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| RESEARCH ARTICLE

Impact of Digital Governance Initiatives on Citizen Participation in Institutional Processes: A Case Study of the Citizens App of Ghana Gov

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| ABSTRACT
Digital governance is changing the dynamics between citizens and their governments. Initiatives in digital governance, like Ghana's Citizens App, strive to boost citizen involvement and enhance the delivery of public services. This research evaluates the influence of the Ghana Gov Citizens App on citizen participation and service efficiency, utilising a cross-sectional survey method with 310 valid responses collected from the Greater Accra Region. The study applies the Technology Acceptance Model (TAM) to analyse accessibility, engagement, and perceived effectiveness. Key results indicate that 55.16% of participants have downloaded the app, with higher rates of adoption among males (51.90%) and users in the middle age group (50.00% for those aged 25–34). Educational levels also affected usage, as users with secondary education (56.9%) and Master's degree holders (61.7%) demonstrated greater engagement. The app's ease of downloading showed a strong correlation with the frequency of use ($r = 0.433$, $p < 0.01$) and satisfaction with its features ($r = 0.576$, $p < 0.01$). Nonetheless, trust in the app was closely linked to perceptions of efficiency ($r = 0.929$, $p < 0.01$), emphasizing the significance of dependable performance. Participants rated the app as being more efficient than traditional approaches (mean = 1.6 on a 5-point scale) and noted that they could complete transactions without needing to visit in person (mean = 3.04). In spite of these improvements, the moderate satisfaction ratings (mean = 2.35) suggest that there is still room for enhancement in terms of responsiveness and usability. The research concludes that, although the Citizens App has made notable progress in Ghana's digital governance, issues such as the digital divide, concerns about data privacy, and inconsistent service quality still exist. Recommendations include focused outreach to marginalized groups, optimizing backend processes, and increasing transparency to build trust. These findings highlight the capacity of digital tools to reshape interactions between citizens and the state while stressing the need for inclusive and user-friendly design.

| KEYWORDS
Digital governance, citizen participation, Ghana Gov Citizens App, Technology Acceptance Model, Public service delivery

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1. Introduction

In a world that is becoming increasingly interconnected, digital governance has emerged as a transformative influence, fundamentally altering the complex relationship between governments and their citizens. The introduction of digital government services signifies a major change in public administration to improve the accessibility, efficiency, and transparency of government operations (OECD, 2020). Due to the rapid digitalisation of public services, governments around the globe have turned to digital government platforms to encourage greater engagement with citizens and simplify administrative processes (Yang et al., 2024). This paradigm shift entails the strategic use of information and communication technologies (ICTs) in

governmental operations, which aims to optimise the provision of public services, greatly improve administrative efficiency, and foster a more inclusive, participatory democratic environment (United Nations, 2020).

As noted by Latupeirissa et al. (2024), this goes beyond merely digitising current services; it requires a holistic reevaluation of governance practices, with the potential to improve efficiency, enhance transparency, fortify accountability systems, and, importantly, empower citizens' participation in public matters. As societies develop greater digital literacy, it has become clear that there is a pressing need for governments to adopt digital tools that promote a more inclusive and responsive relationship with their citizens, transforming digital governance from an emerging concept into a key component of contemporary societal structure (Isabella et al., 2025). Malodia et al. (2021) assert that the smooth integration of advanced digital tools into governmental processes holds significant promise, heralding a new era of modern governance characterised by increased transparency, improved accountability mechanisms, and, crucially, the actual empowerment of citizens in the civic arena. Understanding that meaningful engagement from citizens is an essential foundation of robust democratic societies, which ensures that government decisions effectively reflect the diverse needs and collective goals of the population, the active participation of citizens in various institutional processes from crucial policy development stages to the necessary oversight of public service delivery fosters a critical sense of mutual trust, enhances the overall legitimacy of governmental actions, and reinforces accountability principles (OECD, 2022). Nevertheless, conventional approaches to encouraging citizen engagement frequently encounter intrinsic limitations, such as geographical restrictions that limit outreach, significant time demands that discourage participation, and numerous accessibility obstacles that disproportionately impact certain groups, ultimately impeding the potential for broad civic involvement (Rijal, 2023).

