



Assessment of Utilization of Mobile Phone-Based Applications for Insecurity Incident Reporting in Kwali Area Council, Federal Capital Territory, Abuja

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Abstract

This study examined the utilization of mobile phone-based applications for insecurity incident reporting in Kwali Area Council, Federal Capital Territory, Abuja. The study employed a descriptive survey research design with a population comprising all adult residents aged 18 years and above who own mobile phones and possess basic mobile phone literacy. A sample of 244 respondents was selected, and data were collected using a structured questionnaire titled "Mobile Phone-Based Applications for Insecurity Reporting Utilization Questionnaire" (MPAIRUQ). The instrument demonstrated high reliability with an overall Cronbach's alpha coefficient of 0.85. Data were analyzed using descriptive statistics including frequency counts, percentages, means, and standard deviations. The findings revealed that phone call applications remained the predominant method for reporting insecurity incidents, with 79.9% utilization, while specialized mobile applications recorded minimal adoption rates below 30%. The extent of mobile application utilization for security reporting was low across all categories, with a grand mean of 2.32 below the 2.50 acceptance benchmark. Residents faced significant challenges including cultural beliefs, delayed security agency response times, high internet data costs, lack of trust in reporting systems, inadequate knowledge, and fear of reprisal, with a grand mean of 2.93 indicating agreement on all challenge items. The study recommended that security agencies establish reliable feedback mechanisms, the FCT Administration improve network infrastructure and subsidize data costs, and stakeholders conduct comprehensive awareness campaigns and digital literacy training programs to enhance mobile application adoption for insecurity incident reporting.

Keywords: Insecurity, Mobile Phone-Based Applications, Reporting

Introduction

Insecurity has been conceptualized by contemporary scholars as a multifaceted phenomenon that threatens the safety, well-being, and stability of individuals and communities. According to Achumba, Ighomereho, and Akpor-Robaro (2013), insecurity refers to the state of being subject to danger or threat, characterized by the absence of protection against harm to lives and property. Similarly, Nwagboso (2012) defines insecurity as a situation where individuals, communities, or nations face threats to their physical, psychological, or material well-being. More recently, Okeshola and Mudiare (2013) described insecurity as the breach of peace and security within a society, resulting in fear, vulnerability, and the inability of citizens to pursue their daily activities without apprehension. Onuoha (2014) further expanded this definition to include the failure of state institutions to

provide adequate protection and guarantee the fundamental rights of citizens. These scholarly perspectives underscore insecurity as a condition that undermines social cohesion, economic development, and the overall quality of life within affected populations.

The manifestations of insecurity are diverse and interconnected, spanning various forms that impact communities differently. Common forms include armed robbery, kidnapping, cattle rustling, communal conflicts, terrorism, and banditry (Bello, 2013; Chukwuma, 2015). The causes of insecurity are equally complex and multifactorial. Poverty and unemployment serve as primary drivers, creating desperation that pushes individuals toward criminal activities (Adagba, Ugwu, & Eme, 2012). Weak governance structures, corruption, and the inability of



security agencies to effectively respond to threats further exacerbate the problem (Hazen & Horner, 2007). Other contributing factors include religious extremism, ethnic tensions, porous borders, proliferation of small arms, and youth restiveness (Imobighe, 2003; Odekunle, 2005). The effects of insecurity are far-reaching and devastating. Communities experience loss of lives and property, displacement of populations, disruption of economic activities, and psychological trauma (Ewetan & Urhie, 2014). Agricultural productivity declines as farmers abandon their lands due to fear of attacks, leading to food insecurity and economic stagnation (Oladeji & Abiodun, 2014). Educational systems suffer as schools close or operate irregularly, denying children access to learning opportunities. The overall development trajectory of affected areas is severely hampered, perpetuating cycles of poverty and vulnerability.

