

From Awareness to Compliance Government Social Media Communication and Citizens' Behaviour toward NIN-SIM Registration in Nigeria

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Abstract. Government communication has increasingly shifted toward digital platforms, positioning social media as a strategic tool for public policy dissemination and behavioural influence. In Nigeria, the National Identification Number-SIM (NIN-SIM) registration policy relied heavily on social media to raise awareness and encourage compliance. However, empirical evidence explaining how such communication moves citizens from awareness to actual compliance remains limited. This study adopted a quantitative cross-sectional survey design. Data were collected from 371 residents of Lafia Metropolis, Nigeria, using a structured questionnaire. The instrument measured exposure to government social media messages, levels of policy awareness, perceived message effectiveness, and self-reported compliance behaviour. Data were analysed using descriptive statistics, including frequencies, percentages, mean scores, and standard deviations. Findings reveal high exposure to government social media communication, with 91% of respondents accessing NIN-SIM information online and 88% demonstrating clear policy understanding. Furthermore, 91% reported that social media messages influenced their decision to comply with the registration requirement. Despite these positive outcomes, structural challenges such as unreliable internet connectivity and high data costs (72%) and exposure to misinformation (69%) constrained communication effectiveness. The study confirms that government social media communication extends beyond awareness creation to actively shape compliance behaviour, consistent with the Technology Acceptance Model.

Keywords: Government Communication; Social Media; Policy Compliance; NIN-SIM Registration; Digital Governance; Nigeria

1. Introduction

Communication is no longer limited to information dissemination but has evolved into a strategic mechanism for shaping public behaviour and policy compliance (Entradas

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et al., 2024; Golob et al., 2023; Hofmeister, 2024). Ideally, government communication should not only raise awareness but also encourage citizens to internalise public policies and translate understanding into concrete action (Antwi-Boasiako & Nyarkoh, 2021; Chafik & Benjelloun, 2025; Radwan & Mousa, 2020; Silvallana & Hagling, 2023). With the global expansion of digital technologies, social media platforms have become central to this process, enabling governments to engage citizens in real time, foster dialogue, and influence behavioural outcomes at scale (Fuchs, 2017; Kaplan & Haenlein, 2010). In this ideal context, social media functions as a bridge between state institutions and citizens, transforming policy communication from a one-way broadcast into an interactive, participatory experience.

The growing reliance on social media for public communication reflects a broader shift in the literature toward digital governance and networked public engagement. Studies across Europe, North America, and Asia demonstrate that platforms such as Facebook, X, and WhatsApp are increasingly used to promote compliance with public policies related to health, security, and civic responsibilities (McCorkindale & Distaso, 2014). Scholars argue that the interactive affordances of social media such as immediacy, feedback, and peer-to-peer visibility enhance message credibility and citizens' perceived involvement in governance processes (Sergeant & Mongrain, 2014). As a result, social media is now recognised as a critical site where public opinion, trust, and compliance are actively negotiated.

Empirical research further suggests that social media communication influences not only awareness but also behavioural intention. Drawing on the Technology Acceptance Model, previous studies indicate that perceived usefulness and perceived ease of use significantly affect citizens' willingness to engage with government digital platforms and comply with policy directives (Davis, 1989). In policy contexts, when government messages are perceived as clear, accessible, and relevant, citizens are more likely to adopt the recommended behaviours (Hansson, 2024). These findings reinforce the argument that digital communication strategies must be evaluated not merely in terms of reach, but in their capacity to produce behavioural change.

Within the African context, and particularly in Nigeria, social media has become a prominent channel for government communication due to its wide penetration and low cost (Adams & Dorcas, 2024; Asan et al., 2024; Oni et al., 2023). The National Identification Number-SIM card registration policy represents one of the most extensive national identity and security initiatives in recent years. Government agencies, including the National Communications Commission (NCC), have relied heavily on social media to explain the policy, counter misinformation, and mobilise public participation (Fosu & Koah, 2023; King, 2024; Kondowe, 2021). Previous Nigerian studies confirm that digital platforms have played a key role in raising awareness of the SIM-NIN registration exercise and clarifying its security implications (Akinmoladun & Olaleye, 2019; Okon & Bassey, 2020; Ogunleye et al., 2022). However, these studies often focus on awareness creation rather than examining how communication translates into actual compliance.

