

Factors Influencing the Continuous Use Intention of E-Services in Nigeria: A Study of INEC Portal

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Abstract

This study examined the factors influencing the continuous use intention of e-services in Nigeria regarding the Independent National Electoral Commission portal. Through a quantitative survey, the study examined the influence of information systems qualities on user satisfaction and post-use trust in the INEC portal, as well as the influence of user satisfaction and post-use trust on the continuous use intention of the INEC portal. The survey generated responses from 286 respondents through a convenience non-probability sampling technique. The study's findings showed that the information system qualities significantly influence user satisfaction and post-use trust. Also, user satisfaction and post-use trust are significantly related to the continuous use of the INEC portal. The results imply that the government's conscious drive towards adopting ICT for election purposes in Nigeria can only gain relevance and wide adoption when the quality of the information, system, and services are improved. Trust is an important predictor of adoption. Therefore, their initial experience using the portal should be positive for the citizens to trust the system. Trust in the system will drive wider adoption and credibility in the system.

Keywords: Service quality, ICT, trust, satisfaction, information quality

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Introduction

The procedure for governance has been evolving more sporadically recently, riding on the opportunities offered by technological innovation (Nofal et al., 2021). Across the world, hardly any government can effectively serve modern citizens without using ICT tools in its procedures (Malodia et al., 2021; Nofal et al., 2021). This integration of digital tools in the delivery of public goods is termed e-government. Over the years, several government activities have been upgraded with digital tools, but a prominent aspect of governance that has dominated digital tool adoption in recent times is information management (Kayode et al., 2020). In backing up this, Malodia et al. (2021) noted that right from the onset, e-government emerged as a platform for information dissemination and exchange through the capabilities of the Internet (Nofal et al., 2021). Using digital tools has been highly helpful in managing voluminous public records and information. As posited by Veeramootoo et al. (2018), for instance, e-filing has been at the forefront among the e-government platforms popular among governments across the world. In buttressing this, Nofal et al. (2021) concurred that going by the enormous advantages of internet use for information management, with convenience, public records, and data can now be accessed securely.

Several benefits attached to using digital tools in delivering public services have been advanced in the literature (Ishola et al., 2021). Malodia et al. (2021) asserted that e-government facilitates the achievement of both tangible and intangible outcomes. The tangible and intangible outcomes for the government include trust building, cost, and time-saving at the forefront. For individuals, convenience, efficiency, and satisfaction while seeking public services topped its advantages. However, what is intriguing, as posited by Veeramootoo et al. (2018) and Li and Shang (2020), is that the e-services must have been sustained for a while for these benefits to be realisable. By implication, e-services must be sustained over a reasonable period to realise their benefits.

Repeated use of e-services, as posited by Li and Shang (2020), indicates the emergence of users' loyalty and support for the service provider, in this case, the government. E-government implementation as a fundamental reconfiguration of the government process requires that adequate support be garnered from the citizens for its implementation to be fruitful (Abdulkareem et al., 2015; Kirfi & Ishola, 2018). Through this support, Li and Shang (2020); and Li and Xue (2021) buttressed that investment in the e-government project can facilitate trust building in the relationship between the citizens and their government.

The question that has continued to trouble e-government researchers is how the government can facilitate the continuous use of e-services to maximise its benefit. Given this background, as held by Li and Shang (2020) Li and Xue (2021), the need to investigate the factors influencing the continuous use of e-services assumes importance. Responses to this question vary from region to region. In Jordan, for instance, Nofal et al. (2021) identified satisfaction, trust, privacy, service quality, and faith in technology as the major influencers for the continuous use of e-service in the country. In other climes, these factors may differ, given the influence of varied ecological factors. In establishing the possibility of a differing result, Li and Shang (2020) found that in China, factors promoting the continuous use of e-services were perceived service values and quality. Therefore, a country-specific study is needed to determine the factors relevant to the sustained use of e-services.

The increasing popularity of e-government has gained the attention of researchers and thus led to several investigations in the area (Veeramootoo et al., 2018). However, an important area that is still unexplored, at least to a reasonable extent, is the factors influencing the continuous use of e-services, especially among the developing countries of Africa. More specifically, the role of post-use trust in determining the continuous use of e-services (Abdulkareem et al., 2022). In establishing this gap, Nofal et al. (2021) posited that the bulk of literature in the field of e-government focused on its benefits rather than on factors influencing the continuous use of e-government services beyond its initial adoption rush. Given this background, this study explores the factors influencing the continuous use of e-services in Nigeria using the Independent National Electoral Commission (INEC) portal.

