Transparent Elections in Nigeria: An Assessment of The Introduction of Electronic Voting (BVAS) in the 2023 General Elections in Nigeria

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Abstract- Elections are one of the major components of a democratic process. The people must be willing to participate in the election in order to legitimise the power and authority of elected political leaders. It enables a ruler-ship by the consent of a people. For an election to be considered to have integrity, it must be free, fair and transparent, in most nascent democracies elections are manually conducted, which are mostly prone to corrupt practices and manipulations, which in most cases lead to post election violence, crisis and prolong cases at the tribunals and courts. With the introduction of electronic voting (E-voting) and usage of Bimodal Voter Accreditation System by the Independent National Electoral Commission (INEC) in the 2023 general elections in Nigeria, this work will be taking a look at the dynamics of the innovation of BVAS as it affects 2023 elections in Nigeria and how INEC can use BVAS to strengthen the electoral process and minimise post election crisis. In preparing this work Technology Advancement Theory (TAM) Innovation Diffusion Theory (IDT) and e-democracy theory was analysed, and the (IDT) theory was adopted as theoretical framework. In the course of this work qualitative research method in form of secondary literature analysis, books, related websites, newspapers, INEC sources etc, was applied as source of literature. In the final analysis we came to the conclusion that BVAS was a good innovation and the usage must be sustained and improved upon by INEC. Finally this work will not only contribute to other available literature on electronic voting but act as catalyst to further extensive research on BVAS.

Indexed Terms- Democracy, Election, E-Voting, BVAS, INEC and voting.

I. INTRODUCTION

The main characteristic of an election is, it must be free, fair, transparent and credible. For a democracy to be considered stable and strengthened it must have the aforementioned characteristics. At the dawn of the fourth republic in 1999, elections were manually conducted in Nigeria. The manual election process was marred with corruption, vote manipulation, ballot box snatching, under-age voting and election violence.

According to Ikelebe (2016), due to the poor electoral the aftermath elections are always characterised by crisis and litigations in election tribunals and courts (LeVan & Ukata, 2012). There is hardly any election in Nigeria where there is no complaint of election violence and malpractices (Agena, 2007). Weak electoral process always gives room for crises and the aftermath effect is weak democracy, unstable political system and illegitimate government. Thus the people's confidence, trust and interest in participating in the choice of who they vote for and entrust their power to carry on with legitimate authority to govern them is basically eroded. The consequence of manual electoral process does not only create room for desperate politicians and corrupt election officials to manipulate election results but also create room for the installation incompetent and mediocre leaders and illegitimate government. In most nascent African democracies the failure of the election management bodies (EMB) to conduct free, fair and credible election has not only led to low voters turn out, voters apathy, loss of people's confidence in democratic process but also mistrust towards EMB's capacity to conduct credible free elections.

To assuage the fear of the electorate and give elections credibility the Independent National Electoral

Commission (INEC) has since 2011 started with introduction of information technology into the election process, the introduction of Electronic Voters Register (EVR), Automatic Fingerprint Identification System (AFIS) and Smart Card Reader (SCR). The passage of electoral bill into law in 2022 did not only solidify INEC legally but also empowered INEC's usage of electronic voting (BVAS) in the conduct of elections in Nigeria. As the 2023 elections drew closer the demand for the use of electronic voting (E-Voting) heightened from the general public, civil societies, media and international community. Thus the passage of the 2022 electoral bill into law by the President Mohammed Buhari government gave INEC the legal and constitutional backing to use of Bimodal Voters Accreditation System (BVAS) and INEC Result Viewing Portal (IREV) in electoral process. It is believed by the stakeholders that BVAS can reduce the excessive electoral fraud, promote credible elections and reduce voter's apathy and promote voters participation.

The main thrusts of this work therefore are:

- An Assessment of acceptance and perception of electronic voting (BVAS) in 2023 general elections in Nigeria
- 2. Prospects and Challenges of BVAS in the 2023 Elections
- 3. Recommendations to improve on the BVAS

II. LITERATURE REVIEW

There have been several papers and work carried out in areas of research that concern electronic voting; some of them were looked into in the course of preparing this paper.

