot Study. *International Journal of Ethics, Trauma and Victimology, 9*(2), 6-8.

Apollo, C. (2022) Effects Of Digitalization On Value Added Tax Compliance Among Small And Medium Enterprises In Embakasu Central Subcounty, Nairobi County, Kenya. *Moi University*

Asista, S., & Setyowati, M. S. (2022). Online Tax System Implementation through Digitalization of Tax Administration on Cost and Benefit. *International Journal of Scientific and Research Publications, 12*(3), 123-137.

Bassey, E., Mulligan, E., Ojo, A., (2022) A Conceptual Framework for Digital Tax Administration- A Systematic review, *Government Information Quarterly*, Vol 39, Issue 4

Bassongui, N., Houngbedji, H., (2023), *Impacts of Tax Digitalization on Tax revenues in Sub-Sahara Africa; A Systematic Review,* Research Square, available at; https://assets.researchsquare.com/files/rs-2429085/v1/7432c875-59e5-4715-ad27-6ce20713f221.pdf?c=1672948180

Bello, M., Dabla-Norris, E., Khalid, S., Lima, F., (2022) Digitalization to Improve Tax Compliance; Evidence from VAT e-Invoicing in Peru, *Journal of Public Economics*, Vol 210

Berberov, A. B., & Milogolov, N. S. (2020). Adjusting Tax Policy to the Challenges of Digitalization, Inequality and Technological Unemployment20. *Journal of Siberian Federal University Humanities & Social Sciences*.

Bobek, V., & Horvat, T. (2023). Challenges of Digital Tax Administration Transformation in Indonesia. *Business and Management Annual Volume 2023*, 13-16.

Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity, 56*, 1391–1412.

Carter, S. (2020). Case Study Method and Research Design: Flexibility or Availability for the Novice Researcher? In H. Van Rensburg & S. O'Neill (Eds.), Advances in Early Childhood and K-12 Education (pp. 301–326). IGI Global. https://doi.org/10.4018/978-1-7998-2901-0.ch015

Chernousova, K. S. (2021). Digital Transformation of Tax Administration as a Function of State Administration. *Social and Behavioural Sciences, 4*(2), 108.

Cipek, K., & Ljutic, I. (2021). The influence of digitalization on tax audit. *Oditor*, 37.

CohenMiller, A. S., & Pate, E. (2019). A Model for Developing Interdisciplinary Research Theoretical Frameworks. The Qualitative Report. https://doi.org/10.46743/2160-3715/2019.3558

Davis, F., (1989), Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*, MIS Quarterly*, vol. 13, pp. 319-340

Dawadi, S. (2020). Thematic Analysis Approach: A Step by Step Guide for ELT Research Practitioners. *Journal of NELTA, 25*(1), 62-65.

Dawit, D. A. (2020). An Overview of Data Analysis and Interpretations in Research. *International Journal of Academic Research in Education and Review*, 4-10.

Dobrolyubova, E., (2021), Measuring Outcomes of Digital Transformation in Public Administration: Literature Review and Possible Steps Forward, *NISPAcee Journal of Public Administration and Policy*, Vol 14, Issue 1, 61-86

Doyle, L., McCane, C., Keogh, B., Brady, A., McCann, M., (2020), An Overview of the Qualitative Descriptive Design within Nursing Research, *Journal of Nursing*, Vol 25 (5), Pg. 443-455

Eswatini Revenue Service website, Customs Taxes, Income Taxes and VAT, available at; https://www.ers.org.sz/index.php

ENISA. (2020, October 20). *ENISA.* Retrieved from ENISA News: https://www.enisa.europa.eu/news/enisa-news/enisa-threat-landscape-2020

Etim, R., Jeremiah, M., Dan, P., (2020), Tax Compliance and Digitalization of Nigerian Economy, the Empirical Review, *American Journal of Social Sciences*

Fjord, L. B., & Schmidt, P. K. (2023). The Digital Transformation of Tax Systems Progress, Pitfalls, and Protection in a Danish Context. *Indiana Journal of Global Legal Studies, 1*, 227-272.

