

Internet Diffusion and Government Intervention: The Parody of Sustainable Development in Africa

by

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Abstract

This paper argues that the current attacks on Internet access in terms of legal constraints, political intimidation, Internet shutdown, unlawful arrest of Internet users, and the purposeful disruption of Internet services by government agents will become more pronounced unless African nations technologically develop public institutions to compete constructively with private Internet service providers, in terms of information communication. The data utilized for this study were basically sourced from secondary data collection, and thus contently analyzed based on the nature and practical experience of how the access and the use of Internet has been hindered through undue intervention by governments in Africa. The paper also outlines a set of recommendations for improvement.

Keywords: Internet access, governance, sustainable development, Africa

Introduction

The right to communicate in whatever forms has become part of basic international human right as endorsed by the UN General Assembly in December 1997. By implication the endorsement has committed the UN to ensure the objective of universal access to basic communication and information services for all people without any exception of race or regional locations in order to secure sustainable human development (CIPESA, 2016).

Similarly, the right to share, receive and seek information or ideas regardless of the medium used are enshrined in many international legal frameworks such as the Universal Declaration of Human Rights (UDHR), the African Charter on Human and Peoples' Rights and in the constitutions of respective African countries (ibid). However, some of these national and international legal frameworks have been skewed by some African governments.

In essence, access to Internet has remained on the front burner in driving and sharing of ideas and information for good governance and development in the global system. According to Towela & Tesfaye (2015), the emergence of the global Internet can be linked to the US-based ARPANET in the 1960s; however, Africa gained access to its first Internet network in 1988 nearly thirty years after the US, at Rhodes University in Grahamstown, South Africa. The first data packet transmitted from Africa was sent from South Africa to Portland, Oregon in 1991 which signified the arrival of the Internet in Africa and subsequently led to the surge of Internet Service Providers supplying both dial-up and leased Integrated Services Digital Network connections on a commercial basis.

As observed by Mike Jensen (1997) more than three-quarters of the capital cities in Africa have evolved some form of Internet access: either in terms of a local dial-up store-and-forward e-mail service with a gateway to the Internet or a full leased-line service. Notably, out of the 43 in the 54 counties in Africa, only 36 countries have attained live Internet public-access services in the capital cities that includes: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Côte d'Ivoire, Djibouti, Egypt, Ethiopia, Gabon, Ghana, Kenya, Madagascar, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda Senegal, Seychelles, South Africa, Sudan, Swaziland, Tanzania, Tunisia, Uganda, Zaire, Zambia, and Zimbabwe (ibid).

More importantly, Africa has seen the growth of Internet connectivity in recent years, mainly due to the availability of undersea cables and the ubiquity of mobile phones. More than a quarter of the African population (341 million) had access to the Internet as of 2016, the majority of which are potential Internet learners. To Alvin Toffler (1980), the Internet revolution has tremendously conditioned society into an 'infosphere' in which technology driven information and communication have increasingly changed the social, political, economic and work environments in the world. Toffler further stressed that to a large extent, the "infosphere", information has become the key resource for citizens' active and efficient functioning and participation in society.

However, despite the huge importance of Internet access as an enabling mechanism that fosters citizens' leverage to express their voice, to monitor and hold government accountable, and enter into informed dialogue about decisions which affect their lives without being directly exposed to government intimidation or danger. Internet accessibility as a percentage of the total population of Africa is still very low: as 2004 it was 1.4% when compared to the world average accessibility of 12.7% (Internet Worldstats.com, 2004). Apart from inadequate infrastructure like: electricity, the high cost of Internet services, the prevalence of poverty in Africa and phobia for negative consequences of Internet penetration, there are undue restriction, intervention, incessant attacks on the use of Internet and enactment of several obnoxious rules against Internet resources by some of African governments in the pretence of safeguarding national security, monitoring terrorism activities, preventing hate speech, cybercrime, and illicit financial crimes among others. The current trends of political and legal assaults by some African governments on Internet access/users if not quickly checked, represent a negative omen for sustainable development and good governance in Africa. In this light, this paper is divided into six sections for clarity of purpose and analytical discourse which includes: conceptual clarification, methodology, the emergence and surge of Internet in Africa, opportunities and challenges of Internet access for Africa, political and legal constraints to Internet access and the implication for sustainable development in Africa, with a conclusion and recommendations.