ICT and Election in Nigeria

Nigeria has over 200 million people, making it the largest population in Africa. More so, this large population accounts for the large market for e-services, including those related to elections. Over the years, the growing number of people using technology in their daily lives and familiar with the use of technology in various applications has increased, thereby making Nigeria a hub for ICT and its application in government-related services. Similarly, there is a high mobile penetration rate of over 150 million active mobile phone subscriptions, making it possible for election management bodies to disseminate election-related information to many citizens through mobile phone-based services (Abdulkareem & Ramli, 2021a). The strong and well-developed ICT infrastructure, including a strong telecommunications sector, high-speed internet connectivity, and a rapidly growing e-commerce sector, provides a solid foundation for adopting and implementing ICT-based election services.

E-services in election administration have also grown over the years due to government initiatives to deepen democracy and enhance participation (Abdulkareem et al., 2022; Okeke & Nwali, 2020). The Nigerian government has shown a strong commitment to using ICT to improve governance and the electoral process through the launching of several initiatives aimed at promoting the use of ICT in elections, including the development of an electronic voter register and the use of biometric technology to improve the accuracy of the accreditation and voting processes. Apart from government support, the private sector is also critical in supporting the adoption and implementation of ICT in elections. Companies are developing and providing election-related technology solutions, such as voting platforms, voter education and awareness programs, and data analytics tools (Okeke & Nwali, 2020).

In Nigeria, one of the strategic agencies of government that control an enormous amount of public information and service is INEC. INEC is the institution of government in charge of conducting elections and its related activities. The body must maintain the supply of quality electoral services to the citizens' satisfaction. This is on the understanding that the essence of digital innovation is to ensure that quality service is made available to the satisfaction of service users. This is expected to influence their continuous use of the portal for accessing services (Udu, 2015).

The use of ICT in elections in Nigeria has become increasingly prevalent in recent years, specifically since the 2007 general election with the introduction of electronic voter registers (Duruji et al., 2021). ICT has the potential to significantly improve the efficiency, accuracy, and transparency of electoral processes while also increasing citizen participation. INEC has used various ICT tools and platforms in the electoral process, including Electronic Voter Registration (EVR) which aims to improve the accuracy and transparency of the voter registration process. The introduction of the EVR is meant to reduce the incidence of multiple registrations and the use of fake identities. Similarly, Electronic Result Collation and Transmission (ERCT) was adopted recently to improve the speed and accuracy of results transmission from polling units to the collation centres, reduce the time taken to announce results and reduce the risk of result manipulation. Voter Education and Public Enlightenment (VEPE) has also been enhanced through various online platforms such as social media and the INEC official website to educate and inform citizens on the electoral process, the voting process, and how to participate in elections. Consequent to the use of ICT in elections, it is expected that the electoral process will have positive impacts on democracy and citizen participation in Nigeria through increased transparency, improved efficiency, increased citizen engagement, and increased accessibility to people with disabilities and those in rural areas.

Literature Review

The E-government initiative has sparked many positive changes in government operations worldwide, with advancements ranging from enhanced efficiency and transparency to improved accessibility and citizen engagement. By integrating digital technologies into public services, e-government has helped streamline bureaucratic processes, reduce red tape, and increase the speed and accuracy of government services. Additionally, it has created opportunities for citizens to participate more fully in the governance process, facilitating greater accountability and responsiveness from government institutions (Doran et al., 2023; Nofal et al., 2021). Today, in almost every aspect of governments' engagements, one form of electronic device or another is adopted, all to reduce human effort on the part of service providers and users. Malodia et al. (2021) explain that e-government refers to using ICT devices to deliver public goods and services to guarantee inclusiveness, transparency, reliability, and accountability.

The importance of ensuring efficiency and effectiveness in service delivery through adopting e-government has proven to be an essential advantage, among other benefits (Al-Hussein et al., 2023). However, despite the numerous benefits of digital technologies in enhancing governance, many African nations face significant challenges in implementing and adopting e-government (Abdulkareem, 2015). These challenges may range from inadequate infrastructure and limited resources to political instability and a lack of technical expertise. Nonetheless, African nations need to overcome these hurdles and embrace the transformative potential of e-government to create more transparent, accountable, and citizen-centric governance systems. By doing so, they can improve the quality and accessibility of public services, boost economic growth, and promote social development for the benefit of their citizens (Enaifoghe et al., 2023).