García-Avilés, J. A. (2020). Diffusion of Innovation. In J. A. García-Avilés, *The International Encyclopedia of Media Psychology* (p. 20). New Jersey: John Wiley & Sons, Inc.

Gertzen, W. M., Van der lingen, E., & Steyn, H. (2022). Goals and benefits of digital transformation projects: Insights into project selection criteria. *South African Journla of Economic and Management Sciences, 25*(1), 21-24.

Gong, C. (2021). Developing a unified definition of digital transformation. *Technovation, 102*, 102.

Guo, Q., & Huang, W. (2024). Analyzing the Diffusion of Innovations Theory. *Scientific and Social Research, 12*, 95-97.

Haider, Z., Shuwen, C., Lalani, F., Mangi, A. (2015) Adoption Of E-Government In Pakistan: Supply Perspective. *International Journal Of Advanced Computer Science and Applications* Vol 6, No.6

Hall, R., & Harvey, L. A. (2018). Qualitative research provides insights into the experiences and perspectives of people with spinal cord injuries and those involved in their care. Spinal Cord, 56(6), 527–527. https://doi.org/10.1038/s41393-018-0161-4

Hariyana, D., Hariyana, P., Mishra, S., Sharma, K. (2024) Leveraging Digital Technologies For Advancing Circular Economy Practices And Enhancing Life Cycle Analysis: A systematic Literature Review. *Elsevier* Volume 2, Issue 3, Page 69-83

He, Y. (2024). "Digital Technology Reshapes the Tax Collection and Administration System: Impacts, Challenges and Future Prospects". *Scientific Journal of Economics and Management Research* Vol 6 (9): 85-91. https://doi.org/10.54691/9g1jdp53.

Hendriyetty, N., Evans, C., Kim C., Taghizaden-Hesary, F. (2022). Taxation In The Digital Economy: *Asian Development Bank Institute & Routledge*

Honaker, J., Grant, G., Sorbello, K., Odion, S., (2025) Understanding Parental Adoption Of Smart Devices Amid Privacy Concerns. *School Of Business, Technology And Health Care Administration, Capella University*

Hussaini, S.W. (2021). Impact of Demonetization on Indian Banking Sector. *International Journal of Advanced Research in Science, Communication and Technology.* Vol 73 (2)

Ibrahim, M. G., & M. Victoria, D. (2022). Reflections on the use of qualitative case study design in education policy research: Contributing to the debate of Generalisation in research. *International Journal of Social Sciences and Humanities Invention*, 9(09), 7250–7258. https://doi.org/10.18535/ijsshi/v9i09.09

Ihnatišinová, D. (2021). Digitalization of tax administration communication under the effect of global megatrends of the digital age. *Globalization and its Socio-Economic Consequences Conference Paper*, 18-20.

IMF. (2022). Digitalization and Resilience. *IMF Working Papers, 22*, 19-21.

International Tax Compact, (2023) The Digital Transformation of Tax Administrations, available at; https://www.addistaxinitiative.net/news/digital-transformation-tax-administrations-0 Jameel, B., Shaheen, S., & Majid, U. (2018). Introduction to

Qualitative Research for Novice Investigators. *Undergraduate Research in Natural and Clinical Science and Technology (URNCST) Journal,* 2(6), 1–6. https://doi.org/10.26685/urncst.57

Jung, J., Gomez-Bengoechea, G., (2022), A literature Review on Firm Digitalization; Drivers and Impacts, available at; https://documentos.fedea.net/pubs/eee/2022/eee2022-20.pdf?utm_source=wordpress&utm_medium=portada&utm_campaign=estudio

Kochanova, A., Hasnain, Z., & Larson, B. (2020). Does E-Government Improve Government Capacity? Evidence from Tax Compliance Costs, Tax Revenue, and Public Procurement Competitiveness. *The World Bank Economic Review, 34*(1), 101-120.

Krieger, T., (2021) A Model – Theoretical Analysis for Tax Administration, *International Journal of Innovative Technologies in Economy* 2 (34)

Ma, Q., & Liu, L. (2024). The Technology Acceptance Model. *Journal of Organizational and End User Computing*, 60.

