Unveiling the Factors Influencing the Adoption of Electoral Technologies in Nigeria's Electoral System

Adeleke S. Ogunmokun[1*], Oluwatoyin S. Ayanlade[2], Titilayo O. Olaposi[2]

[1]Department of Information, Communication and Technology/Voter Registry (ICT/VR), Independent National Electoral Commission (INEC), State Headquarters, Osun State, Nigeria.

[2]African Institute for Science Policy and Innovation, Obafemi Awolowo University, Ile-Ife, Osun State.

[*]Corresponding Author

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ABSTRACT

This study examined the factors influencing the adoption of electoral technologies in Nigeria's electoral system, so as to improve Nigeria's electoral process. The study was carried out in the six (6) state offices of the Independent National Electoral Commission (INEC) in one of six Nigeria's geopolitical zones, known as the southwest, comprising Lagos, Oyo, Ogun, Osun, Ondo, and Ekiti states, and at the national head office of INEC, Abuja. The primary data were collected using semi-structured key informant interviews and questionnaire administration of 240 copies of structured questionnaires, at the Information and Communication Technology/Voter Registry (ICT/VR), and Electoral Operations (EOps) departments of the commission. The questionnaire elicited information on the factors influencing the adoption of electoral technologies, such as the ability to improve election management, ease of use of the electoral technologies, among others. Semi-structured key informant interviews with one of the top managers were conducted to assess the manager's views about the factors that influence the adoption of electoral technologies in the commission. The results from the Principal Components Analysis (PCA) showed that Facilitating conditions, causing a variation of 21.67% on the electoral technologies; Performance conditions (17.53%), Social Influence (14.19%); and Impact on electoral service delivery (10.16%), were the four main factors significantly influencing the adoption of electoral technologies, making a cumulative variation of 63.54%. The study concluded that appropriate organisational and technical infrastructures, such as periodic technical training, should be put in place by INEC to support the adoption of electoral technologies.

Keywords: Electoral technologies, Adoption of technologies, Democracy.

INTRODUCTION

To bring about a social change or ensure the sustenance of an existing state of affairs in any society, tons of ideas are required (Araba and Oyoru, 2022; Scalise, 2020). Interestingly, democracy is a converging point of ideas where all sorts of contesting philosophies are collected, debated, and put to good use for the benefit of the people (Edosa, 2014). Therefore, if there are goods that could be enjoyed with zero effort, democracy is not one of them, because democracy is a treasure that should be actively defended daily, every time with hard work (Szonert, 2015). This is because democracy avails protection of individual rights and freedom in terms of equal rights, liberty and security of life and properties. It facilitates the rule of law to prevent the abuse of powers and promotes economic development and prosperity (Acemoglu et al., 2006; Zakaria, 2018; Acemoglu et al., 2019; Coppedge et al., 2020; Müller-Rommel et al., 2020).

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It is reasoned that election is a vital component of democracy because it gives credence to the form of government by which the people govern themselves indirectly by electing representatives (Näsström, 2015). The most important process crucial to changing government or regime, both at the executive and legislative

levels, in a democracy, is the election. It is the correct means of securing the legitimate right to govern the people in a democratic system (James and Alihodzic, 2020; Landman and Splendore, 2020; Fishkin et al., 2005; Pappalardo, 2007; Norris, 2014; Rogowski et al., 2018). This is why the veracity of the electoral procedure is essential in guaranteeing that the election results fairly reflect the collective electorates' will and ensuring that every vote counts. This implies that to combat electoral fraud, the electoral integrity of an electoral process must be maintained because low confidence in the system is often a result of the perception of possible fraud. Thus, to earn the public's trust in delivering electoral services, growing, or maturing the democratic system, defending, or preserving the electoral integrity is central, even in ensuring the credibility of an election and its result (Mauk, 2022).

