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An In- Depth Analysis of the Digital Era's Influence on Tax Compliance within The Zambia Revenue Authority (ZRA)

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ABSTRACT

This study examines the impact of the digital era on tax compliance within the Zambia Revenue Authority (ZRA), focusing on the adoption and effectiveness of digital platforms such as TaxOnline, TaxOnPhone, and TaxOnApp. These tools are designed to streamline tax administration, reduce compliance costs, and enhance taxpayer engagement. While digital transformation has improved efficiency and facilitated real-time tax submissions, challenges such as limited digital literacy, inadequate infrastructure, and resistance to change, particularly in rural areas, hinder widespread adoption.

The research is grounded in the Technology Acceptance Model (TAM) and Diffusion of Innovations Theory, offering a theoretical lens to evaluate how perceived usefulness, ease of use, and social diffusion influence technology adoption. A mixed-methods approach was employed, integrating quantitative surveys and qualitative interviews with taxpayers and ZRA officials to assess adoption patterns, identify barriers, and analyze the platforms' effectiveness. Findings reveal significant benefits, including improved compliance, risk mitigation, and strategic decision-making. However, issues such as inconsistent internet connectivity, language barriers, and lack of trust in digital platforms persist. Despite these challenges, the study shows a high willingness among taxpayers to embrace digital systems, provided accessibility and usability are improved.

The study recommends infrastructure investment, tailored taxpayer education, multilingual platform integration, and public-private collaborations to enhance adoption and trust. These strategies can optimize Zambia's digital tax administration, promote inclusivity, and support sustainable compliance. This research contributes to the growing body of knowledge on digital tax systems in emerging economies, offering practical insights for policymakers and tax authorities.

Keywords

- ✓ Digital Era
- ✓ Tax Compliance
- ✓ Taxpayer Engagement
- ✓ Technology Acceptance Model
- ✓ Risk Mitigation
- ✓ Infrastructure Investment

Introduction

This chapter discusses the background of the study, the problem statement, purpose of the study, the general and specific objectives, and general and specific research questions, significance of the study, operational definitions and a conclusion follows thereafter.

The digital era has profoundly transformed tax administration globally, introducing innovative technologies that streamline tax processes, reduce administrative burdens, and enhance compliance. Digital platforms, such as online tax filing systems and mobile applications, have proven instrumental in enabling taxpayers to fulfill their obligations efficiently while improving revenue collection. These developments are particularly crucial in emerging economies like Zambia, where modernization of tax administration is pivotal for economic growth and fiscal sustainability.

In Zambia, the Zambia Revenue Authority (ZRA) has spearheaded several digital initiatives, including TaxOnline and TaxOnPhone, aimed at enhancing tax compliance and expanding the tax base. These platforms allow taxpayers to file returns, make payments, and access essential tax information through user-friendly digital interfaces, reducing reliance on traditional, time- consuming methods. However, challenges such as limited

digital literacy, uneven internet accessibility in rural areas, and taxpayer skepticism toward digital platforms have restricted the full adoption of these technologies.

METHODOLOGY

This chapter outlines the systematic methodology that will be employed to conduct this research, focusing on understanding the determinants of digital tax compliance within the Zambia Revenue Authority (ZRA). It includes the conceptualization of the research design, development of research tools, sample selection, data collection, data processing, and application of analytical techniques

Research Design

The research design provides a framework for the collection, measurement, and analysis of data. According to Kothari (2004), a research design is a structured plan detailing the steps to answer research questions. This study will employ a mixed-methods research design, integrating quantitative and qualitative approaches to comprehensively address the research objectives.

- Quantitative Component: Structured questionnaires will be used to gather measurable data on taxpayer behaviors and compliance trends.
- Qualitative Component: Semi-structured interviews will capture subjective experiences and insights from ZRA officials and taxpayers.

This combination leverages the strengths of both methodologies, ensuring robust and detailed findings (Bhattacherjee, 2012).

Study Site

The study will be conducted in Chipata, Eastern Province, Zambia. This location is the regional headquarters for ZRA and hosts a diverse population of taxpayers, including formal and informal enterprises. Chipata provides a representative setting to explore the challenges and opportunities in digital tax compliance.