Macleod, M. R., Lawson McLean, A., Kyriakopoulou, A., Serghiou, S., De Wilde, A., Sherratt, N., Hirst, T., Hemblade, R., Bahor, Z., Nunes-Fonseca, C., Potluru, A., Thomson, A., Baginskitae, J., Egan, K., Vesterinen, H., Currie, G. L., Churilov, L., Howells, D. W., & Sena, E. S. (2015). Risk of Bias in Reports of In Vivo Research: A Focus for Improvement. PLOS Biology, 13(10), e1002273. https://doi.org/10.1371/journal.pbio.1002273

Markus, M. L., & Rowe, F. (2021). Guest editorial: Theories of digital transformation: A progress report. *Journal of the Association for Information Systems, 22*(2), 11.

Mashabela, M. F., & Kekwaletswe, R. (2020). A Model for Adopting and Using E-Filing. *International Journal of Innovative Science and Research Technology, 5*(8), 179-193.

McDonnell, A., Jones, M. L., & Read, S. (2000). Practical considerations in case study research: The relationship between methodology and process. *Journal of Advanced Nursing*, 32(2), 383–390. https://doi.org/10.1046/j.1365-2648.2000.01487.xMedynska, T., & Noginova, N.E. (2022). Digitalization Of Tax Administration Bodies In The Context Of Current Challenges And Threats Scientific Notes of Ostroh Academy National University Series Economics 1 Page 90-96.

Meita, F., Malau, M, (2023), Effects of Digital Transformation, Tax Policy, Company Characteristics and Perceptions of Tax System Effectiveness on Business Entity Tax Compliance Before & During Covid-19 Pandemic Moderated by Tax Socialisation, *Journal of Business, Social and Technology*

Meske, C., Wilms, K., Stielglitz, S., (2019), Enterprise Social Networks as Digital Infrastructure-Understanding the Utilitarian Value of Social Media at the Workplace, *Journal of Information Systems Management*, Vol 36, Issue 4

Mpofu, F.Y. (2024). Digital Transformation by Tax Authorities. In: Moloi, T. (eds) Digital Transformation in South Africa. *Professional Practice in Governance and Public Organizations. Springer, Cham*. https://doi.org/10.1007/978-3-031-52403-5_11

Nazarov, M. A., Mikhaleva, O. L., & Chernousova , K. S. (2019). Digital Transformation of Tax Administration. *Digital Age: Chances, Challenges and Future* (pp. 144-149). New York: Springer Link.

Network of Tax Organisations, (2023), The Digital Transformation of tax Administrations, available at; https://www.nto.tax/news/digital-transformation-tax-administrations-0

Noor, S., & Tajik, O. (2022). Simple Random Sampling. *International Journal of Education & Language Studies*.

Nose, M., Mengistu, A., (2023), Exploring the Adoption of Selected Digital Technologies in Tax Administration: A Cross-Country Perspective, International Monetary Fund, available at; https://www.elibrary.imf.org/view/journals/068/2023/008/article-A001-en.xml

Novita, L., Syahril, S., Gistituati, N., & Subandi, A. (2023). The Influence of Organizational Culture and Providing Incentives on Employee Performance. *International Journal Of Humanities Education And Social Sciences, 3*(1), 459-465.

Nurhayati*, Muda, I., Kusuma, S., A., (2023) Building Block in Digital Tax Administration; Literature Review, *International Journal of Social Service & Research,* Vol 3, Issue No. 02, Page 566-575

Nwankwo, F., Okoroji, N. (2021) Technology Adoption and Coconut Production Among Farmers In MKPAT-ENIN LGA In AKWA-IBOM State in Nigeria. *Nigerian Journal Of Cooperative economics & Management,* Vol 13, Issue 1

OECD (2021), Revenue Statistical Guide, OECD, Available at; https://www.oecd.org/tax/tax-policy/oecd-classification-taxes-interpretative-guide.pdf

OECD (2021), Supporting the Digitalization of Developing Country Tax Administrations, Forum on Tax Administration, OECD, Available at; https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/supporting-the-digitalization-of-developing-country-taxadministrations.htm

OCED, (2022), Tax Administration 3.0 Action Plan Update, OECD, Available at; https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/tax-administration-3-0-action-plan-update.pdf