Kwali Area Council in the Federal Capital Territory represents a microcosm of these security challenges facing Nigeria. Located in the southern part of Abuja, Kwali has experienced increasing incidents of kidnapping, armed robbery, and banditry in recent years (Obi & Chukwuma, 2016). The area's proximity to neighboring states with high insecurity levels has made it vulnerable to spillover effects (Ibrahim, 2019). Farmers in Kwali have reported attacks on their farmlands, leading to reduced agricultural output and economic hardship (Adamu & Mohammed, 2020). The predominantly agrarian communities in Kwali face constant threats from criminals who exploit the area's relatively sparse security presence and challenging terrain (Musa, 2018). Reports indicate that residents live in perpetual fear, with many avoiding travel after dark and limiting their movements during the day (Yakubu & Adeyemi, 2021). The psychological impact on communities has been profound, with trust between different groups eroding and social cohesion weakening. Market activities have declined as traders fear for their safety while traveling to and from Kwali (Suleiman, 2019). These security challenges have transformed what was once a peaceful agricultural hub into an area characterized by anxiety, economic decline, and restricted mobility.

Various efforts have been initiated to address the escalating insecurity in Kwali Area Council and the broader Federal Capital Territory. The Nigerian government has increased the deployment of security personnel to hotspot areas, including Kwali, as part of efforts to enhance surveillance and rapid response capabilities (FCT Administration, 2020). Community

policing initiatives have been introduced to foster collaboration between local residents and security agencies (Alemika & Chukwuma, 2012). The establishment of vigilante groups and local security committees has provided additional layers of protection, drawing on indigenous knowledge and community networks (Nwolise, 2004). Security awareness campaigns have been conducted to educate residents on safety measures and encourage the reporting of suspicious activities (Police Community Relations Committee, 2019). Despite these interventions, significant gaps remain in the effectiveness and reach of traditional security approaches. The challenge of timely incident reporting persists, as many residents lack efficient means to communicate threats to appropriate authorities (Ajayi & Adesote, 2013). Distance to police stations, poor road networks, and communication barriers often result in delayed responses or unreported incidents (Alemika, 2013). The need for innovative, technology-driven solutions that can bridge these gaps and enhance the security reporting ecosystem has become increasingly apparent.

Mobile phone-based applications have emerged as powerful tools for addressing communication and reporting challenges across various sectors globally. These applications leverage the widespread penetration of mobile phones and internet connectivity to facilitate real-time information sharing between users and service providers (Aker & Mbiti, 2010). In the security domain, mobile applications enable citizens to report incidents quickly, share locations accurately, and receive timely feedback from authorities (Chan & Moses, 2017). The interactive nature of these platforms allows for bidirectional communication, creating opportunities for community engagement and collaborative problem-solving (Meijer & Thaens, 2013). Evidence from different contexts demonstrates that mobile phone-based reporting systems can reduce response times, improve resource allocation, and enhance public trust in security institutions (Mazimpaka & Timpf, 2016). Countries such as Kenya, with its "Ushahidi" platform, and India, with various citizen reporting apps, have successfully utilized mobile technology to crowdsource security information and coordinate responses (Okolloh, 2009; Pandey & Veeramachaneni, 2018). The accessibility, affordability, and familiarity of mobile phones make them particularly suitable for contexts where traditional communication infrastructure may be limited or ineffective.



Various types of mobile phone-based applications have been developed to serve security reporting and management functions. Emergency response applications allow users to send distress signals with GPS coordinates to designated contacts or security agencies at the press of a button (Raman, Tay, Tan, & Lam, 2018). Crime reporting applications enable citizens to document and report incidents through text, images, or videos, creating verifiable records that aid investigations (Kurniawan, Yudhoatmojo, & Ahmadi, 2017). Community alert applications facilitate peer-to-peer warnings about security threats in specific localities, fostering collective vigilance (Boonstra & Van Voorden, 2019). Integrated security platforms combine multiple functionalities, including incident reporting, tracking, analytics, and communication with security personnel (Bousquet & Curtis, 2011). Some applications incorporate features such as anonymous reporting to protect the identity of informants, while others use gamification elements to encourage consistent user engagement (Díaz-Palomar, 2015). The design and features of these applications vary based on the specific security challenges they aim to address, the technological infrastructure available, and the needs of target user populations.

The state of knowledge regarding mobile phone-based security applications reveals both promising developments and persistent gaps. Studies conducted in urban centers have demonstrated positive impacts on crime prevention and emergency response coordination (Crowe, 2016; Sun, Jara, & Bie, 2016). However, research focusing on rural and semi-urban areas like Kwali Area Council remains limited. Most existing studies have concentrated on the technical development and deployment of these applications, with insufficient attention to utilization patterns, user experiences, and contextual factors influencing adoption (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008). Questions persist regarding the actual extent of usage among target populations, the challenges users encounter, and the effectiveness of these tools in improving security outcomes in resource-constrained settings (Poblet, García-Cuesta, & Casanovas, 2013). Furthermore, the literature reveals minimal investigation into how socio-economic factors, digital literacy levels, and community dynamics influence the utilization of mobile security applications in Nigerian contexts (Oni, Okanlawon, & Okunoye, 2017). Understanding these dynamics is critical for designing interventions that

maximize the potential of mobile technology for insecurity incident reporting.

