African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

Digitalization and Tax Administration in the Gambia

OGBETA, Kingsley Oghenekevwe[1] & OLUWADARE, O. Ayeni[2]

[1]Department of Management Sciences, School of Business and Public Administration, University of the Gambia, Serekunda, the Gambia.

[2]Department of Public Administration, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria

***Corresponding Author's E-mail*: kogbeta@utg.edu.gm**

Abstract

This study extensively explored the potential of digitalization in The Gambia Revenue Authority's tax administration, amidst concerns over the practical application of digital tools and their underutilization, which have hindered the realization of improved revenue mobilization and efficient tax processes in The Gambia. The research, adopting a mixed-method design, aimed to understand the intricate relationship between digitalization and tax administration in The Gambia. With specific objectives, including identifying driving factors, examining effects, and evaluating the correlation with GRA's performance, the study adopted quantitative and qualitative analyses. Similarly, the study population is two thousand, one hundred and eighty-eight (2188). Using Krejcie and Morgan (1970) formula, out of 2188 population of the study, three hundred and twenty seven (327) were selected as the sample size. This encompassed individuals drawn from the Ministry of Finance and Economic Affairs, GRA staff, and corporate taxpayers using a stratified and proportionate-to-size sampling approach. Hypotheses analysis revealed a statistically significant and positive effect of digitalization on tax administration, indicating improved efficiency and GRA effectiveness. Also, Spearman's rank-order correlation affirmed a positive relationship between digitalization and tax administration. Furthermore, qualitative insights from stakeholder interviews highlighted drivers such as international financial body stipulations, modernization imperatives, trust-building, accurate record-keeping, and alignment with global standards. Recommendations include training programs for GRA staff, public awareness campaigns, and enhancing user experiences for e-payment systems, among others.

Key Words: Digitalization, Tax Administration, Taxation, Tax Evasion, Tax Compliance

Citation of article: **Ogbeta, K. O. & Oluwadare, O. A. (2024).** Digitalization and Tax Administration in The Gambia, *African Journal of Politics and Administrative Studies AJPAS*, 17(1):173-211

Date Submitted: 10/03/2024 **Date Accepted**: 30/04/2024 **Date Published**: December, 2024

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/


https://dx.doi.org/10.4314/ajpas.v17i1.10
p-ISSN: 2787-0367; e-ISSN: 2787-0359

Introduction

In the 21st century, digital transformation has significantly impacted society, economics, and politics, revolutionizing government operations worldwide. In recent years, the global emphasis on the convergence of digital technology and tax administration has surged, acknowledging the benefits of digitalization in revenue mobilization and fiscal transparency (International Monetary Fund Report, 2020; World Bank Group Report, 2020). This shift has become crucial for enhancing revenues, simplifying operations, curbing evasion, and fostering global economic growth.

In line with global and African trends, The Gambia recognizes the transformative potential of digitalization in advancing tax administration for improved revenue mobilization and fiscal clarity. However, a preliminary assessment of the Gambia Revenue Authority (GRA) reveals challenges in the practical application of digital tools, indicating a need for more effective implementation (Personal communication, GRA official, 22 November 2023). Despite digital tools being in place, their full potential remains untapped, revealing a knowledge and skill deficit among tax officials and citizens (Personal communication, GRA official, 22 November 2023). Similarly, the World Bank Group report (2020) identifies concerns about the suboptimal deployment of digital tools within the GRA, highlighting deficiencies in taxpayer data handling, tax return processing, compliance oversight, and registration processes. Research by Fudamu, Mohammed, and Kama (2019), Olatunji and Ayodele (2017), Oseni (2016), Benaihia et al. (2017), and Owino et al. (2017) provides varied insights into the adoption of digitalized tax administration, while an IMF report using the Tax Administration Diagnostic Assessment Tool (TADAT) emphasizes deficiencies in The Gambia's tax structure.

To address these gaps, the Gambian government has allocated substantial resources in its budgetary planning from 2018 to 2022 to enhance digital infrastructure for tax administration, including the deployment of the GAMTAXNET system and upgrades from ASYCUDA++ to ASYCUDA World. While adopting digital technology is widely advocated to enhance tax administration, research specific to The Gambia context is limited, particularly regarding the effect of digitalization on tax administration. This is the obvious gap in the literature which this study intends to fill. To direct this study intellectually, the following research questions are raised: What drives The Gambia towards digitalisation of its tax

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

administration? What are the effects of digitalisation on tax administration in The Gambia? What is the correlation between digitalisation and the performance of the Gambia Revenue Authority?

The study seeks to examine the nexus between the use of digitalisation and tax administration in The Gambia. Specifically, it aims to identify the factors driving digitalisation in tax administration in The Gambia, examine the effect of digitalisation on tax administration in The Gambia, and evaluate the relationship between digitalisation and the performance of the Gambia Revenue Authority.