Okunogbe, O., Santoro, F., (2023) Increasing Tax Collection in African Countries: The Role of Information Technology, *Journal of African Economies* 32, i57-i83

Okunogbe, O., Santoro, F., (2022) *The Promise and Limitations of Information for Tax Mobilization*, (Working Paper No. 9848), Policy Research Working Papers Series, available at; https://www.tandfonline.com/doi/epdf/10.1080/23322039.2023.2172810?needAccess=true&role=button

Omar, A., Weerakkody, V., & Daowd, A. (2020). Studying Transformational Government: A review of the existing methodological approaches and future outlook. *Government Information Quarterly, 37*(2), 101.

Otani, T. (2017). What Is Qualitative Research? YAKUGAKU ZASSHI, 137(6), 653–658. https://doi.org/10.1248/yakushi.16-00224-1

Perekrestova, L. V., & Nadtochiy, E. V. (2020). New opportunities for harmonizing tax relations in the conditions of digitalization of the tax system. *Marketing and Management of Innovations, 3*, 66-77.

Press Release (2023) , Digital Economy can Boost Eswatini's Development and Enhance Service Delivery, The World bank, available at https://www.worldbank.org/en/news/press-release/2023/02/08/digital-economy-can-boost-eswatini-s-development-and-enhance-service-delivery

Ramadhani, S., & Sitorus, R.R. (2022). Tax Digitalization and Tax Service Quality's Effects on Taxpayer Obligation During the Pandemic Era. Interdisciplinary Social Studies

Rezigalla, A. A. (2020). Observational Study Designs: Synopsis for Selecting an Appropriate Study Design. Cureus. https://doi.org/10.7759/cureus.6692

Roth, D. (2019). Digital transformation of social theory. A research update. *Technological Forecasting and Social Change*, 88-93.

Sadiq, M., (2021), Impact of Making Tax Digital on Small Businesses, *Journal of Accounting and Taxation*, Vol 13 (4), pp 304-316

Sadress, N., Juma, B., (2020), The Mediating Role of Adoption of an Electronic Tax System in the Relationship between Attitude towards Electronic Tax System and Tax Compliance, *Journal of Economics, Finance and Administrative Science*, Vol 25, 73-88

Santoro, F., Amine, R., Magongo, T., (2023), Encouraging Digital Tax Tools as a response to Covid; Evidence from Eswatini, *International Tax and Public Finance*, Vol 25, Page 95-135

Santoro, F. , Amine, R. , Magongo, T. , (2022) *Mandating Digital Tax Tools as a response to Covid-19: Evidence from Eswatini*, (Working Paper No. 140), Institute of Development Studies, available at ; https://www.africaportal.org/publications/mandating-digital-tax-tools-response-covid-evidence-eswatini/

Setia, M. S. (2020). Methodology Series Module 3: Cross-sectional Studies. *Indian Journal of Dermatology.*, 19.

Shukla, S. (2020). Concept of Population and Sample. *Conference Paper*, 17.

Solomon, E. M., & Van Klyton, A. (2020). The impact of digital technology usage on economic growth in Africa. *Utilities Policy*.

Soneka, P., Phiri, J. (2019) A Model For Improving E-Tax Systems Adoption In Rural Zambia Based on The TAM Model. *Department of Computer Sciences, University Of Zambia*, Vol 7, No.2

Stetsenko, T., & Nishcheretov, O. (2021). Tax culture and tax morale: impact on tax compliance in Ukraine. *Social Economics*, Issue 6 (1), 83-91

Subandi, H., & Tjaraka, H. (2023). Tax Compliance and Tax Incentives during a Pandemic (Covid-19): Evidence from MSMEs in Indonesia. Jati: *Indonesian Journal of Applied Accounting*

Sürücü, L., & Maslakçı, A. (2020). Validity and Reliability In Quantitative Research. *Business and Management Studies: An International Journal, 8*(3), 26-29.

Taherdoost, H. (2021). Data Collection Methods and Tools for Research; A Step-by-Step Guide to Choose Data Collection Technique for Academic and Business Research Projects. *International Journal of Academic Research in Management, 10*(1), 13-16.

