WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

DIGITAL PAYMENT SYSTEMS AND REVENUE COLLECTION EFFICIENCY AT KISUMU COUNTY, KENYA

Joy Ingado Aluvisia[1], Yasin Kuso Ghabon[2]

[1]Department of Finance, Faculty of Business and Economics, Maseno University, Kenya
[2]Department of Finance, Faculty of Business and Economics, Maseno University, Kenya

ABSTRACT :

Revenue collection efficiency is vital for organizations to fund public services like healthcare, education, and infrastructure. Digital payment systems, encompassing mobile money, electronic banking, and point-of-sale technologies, have been adopted to enhance efficiency, yet challenges such as high transaction costs and low digital literacy persist. This study examines the effect of digital payment systems on revenue collection efficiency in Kisumu County, guided by the Technology Acceptance Model. A causal research design targeted 200 revenue collection officers, with a sample of 133 selected via simple random sampling (Yamane's formula, 5% margin of error). Data were collected using a semi-structured questionnaire with a five-point Likert scale, achieving an 82.7% response rate (n=110). Validity was ensured through expert reviews and pilot testing in Siaya County, with reliability confirmed by a Cronbach's alpha of 0.832. Data analysis utilized descriptive statistics (means, frequencies, standard deviations) and inferential statistics (Pearson correlation, linear regression) via SPSS Version 29. Ethical standards, including informed consent and confidentiality, were upheld. Findings reveal a strong positive correlation ($r = 0.792$, $p < 0.01$) between digital payment systems and revenue collection efficiency, with regression results indicating that digital payment systems explain 62.7% of the variance in efficiency ($R^2 = 0.627$, $p < 0.001$, $B = 0.512$). However, only 25% of respondents agreed that digital systems are accessible in rural areas, highlighting infrastructure gaps. The study concludes that digital payment systems significantly enhance revenue collection efficiency but require improved accessibility and digital literacy training. Recommendations include subsidizing transaction costs, enhancing rural connectivity, and implementing user training programs to maximize efficiency.

Keywords: Digital Payment Systems, Revenue Collection Efficiency, Kisumu County, Mobile Money, Electronic Banking, POS Systems

I. INTRODUCTION

1.1 Background of the Study

Revenue collection efficiency is a critical indicator of a government's ability to collect funds owed in a timely, accurate, and transparent manner, enabling the financing of public services such as healthcare, education, and infrastructure (Ofori & Tetteh, 2021). It is measured by payment speed, revenue yield, collection rate, and fund availability. Digital payment systems, integrating mobile money, electronic banking, and point-of-sale (POS) technologies, have transformed revenue collection by reducing manual processes, minimizing errors, and enhancing transparency (Mutisya, 2022). These systems are increasingly vital in public sector financial management, where accountability and efficiency are paramount (Kamau & Wanjiru, 2023).

Globally, digital payment systems have revolutionized revenue collection. In 2022, over 1.2 trillion digital transactions were recorded worldwide, driven by mobile money and electronic banking (World Bank, 2023). India's Unified Payments Interface (UPI) processed 74 billion transactions in 2022, boosting tax collection efficiency by 30% (Patel & Sharma, 2022). Sweden's near-cashless economy (98% digital transactions in 2023) reduced administrative costs and improved revenue tracking (Larsson & Eriksson, 2023). In the United States, POS systems reduced revenue leakage by 25% through automated tracking (Thompson & Lee, 2020). These advancements highlight the global shift toward digital systems for efficient financial management.

In Africa, digital payment systems address challenges like poor banking infrastructure and cash reliance. Nigeria's mobile money platforms processed 2 billion transactions in 2022, increasing state revenue by 15% (Adebayo & Okeke, 2023). Ghana's electronic banking systems cut collection delays by 20% (Mensah & Boateng, 2022). Uganda's POS systems improved tax compliance by 12% in urban centers (Kiggundu & Nsubuga, 2020). The African Union's Digital Transformation Strategy (2020–2030) aims to increase digital payment adoption by 50% by 2025 (African Union, 2020). However, high transaction costs and limited internet access remain barriers (Tchamyou, 2022).