Population

Population refers to the entire group of individuals or entities from which a sample is drawn and to which the study's findings are intended to be generalized (Cooper & Schindler, 2008). For this study, the population will encompass over 7,000 entities, including small and medium enterprises (SMEs), individual taxpayers, and Zambia Revenue Authority (ZRA) officials operating within Eastern Province, Chipata. This diverse population ensures the inclusion of multiple perspectives on digital tax compliance, making the findings comprehensive and relevant.

The population of interest will be categorized as follows: i. Taxpayers:

- a) Individual Taxpayers: Includes both formal sector employees and individuals engaged in informal economic activities.
- b) Small and Medium Enterprises (SMEs): Encompasses businesses operating at varying scales that contribute to tax revenues within the province.
- ii. Corporate Taxpayers: Larger organizations with structured operations and significant contributions to the tax base.
- iii. ZRA Officials:
- iv. Policy and Administrative Staff: Includes officials involved in crafting and implementing tax policies.
- v. Technical and Operational Staff: Personnel managing the digital platforms and ensuring compliance enforcement.

This population will provide a balanced representation of both taxpayers and administrators, enabling the study to comprehensively explore the determinants of digital tax compliance. By

incorporating taxpayers across different sectors and ZRA staff with varied roles, the research ensures a holistic understanding of the digital tax compliance ecosystem in Zambia.

Sampling Frame

A sample framework of Public sector organizations, private sector institutions, informal sector enterprises and individual taxpayer's in the central business area. The list from these was found from Zambia Revenue Authority which had masked some details due to taxpayer confidentiality policies.

Sample Size Determination and Sampling Techniques

To achieve objective representation of the entire population, the percentage of each sector to the total population will be calculated. A definitive number of participants will be selected randomly based on the numerical strength of each sector within the study's population. According to Delice (2010), determining the sample size depends on the research objectives, population size, and practical constraints. For this study, the total sample size will be 140 participants, distributed as follows:

- i. Individual Taxpayers: 100 participants
- ii. Small and Medium Enterprises (SMEs) and Corporate Tax Payers: 30 participants

iii. ZRA Officials: 10 participants. This sample size reflects the need for a manageable yet diverse group of respondents while ensuring equitable representation of all key stakeholders.

Sampling Technique

The researcher will use stratified and random sampling techniques. First, the taxpayers will be stratified into sectors. After the stratification, random sampling was used to pick a sample from each stratum. The adoption, of the sampling technique is to ensure fair and objective distribution of the population for better representation.

• Stratified Random Sampling:

o Participants will be stratified into groups (e.g., individual taxpayers, SMEs). o Random sampling will then be applied within each group to minimize

• Purposive Sampling:

o ZRA officials directly involved in digital tax systems will be purposively selected for interviews.

Stratified random sampling is employed to ensure representative and equitable inclusion of all key stakeholder groups, enhancing the generalizability of findings (Creswell, 2014). By stratifying and selecting participants proportionally, the study aims to balance practical considerations with the goal of capturing meaningful insights into the determinants of digital tax compliance.

Data Collection and Research Tool Construction

A digital data collection tool using software called Mwater loaded on a mobile phone will be used for data collection on to which a pre designed questionnaire was loaded.

Research Tool Construction

The following tools will be constructed and pretested:

1. Questionnaires:

o Digital and physical formats, including closed-ended (Likert scale) and open-ended questions.

2. Interview Guides:

o Semi-structured interview guides to explore in-depth insights from ZRA officials.

3. Digital Tools:

o The Mwater platform will be utilized to facilitate efficient data collection.

Data Collection

Data Collection Instruments:

1. Primary Data:

- o Digital and physical questionnaires.
- o Semi-structured interviews with ZRA officials.

2. Secondary Data:

o ZRA annual reports, compliance records, and policy documents.

Data Collection Procedure:

1. Digital Questionnaires:

o Distributed via email and mobile apps for urban respondents.

2. Physical Questionnaires:

o Administered in rural areas where digital access is limited.

3. Interviews:

o Conducted face-to-face or via virtual platforms. Data collection will be conducted over a three-week period, with follow-ups to ensure completion.

Data Analysis

Data analysis will involve both quantitative and qualitative techniques to ensure comprehensive evaluation and meaningful insights. Advanced tools will be employed to process, analyze, and present data effectively.