Tamilmani, K., Rana, P., N., Wamba, S., F., Dwivedi, R., (2021), The Extended Unified Theory of Acceptance and Use of Technology (UTAUT2); A Systematic Literature Review and Theory Evaluation, *International Journal Of Information Management*, Vol 57

Totobayo, B., Rajkaran, S., Ntuli, C. (2024) Cost Of Reskilling Employees Versus The Profitability of a Business: A reflection On Selected Small Businesses In Mthatha, Eastern Cape. *International Journal Of African reflections*

Trafimow, D. (2024). Theory of Reasoning Action: A Case Study of Falsification in Psychology. *Journal of Theory & Psychology*.

Tripathy, A. (2024). Challenges of Digitalization for Tax Administrations. *13th IMF Japan High Level Tax Conference for Asian Countries.* Tokyo: Tripathy, Abhishek;.Verhoefa, P., Broekhuizena, T., Bartb, Y., Bhattacharyaa, A., & Donga, J. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 889-901.

Vertsey, L. (2024) Financial perspectives Of Economic history: Capital Revolution, Internal Trade, Banking Insurance. *Institute for Economic Analysis Vol 2*

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems, 28*(2), 118-144.

Vial, G. (2020). Understanding digital transformation: A review and a research agenda. *Journal of Strategic Information Systems Review*, 32.

Wang, J., Shen, M., Chun, M. (2021) Why Is Green Consumption Easier Said Than Done? Exploring The Green Consumption Attitude-Intention Gap In China With Behavioural Reasoning Theory. *Elsevier* Vol 2

World Bank. (2020). *World Bank Database.* Retrieved from World Bank: https://data.worldbank.org/

World Bank. (2023, February 8). *Digital Economy can Boost Eswatini's Development and Enhance Service Delivery.* Retrieved from World Bank: https://www.worldbank.org/en/news/press-release/2023/02/08/digital-economy-can-boost-eswatini-s-development-and-enhance-service-delivery

World Bank. (2023). *World Bank Press Release.* Washington, DC: World Bank.

Wulandari, D. S., & Dasman, S. (2023). Taxpayer Compliance: The Role of Taxation Digitalization System and Technology Acceptance Model (TAM) with Internet Understanding as a Mediating Variable. *East Asian Journal of Multidisciplinary Research, 2*(6), 50.

Yan, Z., Jin, Y. (2025) Owners Say Yuck But Pets Say Yum: Factors Influencing Pet Owner's Behaviour Towards Sustainable Pet Food. *Uppsala University*

ANNEXURES

ANNEXURE A

QUESTIONNAIRE SURVEY

*(**Instructions**-Please circle or cross and or tick the most suitable answer for your option)*

Consent:

I Hereby agree to participate in this research project. I agree to the following:

- The research study was explained to me. I understand what this study is about.
- I understand that I can volunteer to take part in the study.
- I agree that the survey may be recorded.
- I agree that direct quotations from my questionnaire survey may be used by the researcher in their research report/ manuscript/book chapter.
- I agree that my participation will remain anonymous (my name or other identifying data will not be used by the researcher in their research report).
- I agree that other researchers may use the information I provide in my questionnaire survey depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on.

1. Required to answer. Single choice.

    a. Yes
    b. No

2. Which Industry is your business operating in? Required to answer. Single

    a. Agriculture
    b. Agriculture, forestry, and fishing
    c. Construction
    d. Financial and insurance activities
    e. Information and communication

f. Manufacturing, mining, and quarrying and other industrial activities
g. Other service activities
h. Professional, scientific, and technical activities
i. Public administration and defence, education, human health, and social work activities.
j. Real estate activities
k. Wholesale and retail trade, transportation and storage, accommodation, and food service activities

3. How frequently do you interact with the tax administration in Eswatini?

a. Daily

b. Weekly

c. Monthly

d. Yearly

e. Rarely

4. How do you usually interact with the Tax Administration?

a. Service Centre/ Face to Face
b. By Telephone/ Email/ WhatsApp
c. Self Service/ e-Tax Platform
d. Social media/ website