Furthermore, the hypotheses formulated for this study are as follows: H01: Digitalisation does not have a significant effect on tax administration in The Gambia. H02: Digitalisation does not have a significant relationship with the performance of GRA.

Conceptual Review

Digitalization

Digitalization is the transformation of information, processes, or services from conventional to digital formats using computers, electronic devices, and the Internet. It seeks to enhance efficiency, accessibility, and innovation in society, business, and personal life. In tax administration, digitalization transforms traditional procedures into user-friendly digital platforms, incorporating automation, communication tools, and data analytics for streamlined processes and improved effectiveness. Digitalization, as defined by Xu, Xu, and Li (2018), is the transformation of information or processes from analog to digital formats using computers and digital technologies for storage, processing, and transmission. Scholars characterize this shift as the Fourth Industrial Revolution, emphasizing digital adoption's central importance (Xu, Xu, & Li, 2018). This Fourth Industrial Revolution extends across society, business, and personal life, emphasizing the central importance of digital adoption. In tax administration, digitalization simplifies procedures for taxpayers through user-centric digital platforms (Westerman, Bonnet, & McAfee, 2014), enhancing trust and engagement through tailored communication (Martínez et al., 2022). Automation and big data analytics improve efficiency and provide insights into compliance patterns, fraudulent behaviors, and resource allocation (Oberer & Erkollar, 2018; Bloomberg, 2018). Tax entities are shifting to digital models, broadening service offerings, and engaging taxpayers in real-time through communication tools (Verhoef et al., 2021; Clerck, 2017).

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

Tax Administration

Tax administration is the coordinated set of government activities, strategies, and processes designed to oversee tax collection, ensure compliance, facilitate revenue mobilization, and maintain a balanced and fair fiscal environment. Steinmo (2018) and Basri et al. (2021) averred that tax administration is a vital and intricate process involving stakeholders, advanced tools, and institutional systems. As governed by governments, this systematic procedure encompasses tax assessment, revenue collection, compliance monitoring, taxpayer education, record-keeping, and communication of tax policies is aimed at ensuring prompt adherence to guidelines for revenue mobilization, fairness, and the reduction of tax evasion (Steinmo, 2018). Gurama (2020) defines tax administration as cohesive governmental initiatives involving appraising taxpayer liabilities, formulating tax collection strategies, implementing tax norms, and utilizing contemporary tech tools. Olaiya (2011) describes it as the orchestrated design and deployment of governmental strategies to manage tax collection, while Moore (2020) emphasizes its shaping in the African context by frameworks and modalities to facilitate and monitor tax collections. In summary, tax administration is a crucial governmental duty for revenue mobilization and establishing a balanced and compliant fiscal environment in line with various scholars' perspectives (Steinmo, 2018; Basri et al., 2021; Olaiya, 2011; Moore, 2020; Gurama, 2020).

Theoretical Framework

The theoretical framework for this study is the Unified Theory of Acceptance and Use of Technology (UTAUT). The UTAUT emphasizes the significance of user behaviour in the successful adoption and practical use of technology within organizations. The theory provides a lens for comprehending the integration of Technology (Venkatesh et al., 2003). Verhoef et al. (2021) opined that adopting digital technology leads to incremental improvements rather than transformative ones. This is often due to disjointed implementation that fails to align with existing resources and human capabilities. The UTAUT framework underscores the need to synchronize human and technological resources, particularly in organizations like the Gambia Revenue Authority (GRA), where digital integration has yet to meet objectives (World Bank Group, 2020). In the current digital era, global and local market efficiency,

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

organizational success, and governmental operations are increasingly linked to advancements in digital technologies (Verhoef et al., 2021; Marikyan & Papagiannidis, 2021). However, the success of substantial investments in digital technologies depends on the synchronized development of human capital and other resources (Venkatesh et al., 2003).

Similarly, a proposed conceptual framework for tax administration in the GRA, in addition to UTAUT, highlights drivers like efficiency, improved taxpayer services, and transparency, emphasizing the importance of design and usability in the digitalisation process. Influencing factors encompass digital infrastructure, literacy, culture, and resistance to change. Others are operational efficiency and increased compliance, facing potential challenges such as glitches and security concerns (Khalil & Benabdelhadi, 2022). Stakeholders play a crucial role, influencing outcomes, and a feedback loop exists where outcomes inform ongoing strategies and call for re-evaluation. Combining UTAUT with this framework provides a comprehensive understanding of the interplay between technology adoption, organisational change, and practical effects in the context of tax administration in The Gambia.