Even though there is no perfect technology, there has been an expanding bulk of academic proof positing that when thoroughly designed and thoughtfully adopted, electoral technologies could preserve and improve the electoral integrity of an electoral system. Deploying electoral technologies has been found to increase the transparency and accountability of an entire electoral system, advance the accuracy and efficiency of vote counting, facilitate cyber security, widen voter access, tamper-proof the result of an election and bring about e-voter registration and voter biometric authentication (NASEM, 2018; Norris, 2019; Kofi Annan Foundation, 2020; IFES, 2022; SpringerLink, 2023). Despite the apparent effects of technologies in different fields of human endeavours, including electoral management and administration, several factors influence the adoption of technologies. Everett Rogers identified Relative Advantage, Compatibility, Complexity, Trialability, and Observability as key factors that generally influence the adoption of technology (Patel et al., 2015; Kiptot et al., 2017; Granić et al., 2022).

LITERATURE REVIEW

Technology Adoption

To adopt a technology is to consent to use an emerged technology or product (Salahshour et al., 2018). Technology adoption speaks to people's dedication to accepting and utilising new technology in their day-to-day lives (Denning, 2020), implying that technology adoption is the successful deployment of modern technology into businesses, organisations, or a community of people. It is the first use of new technology or products.

Technology adoption is a sophisticated, fundamentally social, and developmental procedure. It is the individuals' concept of exclusive but flexible observations of technology impacting their acceptance choices; therefore, effective facilitation of the technology adoption must encompass preceptive, emotional, and circumstantial concerns (Straub, 2009). Salahshour et al. (2018) explained that studies on technology adoption focused on comprehending, forecasting, and elucidating factors affecting adoption performance to receive and use technological innovations, both at organisational and individual levels.

It is worthy of note that from the literature, a good number of factors have already been identified to influence technology adoption such as Societal and organisational culture (Martínez-Caro et al., 2020; Sharma et al., 2020); Manager's age (Nuryyev et al., 2020; Singh et al., 2020); Stakeholder Pressure (Jang et al., 2024; Pinheiro, et al., 2022); Compatibility (Alamri et al., 2020; Maroufkhani et al., 2023); Lack or Inadequate Skilled workforce (Kinkel et al., 2022; Lutfi et al., 2022; Sharma et al., 2020); Firm size (Chen et al., 2021; Lutfi et al., 2022; Pan et al., 2022; Salah et al., 2021); and Digital literacy (Michels et al., 2020; Oh et al., 2021). These have been identified as influential features for the adoption of technologies, in addition to the ones examined for this study.

These have birthed several conceptual models and frameworks aiding the understanding of the connection between these factors and adoption performance. It should be noted that a good number of theoretical points of

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view have their roots in the field of studies like Psychology, Marketing and Management Information Systems (MIS) and have been used to describe individual adoption and use of technologies (Venkatesh, 2012).

Theoretical Review

Venkatesh et al. unified theory of acceptance and use of technology (UTAUT)

Chakraborty et al. (2018) reflected on how rapidly new technologies were emerging those days and the effects of such emergence on major technological stakeholders at individual and organisational levels. The need to fully grasp the intricacies of technology adoption theories has become intensely heightened virtually in every domain of study, fuelling the quest to decrypt and scrutinise the determining factors of technology adoption. Examples of such factors are performance expectancy, effort expectancy, social influence and facilitating conditions, together with moderating factors such as gender, age, experience, and voluntariness of use, alongside the behavioural intention and usage behaviour, which are dependent variables.

These constructs play crucial roles in understanding the users' attitudes and behaviour towards technology by providing the managers, designers, implementers, and users with the key indicators on the critical area that could lead to the accomplishment or failure of the technological product or service. It is the Unified Theory of Acceptance and Use of Technology **(**UTAUT) model that therefore clarifies technology adoption towards a unified view (Chakraborty et al., 2018). Venkatesh et al. (2003) provided a thorough analysis and history of the many models put forth in recent decades to forecast the use of computers. These are primarily quantitative theories that are used to inform organizations about which individuals will adopt innovations the quickest; however, many of the individual theories are criticized for being fragmented and lacking a comprehensive model that considers the wide range of variables that influence technology use. Eight of the most popular theoretical frameworks and models used to explain how people get and use technology were studied in a study by Venkatesh et al. (2003).

