

Significance of electronic voting technologies in achieving SDG 16

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Abstract: The study provides an in-depth understanding of the transformative effect of information and communication technologies on elections and how they can positively impact electoral integrity in Zimbabwe. The study adopted a qualitative approach where data from primary sources were obtained through interviews (in-depth and key informant interviews) and observations, while secondary data were derived from publications and other documented materials. Conceptual and document analysis were used to analyse the collected data from primary and secondary sources. Findings of the study indicate, among other things, that numerous challenges affect the integrity of the traditional electoral system. The study thus proposes a framework called the electronic voting and digital elections implementation framework, requiring related components and sections of the election process to be collaborated and aligned for electronic voting technologies to be successful and have a lasting positive impact on the integrity of the elections in Zimbabwe.

Keywords – Electronic voting technologies, elections, integrity, election management bodies, information and communication technologies.

I. INTRODUCTION

The study discusses the historical journey of elections in Zimbabwe and the challenges hampering the integrity of elections. These challenges prompted the Government of Zimbabwe (GoZ) to adopt electronic voting technologies (EVTs) as a practical solution. The GoZ has learned valuable lessons from countries that have adopted EVT and have success stories to share with other African countries. Some scholars have also analysed these systems, developing a link between the use of EVT and the combat of misconduct, hence maintaining and enhancing the integrity of democratic elections.

The theory of technological determinism (TD) is one of the most applied theories in explaining the effects of technology on sociopolitical developments occurring in a society. It describes the interaction between technology and society (Dafoe, 2015: 1059). It is the belief that technology is the principal initiator of societal transformation, and that a modern information society arises because of innovations, new technologies, and their social and political implications (Hauer, 2017:1). Adler (2006: 1) submits that technological determinism is simply the idea that technology has an important effect on people's lives and that the internet continues to revolutionise society and the economy, further arguing that technology does indeed determine much, or rather, too much, in contemporary society. This view is also shared by Drew (2021), who argues that TD is an idea that technology shapes sociopolitical change and determines the future. According to Drew (2021), this theory posits that technological advancements present moments that bring on a new phase in human history, imagining how the internet and microprocessor-based computers are the most disruptive technologies that have revolutionised human experience on the earth in the past century.

The origin of this theory is attributed to American Sociologist Thorstein Veblen (1857-1929) and is argued to have also received attention and propagation from other theorists such as Karl Marx (Heuer 2017, Papageorgiou and Michaelidis 2016, Smith and Marx 1994). The theory gained both popularity and controversy in the 20th Century in its effort to explain the role of technology in society. Chandler (2003: 3) notes that TD sought to explain political,

social, and historical phenomena in terms of one principle or determining factor. It is perceived to be a doctrine of historical or causal primacy (Chandler 2003:4) and proposes that significant changes in human life result from technology (Bryman, 2007). Smith and Marx (1994: 23) submit that this is a reductionist theory that presumes that a society's technology drives the development of its social, political structure and cultural values. The theory features prominently in popular imagination and political rhetoric, for example, in the idea that the internet is revolutionising the economy and society (Adler, 2006:1). Volti (2020:1) reveals that the proponents of the TD theory claim that technology is the major driver of how society, cultures, economies, and governments are structured, as well as being the most powerful force that causes them to change. Here, technology is portrayed as a transformative tool that causes change in society, whether it is desired or not. Technological determinists are convinced that technological developments directly influence the path of change in society, and the thesis of technological determinism ascribes agency to an inert object, namely technology, in human affairs and their development (Bryman, 2007:12).

Technological determinism (TD) has been grouped into two categories: *hard determinism* and *soft determinism* (Smith and Marx 1994:26). Hard technological determinism posits that every development in society is a direct consequence of technology and that technology is responsible for all changes and developments in society. In contrast, soft determinists hold a more passive view on how technology interacts with sociopolitical situations (Smith and Marx 1994:30). However, it is not the intention of this study to discuss the two strands. Instead, this study aims to demonstrate how the precepts of technological determinism are crucial in explaining the phenomenon of EVT in terms of electoral integrity, and also to explain the behaviour of such technologies in influencing change in this regard.