Quantitative Data Analysis

- Data Coding and Entry: Raw quantitative data will be coded and entered into statistical software for analysis.
- Analytical Tools: SPSS and Microsoft Excel will be used for data processing and statistical analysis.
- Descriptive Statistics: Frequencies, percentages, and means will be calculated to summarize and interpret general trends in the dataset.
- Inferential Statistics: Techniques such as correlation and regression analysis will be applied to identify relationships between key variables and test the study's hypotheses.

Qualitative Data Analysis

- Thematic Analysis: Interview transcripts and open-ended questionnaire responses will be analyzed to identify recurring themes, patterns, and insights.
- Data Categorization: Responses will be categorized based on the study objectives, and key themes will be highlighted to align with the research questions.
- Narrative Presentation: Findings from qualitative analysis will be presented in descriptive formats to provide context and depth to the quantitative results.

Presentation of Results

The analyzed data will be presented in a variety of formats to ensure clarity and enhance the understanding of findings:

- Tables: Summarizing numerical data and identifying patterns.
- Charts and Graphs: Visualizing trends, relationships, and key metrics for ease of interpretation.
- Narratives: Providing in-depth explanations of qualitative insights.

Table Extraction and Application of Analytical Techniques

The processed data will be further refined through table extraction and the application of analytical techniques to ensure the research findings are well-organized and impactful.

Quantitative Data

- Data Summarization: Trends in compliance and platform usage will be summarized in well-structured data tables.
- Application of Advanced Techniques: Statistical models, such as regression analysis, will be employed to establish relationships between independent and dependent variables. These techniques will enable the study to draw meaningful conclusions about the determinants of digital tax compliance.

Qualitative Data

- Thematic Representation: Key themes and narratives identified during qualitative analysis will be extracted into tables for better organization.
- Pattern Identification: Tables will highlight recurring themes and align them with the study objectives to ensure comprehensive insights.

Ethical Consideration

Ethical standards will guide all stages of this research:

- 1. **Informed Consent**: Participants will be briefed about the study and consent obtained.
- 2. Confidentiality: Data will be anonymized to protect participant identities.
- 3. **Voluntary Participation**: Respondents can withdraw at any stage without repercussions.
- Cultural Sensitivity: Local customs and practices will be respected during data collection.

Limitation of the Study

• Low Response Rates:

To address low response rates, the study will implement a multi-channel follow-up strategy. This will include personalized reminders via email, phone calls, and text messages

• Geographic Constraints:

Digital tools and mobile surveys will be used.

• Literacy Challenges:

Oral explanations and guided responses will be provided.

CONCLUSION

This chapter has detailed the research methodology to be employed in understanding the determinants of digital tax compliance within the Zambia Revenue Authority (ZRA). The mixed- methods research design, incorporating both quantitative and qualitative approaches, ensures a comprehensive examination of taxpayer behavior, compliance trends, and the challenges faced in adopting digital tax systems.

The study's focus on Chipata as the study site, along with a clearly defined population and sampling framework, ensures that the research is contextually relevant and representative of diverse stakeholder perspectives. The use of stratified and random sampling techniques, combined with purposive sampling for ZRA officials, enhances the reliability and validity of the findings.

Robust data collection and analysis methods, including digital tools such as the Mwater platform, SPSS for quantitative analysis, and thematic analysis for qualitative data, provide a strong foundation for deriving meaningful insights. Ethical considerations, including informed consent, confidentiality, and cultural sensitivity, are integral to the research process, ensuring compliance with professional standards.

In summary, this chapter outlines a systematic and rigorous methodological framework designed to address the research objectives and answer the key questions. It lays the groundwork for collecting and analyzing data effectively, setting the stage for the subsequent chapters that will present the research findings and their implications.