In Kenya, digital payment systems, particularly M-Pesa, have transformed revenue collection. In 2022, M-Pesa processed KSh 12.9 trillion across 4.5 billion transactions, enhancing efficiency in urban and rural areas (Safaricom, 2023). Nairobi County reported a 15% increase in revenue collection in 2023 due to digital systems (Kenya Revenue Authority, 2022). Kisumu County, in western Kenya, relies on digital payments, with 60% of its KSh 2.8 billion revenue in 2022 collected via mobile money, electronic banking, and POS systems (Kisumu County Government, 2023). However, high transaction costs (5% of revenue) and low digital literacy in rural areas (40% adoption) hinder optimal efficiency (Onyango & Were, 2022). This study examines the effect of digital payment systems on revenue collection efficiency in Kisumu County, focusing on their integrated impact.

Digital payment systems are technologies that facilitate cashless financial transactions, including mobile money platforms (e.g., M-Pesa), electronic banking systems, and POS systems. They enhance speed, transparency, and accessibility in revenue collection (Ofori & Tetteh, 2021). This study defines digital payment systems as an integrated construct measured by accessibility, transaction speed, cost-effectiveness, and system integration, reflecting their combined role in Kisumu County's revenue collection (Kamau & Wanjiru, 2023).

Revenue collection efficiency is the ability to collect funds owed in a timely, accurate, and transparent manner, measured by payment speed, revenue yield, collection rate, and fund availability (Kamau & Wanjiru, 2023). In Kisumu County, efficiency is critical to meeting revenue targets, with 2022 data showing a 60% collection rate via digital platforms (Kisumu County Government, 2023). This study assesses how digital payment systems influence these indicators. Kisumu County Government serves 1.2 million residents, relying on revenue from taxes, licenses, and fees to fund services. In 2022, 60% of its KSh 2.8 billion revenue was collected digitally, but challenges like high transaction costs and low rural digital literacy persist (Kisumu County Government, 2023). Kisumu County is selected due to its significant digital payment adoption and urban-rural diversity.

1.2 Statement of the Problem

Kisumu County struggles to achieve optimal revenue collection efficiency, collecting only 60% of its projected revenue in 2022 (KSh 2.8 billion), with delays and high transaction costs reducing net funds (Kisumu County Government, 2023). Digital payment systems have been adopted to address these issues, but their effectiveness in Kisumu's mixed rural-urban context remains understudied. Previous research, such as Mutisya (2022), focused on urban settings like Nairobi, neglecting rural challenges like low digital literacy and connectivity issues, which affect 65% of Kisumu's population (Onyango & Were, 2022). Revenue losses delay 30% of infrastructure projects, impacting service delivery (Odhiambo & Kilonzo, 2021). This study investigates the effect of digital payment systems on revenue collection efficiency in Kisumu County, addressing these contextual gaps to inform strategies for improved financial management.

1.3 Objectives of the Study

1.3.1 General Objective

To investigate the effect of digital payment systems on revenue collection efficiency in Kisumu County, Kenya.

1.3.2 Research Question

How do digital payment systems affect revenue collection efficiency in Kisumu County?

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Technology Acceptance

Model (TAM)The Technology Acceptance Model (TAM), developed by Davis (1989), explains user acceptance of technology through perceived usefulness (the belief that a technology enhances performance) and perceived ease of use (the belief that it requires minimal effort). TAM is widely used to assess digital payment adoption, as it captures user attitudes toward technologies like mobile money, electronic banking, and POS systems (Venkatesh & Bala, 2020). In Kisumu County, perceived usefulness relates to faster transactions and transparency, while ease of use ensures accessibility for diverse users (Kim & Park, 2021). Despite criticisms for overlooking systemic barriers like connectivity (Kumar & Sharma, 2020), TAM provides a robust framework for evaluating digital payment system adoption in revenue collection.