The study utilizes a qualitative research approach. Mbanaso et al. (2023:258) comment that when little information exists on a topic, when variables are unknown or when relevant theory is based on inadequate or missing information, a qualitative study can help define what is important, that is, what needs to be studied. They argue that in this approach, the methodology often involves an iterative and recursive process in which the researcher moves back and forth between data collection and analysis. The qualitative approach ensures a thorough understanding of a relatively unknown subject of inquiry, making it suitable for a paradigmatic dimension which is exploratory and descriptive.

The sections of the article are covering the following: section II explores the Democratic Elections in Post-independent Zimbabwe. Section III focuses on Discussion and Results. Section IV offers conclusion on the study.

II. DEMOCRATIC ELECTIONS IN POST-INDEPENDENT ZIMBABWE

Zimbabwe's elections at independence in 1980 were conducted using the proportional representation model based on a party list system, according to which seats in the National Assembly were allocated in proportion to the number of votes won in each of the country's eight provinces (Sithole & Makumbe 1997:125). These elections were conducted using a dual voters' roll, which comprised the White Roll, which catered for the White minority and was used for the reserved 20 National Assembly seats, which were won by former Prime Minister Ian Smith's Rhodesia Front Party. The remaining 80 seats were contested in the Common Roll, which served the Black majority (Tevera, 1989:162). These were distributed across the country's eight provinces and contested by the Robert Mugabe-led Zimbabwe African National Union-Patriotic Front (ZANU-PF), which got 57 seats, and the Joshua Nkomo-led Patriotic Front-Zimbabwe African People's Union (PF-ZAPU), which got 20 seats; the other seats were shared among small parties such as the United African National Congress (UANC), led by Abel Muzorewa (Tevera, 1989:162).

Tevera (1989:163) highlights that the proportional representation model was chosen due to its convenience since there had been no adequate time to delimit constituencies. It can also be viewed as "an appropriate model which could have nurtured the country's democratisation process which was still budding" (Moyo, 1992: 182). This model was, however, abandoned in 1985 when the country adopted the single-member district (SMD) or first-past-the-post and winner-takes-all system (Sithole and Makumbe 1997:126). In this election, according to Sachikonye (2003: 127), a total of six parties contested the elections, and ZANU-PF won the elections ahead of its then primary rival, PF-ZAPU, and other political parties. Tevera (1989:165) considers these elections as having been significant in promoting democracy through holding regular elections. According to Tevera (1989:165), this was the country's first general election, which witnessed competition even in the White roll, whose seats were this time contested, a departure from the previous electoral practice which reserved them for the Rhodesia Front. New parties such as the Conservative Alliance of Zimbabwe (CAZ) and the Independent Zimbabwe Group (IZG) contested the White roll

and each garnered 15 seats and four seats, respectively. Lemon (1988:3) buttresses that the 1985 elections presented an opportunity for multiparty democracy in Zimbabwe, evidenced by the numerous parties which contested this election.

However, the adoption of this new model was ill-timed and regressive to the progress of nurturing a democracy still in its nascence. Moyo (1992, in Sithole & Makumbe, 1997:124) argues, in essence, that "the proportional representation model was favoured for Zimbabwe for the simple reason that it was the most suitable for societies which are in the process of developing a democratic culture." Therefore, the abandonment of this model and the incorporation of a winner-takes-all, and first-past-the-post system has been regarded as the source of the problems bedevilling the country's electoral system and processes since its adoption during the 1985 and 1990 elections, because it influenced those in power or the winners to further entrench and consolidate their power through ways which more or less culminate in electoral manipulation and fraud (Moyo, 1992: 182).