As previously employed constructs, innovation diffusion theory, the theory of reasoned action/behaviour, the social cognitive model, the technology acceptance theory, the theory of personal computer use, and the motivational model were all incorporated. Through a within-individuals, longitudinal validation of the various models using subjects in four work-based situations, the study then experimentally examined these distinct hypotheses. The diversity in the use of different information technologies was described by the eight models individually in a range from 17 to 53%. To create a single model for understanding technological acceptance, the eight models' more prominent features were combined. Four important usage factors and four modifiers of specific user behaviour are included in the UTAUT. Due to the complexity of the concept, the research on the creation of the UTAUT revealed that the predictors of behavioural intention, such as performance expectations, effort expectations, and social influence, as shown in Figure 1.0 also predicted usage behaviours. Age, experience, perception of change's voluntariness, and gender moderated the intention (Straub, 2009).

According to Chakraborty and Al Rashdi (2018), the constructs and factors in UTAUT are as defined below:

i. **Behaviour intention (BI):** The extent to which a person has framed determined plans to perform or not perform a few given future behaviours.

ii. **Effort expectancy (EF):** The amount of ease linked with the use of the system.

iii. **Facilitating conditions (FC):** The extent to which an individual believes that an organisational and technical infrastructure exists to shoulder or sustain the use of a system.

iv. **Performance expectancy (PE):** The extent to which an individual believes that using a system will help him or her attain gains in job performance.

v. **Voluntariness:** The level to which potential adopters perceive the adoption decision to be non-mandatory.

vi. **Social influence (SI):** The degree to which an individual perceives that others believe he or she should use the new system.

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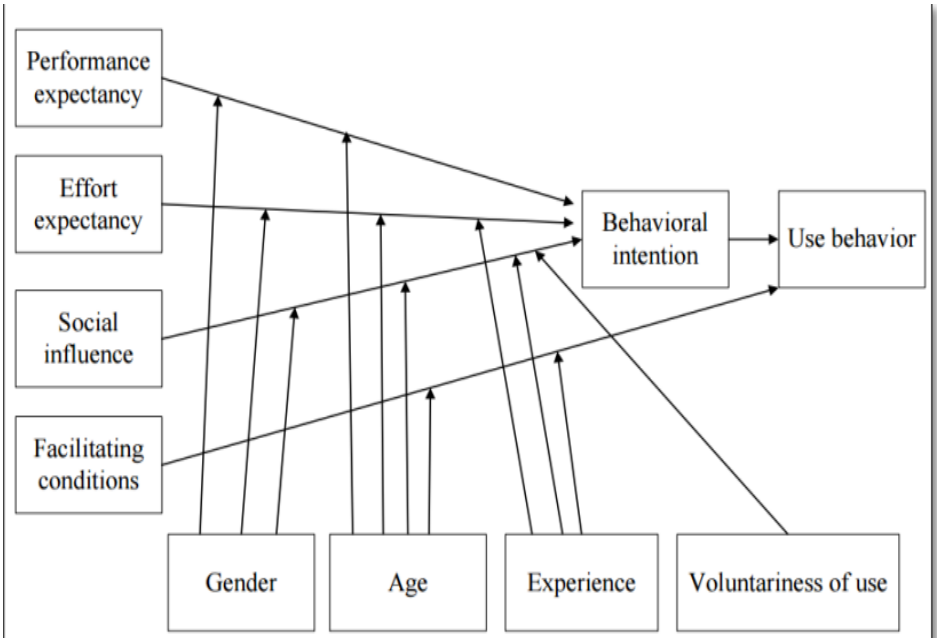

Figure 1.0: Unified theory of acceptance and use of technology (UTAUT)

Source: (Kropf, 2018)

vii. **Attitude:** Individual's positive or negative feelings about performing the target behaviour using a system.

RESEARCH METHODOLOGY

Research Strategy

For this study, some steps were carried out, which included selecting sampling and population, data collection and data analysis.

Sampling and Population

The study was carried out in Nigeria's southwestern zone and Federal Capital Territory (FCT). The zone comprises, Osun, Oyo, Lagos, Ogun, Ekiti, and Ondo states. It covered the head offices of the Independent National Electoral Commission (INEC) located in the selected states, and its National Headquarters at the Federal Capital Territory, FCT, Abuja.

The Department of Information and Communication Technology/Voter Registry (ICT/VR), and the Department of Electoral Operations (EOps) were purposively selected for this study because they are at the centre of the electoral technology deployment, management, and technology-related policymaking and implementation in INEC.