If other (Specify)_____

5. How user-friendly have you found the above platforms to be? Single choice.

a. Very Easy
b. Easy
c. Neither easy no hard

d. Hard
e. Very hard

If other, please specify_____

6. To what extent has the use of digital technologies impacted your compliance behaviour with regards to tax related issues?

a. Significantly impacted for the better
b. Moderately impacted for the better
c. Not impacted
d. Moderately impacted for the worst
e. Significantly impacted for the worst

7. Have you faced any challenges or issues in trying to navigate Eswatini's tax administration's digital services?

a. Yes
b. No

8.What kind of Challenges/ issues did you face? _____

9. In a scale of 1-10 (1-being poor and 10-being excellent) how would you rate the digital services of the tax administration in Eswatini? (*Select the one most suitable answer*).

a. 1
b. 2
c. 3
d. 4
e. 5
f. 6
g. 7
h. 8

i. 9
j. 10

10. What is your most preferred medium of interaction with the tax administration of Eswatini?
    a. Service Centre/ Face to face
    b. By Telephone/ email/ WhatsApp
    c. Self Service/ e-Tax Platform
    d. Social media/ website

11. Please explain your choice above.

_____

12. How useful do you think digital platforms of the tax administration in Eswatini are? Single choice.
    a. Extremely useful
    b. Somewhat useful
    c. Neutral
    d. Somewhat not useful
    e. Extremely not useful

13. Please Elaborate the answer above.

_____

_____

14. *Do you find it easy to navigate the digital platforms of the tax administration in Eswatini?*
    a. Extremely easy
    b. Somewhat easy
    c. Neutral
    d. Somewhat not easy
    e. Extremely not easy

15. Please Elaborate the answer above:

_____

_____

16. Are you personally willing to continue/ migrate to a completely digitalized state of tax administration in Eswatini?

a. Yes
b. No
c. Maybe

17. Please elaborate on your response above.

_____

_____

18. What recommendations, feedback (and / or) any other comments would you suggest on the use of digital technologies in tax administration in Eswatini?

_____

_____

_____

ANNEXURE B

INTERVIEW QUESTIONS

1. Digital transformation is one of the strategic initiatives towards the organisation's vision. E- Tax platform was implemented in May 2020, what digital initiatives should taxpayers expect in the coming months?

---

2. How has the implementation of E-Tax impacted the overall efficiency and effectiveness of tax administration in Eswatini?

---

3. What were the key challenges faced by the tax administrators in Eswatini when implementing digital transformation initiatives, and how can these be addressed?

---

4. To what extent has the adoption of digital technologies such as E-Tax in tax administration in Eswatini improved compliance rates among taxpayers?

---

5. What are the attitudes and perceptions of taxpayers in Eswatini towards the use of digital technologies in tax administration, and how do these impact their compliance behaviour?

---

6. What lessons can be learned from the experiences of other developed countries in implementing digital transformation in tax administration, and how can these be applied to Eswatini's context?

---

7. How has the COVID-19 pandemic accelerated the adoption and implementation of digital technologies in tax administration in Eswatini, and what are the implications for the future?

---

8. What are the potential risks and challenges associated with the use of digital technologies in the Eswatini tax administration, and how can these be mitigated?

---

9. How can tax administrators in Eswatini ensure that the benefits of digital transformation in tax administration are equitably distributed across all taxpayer segments or categories such as Micro business, medium and small enterprises?

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ANNEXURE C

CONSENT FORM

THE PERCEIVED IMPACT OF DIGITAL TRANSFORMATION IN TAX ADMINISTRATION IN ESWATINI

Nqobile Kunene

I, ……., agree to participate in this research project.

I agree with the following:

(Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study.	YES	NO
I agree that the survey may be recorded	YES	NO
I agree that direct quotations from my questionnaire survey may be used by the researcher in their research report/ manuscript/book chapter	YES	NO

I agree that my participation will remain anonymous (my name or other identifying data will not be used by the researcher in their research report)	YES	NO
I agree that other researchers may use the information I provide in my questionnaire survey depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on.	YES	NO

…… (signature)

…… (name of participant)

…… (date)

…… (signature)

…… (name of researcher/person seeking consent)

…… (date)

ANNEXURE D

REQUESTING FOR PERMISSION LETTER



University of the Witwatersrand, Wits Business School, Faculty of Commerce, Law and Management and contact details; 011 171 3038

Mr. Brightwell Nkambule

Commissioner General

Eswatini Revenue Service

P. O. Box 5628

Mbabane

Eswatini

H100

25 May 2023

Dear Sir,

Re: Permission to conduct research at Eswatini Revenue Service.