Ndlovu-Gatsheni (2012:7) notes that election times have never been happy moments in Zimbabwe, recounting that in the 1985 elections, for instance, PF-ZAPU was prevented from campaigning in Manicaland and Mashonaland provinces because of politically motivated violence unleashed against their efforts to penetrate those areas. According to Ndlovu-Gatsheni (2012:7), PF-ZAPU was perceived to be a serious challenge to ZANU-PF in both the 1980 and 1985 elections. However, it was during the 1985 elections and the subsequent ones that much concern was raised regarding how elections were being handled or managed. Also noteworthy were complaints raised during the delimitation exercise, where the structural design of the process was deemed to be favouring certain political parties ahead of others who participated in the 1985 plebiscite (Southall, 2013:108). It is further recorded that numerous challenges were encountered during the voters' registration exercise in the lead up to the 1985 elections, whose actual conduct was not beyond reproach (Southall, 2013: 108). Election management was another area of concern during this era. Southall (2013: 120) indicates that electoral management in Zimbabwe was conducted by four bodies, namely the Electoral Supervisory Commission (ESC), Registrar General (RG), Elections Directorate, and the Delimitation Committee (DC). For Southall (2013), it was not a coincidence that management of elections was neither centralised nor dedicated to one institution.

The subsequent 1990 elections were a unique election in the country's first decade of independence, evidenced by the electoral amendments which introduced an Executive President and abolished the Office of Prime Minister. In the run-up to the 1990 elections, the Constitution and electoral legislation were amended to introduce a provision for a popularly elected and executive president (Africa Watch, 1988:2). The new electoral laws introduced an executive president and were blamed for the irregularities that marred the process of elections (Sithole and Makumbe 1997:135). Sithole and Makumbe (1997:135) note that, "the violence perpetrated against opposition during the 1990 election was the worst in an election year since independence, culminating in the shooting of a businessman, Patrick Kombayi who dared challenge Vice President Muzenda in the Midlands City of Gweru." The elections which succeeded in the 1990 plebiscite also encountered a myriad of challenges and were arguably marred by numerous irregularities and controversies whose outcome(s) were disputed, contested, and dismissed as fraudulent (European Union (EU), 2018: 2).

Regarding the 2002 election, Sachikonye (2003:139) argues that, first, there were significant flaws relating to the voter registration process. The transparency of the electoral process was compromised by the Registrar General's refusal to make public the consolidated voters' roll as required by the electoral laws governing this process. It is further argued that during this election, the production of ballot papers was not open to verification by political parties, monitors, and independent observers (Sachikonye, 2003:139). Melber (2002:49) concludes that, regarding the 2002 election, "Mugabe may have won the election under such conditions, but he faces the serious deficit where it matters the most, namely loss of legitimacy among millions of Zimbabwe citizens." However, the 2002 Presidential Elections and the 2008 harmonised elections in Zimbabwe remain landmark cases in the study of elections. The former is regarded as the first fiercely contested by a then newly emergent and vibrant opposition Movement for Democratic Change (MDC), led by Morgan Tsvangirai, while the latter occurred during the country's worst economic era, punctuated by unprecedented inflation and currency erosion (Moyo, 2021). This was a period when the ruling party, ZANU-PF, led by Robert Mugabe, was believed to be losing its grip on power. The 2002 elections, won by ZANU-PF's Robert Gabriel Mugabe with 56.2%, were also disputed, due to allegations of voter fraud and other malpractices that favoured the incumbent. MDC's Morgan Tsvangirai polled at 42% (Moyo, 2021). The 2008

harmonised elections were called harmonised because they brought the parliamentary and presidential components together, adding them in the election of a new senate (Chan & Gallagher, 2017:20).