Despite the increasing use of digital governance tools, traditional strategies for promoting citizen involvement continue to encounter significant challenges. These challenges encompass geographic isolation, time constraints, and accessibility issues, particularly for marginalised and rural communities (Asimakopoulos et al., 2025; Skariah et al., 2024). According to Nnenna et al. (2024), these obstacles inhibit broader citizen inclusion in governance processes and restrict the effectiveness of public sector responsiveness. Although digital applications such as Ghana's Citizens App aim to tackle these issues, there remains a pressing need to evaluate their real-world impact on citizen engagement. The Government of Ghana has rolled out multiple digital governance initiatives, especially the Ghana Gov Citizens App, intended to enable easy access to government services and enhance civic participation (Osei-Kojo, 2016). Nevertheless, uncertainties persist regarding the degree to which such platforms foster engagement among various demographic groups and improve the overall quality of public services. With the rise in digital literacy and smartphone usage, particularly in urban areas, it is both timely and essential to assess the tangible effects of these initiatives on governance outcomes (Adel, 2024).

While previous studies by Skariah et al. (2024), Lubis et al. (2024), and Mncwango and Mncwango (2024) have recognised the theoretical advantages of digital governance, there is a lack of empirical research specifically examining the practical outcomes of mobile governance platforms on citizen participation in the Ghanaian context. Specifically, the impact of the Citizens App on user engagement, service efficiency, and trust in governmental processes has not been thoroughly investigated. In this evolving context, this article performs a thorough evaluation of the significant influence of digital governance initiatives on the essential enhancement of citizen participation in institutional processes, using Ghana Gov's CitizensApp as a relevant and compelling case study to frame the analysis. This study aims to systematically evaluate its concrete effectiveness in promoting increased civic engagement among the Ghanaian population and its wider contribution to developing more inclusive, responsive, and ultimately democratic governance frameworks within the country.

The primary objective of this research is to assess the impact of digital governance initiatives on citizen involvement in institutional processes, with a focus on the Citizens App of the Ghanaian Government. Specifically, the study seeks to investigate the accessibility of the Citizens App across different demographics, assess the extent of citizen engagement with the Citizens App., and examine the influence of the Citizens App usage on the efficiency and effectiveness of public service delivery.

2. Literature Review

2.1 Theoretical Underpinning of the Study

The technology acceptance theory or model is adopted for this study as it is the most appropriate and enables the researcher to meet the study's objectives. The Technology Acceptance Model (TAM) is a commonly used framework that elucidates how users accept and adopt new technologies. Developed by Fred Davis in 1986, TAM suggests that an individual's decision to embrace a technology is influenced by two main factors: perceived usefulness and perceived ease of use. These elements are essential for understanding user engagement with digital platforms such as the CitizensApp in Ghana.

Perceived usefulness refers to how much a user believes that using a specific technology will enhance their job performance or improve their daily tasks (Davis, 1989). In the context of the CitizensApp, if users perceive that the app will provide timely and pertinent information, assist in issue reporting, and ultimately lead to improved public services, they are more inclined to engage with it. This perception is vital for promoting active involvement, as users tend to adopt technologies that they believe will offer tangible benefits.

According to Bolodeoku et al. (2022), perceived ease of use pertains to how much a user believes that utilizing a technology will require minimal effort. For the CitizensApp, this includes its user-friendliness, such as navigation, accessibility, and the clarity of the information provided. If users find the app straightforward and easy to navigate, they are more likely to use it consistently. On the other hand, if the app is viewed as complex or difficult to use, it may dissuade potential users from participating, thereby reducing citizen involvement in governance. Demuyakor (2021) asserts that users are more inclined to use technology to address a particular problem if they believe the technology will serve their needs well and that the task is considered relatively easy to accomplish.

