

Mitigating Electoral Discontents in Nigeria: A Case for SMS Enabled Vote-Casting System

Stanley C. Igwe^{[a],*}

^[a]Department of Political Science, Nigeria Police Academy, Wudil, Kano.

*Corresponding author.

Received 9 November 2021; accepted 3 December 2021
Published online 26 December 2021

Abstract

Two decades into the 4th Republic has witnessed 6 elections fraught with varying kinds of anomalies that all 3 electoral reforms within the period have been unable to subdue. Electoral violence has summarily led to countless loss of lives and continued low voter turnout. Borrowing however from the resounding success of e-banking the country can rewardingly procure an e-resuscitation of the electoral sector that is not only guilty of consistent fraud but also liable for continued loss of lives. Nigeria ranked atop as the most improved country in Sub-Saharan Africa in the Mobile Connectivity Index as at 2019 and the seventh most improved globally. This progress was driven by a range of improvements like enabling regulatory framework espoused by the country in this direction and as a result the country now has one of the most affordable handset costs in the world besides a mobile penetration of 187 million active cell phone users of the country's 212 million population as of 2021. In addition, up from 31% in 2014 to 52% in 2019, Nigeria's Online Service Index score for e-government shows glaringly that the country is robustly ready for an SMS enabled vote casting system and would do well to rapidly implement same. SMS voting is premised on familiar technology and the use of a single ballot box (single computer Server) is not only fraud-proof but also guarantees eradication of violence and frequent loss of lives associated conventional vote-casting system while also improving political participation and voter turnout.

Key words: Nigeria; Electoral fraud; Electoral violence; Elitism; Critical theories; Rational choice theory (RCT); Technology adoption theories; E-governance;

E-participation; Familiar technology; SMS enabled vote casting system (SMSevcs)

Igwe, S. C. (2021). Mitigating Electoral Discontents in Nigeria: A Case for SMS Enabled Vote-Casting System. *Higher Education of Social Science*, 21(2), 48-73. Available from: URL: <http://www.cscanada.net/index.php/hess/article/view/12376> DOI: <http://dx.doi.org/10.3968/12376>

1. INTRODUCTION

Existing reports on electoral violence in Nigeria are now sufficient to fill up the shelves of a national library but studies supplying significant solutions are still in the emergent phase.

Our traditional societies were better managed because unwritten norms and cultural codes were widely sacrosanct and members irrespective of their location would not dare not challenge existing conventions and customary precedents.

In the present, countless cultural statutes are fast ebbing away owing to cross fertilization of diverse kinds of values that dilute and eat away pre-existing norms.

That notwithstanding, to understand society in its present manifestation is to educate ourselves not only about the conditions that limit our lives but also the opportunities open to us for making improvements on the conditions of our existence.

Renowned physicist, Albert Einstein believes:

Politics is more difficult than physics and the world more likely to die from bad politics than from bad physics (Einstein, 1946 in Dore, Ku and Jackson, 2014).

Indeed, the practice of politics is more difficult than physics because the former involves humans who are prone to bias and prejudice; *saying one and doing the other*.

As such, the pursuit of knowledge of man in society is categorically more significant than learning more about mathematics or engineering, because save we improve on the society in which we dwell; we may not adequately reap from scientific inventions.

The foregoing reflections are not entirely misplaced because the rate at which lives are wantonly lost during elections in Nigeria shows there may be need to consider alternative means to the entire idea of appointing representatives on a general count if only to prevent wanton loss of lives.

Nonetheless, most native African traditional societies and in the present most modern societies tilt towards egalitarian values that embrace such vocabularies like political freedoms, impartial adjudication, economic rights and more owing to the colossal losses deriving from two World Wars that got the conveners of the United Nations to enshrine that whatever could instigate strife anywhere around the world must first be nipped in the bud prior to further considerations.

Defining the basic minimal requirements necessary for a state to be considered egalitarian in 2004, the UN General Assembly adopted resolution (A/RES/59/201) that spelt out *essential elements of a democracy*. The resolution was endorsed by 172 states, with 15 abstentions (including Libya and the United Arab Emirates); no state voted against the resolution. It therefore both represents and consolidates an international consensus on what democracy means and how it should function (International IDEA, 2009).

Paragraph 1 of this resolution spelt out the essential elements of democracy to include:

...respect for human rights and fundamental freedoms, inter alia, freedom of association and peaceful assembly and of expression and opinion, and the right to take part in the conduct of public affairs, directly or through freely chosen representatives, to vote and to be elected at genuine periodic free elections by universal and equal suffrage and by secret ballot guaranteeing the free expression of the will of the people, as well as a pluralistic system of political parties and organizations, respect for the rule of law, the separation of powers, the independence of the judiciary, transparency and accountability in public administration, and free, independent and pluralistic media (UN Resolution A/RES/59/201, 2005; see also International IDEA, 2009).

In addition, effective opposition both within and exterior to the legislature are widely accepted as requisite conditions of a functioning democracy with particular reference to aiding checks and balances. Other inalienable rights include rights to participate, supervise and contribute to governance, and more (International IDEA, 2009).

The Cotonou Conference, which held December 2000, adopted *Declaration on Peace, Security, Democracy and Development*, to which the ministers and representatives of new or restored democracies reaffirmed (International IDEA, 2009).

In furtherance, UN doc. A/56/499, of 23 October 2001, para. 13 affirms that:

the power of public authorities must be based on the will of the people, expressed freely in periodic, fair, pluralistic elections, free of intimidation, conducted by universal, equal suffrage and secret balloting and under the supervision of an independent institution, and public authorities must be accountable for their acts (see Goodwin-Gill, 2006, p.23).

We also agree with Sandbrook that elections and the struggle for power are essential because they give oppressed classes opportunities to put the question of alternative ideologies on the agenda and therefore constitute an important stage in the quest to extend democratic control to the social and economic as well as political sphere (1988).

For flag independent countries of Africa where personal rule override constitutional standards the standards, all concerns regarding rule by laws remain unclear as events evidently tell from virtually all the elections that has been conducted in Nigeria since the inception of the 4th Republic.

Electoral misconduct in Nigeria takes varied forms ranging from massive rigging to violence that occasion injuries, arson and worse, outright loss of lives.

Beyond manifest losses, the latent fatalities of electoral dysfunctions are many and varied.

Among such latent impressions are subtle diminished motivations to get involved in political matters which lends particularly to low voter turnout.

In other terms, what we may tag the *social effects* of negative electoral outcomes impacts on overall public dispositions to participate meaningfully in the exercise of their constitutional rights.

The man who sends a video clip of fraudulent act or violent reactions deriving from a polling booth may not be the immediate victim of the act in question but witnessed the crime and posts same to a friend or close relation, the latter in turn transmits same messages to those within her/his network of family and friends, and in no time the misconduct goes viral, next women begin calling out to their children and family members on a note not distant from: *Whatever may be the benefit do no step out of your door in the name of any election ever again.*

The contention here is that the drive or motivation to social participation, social engagement or social isolation are not shaped in a vacuum. The social environment with respect to popular or unpopular perception impacts favourably or unfavourably to particular or general aspects of social behaviour.

For example, drawing from 170 regions within 18 European countries, Sundström and Stockemer found that regional variations in the perceived level of corruption bear substantial impact on voter turnout (2015).

From another dimension concerning perception of electoral fairness Sarah Birch drawing from a large number of countries, found that perceptions of electoral

integrity are positively associated with voter participation (2010).

Essentially emerging evidence from 1999 up to 2019 elections in Nigeria shows glaringly that a broad range of *unaddressed drivers* of electoral fraud and violence remain persistent and invariably impacts negatively on voter turnout besides occasioning loss of lives.

Development mogul and civil society activist Jibrin Ibrahim, identifies forms of election fraud in Nigeria as comprising:

Compilation of fictitious names on voters registers, illegal compilation of separate voters' list, abuses of the voter registration revise exercise, illegal printing of voters cards, illegal possession of ballot boxes, stuffing of ballot boxes with ballot papers, falsification of election results, illegal thumb-printing of ballot papers, under aged voting, illegal printing of the forms used for collation and declaration of election results, deliberate refusal to supply election materials to certain areas, announcing results in places where no elections were held, unauthorized announcement of elections results, harassment of candidates, agents and voters, change of list of electoral officials and ballot box-switching and inflation of figures (1999).

Ultimately, declining voter turnout is a reflection of the poverty of democracy (Berg-Schlosser and Kersting 2003; Cornwall, 2002; Young 2000) which implies disproportionate access to public policy-making process, core among which are agenda setting, policy adoption and changes in governance policy.

This implies that an unhealthy electoral system that indirectly disenfranchises eligible voters by exposing them to corporal and psychosomatic violence simultaneously excludes them from contributing to agenda setting and governance to which they would have otherwise contributed by voting in credible candidates or voting out unpopular ones as glaringly espoused in Article 21 of the Universal Declaration of Human Rights.

2. STATEMENT OF THE PROBLEM

Elections in Nigeria have remained to date times of extensive tension and confrontations that have winded up in fraud and violence.

Despite assumed peaceful transition to civilian rule in 1999, Nigeria's 4th Republic has been consistently punctuated by varying levels of electoral violence manifest in particularly loss of hundreds of lives aside wanton destruction of property consequent to which a downward trend in voter turnout has become glaringly evident.

2.1 1999 Elections: A New Republic Marred From Inception

The 1999 Presidential election was considered as largely peaceful due from widespread aspiration by the Nigerian populace to transit from military to civil rule after several years of nauseating military rule that rose to virtually unbearable levels during Gen. Abacha's five-year rule.

That notwithstanding, distinguished icon of African politics Prof. Julius Ihonvbere following his disappointment over the conduct of the 1999 election explains:

One can say with certainty that all the contradictions that had bedeviled previous democratic experiments in Nigeria were present and magnified in the February 27, 1999 election: divided loyalties, manipulation of primordial identities and loyalties, corruption and other election malpractices, lack of political discipline, and limited attention to serious structural questions.

From his independent assessment Shola Omotola found irregularities and ineffective administration at all stages and levels of the elections all of which accounted for *damagingly discredited outcomes* (Omotola, 2010, p.535).

For example, following the 1999 election, religious tensions surged all over the country following the imposition of Sharia law in the northwest state of Zamfara in September 1999. At first this motion was met with little remonstrance because over 90 percent of that state's population were Muslim. However, when the more religiously diverse state of Kaduna followed suit, violence erupted, occasioning the loss of over a thousand lives (see Taft and Haken, 2018; Harnischfeger, 2008).

Still among such *outcomes* of 1999 elections, Darren Kew found that:

In one instance the presiding officer and the two party agents – one from the APP – were busy thumb-printing as many PDP votes as they could stuff into the ballot box (1999, p.31).

Kew's observation appeared to resonate with excerpts from the letter of a prominent observer of the election (former President Jimmy Carter) to the INEC Chairman Justice Ephraim Akpata prior to leaving the country the night following the February 27, 1999 presidential polls:

There was a wide disparity between the number of voters observed at the polling stations and the final results that have been reported from several states. Regrettably, therefore, it is not possible for us to make an accurate judgment about the outcome of the presidential election (The NDI/Carter Center, 1999, p.12).

In appreciation of the roles nongovernmental organizations (NGOs) could play during the 1999 elections, the Carter Center based in Atlanta and the National Democratic Institute for International Affairs (NDI) based in Washington responded to advances from the Nigerian government that they observe the elections. The two democratic centers alone (besides others observer missions from other countries) raised a high-powered 66-member international delegation from 12 countries including former Niger President Mahamane Ousmane and former Chairman of U.S. Joint Chiefs of Staff Gen. Colin Powell not excluding former President Jimmy Carter to observe the 1999 elections. On the local front, Nigeria's premier domestic observer group, Transition Monitoring Group (TMG) comprising a coalition of 64 Nigerian pro-democracy organizations raised over 10,000

domestic observers to capture events round the 36 states of the federation.

All were broadly disappointed with the character of serious irregularities nationwide - ballot stuffing, inflation of results, and voter intimidation - widespread enough.

Somewhat unknown to many, the disappointing conduct of this election occasioned the seeming sudden exit of several well-meaning civil society groups around the country.

They had fought hard to see to the end of the second military interregnum in hope for the enthronement of genuine democracy but emerging events dampened the high spirits with which change to civil rule was heralded and they had no option than to lie low thereafter. This outcome also occasioned the grinding apathy that became glaring in low voter turnout in subsequent elections (see Table 4).

That notwithstanding, this section aims to offer a summary content analysis of reviews of the character of electoral violence within the 4th republic with particular reference to **evidence emerging on loss of lives** occasioned or resulting from election generated violence (before, during or after) and the **impact of overall election fraud on voter turnout**.

2.2 2003 Elections Summary

From Prof. Osita Agbu of the Nigerian Institute of International Affairs:

Rigging in the 2003 general election was simply rampant. Some results were said to have been written in the private homes of individuals, and in some cases, announced even when the elections had not been conducted... In other places, fictitious thumb-printed ballot papers were stuffed into ballot boxes and used to compute figures for pre-determined winners. Security agents were used by government to intimidate and harass the electorate in different parts of the country. Money was used to influence the electorate to vote for unpopular candidates. In fact, the European Union Election Observer Mission (EU-EOM) Team led by Max van den Berg mentioned 12 States where fraud and irregularities were rampant and concluded that the 'minimum standard for democratic elections were not met' (Osita, 2016, p.96).

From Hazen and Horner of *Small Arms Survey*, the 2003 election was remarkable because it ushered in the first election which saw political actors arming youth as a tool of political muscle, protection, and intimidation. This contributed to the proliferation of small arms and the growth of militant groups that eventually led to greater violence in subsequent elections (2007).

From the first hand observation of Human Rights Watch, by early 2003, widespread electoral violence broke out, killing at least one hundred people within which the ruling People's Democratic Party (PDP) was widely blamed as using varying strategies to intimidate voters (2003).

The *EU Election Observation Mission to Nigeria* (EU EOM) reported widespread election fraud, lack of transparency and credibility within the INEC, lack of

fairness and balanced coverage by federal and state-owned media which favoured the ruling party. From the summary:

The Presidential and Gubernatorial elections were marred by serious irregularities and frauds. In a number of States the minimum standards for democratic elections were not met (EU EOM, 2003, pp.1-2).