Governments have created digital access to public information and services, deploying websites, mobile apps, and social media platforms (Abdulkareem et al., 2022). Websites are web-enabled applications with the capability for dual communication channels over the internet. Li and Shang (2020) buttressed that government e-channels must guarantee efficiency and effectiveness in information search, transmission, and digital transactions. Regarding service quality in e-service applications, attention is paid to promptly and effectively provide citizens with their information and transaction needs.

Malodia et al. (2021) highlighted the transformative potential of e-government as an effective change agent in the governance process. In addition, Li and Xue (2021) also emphasised that e-government can play a crucial role in building trust between citizens and their government. By providing transparent and accessible digital services, e-government can enhance citizen participation and engagement, which fosters a sense of ownership and accountability among citizens. Moreover, e-government can help bridge the digital divide and ensure that marginalised communities have equal access to government services, promoting inclusivity and social justice. By leveraging e-government to promote transparency, accountability, and citizen engagement, governments can build trust with their citizens, essential for promoting good governance and democratic values.

Theoretical Background and Hypotheses Formation

It is one thing to use innovation and another to sustain its use (Li & Shang, 2020). And in each of these decisions are many determinants (Veeramootoo et al., 2018; Nofal et al., 2021). Use precedes the intention to sustain use. This is because the user's experience during use predicts the likelihood of the user's intention to repeat and sustain usage. In explaining these phenomena, a few theories have gained the attention of scholars (Veeramootoo et al., 2018; Li & Shang, 2020; Nofal et al., 2021). The Technology Acceptance Model (TAM), the Unified Theory of Acceptance, the Use of Technology (UTAUT), the Information System success model, the Theory of Planned Behaviour (TPB), and the Social Cognitive Theory (SCT), are a few of the theories that have come handy. However, these theories' suitability in explaining sustained use has generated arguments among scholars (Veeramootoo et al., 2018). The theme of the arguments was the effectiveness of theories originally developed to explain adoption in explaining continued use (Veeramootoo et al., 2018).

Veeramootoo et al. (2018) developed an integrative model for explaining e-service continued use out of the Expectation-Confirmation Theory (ECT) and the IS Success Model. According to Li and Shang (2020) Li and Xue (2021), this integrative model is gradually gaining popularity in investigating the influencers of e-services' continuous use. As DeLone and McLean (2003) propounded, the IS Success Model has three components: Information, System, and Service Quality. At the same time, ECT, as a theory in the field of marketing, explains that consumers usually have prior utility expectation that is subject to confirmation after putting the product to use. It is then based on the gap between the expected and actual utility derived from the product that the intention to repeat use is based on.

The integrative model has been used in several studies. For instance, in investigating the factors causing citizens' low continuous use of e-services in China, Li and Shang (2020) adopted a model that integrated the IS Success model with the ECT theory. In the study, the three dimensions of information, system, and service qualities, the citizens' perceived value,

and continuous use intention were adopted in investigating the factors that determine the continuous use of government websites. Findings from the study indicated that factors that influence e-services re-use in China were service quality, service value, and satisfaction. The effectiveness of this integrative model has been evident in various studies, such as Li and Xue (2021). Also, a similar study in China using the same conceptual model found that service and information quality, trust in government, and ICT are the major determinants of e-services re-use in the country. Given these confirmations of the effectiveness of this model in exploring the factors that determine e-services re-use, as seen in Figure 1, this study thus adopted the model and, specifically, examined the role of post-use trust in the continuous intention to use e-services.