The Technology Acceptance Model (TAM) is an effective framework for comprehending citizen engagement with the Citizens App in Ghana. By concentrating on the concepts of perceived usefulness and perceived ease of use, this study investigates the primary factors affecting user adoption and participation in governance. The insights gained from implementing TAM inform the development of strategies to improve the app's functionality and effectiveness, ultimately promoting a more engaged and empowered citizenry.

2.2 Ghana's Digital Governance Landscape

Ghana's digital governance features a strong array of policies and initiatives designed to modernise public administration and enhance citizen involvement. The National Digital Transformation Strategy, introduced in 2021, establishes the groundwork for incorporating technology into governmental operations (Ghana Government, 2021). This strategy aims to enhance digital infrastructure, promote e-services, and ensure cybersecurity, all to create a more connected and efficient government. A key initiative under this plan is the e-Government Platform, which offers a centralized system for accessing government services online. This platform encompasses services like online tax payments, land registration, and business registration, simplifying interactions for citizens with government agencies (Adu-Gyamfi, 2022).

Alongside the e-Government Platform, numerous initiatives have been launched to improve digital governance in Ghana. A prominent example is the Ghana Investment Promotion Centre (GIPC) Online Portal, which enables investors to apply for permits and monitor their investment applications digitally (GIPC, 2023). This initiative not only simplifies the investment procedure but also enhances transparency by providing real-time updates on applications. Additionally, the CitizensApp has become an essential tool for encouraging citizen engagement. This mobile application enables citizens to report problems, access government services, and receive prompt responses from public officials (Asare, 2023). The app has played a vital role in promoting participation, particularly among young and tech-savvy individuals, and has helped create a more responsive governance system.

Despite these improvements, the landscape of digital governance in Ghana encounters numerous challenges. A significant obstacle is the digital divide, which impacts individuals in rural regions who may not have consistent access to reliable internet services and digital skills (Osei-Tutu et al., 2022). Agboh (2018) points out that a key issue with digital governance in Ghana is that not all citizens can access the internet and computers. This divide hinders the effectiveness of digital initiatives and creates barriers to equitable access to government services.

Moreover, concerns surrounding data privacy and cybersecurity present threats to the integrity of digital governance efforts. Citizens might be hesitant to use digital platforms due to worries about how their data is handled and safeguarded (Amoako, 2023). Gershon et al. (2018) note that there is a widespread lack of personal information security in Ghana, which has hindered the effective collection of information from citizens.

In addition, Gohary (2020) contends that in many developing nations, including Ghana, financial constraints are a significant barrier to the execution of digital governance, as much of the population struggles to make ends meet. Implementing, operating, and maintaining such systems requires considerable resources. The expenses associated with managing and sustaining e-Government need to remain low enough to ensure a favorable cost-benefit ratio.

2.3 The Ghana Gov CitizensApp

Ghana's digital governance framework has been greatly improved with the launch of the Ghana.Gov Citizen App, which is a key mobile application within the larger Ghana.Gov platform. Introduced as part of the government's Digital Transformation Agenda, this app acts as a centralized hub for citizens to conveniently access a variety of government services right from their smartphones. It aligns with the national goal of fostering a digitally inclusive society by alleviating bureaucratic hurdles, minimizing corruption, and enhancing the efficiency of public service delivery (Ministry of Communications and Digitalisation, 2022).

One of the standout features of the app is its unified access to various government services, which eliminates the necessity for citizens to physically visit multiple offices. Users can apply for passports, renew driver's licenses, register businesses, pay taxes, and even renew memberships for the National Health Insurance Scheme (NHIS) through the app. Furthermore, the app incorporates secure digital payment methods, facilitating transactions via mobile money (MTN, Vodafone, AirtelTigo) and bank transfers. This development has considerably diminished the cash-oriented nature of government transactions, fostering financial transparency and inclusion (Bank of Ghana, 2021).

An essential aspect of the app's capabilities is its connection with the Ghana Card, the national biometric identification system. This integration allows users to verify their identities online, thereby reducing fraud and preventing duplicate registrations across various government platforms. The app also offers real-time tracking for service requests, enabling citizens to keep an eye on the progress of their applications, such as passport processing or business registration, and receive notifications throughout the entire process (National Identification Authority, 2023). Additionally, it acts as a conduit for government news and alerts, keeping citizens updated on policy changes, deadlines, and emergency information.