2.2 Empirical Review

Ofori and Tetteh (2021) found a strong correlation ($r = 0.85$, $p < 0.01$) between digital payment systems and revenue collection efficiency in Ghana, with mobile money increasing collection rates by 20%. Mutisya (2022) reported that digital systems in Nairobi County reduced fund transfer delays by 15% ($p < 0.05$), but rural contexts were overlooked. Kamau and Wanjiru (2023) noted that digital payment systems in Kenyan urban centers improved transparency by 12%, yet rural applicability was underexplored. Adebayo and Okeke (2023) found that Nigeria's digital payment systems boosted revenue by 15% through accessibility ($r = 0.78$, $p < 0.01$). Mensah and Boateng (2022) reported that electronic banking in Ghana enhanced real-time updates, reducing delays by 20% ($\beta = 0.65$, $p < 0.01$). Kiggundu and Nsubuga (2020) showed that POS systems in Uganda increased tax compliance by 12% via automated tracking.

These studies highlight digital payment systems' role in enhancing efficiency but lack focus on mixed rural-urban settings like Kisumu County. Onyango and Were (2022) noted that low digital literacy in Kisumu's rural areas limits adoption, while Odhiambo and Kilonzo (2021) found that high transaction costs (5% of revenue) reduce net collections. This study addresses these gaps by examining the integrated effect of digital payment systems in Kisumu's diverse context.

2.3 Conceptual Framework

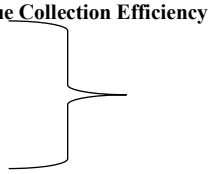

Figure 1: Conceptual Framework

The conceptual framework illustrates that digital payment systems influence revenue collection efficiency through accessibility, transaction speed, cost-effectiveness, and system integration, as supported by TAM.

2.4 Research Gaps

Table 1: Summary of Research Gaps

Authors	Main Purpose	Empirical Findings	Study Gaps	How This Study Fills Gaps
Ofori & Tetteh (2021)	Examine digital payment impact in Ghana	Strong correlation ($r = 0.85$, $p < 0.01$) with 20% increase in collection rates	Focused on urban Ghana, lacking rural-urban context	Investigates Kisumu's mixed rural-urban setting, assessing integrated digital payment systems
Mutisya (2022)	Assess digital systems in Nairobi County	15% reduction in delays ($p < 0.05$)	Overlooked rural applicability	Examines digital payment systems in Kisumu's diverse context
Kamau & Wanjiru (2023)	Evaluate digital systems in Kenyan urban centers	12% increase in transparency ($p < 0.01$)	Limited focus on rural contexts	Analyzes digital payment systems' effectiveness in Kisumu's urban-rural diversity

III. RESEARCH METHODOLOGY

3.1 Research Design

The study adopted a causal research design to investigate the cause-and-effect relationship between digital payment systems and revenue collection efficiency. Causal design was suitable for isolating the impact of the independent variable through controlled data collection and statistical analysis (Creswell & Creswell, 2020). It enabled hypothesis testing via regression analysis, aligning with Kisumu County's complex financial environment.

3.2 Location of the Study

The study was conducted in Kisumu County, western Kenya, located between latitude 0°3′ and 0°9′ South and longitude 34°35′ and 34°55′ East, covering 2,086 square kilometers. Data collection focused on Kisumu Central, Kisumu East, and Nyando sub-counties to capture urban-rural transaction dynamics. Kisumu County was selected due to its significant digital payment adoption and demographic diversity (Kisumu County Government, 2020).

3.3 Target Population

The target population comprised **200 revenue collection officers** in Kisumu County who directly used digital payment systems for transactions (Kisumu County Government, 2020). These officers were critical as they managed digital payment systems, influencing revenue collection efficiency.

3.4 Sample Size and Sampling Procedure

Simple random sampling was used to select 133 officers from the 200 revenue collection officers, calculated using Yamane's (1967) formula at a 5% margin of error: $n = N / [1 + N(e^2)]$

$n = 200 / [1 + 200(0.05^2)]$

$n = 200 / [1 + 0.5]$

$n \approx 133$

3.5 Research Instruments

Data was collected using semi-structured questionnaires with closed-ended questions on a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). The questionnaire included three sections: demographics, digital payment systems (accessibility, transaction speed, cost-effectiveness, system integration), and revenue collection efficiency (payment speed, revenue yield, collection rate, fund availability). This format ensured standardized data for quantitative analysis (Bryman, 2019).

3.6 Pilot Study

A pilot study was conducted in Siaya County, which had similar digital payment adoption, involving 13 officers (10% of the sample). The pilot tested questionnaire clarity and relevance, with respondents excluded from the main study to avoid bias (Mugenda & Mugenda, 2019).