Internet/Internet Access

Over the years Internet access and information technology have been used interchangeably as if they connote similar definition. However, it worthy to note that Internet and information technology are more or less a conjoin twin which either of them cannot exist without the other. Conventionally, it is permissible to use both concepts interchangeably however a careful note must be drawn on their area of differences. According to Almond and Verba (1963) the Internet was describe as part of the online techniques with great democratic potential due to its capacity for feedback that encourages the development of "participant" citizens. Almond and Verba further stressed that with the existence of Internet, rather than acting as passive receptors of political information, participant citizens are more sophisticated and active with utilisation of political information made available by Internet and subsequently respond or make "demands" from such information.

The above definition is narrow in the sense that it focused more on the political benefit of the Internet rather than the actual context of it. In a more succinct manner, Internet access can be describe as the leverage of individuals and organisations to link-up to the Internet using computer terminals, computers and mobile devices with an ability to access services such as email and the World Wide Web through information technology. According to the *Advance English Dictionary*, the Internet is a computer network consisting of a worldwide network of computer networks that use the Transmission Control Protocol/Internet Protocol (TCP/IP) network to facilitate data transmission and exchange.

The Internet, sometimes simply called "the Net," is a worldwide system of computer networks - a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to users at other computers). It was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first known as the ARPANet.

In the contemporary global system, the Internet has permeated the public space and is fast becoming self-sustaining tools accessible to hundreds of millions of people worldwide. Generally speaking, access to the Internet has become more predominant through the use of electronic mail (email) which is gradually replacing the traditional postal service which has become a common practice for people to communicate over the Internet in through several means including Internet Relay Chat (ICR), Internet telephony, instant messaging, Youtube streaming, video chat, WhatsApp, Snap chat, Facebook, google-hangout, yahoo messenger, Instagram, blogging, and through other social media plat forms (<http://searchwindevelopment.techtargt.com/definition/Internet>).

There are other aspects of the Internet that also deserve attention, particular a high-capacity transmission technique to engage a wide range of frequencies to enable a large number of messages to be communicated simultaneously, i.e., broadband. The United States Federal Communications Commission (August 6, 2010) simply defined broadband Internet as "Internet access that is always on, and faster than the traditional dial-up access" and spread over a wide range of technologies. Broadband connections are typically made using a computer's built in Ethernet networking capabilities, or by using a Network Interface Card (NIC). Similarly, Dale Hatfield, et al. (2001) stressed that in terms of transmission rates, define broadband as having the capability of supporting provider-to-consumer (downstream) and the consumer-to-provider (upstream) directions at a speed in excess of 200 kbps, with most cable and DSL service packages are asymmetric with the downstream speed faster than the upstream.

Information Technology

It has become pertinent to provide some definition of information technology as its relevance continues to surface from the definition of Internet access given above. According to Microsoft - Encarta (2009) information technology represents the processing and distribution of data using computer hardware and software, telecommunications, and digital electronics. Similarly, information technology is described as electronic technologies used for information storage and retrieval (Adomi and Kpangban, 2010). Hence, Information Communication Technology (ICT) include the full range of electronic technologies used to manage information and knowledge, and thus, they require the major techniques through which information is generated, processed, stored, manoeuvred and exchanged in the information age (Kebede, 2004).

The use of ICTs also encompasses the digitization, which enables the convergence of different media. In essence, through the ICTs digital technology has made it possible for the integration of communications, computing and content of information to be collected, stored, processed, analyzed and transmitted via the same medium (Nulens et al., 2001).

Development/Sustainable Development

For development to be sustained, it presumes that there must be an existence of developmental indices irrespective of its forms and interpretations. Therefore it is logical to start the discussion on sustainable development from the understanding of what the development implies. It is instructive to note that the concept of development is ubiquitous in nature: it has diverse meanings for different people and different countries. Hence, what some people in Africa would consider as new opportunities in terms of information communication technology might have become obsolete in some of the highly developed countries of Europe and America.

According to Seers (1997) economic growth alone should not constitute the determinant of the developmental status of any country. He further argued that the whole concept of development therefore, involves holistic change of the entire society along the line of modernization initiatives. In addition, Seers further established three requirements to be met for development to be attained, this includes; decrease in poverty and malnutrition, income inequality should reduce, and the employment rate should be minimized. And similarly, Leftwich (2000) is of the opinion that politics is the dominant factor which conditioned the concept of the developmental state as well as the success or failure human societal development. It was also argued that the dynamic context of politics and purposes are central in shaping the structures of developmental states via their development aims, as well as in their impressive performance (Leni et al 2012).