Regarding security, the CitizensApp utilises blockchain technology as a strategy to protect user information and ensure the integrity and transparency of transactions conducted through the platform. In conclusion, the CitizensApp is set to enhance convenience, efficiency, and security in the manner citizens engage with the government of Ghana, marking a notable advancement in the country's digital governance landscape.ape.

2.4 Digital Governance and Citizen Participation

Digital governance is crucial for increasing citizen involvement by using technology to create more inclusive and transparent governmental processes. The use of digital platforms, such as initiatives for electronic participation, has demonstrated improvements in citizen engagement and its impact on policymaking. In India, platforms like MyGov have been key in encouraging citizen involvement by allowing public contributions to governance processes (Pawar et al., 2024). Additionally, it is important to integrate e-participation efforts at various governance levels and highlight the role of federalism in enhancing effective citizen engagement. Research by Cao (2024) shows a significant positive correlation between digital governance and citizen participation. It was discovered that factors like openness, interactivity, and selectivity in public engagement within digital governance positively impact several aspects of digital governance capacity, including information integration, decision-making based on scientific data, and collaborative capabilities.

Research by Kumar (2024) underscores the urgent necessity for user-friendly digital platforms within local governments, as many citizens encounter notable difficulties when navigating the current systems, negatively affecting their engagement and overall experience with public services. This emphasises the need to enhance usability to boost citizen participation in digital governance. Tappert et al. (2024) conclude that the digital transformation occurring in urban development can improve citizen participation by introducing novel forms of decentralised governance and collaborative knowledge creation, potentially leading to more deliberative participatory processes. Digital governance acts as a vital means of improving the provision of public services, encouraging public participation, and fostering transparency, accountability, and inclusivity, ultimately aiming to enhance the quality of life for all citizens (Vyas et al., 2024).

Digital government services are instrumental in improving the efficiency and accessibility of public services, which subsequently builds trust among citizens in their government institutions. This suggests that the digitalisation of public services is a crucial element in establishing public confidence (Afiyah, 2024). The analysis conducted in the study by Hien et al. (2024) reveals a strong positive link between various elements of digital governance, such as transparency, cost-effectiveness, data-informed policymaking, accountability, and service quality, and a rise in citizen engagement. The results underscore the significant potential of digital government initiatives in enhancing public participation and trust within urban governance, highlighting the necessity for continued investment in technological advancements and data security to foster improved governance and citizen involvement.

3. Methodology

A cross-sectional survey design was employed to collect data on citizens' current perceptions and experiences with the Citizens App. A structured questionnaire which targeted adult residents (aged 18+) of the Greater Accra Region. This region has over 5.5 million inhabitants, hosts the highest population density in Ghana and has significant smartphone (85%) and internet (76%) usage. The urban environment provides an ideal backdrop for studying app users and evaluating service delivery, such as obtaining passports and licenses. The region's diverse income levels foster inclusivity, and its status as a tech hub offers valuable insights for nationwide implementation. To ensure representation across various demographic groups, a simple random sampling technique was utilised to select participants from both urban and rural areas, as well as different age groups and educational backgrounds. A target sample size of 400 respondents was established, based on a 95% confidence level and a 5% margin of error using Yamine's Formula for sample size determination.

The data for this research was gathered through a Google form distributed via the WhatsApp groups and online platforms of the target participants. Before distributing the survey questionnaire, the researcher formally communicated with the administrators of the selected WhatsApp groups to address any concerns. The questionnaire was developed based on the theoretical framework, literature review, and research inquiries. It included closed-ended questions with Likert scale responses, multiple-choice options, and yes/no questions. A pre-test was conducted with a small segment of the target population to ensure the questionnaire's clarity, validity, and reliability, which resulted in necessary amendments. Every week, the administrators reminded group members to share the questionnaire with additional groups. To avoid multiple submissions from the same individual, the form was configured to permit only one entry per person. Out of more than 400 responses, 310 were deemed valid, yielding a response rate of 77.5%.