From the report of *Environmental Rights Action*, the highest level of violence during the 2003 elections was in the south and the southeast, where PDP governors and their acolytes universally succeeded in resisting opposition bids for office. These were also the areas where the greatest rigging and fraud were recorded by independent electoral observers all of which led a non-governmental organization which monitored the elections to conclude:

In parts of Rivers and Bayelsa States observed by our monitors, the elections could be characterized as a low intensity armed struggle. Weapons and firearms of various types and sophistication were freely used (Environmental Rights Action, 2003; see also Human Rights Watch, 2004).

2.3 2007 Elections Summary

Egwu, Leonard and Matlosa explain that the flaws associated with the 2003 elections reached unprecedented heights in the 2007 elections:

On the whole, the April 2007 general elections were regarded as the worst in Nigeria's post-independence electoral history. The reports of domestic and international observers confirm that all stages of the elections were fundamentally flawed. As many of them noted, Nigerian citizens showed a rare commitment to electoral democracy by lining up in the sun and rain to exercise their right to vote despite fears that their votes might not count... Widespread malpractices characterised the voter registration process and voter registers were not displayed at the times prescribed by the law. INEC also failed to put in place the basic infrastructure necessary to support the efficient transmission and collation of results, for which large amounts of funds had been approved - inadequate delivery of voting materials, late opening of polls in most of the states, ballot-box stuffing, Armed gangs were employed to appropriate ballot papers, mark them, add the necessary thumbprint to the register, and stuff the voting boxes at polling booths. All stages of the elections (pre-voting, voting and post-voting) were marked by extraordinarily high levels of political violence - according to official sources 55 people across the country died on election day, 14 April (2009, p.110).

Perhaps most conspicuous, the introduction of armed thugs in 2003 contributed to a trend of increasing violence as disaffected youths who had been armed by political parties evolved into well-armed criminals or anti-government militias by the time of the 2007 elections (Onwudiwe and Berwind-Dart, 2010) all of which further occasioned massive decline in voter turnout.

From European Union mission report, electoral violence of 2007 in Nigeria was *the worst they had ever seen anywhere in the world, with rampant vote rigging,*

violence, theft of ballot boxes and intimidation (CNN, 2011).

From EU EOM summary:

The 2007 State and Federal elections have fallen far short of international and regional standards for democratic elections. . . . The elections were marred by poor organisation, lack of essential transparency, widespread procedural irregularities, significant evidence of fraud, particularly during the result collation process, voter disenfranchisement at different stages of the process, and lack of equal conditions for contestants. There were also numerous incidents of violence, although federal election day saw less violence than state election day (EU EOM, 2007).

Rawlence and Albin-Lackey from their assessment of the reports of varying observer missions found that the 2007 elections were *marred by extra-ordinary displays of rigging and intimidation of voters in many areas throughout the country* (2007) all leading Rotimi Suberu to conclude that if the 2003 general elections were *hardly credible*, the 2007 balloting was *blatantly fraudulent* (2007, p.97).

2.4 2011 Elections Summary

While it was widely assumed that the 2003 and 2007 elections were grossly riddled with widespread irregularities and loss of hundreds of lives, Taft and Haken, found that the 2011 elections that followed represented the period of *the greatest bloodshed in the history of the country since the 1967-70 civil war* as over 800 lives were lost in a space of three days particularly in Kaduna State (see also Campbell, 2015; Reuters, 2011).

On its part, Amnesty International (2011) reported, hundreds of people killed in politically motivated, communal and sectarian violence across the country ahead of presidential and parliamentary polls (Amnesty International, 2011).

That notwithstanding from the *National Association for Peaceful Elections in Nigeria* (NAPEN) report on the April 2011 polls, hundreds of lives were lost from elections related violence across the six geopolitical zones (2011) as glaring from Table 1 following:

Table 1
Number of persons killed per month from election related violence within the 6 geopolitical zones February 2010- June 2011

Month	Zone						Total
	NE	NW	NC	SE	SS	SW	
February	-	2	-	-	12	18	32
March	10	2	-	4	6	3	25
April	61	420	8	2	11	7	509
May	17	6	2	-	2	1	28
June	61	-	-	-	-	-	61
Total	149	430	10	6	31	29	655

Source: NAPEN field work (2011, p.147).

April bears the highest number of person killed due from the post-election violence which was the worst witnessed in this democratic dispensation. The trend in the previous elections had been that most violence was during elections according to NAPEN.

- North Central zone (NC): Kogi, Niger, Benue, Kwara, Plateau, Nassarawa and the FCT.
- North-Eastern zone (NE): Taraba, Borno, Bauchi, Adamawa, Gombe and Yobe
- North-Western zone (NW): Kaduna, Kebbi, Zamfara, Sokoto, Kano, Jigawa, and Katsina.
- South –Eastern zone (SE): Ebonyi, Enugu, Imo, Abia, and Anambra.
- South-Southern zone (SS): Akwa-Ibom, Bayelsa, Cross Rivers, Edo, Rivers and Delta.
- South-Western zone (SW): Oyo, Ogun, Lagos, Ondo and Ekiti.

From Taft and Haken, the 2011 polls violence was largely triggered by the loss of the Congress for Progressive Change candidate Muhammadu Buhari to PDP incumbent Goodluck Jonathan, who had assumed the presidency after the death in office of President Yar’Adua (2018, p.14).

State level elections in two northern states were postponed after violence broke out at the announcement of Goodluck Jonathan’s win and in response to claims of election rigging during the presidential elections (Taft and Haken, 2018).

Despite the high levels of violence, several international observers reported the 2011 elections as one of the most transparent in decades in lieu of improvements over the 2007 elections which contributed to more representative polling, including improved vetting of election officials, re-registering all voters, and greater use of media outlets to reach voters. The 2010 Electoral Act introduced primary elections to select party candidates, although these primaries reportedly lacked transparency and did little to increase the legitimacy of the election (National Democratic Institute, 2011; Taft and Haken, 2018).

That notwithstanding from the European Union Election Observation Mission to Nigeria, 2011:

The 2011 General Elections marked an important step towards strengthening democratic elections in Nigeria, but challenges remain. . . .Regrettably, the Chairman’s resolve to adhere to election regulations was not always supported by the performance of the remaining INEC structure. . . . Violence which broke out in many parts of the country before and after elections caused loss of lives and properties, and several thousand internally displaced persons (EU EOM, 2011, pp. 1-5).

2.5 2015 Elections Summary

Taft and Blyth of the *Fund for Peace* affirm that the 2015 election *took place amidst the backdrop of political violence, lethal criminality, and gang clashes*. The state headquarters of the Independent National Election

Commission (INEC) in Rivers state was burnt down, and large deployments of military and police personnel were mobilized across the state. Allegations of manipulation of votes, theft of ballot materials and intimidation of opponents led to inconclusive results in the legislative elections, and stoked tensions between party candidates and their supporters (2017, p.2).

Reporting on the 2015 elections the European Union Election Observation Mission (EU EOM) affirmed the large-scale violence that blighted the April 11 polls and independently reported 30 deaths nationwide with most occurring in two states, saying *problems were most pronounced in Rivers and Akwa Ibom states* (see The Punch, 2015).

The Braithwaite Memorial Specialist Hospital and Kelsey Harrison Hospital both in Rivers State attest that between January and March 12, 2016, 41 casualties were treated for gunshot injuries while 26 others were treated for machete wounds among other associated discontents that led the then state Commissioner for Health, Samson Parker, to declare:

It behoves on me at this time to announce to the people of Rivers State the emergence of a new epidemic. There is an epidemic of political violence going on in Rivers State... (Okoye, 2017, p.73; see also The Tide, 2015).

2.6 2019 Elections Summary

The 2019 presidential election was postponed six hours before its commencement on 16 February 2019 leading first to abysmal voter turnout in comparison to previous elections.

In essence, with a 35% voter turnout, the country recorded the lowest turnout on the continent attended further by widespread public disenchantment and mistrust in the electoral process excluding arbitrary cancellation of poll results in areas considered strongholds of the opposition (Onapajo and Babalola, 2020).

Writing for *The Punch Newspapers* in the piece tagged *2019 elections: Watered by blood of Nigerians* Onwuka reports that:

The deaths and violence that trailed the 2019 elections left a sour taste in the mouth... Before the end of voting on Saturday, media reports showed that as many as 40 people could have been killed. Different sources reported that as many as 30 could have been killed in Rivers State. Three were killed in Kogi State; two were killed in Bayelsa State; two were killed in Delta State; and one was killed in Oyo State. The dead included civilians shot by soldiers, civilians shot by political thugs, and politicians shot by political thugs and unknown assassins (Onwuka, 2019).

Kunle Sanni who reported for a coalition of Civil Societies in Nigeria found that an estimated 626 persons were killed across the six geopolitical zones in the country between the start of the election campaign and the commencement of the general and supplementary 2019 elections (October 2018-March 2019). North-west region recorded the highest number of deaths with 172 killed

during the elections, while the North-east followed with 146 fatalities. South-south and North-central had 120 and 111 fatalities respectively. Sixty-three people were killed in the South-west, while 14 were killed in the South-east (Sanni, 2019).

From the summary of EU EOM on the 2019 (23 February, 9 and 23 March 2019):

Nigeria's 2019 general elections were marked by severe operational and transparency shortcomings, electoral security problems, and low turnout...the last-minute postponement of the elections put an undue burden on voters, results' collation procedures were not sufficiently robust, and inadequate information was provided to the public. Fatalities escalated and the role of security agencies became increasingly contentious. The leading parties were at fault in not reining in acts of violence and intimidation by supporters, and in abusing incumbency at federal and state levels...Journalists were subject to harassment, and scrutiny of the electoral process was at times compromised ... The suspension of the chief justice of Nigeria by the president a few weeks before the elections was seen to lack due process and reportedly undermined judicial independence (EU EOM, 2019).

From an appraisal of the 2019 elections Emmanuel Remi Aiyede Professor of Public Policy, University of Ibadan explains:

- My review of election observers' reports on the 2019 elections show there were interferences with results collation by political party agents and security agencies with the connivance of electoral commission officials. Inefficiencies in its operations manifested in puzzling discrepancies in records, voters' register data and declared election results.

- For instance, presidential and National Assembly elections were held simultaneously. But there were more votes cast in the presidential elections than the National Assembly.

- Figures on the total number of registered voters announced before the election and the figures announced by electoral commission during the collation in 30 of the 36 states were inconsistent. Furthermore, poor logistics and supply of materials resulted in delays and created room for malpractices. There were also localised incidents of voter intimidation, ballot snatching and destruction.

- My review also concluded that security agencies were deployed without any clear coordination with electoral commission as required by law. The military posed significant challenges and obstruction to the performance of election duties by commission officials in some parts of Rivers State. Reports noted the overbearing and partisan role of the police and the secret service personnel (Aiyede, 2021).

2.7 Impact of Electoral Violence on Voter turnout

Electoral violence in Nigeria and the loss of lives associated with the phenomenon has been widely interpreted but Nwolise (2007) believes they are better typified under three district dimensions in the order of their manifestation as evident from Table 2:

Table 2
Manifestations of the three dimensions of electoral violence by nwolise (2007)

Electoral Violence Type	Dimensions of Manifestation
Physical Violence	<ul style="list-style-type: none"> • Physical assault on individuals during campaigns, elections and when election results are released. • Assassination of political opponents or people perceived as a threat to one's political ambition. • Arson (burning down of public or opponents' houses or cars. • Shooting, shoot-outs. • Killing of individuals. • Partisan harassment by security agents, unlawful arrests, forceful dispersal of rallies, or shootings, wounding or killing of people. • Kidnappings and hostage-taking. • Bombing of infrastructure. • Forceful disruption by thugs of political or campaign rallies. • Destruction of ballot boxes and ballot papers by thugs or partisan security agents. • Armed raids on voting and collation centres, and snatching of ballot boxes and papers from polling agents. • Free-for-all fights.
Psychological Violence conditions of perpetual state of fright	<ul style="list-style-type: none"> • Threats against and harassments by security agents of opponents of the ruling regime or party, which creates political apathy. • Shoot-at-sight orders that breeds fear in voters. • Terror inflicted by political assassinations, which scares people away from participating actively in politics or elections. • Publication or broadcast of abusive, insulting, or intimidating material or adverts • Threats to life through phone calls, text messages, etcetera
Structural Violence effect of accumulated exclusionary and discriminatory politics and ethnic manipulations	<ul style="list-style-type: none"> • Coercion of citizens by government to register or vote. • Exclusionary acts and policies. • Discriminatory acts and policies. • Unequal opportunities for political parties and candidates. • Deliberate changes in dates, venues, or times of events to the disadvantage of others. • Partisan delimitation of electoral constituencies and location of polling booths. • Excessive fees for collecting party nomination forms. • Unfree campaigns. • Reliance on money and brute force instead of moral integrity and competence. • Restraints imposed on voters. • Use of the incumbency factor to give undue advantage to some candidates. • Announcement of false or fraudulent results. • Lengthy delays in announcing election results. • Absence of (adequate) voting materials and election results forms. • Delays in voting. • Absence of electoral officers from polling booths. • Partisan behaviour of police and other security agents.

Source: Nwolise (2007, pp.161-161).

These dimensions of electoral violence among several associated adverse properties are more promptly evident in low voter turnout as observable in tables 3 and 4 following.