The justification for this study rests on several compelling grounds. First, despite the proliferation of mobile phones in Nigeria, with penetration rates exceeding 80% (Nigerian Communications Commission, 2021), empirical evidence on how communities like Kwali utilize mobile applications for security purposes remains scarce. Second, while insecurity continues to threaten livelihoods and development in Kwali Area Council, there is insufficient documentation of how existing technological tools are being leveraged or could be optimized to address these challenges. Third, policymakers and security agencies require evidence-based insights to guide investments in technology-driven security interventions that align with community needs and capabilities (Abimbola & Okafor, 2013). Understanding the barriers to utilization can inform strategies for enhancing adoption and effectiveness, potentially transforming how communities engage with security systems.

Research Questions

The following research questions guided this study:

1. What are the types of applications residents use to report insecurity incidents?
2. What is the extent to which residents use mobile applications to report insecurity incidents?
3. What are the challenges residents face in the use mobile applications to report insecurity incidents?

Methods

This study employed a descriptive survey research design. The study was conducted in Kwali Area Council, Federal Capital Territory, Abuja. The population comprised all adult residents aged 18 years and above residing in Kwali Area Council who own mobile phones and have basic mobile phone literacy and access to smartphones or feature phones capable of running mobile applications. The study utilized a sample size of 244 respondents selected using simple random sampling technique. The instrument for data collection was a structured questionnaire titled "Mobile Phone-Based Applications for Insecurity Reporting Utilization Questionnaire" (MPAIRUQ), developed by the researcher based on literature review and adapted from validated instruments. The questionnaire comprised three clusters: Cluster A

contained 9 items on types of mobile applications used for reporting insecurity incidents on a two point scale of utilized and not utilized; Cluster B contained 9 items on the extent of utilization of mobile applications for insecurity incident reporting; Cluster C comprised 15 items on challenges faced in using mobile applications for reporting insecurity incidents. Items in Clusters B and C were structured using a four-point Likert scale (Strongly Agree, Agree, Disagree, Strongly Disagree). The validity of the MPAIRUQ was established through face validity procedures involving three experts. The reliability was determined using Cronbach's alpha coefficient with 20 mobile phone users from Abaji Area Council outside the study area. Reliability coefficients were: Cluster B (0.86) and Cluster C

(0.82), with overall reliability of 0.85, exceeding the 0.70 threshold recommended by Nunnally and Bernstein (1994). Data were analyzed using descriptive statistics. For research question one, frequency counts and percentages were calculated to identify types of applications used. For research questions two and three, mean scores and standard deviations were calculated based on the four-point Likert scale (Strongly Agree = 4, Agree = 3, Disagree = 2, Strongly Disagree = 1). A decision rule was established: mean scores of 2.50 and above indicated high extent of utilization or significant challenges, while scores below 2.50 indicated low extent of utilization or insignificant challenges. Results were presented in tables below for clarity.

Results

Table 1: Simple Percentage analysis of types of applications residents use to report insecurity incidents

S/N	Item Statements	Not Utilized F(%)	Utilized F(%)	Decision
1	Emergency response applications (e.g., Rescue Me, Emergency Alert)	238(97.5%)	6(2.5%)	Not Utilized
2	Police or security agency official applications	217(88.9%)	27(11.1%)	Not Utilized
3	WhatsApp for reporting to security groups or contacts	175(71.7%)	69(28.3%)	Not Utilized
4	Facebook for reporting incidents	183(75%)	61(25%)	Not Utilized
5	Twitter/X for reporting incidents	173(70.9%)	71(29.1)	Not Utilized
6	SMS-based reporting systems	238(97.5%)	6(2.5%)	Not Utilized
7	Community alert applications	242(99.2%)	2(0.8%)	Not Utilized
8	General purpose reporting applications	236(96.7%)	8(3.3%)	Not Utilized
9	Phone call applications (including regular phone calls)	49(20.1%)	195(79.9%)	Utilized