Also, the respondents used for the study were randomly selected based on their availability.

Data Collection

Research Philosophy

Both qualitative and quantitative data were gathered for the study. Qualitative data were from interviews while quantitative data were from questionnaire.

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Research Design

Both primary and secondary data were used for the study. The primary data was collected using questionnaires, observations, and semi-structured interview methods. A set of questionnaires was designed and given to 105 respondents from the ICT/VR departments in the six selected states and FCT Abuja, with an equal number (15 respondents) from each state. Similarly, one hundred and forty (140) respondents were purposively selected from the Electoral Operations department, with an equal number (20 respondents) coming from each state and the FCT. Therefore, in total, two hundred and forty-five (245) respondents participated in the study.

The questionnaires elicited information on the factors influencing the acceptance of electoral technologies.

To examine the factors influencing the acceptance of electoral technologies in Nigeria's electoral system, a 3-point Likert scale (Strongly Agreed, Neutral and Strongly Disagreed) was used to measure the factors, as extracted from Venkatesh et al.'s Unified Theory of Acceptance and Use of Technology, UTAUT, (2003). The variables considered were:

a) Performance Expectancy:

i. Ability to improve election management.
ii. Capacity to enhance productivity relative to electoral service delivery.
iii. Ability to positively impact the performance of EMB regarding electoral service delivery and election management.
iv. Usefulness for the Commission and its employees

c) Effort Expectancy:

i. Ease of use of the electoral technologies
ii. Stress-free interaction with the electoral technologies
iii. The degree of importance attached to the usage of electoral technologies

d) Social Influence:

i. The usefulness of electoral technologies for the co-workers
ii. The rate at which the electoral technologies are integrated into the electoral system.
iii. Encouragement by the Commission

e) Facilitating Conditions:

i. Availability of electoral technologies
ii. The technical know-how of the workforce to operate the electoral technologies.
iii. The level of priority given to the electoral technologies as per their good placement within the electoral culture

To validate the findings from the questionnaires, one of the heads of the selected departments at the headquarters was engaged in personal oral interviews. Secondary data were sourced from the websites, reports, and publications that are relevant to the study. The data obtained was analysed using Mean Rating and Principal Components Analysis (PCA) with the aid of the Statistical Package for Social Sciences, SPSS.

RESULTS AND DISCUSSION

A total number of two hundred and forty-five (245) copies of questionnaires were distributed to the staff of the ICT/VR and EOps Departments of the Independent National Electoral Commission in the State Offices and FCT, as detailed in Table 3.0. Thirty-five (35) copies of the questionnaires were distributed per state. Out of the 245 questionnaires, a total number of two hundred and twenty (220) copies of questionnaires were

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retrieved, leaving the response rate at 89.80% (Table 3.0). This shows that the study's response rate is excellent. This suggests that the study's findings accurately reflected the target sample, provided higher data accuracy and quality, and that the questionnaires worked as intended (Brtnikova et al., 2018; Deutskens et al, 2004; Perkins, 2011; Manzo and Burke, 2012).

About 75.5% of the respondents were 35 to 50 years old (Table 4.0), implying that the respondents of this study are Generation X. Generation X are individuals whose ages range between 35 to 50 years (Johnson and Smith, 2022). They are distinguished because they have experienced the most profound social upheavals and technological advancements in human history. They have also been found to be extremely comfortable with technology and have

Table 3.0: Analysis of the questionnaire distribution and retrieval rate by states

S/N	State	Number of Distributed copies of Questionnaires	Number of Retrieved copies of Questionnaires	Response Rate (%)
1	Ekiti	35	32	91.43
2	Osun	35	35	100
3	Oyo	35	35	100
4	Ondo	35	35	100
5	Ogun	35	24	68.57
6	Lagos	35	26	74.29
7	FCT	35	33	94.29
	Total	**245**	**220**	**89.8**

made significant contributions to its advancement (Oblinger, 2003; Casalegno et al, 2022; Wahyuningsih et al., 2022}. It, therefore, follows that 75.5% of the responses to the study's survey were informed by moderate technological knowledge.