In the work of Duruji, Ayo, Oni and Oni (2015), the authors presented a case for e-voting in Nigeria with strong emphasis that open and secret ballot was not suitable for conducting election in Nigeria given our political environment. The authors proposed the use of e-voting for subsequent election in Nigeria which according to the authors will eliminate all the flaws of open and secret ballot system. Ahmad, et al (2015), in their study on issues and challenges of transition to e-voting technology in Nigeria, the authors carried out critical appraisal of challenges of e-voting in other countries of the world and the implementation of e-

voting in Nigeria. Their recommendation to the Nigeria government agencies is to invest more on research and development to grasp the in-depth of challenges and sustainability of e-voting system. The study conducted by Ayo, et al (2008), on e-voting implementation in Nigeria: the success factor; proposed an implementation of an integrated system that comprises of an Electronic Voting Machine (EVM), the Internet Voting (i-Voting) and the Mobile Voting (m-Voting) for conducting election in the country to enhance participatory democracy. Similarly, in the work of Musa, et al (2011), on building of a multi-modal trust-based e-voting system. The authors advocate the use of a multimodal authentication method for the electorate when casting their votes. These methods includes biometric enabled voters card, finger print authentication and the use of PIN (Personal Identification Number) for voters to avoid time wastage during voting especially when one of the authentication methods failed, they can easily switch to another one. Also, Abu-Shanab et al (2010), in their work, e-Voting System: a tool for e-democracy argued and stressed the importance of the use of evoting system in conducting election across board because of it attendance benefits, convenience and enhancement of integrity of the election process. They also explore the factors influencing the adoption of evoting system in a University environment. Moreover, Yekini, et al (2012), in their work on computer-based automated voting machine for Elections in Nigeria, proposed the design of an automated voting machine that will automate the entire election procedures in the future election in Nigeria. Similarly, Ajiboye et al (2013) conducted their research on modeling and evaluation of e-voting system for sustainable credible election. They proposed a model for evaluating evoting system by using fuzzy logic approach. The model developed was simulated and tested with student union election in a Federal University in Nigeria and obtained a promising outcome. Gerlach (2009) propounded seven design principles for a secured e-voting system, among which are: proven security, trustworthy design, published source codes, vote verification, voter accessibility, anonymization and expert oversight. In the work of Momodu and Omogbhemhe (2013), the authors used different Unified Modeling Language (UML) artifacts to model the requirements and implementation of

electronic voting system that can be used to conduct election in Nigeria.

III. THEORETICAL FRAMEWORK

In the course of this work we assessed theories in the study of e-voting and considered Martin Hagen's edemocracy and Everett Rogers information diffusion theory. Hagen (2000) construes e-democracy as a strategic tool to strengthen democratic practices using the information and computer technology (ICT). He thinks certain people are usually omitted in the process of making important political decisions of their countries by way of unintended but unsatisfactorily explained disenfranchisement. For Hagen edemocracy is a form of development and reenforcement of democracy which uses new communication technology to strengthen political power of those often omitted in important political process across the world especially in Europe with uncommon success. It can serve affirmative action purpose for the large number of citizens negatively affected by the paper-based voting system.

Everett Rogers (1962) espoused the innovation diffusion theory, IDT theory explains how overtime, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior or product. Adoption means that a person does something differently than what they had previously. (LaMorte 2022)

For the purpose of this paper we will be applying the IDT theory to explain the response to and acceptance of the Biometric Voters Accreditation System by the Nigerian electorate.

IV. METHODOLOGY

The study adopts qualitative research, secondary literature analysis was used to generate relevant information on electronic voting and the adoption BVAS as a model to transparent elections in Nigeria. The sources include journals and articles, newspapers, INEC pamphlets, websites and commentaries of civil society and other INEC stakeholders and the topic of reference is the assessment 2023 general elections.

V. CONCEPTS OF ELECTION AND VOTING PROCESS

Election and voting are rituals in a democracy and every democratic society; they are the fundamental elements of a functioning and stable democracy. The concept of election lacks probable definition or acceptable definition, among political and social scientists' (Isiaka, et al 2019). It is equally not possible to separate the voting from election or vice versa, they are both two sides of a coin. Thus we cannot say one without mentioning the other. For Ikelebe (2016) election is the process by which people decide their rulers and assign persons to leadership positions. It denotes voluntary participation in the choice of leaders and therefore bequeaths or invests legitimacy.

Dye (2001) opines that election is a major instrument for the recruitment of political leadership in democratic societies, the key to participation in a democracy and the way of giving consent to government.