Descriptive statistics (frequencies, percentages, means, and standard deviations) summarised demographic characteristics and responses to the questionnaire items. Beyond descriptive analysis, inferential statistical techniques such as chi-square tests, correlational analysis were employed to explore associations, group differences, and predictive relationships among variables related to accessibility, engagement, and service delivery outcomes.

4. Results and Discussion

4.1 Accessibility of the Citizens App Across Different Demographics

The primary objective of the study is to assess the accessibility of Ghana's Citizens App among various demographic groups, a crucial factor in achieving inclusive public service delivery. As digital platforms mediate citizen-state interactions, equitable access is essential to prevent marginalised populations from being left behind. Key findings highlight how age, gender, education, and location affect app adoption and usability, revealing both progress and persistent gaps. This analysis provides policymakers with insights to address accessibility barriers and enhance participation in digital governance, assessing whether the app serves as an equalising platform or reinforces existing inequalities in service access. The result is shown in Table 1 below:

Table 1: Accessibility of Ghana's Citizens App

			Citizens App Download		Total
			Yes	No	
Gender	Male	N	95	88	183
		%	51.90%	48.10%	100.00%
	Female	N	76	51	127
		%	59.80%	40.20%	100.00%
Total		N	171	139	310
		%	55.16%	44.84%	100.00%
Age Group	18 - 24	N	23	17	40
		%	57.50%	42.50%	100.00%
	25 - 34	N	57	57	114
		%	50.00%	50.00%	100.00%
	35 - 44	N	41	63	104
		%	39.40%	60.60%	100.00%
	45 - 54	N	35	5	40
		%	87.50%	12.50%	100.00%
	55+	N	8	4	12
		%	66.70%	33.30%	100.00%
Total		N	164	146	310
		%	52.90%	47.10%	100.00%
Level of Education	Primary	N	20	21	41
		%	48.80%	51.20%	100.00%
	Secondary	N	78	59	137
		%	56.90%	43.10%	100.00%
	Bachelor's Degree	N	37	48	85
		%	43.50%	56.50%	100.00%
	Master's Degree	N	29	18	47
		%	61.70%	38.30%	100.00%
Total		N	164	146	310
		%	52.90%	47.10%	100.00%

Source: Authors' field work 2025

The results presented in Table 1 highlight significant patterns in the use and adoption of the Ghana Gov Citizens App among various demographic segments. Male participants reported the highest usage frequency of 183, with 95 (51.90%) having downloaded the app and 83 (48.10%) not having done so, while female participants had 71 (59.80%) downloads out of 127 total respondents, with 51 (40.20%) not downloading the app. This difference indicates that men may view the app as more beneficial or user-friendly, which corresponds with the Technology Acceptance Model (TAM) that identifies perceived usefulness and ease of use as primary motivators for technology adoption. Alternatively, the features of the app, such as business registration and tax payment functionalities, may appeal more to male users, leading to increased interaction, whereas the lower engagement among women could be attributed to a general lack of technological literacy in that demographic.

Age also significantly influenced the adoption of the app. Younger users (ages 18–24) displayed moderate adoption rates, reflected in a usage frequency of 23 (57.50%) out of 40 respondents, while users in the middle-aged categories (25–34 and 35–44 years) showed the highest adoption rates with frequencies of 57 (50.00%) and 41 (39.40%) out of 114 and 104 respondents, respectively. Furthermore, older groups (ages 45–54 and 55+) exhibited the lowest adoption rates, noted with frequencies of 35 (87.50%) and 8 (66.70%) from totals of 40 and 12, respectively. Although younger individuals may be comfortable with technology, they might prioritize social media applications over governmental services unless there are incentives, such as services tailored to students, which could explain the moderate engagement of younger users. The strong response from middle-aged individuals may suggest that this demographic finds significant value in services provided by the app, such as tax payments or obtaining passports and driver's licenses. The limited adoption among older age groups might indicate either time limitations or a favored reliance on traditional methods for service, highlighting the necessity for focused initiatives aimed at making the app more attractive to these users.