Hove and Harris (2015:6) summarise the period encompassing these elections as "decade of stolen ballots." It is further alleged that "in fact the last five elections, the presidential election in 2002, parliamentary elections in 2005, the harmonised elections in March 2008, the presidential runoff in June 2008 and the July 2013 elections were not free and fair" (Bureau of Democracy, Human Rights and Labour, 2010: viii). Further commenting on the 2008 elections, Hove and Harris (2015: 12) contend that the voters' roll used during these elections was in shambles and unrealistic. The same voters' roll was argued to have been used in the preceding elections with deliberate human-induced omissions and inclusions. It is such a voters' roll which led to the deeply contested election results (Hove & Harris, 2015: 12). Ndlovu-Gatsheni (2012:10), citing Byron (2005), notes that an outdated and shambolic voters' roll was used, which facilitated rigging. Ndlovu-Gatsheni (2012:10) further discounts the credibility of these elections by alleging that ballot boxes were being stuffed with votes in favour of the ruling party. However, "these elections were regarded as constituting an extraordinary process in Zimbabwe's electoral history" (Electoral Institute for Sustainable Democracy in Southern Africa (EISA), 2008: xii).

During the 2008 harmonised elections, fears of election manipulation through the voters' roll were registered mainly by civil society groups (Crisis in Zimbabwe Coalition (CZC), 2008:11). The election was marred by numerous electoral irregularities, which raised suspicions from opposition political parties, civic groups, and observer missions that the election was being manipulated. Delay in the publication of results, which took almost two months before publication, cemented the narrative of these civics that the elections were manipulated (CZC, 2008: 11). Southall (2013:116) notes that the 2008 electoral process was severely wanted in respect of fairness as most of the critical aspects of the process lacked transparency. The delay by ZEC to announce results, alongside a lack of transparency in the counting process, fuelled widespread suspicions of vote rigging. The civil society organisations presented their version of the vote and alleged the results announced by the Zimbabwe Electoral Commission (ZEC) were manipulated in favour of ZANU-PF (Southall, 2013: 116). The election was won by MDC-T, with Morgan Tsvangirai polling at 47.9% of the total vote ahead of Robert Mugabe's 43.2%, and Simba Makoni of Mavambo Kusile Dawn (MKD) at 8.3%. MDC also won the parliamentary contest, garnering 100 seats in the National Assembly; ZANU-PF accounted for 99 seats, while the remaining 10 seats went to the splinter MDC led by Arthur Mutambara (Moyo, 2021).

However, the percentage polled by Morgan Tsvangirai was not adequate to enable him to form a government, and as such, the March 2008 election was not conclusive. Section 110(f) (iii) of The Zimbabwe Electoral Act 2018 [Chapter 2:13] provides that a presidential runoff election be held in the case where none of the contestants' polls more than half of the total votes. It states that: "where there are more than two candidates, and no candidate has received more than half the number of votes, forthwith declare that a runoff presidential election shall be held on the date fixed by the President in terms of section 38(1)(a)(iii)(that is to say, a fixed date not less than twenty-eight and not more than forty-two days after the polling day or last polling day, as the case may be, of the original election): Provided that the Electoral Court, on the application of the Commission, may for good cause extend the period" (Government of Zimbabwe (GoZ), 2018). This is the section of the law that informed the subsequent June 2008 presidential election runoff, which resulted in the election of Robert Mugabe. The election was boycotted by Morgan Tsvangirai, who claimed that his life was in danger and that the election had already been manipulated in favour of ZANU-PF and Robert Mugabe (Southall, 2013: 116).

Chan and Gallagher (2017: 1) consider the presidential runoff elections as the worst in the country's history of elections. Chan and Gallagher (2017:36) further argue that rigging was followed by a simple *force majeure* to coerce the electorate to vote in favour of Mugabe, adding that the violent coercion became so bad that Tsvangirai withdrew just days before the runoff. Mugabe went to the polls unopposed, and this time, the counting only took two days.