Visual Diagram of the Conceptual Framework of Digitalisation Effect on Tax Administration

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10
p-ISSN: 2787-0367; e-ISSN: 2787-0359

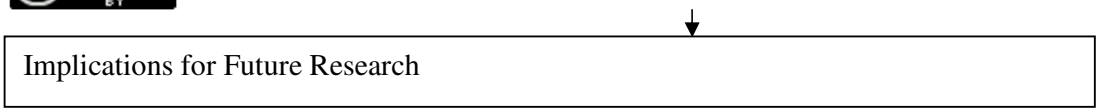

Figure 1: Visual Diagram of the Conceptual Framework of Digitalisation Effect on Tax Administration.

Methodology

The research adopted a mixed-method design, integrating the advantages of qualitative and quantitative data collection and analysis methods. The population of the study is 2188 participants. This comprises 19 senior and middle management staff from the Ministry of Finance and Economic Affairs (MoFEA), the entire 857 staff of Gambia Revenue Authority as of January 10, 2024, and all corporate taxpayers in The Gambia 1312 as of January 10, 2024. Table 1 showcased a comprehensive description of the study's population. The research used a staged sampling technique, combining various methods to ensure a representative sample. Participants were stratified into three clusters: Gambia Revenue Authority staff, senior and middle management staff from MoFEA, and corporate taxpayers. Proportionate sampling, based on cluster sizes, determined participant numbers. Targeted sampling identified individuals with crucial insights. The sample size, determined by the Krejcie and Morgan (1970) formula, was 327.

Distribution included MoFEA members (3), senior and middle management personnel from various divisions within Gambia Revenue Authority officials (128), and 196 corporate taxpayerrs. Targeted sampling ensured representatives mirrored relevant categories, enhancing engagement with key tax administration stakeholders. Inclusion of MoFEA and corporate taxpayers enriched research outcomes, providing a comprehensive analysis of factors that drives digital tools' adoption, effects, and its relationship with GRA performance. Interview sessions were held with pivotal figures from varied sectors. From MoFEA, the participants were three managerial staff from the Tax Department. As for the GRA**,** the dialogues included five high-ranking officials holding the following roles: Head of Technical Services, Director of ICT Department, Commissioner of Domestic Tax, Commissioner of Customs and Excise Division, and Head of Corporate Taxpayer Division. Additionally, four executives from major corporate taxpayer enterprises, chosen based on the benchmarks set by the "2022 Taxpayer Honours and Recognition," were part of the interview process. Leading

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10
p-ISSN: 2787-0367; e-ISSN: 2787-0359

corporate taxpayers in this bracket featured companies like Africell, Jah Oil, Qcell, Eco-Bank Gambia Ltd, (GRA, 2023).

Table 1: Table Showing Sample Size of Respondents

Category of Respondents	Population	Number of Questionnaire Administered	Percentage (%) of Questionnaire Administered
GRA staff	857	**128**	**15**
MoFEA	19	**3**	**16**
Corporate Taxpayers	1312	**196**	**15**
Total	2188	327	15

Source: Field Work, (2024)

The study data collection adhered to a systematic approach, utilizing ordinal regression for evaluating hypothesis one, correlation analysis for hypothesis two, and thematic analysis for analyzing interviews related to objective one.

This study recognized digitalization as the independent variable and tax administration as the dependent variable. The digitalization indicators include oonline tax registration rates, E-payment adoption rates, E-filing frequency, user experience and interface ratings, digital security measures adopted, digital taxpayer education initiatives, and E-query resolution rates. Tax administration is measured through indicators such as revenue mobilization, operational efficiency, tax policy structure, equitability, handling of tax credits and debts, taxpayer services, dispute resolution mechanisms, and international tax cooperation. Additionally, mediating variables explored in the study involve digital literacy and training, organizational culture, change management strategies, user satisfaction and engagement, and collaboration with technology providers.

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10
p-ISSN: 2787-0367; e-ISSN: 2787-0359

Data Analysis, Result and Discussion of Findings

In this study, 327 survey forms were distributed, with 289 collected back, resulting in an 88.38% return rate. The analysis of completed questionnaires involved using Ordinal Regression and Correlation Analysis to examine hypotheses 1 and 2. The outcomes of this analysis are in the following section below:

Test of Hypothesis 1:

Table 2: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	695.353			
Final	.000	695.353	27	.000

Link function: Logit.

Table 2 provides an all-around overview of the logistic regression analysis conducted in this study, focusing on the relationship between predictor variables (online tax registration rates, E-payment adoption rates, E-filing frequency, user experience and interface ratings, digital security measures adopted, digital taxpayer education initiatives, and E-query resolution rates) and the outcome variable, tax administration. The intercept-only model, serving as a baseline, has a -2 Log Likelihood of 695.353. In contrast, with a -2 Log Likelihood of 695.353, the incorporated predictor variables significantly enhanced the model's fit as indicated by the Chi-Square test with a 0.000 and 27 degrees of freedom. The statistical significance of the final model underscores the relevance of the predictor variables in explaining the variability in tax administration within the study's context.