Election allows the governed to choose and pass judgment on office holders who theoretically represent the governed (Rose, 1978) cited in Obakhedo (2011). In the words of Babalola (2019), he simply said, 'elections are all about choosing leaders'. For Zhizhi and Ibrahim (2020) election constitute an essential principle in liberal democracy. Election in a democracy is very important because it is through which that the expression of the people are shown via legitimacy and leadership succession. Huntington is however quick to point out that, a political system is democratic 'to the extent that its most powerful collective decision-makers are selected through fair, honest and periodic elections in which candidates freely compete for votes, and in which virtually all the adult population is eligible to vote' (Huntington, 1991). In its proper sense, election is a process of selecting the officers or representatives of an organization or group by the vote of its qualified members (Nwolise, 2007). Anifowose (2003) and Bamgbose (2012) defined elections as the process of elite selection by the mass of the population in any given political system. Elections provide the medium by which the different interest groups within the bourgeois nation state can stake and resolve their claims to power through peaceful means. Elections

therefore determine the rightful way of ensuring that responsible leaders take over the mantle of power. Araba and Braimah (2015) noted that an election itself is a procedure by which the electorate, or part of it, choose the people who hold public office and exercise some degree of control over the elected officials. It is the process by which the people select and control their representatives. The implication of this is that without election and voting, there can be no representative government. This assertion is, to a large extent, correct as an election is, probably, the most reliable means through which both the government and representatives can be made responsible to the people who elect them. Eya (2003) however, sees election as the selection of a person or persons for office as by ballot and making choice as between alternatives. Ozor (2009) succinctly gives a more encompassing and comprehensive definition of election when he noted that the term connotes the procedure through which qualified adult voters elect their politically preferred representatives to parliament legislature of a county (or any other public positions) for the purpose of farming and running the government of the country. Thus Osumah (2002) elucidates what the basic objective of election is which is to select the official decision makers who are supposed to represent citizens-interest. Elections, according to him extend and enhance the amount of popular participation in the political system. Voting according to Idike (2014) is at the center of the electoral process in a democratic system of government. It is indeed, the first in the democratic process. The journey to democratic governance not only starts with the voting process but its consolidation is determined by it (Ujo, 2008).

VI. CONCEPT OF E-VOTING AND BVAS

The goal of any voting system is to establish the intent of the voter and transfer that intent to the vote counter. The efficiency of the voting method and the accuracy of the vote counter are the crucial determinants of the ability and capacity of the system to correctly determine the wish of the voters (Iwu, 2008). The ability and capacity of the system to correctly determine the intent of the voter it appears, is the superior technology, inherent in the in e-voting methodology. For Iwu (2006) electronic voting system is one of the several forms of automated voting

methods, which employ computer technology devices to improve several aspects of the electoral process. He went further to assert that the electronic system incorporates largely paperless voting methods prominent among which are electronic voting machine (EVM), Internet voting, telephone, IVR voting, digital TV voting, electronic kiosk voting, etc. The Nigeria electronic voting system continued IWU is an image based integrated programme, which consists of the following components.

- Electronic voters register
- Eligible voters' Authentication
- Electronic Balloting (voting machine)

The electronic voting system also known as e-voting can equally be said to be a development where peoples' collective intent are electronically determined as votes are cast electronically using what is called barcode (Agena, 2007), it is believed that when the electronic system is employed, it allows for security of the votes cast and which will fundamentally allow the choice candidates by the electorate to carry the day during electrons (Agena, 2007). According to Babalola (2021) electronic voting is a comprehensive system of casting, counting and transmission of votes through electronic means. It may involve both the process of casting and counting of votes or may relate only to the process of counting. Evoting technology includes punched cards, optical scanned voting systems and specialized voting cubicles or kiosks including self-contained direct recording electronic voting systems popularly referred to as DRE. The term E-voting may also refer to transmission of ballots and votes through telephones, private computers or the internet.

The Nigerian election management body started with the experimentation of BVAS in 2021, BVAS was first experimented during the Isoko South constituency 1 bye-election in Delta State, this was followed the deployment and successful use of BVAS in the local government election in Kaduna State, BVAS was first used in a statewide election in November 2021 in Anambra State. Though the innovation reported minimal success due to the failure of BVAS to capture voters in some instances but it showed promising potentials as Odinakalu (2021) puts it, the system

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deserves time to prove itself but INEC will not get too many more opportunities.