DATA ANALYSIS

The research yielded the following data;

Response Rates

For the study, out of the 140 questionnaires issued to the respondents, 123 were returned. The overall response rate for the study was as presented in Table 4.4 below;

Table 1 Response rate

Demographic Characteristics

This subsection presents the respondents' personal information, including their gender, age group, greatest education level reached, and income source. According to the study, 69 respondents (or 56%) were men, and 54 (or 44%) of the 123 participants were women, as shown in Figure 7 below

Response	Frequency	Percentage (%)
Returned	123	77%
Unreturned	37	23%
Total	160	100%

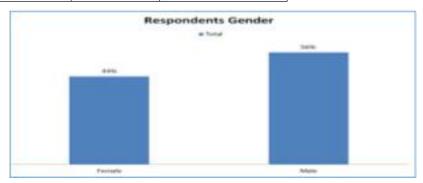


Figure 1 Respondents Gender

As shown in Figure 8 below, the study found that 39 respondents (or 31.71%) were mostly between the ages of 30 and 34, while only 3 (or 2.4%) were between the ages of 16 & 20.

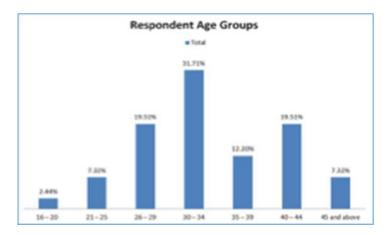


Figure 2 Respondents Age Groups

The study found that 6 respondents (or 5%) only completed upper primary school, whereas 9 respondents (or 7%) attended senior secondary school, 36 respondents (or 29%) attended college, and 72 respondents (or 31.71%) had earned a university degree. This is seen in Figure 9.

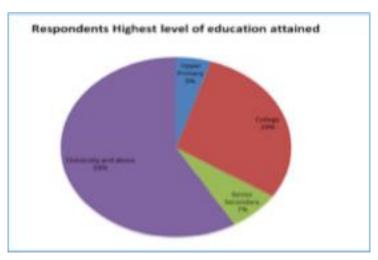


Figure 3 Respondents Highest level of education attained

As depicted on Figure 10 75 respondents, or 61%, the study revealed, have a formal job; 21 respondents, or 17%, have an informal employment; and 27 respondents, or 22%, and are business owners.

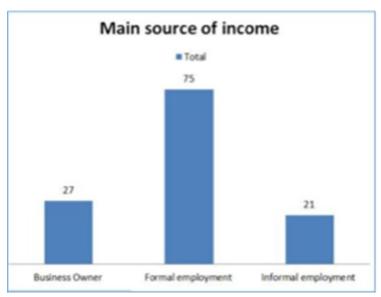


Figure 4 Respondents Main source of income

Digital tax services awareness

This section provides an overview of respondents' understanding of the available electronic and digital tax services in Zambia. It also explores how these services are utilized to ensure compliance with personal and business tax obligations.

Knowledge of digital tax services

According to the study's findings, 104 respondents (84.51%) were aware of the available ZRA electronic services, compared to 19 respondents (15.49%) who were not. Similarly, 57 respondents (46.48%) were aware of the ZRA Tax On Phone (*858#) service, while 66 respondents (53.52%) were not. Additionally, 90 respondents (73.24%) were aware of the ZRA Tax Online (https://portal.zra.org.zm) portal, whereas 33 respondents (26.76%) were not.

However, only 19 respondents (15.49%) were aware of the ZRA TaxOnApp mobile application, with a significant majority of 104 respondents (84.51%) not being aware.

These findings are illustrated in the corresponding figures below.

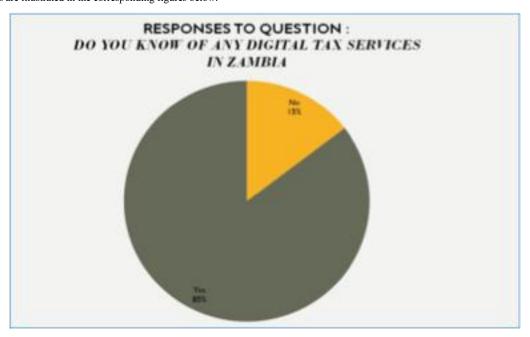


Figure 5 Knowledge of digital tax services in Zambia Respondent's rating of project design-related factors.