Downward trend in number of registered voters against percentage ratio of voter turnout evident from Table 4 following from the Independent National Electoral Commission (INEC):

Table 3
Number of registered versus % of voter turnout during 2011 Presidential polls

State	No of REGD voters	Valid votes cast	Rejected votes cast	Total vote cast	% voter turnout
Abia	1,524,484	1,189,233	11,319	1,200,552	78.75
Adamawa	1,816,094	907,706	43,230	950,936	52.36
Akwa Ibom	1,616,873	1,232,395	19,356	1,251,751	77.42
Anambra	2,011,746	1,157,339	14,707	1,172,046	58.26
Bauchi	2,523,614	1,610,094	40,365	1,650,495	65.40
Bayelsa	591,870	506,693	4,941	511,634	86.44
Benue	2,390,884	1,047,709	41,823	1,089,532	45.57
Borno	2,380,957	1,177,446	45,444	1,222,890	51.36
Cross River	1,148,486	725,491	14,719	740,210	64.45
Delta	2,032,191	1,410,379	19,672	1,430,051	70.37
Ebonyi	1,050,534	502,890	12,573	515,463	49.07
Edo	1,655,776	621,192	15,037	636,229	38.42

State	No of REGD voters	Valid votes cast	Rejected votes cast	Total vote cast	% voter turn out
Ekiti	764,726	261,858	20,066	281,924	36.87
Enugu	1,303,155	814,009	13,310	827,319	63.49
Gombe	1,318,377	770,018	28,665	798,683	60.58
Imo	1,687,293	1,409,850	16,629	1,426,479	84.54
Jigawa	2,013,974	1,140,766	74,008	1,214,774	60.32
Kaduna	3,905,387	2,569,964	64,434	2,634,398	67.46
Kano	5,027,297	2,673,228	72,223	2,745,451	54.61
Katsina	3,126,898	1,639,532	76,392	1,715,924	54.88
KEBBI	1,638,308	924,099	69,057	993,156	60.62
KOGI	1,316,849	561,781	19,551	581,332	44.15
KWARA	1,152,361	414,754	20,615	435,369	37.78
LAGOS	6,108,069	1,945,044	74,072.00	2,019,116	33.06
NASSARAWA	1,389,308	695,337	24,301.00	719,638	51.80
NIGER	2,175,421	1,019,167	71,373	1,090,540	50.13
OGUN	1,941,170	453,715	27,270	570,985	29.41
ONDO	1,616,091	486,837	12,422	499,259	30.89
OSUN	1,293,967	512,714	21,542	534,256	41.29
OYO	2,572,140	863,544	37,195	900,739	35.02
PLATEAU	2,259,194	1,411,117	23,850	1,434,967	63.52
RIVERS	2,429,231	1,854,116	21,360	1,875,476	77.20
SOKOTO	2,267,509	909,808	63,434	973,242	42.92
TARABA	1,336,221	739,065	31,625	770,690	57.68
YOBE	1,373,796	622,115	40,798	662,913	48.25
ZAMFARA	1,824,316	942,679	36,643	979,322	53.68
FCT	943,473	396,294	15,485	411,779	43.65
TOTAL	73,528,040	38,209,98	1,259,506	39,469,520	53.68

Source: Independent National Electoral Commission (INEC), Abuja.

Drawing from (INEC) the International Institute for Democracy and Electoral Assistance (IDEA) Voter Turnout Database further evidence shows downward trend and continued steady decline in presidential election turnouts since 2003 all occasioned by electoral violence.

Table 4
Nigerian voter turnouts for presidential elections (2003 to 2019)

Year	Voter turnout (%)	Total votes	Registration	VAP turnout (%)	Voting Age Population (VAP)
2003	69.08	42018735	60823022	65.33	64319246
2007	57.49	35397517	61567036	49.85	71004507
2011	53.68	39469484	73528040	48.32	81691751
2015	43.65	29432083	67422005	32.11	91669312
2019	34.75	28614190	82344107	26.87	106490312

Source: International IDEA (2019).

From Onwudiwe and Berwind-Dart writing for the *United States Institute of Peace*:

Since the rebirth of Nigeria's democracy in 1999, violence of varying levels has been an unfortunate staple of Nigerian elections and numerous *drivers of election violence remain unaddressed* (2010, p.3).

The Independent National Electoral Commission (INEC) was established in 1998 as part of the transition process that ushered in the 4th Republic. On INEC's watch since 1999, three electoral reform processes have taken place and none has succeeded in evolving solutions to the numerous *drivers of election violence* at the core of which is protection of lives.

If today we are able to recharge our phones and transfer funds from the cheapest available phones without subscribing to internet data; we also can *send 1 to vote candidate A* and *2 to vote candidate B*; all from our phones without exposing ourselves to the risk of loss of lives from stray bullets and simultaneously conveniently vote the candidate(s) of our choice.

3. PROCEDURE

This study was carried out using focus group discussion and documentary assessment while content analysis was adopted in the assessment of secondary data.

Content analysis was successfully introduced as a systematic method of study within media studies by

Harold Lasswell in 1927 making the method the most common among media practitioners. The method is also employed to study broad range of *texts* from transcripts of interviews and discussions in clinical as well as in social research works.

Neuendorf describes the method as *the primary message-centred methodology* (2002).

The usefulness of the method may be derived from Lasswell, Lerner and Pool's affirmation that:

Content analysis operates on the view that verbal behaviour is a form of human behaviour, that the flow of symbols is a part of the flow of events, and that the communication process - an aspect of the historical process ... (1952, p.34).

4. THEORETICAL FRAMEWORK

Eminent Jurist and Elder statesman, Professor Ben Nwabueze describes election rigging as electoral manipulations and palpable illegalities committed with a corrupt, fraudulent or sinister motive to influence an election in favour of a candidate(s) by way such as illegal voting, bribery, treating and undue influence, intimidation and other form of force exerted on the electorates, falsification of results, fraudulent announcement of a losing candidate as the winner (without altering the recorded results) (Nwabueze, 2003).

4.1 Elitism

Though, electoral fraud and violence may be said to manifest in varied forms, most if not all are always sponsored and this sponsorship is carried out on the consent of competing candidates and their acolytes who more often than not are loyal to another group higher in the echelon. This latter group is usually composed of the wealthiest and politically influential personalities in society and they largely determine outcomes socially and politically.

Ebiede explains elsewhere that *neopatrimonialism* tends to view elections as a process dominated by elites competing for political power working hand-in-hand with a downline of *clients* (Ebiede, 2018).

Within this frame Human Rights Watch, explain in many parts of Nigeria, successful candidates are often those who are *sponsored* by wealthy and powerful individuals and dependence on the latter is the result of a system in which few aspirants to political office can rarely raise on their own the substantial resources usually necessary to compete in the country's violent and corrupt political system (2007).

From the annals of the theories of power, elitism presupposes that in all societies and political organisations there exists a small class of rulers and decision-makers that perform key political functions while also monopolizing power. They are distinguished from the remaining largely passive remnants of society who are marginalized otherwise excluded from political affairs.

Proponents of elitism deny the possibility of a *classless society* while holding that elites are both indispensable and inevitable and that any attempt at abolishing any given set of elites would merely result in their replacement by another in a fashion that bespeaks an unending cycle (see Pareto, 1935; Barry, 2013; Mosca, 1939; Joseph, 1999).

Among major contributors to this idea, Mosca identifies that in many societies of the world there also exists a sub-group who facilitate communication between the elite and non-elite majority in society and who constitute the crop of *elite-in-the-making* otherwise potential candidates for elite recruitment, and more often than not, the elite class extend *blessings* to chosen members of the sub-elite group by *rewarding* them with political positions among other similar *favours* (Mosca 1939).

Albert on his part explains that:

Political godfathers use their influence to block the participation of others in Nigerian politics. They are political gatekeepers: they dictate who participates in politics and under what conditions. The role of such people is highly injurious to the advancement of popular, participatory democracy in Nigeria. Political godfathers are responsible for most of the pre and post-election violence that we have seen in Nigeria. It is thus necessary to have a better understanding of their activities as a way of generating new ideas on how to make the political process in Nigeria less violent and more democratic (2005, p.82).

Albert's postulations from the foregoing inevitably brings to mind Schattschneider's critique of pluralist democratic theories that:

The flaw in the pluralist heaven is that the heavenly chorus sings with a strong upper-class accent (1960, p.35).

Which summarily implies domination of the few over the vast majority even where democratic ideals are made to fill the pages of the paper work.

That notwithstanding, elite theorists adopt two rudimentary frames of reference.

First, that certain aspects of human nature make elites inevitable and second, that elites are necessary for any social organisation to function effectively (Goertzel, 1976).

This theory is drawn to support this study because the elites of any given society or organisation are not only indispensable but are required to make political and social changes take place.

For example, the quest for transition from the traditional *under-the-tree-voting-booth* vote casting system to an SMS enabled one advocated by this study may not be rapidly obtained without the tacit support of some elite group within the system irrespective of the fact that forces of social change in society are often not premeditated.

Nonetheless the SMS vote casting system such as proposed by this study may be most easily introduced where measurable political consensus exists regarding its

merits and such a consensus may expressly be fostered by the governing elite save civil societies press for a referendum on the issue or lobby it through.

Political actors may, however, oppose the scheme either in principle, because they believe in their ability to successfully rig themselves to power under conventional means hence may come up with objections to infuse widespread distrust on the proposed scheme; or because they simply would like to scuttle the prospects of the proposing parties receiving the credit for modernizing such aspect of the electoral process (see also International IDEA, 2011, p.19).

Still according to International IDEA (2011) it is plausible to seek widespread support towards the approval of legislative changes required to introduce electronic voting systems even where no statutory clause censors changing the voting system.

For example Inibehe Effiong writing for Premium Times in a recent report ahead of the 2023 elections highlights that the Supreme Court has expressly invalidated the use of smart card reader (SCR) issued by INEC for authentication of permanent voters card on the account of lack of statutory provision for its use in the Electoral Act.

From Effiong:

The view of the Apex Court is that Guidelines issued by the INEC on the use of the SCR cannot override the extant provisions for manual accreditation under the Electoral Act (2020).

4.2 Critical Theories

It is pertinent to highlight that governance/civil society relations around the world and Africa in particular have more often than not been identifiable within a *they* and *we* framework of analysis within which *workers* or *civil populace* on the one side are pitched against *management* or *governing class* on the other. For example, in a series of peaceful demonstrations during the 1890s when British colonial overlords stripped all Indians of the right to vote Mahatma Gandhi organised and fought anti-Indian legislation up to the law courts but remarkably through a philosophy of non-violent resistance which eventually procured a blueprint for future social movements around the world.

For example, during '60s in the United States human rights activist Martin Luther King (Jr.) initiated a series of peaceful protests aimed at compelling governance at the time to enfranchise the black population during a period when several social rights were virtually *whites only*.

Ultimately, exponents of critical approaches consider that there are two camps pitched against each other in society representing the two major traditional classes identified within Marxist terms as *labour* and *capital*.

From the annals of industrial relations theoreticians their meeting point in modern times is the battle ground

of *employer/employee* relations. Significantly, conflict is inevitable within these relations, hence both sides functionally operate amidst such attitudes as *low-trust*, *combat readiness* and a desire to *preserve an arm's length relationship* due from the *low trust* profile. Hence, both camps envision themselves in a state of *trench warfare* (since management constantly attempts to increase the rate of exploitation; while workers remain constant in seeking improved working conditions) and for these interconnected reasons sprouts an *adversarial* frame of reference of competing actors (see Walton and McKersie, 1965, p.18, 122; Purcell, 1981, p.50; Blumberg, 1968, p.40; Burawoy, 1979; Murakami, 1995).

The same goes for the masses/civil societies on one hand and the governing elite on the other hand.

4.3 Rational Choice Theory (RCT)

Some behavioralists assume the act of voting ricochets between the premises of *socially defined practice* on one hand and as an act of *rational individual choice* on the other.

Rational choice theory (RCT) identifies that individuals make choices based on their self-interests with reference to what might procure them the greatest benefit.

In other terms *an individual acts as if balancing costs against benefits to arrive at action that maximizes personal advantage* (Friedman, 1953; see also Elster, 1989; Scott, 2000).

With reference to *socially defined practice*, some adhere to social norms, even when benefits do not arise from adhering to them; yet individuals with self-interest would not always take part in collective action to accomplish common goals.

For example, Olson raises *why would some refuse to pay tax despite the fact that the monies derived from taxes are used to develop our society; improve basic amenities and security?* (Olsen, 1965).

That notwithstanding Adam Smith is considered the first rational choice theorist in lieu of his consideration that human nature always tended towards self-interest which resulted in the unintended widespread delivery of goods and services required in society because the individual in advancing his own gain indirectly serves public interest in providing services for which he is eventually paid (1776).

It thus happened that RCT entered among the tools of economic analysis that was widely employed by emerging economists after Adam Smith since he is ranked among classical economists.

The RCT idea however transited to other social science disciplines in the course of time. For example, during the early '70s James Buchanan and Gordon Tullock considered that the average individual acts on the basis of the same overall value scale when he participates in market activity and in political activity (1962).

This consideration led to Tullock's corollary that:

Voters and customers are essentially the same people. Mr. Smith buys and votes; he is the same man in the supermarket and in the voting (1976).

On his part, Becker concluded that RCT is a *unified framework for understanding all human behaviour* (1976).

Downs was considered the first to apply RCT to electoral behaviour and party competition consequent to which RCT has been widely employed to explain such phenomena as voting behaviour, the actions of politicians and the handling of political issues (1957).

Summarily, the adjudged RTC frame of reference hinges on the consideration that individual actions and social actions are optimally chosen to entirely foster their own welfare. Yet, since individuals are self-calculating, self-interested and self-maximizing, it is difficult for the latter to participate in collective action or work towards the good of the public unless the public good would lead ultimately to their own interests. In other words, the individual will explore the possibility of getting involved in collective activity only if it amount to self-improvement.

At the helm of its censure however, RCT does not account for choices that are made due to situational factors that are somewhat complex and context-dependent; like emotional dispositions, environmental factors and the way the choices may be presented or posed to the individual.

For example, with reference to voter turnout in Nigeria, *the way the choices of vote casting are presented; the character of the registration processes; the intimidating character of the environment and even the range of candidates available to be voted for* rank among several other factors not mentioned that undermine the original choice that would have been made by the individual from where we highlighted in the introduction section that *an unhealthy electoral system may indirectly disenfranchise eligible voters by exposing them to physical, psychological and structural violence* which leads them into decisions they would not ordinarily have taken.

4.4 Technology Adoption Theories

Worth mentioning, yet not particularly relevant to this study are information and communication technology (ICT) adoption theories.

ICT adoption models are characteristically used to assess the levels of *intention to use* or *accept new technology*. These are espoused within varying ranges of technology acceptance models like the *theory of reasonable action* (TRA) (Fishbein and Ajzen, 1975), *theory of planned behavior* (TPB) (Ajzen, 1985, 1991), *technology acceptance model* (TAM) (Davis, 1989; Davis, Bogozzi and Warshaw, 1989; *diffusion of innovations theory* (DOI) (Rogers, 1995); *decomposed theory of planned behaviour*, (DTOB) (Taylor and Todd, 1995), *technology acceptance model 2* (TAM2) Venkatesh and Davis (2000) and *technology acceptance model 3* (TAM3) Venkatesh and Bala (2008); These were conscripted

into *unified theory of acceptance and use of technology* (UTAUT) by Venkatesh, Morris, Davis, and Davis, 2003) to forge an integrative approach to acceptance and use of technology.