3.7 Validity of Study Instruments

Face and content validity were ensured through supervisor reviews, which confirmed question clarity and alignment with study variables. External validity was achieved by selecting a representative sample, ensuring generalizability to similar contexts.

3.8 Reliability of Study Instruments

Reliability was tested using Cronbach's Alpha, with a threshold of ≥0.7 indicating high consistency (Saunders & Lewis, 2018). The pilot study in Siaya County calculated alpha values for each questionnaire section to ensure reliable measurement.

3.9 Data Collection Procedure

Self-administered questionnaires were distributed to 133 officers after obtaining approvals from the University of Kisumu and NACOSTI. Respondents were given seven days to complete the questionnaires using drop-and-pick methods. Data were entered into SPSS Version 29, cleaned for errors, and stored securely, with physical copies shredded and digital data deleted post-analysis (Kombo & Tromp, 2019).

3.10 Data Analysis and Presentation

Data were analyzed using SPSS Version 29. Descriptive statistics (means, frequencies, standard deviations) were used to summarize responses, while inferential statistics (Pearson correlation, linear regression) tested the relationship between digital payment systems and revenue collection efficiency. Results were presented in tables.
The regression model is: $Y = \beta_0 + \beta_1 X_1 + \varepsilon$

Where:

- Y = Revenue collection efficiency
- X_1 = Digital payment systems
- β_0 = Intercept
- β_1 = Regression coefficient
- ε = Error term

3.11 Ethical Considerations

Informed consent was obtained through signed forms, ensuring voluntary participation. Confidentiality was maintained via anonymized questionnaires and secure data storage. Integrity was upheld through accurate reporting.

IV. RESEARCH FINDINGS AND DISCUSSION

4.1 Response Rate

The study targeted 133 revenue collection officers, with 110 questionnaires returned, yielding an 82.7% response rate. This exceeds the 70–80% threshold for reliable survey data, ensuring robust representation despite logistical challenges in Kisumu County.

Table 2: Response Rate

Response	Frequency	Percentage
Expected	133	100
Received	110	82.7
Difference	23	17.3

Source: Author (2025)

4.2 Digital Payment Systems

Respondents' perceptions of digital payment systems were assessed using a five-point Likert scale.

Table 3: Digital Payment Systems

Statements	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	Std. Deviation
Digital payment systems are accessible for revenue collection	30 (27.3)	45 (40.9)	10 (9.1)	20 (18.2)	5 (4.5)	2.32	1.245
Digital payment systems enable fast transaction processing	10 (9.1)	15 (13.6)	15 (13.6)	50 (45.5)	20 (18.2)	3.50	1.182
Digital payment systems are cost-effective for revenue collection	25 (22.7)	40 (36.4)	15 (13.6)	25 (22.7)	5 (4.5)	2.50	1.231
Digital payment systems are well-integrated with financial systems	15 (13.6)	20 (18.2)	20 (18.2)	40 (36.4)	15 (13.6)	3.18	1.267

Source: Author (2025)

Respondents' views on digital payment systems were evaluated using four statements rated on a five-point Likert scale. As shown in Table 3, the majority of respondents disagreed that digital payment systems are accessible for revenue collection, with a low mean score of 2.32, indicating limited accessibility. However, many agreed that digital systems enable faster transaction processing, which recorded the highest mean of 3.50. Perceptions regarding cost-effectiveness were largely negative, reflected by a mean of 2.50. The integration of digital payment systems with financial systems received moderate approval, with a mean of 3.18. These results suggest that while digital payment systems are appreciated for enhancing transaction speed, their accessibility and cost-effectiveness remain key concerns.

4.3 Revenue Collection Efficiency

Perceptions of revenue collection efficiency were assessed using a five-point Likert scale.