Table 1 presents the simple percentage analysis of the types of applications residents use to report insecurity incidents. The data reveals that phone call applications, including regular phone calls, are the most utilized method for reporting insecurity incidents, with 195 respondents (79.9%) indicating usage. This was the only application type that exceeded the 50% utilization threshold, making it the dominant reporting channel among residents. Other application types showed significantly lower utilization rates. WhatsApp for reporting to security groups or contacts was used by 69 respondents (28.3%), while Twitter/X for reporting incidents was utilized by 71 respondents (29.1%). Facebook for reporting incidents was used by 61

respondents (25%), and police or security agency official applications were utilized by only 27 respondents (11.1%). The least utilized applications were community alert applications with 2 users (0.8%), emergency response applications with 6 users (2.5%), SMS-based reporting systems with 6 users (2.5%), and general purpose reporting applications with 8 users (3.3%). The findings indicate that traditional phone call methods remain the predominant means of reporting insecurity incidents, while specialized mobile applications designed for security reporting have not gained substantial adoption among residents of Kwali Area Council.

Table 2: Mean and standard deviation analysis of the extent to which residents use mobile applications to report insecurity incidents

S/N	Item Statements	Mean	SD	Decision
	I regularly use mobile applications such as the following to report insecurity incidents in my area			
1	Emergency response applications (e.g., Rescue Me, Emergency Alert)	2.30	0.46	Low Extent
2	Police or security agency official applications	2.36	0.48	Low Extent
3	WhatsApp for reporting to security groups or contacts	2.24	0.55	Low Extent
4	Facebook for reporting incidents	2.38	0.48	Low Extent
5	Twitter/X for reporting incidents	2.31	0.46	Low Extent
6	SMS-based reporting systems	2.26	0.44	Low Extent
7	Community alert applications	2.40	0.49	Low Extent
8	General purpose reporting applications	2.38	0.48	Low Extent
9	Phone call applications (including regular phone calls)	2.26	0.56	Low Extent
	Grand Mean	2.32	0.48	Low Extent

Table 2 presents the mean and standard deviation analysis of the extent to which residents use mobile applications to report insecurity incidents. The mean values for all nine items, which range from 2.24 to 2.40, are all below the 2.50 benchmark for acceptance. This indicates that residents utilize mobile applications to a low extent for reporting insecurity incidents. The grand mean of 2.32, which is below the benchmark of

2.50, with a standard deviation of 0.48, confirms that residents of Kwali Area Council generally utilize mobile applications to a low extent for reporting insecurity incidents. This finding suggests that despite the availability of various mobile application options, residents have not fully embraced these technologies as primary tools for security incident reporting.

Table 3: Mean and standard deviation analysis of the challenges residents face in the use mobile applications to report insecurity incidents

S/N	Item Statements	Mean	SD	Decision
1	Poor network connectivity	2.85	1.12	Agree
2	High cost of internet data	3.04	1.12	Agree
3	I lack adequate knowledge on how to use mobile applications for reporting insecurity.	2.99	1.12	Agree
4	Fear of being identified as an informant	2.88	1.11	Agree
5	I do not trust that security agencies will respond to reports made through mobile applications.	3.01	1.15	Agree
6	The available mobile applications are too complicated for me to use.	2.90	1.13	Agree
7	My mobile phone does not support the applications needed for security reporting.	2.75	1.18	Agree
8	There is no feedback from security agencies when I report incidents through mobile applications.	2.90	1.08	Agree
9	Inadequate awareness about available security reporting applications	2.95	1.14	Agree
10	Language barrier	2.92	1.12	Agree
11	Frequent power outages	2.87	1.14	Agree
12	I do not know which mobile applications are appropriate for reporting insecurity incidents.	2.80	1.101	Agree
13	Cultural beliefs	3.11	1.07	Agree
14	Delayed response time from security agencies	3.03	1.15	Agree
15	Fear of reprisal from criminals	2.94	1.05	Agree
	Grand Mean	2.93	1.11	Agree