Despite the growing body of literature on social media and public policy communication, a significant research gap remains. Existing studies tend to adopt a descriptive approach, emphasising media usage patterns or message exposure, while paying limited attention to behavioural outcomes and citizens' responses to government messaging. Moreover, there is insufficient empirical evidence on how government social media communication functions within specific socio-cultural contexts in Nigeria, particularly in urban centres outside major metropolitan areas. The transition from



awareness to compliance, arguably the most critical outcome of policy communication remains underexplored in current scholarship (Kazembe *et al.*, 2025).

This study addresses this gap by empirically assessing how government social media communication influences citizens' behaviour toward the NIN-SIM registration policy in Nigeria. By focusing on Lafia Metropolis, the study provides context-sensitive insights into how residents interpret, engage with, and act upon official social media messages. The research is significant in that it moves beyond message dissemination to examine behavioural compliance, thereby contributing to communication theory, digital governance studies, and policy communication literature. It also offers practical implications for government agencies seeking to design more effective and citizen-centred digital communication strategies.

Accordingly, the main objective of this study is to examine the effectiveness of government social media communication in shaping citizens' awareness and compliance with the NIN-SIM registration policy in Nigeria. Specifically, the study seeks to identify the dominant social media platforms used for policy communication, assess citizens' levels of awareness and understanding of the policy, evaluate the extent to which social media messaging influences compliance behaviour, and explore the challenges that hinder effective engagement. By achieving these objectives, the study aims to contribute empirical evidence to ongoing debates on the role of social media in transforming public policy communication from awareness-driven campaigns into mechanisms of behavioural change.

2. Method

This study adopted a quantitative research design using a cross-sectional survey approach to examine the effectiveness of government social media communication in shaping citizens' behaviour toward the NIN-SIM registration policy. The survey method was considered appropriate because it allows for systematic collection of data from a large population and facilitates the measurement of attitudes, perceptions, and behavioural responses to mediated communication (Getliffe, 2008; Novosel, 2022). This design enabled the researchers to capture citizens' exposure to government social media messages and assess their perceived influence on awareness and compliance (Bloomfield & Fisher, 2019; Slater & Hasson, 2025).

The population of the study comprised residents of Lafia Metropolis, Nigeria, with an estimated population of 509,300. A sample size of 384 respondents was determined using the Krejcie and Morgan (1970) sample size determination table, which is widely used in social science research to ensure representativeness. Participants were selected through availability sampling due to the heterogeneity of the urban population and practical constraints associated with large-scale field surveys. While non-probability in nature, this approach allowed for efficient data collection from respondents who were active social media users and had exposure to the NIN-SIM registration campaign.

Data were collected using a structured questionnaire designed to measure social media usage patterns, exposure to government messages, levels of awareness and understanding of the NIN-SIM policy, perceived message effectiveness, and self-reported compliance behaviour. The questionnaire items were developed based on relevant literature and guided by the Technology Acceptance Model, particularly constructs related to perceived usefulness and perceived ease of use (Davis, 1989). To ensure validity, the instrument was reviewed by communication research experts, while reliability was



established through a test-retest procedure conducted over a two-week interval, yielding consistent responses.

The administration of the questionnaire was conducted through face-to-face distribution to enhance response rates and reduce non-response bias. Out of the 384 questionnaires administered, 371 were successfully retrieved and found valid for analysis. Data were analysed using descriptive and inferential statistical techniques, including frequencies, percentages, mean scores, and standard deviations. Responses were measured on a five-point Likert scale ranging from strongly agree to strongly disagree. The analysis focused on identifying patterns of social media use, assessing perceived message effectiveness, and examining the relationship between government social media communication and citizens' compliance behaviour.

3. Results and Discussion

3.1. High Exposure to Government Social Media Messages and Public Awareness of the NIN-SIM Policy

The findings of this study demonstrate that government social media communication achieved a notably high level of exposure among residents of Lafia Metropolis. A substantial proportion of respondents reported frequent encounters with official messages related to the NIN-SIM registration policy across multiple social media platforms. This widespread exposure reflects the increasing centrality of social media as a primary channel through which citizens access government information, particularly in urban Nigerian contexts where digital media penetration continues to expand.