Technology acceptance models however are not chosen to support this study because e-banking particularly cell phone banking (from where we propose e-voting and specifically cell phone voting) has stepped above the level of *intention to adopt technology* in present Nigeria where market women actively use their phones for trade transactions.

In other terms the use of cell phones for purposes other than just making calls now ranges within familiar technology in Nigeria as will be observable within the literature review section following.

5. LITERATURE REVIEW

This section is divided into two parts. The first subsection concerns factors impacting on voter turnout on a general scale as well as identified factors impacting on voter apathy in Nigeria.

The second subsection identifies trends in electronic voting around the world capturing related e-areas within which the proposed e-voting by short message service (SMS) is premised.

The second subsection further attempts a conceptual clarification of related terminologies, particularly; e-banking, e-governance, e-participation and e-democracy. The section winds up with justifications for the SMS enabled cell phone voting in Nigeria, highlighting alongside some of its numerous merits.

5.1 Voter Turnout and Voter Apathy

Carbone and Cassaini consider that elections can be drivers of and springboards for further democratic achievements (2016), yet, only when there exists active participation within the arena.

Within this realm Verba, Schlozman, and Brady consider that political participation concerns all such activities aimed at influencing or impacting on the evolution and implementation of public policy not excluding actions that bear on the selection of candidates to political office carried out without prospects of some immediate reward or financial compensation (1995, p.38; see also Verba and Nie, 1972).

According to International Institute for Democracy and Electoral Assistance (International IDEA) voter turnout is one of the crucial indicators of how citizens participate in the governance of their country (2016, p. 13).

Higher voter turnout is in most cases a sign of the vitality of democracy in such a country, while lower turnout is associated with voter apathy and mistrust of the political process (see Blais and Dobrzynska, 1998; Lindberg 2004; Altman and Perez-Linan 2002, Lijphart, 1997).

Bratton on his part avows that *voter registration* accounts for the single most important determinant not only of a citizen's behaviour but also of his overall participation, outweighing other institutional, cultural, or social considerations (1999, p.570).

Voter behaviour may be affected by a multitude of factors depending on the country in question and these factors do not categorically bear equally on the entire population (International IDEA, 2016).

In other words, some factors may affect only certain groups of the population, such as women, the young or particular ethnic or tribal groups and so on.

For example, the lack of freedom of movement for women or some other restrictive traditional practices may

bear negatively on their turnout during elections.

From another dimension, younger people may exhibit voter apathy because their demands are not being addressed by the political parties or leaders competing in elections.

Ultimately, several factors may impact on voter apathy and voter turnout and the interplay of these factors differ from country to country.

These variations occasioned wide ranging empirical studies (see Blais and Dobrzynska, 1998; Geys, 2006).

International IDEA (2016) attempted a typology of factors affecting voter turnout that we found useful to categorize in Table 5 following.

Table 5
Factors impacting voter turnout

Associated Factors	Manifestations
S o c i o - economic factors	Population size. In countries with smaller populations, the impact of each vote is greater and thus more people turn out to vote in an election.
	Population stability. People who reside in the same area for longer periods of time usually have better knowledge of local issues and candidates, and are also more concerned about the political decisions that affect their daily lives. Thus, they will be more likely to vote in an election. Frequent movement from one place to another, on the other hand, may decrease people's desire to engage in the political process.
	Economic development. People are more informed and engaged in political processes in developed countries, while economic adversity negatively affects political participation because economic hardship can result in voter apathy and lead people to withdraw from politics and focus on meeting their basic needs.
P o l i t i c a l factors	Perception of the political issues at stake. The degree to which different election outcomes might lead to a different direction in the policies of the government on important issues will affect turnout. If, for example, the political parties contesting an election have different agendas on how to resolve a specific economic problem that affects the majority of the population (for example lack of housing), this will have a significant impact on citizens' desire to vote in order to elect the party that best represents their views on the issue.
	Campaign expenditures. The involvement of large amounts of money in election campaigns, mainly from private donors, is creating intense debate about the impact of the richest segments of the population on national policies.
	Political fragmentation. The number of parties that contest an election can affect voter turnout, but there is no agreement on whether fragmentation increases or decreases turnout. Some argue that the availability of more parties gives more options to voters, and thus increases their desire to vote. However, the opposite may also be true as too many options can confuse voters and make it difficult for them to judge whether their vote will have the desired impact on the election outcome.
I n s t i t u t i o n a l factors	Electoral system. Voter turnout is higher in elections that use systems of proportional representation than in those that use plurality/majority systems.
	Compulsory voting. When voters are legally obliged to vote, turnout increases dramatically, as in the case of Australia. However, in some countries with compulsory voting the sanctions for not voting can be weak or the regulation is not well observed, which results in lower turnouts.
	Concurrent elections. When several elections take place on the same day voter turnout is usually higher since an individual voter may be motivated to cast his/her vote in at least one of the elections.
I n d i v i d u a l factors	Registration requirements. The existence of individual registration requirements that must be fulfilled by the voter creates an additional burden for voters, because registration requires time and energy. In some settings, registration may also entail direct financial costs such as for travel to registration centres. These burdens can affect registration rates and consequently voter turnout. Automatic registration (i.e. the use of civil registries to create voter lists) enter as efficient ways of removing registration-related barriers.
	Voting arrangements. The design of various types of voting arrangement can have an impact on voter turnout. These include single or multiple voting days, elections taking place on rest or working days, the availability of voting technologies, the proximity of polling stations and alternative voting procedures, such as advance voting, postal voting or proxy voting.
	Age. Age is one of the most important factors to affect voter turnout. Youth voter apathy is a primary source of concern in many countries.
I n d i v i d u a l factors	Education. Higher levels of education are not expressly associated with higher rates of voter turnout. Yet, in the least developed countries, people affected by poverty do not have access to basic education that would enable them to understand how their vote is expected to affect the direction of government policies.
	Political interest. Societies that encourage citizens' interest in the political process through the introduction of citizenship education in schools, among other things, can boost voter participation.
	Civic duty. A perception of civic duty is one of the most crucial factors affecting attitudes to voting in elections.

Source: Evolved from International IDEA (2016, pp.35-40).

From Table 5 above it is glaring that a multitude of factors affect voter turnout and these factors appear in

complex combinations in each country and may change in the course of time. An understanding of these factors

are however relevant to public policy making and implementation with particular reference to eliminating barriers obstructive to voter participation.

5.1.2 Factors responsible for political apathy in Nigeria
For Nigeria several factors have been identified as casual to growing political apathy and consequent low voter turnout.

From their fieldwork during which samples were drawn from 12 states, 27 LGAs, 43 wards in rural areas and 60 wards in urban areas, the joint team of Independent National Electoral Commission (INEC) and German based Friedrich-Ebert-Stiftung (INEC and FES Nigeria) in 2011 found that among several factors that occasion voter apathy, *violence* and *electoral fraud* were most significant see Figure 1 following:

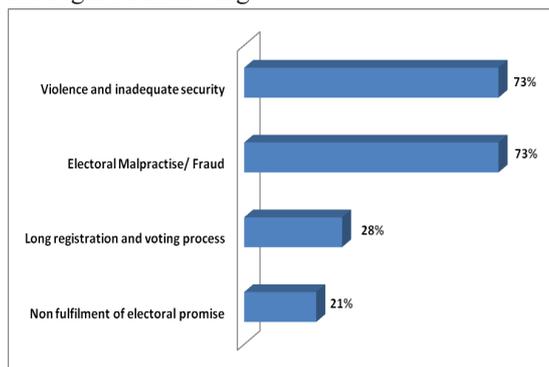


Figure 1
Reasons for voter apathy
Source: INEC and FES Nigeria, (2011, p.49).

According to *INEC and FES Nigeria* in almost all the regions, violence and fraud were major reasons identified by respondents for voter apathy at a ratio of seven to ten respondents.

In the North East, where serious apprehension was nursed due to pre-election violence in certain areas, 61% felt that violence was the major reason for voter apathy. This, however, was much lower than the figures returned for the South South (86%) and the South West (83%), reflecting the extent to which violence in general and election-related violence in particular had become an endemic problem in virtually every part of the country (INEC and FES Nigeria, 2011, p.50).

5.2 From E-banking to SMS Vote-casting System

Prof. Elaigwu Isawa affirms that the electoral process in Nigeria has been crises-ridden since 1999 with each election turning out worse than earlier ones (2007, p.9).

From his 1979 entry *The Story of the Nigerian General Elections*, Onafagoro lamented that *FEDECO staff were variously accused of aiding and abetting the perpetration of electoral fraud* (Onafagoro, 1979; see also Kurfi, 1983).

The scenario was no different during the 1983 elections during which two states (Oyo and Ondo) alone accounted for as many as 70 lives lost (see May, 1983).

Edoh on his part highlights that rigging became integrated into Nigeria's politics during the first republic noting that:

During the 1959 elections under the supervisory eyes of the British, incidents of violence, stuffing of ballot boxes as well as obstructions and intimidations of opponents were reported here and there. (2003, pp. 70-71).

What however makes the scenario most worrisome is the continued loss of innocent lives that characterize the elections owing to which this proposal makes a case for SMS enabled vote casting system (SMSEvcs) to conclusively checkmate the spate of violence during elections in the country.

To this end, we shall take a screenshot of e-areas or sectors within which SMS vote-casting system is premised.

5.2.1 E-governance

E-governance concerns the use of ICT to promote the functional efficiency of government processes to achieve broad societal goals in democratic fashion with a view to improving benefits to all parties - citizens, businesses and all government. Hence it implies close knit interaction between the governments, citizens and business communities (G2C/C2G or G2N for NGOs, G2B for business), and between different arms of government (see (Council of Europe, 2009; Kushchu and Kuscu, 2003; Sangita and Dash, 2005; Whittal, 2008).

E-governance advocacy is predicated on growing public apathy towards active political participation worldwide. Although most citizens, only interact with government during elections, there are several ways in which citizens can participate on an on-going basis.

E-participation is the support and enhancement of democratic participation and encompasses those sectors of e-democracy where civil society and businesses are involved in drawing up formal and informal agendas and shaping and taking decisions (Council of Europe, 2009, p.13).

E-participation is necessary to ensure that citizens are able to make inputs for the consideration of decision-makers, especially in situations where the decisions taken affect their lives directly. Not allowing for participation limits a government's sources of options and ideas, and also exposes the process to corruption. In some cases politics can be difficult to understand and therefore can be a barrier to participation.

Public participation is not summarily premised only on events like voting in elections, protests or demonstrations, rather it is an on-going and evolutionary process requiring both change in public perception and government commitment to explore new systems of participation, administration, service delivery, decision-making and policy making (see Brücher and Baumberger, 2003; Macintosh and Whyte, 2008; Creighton, 2005; Pahad, 2005).

While the evolution of the Nigerian National Information Technology (NNIT) policy in year 2000 may be referenced as marking the introduction of theoretical e-governance in Nigeria, the implementation of e-banking beginning from 2012 may simultaneously be referenced as marking the commencement of its active practice.

Significantly, the active practice of e-governance though still in its evolutionary stage in Nigeria has recorded immense applause.

For example, from its spotlight tagged: *The virtuous circle of connectivity in Nigeria*, GSM Association highlights that Nigeria ranks atop as the most improved country in Sub-Saharan Africa in the Mobile Connectivity Index as at 2019 and the seventh most improved globally (2020, p.39).

This progress was driven by a range of improvements like enabling regulatory framework espoused by the country in this direction and as a result Nigeria now has one of the most affordable handset costs in the world besides a mobile penetration of 187 million active cell phone users of the country's 212 million population as of 2021 (see NCC, 2021).

From yet another dimension the country's Online Service Index score for **e-government** increased from 31% in 2014 to 52% in 2019, while the number of active mobile apps developed per person increased fivefold over the same period. As of 2019, Nigeria was home to almost 2,000 mobile apps developers. The country also scored 53 in both the accessibility of apps in local language and the accessibility of top ranked apps, compared to a regional average of 32 (GSM Association, 2020).

Following from the above progress, mobile internet penetration doubled in six years, from 16% in 2014 to 32% in 2019, while mobile ownership reached 50% and in 2019, there were more than 7.5 million new mobile internet subscribers in the country (GSM Association, 2020, p.39).

On yet another scale, the resounding success of e-banking within the country makes a case for the **e-upgrade** of other ailing sectors within the socio-political landscape.

Among the many sectors needing immediate e-upgrade (evident from the many discontents associated with the present manner of conducting elections and with particular reference to lives lost) is the electoral sector and one in dire need of urgent **e-attention**.

5.2.2 Electronic Voting

Within the frameworks of e-governance and e-democracy, **electronic voting** (otherwise e-voting) describes the option of employing information and communication technology (ICT) enabled devices to vote in elections. Usable appliances within this respect may include: personal computers (PCs), personal digital assistants (PDAs) or mobile phones.

E-voting is distinguishable within the framework

of electronic democracy (e-democracy) which informs the use of ICT to support the conventional democratic decision-making processes (see also Brucher and Baumberger, 2003; Ayo, 2006; Lallana, 2004).

E-voting enables voters to cast their votes electronically away from traditional paper-based voting system that requires voters to arraign themselves in queue at polling stations.

The Council of Europe describe e-voting as an election or referendum that involves the use of electronic means in at least the casting of the vote other than traditional paper-based voting system (Council of Europe, 2010).

Abandah, Darabkh and Qunsul agree that e-voting provides accuracy and efficiency to electoral processes while also improving voter participation and preventing electoral fraud (2014).

5.2.2.1 E-banking and Prospects of E-voting in Nigeria

First, **electronic banking** (e-banking) was triggered by the Central Bank of Nigeria's cashless policy which began in 2012.

The apex bank rightly considered that a cash based economy imposed huge costs on virtually all parties, namely, the banking system, individuals, and the government.