Table 3: Pseudo R-Square

Cox and Snell	.910
Nagelkerke	.987
McFadden	.943

Link function: Logit.

Table 3 reveals the Pseudo R-squared values, indicating the logistic regression model's robust goodness of fit. The Cox and Snell Pseudo R-Square of .910 highlights that the model, incorporating predictor variables, explains 91% of the variability in tax administration, indicating a robust fit. The Nagelkerke Pseudo R-Square, at .987, emphasises the model's

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/


https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

effectiveness in capturing 98.7% of the maximum possible variability in the dependent variable (tax administration), signifying a strong fit. The McFadden Pseudo R-Square, standing at .943, indicates that the model improves explanatory power by 94.3% compared to a null model. Collectively, these high Pseudo R-Square values affirm that the logistic regression model, with its specified predictors (online tax registration rates, E-payment adoption rates, E-filing frequency, user experience and interface ratings, digital security measures adopted, digital taxpayer education initiatives, and E-query resolution rates), offers a convincing explanation for the observed variability in tax administration within the study's context.

Table 4 in the appendix 1, the logistic regression model's parameter estimates provide robust insights into the associations between predictor variables and log-odds of tax administration levels. For the thresholds of tax administration levels (1 to 4), none of the estimates are statistically significant (Tax Administration = 1: Estimate = -33.433, p = 0.400; Tax Administration = 2: Estimate = -14.444, p = 0.667; Tax Administration = 3: Estimate = -9.875, p = 0.769; Tax Administration = 4: Estimate = -0.972, p = 0.977), indicating a lack of proof to suggest significant differences in log-odds compared to the reference category. Among location variables, a higher online tax registration rate is associated with significantly higher log-odds of favorable tax administration (Estimate = 4.960, p = 0.008), while increased epayment adoption rates are tied to lower log-odds (Estimate = -3.701, p = 0.009). The significance of equery resolution rates (Estimate = 1.867, p = 0.029) indicates a positive association with favorable tax administration. However, categorical variables such as digital literacy, organisational culture, change management strategies, user satisfaction, and collaboration with technology providers show mixed results in terms of statistical significance. Notably, digital literacy, organisational culture (Level 3: Estimate = 1.569, p = 0.218), user satisfaction (Level 1: Estimate = -2.432, p = 0.001), and collaboration with technology providers (Level 1: Estimate = -4.514, p = 0.003) exhibit significant associations. Overall, the findings underscore the complexity of factors influencing tax administration within the study's context, with some variables showing significant associations while others do not.

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10
p-ISSN: 2787-0367; e-ISSN: 2787-0359

Test of Hypothesis Two

Table 5: Correlations

			Digitalisation	Tax Administration
Spearman's rho	Digitalisation	Correlation Coefficient	1.000	.924**
		Sig. (2-tailed)	.	.000
		N	289	289
	Tax Administration	Correlation Coefficient	.924**	1.000
		Sig. (2-tailed)	.000	.
		N	289	289

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

Table 5 presents Spearman's Rank-Order Correlation Analysis, showing a significant relationship between Digitalisation and Tax Administration, as revealed by a Spearman's rho coefficient of 0.924. This coefficient reveals a strong positive monotonic relationship, suggesting that an increase in Digitalisation corresponds to an increase in Tax Administration, and vice versa. Although the relationship is not strictly linear, the consistent trend highlights a significant association. The correlation is statistically significant at the 0.01 level (two-tailed) with a p-value of 0.000, confirming that the observed correlation is highly unlikely to be a chance occurrence. The non-parametric nature of the Spearman's rank-order correlation coefficient highlights the robust and meaningful connection between Digitalisation and Tax Administration within the study's context, emphasising the strength and direction of the monotonic association.

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10
p-ISSN: 2787-0367; e-ISSN: 2787-0359

Table 6: Analysis of Interview Responses on Factors Driving Digitalisation in Tax Administration in The Gambia using Thematic Analysis

Informants	Position	Organisation	Code	Date
Informant 1	Managerial staff from the Tax Department (3)	MoFEA	Inf1	9th to 11th January, 2024
Informant 2	Heads of Technical Services (1)	GRA	Inf2	15th to 17th January, 2024
Informant 3	Head , ICT Department (1)	GRA	Inf3	19th January, 2024
Informant 4	Commisioner, Domestic Tax Department (1)	GRA	Inf4	22nd January, 2024
Informant 5	Commisioner, Customs and Excise Duty (1)	GRA	Inf5	23rd January, 2024
Informant 6	Head of Corporate Taxpayer Division (1)	GRA	Inf6	25th January, 2024
Informant 7	Operation Manager (1)	Africell	Inf7	29th January, 2024
Informant 8	Manager (1)	Jah Oil	Inf8	29th January, 2024
Informant 9	Manager (1)	Qcell	Inf9	6th February, 2024
Informant 10	Manager (1)	Eco-Bank Gambia Ltd	Inf10	8th February, 2024

Source: Field Work, (2024)

Below are the interview queries crafted to identify the factors driving digitalisation in tax administration in The Gambia:

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

Theme I: Assessment of the Current State of Digitalization in Tax Administration.