The dominance of platforms such as Facebook, WhatsApp, Instagram, and X suggests that government communication strategies were aligned with citizens' existing media consumption habits. By utilising platforms that are already deeply embedded in everyday social interaction, the National Communications Commission (NCC) was able to integrate policy messages seamlessly into citizens' daily information flows. This alignment enhanced message visibility and reduced barriers to access, thereby strengthening the likelihood that citizens would encounter and process official policy information.

Quantitative evidence further indicates that exposure translated into meaningful awareness. Approximately 91% of respondents reported accessing NIN-SIM-related information through social media, while 88% demonstrated a clear understanding of the policy's objectives, registration procedures, and deadlines. These figures suggest that government social media communication was not merely visible but also cognitively effective. In communication terms, repeated exposure combined with message clarity appears to have facilitated comprehension, supporting the role of social media as an efficient awareness-building mechanism.

This finding reinforces arguments in the literature that social media's interactive and repetitive nature enhances information retention and understanding (Fuchs, 2017; Kaplan & Haenlein, 2010). Unlike traditional mass media, social media allows users to revisit content, share it within peer networks, and engage in discussions that further clarify policy meanings. Such dynamics contribute to a deeper level of awareness, transforming policy communication from passive reception into active sense-making.

The high exposure and awareness observed in this study suggest that social media has evolved into a strategic asset for government public communication in Nigeria. The ability of the NCC to reach a broad audience and ensure policy understanding underscores the growing relevance of digital platforms in public policy sensitisation. This outcome provides empirical support for the argument that effective government communication in



the digital era must prioritise platform relevance, message consistency, and audience-centred dissemination strategies.

Table 2 Exposure to Government Social Media Messages and Public Awareness of the NIN-SIM Policy

Indicator	Percentage (%)
Respondents exposed to NIN-SIM information via social media	91
Respondents who understood policy objectives and procedures	88
Frequent exposure to NCC social media messages	89
Use of Facebook, WhatsApp, Instagram, and X for policy information	92

Table 2 summarises respondents' levels of exposure to government social media messages and their corresponding awareness of the NIN-SIM registration policy. The data show that over nine out of ten respondents accessed policy-related information through social media platforms, while a similarly high proportion demonstrated clear understanding of the policy. This close alignment between exposure and awareness indicates that government social media communication was both widely disseminated and effectively comprehended, reinforcing the role of social media as a critical tool for public policy awareness and information diffusion.

3.2. Influence of Government Social Media Communication on Citizens' Compliance Behaviour

The findings of this study provide strong empirical evidence that government social media communication significantly influenced citizens' compliance with the NIN-SIM registration policy. Moving beyond mere awareness, respondents reported that official messages disseminated through social media platforms directly motivated them to complete the registration process. This suggests that social media functioned as an active instrument of behavioural change rather than a passive channel of information dissemination.

Survey data indicate that 48% of respondents strongly agreed and 43% agreed that exposure to government social media messages influenced their decision to comply with the NIN-SIM registration requirement. The combined 91% positive compliance influence rate reflects a remarkably high level of persuasive effectiveness. Such a response pattern underscores the capacity of sustained digital messaging to shape citizens' behavioural choices, particularly when policy communication is repeated, visible, and easily accessible within everyday media environments.

This behavioural influence can be attributed to the interactive and persuasive features of social media communication. Government messages were not only consumed individually but also circulated through peer networks, discussion threads, and group chats, reinforcing social norms around compliance. Repeated exposure to official updates, deadlines, and security rationales likely increased the perceived urgency and legitimacy of the policy, encouraging citizens to act. In this sense, social media served as both a cognitive and social reinforcement mechanism.

The findings are consistent with the Technology Acceptance Model, which posits that perceived usefulness and perceived ease of use play critical roles in shaping behavioural intention (Davis, 1989). When citizens perceive government social media messages as useful for clarifying procedures and accessible across familiar platforms, they are more inclined to accept the technology as a reliable source of information and act upon it. The



high compliance rate observed in this study suggests that government communication successfully leveraged these TAM constructs to promote policy adoption.