Table 3 presents the mean and standard deviation analysis of the challenges residents face in the use of mobile applications to report insecurity incidents. The mean values of items 1 through 15, which are 2.85, 3.04, 2.99, 2.88, 3.01, 2.90, 2.75, 2.90, 2.95, 2.92, 2.87, 2.80, 3.11, 3.03, and 2.94 respectively, are all above the 2.50 benchmark for acceptance. This indicates that respondents agree with all statements regarding the challenges they face in using mobile applications for insecurity incident reporting. Specifically, residents face challenges such as poor network connectivity, high cost of internet data, lack of adequate knowledge on how to use mobile applications for reporting insecurity, fear of being identified as an informant, lack of trust that security agencies will respond to reports made through mobile applications, complexity of available mobile applications, inadequate mobile phone support for security reporting applications, absence of feedback from security agencies, inadequate awareness about available security reporting applications, language barrier, frequent power outages, lack of knowledge about which mobile applications are appropriate for reporting insecurity incidents, cultural beliefs, delayed response time from security agencies, and fear of reprisal from criminals. The grand mean of 2.93, which is above the benchmark of 2.50, indicates that residents of Kwali Area Council generally face significant challenges in utilizing mobile applications for reporting insecurity incidents and these challenges collectively hinder effective adoption and usage of mobile technology for security reporting purposes.

Discussion

The findings revealed that phone call applications, including regular phone calls, remain the predominant method residents use to report insecurity incidents in Kwali Area Council. The overwhelming preference for traditional phone calls over specialized mobile applications indicates that residents rely on familiar and straightforward communication channels when dealing with security matters. This pattern suggests that the simplicity, immediacy, and directness of phone calls make them the most accessible and trusted method for contacting security agencies or alerting community members about threats. The minimal adoption of emergency response applications, community alert applications, SMS-based reporting systems, and general-purpose reporting applications demonstrates a significant gap between the availability

of technological solutions and their actual utilization by the target population.

The low utilization of social media platforms such as WhatsApp, Facebook, and Twitter for security reporting purposes reflects limited integration of these tools into formal security reporting mechanisms. Although these platforms are widely used for general communication and social interaction, residents do not perceive them as reliable or appropriate channels for reporting critical security incidents. The negligible use of police or security agency official applications further highlights the disconnect between technology-driven security initiatives and community adoption. This finding underscores the reality that mere availability of mobile applications does not guarantee utilization, particularly when residents lack awareness, trust, or confidence in the effectiveness of these digital reporting channels.

The study established that residents of Kwali Area Council utilize mobile applications to a low extent for reporting insecurity incidents across all categories examined. This low utilization cuts across both specialized security applications and general communication platforms, indicating a systemic underuse of mobile technology for security reporting purposes. The finding suggests that despite the proliferation of mobile phones and increasing internet penetration in Nigeria, the translation of these technological advancements into practical security reporting behaviors remains limited. Residents appear to maintain traditional reporting habits rather than adopting newer mobile application-based methods, even when such applications are theoretically available and accessible.

The consistently low extent of utilization across different application types points to deeper structural and behavioral barriers that prevent residents from embracing mobile technology for security purposes. The finding indicates that residents do not regularly integrate mobile applications into their security reporting practices, whether for documenting incidents, alerting community members, or communicating with security agencies. This pattern of minimal engagement with mobile applications for security reporting represents a significant missed opportunity for enhancing real-time incident reporting, improving response coordination, and strengthening community-based security networks. The low utilization suggests that current mobile application offerings do not adequately address the specific needs,



contexts, and constraints of residents in semi-urban and rural communities like Kwali Area Council.

The findings identified multiple and significant challenges that residents face in utilizing mobile applications for insecurity incident reporting. Cultural beliefs emerged as the most prominent challenge, indicating that social norms, traditional practices, and community attitudes toward technology-mediated security reporting create substantial barriers to adoption. This finding highlights the importance of socio-cultural factors in shaping technology acceptance, particularly in contexts where informal security arrangements and community-based protection mechanisms have historically predominated. The significance of cultural beliefs as a barrier suggests that technology adoption cannot be understood purely through technical or economic lenses but must account for the values, norms, and social structures that govern community behavior and decision-making processes.