The professional experience of the respondents revealed that 36.4% of them have put in 11 -15 years of service, 28.6 % have put in 5-10 years, 19.5% have put in 16-20 years, 10.9% have put in 21-25 years of service as of the time the survey was conducted. This suggested that 36.4%, 28.6%, 19.5%, and 10.9% of the responses to this study were informed by 11-15 years, 5-10 years, 16-20 years, and 21-25 years of electoral technology professional experience respectively.

Table 4.0: Socio-demographic characteristics of the respondent

Characteristics		Frequency	Percentage %
Gender	Male	169	76.8
	Female	51	23.2
Age	<20	0	0
	21-34	23	10.5
	35-50	166	75.5
	51-65	31	14.1

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	>65	0	0
Professional Experience	Less than 5 years	0	0
	5-10 years	63	28.6
	11-15 years	80	36.4
	16-20 years	43	19.5
	21-25 years	24	10.9
	26-30 years	7	3.2
	31-35 years	3	1.4

Factors That Influence the Adoption of Electoral Technologies in Nigeria's Electoral System

A total number of thirteen (13) factors, which were subcategorised into four (4), were considered for this study. They are: (i) ability to improve election management, (ii) capacity to enhance productivity relative to electoral service delivery, (iii) ability to positively impact the performance of EMB in terms of electoral service delivery and election management, and (iv) usefulness for the Commission and its employees, categorised as Performance Expectancy; (v) ease of use of the electoral technologies, (vi) stress-free interaction with the electoral technologies and (vii) the degree of importance attached to the usage of electoral technologies, categorised as Effort Expectancy; (viii) usefulness of the electoral technologies for the co-workers, (ix) the rate at which the electoral technologies are integrated into the electoral system, (x) encouragement by the Commission, categorised as Social Influence; (xi) availability of electoral technologies, (xii) the technical know-how of the workforce to operate the electoral technologies and, (xiii) the level of priority given to the electoral technologies as per their good placement within the electoral culture, categorised as Facilitating Conditions.

It was discovered as shown in the Mean Rating Analysis detailed in Table 5.0, that all the thirteen (13) factors presented for this study have mean ratings that fall within the agreed key interval used to measure the variable (Ramdhani et al., 2014; Linacre, 2002), essentially implying that all the factors examined influenced the adoption of electoral technologies, because all the respondents agreed to the factors. Therefore, when the mean falls between 1.00 and 1.49, the respondents disagreed with the factor, when between 1.50 and 2.49, the respondents were neutral about the factor and when between 2.50 and 3.0, the respondent agreed with the factor in question.

It was also discovered that the ability to improve election management, capacity to enhance productivity relative to electoral service delivery, and ability to impact the delivery of electoral services and election management positively, seem to be the most influential factors with the highest mean of 2.98, followed by usefulness for the Commission and its workforce with 2.96 mean ratings, this might be because all these four factors were categorically identified as the indicators measuring performance expectancy which is classified by Venkatesh et al (2003) as one of the factors influencing technology adoption.

Considering the 3-Point Likert Rating, the very high mean ratings of 2.98 and 2.96, as shown in Table 5.0, suggests that the respondents agreed to the factors presented as being influentially affecting the adoption of electoral technologies, even though all the presented indicators were ranked agreed because all their rated means fall within the 2.50-3.00, (Table 5.0), which is in the agreed threshold key. This was why we had to

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take further steps to unveil the latent factors influencing the adoption of electoral technologies.

To do this, Kaiser-Meyer-Olkin (KMO) was carried out on the study data to check whether or not the data was suitable for Principal Component Analysis (PCA), The KMO test showed as outlined below that the data was good for PCA.

a. It had a Kaiser-Meyer-Olkin (KMO) value of 0.719, as evident in Table 6.0, which is greater than 0.5. It was established that if KMO< 0.5, it is Fair; KMO between 0.51 and 0.7 is Mediocre; KMO between 0.71 and 0.8 is Good; KMO between 0.81 and 0.9 is great; while KMO greater than 0.9 is Superb (Hutcheson and Sofroniou, 1999), implying that sampling adequacy for this study is good.
b. It had a significant Bartlett's test that is significant at 0.001, greater than zero. This means the predictor variables correlate enough with the dependent variable for us to run a PCA.