This finding highlights a significant shift in the function of government communication in the digital era. Social media no longer serves solely to inform citizens but increasingly operates as a behavioural driver capable of translating awareness into concrete policy compliance. The evidence from this study reinforces the argument that effective digital communication strategies can enhance citizens' willingness to engage with and adhere to government policies, particularly in contexts where traditional enforcement mechanisms face limitations.

Table 3 Influence of Government Social Media Communication on Citizens' Compliance Behaviour

Response Category	Percentage (%)
Strongly Agree	48
Agree	43
Undecided	5
Disagree	3
Strongly Disagree	1
Total Positive Influence (Agree + Strongly Agree)	91

Table 3 presents respondents' perceptions of the influence of government social media messages on their compliance with the NIN-SIM registration policy. The data show that an overwhelming majority of respondents either agreed or strongly agreed that official social media communication motivated them to complete the registration process. This distribution confirms that social media messaging played a decisive role in shaping compliance behaviour, supporting the view that digital platforms can effectively bridge the gap between policy awareness and behavioural action.

3.3. Structural and Informational Challenges Affecting Message Effectiveness

Although government social media communication proved effective in raising awareness and encouraging compliance, the study identified significant structural and informational challenges that constrained its overall impact. These challenges did not negate the effectiveness of digital communication but rather moderated its reach and consistency. The findings suggest that while social media offers a powerful platform for policy communication, its success is closely tied to the broader digital environment within which citizens operate.

One of the most prominent barriers identified was unreliable internet connectivity coupled with the high cost of mobile data. Approximately 72% of respondents reported that inconsistent network services and expensive data plans limited their ability to regularly access official government messages on social media. This challenge disproportionately affected respondents with lower socioeconomic status, reducing the frequency and depth of engagement with policy-related content. As a result, even well-designed communication campaigns risk uneven reach when digital infrastructure remains inadequate.

In addition to infrastructural barriers, misinformation and fake news emerged as a critical informational challenge. About 69% of respondents indicated that misleading or false information circulating on social media platforms created confusion regarding the



objectives, procedures, and implications of the NIN-SIM registration policy. Rumours concerning data misuse, surveillance, and policy motives undermined public trust and, in some cases, delayed compliance. This finding underscores the vulnerability of digital communication environments to competing narratives that can dilute or distort official messages.

These challenges highlight the complex dynamics of social media as a communication space. While social media enables rapid dissemination and interaction, it also facilitates the spread of unverified information that competes directly with official sources. The speed and volume of online content make it difficult for government agencies to monitor discussions and correct misinformation in real time. Consequently, the effectiveness of government messaging depends not only on message clarity but also on the ability to manage the surrounding information ecosystem.

The findings indicate that structural limitations and informational noise remain significant obstacles to maximising the benefits of social media-based policy communication. Addressing these challenges requires coordinated efforts to improve digital infrastructure, reduce data costs, and strengthen institutional capacity for countering misinformation. Without such measures, the transformative potential of social media in enhancing public engagement and policy compliance may remain only partially realised.

Table 4 Structural and Informational Challenges Affecting Government Social Media Communication

Identified Challenge	Percentage (%)
Unreliable internet connectivity and high data costs	72
Exposure to misinformation and fake news	69
Difficulty verifying official information online	61
Irregular power supply affecting internet access	58

Table 4 summarises the key structural and informational challenges reported by respondents in relation to government social media communication on the NIN-SIM registration policy. The data indicate that infrastructural constraints, particularly unreliable internet services and high data costs, were the most frequently reported barriers. Additionally, the high prevalence of misinformation highlights the need for stronger content verification and digital literacy strategies. Together, these challenges illustrate how external factors can moderate the effectiveness of government social media messaging, even when awareness and compliance levels are relatively high.

3.3. From Digital Awareness to Behavioural Compliance in Government Policy Communication

The findings of this study collectively demonstrate that government social media communication has evolved from a mere awareness-raising tool into a mechanism capable of shaping citizens' behavioural compliance. The high level of exposure and awareness observed among respondents confirms earlier arguments that social media has become a central infrastructure for public communication in contemporary governance. In line with digital governance literature, the ability of the National Communications Commission (NCC) to disseminate policy messages through platforms already embedded in citizens' daily routines reflects a strategic alignment between communication channels and audience behaviour, a key determinant of message effectiveness.