Educational attainment also affected the utilization of the app, with users who completed secondary education (56.9%) and those holding Master's degrees (61.7%) displaying higher uptake rates. Conversely, those with Bachelor's degrees (43.5%) were less inclined to use the app. This distinction implies that secondary-educated users might benefit from the app's straightforward design, while Master's degree holders might appreciate its efficiency. The reduced engagement from Bachelor's degree holders could be due to doubts regarding the app's effectiveness or a tendency to favour alternative digital platforms. These observations underline the necessity of customising the app's design and outreach strategies to cater to the varied needs of people with different educational backgrounds.

The findings indicate that although the Citizens App has seen considerable adoption, its accessibility and levels of engagement differ among various demographics. The failure to adopt the app among certain respondents is largely attributed to a lack of awareness, suggesting insufficient publicity surrounding the citizen app among diverse groups. To improve inclusivity, policymakers should aim to enhance usability for underrepresented demographics, such as younger and middle-aged users, while addressing obstacles such as digital literacy and trust. By applying insights from the Technology Acceptance Model, the government can refine the app's functionalities and promotional tactics to encourage wider citizen engagement and ensure that digital governance efforts benefit all community segments.

4.2 Citizens Engagement with the Citizens' App

This study's second objective focuses on citizen engagement with the Ghana Gov Citizens App, examining adoption patterns, usage frequency, and factors influencing ongoing participation. Key findings reveal how different demographic groups interact with the app, highlighting correlations between usability, satisfaction, and trust. The results assess the app's role in fostering civic participation, showcasing both successes and limitations of digital governance in promoting inclusive engagement. Using the Technology Acceptance Model (TAM), the analysis illustrates how perceived usefulness and ease of use affect adoption trends across Ghana's diverse population. The result is shown in Table 2 below:

Table 2: Pearson Correlation

		Ease of download	Usage period	Features and functions	Efficiency	Trust
Ease of download	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	176				
Usage period	Pearson Correlation	.433**	1			
	Sig. (2-tailed)	0				
	N	176	176			
Features and functions	Pearson Correlation	.576**	.334**	1		
	Sig. (2-tailed)	0	0			
	N	176	176	176		
Efficiency	Pearson Correlation	.397**	0.041	.434**	1	
	Sig. (2-tailed)	0	0.599	0		
	N	176	176	176	176	
Trust	Pearson Correlation	.383**	0.014	.373**	.929**	1
	Sig. (2-tailed)	0	0.856	0	0	
	N	176	176	176	176	176

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

The correlation analysis in Table 2 provides several important insights into how citizens engage with the Ghana Gov Citizens App, directly addressing Study Objective 2 related to the level of interaction with the platform. There is a strong positive correlation between the ease of downloading and starting to use the app and both frequency of use (r = 0.433) and levels of satisfaction (r = 0.576), indicating that the initial user experience plays a significant role in ongoing engagement. This finding supports the Technology Acceptance Model, which highlights perceived ease of use as a crucial element in the adoption of technology. The data shows that when citizens find the app easy to install and navigate, they tend to use it more often and express greater satisfaction with its features.

Interestingly, although the frequency of use reveals a moderate correlation with satisfaction (r = 0.334), it lacks a significant relationship with either perceived efficiency or trust in the app's information. This implies that frequent users may enjoy the app's interface and functionality, but their continued engagement doesn't necessarily lead to stronger beliefs regarding the app's effectiveness or reliability. This disconnect emphasizes a critical consideration for digital governance initiatives: merely using the app does not automatically mean users find value or trust in the system. The findings suggest that engagement metrics should be supplemented with qualitative evaluations of user perceptions to fully understand a platform's impact.