The higher the velocity of cash in use, the higher the processing cost borne by those in the value chain. Particularly, the cost of printing new notes to replace torn or worn out ones due from frequent handling was overbearing (see Osazevbaru and Yomere, 2015, p.2).

Hence, among other associated factors the policy was aimed at delivering efficient banking system given rise to varying e-banking options (see Central Bank of Nigeria, 2011).

A cashless economy is regulated to have the least needed amount of cash in circulation, the rest of which is transacted electronically via e-banking options identifiable within devices like personal computers and mobile phones among other digital devices that enable customers to conduct financial transactions remotely (see Daniel, 1999; Okoye and Ezejiofor, 2013).

5.2.2.1.1 Notable E-Banking Channels

Internet banking – here an account holder manages varying banking transactions through internet enabled devices like personal computers, pagers, and their like.

Automated Teller Machine (ATM) - describes a machine, activated by magnetically encoded card or other medium that can process a variety of banking transactions like deposits, withdrawals and transfer of funds between accounts.

Point of Sale (POS) (point of purchase POP otherwise checkout). This is used first, to refer to the location where a transaction occurs; while the device employed for *checkout* refers to the POS terminal (portable hardware used for checkouts), It is principally the equivalent of an electronic cash register that enables users

to effect transfer of funds and other bill payment using credit/debit cards (NIBSS, 2015).

Mobile Phone Banking: This concerns banking services enabled by cellphones using menu-driven options within which account balances are checked, funds transferred, bill payments and more, anywhere, anytime, in 24/7 fashion (see also Mlitwa and Tshetsha, 2012; Segun, 2011; Akpan, 2009).

Several findings affirm that e-banking has improved customer satisfaction, reduced frequency of use of banking halls for banking services, reduced waiting time for customers, while also enabling customers to control their account and more (see Agwu and Carter, 2014; Worku, Tilahun and Tafa 2016; Darvish, Moayeri, Faradonbe, Naderifar, 2013; Paul, 2013).

Essentially, e-voting follows in the precedents of e-banking. One simply needed to precede the other to create requisite awareness with reference to inaugurating familiarity with technology.

In Nigeria, e-banking met with stiff opposition in the early stages of its introduction. Even those that had received debit cards nursed phobia using the ATM in the early stages and would enter banking halls seeking to make withdrawals. It took the politeness and patience of bank customer-care staff to persuade and convince people that their funds were safe in using e-devices.

Today, people enjoy the benefits of e-banking and very many have even forgotten their signatures since within the earlier tradition you sign and sign again on slips to make withdrawals within banking halls.

Again, with numerous Point of Sale (POS) outlets all over the place even the ATM is now a *once in a while* place that people go to; coupled again with instant *receive* and *transfer* via the commonest cell phone. A similar story would also be told concerning the present traditional vote casting system when it is replaced by SMS enabled phone voting.

In other terms, we do not lose count of the fact that e-voting may well already be in government agenda as a *sector-in-the-waiting* for migration to the **e-ways** of doing in lieu of evident progress the country is making in the direction of e-governance.

5.2.3 E-Democracy

By employing **e-based** connections to ministries, governments departments, and businesses government processes become more streamlined, proficient and less dependent on human physical interactions while enhancing the process of governance in the society (Adegoroye, Oladejo and Yinus, 2015).

E-democracy encompasses social, economic and cultural conditions that enable the free and equal practice of political self-determination leading to a more simplified process and access to government information for public-sector agencies and citizens. It is also linked to complex internal factors, such as political norms and citizen

pressures (Council of Europe, 2009; Lee, Chang and Berry, 2011; Richardson and Emerson, 2018).

From the Council of Europe, (2009) electronic democracy offers new opportunities to enhance public engagement and participation in democratic institutions and democratic processes. In this way, it helps empower civil society and improve policy-making procedures. E-democracy's strength lies in its capacity to facilitate both bottom-up and top-down initiatives, and its growth can contribute to a redefinition of political priorities and a transformation of the ways our local and global communities are governed (2009).

5.2.3.1 Sectors of E-Democracy (drawn from Council of Europe, 2009)

From the Council of Europe e-democracy encompasses such sectors as:

- e-parliament,
- e-legislation,
- e-justice,
- e-mediation,
- e-environment,
- e-election,
- e-referendum,
- e-initiative,
- e-voting,
- e-consultation,
- e-petitioning,
- e-campaigning,
- e-polling and
- e-surveying;
- E-democracy involves
- e-participation,
- e-deliberation and
- e-forums.

E-parliament is the use of ICT by elected representative assemblies, their members and political and administrative staff in the conduct of their tasks, in particular for the purposes of actively involving citizens. Hence, it concerns legislative, consultative and deliberative assemblies at inter-national, national, regional and local level; there are many stakeholders: members of parliament, political and administrative staff, electors, citizens, and the media.

E-parliament encompasses, inter alia, aspects of e-legislation, e-voting, e-petitioning and e-consultation, and can make for better information and improved management of communication with members, staff and administration, and for contact with citizens. While e-parliament underpins the principle of representative democracy, it can provide tools for changing the culture of representation in such a way as to ensure a more inclusive, deliberative and participatory form of democracy.

E-legislation is the use of ICT for drafting, commenting on, consulting, structuring, formatting, submitting, amending, voting on and publishing laws

passed by elected assemblies. It makes legislative procedures more transparent, improves the content and readability of legislation, provides better access to it, and thereby enhances public knowledge of the law.

E-justice is the use of ICT in the conduct of justice by all stakeholders of the judiciary in order to improve the efficiency and quality of the public service, in particular, to individuals and businesses. It includes electronic communication and data exchange, as well as access to judicial information.

As the judiciary is a key component of democracy, e-justice is an essential facet of e-democracy, its main goal being to improve the efficiency of the judicial system and the quality of justice. Access to justice is one aspect of access to democratic institutions and processes.

E-mediation is the use of ICT to find means of resolving disputes without the physical presence of the opposing parties: e-tools can serve as mediators.

E-environment is the use and promotion of ICT for the purposes of environmental assessment and protection, spatial planning, and the sustainable use of natural resources, and includes public participation. Using ICT to introduce or enhance public participation can improve democratic governance in respect of environmental issues.

E-referendums e-elections, and e-initiatives are political elections, referendums or initiatives in which electronic means are used at one or more stages.

E-voting is an election or referendum that involves the use of electronic means in at least the casting of the vote. *Remote e-voting* speeds up procedures, enables voting to be electronically monitored and votes electronically registered, and facilitates participation from greater distances and by persons with special needs.

International IDEA add that e-voting is often seen as a tool for making the electoral process more efficient and for increasing trust in its management. Properly implemented, e-voting solutions can increase the security of the ballot, speed up the processing of results and make voting easier (2011, p.2).

E-consultation is a way of collecting the opinions of designated persons or the public at large on a specific policy issue without necessarily obliging the decision maker to act in accordance with the outcome. There are various forms of e-consultation, formal and informal, public-authority regulated and unregulated.

E-consultation can invite and collect various opinions whilst providing an inclusive space for deliberation or for simply following the debate; it allows decisions to be directly or indirectly influenced.

E-initiatives allow citizens to develop and put forward political proposals by means of ICT and thus engage in political agenda setting.

E-petitioning is the electronic delivery of a protest or recommendation to a democratic institution: citizens sign a petition and possibly engage in a discussion on the subject by putting their names and addresses online.

As is the case with petitions to parliament in general, e-petitions take various forms all of which aim at facilitating citizen input to parliament and other democratic institutions and discussion and deliberation among citizens.

E-campaigning is engaging by electronic means with people in a coordinated way and encouraging people to engage with one another in order to mobilise individuals in electoral and other campaigns and/or persuade them to promote a particular cause, in an endeavour directly or indirectly to influence the shaping or implementation of public policy.

E-campaigning includes **e-electioneering** that is, e-campaigning in connection with elections, and **e-advocacy**, that is, e-campaigning in connection with other issues.

E-polling/e-surveying allow opinions to be obtained informally, by electronic means, from random or selected persons, usually in connection with a proposal and a set of possible responses (Council of Europe, 2009, p.17-18).

5.2.3.2 E-Democracy and Technology

ICT has led to major changes in the structure and culture of communication, which have to be taken into account when designing or redesigning democratic institutions and processes.

While e-democracy is dependent on modern, suitably adapted ICT, more and better technology does not in itself lead to more and better democracy.

Technology is an enabler, not a solution; it is a tool that can support and enhance democratic processes.

Technology is of secondary importance to democratic considerations. It must not be the reason for introducing e-democracy.

Technology is not neutral but has built-in values and its own methodology.

A general awareness of the characteristics of technology is necessary and needs to be promoted.

Responsibility for the technology used lies with the institution in charge of the e-democracy tool. It is of prime concern that the ICT in question should be designed to perform securely.

Making the source code available to the public enhances transparency. The use of open-source solutions can enhance trust, as anyone can, to some extent, inspect the solution adopted. Open source is not a substitute for the open standards/specifications requirement.

The use of environment-friendly, sustainable *green* technology for e-democracy is of benefit to the public and to democracy (Council of Europe, 2009, p.17-18).

5.2.4 How is E-Democracy to Be Introduced?

The Organisation for Economic Co-Operation and Development (OECD) describes **e-participation** or active participation as a relationship based on partnership with government in which citizens actively engage in defining the process and content of policy-making. It

acknowledges equal standing for citizens in setting the agenda, proposing policy options and shaping the policy dialogue – although the responsibility for the final decision or policy formulation rests with the government (OECD, 2001, p.23).

By not allowing citizens only to decide between offered choices or comment on a fixed *menu* of options, government loses the opportunity for maximum input from citizens, while citizens are unable to express their true thoughts (OECD, 2001, p.55).

Sclove adds further that:

Decision-making processes are democratically inadequate, even spurious, unless they are combined with relatively equal and extensive opportunities for citizens, communities, and groups to help shape the decision-making agenda (1995, p.39).

E-democracy makes for greater individual and group participation, allows those whose voices are heard less often or are less powerful to express their views, and fosters participation on an equal footing. It can lead to more participatory forms of decision making and democracy.

E-democracy can be introduced by any stakeholder. It can be initiated top-down, namely, by public authorities, at all levels of government, or bottom-up, that is, by citizens. It can also be horizontally designed. Each approach has its merits. (2009, p.15).

5.2.5 Merits of E-Democracy

The Council of Europe outlines the merits of e-democracy as follows:

a. E-democracy can result in a form of democracy which can be seen and observed, accessed and interacted with from anywhere, by all stakeholders.

b. E-democracy can bring together policy makers and citizens in new forms of engagement and policy making. This can lead, on the one hand, to a better understanding of public opinion and people's needs by policy makers and, on the other, to a better public understanding of the tasks and challenges facing policy makers, and thus to increased citizen identification with the democratic system and a higher regard for, and greater trust in democracy.

c. E-democracy has the potential to address shortcomings in democratic institutions and processes because it opens up new channels for information, communication, deliberation and participation and enhances transparency and accountability.

d. E-democracy is relevant to community building, including among, and with, minorities.

e. By providing a means of reducing exclusion, e-democracy can foster social integration and social cohesion and thus contribute to social stability.

f. E-democracy can enhance the global nature of politics and facilitate the cross-border collaboration this entails.

g. E-democracy requires inter-disciplinary and cross-border research (Council of Europe, 2009).

5.2.6 Trends in the Evolution of E-Voting From Selected Some Countries Around the World

Trechsel, Kucherenko, Silva and Gasser explain that for the past two decades, the dynamic development of Internet technologies enabled the implementation and expansion of Internet voting programs worldwide under varying forms. After an initial *hype* during the late 1990s and early 2000s, but in the present e-voting experiences some kind of *second spring* within which the phenomenon is now beyond the trial stage in lieu of numerous successful outcomes from varying countries irrespective of the concern that certain parts of the population remain excluded from these technologies in lieu of existing gaps between computer literacy, household Internet usage and availability (2016, p.5).

During the 2003 *Internet, law and politics* seminar Professor Trechsel discussed the success stories of the adoption of e-voting in Estonia and Switzerland.

In both Estonia and Switzerland e-voting was introduced in part to tackle the problem of decline in turnout, described by Trechsel as *one of the major problems of democracy*. Although the two countries differ greatly in their political history and structure, both states had a modern electoral administration, high levels of internet penetration and political will making them fertile grounds for e-voting (see European University Institute, 2003).

According to Trechsel fears that e-voting would affect the outcome of elections initially raised a debate in Switzerland during which:

The *left* said the internet was just for rich people; rich people have access to the technology and are voting on the *right*, therefore it could be our death knell. The *right* said that the internet was a new thing for young people, and the young people are more on the *left*, so it's not good for us (Trechsel in European University Institute, 2003).

The debate ended with a go ahead in lieu of the low turnout and today the practice has been rolled out across Swiss cantons and was enshrined in Geneva's constitution in 2009.

In Brazil (like Nigeria) elections were variously plagued with fraud and poor levels of participation. By 1995 the Supreme Electoral Court created a task force financed by the World Bank to find a way to stop fraud and strengthen political participation resulting in electronic voting machines (Avgerou Ganzaroli, Poullymenakou and Reinhard, 2007, p.6).

A multi-year approach for the gradual introduction of the scheme was adopted along the following steps:

a. Voter and civic information including usability and feasibility studies starting in 1986

b. Capacity building within the EMB, and digitalization of the result aggregation

c. Evolution of hard and software, involving local technical expertise

- d. Testing of equipment in the Brazilian environment
- e. EMB's final decision on the type of machine fitting the Brazilian context best
- f. Quality control and testing in various environments
- g. Authorization of e-voting in 1996 local and municipal elections
- h. Post-election review and subsequent quality overhaul
- i. Full e-voting roll-out in the 2002 general elections (see International IDEA, 2011, p.20).

The Brazilian initiative consists of two terminals, the first is used by the polling official to authenticate the voter and the second is used by the voter to cast a ballot. Authentication consists of the polling official typing in the ID number of the voter. If the voter is found and able to vote then the polling official activates the voting terminal. The voting terminal consists of a numerical keyboard and an LCD screen. Voters enter the number of the candidate for whom they wish to vote. The selection is displayed and the voter can confirm the choice or alter it. The voter can also cast a blank ballot. At the end of polling the voting machine produces the results from the polling station. These results are also encrypted and loaded onto a diskette which is taken to a results consolidation center (Avgerou, et al, 2009, pp.141-2).