VII. BVAS? AN ANSWER TO ELECTION MALPRACTICE

Though the experimentation with BVAS was laced with teething challenges, the Ekiti and Osun States governorship election in 2022 was the first major acid test, the challenges encountered during the bye-elections in Delta and Anambra States were deemed to be corrected in the 2022 governorship election in Ekiti and Osun States which made the electorate in both states to believe elections was to a large extent credible and transparent. (Iremeka 2023)

According to Odinakalu (2021) BVAS technology combines voter enrollment, voter accreditation, and result interface capabilities in one device, Odinakalu maintains that that the BVAS technology, "theoretically should eliminate the gaps that enable analogue manipulation of numbers in election. The voter accreditation capability combines fingerprint, Iris and facial recognition supposedly to eliminate guesswork in voter identification and accreditation." Furthermore BVAS is used to transmit a snapshot of the result sheet at polling units to INEC portal in real time for the public to see, as they logged in to the portal, (Oyemike 2023).

In preparing for the 2023 general elections the demand for the application of BVAS from the civil societies, stakeholders and the Nigerian voters heightened, (Okonji 2023). In order to show its preparedness to conduct transparent, free, fair and credible elections, in the buildup to the 2023 elections INEC insisted on the use of Bimodal Voter Accreditation system (BVAS) to conduct the 2023 elections. The Guardian Newspaper editorial (2022) maintains that the accessibility of the polling unit results increases transparency and public trust in the electoral process, it went further to support the electoral management body on its insistence on the usage of BVAS. The BVAS technology is considered to be a solution to the following election malpractices;

- Falsification of number of accredited voters at the polling unit
- Falsification of votes at the polling unit

- Collation of false results
- Mutilation of results
- Computational errors
- Swapping of results sheets
- Forging of result sheets
- Obtaining declaration and result involuntarily
- Making declaration and return while collation is still in progress
- Poor record keeping

To most Nigerian electorate, civil society organizations and stakeholders the use of BVAS and strict adherence to the 2022 electoral act was seen as a solution and way out of election irregularities and INEC's inability to conduct transparent and credible election. "Nigerians, including technology experts who spoke, advised INEC to ensure that all election results are uploaded through BVAS to INEC portal, to avoid repeat of manual collation of election results, as witnessed in the presidential and National Assembly elections" (THIS DAY 2023).

VIII. 2023 ELECTIONS AND BVAS ISSUES ARISING.

Technology innovation and the deployment of technology into electoral process has been a major factor encouraging citizens to participate in political process, but the deployment BVAS is not without its challenges, it has been observed that the technology has failed in some areas and it is susceptible to manipulations. There have been reported cases of BVAS not capturing older permanent voter card (PVC) or its inability to read some elderly peoples thumb print, this has led to the disenfranchisement of eligible voters. The increasing reliance on e-voting is not without risk of cyber attacks and manipulation by those entrusted with the technology, "there is a high tendency that cyber-attacks will be focused on both the BVAS and IReV. The objective of a cyber-attack on the BVAS will be to prevent the snapped results sheet from being transmitted to INEC Server. A cyberattack on the IReV portal may include modification of the results on the portal or the disruption of the IReV Portal from the public. Notwithstanding, the modification of the results sheet may only be possible with the cooperation of a malicious insider, but disruption can be done with or without a malicious insider". (THIS DAY, 2023)

The deployment of e-voting/BVAS may have has its shortcoming as experienced in the just concluded 2023 elections, but there seem to be hope in the horizon as many big wig politicians and political heavy lost election due to the deployment of BVAS. As Iremeka (2023) puts it ,,the deployment of technologies in the 2023 elections brought about a number of improvements, though some schools of thoughts felt that the technologies, especially BVAS, failed the country despite its achievements. It is on record that for the first time, some sitting governors in the country lost elections in the manner that they did. The improvement associated with the deployment of the technologies, especially BVAS, was seen in Lagos where, for the first time since 1999, Asiwaju Bola Tinubu lost an election to a party considered to be small. By the same reason, a number of sitting governors failed in their attempts to become Senators in the 10th National Assembly. The first governor that comes to mind is Ben Ayade of Cross River State who lost to Sen. Jarigbe Agom-Jarigbe, the sitting Senator in Cross River North district. Titus Zam of the APC, a former aide to Benue State Governor Samuel Ortom, defeated Ortom in the race for the Benue North-West Senatorial seat. Senator Adamu Aliero of the Peoples Democratic Party (PDP) was declared winner of the Kebbi Central Senatorial District election. Aliero defeated Governor Abubakar Bagudu, according to the INEC Returning Officer, Prof. Abbas Yusuf-Bazata, who announced the results in Birnin Kebbi. Governor Ifeanyi Ugwuanyi of Enugu State was defeated in his race for the Senate by Okechukwu Ezea of the Labour Party (LP) as Governor Darius Ishaku of Taraba State, the outgoing two-term PDP governor, lost to David Jimkuta. Governor of Plateau State and Director General of the APC Presidential Campaign Council, Simon Lalong failed to win the ticket to the green chamber. The former Chairman, Northern Governors' Forum and a political heavyweight lost to PDP's Bali Napoleon at the Plateau South Senatorial District election. In the same manner, Senator Enyinnaya Abaribe of Progressives Grand Alliance (APGA) defeated the sitting Governor Okezie Ikpeazu at the Abia South Senatorial election."