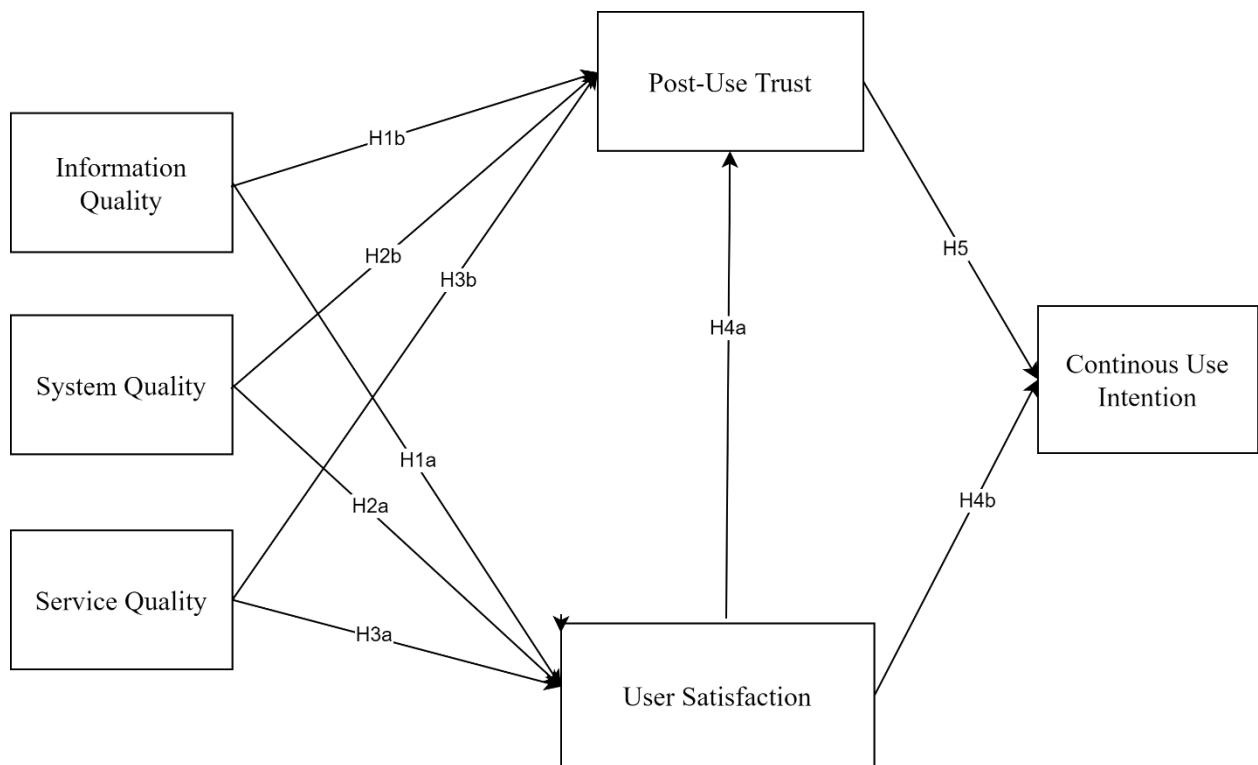


Figure 1 Conceptual Model.

Information System Qualities

e-Services are platforms for delivering services to clients effectively and efficiently. In the context of government, it is referred to as e-government. E-government is not an end in itself; rather, it is a means to an end. It has resulted in an attempt to eliminate the inefficiency and ineffectiveness associated with the traditional manual mode of public service delivery. The use of digital tools in the provision of social services, significant among which is the effective organisation of elections, must consider the IS Success model's three dimensions of information, system, and service qualities. These dimensions must be exhibited in discharging the mandate of the Nigerian electoral umpire, INEC. In this mandate, INEC is expected to ensure that elections in Nigeria are free, fair, transparent, credible, trustworthy, and inclusive (INEC, 2022). These are the expected values in the activities of INEC, and it is against these values that the actual performance of the body will be measured. The activities of INEC on its

online portal revolve around several activities that can be merged into voters' education, registration, and validation. These services are offered using the e-service portal of the agency.

Information Quality

Information to the public has recently assumed a new prominence through technological innovation supporting its collection, storage, and dissemination. This was an invaluable opportunity for the government as the custodian of public information to adopt emerging ICT tools for effective and efficient information management. An important platform readily available for information dissemination and harvesting was the website platform/service portals. Service portals/websites are online web pages with the capacity for real-time information supply for users. The use of an e-service portal in disseminating information to the public is expected to observe some level of benchmarks that is at par with the general expectation of the information users. This is because information quality directly affects the realisation of effective service, the self-fulfilment of the users, and trust in the service (Veeramootoo et al., 2018). In Li and Shang (2020) Li and Xue (2021), information quality was adopted in evaluating the Chinese government websites to determine its influence on citizens' e-services re-use intention. It is from this background that this study hypothesises thus:

H1a: Information quality influences user satisfaction with INEC online portal

H1b: Information quality influences users' post-use trust in INEC online portal

System Quality

Aside from the quality of the information supplied to the public, public agencies also need to ensure that their online portal portrays several system features that align with global standards. Veeramootoo et al. (2018) posited that the qualities expected are user-friendliness, system reliability, data security, and timeliness. In contributing to this, Li and Shang (2020); and Li and Xue (2021) captured system quality as the features that guarantee user-friendliness and easy navigability of the website without compromising the safety and related standards. System technical features are required to meet the need of the users effectively and efficiently. These qualities equally affect the extent to which the users are satisfied and trust the e-services. Li and Shang (2020) added that at the introductory phase of e-services, users are attracted by the visual charm of the websites. This is from the understanding that when there is system quality, all impediments that may hinder efficient portal use are eliminated. This boosts the extent to which users are fulfilled. In extension, this influences the re-use intention of the users of websites. The significance of system quality has been demonstrated in different studies investigating the determinants of continuous e-services use (Li & Shang, 2020; Li & Xue, 2021). It is, therefore, a sequel to the above that the following hypothesis is advanced:

H2a: System quality influences users' satisfaction with INEC online portal

H2b: System quality influences users' post-use trust in INEC online portal

Service Quality

As a marketing theory, ECT buttresses the importance of service quality to the intention of the users to repeat the use of a particular product or service. To Veeramootoo et al. (2018), users' devotion is earned when the actual service quality enjoyed exceeds the initial service expectation. Such devotion, as supported by Li and Shang (2020), transmogrified into the

satisfaction of users, trust in the process, and ultimately, continuous use of the services. Nofal et al. (2021) buttressed that service quality captured a product's or service's overall merits. Service quality has assumed prominence in studies having, for their agenda, the promotion of continuous e-services use (Li & Shang, 2020; Nofal et al., 2021; Li & Xue, 2021). When the service users' expectations are fulfilled, there is goodness in the service, and the re-use intention is reinforced. When established, service quality leads to the development of customer loyalty (Veeramootoo et al., 2018). Li and Shang (2020) argued further in their study that service quality significantly influences users' loyalty, trust, and continuous use intention more than other factors. Findings from different studies on e-service use have substantially upheld the relevance of service quality to the success of e-government implementation initiatives (Li & Shang, 2020; Nofal et al., 2021; Li & Xue, 2021). Therefore, emanating from the above is the following hypothesis:

H3a: Service quality influences users' satisfaction with INEC online portal

H3b: Service quality influences users' post-use trust in INEC online portal

User Satisfaction

According to the literature on IS, the term "satisfaction" refers to the degree to which users are happy both with the system itself and with the results produced by the system. The belief developed throughout the interaction process between the user and e-government services is a major contributor to the user's level of satisfaction after utilising e-government websites or services. According to several studies, trust and satisfaction have a strong relationship. Users who use an online service experience a sense of satisfaction often influenced by the system's attractiveness, dependability, and desire to be utilised. The level of confidence citizens have in the system is directly proportional to their satisfaction. Similarly, the customer satisfaction model pointed out in the e-commerce literature that a user's satisfaction with an online retailer will impact the client's inclination to make repeat purchases. Even more so, in the domain of e-government, it has been shown that when individuals utilise e-services, their inclination to continue using electronic government websites increases in direct proportion to the degree to which they are satisfied with the e-services. Therefore, this study hypothesises that:

H4a: User satisfaction with INEC online portal influences its post-use trust

H4b: User satisfaction with INEC online portal influences its citizens' continuance intention to use

Post-Use Trust

Once users have employed the technology, they experience its characteristics and form their opinions. These opinions may confirm earlier beliefs and cause a rapid change in trust levels. Users with experience are better evaluators of the adopted technology characteristics and effectiveness; hence, it determines their trust levels. Post-use trust becomes effective in the continuance intention of e-services as perceived by the end users. Therefore, citizens' trust in e-government means they believe the platform and services offered are secure, efficient, and effective. For example, e-commerce studies found a positive instance of increased trust levels and sustained continuance intention to use, which affects customers' behavioural intentions. Similarly, some research in the e-government arena has also confirmed that post-use trust is a

major predictor of citizens' continuous-use intention. Therefore, based on this background, this study hypothesised that:

H5. Post-use trust in the INEC online portal influences citizens' continuance intention to use

Methodology

The study investigates the factors influencing the continuous use of INEC's e-service portal; hence, a survey design is used. Data for realising this objective were sourced from recent portal users (mostly in the last six months). Given the complexity of such many target respondents, the study adopts the convenience non-probability sampling technique. The G*power program calculated the minimum sample size with a prediction power of 0.95. The needed sample size, with a maximum of three predictors, was calculated to be 119, with an effect size of 0.15. A link to the questionnaire was sent to respondents through social media platforms (Facebook, Twitter, and email). Initially, 128 responses were recorded in the first two weeks, a reminder was sent, and 117 were retrieved after another two weeks. A follow-up reminder was also sent after this, and an additional 96 responses were recorded. In total, 341 responses were obtained, of which 286 were useful for further analysis. Responses from those who had never visited the INEC portal or those that last visited the INEC portal six months were discarded.

The questionnaire comprised two sections to obtain respondents' opinions on the service obtainable on the portal that encourages its continuous use. Section one contained demographic information of the respondents, and the second section had questions based on the constructs. A control question probing the validity of the respondent to the study was asked, as only recent visitors (6 months) to the agency's portal were valid. Other information about the respondents was also collected, such as their demographic details and access to ICT facilities.