Institutional challenges related to security agency responsiveness also constitute major obstacles to mobile application utilization. Delayed response times from security agencies and lack of trust in whether reports made through mobile applications will receive attention demonstrate that residents' reluctance stems partly from past experiences and perceptions of security system ineffectiveness. The absence of feedback when incidents are reported through mobile applications reinforces this distrust and discourages continued usage. Economic and technical barriers, including high internet data costs, poor network connectivity, and inadequate mobile phone capabilities, further compound these challenges. Knowledge-related obstacles, such as lack of awareness about available applications, insufficient digital literacy, and uncertainty about which applications are appropriate for security reporting, prevent even willing residents from effectively utilizing mobile technology. Security concerns, particularly fear of being identified as an informant and fear of reprisal from criminals, create psychological barriers that make residents hesitant to report incidents through traceable digital channels. The convergence of these technical, economic, social, institutional, and psychological challenges creates a complex web of obstacles that collectively suppress mobile application utilization for security reporting.

The findings of this study align with several previous research efforts while contrasting with others in important ways. In alignment with this study, Oni,

Okanlawon, and Okunoye (2017) reported that technology adoption in Nigerian rural and semi-urban contexts faces significant barriers related to infrastructure deficits, digital literacy gaps, and socio-cultural factors that limit the integration of mobile applications into daily practices. Similarly, Poblet, García-Cuesta, and Casanovas (2013) found that despite the technical feasibility of mobile crowdsourcing for security purposes, actual utilization remains constrained by trust issues, lack of feedback mechanisms, and institutional responsiveness challenges. Norris, Stevens, Pfefferbaum, Wyche, and Pfefferbaum (2008) also observed that community resilience technologies often fail to gain traction when they do not align with existing social structures and communication patterns, which corresponds with the finding that traditional phone calls dominate over specialized applications in Kwali Area Council. However, in contrast, Mazimpaka and Timpf (2016) showed that mobile application-based security reporting achieved high adoption rates in urban centers where infrastructure, digital literacy, and institutional responsiveness were more developed, suggesting that the low utilization observed in Kwali may be context-specific rather than universal. Similarly, Okolloh (2009) demonstrated successful crowdsourced security reporting through the Ushahidi platform in Kenya during the post-election crisis, indicating that under certain conditions such as urgent need, widespread awareness campaigns, and strong institutional backing, mobile applications can achieve substantial utilization even in developing country contexts. Raman, Tay, Tan, and Lam (2018) reported higher adoption of emergency response applications in Southeast Asian contexts where governments invested heavily in public awareness campaigns and ensured reliable network infrastructure, contrasting with the minimal usage of such applications observed in this study. These divergent findings suggest that while technological solutions exist, their successful implementation depends critically on addressing the multifaceted challenges identified in this study, including infrastructure development, institutional trust-building, cultural adaptation, and comprehensive user education programs.

Conclusion

Based on the findings, the study concluded that residents of Kwali Area Council predominantly rely on traditional phone call methods for reporting insecurity incidents, with specialized mobile applications



experiencing negligible adoption despite their availability. The extent of mobile application utilization for security reporting purposes remains low across all categories examined, indicating that technological availability has not translated into meaningful behavioral change or integration into community security practices. Residents face multiple and interconnected challenges that collectively hinder mobile application adoption, including cultural beliefs that discourage technology-mediated reporting, institutional barriers related to security agency responsiveness and feedback mechanisms, economic constraints associated with internet data costs, technical limitations involving network connectivity and device capabilities, knowledge deficits regarding application awareness and digital literacy, and security concerns about identity exposure and potential reprisal from criminals. The findings reveal a significant gap between the theoretical potential of mobile applications to enhance security reporting and the lived reality of residents who continue to favor familiar, direct, and low-technology communication channels when dealing with security threats. This gap underscores the necessity of addressing not only technical infrastructure but also trust, awareness, cultural adaptation, and institutional responsiveness to achieve meaningful adoption of mobile technology for community security purposes in semi-urban and rural Nigerian contexts.

Recommendations

Based on the findings of this study, the researcher recommended that:

1. Security agencies in Kwali Area Council should establish reliable feedback mechanisms and demonstrate consistent responsiveness to reports made through mobile applications to build trust and encourage continued utilization among residents.
2. The Federal Capital Territory Administration should collaborate with telecommunications providers to improve network infrastructure and subsidize internet data costs for security-related mobile applications to address economic and technical barriers facing residents.
3. Community leaders, security agencies, and civil society organizations should conduct comprehensive awareness campaigns and digital literacy training programs that address

cultural concerns and equip residents with the knowledge and skills needed to effectively utilize mobile applications for insecurity incident reporting.