The analysis reveals a notably strong connection between satisfaction with the app's features and both perceived efficiency (r = 0.434) and trust (r = 0.373), indicating that users who highly rate the app's functionality are more inclined to feel it effectively helps them complete tasks and to trust the information given. Remarkably, the almost perfect correlation between efficiency and trust (r = 0.929) suggests that these two elements are nearly indistinguishable in users' minds when the app excels in assisting task completion, citizens extend that positive experience to their overall trust in the system. This finding carries significant implications for digital governance, as it highlights the direct impact of technical performance on citizen confidence in government institutions.

These results together create a complex picture of citizen engagement with the Citizens App. While accessibility and initial ease of use are critical pathways to adoption, sustained meaningful engagement relies on the app's capacity to consistently provide value, efficiency, and reliable information. The findings indicate that initiatives aimed at boosting engagement should focus not merely on increasing user numbers but on improving the quality of interactions and ensuring the app offers concrete benefits to citizens' everyday lives. For digital governance initiatives to genuinely succeed, they must transcend basic functionality to foster trust and demonstrate clear utility in addressing real-world issues for citizens across all demographic groups.

4.3 Influence of the Citizens App on the Efficiency and Effectiveness of Public Service Delivery

This study's third objective assesses the Ghana Gov Citizens App's impact on public service delivery efficiency. It evaluates whether digital governance improves service accessibility and performance compared to traditional methods. Key findings highlight citizens' perceptions of the app's utility in reducing reliance on physical offices, enhancing transaction completion, and providing satisfactory outcomes. The results offer insights into its operational impact and identify areas for improvement to optimise public service delivery in Ghana. The result is shown in Table 3 below:

Table 3: Influence of the Citizens App

	N	**Mean**	**Std. Deviation**	**Skewness**		**Kurtosis**	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Compared to traditional methods, the Citizens App is ...	176	1.6	0.688	0.705	0.19	-0.65	0.377
Since using the Citizens App, how often have you completed government transactions without visiting an office?	176	3.04	1.312	0.036	0.19	-1.099	0.377
Overall, how satisfied are you with accessing government services through the Citizens App?	176	2.35	0.882	0.164	0.189	0.341	0.376
Compared to traditional methods, how effective is the Citizens App in helping you receive responses from government agencies?	176	2.41	0.956	0.355	0.191	0.301	0.379

The descriptive statistics presented in Table 3 provide strong evidence regarding the Citizens App's influence on public service delivery in Ghana, directly relating to the study's third objective of assessing how the app affects service efficiency and effectiveness. The findings indicate that respondents consider the app to be more efficient than conventional methods, with a notably low mean score of 1.6 on a scale of 1-5. This significant positive skew toward the lower end of the scale suggests widespread consensus that the digital platform offers considerable time savings and convenience compared to traditional

bureaucratic practices. These results support the government's digital transformation initiatives and illustrate how technology can enhance administrative processes that previously required physical presence and multiple visits to offices.

A particularly optimistic finding pertains to the frequency of digital transactions, as respondents indicated the ability to complete government services without visiting offices, recording a mean score of 3.04. While this reflects frequent use, the relatively high standard deviation of 1.312 indicates notable variation in user experiences. Some citizens may be fully embracing digital options, while others might still need to combine app usage with in-person visits for certain services. This variability could result from several factors, including incomplete digitization of all government services, technical issues with specific transactions, or differing levels of digital literacy among users. The nearly symmetrical distribution of responses (skewness of 0.036) further underscores that while digital adoption is advancing, there remains potential to make the transition more widespread across different types of government services and demographics.

The examination of user satisfaction and perceived effectiveness provides more detailed insights. With mean scores around the midpoint of the scale (2.35 for overall satisfaction and 2.41 for effectiveness in receiving responses), the data imply that although the app signifies a notable improvement over traditional methods, users still experience certain limitations in their interactions. The positive skewness in both metrics indicates that a higher number of respondents tend to provide positive assessments rather than negative ones; however, the moderate kurtosis values suggest these positive impressions aren't yet sharply concentrated. This trend likely reflects real-world disparities in service quality, while some transactions via the app may occur smoothly, others might encounter delays or obstacles. The findings particularly emphasise opportunities to enhance both responsiveness and reliability, which could raise user satisfaction from moderate to consistently high levels.