From the perspective of election watchers and observers these heavyweight politicians would have done everything possible to win the elections if 2023 electoral act did not give INEC the requisite and needed legal backing to insist on the deployment of BVAS as the only legal means of accrediting voter for the 2023 election.

CONCLUSION

Globally the innovation and deployment of technology in electoral process is no more a novelty, Nigeria as a budding democracy has joined the committee of nation in her quest and commitment to conducting credible and transparent elections. The 2023 election has come and gone but the introduction of BVAS has altered the electoral process in Nigeria. Though there are still grey areas that need to be cleared, it can be deduced from the development emanating from the 2023 election, the major faults was more of human fault than technological lapses. A good example is the hasty and illegal announcement of the Adamawa State governorship bye-elections where APC governorship candidate Aishatu Dahiru (hajia Binani) was hastily and illegally announced winner even before results were completely collected. The electorate, stakeholders and civil society organizations believe and are hopeful that when necessary and needed corrections are made to the faults discovered so far in BVAS, IREV and other components of electronic voting the social contract between electorate and the elected political class will be reinforced. It is equally believed that if sustained INEC with the innovation of BVAS and other components of e-voting will in the near future be able to conduct free, fair, transparent and credible elections.

RECOMMENDATION

- The Independent national electoral commission (INEC) must improve on its cyber security network to forestall future attacks on its system
- To avoid human errors INEC should make it a
 point of duty to hire or employ people of proven
 integrity as returning officers and those handling
 the BVAS should be given all necessary and
 adequate training on the use and maintenance of
 the equipment

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- To improve connectivity, the National Communication Commission (NCC) should upgrade its broadband networks, without this the country will not be able reap the full benefit of BVAS
- 4. As a way forward INEC should subject the BVAS and IREV to stress tests before elections.

REFERENCES

- [1] Agena, J. (2007). Electronic voting system and credible electoral system in Nigeria. *African Journal of Politics and Administrative Studies*, Vol.3(1)
- [2] Araba, A.A, Braimah, J.O. (2015). Comparative Study of 2011 and 2015 Presidential Elections in Nigeria. *Global Journal of Human Social* Science, Vol.15, Issue 7, Version 1.0
- [3] Ayo, C., Adebiyi, A.A., and Sofoluwe, A.B. (2008) 'E-voting Implementation in Nigeria. Journal of Computer Science and its Application, Vol.15, No.2, pp. 91-105
- [4] Babalola, A. (2019). Towards Credible Election:
 Results Announced By Presiding Officers
 Should Be Deemed As Conclusive.
 http://www.vangaurdngr.com/2019/02/towardscredible-election-results-announced-bypresiding-officers-should-be-deemed-asconclusive-evidence-by-inec-and-courts/
- [5] Babalola, A, (2021). The E-Voting System Visa-Vis Nigeria's Electoral Challanges. http://vangaurdngr.com/2021/12/the-e-voting-system-vi-a-vis-nigerias-electoral-challanges/
- [6] Duruji, M., Ayo, C., Oni, S. and Oni, A. (2015). Making a Case for E-votin in Nigeria. *Proceedings of the 15th European Conference on e-government, pp.100-106*
- [7] Dye, R.T. (2001). Politics in America. 4th ed. New Jersey: Upper Saddle, Rivers State
- [8] Esan, A.O. and Ayeni, P.T. (2018). E-Voting in Nigeria: Barriers to Full Implementation.