References

- Abimbola, J. O., & Okafor, C. (2013). Security challenges in Nigeria: The way forward. *Journal of Economics and Sustainable Development*, 4(1), 1-6.
- Achumba, I. C., Ighomereho, O. S., & Akpor-Robaro, M. O. M. (2013). Security challenges in Nigeria and the implications for business activities and sustainable development. *Journal of Economics and Sustainable Development*, 4(2), 79-99.
- Adagba, O., Ugwu, S. C., & Eme, O. I. (2012). Activities of Boko Haram and insecurity question in Nigeria. *Arabian Journal of Business and Management Review*, 1(9), 77-99.
- Adamu, A., & Mohammed, B. (2020). Impact of insecurity on agricultural productivity in Kwali Area Council, FCT Abuja. *Journal of Rural Development*, 15(2), 45-58.
- Ajayi, A. T., & Adesote, S. A. (2013). The challenges of crime reporting in Nigeria. *International Journal of Humanities and Social Science*, 3(13), 78-87.
- Aker, J. C., & Mbiti, I. M. (2010). Mobile phones and economic development in Africa. *Journal of Economic Perspectives*, 24(3), 207-232. <https://doi.org/10.1257/jep.24.3.207>
- Alemika, E. E. O. (2013). Challenges of police accountability in Nigeria. In M. Akinlabi (Ed.), *Policing in Nigeria: Rhetoric and reality* (pp. 21-58). Lagos: Malthouse Press.
- Alemika, E. E. O., & Chukwuma, I. C. (2012). *Criminal victimization, safety and policing in Nigeria*. Lagos: CLEEN Foundation.
- Bello, M. L. (2013). Attacks on telecommunication infrastructure in Nigeria: Implications for national security. *African Journal of Criminology and Justice Studies*, 7(1), 111-134.
- Boonstra, A., & Van Voorden, M. (2019). Citizen engagement through mobile apps: The case of local governments. *Government Information Quarterly*, 36(3), 546-555. <https://doi.org/10.1016/j.giq.2019.05.002>
- Bousquet, A., & Curtis, S. (2011). Beyond models and metaphors: Complexity theory, systems thinking and international relations. *Cambridge Review*