My name is Nqobile Jessica Kunene. I am currently working for the organization as a Manager - Operational Policy in Debt Management. I am studying for a Master's in Business Administration at the Wits Business School at the University of Witwatersrand. I am seeking permission to do research at Eswatini Revenue Service.

I am conducting research on the impact of digital transformation in Tax Administration in Eswatini. The main objective of the study is to identify whether digital transformation has a negative or positive impact to corporate taxpayers. The study will also provide recommendations based on the findings. I have chosen this study in order to assist the organization in understanding the taxpayer needs and a way to increase voluntary compliance which is aligned with the organization's vision.

The research will entail collecting data from the organization's system of the corporate taxpayer category. I request permission to get access to the building of the organization, list of corporate taxpayers in your database, conduct an interview with a senior member in the organization and use organizational resources to develop an electronic questionnaire survey to the sampled corporate taxpayers from each category.

I will invite the taxpayers to participate in this study as a student and the Commissioner General of the organization. If they agree, corporate taxpayers will be asked to answer an electronic questionnaire, and the Commissioner General will be interviewed. The interview will require thirty minutes during working hours in the organization. The participants' responses will be written on the interview questionnaire form.

Participants will be asked to give their written or verbal consent before the research begins. Their responses will be treated confidentially, and identities will be anonymous unless otherwise expressly indicated. Individual privacy will be maintained in all published and written data resulting from the study.

The results will be communicated and published on the dissertation of my paper in the University of Witwatersrand.

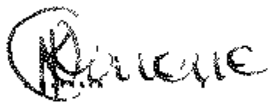
The research participants will not be advantaged or disadvantaged in any way. They will be reassured that they can withdraw their permission at any time during this project without any penalty. There are no foreseeable risks in participating in this study. The participants will not be paid for this study.

All research data will be destroyed.

I therefore request permission in writing to conduct my research at your organization. The permission letter should be on your organization's headed paper, signed and dated, and specifically referring to myself by name and the title of my study.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

Yours sincerely,



Nqobile Kunene

(+268) 76127027

2370999@students.wits@co.za

Dr. Jacques Totowa

011 717 4853

jacques.totowa@wits.ac.za

ANNEXURE E

PERMISSION TO CONDUCT RESEARCH

ERS
Eswatini Revenue Service

Telephone: 2406 4000 **Contact Centre:** 2406 4050 **Email:** info@ers.org.sz

Portion 419 of Farm 50 along MR 103
Ezulwini
P.O. Box 5628
Mbabane
Eswatini

12 June 2023

ATT: Ms Nqobile Jessica Kunene

Wits Business School University of Witwatersrand

Dear Nqobile

RE: PERMISSION TO CONDUCT RESEARCH ON: THE IMPACT OF DIGITAL TRANSFORMATION IN TAX ADMINISTRATION IN ESWATINI.

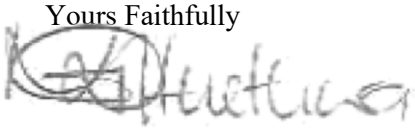
This serves to acknowledge receipt of your request to conduct the above entitled research at ERS for your MBA studies.

The students are hereby granted the permission to conduct the research which includes: access to the building of the organization, list and contact details of corporate taxpayers in your database, conduct an interview with a senior member in the organization and use organizational resources to develop an electronic questionnaire survey to the sampled corporate taxpayers.

You are also granted permission to send an electronic questionnaire survey to corporate taxpayers and conduct an interview with the Commissioner General. The interview will require thirty minutes during working hours in the organization.

We would like to remind all that the information be used for the stated academic purpose only and that adherence to confidentiality be maintained at all times. A copy of the research should also be submitted to ERS for filing in our library as a portal of information.

Yours Faithfully



Lindelwe Mthethwa Director Human Resources

'Raising the Standard'