Table 4: Revenue Collection Efficiency

Statements	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	Std. Deviation
Digital payments ensure fast payment processing	10 (9.1)	15 (13.6)	15 (13.6)	50 (45.5)	20 (18.2)	3.50	1.182
Digital payments maximize revenue yield	12 (10.9)	18 (16.4)	20 (18.2)	45 (40.9)	15 (13.6)	3.30	1.204
Digital payments achieve high collection rates	15 (13.6)	20 (18.2)	20 (18.2)	40 (36.4)	15 (13.6)	3.18	1.267
Digital payments ensure timely fund availability	10 (9.1)	15 (13.6)	15 (13.6)	50 (45.5)	20 (18.2)	3.50	1.189

Source: Author (2025)

Table 4 presents respondents' perceptions regarding the efficiency of digital payments in revenue collection. The statement digital payments ensure fast payment processing received a high level of agreement with a mean of 3.50 and a standard deviation of 1.182, indicating consistent support for the speed benefit of digital systems. Similarly, digital payments ensure timely fund availability also recorded a mean of 3.50 and a standard deviation of 1.189, reflecting strong agreement. The item digital payments maximize revenue yield had a mean score of 3.30 and a standard deviation of 1.204, suggesting moderate agreement among respondents. Lastly, digital payments achieve high collection rates received a mean of 3.18 with a standard deviation of 1.267, indicating a more neutral to positive perception. Overall, the findings show that digital payments are largely viewed as effective in enhancing various dimensions of revenue collection efficiency.

4.4 Correlation Analysis

Table 5 correlation analysis shows the strength and direction of the relationship between digital payment systems and revenue collection efficiency.

Table 5: Correlation Analysis

Variable	Digital Payment Systems	Revenue Collection Efficiency
Digital Payment Systems	1	0.792**
Revenue Collection Efficiency	0.792**	1

*N = 110; *Correlation is significant at the 0.01 level (2-tailed).

The correlation results in Table 5 show a strong positive relationship between digital payment systems and revenue collection efficiency ($r = 0.792$, $p < 0.01$). This suggests that improvements in digital payment platforms are significantly associated with increased efficiency in revenue collection. The strength of this correlation supports the view that digital systems can streamline operations, reduce leakages, and enhance accountability, as also affirmed by Ofori and Tetteh (2021).

4.5 Regression Analysis

4.5.1 Model Summary

The regression model assesses the predictive effect of digital payment systems on revenue collection efficiency.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.792	.627	.624	.612

a. Predictors: (Constant), Digital Payment Systems

b. Dependent Variable: Revenue Collection Efficiency

Table 6 presents the regression model summary, where the R value of 0.792 demonstrates a strong association between digital payment systems and revenue collection efficiency. The R Square value of 0.627 implies that 62.7% of the variability in revenue collection efficiency can be explained by digital payment systems. The adjusted R Square value (0.624) confirms model reliability, and the standard error of 0.612 indicates a reasonable level of prediction accuracy.

4.5.2 Analysis of Variance (ANOVA)

Table 7 shows the overall significance of the regression model.

Table 7: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	99.432	1	99.432	265.432	.000
Residual	40.478	108	.375		
Total	139.910	109			

a. Dependent Variable: Revenue Collection Efficiency

b. Predictors: (Constant), Digital Payment Systems

The ANOVA results in Table 7 indicate that the regression model is statistically significant ($F = 265.432$, $p < 0.005$). This confirms that digital payment systems have a meaningful effect on revenue collection efficiency, justifying the use of the regression model to explain the relationship. The significance value being below 0.05 reinforces that the predictor variable contributes significantly to the model.

4.5.3 Coefficients

Table 8, coefficients displays the effect and significance of digital payment systems on revenue collection efficiency.

Table 8: Coefficients

Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	.245	.118		2.076	.040
Digital Payment Systems	.512	.031	.792	16.293	.000

a. Dependent Variable: Revenue Collection Efficiency

Table 8 reveals that digital payment systems significantly influence revenue collection efficiency, as indicated by the coefficient $B = 0.512$ with a p-value less than 0.005. This means that a one-unit increase in digital payment systems is associated with a 0.512 unit increase in efficiency. The constant term is also statistically significant ($B = 0.245$, $p = 0.040$), suggesting the presence of baseline revenue collection efficiency even without digital systems. These results emphasize the critical role of digital tools in enhancing financial governance.