Sub-Theme 1: Can you provide an overview of the current state of digitalization in tax administration in The Gambia?

Responses from senior and middle management staff of the Ministry of Finance and Economic Affairs (MoFEA):

> "*Digitalisation in tax administration signifies a strategic shift for enhanced efficiency and accuracy in tax collection. MoFEA is actively simplifying processes for corporate taxpayers, adopting digital systems to improve transparency and accountability in the tax administration framework"* (Inf1, 2024).

Responses from departmental managers of GRA:

> "*GRA prioritizes digitalisation in tax administration, implementing secure online platforms to modernise operations, reduce paperwork, and enhance efficiency. This transformation focuses on improving taxpayer services, transparency, and customs procedures, ensuring compliance and facilitating trade. GRA's commitment extends to tailored solutions, employing advanced digital platforms for corporate tax filings and communication, benefiting businesses in The Gambia"* (Inf2, 2024; Inf3, 2024; Inf4, 2024; Inf5, 2024 & Inf6, 2024).

Responses from representative managers of corporate taxpayers:

> "*Digitalisation by GRA benefits corporate taxpayers, simplifying processes, reducing paperwork, and improving record-keeping accuracy. Corporate entities appreciate the shift to digital platforms for smoother transactions and increased efficiency in tax compliance, easing administrative burdens and promoting streamlined processes. The accessibility and user-friendly nature of these platforms create a positive environment for tax compliance in the corporate sector"* (Inf7, 2024; Inf8, 2024; Inf9, 2024; Inf10, 2024).

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

Theme 2: Factors That Lead to the Adoption of Digitalization

Sub-Theme 2: In your opinion, what drives The Gambia towards digitalization of its tax administration?

Responses from senior and middle management staff of the Ministry of Finance and Economic Affairs (MoFEA):

> *"The push towards digitalization in tax administration was driven by the need for greater efficiency, accuracy in tax collection, and the desire to streamline processes to make them more taxpayer-friendly. Additionally, digitalization was seen as a key step towards enhancing transparency and accountability in tax administration"* (Inf1, 2024).

Responses from representative managers of corporate taxpayers:

> *"We believe that GRA's move towards digitalization was driven by the need to simplify the tax-paying process, making it easier for businesses to comply. Digital systems reduce paperwork, cut down on processing times, and make it easier to track payment histories and liabilities"* (Inf7, 2024; Inf8, 2024; Inf9, 2024; Inf10, 2024).

Responses from departmental managers of GRA:

> *"International financial bodies like the EU, IMF, and World Bank play a crucial role in compelling The Gambia to digitize its tax administration. This pressure stems from the conditionality of financial assistance tied to technological advancements. Additionally, internal factors driving this digital transition include the need for modernization, trust-building, accurate record-keeping, enhanced data analysis, improved taxpayer services, increased revenue collection, institutional image enhancement for the Gambia Revenue Authority, tackling global trade challenges, and conformity with evolving global standards in tax administration"* (Inf2, 2024; Inf3, 2024; Inf4, 2024; Inf5, 2024 & Inf6, 2024).

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/


https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

Discussion of Findings

The findings of this study present a thorough examination of the digitalization effects on tax administration in The Gambia, employing quantitative and qualitative dimensions. The logistic regression model's robust fit emphasizes its substantial explanatory power in elucidating the complexities of tax administration levels, consistent with prior literature on tax administration effectiveness (Benaihia et al., 2017). The subtle associations revealed by parameter estimates, especially the positive correlation of online tax registration rates with tax administration, provide valuable insights. Conversely, the negative association of e-payment adoption suggests potential challenges in this aspect.

Spearman's rank-order correlation reaffirms a robust positive relationship between digitalization and tax administration, aligning with global trends recognizing the transformative role of digital technologies in tax practices (Xu et al., 2018). Qualitative insights from interviews unveil the current state of digitalization and the drivers propelling The Gambia's digitalization journey, emphasizing a strategic shift towards efficiency, transparency, and accessibility in tax administration (Bloomberg, 2018; Steinmo, 2018). The identified drivers, including international financial body stipulations, modernization imperatives, trust-building, accurate record-keeping, and alignment with global standards, align with previous research emphasizing diverse drivers for digital transformation in tax administration (Mas'ud et al., 2023; Westerman et al., 2014).