Respondent's rating of knowledge of digital tax services

Statistics on knowledge of digital tax services

Gadget Used for eTax Service Access 50.00% 45.00% 4634% 40.00% 35.00% 30.00% 25.00% 20.00% 15.00% 14.63% 10.00% 5.00% 0.00% Computer/Laptop Do not use the services Handheld Device or Phone Type of Gadget

Figure 6 Gadget used for etax services

Willingness to access digital tax services

The study findings indicate that 68% of respondents were willing to adopt e-Tax services, while 29% expressed mixed feelings about their usage. A small proportion, 3%, were disinclined to use digital tax services, as depicted in Figure 14.

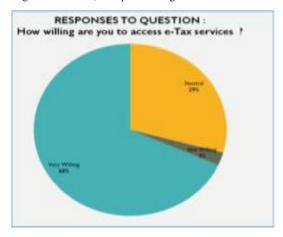


Figure 7 Willingness to access etax services

Etax ease of usage

The study findings indicate that a majority of respondents, 84 individuals (68%), consider eTax services to be user-friendly. Conversely, 18 respondents (15%) reported difficulties in using these services. These findings are depicted in Figure 15.

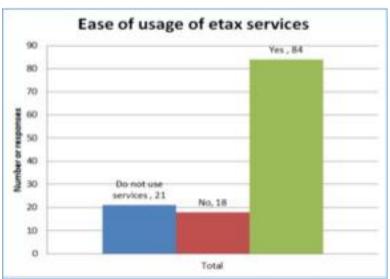


Figure 8 Willingness to access etax services

eTax Education

The study revealed that a significant proportion of respondents, 78 individuals (59%), strongly advocate for ZRA to enhance taxpayer education initiatives focused on their electronic tax services. Furthermore, 45 respondents (37%) expressed agreement with this need, while a small minority of 6 respondents (4%) remained undecided on the matter. In addition, the findings demonstrate a clear preference for English as the medium for tax education, with 108 out of 123 respondents (88%) selecting it as their preferred language.

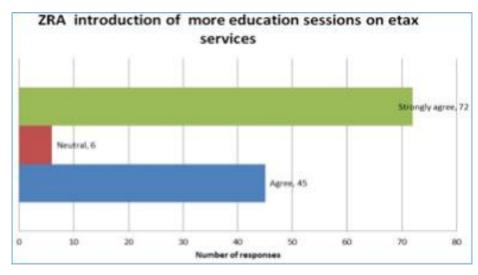


Figure 9 etax education by ZRA

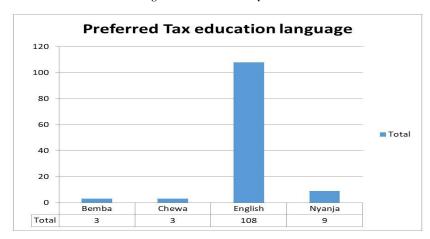


Figure 10 Preferred tax education language.

The results also showed that 58% of the respondents favoured radio and television for tax education, and that other preferred ways for learning about tax services included online, Zoom, social media platforms, virtual conferences, and face-to-face meetings as evidenced in Figure 18.

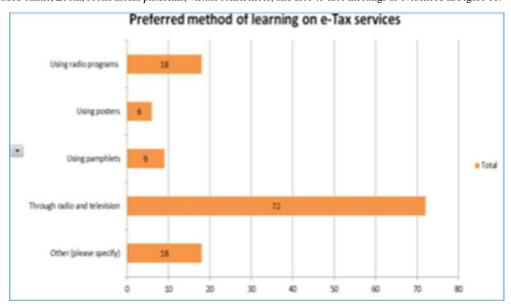


Figure 11 Preferred methods for e-tax services education

This section presents an overview of respondents' perspectives on the digitization of tax administration, focusing on its influence on personal and organizational tax management and compliance practices.

eTax implementation and impact

The study's findings reveal that 66 respondents (54%) strongly agree, 42 respondents (34%) agree, and 15 respondents (12%) are neutral on the need for implementing additional digital services to enhance tax administration. These findings are visually represented in Figure 19.

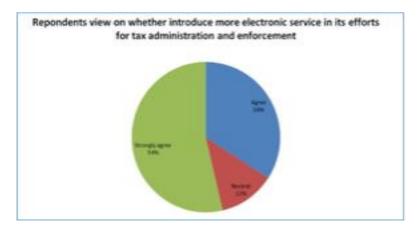


Figure 12 Respondents view on introduction of addition e-tax services

Table 2 shows that, according to the findings, the introduction of electronic tax services has enhanced tax compliance in Zambia for 48 respondents (or 39% of the total 123), 39 respondents (or 32% of the total 123), 24% of the respondents, and the remaining 5% are not in agreement.