For Brazil electronic voting succeeded in both reducing fraud and enfranchising illiterate voters. While the rate of invalid votes that averaged 40 percent previously dropped to 7.6 percent by 2002 (Avgerou et al, 2007, p.9).

The Brazilian Supreme Electoral Court regularly funds research aimed at improving security. For example, in 2009, a hacking competition was organized to create additional confidence on the technology (see International IDEA, 2011, p.20).

For Canada the driving force for implementing e-voting was identified as the desire to enhance service excellence, as well as the belief that Internet and telephone voting are a natural extension of election services and also with a view to enhancing convenience and accessibility for electors particularly special populations like higher education students, retirees and persons with disabilities.

Markham, Canada's high-tech capital, became the first major municipality for pilot implementation of Internet voting in 2003. By November 2006, the city successfully offered Internet voting as an option for advance poll voting providing further evidence that Internet voting is a viable addition to the electoral process (see Esteve, Goldsmith and Turner, 2012, p, 111).

5.2.7 Appraisal of some E-voting systems

According to Dimitris Gritzalis, Professor of ICT Security at Athens University of Economics and Business, e-voting systems may be generically grouped into three categories: *Poll*, *Info-kiosk*, and *Remote*.

The means used for their grouping is the location where the ballot is cast. The location leads to the identification of the social concerns and the risks and

vulnerabilities, associated with each group.

Poll voting (e-polling) – This is somewhat more convenient and more efficient than traditional voting systems, because the voters can cast their ballots from any location, and the tallying process is fast and valid.

In **Info-kiosk (i-voting)**- here voting machines are located away from traditional polling places usually under the control of election officials to meet security and privacy requirements and to prevent intervention.

Remote Internet voting (r-voting) provides the voters with convenience and ease-of-access, by enabling them to cast ballots from any Internet accessible location offering significant benefits. Without official control of the r-voting platform, there are several known ways for one to intervene and alter the election results (Gritzalis, 2003, p.xii).

5.2.8 Case for SMS enabled Vote Casting System (SMSevcs)

As observable from the foregoing, current e-voting systems are complex and saddled with security challenges. But towering above all e-voting systems is not just internet voting but *short message service (SMS) enabled vote casting system (SMSevcs)* system recommended within this proposal.

Since SMSevcs is linked to Mobile phone banking we take a shot at conceptual clarifications regarding the usefulness of cell phones and how it also enters as a more viable option for Nigeria among other **e-voting** options. Last, we present how it would work.

5.2.8.1 Rate of Diffusion of Mobile Phone Connection in Nigeria

From Kemp writing for Data Report, there were 85.49 million internet users in Nigeria as at January 2020. The number of internet users in the country increased by 2.2 million (+2.6%) between 2019 and 2020. Hence, internet penetration in Nigeria stood at 42% by January 2020.

In addition there were 169.2 million mobile phone connections in Nigeria as at January 2020. The number of mobile connections in Nigeria increased by 12 million (+7.7%) between January 2019 and January 2020 (Kemp, 2020).

By July 2021 Nigerian Communications Commission (NCC) affirmed a mobile penetration of 187,470,860 million active cell phone users (NCC, 2021).

5.2.8.2 Comparative advantage of Cell phone banking over other E-banking Channels

Perhaps most remarkable, the subtle hardware security ingrained in mobile phones make them more reliable than other e-banking counterparts. This aligns with the fact that the network required to make phone calls and carry out banking transactions derive from unstructured supplementary service data (USSD) powered by transceiver masts of GSM providers to provide service to the phone user in 24/7 fashion within which internet data connection is not required.

From field work research, Agwu and Carter, using interview and focus group discussion found that Mobile phone banking was considered by most users as being much more secure than all others. For example, internet banking requires internet banking requires purchase of internet data and more; while the ATM implies movement to its location, exposure to robbery and more (2014, p.65).

Clips from Agwu and Carter's field work lend further to the preferred usage of cell phone for banking activities.

From Participant 6: *Since I migrated from internet banking to mobile phone banking I have been at ease as there is nothing to worry about electricity fluctuations or the state of my computer.*

From Participant 10: *I do not have to think about usernames and passwords which I forget often and end up calling my bank to reset.*

From Participant 20: *I often run out of money in the campus, instead going to the bank, I ask my family to send me airtime of any amount and I walk across to the vendors in the campus and it is converted, sometimes, they charge a little fee.*

From Participant 5: *One major benefit of the mobile phone services is the anywhere/anytime characteristics. A mobile phone is almost always with a customer; therefore, it can be over a vast geographical area, a customer does not need to visit the bank branches at all (see Agwu and Carter, 2014).*

Again, besides issues of network fluctuation, sudden data expiration among other unpremeditated hitches that might perilously interrupt internet transaction one is less likely to hear about virus attacking a cell phone.

On another count, the short message service (SMS) communication is the cheapest form of communication and is used extensively only on cell phones while no costs are charged on such services like the *please call me* services offered by Global System for Mobile Communications (GSM) providers all of which enables by far more widespread usage of cell phones than other e-banking channels (see also Skuse and Cousins, 2008).

From the findings of Siano, Raimi, Palazzo and Panait, two major factors emerge as drivers of mobile phone banking in Nigeria:

a. The ease of using mobile devices for personal banking transactions including prompt information about users' financial transactions (savings and withdrawals) through SMS (short message service) alert (easy management of account).

b. Assured security/safety over concerns of theft or cyber fraud (2020).

5.2.8.3 Utilities of the Cell Phone Beyond Banking

First, cell phone penetrates urban and rural poverty more deeply than other interactive technologies besides the rewards associated with speedy transmission, large scale outreach and accessibility (see Wasserman, 2011; Whittal, 2011; Ivatury and Pickens, 2006).

In Nigeria, beyond banking utility, cell phone is a medium for the transfer of critical information like communicating public health messages, accessing emergency services and more.

With particular reference to permeating poverty, Ivatury and Pickens (2006) affirm that mobile phones had more users in developing countries by 2006 than in developed ones; and by October 2009, it was estimated that cell-phone ownership amongst poor Africans was 48% - eight times the level of penetration estimated in 2000 (Smith, 2009).

(As already highlighted in the preceding sections, Nigeria alone commands a staggering 187 million active cell phone users).

Again, cell phone serves as medium for a wide range of participatory activities such as reporting traffic congestion, entering competitions, or spreading news of different events; sharing emerging updates in politics and more; hence, a medium for innovative ways of popular participation (Hermanns, 2008; Vincent and Harris, 2008).

5.2.8.4 Comparative Advantage of Cell Phone Voting Over Other E-Voting Channels

From the brief content analysis of the problem statement streamlined to a review of emerging outcomes of electoral violence within the 4th republic - violence appears almost like a deliberately perpetrated series of actions enunciated squarely to dampen political participation within the littlest means by which the mass population can exercise their constitutional rights.

The thought of falling prey to stray bullets alone, keep many from stepping out during elections. It becomes imperative to extend electronic voting rights to those who would prefer such an option as part and parcel of their fundamental inalienable human rights.

Within this range, it is proper to lend to existing evidence that **as cell phone banking towers above other e-banking channels, so also cell phone voting towers above other e-voting channels** with reference to both ease of use and cost of implementation.

Ease of usage because it premised on familiar technology (resounding evidence of 187 million active phone users of the country's 212 million population (see World Population Review, 2021).

Diminished cost of implementation because SMS enabled cell phone voting concerns the use of just a central computer Server.

5.2.8.5 Excerpts From SMS Enabled Vote Casting System (SMSevcs) Field Work

From focus group discussions and interview of computer operators of a few banks and one Global System for Mobile Communications (GSM) service provider using open-ended instruments the researcher obtained responses that was summed up in one statement: *voting by phone amounts to simply sending an SMS, and receipt and printing out of the same ranks among the easiest things*

our database can do; one of the respondents from the GSM affirms further *even identifying the location from where SMS was sent is not a problem.*

Financial institutions spend considerable time and money protecting funds entrusted to them for safety; within this frame securing votes in the form of SMS indeed ranks among the least they can do hence an *SMS enabled cell phone voting* is widely recommended.

Here we are looking at a single storage computer device that can be subjected to public scrutiny otherwise to the scrutiny of the computer analyst(s) representing competing political parties in a given election.

In other terms, the Server to be employed for receiving votes in the form of SMS is capable of exposure to the scrutiny of even international election observers who may decide to arrive with computer analysts capable of scrutinizing the operation of the device for the purpose for which it is meant.

5.2.9 How Voting by SMS Will Work (from Voter Registration to actual voting)

First, following legislative approval INEC in conjunction with the Central bank of Nigeria makes arrangements for registration of voters using the database of registered Biometric Verification Number (BVN) owners.

5.2.9.1 Why BVN Instead of Permanent Voter's Card or National Identity Number?

Large voter turnout witnessed in Egypt beginning from the country's 2012 election following the 2011 revolution, took effect from amended legislations that enabled **automatic universal voter registration** drawn from the nation's National Identification Database (see International IDEA, 2016, p.19).

The BVN is the equivalent of social security number in some advanced countries and represents the major identification standard contextualized within e-standards.

In other words BVN is associated with **e-banking** and when we raise issues on **e-voting** it becomes tenable **e** and **e** remain linked given the assured security within which the identification model safeguarded. We don't go linking **e-identification** with paper identification as there may be errors in the end.

BVN employs biometric technology which captures and records inescapably all the physical features unique to the registered individual (fingerprints and more).

Biometric enrolment aids those who cannot read and write. Multiple account holders are covered with a single registration. For a healthy financial system it aids in identifying and checkmating situations where loan defaulters transit from bank to bank to obtain new loans. With BVN banks are able to track transactions across all banks with ease (see also Vanguard Editorial, 2015).

Again, besides the fact that BVNs are linked to verifiable cell phone lines they are also secured in Central Bank of Nigeria database all solidifying the potential of this identification model for e-voting among other

potentials. These sterling qualities make the BVN a reliable and secure identification model from where eligible voters may be drawn.

5.2.9.2 E-Voter Registration

Reception and dispatch of SMS is perhaps one of the commonest activities carried out with ease by cell phone users in Nigeria. This invariably means that the proposed SMS enabled cell phone voting (SMSecpv) system is premised on what counts for most importance - **familiar technology**.

Where national legislation tilts in favour of the use of BVN as standard identification model for eliciting eligible voters then all is set for a most transparent election.

We take for granted that legislation covers *INEC working hand in hand with CBN* since CBN is host to requisite data. Both institutions working in synergy arrange for transfer or routing of required data to an independent server. A USSD code is programmed for sending and receiving SMS for example *111#.

Next, voting age population (VAP) is sorted out within the database to obtain potential eligible voters to whom *verify you are available to vote* SMS will be sent. Noteworthy is the fact that this measure is meritorious in bringing those apathetic to electoral matters into automatic registration yet only when they respond to the verification exercise.

Verification offer SMS messages to potential eligible voters simultaneously aids to screen out eligible but deceased voters or unavailable potential voters.

The computer sever receives the message to enable production of a final list of available and eligible voters or what INEC may prints out as final list of Registered Voters for record purposes.

5.2.9.3 Actual Voting

When you dial *919# on your cell phone glaringly you are a United Bank for Africa account holder and whatever GSM provider you are using is unquestionably linked to that your UBA account and you are able to send SMS and make calls because your phone is preprogrammed to be active by Unstructured Supplementary Service Data without reference to internet data.

On punching *919# you are promptly served a menu of options ranging from 1 to 8 from where you determine what nature of transaction you wish to carry out in the following fashion:

- Airtime Self
- Airtime Others
- Transfer to UBA, etcetera.

Thus the account holder serves himself.

In similar fashion, INEC set up as a kind of **electoral bank** tells us the code configured for use for the election by which options for voting will be captured.

Hence other than

1. *Airtime Self*

we get

1. Mr. A or Party A for President
2. Ms. B or Party B for President, etcetera.

The system ultimately is programmed for once voting shuts off thereafter.

The database produces results in seconds and with reference to secrecy voter identification under this scheme is represented by cell phone number or BVN hence even when televised voters' anonymity remains intact among manifold other benefits.

Again as already, highlighted the computer server to be used is exposed to scrutiny by agents of competing parties among similar considerations like having backup servers holding the same data as the central server.

Essentially, we cannot make security recommendations from the position of this study because technological security continually undergo updates yet within blockchain security any attempt to hack into a datasheet to include fictitious BVN numbers will immediately be discovered.

5.2.10 Merits of SMS enabled cell phone voting (SMSevpv) paired against the weaknesses of Internet Voting

a. Whereas internet voting may lack measurable transparency since votes would have to be printed out and sorted; SMSevcs is glaringly transparent because voting transactions like banking transactions are not just instantly captured they can also be transmitted on live television stations such that everyone can see votes trickling-in accurately. Hence, you don't just live in assurance that your vote will count you see it counting.

b. Whereas internet voting is prone to possibility of fraud via large scale manipulation by a small group of insiders; SMSevcs is not beclouded in such secrecy.

c. Whereas internet voting may be exposed to risk of manipulation by insiders with privileged access to the system or by hackers from outside; SMSevcs is as secure as the bank.

d. Whereas internet voting may be exposed to Potential violation of the secrecy of the vote after print out and during sorting; SMSevcs is not exposed since BVN is used in place of names and even where the voting results are printed out anonymity of voters remain intact and sacrosanct.

e. Whereas internet voting may involve use of web data which may not be affordable to all; SMSevcs requires use of ordinary cell phone without reference to internet access.

f. Whereas internet and electronic voting standards ascribe to costs for both purchasing and maintaining e-voting systems; SMSevcs simply uses existing banking technology for its purpose without incurring additional costs.

g. Whereas internet voting standards require increased

security requirements for protecting the voting system during and between elections including during transport, storage and maintenance; SMSevcs does not require additional inputs beyond a technology only in existence. Relevant EMB, like INEC simply works alongside the CBN to set up just a single database linked for viewing to the general public.

h. Whereas internet and electronic voting standards require additional voter education campaigns SMS requires little or no education.