Three public administration professionals examined the questionnaire items' phrasing, structures, and use of language for content validation. The experts' feedback was utilised to refine the questionnaire's phrasing and design before beginning a pilot test with 20 carefully selected respondents depending on the study's needs. All pre-test questionnaires were collected, and a reliability test was done; however, only constructs and items with Cronbach Alpha of 0.70 or above were retained.

This study adopted the measures of DeLone and McLean (2003) to measure the information system qualities. Measures such as "Information provided on the INEC portal is up-to-date", "I can quickly find the required information on the INEC website", "I can successfully log on to the INEC website without stress", "I can successfully visit the related links provided at the home page of INEC portal" "Services provided by INEC portal reliable" "Services provided by INEC portal meets my needs". Post-use Trust is measured by items adapted from Gefen, Karahanna and Straub. Measures such as "I trust INEC portal to the right job, even if not monitored", "I trust INEC portal", and "I am quite certain of what to expect from the INEC portal". User satisfaction was measured using items from Spreng et al. Examples of adapted items include "I feel more satisfied with using the INEC portal", "I feel

fulfilled with my experience on the INEC portal” “I am satisfied with the quality of service on the INEC portal”.

The responses were input into Statistical Packages for Social Sciences (SPSS Version 24) for preliminary data screening and analysis. SmartPLS 4 was utilised for confirmatory factor analysis using Structural Equation Modelling-Partial Least Squares (SEM-PLS) (Ringle et al., 2020). Structural Equation Modelling (SEM) is one of the most widely used statistical techniques for analysing quantitative data. The analysis's measurement and structural model were used to determine the levels of relationship among the variables. This study conducted a full collinearity test to check for collinearity issues related to common method bias (CMB) where all constructs were regressed against a random item. All construct values were lower than 3.3. Therefore, CMB is not a problem for this study.

Analysis

Demographic Profile of Respondents

The responses generated showed 52 percent male and 48 percent female respondents. The majority of the respondents are between the age of 26 and 40. There are 26 percent respondents between 18-25 years, 21 percent are between 41 – 60 years, and 16 percent are 61 years and above. Most respondents (80 percent) have tertiary education qualification, 9 percent had secondary education, 5 percent had primary education, and 6 percent had other education forms. Most respondents (38 percent) last visited the INEC portal in the last three months, 33 percent visited the portal in the last month and 29 percent last visited in the last six months. More respondents (46 percent) had regular access to ICT, 33 percent had access to ICT very frequently, and 21 percent had occasional access to ICT.

Measurement Model

In Table 1, we used a reflective model to create the constructs and checked their reliability and validity by analysing the loadings and composite reliabilities of the items within each construct. All the items have their loadings above the recommended 0.708 thresholds, except for a few whose results didn't affect the validity of the constructs. Also, all the constructs' composite reliabilities were above the recommended 0.7 threshold. Therefore, it can be concluded that this data satisfies the reliability assumption tests. Also, the validity of the constructs was examined based on convergent and discriminant validities. For the convergent validity, the Average Variance Extracted (AVE) of the variables was above the 0.5 minimum threshold. Also, for the discriminant validity, as seen in Table 2, all values of the constructs were below the 0.850 maximum thresholds. Therefore, it can also be concluded that this data satisfied the validity assumption of the measurement model.

Table 1 Table of Reliability and Validity.

Constructs	Loadings	CR	AVE
Information Quality	.779	.888	.615
	.713		
	.836		
	.777		
	.779		
Service Quality	.803	.834	.557
	.756		
	.721		
	.701		
System Quality	.783	.865	.615
	.815		
	.721		
	.815		
User Satisfaction	.788	.785	.554
	.593		
	.829		
Continuance Intention to Use	.859	.898	.747
	.908		
	.823		
Post Use Trust	.816	.869	.689
	.825		
	.849		

Table 2 Discriminant Validity (HTMT).