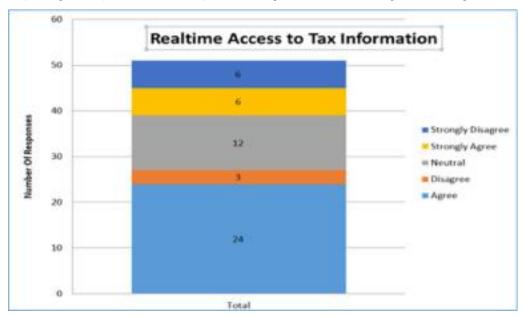


Figure 22 demonstrates that 63% of respondents agreed that unnecessary delays had been minimized as a result of the prompt updating of tax information due to the usage of digital platforms.

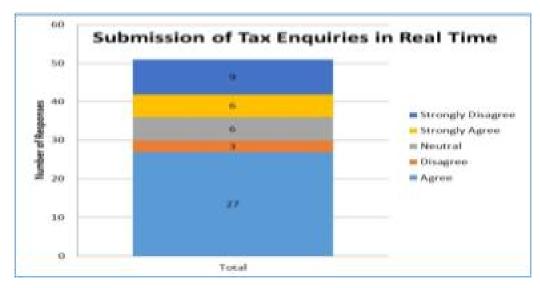


Figure 15 Updating of tax information

Data Analytics by Organizations

This section sought to assess the extent to which businesses have utilized data analytics to enhance their tax compliance levels. Respondents were presented with statements regarding the application of data analytics in tax management.

SUMMARY OF FINDINGS

DISCUSSION OF RESULTS

• Impact of Digitization on Tax Compliance and Administration

- o Digital platforms such as TaxOnline and TaxOnPhone have improved tax compliance by enabling real-time submissions, retrieval of compliance certificates, and monitoring of tax statuses. These platforms have reduced transaction costs and enhanced flexibility.
- o Businesses have leveraged data analytics to refine tax profiles, understand tax exemptions, and make strategic decisions, with 53% of respondents agreeing on the utility of analytics in improving operations.
- o Digitization has mitigated tax risks, with 64% of respondents noting that it eliminates risks such as document loss. Businesses also reported improved risk management by identifying problematic transactions and planning effectively.

• Taxpayer Beliefs and Perceptions

- o Awareness of digital tax services was high (85%), with respondents recognizing their benefits. However, usage rates varied, with 54% using TaxOnline, 27% using TaxOnPhone, and 7% using TaxOnApp.
- o While 68% of respondents expressed willingness to adopt digital tax services, challenges such as digital literacy gaps, poor infrastructure, and language barriers limited adoption in certain segments.
- o Despite positive perceptions, 59% of respondents indicated they would evade taxes if given the opportunity, underscoring the need for ongoing taxpayer education and engagement.

• Effects of Digitized Tax Services on Compliance

- o Digitized tax services have positively influenced compliance levels, with 47% of businesses filing returns ahead of deadlines.
- o Respondents highlighted the role of technology in moderating compliance, citing improvements in timeliness, risk management, and strategic planning.
- o Businesses emphasized the importance of ongoing system upgrades and the inclusion of advanced features to enhance the user experience and improve compliance rates.

SUGGESTIONS

Based on the findings, the following recommendations are proposed:

1. Expand Digital Infrastructure Improve internet connectivity and mobile network coverage, particularly in rural and semi-urban areas.

1. Optimize digital platforms, such as TaxOnApp, to ensure functionality in low-bandwidth environments.

2. Enhance Taxpayer Education

- 1. Develop targeted training programs to address digital literacy gaps, focusing on informal businesses and rural communities.
- 2. Use localized communication channels, including community radio and social media, to raise awareness of e-tax services.

3. Promote Inclusivity

- 1. Integrate local languages into digital platforms to cater to non-English-speaking taxpayers.
- 2. Simplify platform interfaces to make them accessible to less tech-savvy users.