5.2.11 Crucial Merits of SMS Enabled Vote Casting System (SMSevcs)

a. Perhaps towering above the innumerable merits of SMSevcs is the entrenchment of genuine democracy in Nigeria because transparency in vote casting without intimidation will enable the emergence of candidates disenfranchised by their inability to serve as clients to neopatrimony putting enhanced check on political intimidation. In other terms, those genuinely committed to selfless service are more likely to emerge and inject new ideas and expertise on governance.

b. SMS enabled vote casting system (SMSevcs) is required to put an end to all dimensions of electoral violence – physical, physical and structural.

c. SMSevcs is premised on familiar technology hence little or no political education is required.

d. Aligned to 3, above increased voter participation generated from the use of familiar technology puts a check on political apathy.

e. SMSevcs dismantles the hurdles associated with *late arrival of polling materials; no place to charge card reader battery* and a million other flaws associated with the present system of vote-casting.

f. SMSevcs overrides the possibility of voter intimidation and threat of loss of lives.

g. SMSevcs overrides the cost incurred in travelling home or moving from place to place just to cast votes. Local and foreign observers also would not need travel from location to location. All stay on the central server.

h. SMSevcs replaces labourious counting of votes besides elimination of exposure to manipulation.

i. SMSevcs implies delivery of more accurate results computer generated free from subjective error

j. Use of SMSevcs replaces all hurdles associated with filling and signing of ballot papers.

k. SMSevcs procures increased voter participation and voter turnout.

l. SMSevcs procures increased convenience for voters as issues of queuing on long lines is eliminated.

m. SMSevcs overrides fraud widespread from the use of numerous polling stations.

n. SMSevcs prevents fraud possible during thro and fro movement of both ballot materials and election results.

o. SMSevcs eliminates issues of damaged ballot papers since votes are either received or not received.

p. SMSevcs overrides issues of curfews imposed during elections

q. SMSevcs overrides the massive costs procured in conducting elections by paper balloting, The computer manages all relevant data and cost of employing thousands of adhoc staff is eliminated

r. SMSevcs eliminates issues of double voting since votes are programmed for once casting.

s. SMSevcs enables thorough verifications as results may be transmitted on live television printed out and checked against the confirmed voter registration list recorded in the database.

t. SMSevcs secures full voter anonymity.

6. CONCLUSION

This study has raised resounding substantiations to initialize that the use of cell phones for vote casting will not only douse tensions and challenges associated with widespread loss of lives during elections, it will reduce if not completely eliminate issues of electoral violence while improving voter turnout.

SMS enabled vote casting system (SMSevcs) is uniquely designed to fit specifically into the Nigerian socio-cultural milieu and towers above e-voting experiments around the world since it is premised on the use of familiar technology, and of voting from anywhere with as much network required to simply make a phone call or send an SMS without reference to internet data or internet connection.

SMSevcs will not only save lives that may be lost in forthcoming elections it will also save billions of naira that can be allocated to students bursary payments; care of the elderly and fuel price subsidization in the face of multiple digit inflation prevalent all over the country.

It is thus incumbent on all, not excluding youth groups on whose hands the future of the country lies as also civil society groups to prevail on the National Assembly to SAY YES TO SMS VOTING as the one single solution for putting an end to what Effiong identifies as a poignant culture of electoral heist, brigandage, violence, inducement of voters, militarisation of elections, partisanship and corruption of the electoral umpire, among other maladies (2020).

REFERENCES

Adegoroye, A. A., Oladejo, M. O., & Yinus, S. O. (2015). Impact of e-government on governance service delivery in Nigeria. *International Journal of Advances in Management and Economics*, 4(3), 132-138.

Agwu, E. M., & Carter, A. (2014). Mobile phone banking in Nigeria: Benefits, problems and prospects. *International Journal of Business and Commerce*, 3 (6),50-70.

Aiyede, E. R. (2021). Nigeria's electoral system is still broken. Here's a list of what's urgent. *The Conversation Africa*,

Inc. Retrieved from <https://theconversation.com/nigerias-electoral-system-is-still-broken-heres-a-list-of-whats-urgent-159693>

Ajzen, I. (1985). From intentions to actions: a theory of planned behavior. In J. Kuhl and J. Beckmann (Eds.), *Action-control: From cognition to behaviour* (pp.11-39). Springer- Verlag, Heidelberg.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50 (2), 179-211.

Akpan, I. (2009). Cross channel integration and optimization in Nigerian banks. *Telnet Press Release*, 20 (1), 1-4.

Albert, I. O. (2005). Explaining "godfatherism" in Nigerian politics. *African Sociological Review*, 9 (2), 79-105.

Altman, D., Perez-Linan, A. (2002). Assessing the quality of democracy: Freedom, competitiveness and participation in eighteen latin american countries. *Democratization*, 9(2).

Amnesty International. (2011). *Loss of life, insecurity and impunity in the run-up to Nigeria's elections*. Retrieved from <https://www.amnesty.org/en/documents/afr44/005/2011/en/>

Avgerou, C., Ganzaroli, A., Poulymenakou, A., & Reinhard, N. (2007). *ICT and citizens' trust in government: lessons from electronic voting in Brazil*. Proceedings of the 9th International Conference on Social Implications of Computers in Developing Countries, Sao Paulo, Brazil, May, 2007. Retrieved from <http://www.ifipwg94.org.br/fullpapers/R0098-1.pdf>

Avgerou, C., Ganzaroli, A., Poulymenakou, A., & Reinhard, N. (2009). Interpreting the trustworthiness of government mediated by information and communication technology: Lessons from electronic voting in Brazil. *Information Technology for Development*, 15 (2), 133-148.

Ayo, C. K. (2006). E-democracy: A panacea for enhanced participatory democracy. *The Information Technologist –An International Journal of Information and Communication Technology*, 3(1), 43-53.

Barry, J. (2013). Theories of power: Pluralist, elitist and Marxist perspectives. In *AS Level Politics Conference, Queen's University, Belfast*. Retrieved from <http://academia.edu/3270103>

Becker, G. (1976). *The economic approach to human behavior*. Chicago and London: The University of Chicago Press.

Berg-Schlosser, D., & Kersting, N. (2003). Poverty and democracy: a contradiction? In D. Berg-Schlosser & N. Kersting (Eds.), *Poverty and democracy: Self-help and political participation in Third World Cities*. London: Zed Books.

Birch, S., (2010). Perceptions of electoral fairness and voter turnout. *Comparative Political Studies*, 43 (12), 1601-1622.

Blais, A and Dobrzynska, A. (1998). Turnout in electoral democracies. *European Journal of Political Research*, 33, 239-261

Blumberg, P. (1968). *Industrial democracy - The sociology of participation*. London: Redwood Press.

Bratton, M. (1999). Political participation in a new democracy. institutional considerations from Zambia. *Comparative Political Studies*, 32(5).

- Brucher, H., & Baumberger, P. (2003). *Using mobile technology to support democracy*. In Proceedings of the 36th Hawaii International Conference on System Sciences. Hawaii.
- Buchanan, J. M., & Tullock, G. (1962). *The calculus of consent: Logical foundations of constitutional democracy*. Ann Arbor: University of Michigan Press.
- Burawoy, M. (1979). *Manufacturing consent: Changes in the labour process under monopoly capitalism*. Chicago: University of Chicago Press.
- Campbell, J. (2015). *Nigeria's elections in 2011 and 2015*. Council on Foreign Relations. Retrieved from <https://www.cfr.org/blog/nigerias-elections-2011-and-2015>
- Carbone, G., & Cassani, A. (2016). Nigeria and democratic progress by elections in Africa. *Africa Spectrum*, 51 (3), 33-59.
- Central Bank of Nigeria (2011). Towards a cashless Nigeria: Tools and strategies. *Nigerian Journal of Economy*, 3 (2), 344-350.
- CNN (2011). Nigerian election pushed back a week. Retrieved from <http://edition.cnn.com/2011/WORLD/africa/04/03/nigeria.election/index.html?eref=ft>
- Cornwall, A. (2002). *Making spaces, changing places: Situating participation in development*. Institute of Development Studies (IDS) Working Paper No 170. Brighton: IDS.
- Council of Europe (2009). *Electronic democracy ("e-democracy") Recommendation CM/Rec(2009)1 adopted by the Committee of Ministers of the Council of Europe on 18 February 2009 at the 1049th meeting of the Ministers' Deputies and explanatory memorandum*. Strasbourg Cedex: Council of Europe Publishing.
- Council of Europe (2010). *E-voting handbook: Key steps in the implementation of e-enabled elections*. Strasbourg Cedex: Council of Europe Publishing.
- Creighton, J. L. (2005). *The public participation handbook: Making better decisions through citizen involvement*. San Francisco: Jossey-Bass.
- Daniel, E. (1999). Provision of electronic banking in the UK and the Republic of Ireland. *International Journal of Bank marketing* 17: 72-83.
- Darvish, H., Moayeri, M. R., Faradonbe, M. M., & Naderifar A. R. (2013). A survey on relationship between customer satisfaction and electronic banking features: A case Study of Tejarat bank in Iran. *Management Science Letters*, 3, 425-430.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13 (3), 319-340.
- Davis, F. D., Bagozzi, R. P., and Warshaw, p.R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35, 982-1003.
- Dore, G. M. D., Ku, J. H., & Jackson K. D. (2014). Conclusions: Politics is more difficult than physics (pp.256-263). In G. M. D. Dore, J. H. Ku, & K. D. Jackson (Eds.), *Incomplete democracies in the Asia-Pacific. Critical Studies of the Asia-Pacific series*. London: Palgrave Macmillan.
- Downs, A. (1957). An economic theory of political action in a democracy. *The Journal of Political Economy*, 65(2), 135-150.
- Ebiede, T. M. (2018). Ex-militants and electoral violence in Nigeria's Niger Delta. In S. K. Mimmi & J. Bjarnesen (Eds.), *Violence in African Elections: Between democracy and big man politics* (pp.135-155). London: Zed Books.
- Ebiri, K. (2016). *Violence, killings, irregularities wreck Rivers rerun poll*. Retrieved from <https://guardian.ng/news/violence-killings-irregularities-wreck-rivers-rerun-poll/>
- Edoh, H. (2004). Corruption: Political parties and the electoral process in Nigeria. In M. Jibo & A. T. Simbine (Eds.), *Contemporary issues in Nigerian politics*. Ibadan: JODAD Publication.
- Effiong, I. (2020). *Nigeria 2023 elections: The necessity of radical electoral reforms*. Retrieved from <https://allafrica.com/stories/202008110474.html>
- Egwu, S., Leonard, D. K., & Matlosa, K. (2009). Nigerian elections since 1999: What does democracy mean? *Journal of African Elections*, 8(1), 108-144.
- Elaigwu, J. I. (2007). Nigeria: The current state of the federation: Some basic challenges. Paper presented at International Conference on Federalism in Honour of Professor Ronald Watts, Organized by the Institute of Intergovernmental Relations, Queens University, Kingston, Canada, October 18-21, 2007.
- Elster, J. (1989); Social norms and economic theory. *Journal of Economic Perspectives, American Economic Association*, 3(4), 99-117.
- Environmental Rights Action. (2003). *Election monitoring report on the ongoing Nigeria federal and state general elections, April/May 2003 (executive summary)*, April 26, 2003.
- Esteve, J. B., Goldsmith, B., & Turner, J. (2012). *International experience with e-voting: Norwegian e-vote project*. Washington, DC 20006: International Foundation for Electoral Systems (IFES).
- EU EOM (2003). *European Union election observation mission to Nigeria, 2003 Final Report*. Retrieved from <http://eeas.europa.eu/eucom/pdf/missions/nigeria2003.pdf>.
- EU EOM (2007). *European Union Election Observation Mission to Nigeria 2007 Press Release*. Retrieved from http://www.europarl.europa.eu/meetdocs/2004_2009/documents/dv/nigeriapressrelease/nigeriapressreleaseen.pdf.
- EU EOM (2019). *European Union Election Observation Mission NIGERIA 2019 Final Report*. Retrieved from https://eeas.europa.eu/election-observation-missions/eom-nigeria-2019_en
- EU EOM, (2011). *European Union Election Observation Mission to Nigeria, 2011 Final Report*. Retrieved from http://www.eucom.eu/files/dmfile/final-report-nigeria2011_en.pdf.
- European University Institute (2003). *Internet voting a success in two European countries*. European University Institute Newsletter 12 February 2013. Retrieved from <https://www.cui.eu/news/2013/02-12-internetvotingasuccessintwoeuropeancountries>