The 2013 harmonised elections were won by ZANU-PF and its then leader, Robert Mugabe, who accounted for 160 National Assembly seats and 61.1% of the presidential vote, respectively (Moyo 2021). In comparison, MDC-T only managed 49 seats in the National Assembly whilst its leader, Morgan Tsvangirai, polled at 34.9% of the presidential total. ZANU-PF gathered the two-thirds majority in parliament in an election that was endorsed as free and peaceful by numerous observer missions. However, despite this endorsement, there remained allegations of voter

fraud and suspected electoral malpractice (Chan & Gallagher, 2017: 1). Of note is the observation made by the Zimbabwe Election Support Network (ZESN) (2013:32, 71) that the voters' roll was not updated and had missing voters, notably young and urban voters, and that numbers had been inflated, especially in the rural areas. Further allegations are that, in 2013, the voter registration exercise and the voters' roll were manipulated (ZESN, 2013:32, 71).

Due to these challenges, electronic voting technologies were considered to create an environment of good governance.

The most recent elections were the 31 July 2018 harmonised elections, which came on the heels of a military-assisted transition in November 2017, which was dubbed "Operation Restore Legacy." This marked an end to the longest tenure of Robert Mugabe, who was replaced by his then-deposed deputy and now president of Zimbabwe, Emmerson Mnangagwa (Chikwawawa, 2019:312). These were a unique set of elections in the sense that, first of all, it was the country's first election since independence which did not have Mugabe as a contestant, and secondly, it occurred under reformed electoral laws which introduced the country to its first utilisation of information communication technologies (ICTs) in an electoral process, albeit only at voter registration level (International Republican Institute (IRI), National Democratic Institute (NDI), Zimbabwe International Election Observer Mission (ZIEOM), 2018: 6). The incorporation of biometric voter registration (BVR) was regarded by many as a milestone in improving the country's electoral process, most importantly in the much-criticised voter registration process (ZESN, 2018:5).

The 2018 harmonised elections sought to alter the narrative about Zimbabwe's elections and present a reformed electoral environment which marked a 'new dispensation' towards renewed commitment to principles of democracy by holding free, fair, and credible elections (Chikwawawa, 2019:312). According to ZESN (2018: 9), to demonstrate increased interest in this election, the Zimbabwe Elections Commission (ZEC) surpassed its voter registration target to register eligible voters from 70% to 73%, and for the first time, people considered to be of foreign origin (aliens) were permitted to register and vote under the new electoral laws. Zimbabweans came out and voted in significant numbers. Voter turnout was approximately 85% and demonstrated the populace's desire for democratic governance and enthusiasm to participate in the electoral process (IRI/NDI ZIEOM, 2018: 6).

The 2018 elections were won by ZANU-PF's Emmerson Mnangagwa, who polled at 50.8% ahead of MDC-Alliance's Nelson Chamisa, who managed 44.3% of the total vote (IRI/NDI ZIEOM, 2018:10). This result was also confirmed by ZESN who conducted a parallel voter tabulation (PVT) exercise and accepted the final result as being within a credible statistical range (ZESN 2018:9). However, Chikwawawa (2019:315) citing the European Union Observer Mission (EUOM) (2018) claimed that the final results announced by ZEC contained numerous errors and lacked adequate traceability, transparency, and verifiability. Like in other preceding elections, the 2018 plebiscite also could not render a credible outcome with fewer or no contestations and disputes, which lamentably could have further implications for the country's prospects for consolidation of democracy (Chikwawawa, 2019: 315).

III. DISCUSSION AND RESULT

Zimbabwe has a history of conducting elections since the country's attainment of independence in 1980 (Sithole & Makumbe 1997:124). Although different political parties have always contested these elections, the ruling party, ZANU-PF, has always had electoral hegemony since 1980 (Sithole & Makumbe, 1997: 126). Since 1980, Zimbabwe has conducted numerous elections to elect representatives from local authority, legislature, and presidential levels. Southall (2017:106) notes that "between 1980 and 2009, Zimbabwe had experienced seven elections, four for the National Assembly, two for the Senate, two for the Presidency [inclusive of the runoff in the second instance] and a constitutional referendum in 2000." Although Southall's observation overlooks the additional harmonised elections conducted in 2013 and 2018, as well as another constitutional referendum held in 2013, the point of his observation is to demonstrate the relatively rich history and experience that the country has in conducting regular elections. Southall (2017:106) also indicates how the country's electoral systems and processes have evolved in response to the dynamic changes in the global sphere and the quest for democratisation. Despite this experience, Sachikonye (2003: 120) highlights that Zimbabwe's election outcomes remain disputed amidst allegations of electoral malpractices, which have often undermined the legitimacy of the process.