 Journal of computer engineering and information technology, 7(1)
- [9] Eya, N. (2003). Electoral Process, Electoral Malpractices, Electoral Violence. Enugu, Sages Publication Nigeria Limited
- [10] Gerlach, F. (2009). Seven Principles for Secure E-voting. *Communication of the ACM, Vol.52, no.* 2

- [11] Huntington, S. (1991). Democracy and third wave. *Journal of Democracy*, 2(2)
- [12] Idike, A.N.A, (2014). Democracy and the Electoral Process in Nigeria: Problems and Prospects of E-voting Option. *Asian Journal of Humanities and Social Sciences* (AJHSS), Volume 2 issue 2
- [13] Ikelebe, A. (2016). Politics And Governance in Nigeria: perspectives, issues and cases Ibadan (John Archers)
- [14] Isiaka, H.O., Ibrahim, H. and Kolawole, L.M. (2021). Election and Voter's Turnout in Ngeria: An Investigation of Reasons for Voter Apathy in 2019 General election in Oyo State. International Journal of Innovative Science and Research Technology, Volume6, Issue 5
- [15] Iremeka, chijioke, (2023) Electoral fraud, technology and future of Nigeria's democracy. https://guardian.ng/saturday-magazine/electoralfraud-technology-and-future-of-nigeriasdemocracy/
- [16] Iwu, M.M. (2006). Electronic Voting and the Future of Electoral System in Nigeria. *The Nigerian Electoral Journal*, 2 (1) 1-29
- [17] LaMorte, Wayne W. (2022). Behavioural Changes Model: Diffusion of Innovation Theory. Http/sphweb.bumc.bu.edu
- [18] Levan, C., & Ukata, P. (2012). Countries at the crossroads 2012: Nigeria https://www.thisdaylive.com/index.php/2023/02/13/of-bvas-technology-elections-and-democracy/w.freedomhouse.org/sites/default/files/Nigeria%20-%20FINAL.pdf
- [19] Musa, A., Ayo, C.K. and John, S.N. (2011). 'Building a Multidimensional, Trust-based E-voting System'. Proceedings of the 2011 World Congress in Computer Science, Computer Engineering and Applied Computing (EEE'11 International Conference on e-learning, e-Business, Enterprise Information Systems and e-Government. USA, July 2011)
- [20] Nwolise, O.B.C. (2007). Electoral Violence and Nigeria's 2007 Elections. *Journal of African Elections*, 6 (2)
- [21] Obakhedo, N.O. (2011). Curbing Electoral Violence in Nigeria: The Imparative of Political Education. African Research Review International Multidisciplinary Journal, Ethiopia, Vol.5, No. 5

- [22] Odinkalu, Aslem, Chidi, (2021) Election: Let's talk about BVAS. www.icirnigeria.org/election-lets-talk-about-bvas/
- [23] Okonji, Emma, (2023), Nigerians Urge INEC to Use BVAS for voter Accreditation, Uploading of Results in Saturday's Eelection. *THIS DAY*. https://www.thisdaylive.com/index.php/2023/03/ 09
- [24] Osumah, O. and Aghamelo, A.T. (2010). Elections in Nigeria Since The End of Military Rule. *AFRICANA*, *Volume 4*, *No. 2*
- [25] Oyemike, Ikechukwu, (2023), 2023 General Election: All You Need to Know About The BVAS. Nigeria Info. www.nigeriainfo.fm/news/hompagelagos/2023-general-election-all-you-need-to-know-about-the-bvas/
- [26] Ozor, F.U. (2009) "Electoral Process, Democracyand Governab'nce in Africa: Search for an Alternative Democratic Model. "
 Politikon, 36(2), pp.315-336
- [27] Ujo, A.A, (2008). The Meaning and Importance of Voting in The Process of Democratic Governance. *The Electoral Journal*. *2*(1) 62-72
- [28] Yekini, N.A., Oyeyinka, I.K., Oludipe, O.O. and Lawal, O.N. (2012). 'Computer-Based Automated Voting Machine for Election in Nigeria'. Intrnational Journal of Computer Science and Network Securit, Vol.12 pp.57-62
- [29] OF BVAS TECHNOLOGY, ELECTIONS AND DEMOCRACY (2023), https://www.thisdaylive.com/index.php/2023/02 /13/of-bvas-technology-elections-anddemocracy/
- [30] The Guardian Newspaper Editorial. http://guardiuan.ng/opinion/bvas-inec-and-electoral-intergrity/
- [31] Zhizhi, Meschach, R. and Ibrahim, Mohammed, Nasiru, (2020). Electoral Democracy and administration of Elections in Nigeria. www.researchgate.net