- Fishbein, M., and Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, Mass; Don Mills, Ontario: Addison-Wesley Pub. Co.
- Geys, B. (2006) 'Explaining voter turnout: A review of aggregate-level research. *Electoral Studies*, 25, 637-663
- Goertzel, T. G. (1976). *Political society*. Chicago: Rand McNally College Pub. Co.
- Goodwin-Gill, G.S. (2006). *Free and fair elections*. New expanded edition. Geneva: Inter-Parliamentary Union.
- Gritzalis, D. (2003) Preface to Secure electronic voting, in Dimitris A. Gritzalis (Ed.), *Secure electronic voting*. Center for Secure Information Systems: Kluwer Academic Publishers.
- GSM Association (2020). *The state of mobile internet connectivity 2020*. GSMA Connected Society
- Harnischfeger, J. (2008). *Democratization and Islamic law: The sharia conflict in Nigeria*. Frankfurt; New York: University of Chicago Press.
- Hazen, J. M., & Horner, J. (2007). *Small arms, armed violence, and insecurity in Nigeria: The Niger delta in perspective*. Small Arms Survey. Occasional Paper of the Small Arms Survey: Graduate Institute of International Studies, Geneva.
- Hermanns, H. (2008). Mobile democracy: Mobile phones as democratic tools. *Politics*, 28(2), 74-82.
- Human Rights Watch (2003). *Nigeria's 2003 elections: The unacknowledged violence*. Retrieved from <https://www.hrw.org/sites/default/files/reports/nigeria0604.pdf>
- Human Rights Watch (2004). *Nigeria's 2003 Elections: The unacknowledged violence*. 2 June 2004. Retrieved from <https://www.refworld.org/docid/412eef5b4.htm>
- Human Rights Watch, (2007). *Corruption, godfatherism and the funding of political violence*. Retrieved from <https://www.hrw.org/reports/2007/nigeria1007/5.htm>
- Ibrahim, J. (1999). *Ethno-Religious mobilization and sapping of democracy in Nigeria*. In J. Hyslop (Ed.), *African democracy in the age of globalization*. Johannesburg: Witwater-Rand University Press.
- Ihonvbere, J. O. (1999). The 1999 presidential elections in Nigeria: The unresolved issues. *African Issues*, 27(1), 59-62.
- Independent National Electoral Commission (INEC) and Friedrich-Ebert-Stiftung (FES), (2011). *Voter apathy and the 2011 election in Nigeria. A research report, Abuja, Nigeria*. Lagos: Muhamasaid Commercial Press.
- International IDEA (2006). *Engaging the Electorate: Initiatives to promote voter turnout from around the world*. Stockholm: International IDEA.
- International IDEA (2019). *Nigeria voter turnout*. Retrieved from <https://www.idea.int/data-tools/country-view/231/40>
- International IDEA (July 2009). *Democracy in Development, Global Consultation on the EU's role in democracy building*. Berlin: Democracy Reporting International.
- International IDEA, (2015). *Money in Politics, Policy Brief*. Stockholm: International IDEA. Retrieved from <http://www.idea.int/publications/catalogue/money-politics>
- International Institute for Democracy and Electoral Assistance (2016). *Voter turnout trends around the world*. Stockholm: International IDEA.
- International Institute for Democracy and Electoral Assistance IDEA (2011). *Introducing electronic voting: Essential Considerations*. IDEA Policy Paper. Stockholm,
- Ivatury, G and Pickens, M. (2006). *Mobile phone banking and low-income customers: Evidence from South Africa*. www.cgap.org/p/site/c/template.rc/1.9.2953
- Joseph, R. (1987). *Democracy and prebendal politics in Nigeria: The rise and fall of the second republic*. Ibadan: Spectrum Books.
- Kemp, S. (2020). *Internet users in Nigeria 2020*. Retrieved from <https://datareportal.com/reports/digital-2020-nigeriaInternet-users-in-Nigeria>
- Kew, D. (1999). Democracy, dem go craze, O: Monitoring the 1999 Nigerian elections. *Journal of Opinion*, 27 (1) 29-33.
- Kurfi, A. (1983). *The Nigerian general elections: 1958 and 1979*. Lagos: Macmillan.
- Kushchu, I., & Kuscu, H. (2003). *From e-government to m-government: Facing the inevitable*. www.mgovernment.org/resurces/mgovlab_ikhk.pdf
- Lallana, C. E. (2004). *E-government for development, government definitions and models, institute for development policy and management*. Retrieved from <http://www.egov4dev.org/mgovden.htm>
- Lasswell, H. (1927). *Propaganda techniques in the world war*. New York: Knopf.
- Lasswell, H., Lerner, D., & Pool, I. (1952). *The comparative study of symbol: An introduction*. Stanford University Press, Hoover Institute and Library on War, Revolution and Peace.
- Lee, C., Chang, K., & Berry, F. S. (2011). Testing the development and diffusion of e-government and e-democracy: A global perspective. *Public Administration Review*, 71(3), 444-454.
- Lijphart, A. (1996). Unequal participation: democracy's unresolved dilemma. Presidential address, American Political Science Association. *American Political Science Review*, 91(1). 1-14.
- Lindberg, S. I. (2004). The democratic qualities of competitive elections: Participation, competition and legitimacy in Africa. *Commonwealth and Comparative Politics*, 42(1).
- Macintosh, A., & Whyte, A. (2006). *Evaluating how e-Participation Changes Local Democracy*. E-Government Workshop, Sep, Brunel University, London.
- Macintosh, A., & Whyte, A. (2008). Towards an evaluation framework for E Participation. *People, Process and Policy*, 2 (1), 16-30.
- May, C. D. (1983). 70 reported killed after Nigerian state elections. *New Times* August 20, 1983, Section 1, Page 3. Retrieved from <https://www.nytimes.com/1983/08/20/world/70-reported-killed-after-nigerian-state-elections.html>
- Meisel, J. H. (1962). *The myth of 'the ruling class: Gaetano Mosca and the "Elite"*. Ann Arbor.
- Mlitwa, N., & Tshetsha, N. (2012). Adoption of cell-phone banking among low-income communities in rural areas of South Africa. *iBusiness*, (4) .
- Mosca, G. (1939). *The ruling class*. New York: McGraw-Hill.
- Murakami, T. (1995). *Teamwork and the structure of*

- representation at Vauxhall Ltd. (UK) and Adam Opel AG (Germany). Unpublished Doctoral Thesis School of Industrial and Business Studies, University of Warwick.
- National Association for Peaceful Elections in Nigeria (NAPEN) (2011). Nigeria Electoral Violence Report (Nevr) Project. SUBAWARD NUMBER: P. O. No. S – 10 – 129 International Foundation for Electoral Systems (IFES)/ USAID.
- National Democratic Institute (2011). *Final Report on the Nigeria 2011 General Elections*. National Democratic Institute, Washington. Retrieved from https://www.ndi.org/sites/default/files/NDI%20Final%20Report%20on%20the%20Nigeria%202011%20Electionsnew_Part1.pdf.
- Neuendorf, K. (2002). *The content analysis guidebook*. Thousand Oaks, CA: Sage Publications.
- NIBSS. (2015). *PoS adoption and usage: A study on Lagos State*. Retrieved from <http://www.nibss-plc.com.ng/wp-content/uploads/2015/05/NIBSS-2015-POS-Adoption-Study-Lagos-State.pdf>
- Nigerian Communications Commission (2021). *Monthly subscriber technology data*. Retrieved from <https://www.ncc.gov.ng/statistics-reports/subscriber-data>
- Nwabueze, B. (2003). Election rigging and democracy in Nigeria. *Daily Champion*, Wednesday, May 21, 2003.
- Nwolise, O. B. C. (2007). Electoral violence and Nigeria's 2007 elections. *Journal of African Elections*, 6(2), 155-179.
- Obe, E. (2017). Cultists dare Wike. *Tell Magazine*, May 15 pp.25-26.
- OECD (2001). *Citizens as Partners: Information, Consultation and Public Participation in Policy-making*. OECD.
- Ofonagoro, W. (1979). *The story of the Nigerian general elections, 1979*. Lagos: Federal Ministry of Information.
- Okoye, P. V. C., & Ezejiofor, R. (2013). An appraisal of cashless economy policy in development of Nigerian economy. *Research Journal of Finance and Accounting*, 4(7), 237-252.
- Olson, M. (1965). *The logic of collective action: Public goods and the theory of groups*. Cambridge, MA: Harvard University Press.
- Omotola, J. S. (2010). Elections and democratic transition in Nigeria under the fourth republic. *African Affairs*, 109 (437), 535–553.
- Onapajo, H., & Babalola, D. (2020). Nigeria's 2019 general elections – A shattered hope? *Commonwealth Journal of International Affairs*, 109(4), 363-367.
- Onwudiwe, E., & Berwind-Dart, C. (2010). *Nigeria post-election violence killed 800: Rights group*. Retrieved from <https://www.reuters.com/article/us-nigeria-violence/nigeria-breaking-the-cycle-of-electoral-violence-in-nigeria>. Washington: United States Institute of Peace.
- Onwuka, A. (2019). 2019 elections: Watered by blood of Nigerians. Retrieved from <https://punchng.com/2019-elections-watered-by-blood-of-nigerians/>
- Osazevbaru, H. O. and Yomere, G. (2015). Benefits and challenges of Nigeria's cash-less policy. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 4 (9), 1-10.
- Osita, A. (2016). Election rigging and the use of technology: The smart card reader as the joker in Nigeria's 2015 presidential election. *Journal of African Elections*, 15(2), 90-111.
- Pahad, E. (2005). Political participation and civic engagement. *Progressive Politics*, 4(2), 21-26.
- Pareto, V. (1935). *Mind and society*. New York: Harcourt Brace and Co.
- Paul, S. (2013). ATM: The new horizon of e-banking. *Science, Technology and Arts Research Journal*, 2, 148-152.
- Rawlence, B., & Albin-Lackey, C. (2007). Nigeria's 2007 general elections: Democracy in retreat. *African Affairs*, 106 (424).
- Reuters (2011). *Nigeria post-election violence killed 800: Rights group*. Retrieved from <https://www.reuters.com/article/us-nigeria-violence/nigeria-post-election-violence-killed-800-rights-groupidUSTRE74F71S20110516>
- Richardson, J., & Emerson, J. (2018). E-democracy: An emerging force for change. *Stanford University Social Innovation Review Newsletter*.
- Rogers, E.M. (1995). *Diffusion of Innovations* (4th ed.). New York: The Free Press.
- Sandbrook, R. (1988). Liberal democracy in Africa: A socialist revisionist perspective. *Canadian Journal of African Studies*, 22(2), 240-267.
- Sangita, S. N., & Dash, B. C. (2005). *Electronic governance and service delivery in India: theory and practice - Working Paper No. 165*. Retrieved from <http://www.isec.ac.in/WP%20-%20165.pdf>
- Sanni, K. (2019). *626 killed during 2019 Nigeria elections – Report*. Premium Times. Retrieved from <https://punchng.com/2019-elections-watered-by-blood-of-nigerians/>
- Schattschneider, E. E. (1960). *The semi-sovereign people: A realist's view of democracy in America*. New York, NY: Holt, Rinehart and Winston.
- Sclove, R. (1995). *Democracy and technology*. New York: Guildford Press.
- Segun, A. (2011). *Mobile Banking to Transform Nigeria's Economy, says GT Bank Boss THISDAYLIVE* Retrieved from <http://www.thisdaylive.com/articles/mobile-banking-to-transform-nigerias-economy-says-gt-bank-boss/105126/>
- Siano, A., Raimi, L., Palazzo, M., & Panait, M. C. (2020). Mobile banking: An innovative solution for increasing financial inclusion in Sub-Saharan African Countries: Evidence from Nigeria. *Sustainability*, 12(23), 101-130.
- Skuse, A., & Cousins, T. (2008). Getting connected: The social dynamics of urban telecommunications access and use in Khayelitsha, Cape Town. *New Media and Society*, 10(1), 9-26.
- Smith, A. (1776/1998). *The wealth of nations*. Oxford: Oxford University Press.
- Smith, D. (2009). *Africa calling: mobile phone usage sees record rise after huge investment*. www.guardian.co.uk/technology/2009/oct/22/africa-mobilephonesusage-rise
- Suberu, R. (2007). Nigeria's muddled elections. *Journal of Democracy*, 18 (4), 95-110.

- Sundström, A. and Stockemer, D., (2015). Regional variation in voter turnout in Europe: The impact of corruption perceptions. *Electoral Studies*, 40, 158–169.
- Taft, P., & Blyth, H. (2017). *The abuse of trust in Nigeria's Rivers State: Examining patterns and trends in Gender based violence*. The Fund for Peace.
- Taft, p.and Haken, N. (2018). *Beyond hash tags leveraging networks for the prevention of election violence in Nigeria*. Washington: Fund for Peace, United States Institute of Peace.
- Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research*, 6, 144-176.
- The NDI/Carter Center (1999). Observing the 1998-99 Nigeria elections: Final report carter center and national democratic institute for international affairs (pp.8-9). Retrieved from <https://www.cartercenter.org/documents/1152.pdf>.
- The Punch (2015). *Rivers election violence*. Retrieved from <https://punchng.com/rivers-election-violence/>
- The Tide (2015). *RSG Alerts on rising political violence, killing*. The Tide Newspapers. www.thetidenewsonline.com › 2015/03/16 › rsg-alerts-on-rising-political-v
- Trechsel, A. H., Kucherenko, V., Silva, F., & Gasser, U. (2016). *Potential and challenges of E-Voting in the European Union*. Zurich, Switzerland. Retrieved from <http://www.europarl.europa.eu/supporting-analyses>
- Tullock, G. (1976). *The vote motive: An essay in the economics of politics*. The Institute of Economic Affairs, London: Hobart Press.
- UN General Assembly A/RES/59/201 (2005). Retrieved from <http://www.undemocracy.com/A-RES-59-201.pdf>
- Vanguard Editorial (2015). *Importance of bank verification number*. March 12, 2015 Retrieved from <https://www.vanguardngr.com/2015/03/importance-of-bank-verification-number/>
- Vanguard, (2016). *Quotes of founding fathers on Nigeria*. Vanguard Newspapers 1st October 2016. Retrieved from <https://www.vanguardngr.com/2016/10/quotes-founding-fathersnigeria/>
- Venkatesh, V. and Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Science*, 39(2), 273-312.
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four Longitudinal field studies. *Management Science*, 46(2), 186-204.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-479.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425 - 479.
- Verba, S., & Nie, N. H. (1972). *Participation in America: Political democracy and social equality*. New York: Harper and Row.
- Verba, S., Schlozman, K. L., & Brady, H. L. (1995). *Voice and equity. Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.
- Vincent, J., & Harris, L. (2008). Effective use of mobile communications in e-government: How do we reach the tipping point? *Information, Communication and Society*, 11(3), 395-413.
- Walton, E. R., & McKersie, B. R. (1965). *A behavioral theory of labour negotiations: An analysis of a social interaction system*. New York: McGraw-Hill Book Company.
- Wasserman, H. (2011). Mobile phones, popular media and everyday African democracy: Transmissions and transgressions. *Popular Communication*, 9(2), 146-158.
- Whittal, J. (2008). *Fiscal cadastral systems reform: A case of the General Valuation Project 2000 in the City of Cape Town* (Unpublished Doctoral Thesis). University of Calgary.
- Whittal, J. F. (2011). The potential use of cellular phone technology in maintaining an up-to-date register of land transactions for the urban poor. *Potchefstroom Electronic Law Journal*, 14(3).
- Worku, G., Tilahun, A., & Tafa, M. A. (2016). The impact of electronic banking on customers' satisfaction in Ethiopian banking industry (The Case of Customers of Dashen and Wogagen Banks in Gondar City). *Journal of Business and Financial Affairs*, 5(2), 174.
- World Population Review. (2021). *Nigeria population*. Retrieved from <https://worldpopulationreview.com/countries/nigeria-population>
- Young, I. M. (2000). *Inclusion and democracy*. Oxford: Oxford University Press.