4. Incentivize Compliance

- 1. Introduce rewards for early adopters and consistent users of digital tax platforms, such as discounts or certifications.
- 2. Offer reduced fees for digital submissions to encourage voluntary compliance.

5. Leverage Public-Private Partnerships

- Collaborate with telecommunications providers, financial institutions, and community organizations to expand the reach and effectiveness of digital platforms.
- 2. Partner with educational institutions to deliver digital skills training and promote awareness.

6. Continuously Upgrade Systems

- 1. Regularly evaluate and improve existing platforms based on user feedback.
- 2. Introduce predictive analytics and real-time feedback mechanisms to enhance decision-making and user engagement.

7. Address Resistance to Change

- 1. Conduct behavioral campaigns to emphasize the benefits of digital platforms, addressing skepticism and building trust among taxpayers.
- 2. Highlight success stories to demonstrate the impact of digitization on business growth and compliance.

Contribution to the Body of Knowledge

This study makes significant contributions to the existing body of knowledge on tax compliance, digitization, and public administration. The findings offer theoretical and practical insights that are relevant to policymakers, tax authorities, and researchers.

• Comprehensive Understanding of Digitization and Tax Compliance

This study provides an in-depth analysis of how digitization influences tax compliance and administration. By examining the impact of digital platforms such as TaxOnline and TaxOnPhone on compliance behaviors, the research sheds light on the mechanisms through which technology improves efficiency, reduces compliance risks, and fosters strategic decision-making. This comprehensive understanding addresses gaps in literature, particularly in the context of developing economies like Zambia.

• Integration of Taxpayer Perspectives

Unlike many previous studies that focus solely on tax authorities, this research integrates insights from both taxpayers and ZRA officials. By assessing taxpayer beliefs, perceptions, and challenges, the study offers a balanced understanding of the adoption and utilization of digital tax systems. This dual perspective provides actionable insights into how digital services can be tailored to meet the needs of diverse user groups.

• Localized Insights on Zambia's Tax System

By focusing on Zambia, this research fills a gap in the literature on tax compliance in sub-Saharan Africa. The findings provide valuable insights into the specific challenges faced by Zambian taxpayers, including infrastructural limitations, digital literacy gaps, and cultural resistance to change. These localized insights are crucial for policymakers and researchers seeking to address tax compliance issues in similar contexts.

• Emphasis on the Role of Technology in Modern Tax Administration

The study highlights the transformative role of technology in moderating the relationship between digitization and tax compliance. By showcasing how digital tools enable real-time submissions, mitigate risks, and enhance strategic decision-making, this research provides a framework for understanding the interplay between technology and compliance. These findings contribute to the growing body of literature on e-government and digital transformation in public administration.

• Focus on Behavioral and Structural Barriers to Adoption

This research identifies key behavioral and structural barriers to the adoption of digital tax services, such as resistance to change, language barriers, and system usability issues. By emphasizing these challenges, the study provides a foundation for future research on overcoming barriers to digital service adoption in tax administration.

• Recommendations for Policy and Practice

The study offers practical recommendations for improving digital tax systems, including enhancing infrastructure, promoting taxpayer education, and introducing incentives for compliance. These actionable insights contribute to the body of knowledge by providing a roadmap for implementing effective and inclusive digital tax administration strategies.

• Foundation for Longitudinal Research

The study highlights the need for longitudinal research to assess the long-term impacts of digitized tax systems on compliance behaviors and administrative efficiency. By identifying this gap, the research lays the groundwork for future studies that track changes over time, providing a deeper understanding of the sustainability of digital transformation efforts.

Limitations of the Study

While this study provides valuable insights into the impact of digitization on tax compliance in Zambia, several limitations must be acknowledged:

• Geographic Scope

The research was confined to Zambia Revenue Authority (ZRA) operations and respondents within specific regions. This focus limits the generalizability of the findings to other geographical areas or countries with different tax administration systems and socio- economic contexts.

• Time Constraints

The limited timeframe for data collection and analysis may have affected the depth of the research. A longer study period could have allowed for more comprehensive data collection, broader participant engagement, and deeper analysis of findings.