Together, these findings illustrate a digital governance tool that has effectively initiated the transformation of public servi]ce delivery in Ghana, yet still possesses untapped potential. The clear preference for the app over conventional methods and the evidenced decrease in the need for physical office visits highlight its value as a tool for efficiency. However, the variability in user experiences and the moderate satisfaction ratings suggest that attaining consistently excellent service delivery across all interactions will necessitate ongoing refinement. Future development initiatives should concentrate on expanding service coverage, streamlining response times, and addressing any technical or usability challenges that might hinder certain users from fully utilizing digital channels. As these enhancements are made, the app has the capacity to not only equal but significantly exceed the effectiveness of traditional service delivery methods, realizing the promise of digital governance to create public services that are more accessible, efficient, and user-friendly for all citizens.

5. Conclusion

This research has shown that initiatives in digital governance, such as the Ghana Gov Citizens App, significantly enhance citizen involvement in institutional processes. The app has effectively increased access to government services by offering a centralized and user-friendly platform that enables citizens to interact with various public services remotely. This development has helped to eliminate traditional obstacles like geographical isolation, time limitations, and bureaucratic inefficiencies, thus promoting a more inclusive and participatory democratic environment.

The results confirm that perceived usefulness and ease of use are critical factors affecting the adoption and continuous engagement with digital governance tools. Users who believe the Citizens App streamlines their interactions with government services and is easy to navigate are more inclined to engage actively in governance processes. This finding is consistent with the Technology Acceptance Model that forms the basis of the study’s theoretical framework.

Furthermore, the incorporation of secure digital payment methods, real-time tracking for service requests, and biometric identity verification using the Ghana Card has improved the efficiency, transparency, and reliability of public service delivery. The integration of blockchain technology further protects user data and ensures transaction integrity, leading to greater accountability and increased citizen trust in governmental operations.

Nevertheless, challenges persist, especially the digital divide, which restricts access for rural and marginalized communities lacking reliable internet connectivity and digital literacy. Concerns regarding data privacy and cybersecurity are also present, which could impede broader adoption. Additionally, financial limitations create hurdles for the sustainable development and upkeep of digital governance infrastructure.

The Ghana Gov Citizens App represents a major leap forward in digital governance and citizen engagement in Ghana; meanwhile, ongoing efforts are needed to tackle accessibility issues, enhance user experiences, and bolster data protection measures. Such steps are essential for realising the full potential of digital governance as a means of promoting more responsive, transparent, and democratic institutions. This study highlights the significance of digital governance as a vital facilitator of citizen empowerment and inclusive public administration in today's world.

6. Policy Implications and Recommendations

Government should engage in outreach and training programmes that will meet the unique needs of marginalised groups, including middle-aged individuals and those with limited digital skills. More user-friendly features and support in multiple languages could further enhance access. Also, app developers should emphasise the optimisation of backend processes to guarantee prompt and dependable service delivery. Frequent updates and channels for feedback can assist in pinpointing and

addressing issues. Besides, government should be transparent about data management, along with consistent performance to bolster public trust. Showcasing success stories and illustrating the app's impact could reinforce its significance. Moreover, Government should complete digitisation of all its services and ensuring smooth interoperability among platforms will minimise the necessity for in-person interactions and improve convenience.

7. Final Reflections

The Ghana Gov Citizens App marks a significant advancement in the nation's digital transformation journey, serving as a model for how technology can improve governance and engage citizens. Although the app has shown its ability to enhance efficiency, accessibility, and civic involvement, its long-term effectiveness relies on overcoming identified challenges and promoting an inclusive, user-focused strategy. By utilizing the findings of this study, policymakers can enhance the app's design and functionality, ensuring it addresses the varied needs of Ghana's citizens and fulfills the potential of digital governance as a means for equitable and effective public service delivery. Further research could investigate long-term patterns in app usage and the effects of particular interventions on user satisfaction and trust, offering deeper insights into the changing landscape of digital governance in Ghana.

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