The transition from awareness to compliance identified in this study strongly supports the assumptions of the Technology Acceptance Model. According to Davis et al. (1989), perceived usefulness and perceived ease of use significantly influence individuals' intention to adopt a technology and act upon information delivered through it. The finding that 91% of respondents acknowledged being motivated to comply with the NIN-SIM registration policy after exposure to government social media messages suggests that these platforms were perceived as both accessible and instrumental. Digital communication tools become behaviourally influential when users view them as efficient, reliable, and relevant to their immediate needs.

Beyond individual cognition, the findings also highlight the social dimension of compliance facilitated by social media. Scholars such as McCorkindale and DiStaso (2014) argue that social media enables two-way interaction and social validation, allowing government messages to be reinforced through peer discussion and networked visibility. In this study, repeated exposure to official messages within social networks likely normalised compliance behaviour and created a sense of collective responsibility. This supports diffusion-based explanations of policy adoption, where innovations gain acceptance more rapidly when communicated through familiar and trusted channels (Lee, 2024).

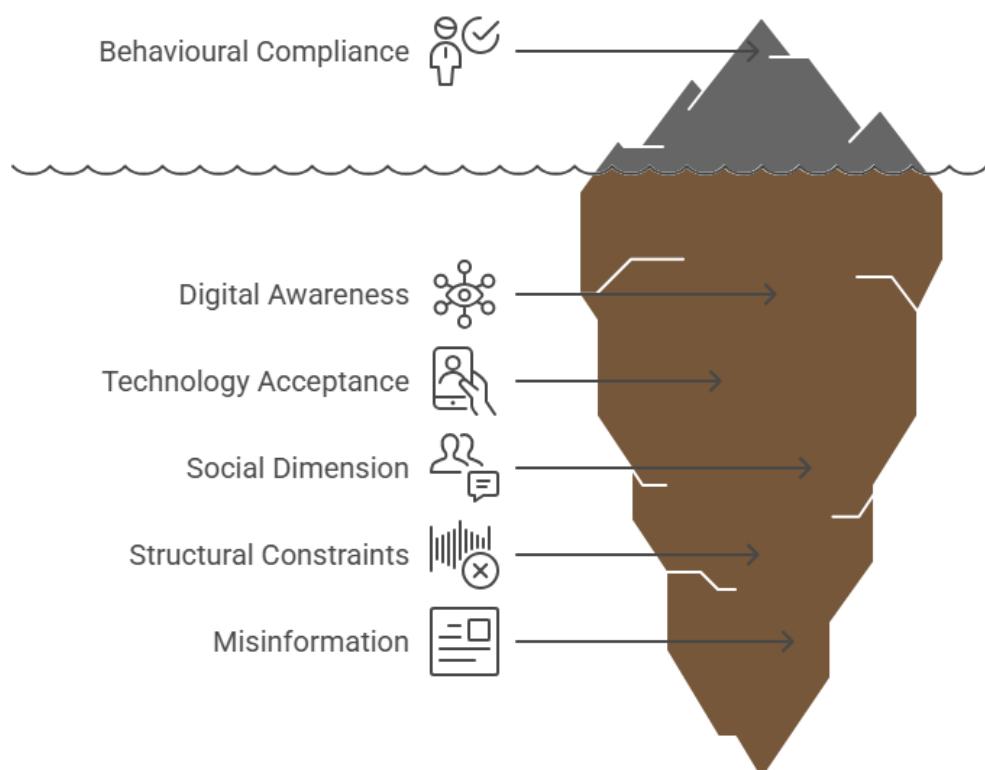


Figure 1 Government Social Media Communication: Beyond Awareness

Figure 1 reinforces the discussion findings by visually synthesising how government social media communication moves from awareness to behavioural compliance through a layered and interdependent process. The iceberg metaphor aligns directly with the study's empirical results, where behavioural compliance positioned at the visible tip reflects the high proportion of respondents who reported being motivated to complete the NIN-SIM registration after exposure to official social media messages. This visible



outcome corresponds with the discussion that social media functioned not merely as an informational channel but as a behavioural driver, consistent with the Technology Acceptance Model and diffusion-based explanations of policy adoption.