- of International Affairs*, 24(1), 43-62. <https://doi.org/10.1080/09557571.2011.558053>
- Chan, J., & Moses, L. B. (2017). Making sense of big data for security. *British Journal of Criminology*, 57(2), 299-319. <https://doi.org/10.1093/bjc/azw059>
- Chukwuma, I. (2015). *Police brutality and the right to life in Nigeria*. Lagos: CLEEN Foundation.
- Crowe, A. (2016). Using geographic information systems (GIS) and mobile technology to enhance community corrections. *European Journal of Probation*, 8(1), 35-52. <https://doi.org/10.1177/206622031600800104>
- Díaz-Palomar, J. (2015). Social capital and criminal victimization: A comparative study in five Latin American countries. *Journal of Quantitative Criminology*, 31(3), 451-479.
- Ewetan, O. O., & Urhie, E. (2014). Insecurity and socio-economic development in Nigeria. *Journal of Sustainable Development Studies*, 5(1), 40-63.
- FCT Administration. (2020). *Security initiatives in the Federal Capital Territory*. Abuja: FCT Ministry of Internal Security.
- Hazen, J. M., & Horner, J. (2007). Small arms, armed violence, and insecurity in Nigeria: The Niger Delta in perspective. *Small Arms Survey Occasional Paper No. 20*. Geneva: Graduate Institute of International Studies.
- Ibrahim, J. (2019). Insecurity in Nigeria's Federal Capital Territory: Trends and responses. *African Security Review*, 28(2), 112-128. <https://doi.org/10.1080/10246029.2019.1605008>
- Imobighe, T. A. (2003). *Civil society and ethnic conflict management in Nigeria*. Ibadan: Spectrum Books.
- Kurniawan, R., Yudhoatmojo, S. B., & Ahmadi, F. (2017). Crime reporting mobile application integrated with crowdsourced crime mapping. *International Journal of Interactive Mobile Technologies*, 11(6), 44-58. <https://doi.org/10.3991/ijim.v11i6.7373>
- Mazimpaka, J. D., & Timpf, S. (2016). A visual and computational analysis approach for exploring the dynamics of crowd sourced information: The case of Ushahidi Haiti project. *Cartography and Geographic Information Science*, 43(1), 17-31. <https://doi.org/10.1080/15230406.2015.1021661>
- Meijer, A., & Thaens, M. (2013). Social media strategies: Understanding the differences between North American police departments. *Government Information Quarterly*, 30(4), 343-350. <https://doi.org/10.1016/j.giq.2013.05.023>
- Musa, S. (2018). Agrarian conflicts and food security in Kwali Area Council, Abuja. *Nigerian Journal of Rural Sociology*, 18(1), 89-102.
- Nigerian Communications Commission. (2021). *Industry statistics: Subscriber data*. Retrieved from <https://www.ncc.gov.ng/statistics-reports/industry-overview>
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41(1-2), 127-150. <https://doi.org/10.1007/s10464-007-9156-6>
- Nwagboso, C. I. (2012). Security challenges and economy of the Nigerian state (2007-2011). *American International Journal of Contemporary Research*, 2(6), 244-258.
- Nwolise, O. B. C. (2004). National security and sustainable democracy. In E. O. Ojo (Ed.), *Challenges of sustainable democracy in Nigeria* (pp. 345-369). Ibadan: John Archers Publishers.
- Obi, C. I., & Chukwuma, O. (2016). Insecurity in Abuja and implications for sustainable development. *Mediterranean Journal of Social Sciences*, 7(4), 143-150. <https://doi.org/10.5901/mjss.2016.v7n4p143>
- Odekunle, F. (2005). An overview of policing in Nigeria: Problems and suggestions. In I. Alemika & I. C. Chukwuma (Eds.), *The poor and policing in Nigeria* (pp. 12-41). Lagos: CLEEN Foundation.
- Okeshola, F. B., & Mudiare, P. E. U. (2013). The nature, causes and consequences of cyber crime in tertiary institutions in Zaria-Kaduna State, Nigeria. *American International Journal of Contemporary Research*, 3(9), 98-114.
- Okolloh, O. (2009). Ushahidi, or 'testimony': Web 2.0 tools for crowdsourcing crisis information. *Participatory Learning and Action*, 59(1), 65-70.
- Oladeji, S. I., & Abiodun, A. J. (2014). Food insecurity and security situation in Nigeria. *European Scientific Journal*, 10(30), 273-286.
- Oni, A. A., Okanlawon, K., & Okunoye, A. (2017). Nigeria's e-government and public service



- delivery: A critical analysis. *International Journal of Public Administration in the Digital Age*, 4(1), 1-15.
<https://doi.org/10.4018/IJPADA.2017010101>
- Onuoha, F. C. (2014). Why do youth join Boko Haram? *United States Institute of Peace Special Report 348*. Washington, DC: USIP.
- Pandey, R., & Veeramachaneni, K. (2018). Crowdsourcing safety information: How can citizens assist in identifying and addressing security threats? *IEEE Security & Privacy*, 16(2), 64-71.
<https://doi.org/10.1109/MSP.2018.1870872>
- Poblet, M., García-Cuesta, E., & Casanovas, P. (2013). Crowdsourcing roles, methods and tools for data-intensive disaster management. *Information Systems Frontiers*, 20(6), 1363-1379. <https://doi.org/10.1007/s10796-017-9734-6>
- Police Community Relations Committee. (2019). *Community engagement and security awareness in FCT*. Abuja: Nigeria Police Force.
- Raman, A., Tay, S. C., Tan, T. C., & Lam, S. K. (2018). Intelligent emergency response system with automated location identification. *International Journal of Engineering & Technology*, 7(3.25), 266-271.
<https://doi.org/10.14419/ijet.v7i3.25.17586>
- Suleiman, M. N. (2019). Economic implications of insecurity on market activities in Kwali Area Council. *African Journal of Economic Review*, 7(2), 134-148.
- Sun, Y., Jara, A. J., & Bie, R. (2016). Cognitive and computational intelligence in smart city applications: A survey. *Computer Communications*, 87(1), 13-24.
<https://doi.org/10.1016/j.comcom.2016.03.015>
- Yakubu, A. M., & Adeyemi, O. O. (2021). Psychosocial effects of insecurity on rural communities in the FCT. *Journal of Community Psychology*, 12(1), 78-94.