Conclusion

In conclusion, this study has provided a useful understanding of the digitalization of tax administration in The Gambia and its implications for the performance of the Gambia Revenue Authority (GRA). Through a comprehensive analysis of factors driving digitalization, its effects on tax administration, and its correlation with GRA performance, several key findings have emerged. It pinpoints key drivers such as modernization needs and international standards alignment, emphasizing efficiency and transparency. Additionally, it reveals positive effects like streamlined processes and improved taxpayer engagement. Moreover, it establishes a significant correlation between digitalization and GRA effectiveness, underscoring the importance of digital

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/


https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

transformation for revenue mobilization and fiscal probity. Overall, this study contributes to the existing literature by providing empirical evidence of the benefits of digitalization in tax administration and its implications for GRA performance in The Gambia. The findings underscore the need for continued investment in digital infrastructure, training programs for GRA staff, and public awareness campaigns to further improve the effectiveness of digital tools in tax administration. By adopting digitalization, The Gambia can boost its revenue collection efforts, promote economic growth, and enhance overall governance.

Policy Implications

Policy recommendations for enhancing tax administration in The Gambia through digitalization include prioritizing initiatives to boost online tax registration rates due to their positive correlation with tax administration. Additionally, addressing challenges related to the negative correlation between e-payment adoption and tax administration levels is crucial, with proposed strategies like awareness campaigns and improvements in user experiences. Tailored interventions for variables like digital literacy, organizational culture, user satisfaction, and collaboration with technology providers are necessary, involving initiatives such as training programs and fostering tax-friendly cultures. Aligning national tax policies with global standards is emphasized, urging policymakers to engage with international institutions for support in strengthening The Gambia's digital tax administration infrastructure. In summary, the study advocates for a comprehensive and context-specific approach to digitalization in tax administration, stressing the importance of tailored policies to address specific challenges and opportunities within The Gambia.

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

References

Adebisi, J. F., & Gbegi, D. O. (2013). Effect of tax avoidance and tax evasion on personal income tax administration in Nigeria. *American Journal of Humanities and Social Sciences*, 1(3), 125-134.

Basri, M. Chatib, Mayara Felix, Rema Hanna, & Benjamin A. Olken. (2021). Tax Administration versus Tax Rates: Evidence from Corporate Taxation in Indonesia. *American Economic Review*, 111 (12): 3827-71.

Benaihia, K. B., Owino, P. O., & Tanui, P. J. (2017). A survey of views on the effect of Online taxpayer registration and tax return processing on revenue collection at The Kenya Revenue Authority, Rift Valley Region. *International Journal of Business and Management Review,* 5(9), 78-89.

Bloomberg, J. (2018). Digitization, digitalization, and digital transformation: confuse them at your peril. *Forbes. Retrieved on August*, *28*, 2019.

Borges, M. R. S., & Scarpin, J. E. (2019). Digitalization of Tax Administration and Tax Compliance in Brazil: An empirical analysis. *Revista de Administração de Empresas*, 59(5), 383-395.

Clerck, J. (2017). Digitalization. *Digital Transformation: The Differences. i-SCOOP*.

Dimitropoulou, C. Govind, S. & Turcan, L. (2018). Applying modern, disruptive technologies to improve the effectiveness of tax treaty dispute resolution. *Intertax,* 46(11), 856-872.

Edori, D. S., Edori, I. S., & Idatoru, A. R. (2017). Tax issues and challenges inherent in the Nigerian tax system. *American Journal of Management Science and Engineering,* 2(4), 52-57.

Fudamu, A. U., Mohammed N., & Kama Y. S. (2019). Information technology and administration in Adamawa State Board of Internal Revenue Yola- Nigeria. *Dutse Tax Journal of Economics and development Studies* (DUJEDS) 7(1), ISSN: 2536- 6130.

GRA (2021, December 31). Government Task GRA to Collect D13.5B Revenue in 2022. *The Point Newspapers*, p. 3.

GRA (2023, March 07). Tax award and recognition 2022. *The Standard Newspaper*, p. 4.

Gurama, Z. (2020). Tax Administration. *Encyclopedia of Public Administration and Public Policy, Third Edition*.

Hela, B. A. (2023). M-banking adoption from the developing countries perspective:

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

A mediated model, *Digital Business*, 3(2), https://doi.org/10.1016/j.digbus.2023.100065.

International Monetary Fund (IMF) report (2020). *TADAT International Monetary Fund repor*t, Banjul: Government of The Gambia. https://www.imf.org/~/media/Files/Publications/CR/2020/English/1GMBEA2020001.ashx

Khalil Ibrahim, A., & Benabdelhadi, A. (2022). Organizational change management of digital administration. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 3(2-1), 339- 353.

Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.

Leyira, C. M., Chukwuma, E., & Umobong A. A. (2017). Tax system in Nigeria: And the way forward. *Research Journal of Finance and Accounting Challenges,* 3(5), 9-15.

Marikyan, D., & Papagiannidis, S. (2021). Unified Theory of Acceptance and Use of Technology: A review. In S. Papagiannidis (Ed.), *Theory Hub Book*. Retrieved from http://open.ncl.ac.uk

Martínez, J. M. G., Puertas, R., Martín, J. M. M., & Ribeiro-Soriano, D. (2022). Digitalization, innovation and environmental policies aimed at achieving sustainable production. *Sustainable Production and Consumption*, *32*, 92-100.

Mas'ud, A., Mohammed, S. D., & Gimba, Y. A. (2023). Digitalisation and Subnational Tax Administration in Nigeria.

MoFEA (2017). *Budget Speech 2018.* Ministry of Finance and Economic Affairs, Banjul: Government of The Gambia.

MoFEA (2018). *Budget Speech 2019*. Ministry of Finance and Economic Affairs, Banjul: Government of The Gambia.

MoFEA (2019). *Budget Speech 2020*. Ministry of Finance and Economic Affairs, Banjul: Government of The Gambia.

MoFEA (2020). *Budget Speech 2021*. Ministry of Finance and Economic Affairs, Banjul: Government of The Gambia.

MoFEA (2021). *Budget Speech 2022*. Ministry of Finance and Economic Affairs, Banjul: Government of The Gambia.

Moore, M. (2020). What is Wrong with African Tax Administration? ICTD Working Paper 111, Brighton: Institute of Development Studies. *https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/15661*

https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

Moyosore, A. & Fabrizio, S. (2022). *An Introduction to Digital Tax Payment Systems in Low-and Middle-Income Countries*. https://www.ictd.ac/publication/introduction-digital-tax-payment-systems-low-middle-income-countries/

Muralidharan, K., Niehaus, P., & Sukhtankar, S. (2016). Building State Capacity: Evidence from Biometric Smartcards in India. *American Economic Review*, 106(10), 2895-2929.

Oberer, B., & Erkollar, A. (2018). Leadership 4.0: Digital leaders in the age of industry 4.0. *International journal of organizational leadership*.

Odusola, A., (2016). *Tax policy reforms in Nigeria.* United *Nations University-World Institute for Development Economics Research,* 2(1), 123-136. Research paper No 2006/3,

Olaiya, T. A. (2011). *A Study of Tax Administration and Burden of Governance in Nigeria and Ghana (1990–2009)* (Doctoral dissertation, Ph. D Dissertation, Submitted in partial fulfillment of the Award of Doctor of Philosophy of the Obafemi Awolowo University, Ile-Ife, Nigeria).

Olatunji, O. C. & Ayodele, K. B. (2017). Impact of information technology on tax administration in southwest, Nigeria. *Global Journal of Management and Business Research*: D Accounting and Auditing 17 (2).

Oseni, M. (2016). Sustenance of tax administration by information and comunications technology in Nigeria. *Archives of Business Research*, 4(1), 47R54.

Owino, H. O., Otieno, S. & Odoyo, F. S. (2017). Influence of Information and Communication Technology on revenue collection in county governments in Kenya: A Comparative Study of Migori and Homa Bay County Governments. *International Journal of Recent Research in Commerce Economics and Management* (IJRRCEM), 4(1), 66-96.

Saruji, S., & Hamid, N. A. (2021). Tax Agents' Acceptance of the Digitalisation of Tax Administration in Malaysia. *Proceedings of the First International Conference of Economics, Business & Entrepreneurship, ICEBE 2020, 1st October 2020, Tangerang, Indonesia*.

Schulz, N., Ueberbach, F., & Fischer, C. (2018). Factors influencing the acceptance of digital tax services by SMEs: Insights from Germany. Business Research, 11(2), 317-346.

Siahan, M.P. (2010). *Hukum pajak elementer.* Graha Ilmu. Yogyakarta.

Sidik, M. (2022). Digital Services Tax: Challenge of International Cooperation For Harmonization. *Jurnal Pajak Dan Bisnis (Journal of Tax and Business)*, *3*(1), 56–64. https://doi.org/10.55336/jpb.v3i1.46

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/


https://dx.doi.org/10.4314/ajpas.v17i1.10 p-ISSN: 2787-0367; e-ISSN: 2787-0359

Steinmo, S. H. (2018). *The leap of faith: the fiscal foundations of successful government in Europe and America* (p. 336). Oxford University Press.

Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly,* 3(27), 425–478.

Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, *122*, 889-901.

Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading Digital: Turning Technology into Business Transformation.* Harvard Business Review Press.

World Bank Group (2020). Systematic Country Diagnostic of The Republic of The Gambia. https://openknowledge.worldbank.org/bitstream/handle/10986/33810/The Gambia-Systematic-Country-Diagnostic

Xu, L. D., Xu, E. L., & Li, L. (2018). Industry 4.0: state of the art and future trends. *International journal of production research,* 56(8), 2941-2962.

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10
p-ISSN: 2787-0367; e-ISSN: 2787-0359

Appendix 1

Table 4: Parameter Estimates

		Estimate	Std. Error	Wald	DF	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[TaxAdministration = 1]	-33.433	39.728	.708	1	.400	-111.299	44.433
	[TaxAdministration = 2]	-14.444	33.563	.185	1	.667	-80.226	51.338
	[TaxAdministration = 3]	-9.875	33.581	.086	1	.769	-75.694	55.943
	[TaxAdministration = 4]	-.972	33.594	.001	1	.977	-66.815	64.872
Location	OnlineTaxRegistrationRate	4.960	1.856	7.140	1	.008	1.322	8.598
	EpaymentAdoptionRates	-3.701	1.407	6.920	1	.009	-6.459	-.944
	EFilingFrequency	-1.394	1.618	.742	1	.389	-4.566	1.777
	UserExperienceandInterfaceRatings	.136	.582	.055	1	.815	-1.004	1.277
	DigitalSecurityMeasuresAdopted	.338	.308	1.199	1	.273	-.267	.942
	DigitalTaxpayerEducationInitiatives	1.737	.969	3.212	1	.073	-.163	3.636
	EQueryResolutionRates	1.867	.855	4.768	1	.029	.191	3.543
	[DigitalLiteracyandTraining=1]	-17.854	27.470	.422	1	.516	-71.694	35.987
	[DigitalLiteracyandTraining=2]	-11.572	20.138	.330	1	.566	-51.041	27.897
	[DigitalLiteracyandTraining=3]	-19.951	21.547	.857	1	.354	-62.183	22.281
	[DigitalLiteracyandTraining=4]	-3.149	2.044	2.372	1	.124	-7.156	.858
	[DigitalLiteracyandTraining=5]	0[a]	.	.	0	.	.	.
	[OrganisationalCulture=1]	-1.478	82.813	.000	1	.986	-163.788	160.833
	[OrganisationalCulture=2]	-.674	2.241	.090	1	.764	-5.066	3.718
	[OrganisationalCulture=3]	1.569	1.274	1.518	1	.218	-.927	4.066
	[OrganisationalCulture=4]	-2.236	1.419	2.481	1	.115	-5.018	.546
	[OrganisationalCulture=5]	0[a]	.	.	0	.	.	.
	[ChangeManagementStrategies=1]	-18.224	84.418	.047	1	.829	-183.680	147.231

African Journal of Politics and Administrative Studies (AJPAS)
17(1) (June, 2024): 173-211
Available online at https://www.ajpasebsu.org.ng/

https://dx.doi.org/10.4314/ajpas.v17i1.10
p-ISSN: 2787-0367; e-ISSN: 2787-0359

[ChangeManagementStrategies=2]	-11.286	20.385	.307	1	.580	-51.240	28.668
[ChangeManagementStrategies=3]	-8.788	20.385	.186	1	.666	-48.741	31.165
[ChangeManagementStrategies=4]	-9.790	20.339	.232	1	.630	-49.654	30.073
[ChangeManagementStrategies=5]	0[a]	.	.	0	.	.	.
[UserSatisfactionandEngagement=1]	-2.432	82.083	.001	1	.976	-163.311	158.448
[UserSatisfactionandEngagement=2]	-.287	2.008	.020	1	.886	-4.223	3.649
[UserSatisfactionandEngagement=3]	.853	1.845	.214	1	.644	-2.763	4.469
[UserSatisfactionandEngagement=4]	.818	1.930	.180	1	.672	-2.965	4.602
[UserSatisfactionandEngagement=5]	0[a]	.	.	0	.	.	.
[CollaborationwithTechnologyProviders=1]	-4.514	86.039	.003	1	.958	-173.147	164.119
[CollaborationwithTechnologyProviders=2]	-8.623	25.874	.111	1	.739	-59.335	42.089
[CollaborationwithTechnologyProviders=3]	-14.360	25.964	.306	1	.580	-65.248	36.527
[CollaborationwithTechnologyProviders=4]	-7.035	25.900	.074	1	.786	-57.798	43.728
[CollaborationwithTechnologyProviders=5]	0[a]	.	.	0	.	.	.

Link function: Logit.
a. This parameter is set to zero because it is redundant.