• Resource Constraints

Financial and logistical challenges restricted the scope of the study to taxpayers and ZRA officials, without extensive comparisons to other sectors or agencies implementing digital transformation.

• Target Population

The study primarily focused on ZRA officials and taxpayers while excluding insights from other critical stakeholders, such as policymakers, funding agencies, and technology providers. This limited scope may have excluded key perspectives on the broader impact of digitization.

• Scope of Digital Tools Analyzed

While the study focused on platforms like TaxOnline, TaxOnPhone, and TaxOnApp, it did not comprehensively explore other emerging digital tools or global best practices that could provide additional insights into enhancing Zambia's tax compliance system.

Directions for Future Research

To address the limitations of this study and further contribute to the understanding of the impact of digitization on tax compliance and administration, the following recommendations for future research are proposed:

1. Expand Research to Other Regions

Future studies should encompass multiple regions within Zambia to provide a broader perspective on the challenges and successes of digitization. Research focusing on diverse geographical contexts will enhance the generalizability of findings.

2. Include Additional Stakeholders

Future research should include perspectives from funding agencies, technology providers, and policymakers to gain a holistic view of the factors influencing the success of digital tax systems.

3. Focus on Beneficiary Perspectives

ncorporating a deeper exploration of taxpayer perspectives, particularly from rural and informal sectors, will provide valuable insights into the barriers and enablers of digital adoption.

4. Conduct Longitudinal Studies

Longitudinal research is essential to track the long-term impacts of digitization on tax compliance behaviors, risk management, and administrative efficiency. This approach will provide a comprehensive understanding of the sustainability of digital transformation initiatives.

5. Evaluate Emerging Technologies

Further research should assess the integration of emerging technologies, such as blockchain, artificial intelligence, and machine learning, in tax administration. These technologies have the potential to enhance compliance, improve accuracy, and streamline tax processes.

6. Investigate Sustainability and Eco-Friendly Practices

Future studies should explore the integration of sustainable practices in digital tax systems. For example, research could focus on how eco-friendly technologies can be leveraged to reduce environmental footprints while improving efficiency.

7. Address Digital Literacy and Infrastructure Challenges

Research focusing on overcoming barriers related to digital literacy and infrastructure limitations will provide actionable insights for policymakers and tax authorities seeking to improve access and inclusivity.

8. Explore Behavioral Economics in Tax Compliance S

Studies examining the role of behavioral economics in encouraging tax compliance through nudges, incentives, and default settings could provide innovative solutions for increasing adoption and voluntary compliance.

CONCLUSION

This study underscores the transformative potential of digitization in enhancing tax compliance and administration within the Zambia Revenue Authority (ZRA). Through platforms such as TaxOnline and TaxOnPhone, significant progress has been made in streamlining tax processes, reducing transaction costs, and improving access to tax services. The findings reveal that these innovations have fostered efficiencies, enhanced compliance, and empowered businesses with tools for strategic decision-making. However, challenges persist, including limited digital literacy, infrastructural gaps, and taxpayer resistance, particularly in rural and underserved areas.

By framing the analysis within the Technology Acceptance Model (TAM) and Diffusion of Innovations Theory, the study highlights how individual attitudes and societal dynamics shape the adoption of digital platforms. This theoretical lens provides a roadmap for understanding taxpayer behavior and identifying barriers to technology utilization. Key insights indicate the need for robust infrastructure, targeted education programs, and the integration of user-friendly and inclusive design elements into digital tax systems.

The research findings also suggest actionable strategies for addressing these barriers, such as expanding public-private collaborations, offering incentives for compliance, and leveraging behavioral insights to encourage adoption. These strategies not only align with global best practices but also cater to the unique socio-economic context of Zambia, providing a pathway for enhancing the effectiveness and inclusivity of the ZRA's digital transformation initiatives.

Looking ahead, this research lays the groundwork for empirical analyses exploring the long-term impacts of digital tax systems on compliance behaviors, administrative efficiency, and economic growth. Additionally, it serves as a basis for formulating policy recommendations aimed at bridging the digital divide, fostering trust in digital platforms, and building a more sustainable and inclusive tax ecosystem. By addressing systemic challenges and harnessing the potential of digital technologies, Zambia can continue to advance its tax modernization agenda, contributing to broader national development goals.

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