Table 5.0: Mean ratings of factors influencing the adoption of electoral technologies in the study area

KEY: 1.00 –1.49: Disagree; 1.50 – 2.49: Neutral and 2.50 – 3.00: Agree

S/N		Min	Max	Mean
i.	Ability to improve election management	2	3	2.98
ii.	Capacity to enhance productivity relative to electoral service delivery	2	3	2.98
iii.	Ability to positively impacts the delivery of electoral services and election management	2	3	2.98
iv.	Usefulness for the Commission and its Workforce	2	3	2.96
v.	Availability of electoral technologies	2	3	2.95
vi.	Ease of use	2	3	2.94
vii.	Stress-free interaction with electoral technologies	1	3	2.92
viii.	The usefulness of electoral technologies for co-workers	1	3	2.92
ix.	The degree of importance attached to the usage of electoral technologies	2	3	2.91
x.	The technical know-how of the workforce	2	3	2.9
xi.	The level of priority given to electoral technologies in electoral culture	2	3	2.9
xii.	Encouragement by the Commission	1	3	2.86
xiii.	The rate at which the technologies are integrated into the electoral system	1	3	2.79

As noted in Table 6.0, the Kaiser Meyer Olkin test confirmed the appropriateness of the sample for the analysis. From Table 6.0, KMO = 0.719 (ranked 'Good' according to Field, 2009), and each of the KMO values of each item was >0.57 which is above the standard limit of 0.5 (Field, 2009). Also, Bartlett's test of

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sphericity $\{\chi^2 (78) = 908.746, p < 0.001\}$ was carried out indicating that the correlations between items were large enough for a PCA test.

The analysis extracted four (4) factors, which were named according to the predictor variables correlated with each factor. The factors were extracted based on a threshold value of 0.4. The 13 items were analysed using a principal component analysis (PCA) with orthogonal rotation (varimax). After an initial analysis, eigenvalues were obtained for each factor in the data as shown in Figure 2.0 (The scree plot).

Table 6.0: KMO test showing sample adequacy for the study

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.719
Bartlett's Test of Sphericity	Approx. Chi-Square	908.746
	Df	78
	Sig.	0.000

Table 7.0: Principal components analysis for factor extraction

S/N	**Components**	**Factors**			
		1	2	3	4
i.	Ability to improve election management		0.865		
ii.	Capacity to enhance productivity relative to electoral service delivery		0.675		
iii.	Ability to positively impact the delivery of electoral services and election management				0.871
iv.	Usefulness for the Commission and its Workforce		0.401		0.666
v.	Ease of use		0.601		
vi.	Stress-free interaction with electoral technologies	0.51	0.503		
vii.	The degree of importance attached to the usage of electoral technologies	0.834			

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viii.	The usefulness of electoral technologies for co-workers			0.717	
ix.	The rate at which the technologies are integrated into the electoral system			0.795	
x.	Encouragement by the Commission			0.66	
xi.	Availability of electoral technologies	0.848			
xii.	The technical know-how of the workforce	0.754			
xiii.	The level of priority given to electoral technologies in electoral culture	0.615	0.501		
1=Facilitating Conditions of the electoral technologies					
2=Performance expectancy of the electoral technologies					
3=Social Influence					
4=Positive impacts on electoral services delivery					