The contextual background and historical overview of Zimbabwe's elections, presented above on a case-by-case basis of elections held since 1980 independence, aptly demonstrates the electoral crisis that continues to

undermine the country's efforts at democratisation. The current traditional and manual system, which has been in use since the first elections in post-colonial Zimbabwe, can arguably be identified as largely responsible for the type and quality of elections that the country has administered since independence. Baker (1982: 6) supports this notion by positing that, even the 1980 elections in Zimbabwe encountered unusual administrative difficulties, being conducted in some haste, during a ceasefire in the civil war, and when stable administration was not established in the whole country, the author argues that the problems faced in the conducting of elections went beyond what are discussed in standard works of elections. Mathe (2020:128) also contends that "Zimbabwe has had a troublesome electoral past since 1980", citing that, "the country's elections have been a subject of manipulation, fraud and are fraught with disputes which have been a result of the way they are conducted." In essence, the scholar argues for an improved electoral system which will enhance the quality of the country's elections and its electoral record. Citing Sithole and Makumbe (1997), Mathe (2020:129) contends that most of the elections held after 1980 had been a mere formality with low voter turnout due to voter apathy, further arguing that Zimbabwe is among African states with a troubled democracy whose elections have been viewed as unfair and unrepresentative with a rigged, inaccurate voters' roll and low voter turnout.

The important role of elections in democratic dispensation cannot be overemphasised. Regular free and fair elections are part of a democratic system, and they accord the citizens a chance to elect a leader of their choice. In democratic political systems, elections are an important feature of public participation in choosing the individuals and groups that will rule them (Makumbe. 2006:45). The handling of democratic elections requires certain minimum standards if elections are to be judged free and fair. Transparency in the procedures followed in handling all aspects of the electoral process is a key requirement (Makumbe 2006: 46). Many elections in Zimbabwe have arguably failed the test of integrity and production of credible results due to allegations of fraud and electoral malpractices in the pre-election, election, and post-election period. These malpractices range from a lack of transparency, voting, tallying, counting, and tabulation of results, among many others (Mathe. 2020: 127).

Sachikonye (2003:118) submits that growth in electoral studies appropriately places elections at the centre of the discourse on governance. Pottie (2001:32) argues that elections are central to the process of democratic consolidation and good governance. All elements of elections should demonstrate their service towards the advancement of the will of the people, from voter registration to the publication of the results. Sachikonye (2003:118) further observes that the conduct of Zimbabwe's past elections and their outcomes expose serious and inherent weaknesses in the country's electoral system. According to Makumbe (2006:45), the significant "challenges in the country's electoral system include lack of transparency in electoral procedures; lack of information on electoral regulations on both the electorate and contestants; numerous amendments to the laws; and fraudulent tallying of votes at counting," to state a few. In essence, it is the whole system that is argued to be flawed and, as such, burdened with challenges which compromise the quality of elections. This also hampers efforts at good governance and casts a shadow of doubt on issues of the legitimacy of the outcome and regresses democratic consolidation (Mathe, 2020: 131).

Melber (2002:49) posits that Zimbabwe's governance system, including electoral infrastructure, must be reformed to make it responsive and more accountable. On the electoral system, Melber (2002: 50) agitates for a transparent and less flawed process of conducting elections to contribute towards the growth of democracy and good governance in Zimbabwe. Also commenting on the challenges bedevilling the electoral processes in Zimbabwe, with particular interest on voter registration, Sachikonye (2003:129) states that "the process of voter registration remained an Achilles heel of Zimbabwe's electoral system which required urgent addressing." On the same note, Sachikonye (2003:129) emphasises the importance of elections, stating, "elections are central to the process of democratisation." Henceforth, it is noteworthy that elections are a crucial component of democratisation and good governance, the importance of which cannot be overemphasised.