	Cont. int. Use	Inf. Qty	P-use trust	Svc. Qty	Syt. Qty	User sat
Cont. int. Use						
Inf. Qty	.643					
P-use trust	.532	.594				
Svc. Qty	.605	.647	.641			
Syt. Qty	.504	.697	.714	.764		
User sat	.620	.655	.547	.694	.654	

Structural Model

The relationships among the various constructs are examined based on the stated hypothesis, as shown in Table 3. The coefficient of determination was examined using the R-Square algorithm on SmartPLS. The R^2 result showed that IS qualities, post-use trust and user satisfaction explain 25 percent of the total variance for Continuance intention to use. Also, IS qualities explain 51 percent of the total variance for user satisfaction, while IS qualities and User Satisfaction explains 59 percent total variance for post-use trust. Information systems quality significantly predicts user satisfaction and post-use trust; therefore, hypotheses H1a, H1b, H2a, H2b, H3a, and H3b are confirmed. Similarly, for Hypothesis H4a and H4b, user satisfaction significantly predicts both post-use trust and citizens' continuance intention to use.

Hypothesis H5 is confirmed as post-use trust significantly predicts citizens' continuance intention to use.

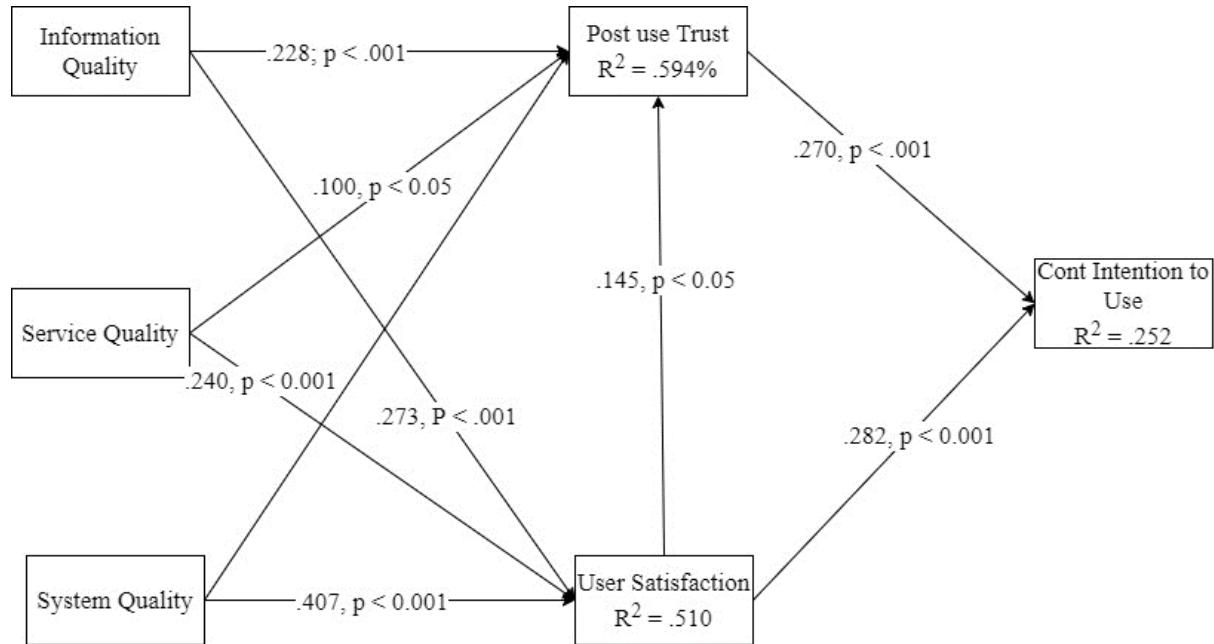


Figure 2 Structural Model.

Table 3 Table of Hypothesis Testing.

Hypotheses	β	Std Error	T-Value	5.00 percent	95.00 percent
H1a	.273	.063	4.312**	.162	.368
H1b	.228	.055	4.159**	.138	.323
H2a	.240	.055	4.387**	.152	.326
H2b	.100	.059	1.681*	.008	.202
H3a	.299	.054	5.566**	.204	.385
H3b	.407	.059	6.861**	.297	.496
H4a	.145	.059	2.480*	.046	.243
H4b	.282	.060	4.677**	.186	.384
H5	.270	.061	4.430**	.157	.359

**P < 0.001 *P < 0.05

Discussion

This study examines the factors influencing citizens' continuance intention to use e-services in Nigeria. Specifically, it examines the citizens' continuance intention to use the INEC portal for voters and election-related issues in the country. The study hypothesised that information system qualities would significantly influence user satisfaction with the INEC portal, further influence post-use trust, and finally influence citizens' continuance intention to use. Election and voters' use of the electoral umpire's portal is not an everyday affair. However,

it is gradually becoming an important activity as the electoral umpire migrates from the traditional manual mode of electioneering to an electronic form.