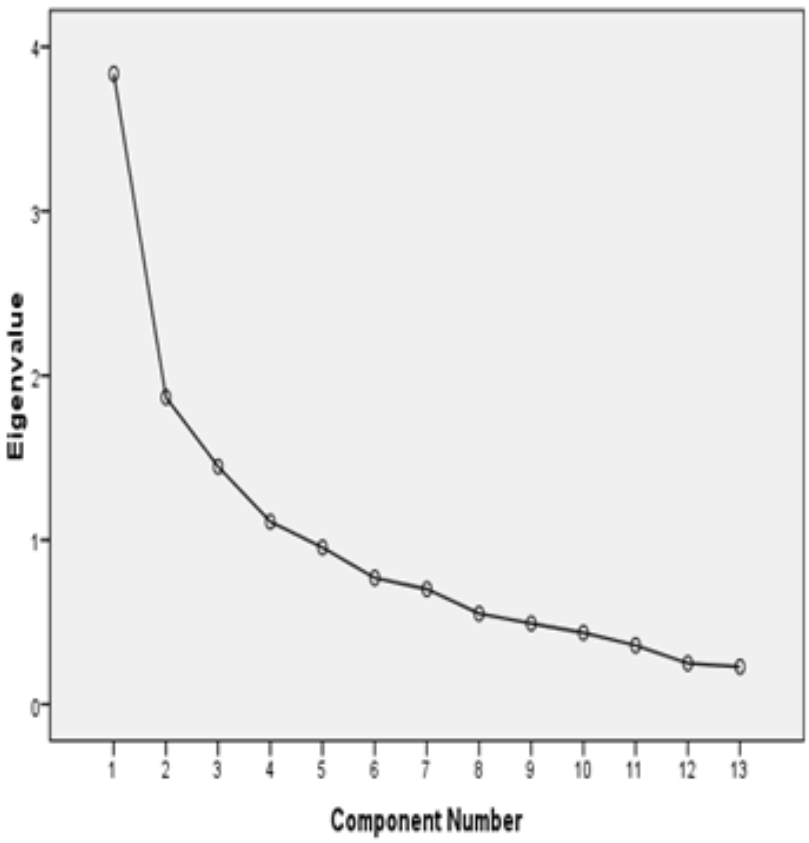

Figure 2.0: Scree Plot Showing the Four Factors Extracted.

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Table 7.0 shows the factor loadings after rotation. As stated earlier, the extraction was based on a threshold of 0.4. The items that cluster on the same factors suggest the following: the four extracted adoption influencing factors of electoral technologies for this study.

i. The first Principal Component (Factor 1), described as Facilitating conditions, strongly correlates with five of the original 13 variables presented as factors. The said variables are stress-free interactions with the electoral technologies with a factor loading of 0.51; the degree of importance attached to the usage of electoral technologies with a correlation value of a factor loading of 0.835; availability of electoral technologies with a factor loading of 0.848; the technical know-how of the workforce with a factor loading of 0.754; and the level of priority given to electoral technologies in electoral culture with a factor loading of 0.615. This suggests that the five measures vary together, meaning as any of the measures increases, the others too will increase. As supported in the literature, the technical know-how or operational technical knowledge was outlined as one of the factors influencing the adoption of agricultural technologies (Chi, 2008) and so is the electoral technologies facilitating conditions (Gupta et al., 2008; Agbesi, 2020; Falwadiya and Dningra, 2022}. Facilitating condition is the degree to which an individual believes that an organisational and technical infrastructure exists to support or sustain the use of a system.

ii. The Second Principal Component (Factor 2) described as Performance Expectancy is also strongly correlated with six of the 13 presented factors. These variables, according to Table 7.0, are the ability to improve election management with a factor loading of 0.865; capacity to enhance productivity relative to electoral service delivery with a factor loading of 0.675; Usefulness for the Commission and its Workforce with a factor loading of 0.401; Ease of use with a factor loading of 0.601; Stress-free interaction with electoral technologies with a factor loading of 0.503, and the level of priority given to electoral technologies in electoral culture with a factor loading of 0.501. This suggests that the six measures vary together, meaning if any of the measures increases, the others too will increase. The performance expectancy extracted in this study as a factor influencing the adoption of electoral technologies obeys the Unified theory of acceptance and use of technology, UTAUT, (Kropf, 2018). This is defined as the level to which a person believes that using a system, in this case, electoral technologies, will help him or her attain gains in job performance.

iii. The Third Principal Component (Factor 3) described as Social Influence is strongly correlated with just three of the 13 presented factors variables. According to Table 7.0, the usefulness of electoral technologies for co-workers with a factor loading of 0.717; the rate at which the technologies are integrated into the electoral system with a factor loading of 0.795; and encouragement by the commission with a factor loading of 0.66. These imply that these three measures vary together, as one increases, the other increases. The social influence extracted in this study as a factor influencing the adoption of electoral technologies is in line with Venkatesh's Unified theory of acceptance and use of technology, UTAUT, (Kropf, 2018), social influence was outlined as one of the factors influencing the adoption of technology. Social Influence is defined as the extent to which a person realizes that others believe he or she should make use of the new system.

iv. The Fourth Principal Component (Factor 4) labelled as Positive Impact on Electoral Service Delivery correlated strongly with two of the thirteen (13) presented factors. According to Table 7.0, the two variables are the ability to positively impact the delivery of electoral services and election management with a factor loading of 0.871; and the usefulness for the Commission and its workforce with a factor loading of 0.666. This is suggestive of the fact that these two measures vary together, an increase in one means an increase in the other. This is evident in one of the variables promoting the deployment of electoral technology and its good influence on the delivery of electoral services (AlAwadhi and Morris, 2009).