Beneath the surface, the layers of digital awareness, technology acceptance, and social dimension mirror the study's findings on high exposure and understanding of policy messages, as well as the role of perceived usefulness, ease of access, and peer reinforcement in shaping compliance behaviour. These elements resonate with the discussion that repeated exposure, platform familiarity, and social interaction strengthened message credibility and normalised compliance within citizens' networks. At the same time, the deeper layers representing structural constraints and misinformation reflect the challenges identified in the study, particularly unreliable internet connectivity, high data costs, and the circulation of fake news that moderated communication effectiveness. Together, the visual and the discussion underscore the study's central argument that effective government social media communication operates as a multidimensional process in which behavioural outcomes depend on the interaction between awareness, technological acceptance, social reinforcement, and the broader digital and informational environment.

However, the study also reveals that the effectiveness of social media communication is not absolute but mediated by structural and informational conditions. The reported challenges of unreliable internet connectivity and high data costs echo earlier Nigerian studies that emphasise infrastructural inequalities as a major constraint on digital participation (Adeleke *et al.*, 2022; Bello & Abdullahi, 2021; Inegbedion *et al.*, 2023). These findings suggest that while social media enhances reach, its benefits are unevenly distributed, thereby reinforcing the argument that digital communication strategies must be accompanied by broader investments in digital infrastructure.

Misinformation and fake news emerged as another critical factor moderating communication effectiveness, aligning with existing scholarship on the risks of digital public spheres. Fuchs (2017) caution that the same affordances that make social media effective namely speed, openness, and virality also facilitate the rapid spread of false or misleading information. In the context of the NIN-SIM registration policy, competing narratives about data privacy and surveillance diluted official messages and, in some cases, delayed compliance. This underscores the need for proactive misinformation management as an integral component of government communication strategies.

Taken together, these findings extend theoretical discussions on digital policy communication by empirically demonstrating how awareness, behavioural intention, and structural constraints interact within a social media environment. The study contributes to communication theory by showing that government social media messaging can successfully drive compliance when perceived as useful, accessible, and socially reinforced, but its effectiveness remains contingent upon infrastructural capacity and information integrity. This integrative perspective advances the understanding of social media not merely as a communication channel, but as a complex governance tool operating at the intersection of technology, behaviour, and institutional trust.

4. Conclusion

This study demonstrates that government social media communication played a decisive role in moving citizens from awareness to behavioural compliance with the NIN-SIM registration policy in Lafia Metropolis, Nigeria. Empirically, the findings show that 91% of respondents were exposed to NIN-SIM information through social media, 88%



reported a clear understanding of policy objectives and procedures, and 91% acknowledged that government social media messages influenced their decision to comply with the registration requirement. These figures indicate that social media platforms such as Facebook, WhatsApp, Instagram, and X were not only effective in disseminating policy information but also successful in motivating concrete civic action. The results confirm that high exposure, message clarity, and platform relevance significantly enhance both cognitive awareness and compliance behaviour.

From a discussion perspective, the findings reinforce the assumptions of the Technology Acceptance Model by showing that perceived usefulness and ease of access to government messages increased citizens' willingness to act on policy directives. Social media functioned as a behavioural driver by combining repeated exposure, peer reinforcement, and social validation within digital networks. Compliance was not merely an individual decision but a socially reinforced practice shaped through online interaction and shared norms. However, the study also reveals that the effectiveness of social media communication is mediated by contextual factors. Structural challenges such as unreliable internet connectivity and high data costs, reported by 72% of respondents, alongside misinformation and fake news experienced by 69%, moderated message consistency and trust. These findings underscore that while social media strengthens policy communication, it operates within a contested digital environment that requires active management.

Despite its contributions, this study has several limitations. The use of availability sampling and a single metropolitan location limits the generalisability of the findings to other regions of Nigeria with different digital infrastructures and socio-cultural dynamics. In addition, reliance on self-reported compliance behaviour may not fully capture actual registration outcomes. Future research should adopt mixed-method or longitudinal designs to examine behavioural change over time and incorporate objective compliance data. Comparative studies across rural and urban settings, as well as analyses of message framing, misinformation counter-strategies, and trust-building mechanisms, would further enrich understanding of how government social media communication can sustainably translate awareness into compliance within diverse policy contexts.

Conflict of Interest

The authors declare no conflict of interests.

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