This study shows that the quality of information, system, and services rendered by the election umpire on its website will determine the level of user satisfaction and trust in the system, which will further translate into the willingness to use it in the future. Currently, the INEC portal is useful for information searching and retrieval. Online voting is yet to be activated on the portal; therefore, users will look forward to comprehensive, up-to-date, and correct information seamlessly. Also, users will value the support rendered by the staff on the portal to resolve problems with voters' registration details. Previous studies' results confirm this study's findings, which found information and system quality significant predictors of user satisfaction (Abdulkareem et al., 2022; Al-Maroof & Salloum, 2021).

More so, the result of the study shows that post-use trust and user satisfaction significantly affect the citizens' continuance intention to use the INEC portal. Their experience influences the intention to re-use the INEC portal in the earlier use. It can be deduced from these findings that trust building in institutions, especially public institutions, is a cumulative process influenced by certain experiences from the pre-use stage to the actual use stage. The actual use stage in this regard is related to the information system quality experience, such as the speed of information retrieval, correctness of the information, support services received, and accuracy of the information supplied. Therefore, citizens will trust the system and aim for repeated use if the experiences are positive. The findings of this study are confirmed by earlier studies (Hernandez-Ortega, 2011; Li & Xue, 2021).

Practical Contributions

These findings have practical implications for the implementation of ICT in the electoral process in Nigeria. Firstly, they highlight the importance of ensuring high-quality information systems to improve user satisfaction and increase public trust in the electoral process. This can be achieved through regular maintenance and upgrades of ICT systems and infrastructure and robust security measures to protect against potential breaches and cyberattacks. Elections are part of the test for the sovereignty of a nation; therefore, any breach might signify a threat to the country's national security architecture; therefore, it is important to ensure a high level of security for the ICT wares.

Furthermore, the findings suggest that improving user satisfaction is crucial to increasing public trust in the electoral process and encouraging continued use of ICT. This can be done by providing clear and user-friendly interfaces, as well as providing adequate training and support for citizens who are unfamiliar with ICT. For example, INEC can prioritise improving IS quality to increase user satisfaction, increasing post-use trust and citizens' continuance intention to use. This will help increase the electoral process's efficiency, accuracy, and transparency and increase public engagement and participation.

The findings further highlight the importance of post-use trust in determining citizens' continuance intention to use ICT in the electoral process. This underscores the need for transparency and accountability in using ICT for elections and to address concerns that arise during or after the elections. These findings can serve as a guide for policymakers and stakeholders in their efforts to improve the use of ICT in the electoral process in Nigeria, thereby enhancing the overall transparency, efficiency, and fairness of the electoral process.

Limitations and Suggestions for Future Research

This study examined the factors influencing the continuous use of e-service in Nigeria, focusing on the INEC portal. The findings presented are interesting and useful for research; however, there are limitations to their generalisation. First, this study adopted a sample size of 286 respondents may not be representative of the entire population of users of the INEC portal in Nigeria. As such, the findings of this study may not be generalisable to the entire population. However, future studies could benefit from a larger sample size to increase the representativeness of the findings.

More so, this study employed a quantitative survey to gather data from respondents. While this method is suitable for examining the relationships between variables, it may not be able to capture the real experiences of users of the INEC portal in Nigeria. Therefore, in addition to quantitative methods, qualitative methods such as focus groups or in-depth interviews could provide a more evidenced-based understanding of the experiences of users of e-services in Nigeria.

This study focused on the INEC portal, so the findings may not apply to other e-services in Nigeria. Future studies could also compare the findings of this study with those of similar studies conducted in other countries to understand better the factors that influence the continuous use intention of e-services in different contexts.

Finally, this study is cross-sectional; however, a future research longitudinal approach could provide a more in-depth understanding of the factors that influence the continuous use intention of e-services over time.

Conclusion

This study used a survey to examine the factors influencing the continuous use intention of the INEC portal. The self-administered survey generated responses from 286 respondents. The result of the study showed that information system qualities significantly influence satisfaction with the INEC portal and shape post-use trust in the INEC portal. Similarly, user satisfaction significantly influences post-use trust and continuous use intention with the INEC portal. These findings conclude that the government's conscious drive towards adopting ICT for election purposes in Nigeria can only gain relevance and wide adoption when the quality of the information, system and services are improved. Trust is an important predictor of adoption; therefore, for the citizens to trust the system, their initial experience with using the portal should be positive. Trust in the system will drive wider adoption and credibility (Abdulkareem & Ramli, 2021b). Thus, ICT is crucial to public sector decision-making, comprehending citizens' expectations, and supporting good governance. Compared to manual means of information retrieval for election purposes, ICT technology will allow the government to communicate quickly with a vast and diverse audience.

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