Thus, the four extracted factors had eigenvalues over Kaiser's criterion of 1 and together explained 63.545% of the variance accounted for by the extracted factors as obvious in Table 8.0.

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Table 8.0: Percentage of total variability accounted for by the extracted factors

Factor	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.816	21.665	21.665
2	2.279	17.53	39.194
3	1.845	14.193	53.387
4	1.32	10.158	**63.545**

Qualitative Result and Discussion

For this study, a respondent was interviewed to get qualitative data. The respondent is a Deputy Director (System Analyst) serving as a Head of the Division of ICT/VR in INEC State Headquarters in one of the selected states. The respondent has a Bachelor of Science in Computer Science with a Master of Business Administration. She has an age range of 45-50 years old. Her professional qualifications were Nigeria Computer Society (NCS) and Computer Professionals of Nigeria (CPN). Having served as a System Analyst for twenty-four (24) years in the ICT/VR Department of INEC, the respondent branded herself as an expert in electoral technologies with 24 years of professional experience.

A semi-structured question was used to guide an interview with her. A total number of thirteen (13) factors influencing the adoption of electoral technologies were presented to her to either affirm or disaffirm. The list of the presented factors were: (i) ability to improve election management, (ii) capacity to enhance productivity relative to electoral service delivery, (iii) ability to positively impact the performance of EMB in terms of electoral service delivery and election management, (iv) usefulness for the Commission and its employees (v) ease of use of the electoral technologies, (vi) stress-free interaction with the electoral technologies (vii) the degree of importance attached to the usage of electoral technologies, (viii) usefulness of the electoral technologies for the co-workers, (ix) the rate at which the electoral technologies are integrated into the electoral system, (x) encouragement by the Commission, (xi) availability of electoral technologies, (ii) the technical know-how of the workforce to operate the electoral technologies and (xiii) the level of priority given to the electoral technologies as per their good placement within the electoral culture.

Using theme analysis, the respondent affirmed only four (4) factors as being the ones that influence the adoption of electoral technologies in Nigeria's electoral system and disagreed with others. The factors influencing the adoption of electoral technologies as identified by the respondent were:

i. Ability to positively impact the performance of EMB in terms of quality delivery of electoral services and election management.

ii. Ease of use of electoral technologies.

iii. Availability of electoral technologies.

iv. the technical know-how of the workforce to operate the electoral technologies.

To mitigate the identified factors, the respondent suggested that before INEC fully adopts electoral

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technologies, adequate performance assessments should be carried out. The electoral technologies should be designed and developed in such a way that would make both user-technology interactions and admin-technology interactions easy. She also advised that the technical know-how of electoral technologies should be demonopolized so that every technical staff could access a proportionate amount of technical knowledge required to carry out their duties effectively and efficiently.

CONCLUSION

This study identified facilitating conditions, performance expectancy of the electoral technologies, social influence, and the positive impacts of the electoral technologies on electoral service delivery, as the factors influencing the adoption of electoral technologies in Nigeria's electoral system.

PRACTICE AND THEORY RECOMMENDATION

The study recommends that INEC should draw up a dynamic policy whose cardinal principles would be informed by the facilitating conditions, the performance expectancy of the electoral technologies, the social influence, and the positive impacts of the electoral technologies on electoral service delivery, for adopting electoral technologies, being the four adoption influential factors identified by this study.

For instance, to address facilitating conditions, INEC should invest more in providing organisational and technical infrastructures that would make the adoption of electoral technologies and adopted technologies thrive. A series of improved periodic pieces of training for technical staff should be designed and carried out for their upskilling or reskilling, towards the enhancement of their technical know-how.

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