In most states in the developing world, discussions on the centrality of transparency and accountability in electoral processes have resulted in the understanding that information and communication technologies (ICTs) have a role to play in ensuring delivery of credible elections and improvement of electoral integrity in many states in the developing world, particularly in Africa (Wolf & Zander, 2014: 14). ICTs and information technology (IT), especially electronic voting technologies (EVTs) are gradually becoming common phenomena in political debates. Investigations on their suitability in the African electoral context continue to be prosecuted with the intention to

consider them as a viable alternative to address and improve electoral challenges that continue to hamper efficient transition towards democracy and good governance (Maphunye, 2019: 3).

Rapid development in digital technologies in recent decades has also had a profound transformative impact on public and governance processes across the world. These changes have affected and now influence the political dynamics of contemporary societies, especially elections (Diamond, 2010: ix). Considering the above observation, it is argued that elections require constant innovations and improvements to be able to produce legitimate and accountable representatives for all governance levels across the world (Diamond, 2010: x). Maphunye (2019:1) further observes that such improvements and innovations include EVTs, especially EVMs that some functionaries are increasingly resorting to to address the problems they encounter in their work. Ajayi (2013:91) adds that the introduction of ICTs in governance facilitated the emergence of the concept of e-governance and other related concepts such as e-elections and e-voting. Ajayi (2013:91) opines that all these concepts are aimed at improving governance, especially in Africa, where they seem intended towards providing alternatives to the traditional way of doing things.

Incorporation of EVTs may not be the ultimate panacea to solving the question of credibility and integrity of elections in Africa in general, and Zimbabwe in particular. However, there is consensus among various scholars that utilisation of digital concepts in electoral processes presents more opportunities than challenges (Achieng & Ruhode, 2013: 3). This is also supported by Maphunye (2019:3), who asserts that African elections and election management bodies (EMBs) cannot avoid the use of technology, as it will revolutionise election management. Struwig, Roberts and Vivier 2011: 91) opine that insufficient use of technology is what makes elections problematic and observe that focus should be put on improving EVTs, providing timely training to those who use them to equip them with relevant skills to deliver legitimate elections, the results of which are produced within record time. Struwig et.al. (2011:91) maintain that this will significantly reduce the margin of error and avoid undue human interference in the outcome.

IV.CONCLUSION

The study mentions the competitiveness of the country's elections since the formation of a vibrant opposition political party in 2000, which, to date, continues to challenge ZANU-PF's hegemony and domination in the country's politics. The competitive nature of Zimbabwe's politics since 2000 has led to highly charged and contested elections, which have been subject to serious scrutiny due to allegations of manipulation. The country's elections have reportedly failed the test of integrity and have, in numerous cycles, been criticised for failing to satisfy local and global standards of free, fair, and credible elections. There have been challenges in the traditional voting system, which have long dogged the country's elections.

The subject of elections is a very broad area with numerous fields that can be explored beyond this specific study. The study's focus on EVTs in maintaining the integrity of Zimbabwe's elections has indicated various areas that can potentially be targeted for future research, such as the electoral integrity can be broken down into various specific components, which can be studied independently. Topics such as electoral transparency constitute key positions in the study of electoral integrity and can be pursued as specific areas of research interest in the future. Transparency in elections has become a crucial concern that the study asserts warrant specific research attention.

The importance and significance of this study cannot be overemphasised, particularly its necessity and contribution to the greater scholarly work in the subject of elections and democracy. The study is presented during a period where democracy is ostensibly under threat in Africa in general, and in Zimbabwe in particular. Terms such as "democratic recession" and "electoral authoritarianism" have become common. The study sought to redefine the role and importance of elections through identifying the central role that EVTs can play in restoring and maintaining the integrity of elections and projecting their appeal to voters, policy makers, scholars, government officials, non-state actors, and electoral practitioners.

NOTE

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