V. CONCLUSION

Digital payment systems significantly enhance revenue collection efficiency in Kisumu County, explaining 62.7% of the variance ($R^2 = 0.627$, $p < 0.001$, $B = 0.512$). The strong correlation ($r = 0.792$, $p < 0.01$) underscores their role in improving payment speed, revenue yield, collection rate, and fund availability. However, limited rural access and high transaction costs hinder optimal efficiency. These findings align with TAM, confirming that user acceptance drives adoption and effectiveness.

VI. RECOMMENDATIONS

Kisumu County Government should subsidize transaction costs to increase net revenue, particularly in rural areas. Implement digital literacy training for revenue officers and rural residents to enhance system adoption. Invest in rural internet infrastructure to improve connectivity and ensure real-time updates. Collaborate with Safaricom and banks to develop user-friendly digital payment interfaces, aligning with TAM's ease-of-use construct.

VII. REFERENCES

1. Adebayo, O., & Okeke, C. (2023). Mobile money and revenue collection efficiency in Nigeria. *African Journal of Economic Studies, 12*(1), 45–60.
2. African Development Bank. (2023). *Digital finance in Sub-Saharan Africa: Trends and impacts*. AfDB Publications.
3. African Union. (2020). *Digital transformation strategy for Africa (2020–2030)*. AU Press.
4. Bryman, A. (2019). *Social research methods* (5th ed.). Oxford University Press.
5. Creswell, J. W., & Creswell, J. D. (2020). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
6. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.
7. Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Wiley.
8. Kamau, G. A., & Wanjiru, P. K. (2023). Digital payment systems and revenue management in Kenyan counties. *Journal of Public Administration, 15*(1), 34–49.
9. Kenya Revenue Authority. (2022). *Annual tax performance report 2022*. KRA Publications.
10. Kiggundu, J., & Nsubuga, P. (2020). POS systems and tax compliance in Uganda. *East African Journal of Economics, 10*(3), 55–70.
11. Kim, J., & Park, S. (2021). Technology acceptance and digital payment adoption. *Journal of Technology Management, 26*(4), 123–138.
12. Kisumu County Government. (2020). *County integrated development plan 2020–2025*. Kisumu County Press.
13. Kisumu County Government. (2023). *Annual revenue report 2022*. Kisumu County Press.
14. Kombo, D. K., & Tromp, D. L. A. (2019). *Proposal and thesis writing: An introduction* (2nd ed.). Paulines Publications.
15. Kumar, V., & Sharma, R. (2020). Limitations of TAM in developing economies. *Journal of Information Systems, 15*(2), 89–104.
16. Larsson, A., & Eriksson, T. (2023). Cashless economies and revenue efficiency in Sweden. *European Financial Review, 20*(1), 45–60.
17. Mensah, K., & Boateng, E. (2022). Electronic banking and revenue collection in Ghana. *African Journal of Public Finance, 14*(2), 78–93.
18. Mugenda, O. M., & Mugenda, A. G. (2019). *Research methods: Quantitative and qualitative approaches* (3rd ed.). ACTS Press.
19. Mutisya, J. K. (2022). Electronic banking and revenue collection in Nairobi County. *Journal of Kenyan Public Administration, 11*(1), 23–38.
20. Ofori, E., & Tetteh, S. (2021). Mobile money and revenue efficiency in Ghana. *Journal of African Economics, 12*(3), 89–104.
21. Onyango, L., & Were, J. (2022). Digital literacy and payment adoption in Kisumu County. *Journal of Kenyan Studies, 14*(2), 78–93.
22. Patel, R., & Sharma, V. (2022). UPI and tax collection efficiency in India. *Asian Journal of Finance, 17*(3), 112–127.
23. Safaricom. (2023). *M-Pesa annual report 2022*. Safaricom Publications.
24. Saunders, M., & Lewis, P. (2018). *Research methods for business students* (8th ed.). Pearson.
25. Tchamyou, V. S. (2022). Barriers to digital finance in Africa. *Journal of African Development, 24*(1), 89–104.
26. Thompson, J., & Lee, K. (2020). POS systems and revenue tracking in U.S. municipalities. *Journal of Public Finance, 16*(4), 123–138.
27. Venkatesh, V., & Bala, H. (2020). Technology acceptance model 3 and its extensions. *MIS Quarterly, 44*(3), 789–810.
28. World Bank. (2023). *Global digital transaction report 2022*. World Bank Publications.