The global discourse on sustainable development has resulted in a myriad of definitions by scholars and developmental theorists. However, the widely acceptable definition of sustainable development has been offered by the Brundtland Commission (Cerin, 2006; Stoddart, 2011; Dernbach, 2003). According to the Brundtland Commission, sustainable development is define as the “capacity to make development sustainable: by ensuring that such development meets the needs of the present realities without compromising the ability of future generations to meet their own needs” (WECD, 1987).

The 2002 World Summit on Sustainable Development marked a further expansion of the standard definition with the widely used of three pillars of sustainable development: economic, social, and environmental. The Johannesburg Declaration created “a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development and environmental protection—at local, national, regional and global levels (The Johannesburg Declaration on Sustainable Development, 2002)”.

In the same manner, Porter & van der Linde (1995) emphasised on a win-win hypothesis which suggest that a trade-off is not important if sustainable development policies can address the sources of environmental degradation, not its just the symptoms, and still provide opportunities while creating motivation for economic advancement. And in essence, sustainable development as a process of conserving resources for future generations represents the distinguish characteristics that differentiate sustainable development policy from traditional environmental policy. Thus, the general focus of sustainable development centred on the long-term stability of the economy and environments is only achievable through the integration and acknowledgement of economic, environmental, and social concerns throughout the decision making process.

Good Governance

The concept of governance predated global modernisation; this is true because every human society were guided by basic rules and value systems. Put differently, all existing human societies before modern day civilisation were guided by decision-making and decision implementation processes. In essence, the government represents the state's machinery for executing every day business of public administration for the overall wellbeing of the entire people within a given territory. Hence, good governance connotes the act of governing according to the social contract between the ruled and the ruler for the purpose of promoting the common good. Generally speaking, good governance comprises of nine key elements including; participatory, accountability, responsiveness, transparency, consensus, effectiveness, equitability, inclusiveness and supremacy of the rule of law. Simply put, good governance must promote: the rule of law, transparency, responsiveness to the people demands, accountability for action/inactions, the administering the state affairs base on consensus, rule without fear or favour; the allocation of resources efficiently, and above all, governance must be all inclusive.

In the Sixty Seventh Session of the International Fund for Agricultural Development Executive Board held in Rome (1999), the African Development Bank (AfDB) define good governance as the process of referring to the way in which power is exercised in the management affairs of a nation and stressed that good governance is central to creating and sustaining an enabling environment for development and suggested that sound development which include good governance is inextricably linked to the efficacy of a AfDB investment and finance assistance.

The Emergence and Surge of the Internet in Africa

The far reaching effects of the Internet on economy, cultural value systems, industry, tourism, governance, and global politics among others in the contemporary world system has compelled several governments in Africa to introduced different plans, strategies and programmes towards the establishment of effective and operational e-governance and Internet administration in their respective countries. The development of government websites and e-portals represent the most feasible efforts in this regards as most African governments now use the web to provide access to digital-based information and public services to their citizens and other stakeholders.

In addition to the foregoing explications, the growing agreement that the right to communicate should become a basic human right is fast growing. In December 1997, the UN General Assembly endorsed a statement committing the UN system to the objective of universal access to basic communication and information services for all in order to secure sustainable human development, presented in part with a focus on the right to communicate via the Internet in Africa (<https://www.article19.org/data/files/pdfs/publications/africa-Internet.pdf>).

Similarly, the surge of the Internet in Africa was also boosted by an enshrinement of the right to receive, search and transmit information or ideas regardless of the medium used in the Universal Declaration of Human Rights (UDHR), the African Charter on Human and Peoples' Rights and in the constitutions of several African nations (CIPESA, 2016). Although, the origins of the global Internet can be traced to the US-based ARPANET in the 1960s, the emergence of the first network in Africa came in 1988 at Rhodes University in Grahamstown, South Africa (Towela & Tesfaye, 2015).

In 1991 the first data packet transmitted from Africa was sent from South Africa to Portland, Oregon. This development ushered in the arrival of the Internet in Africa. The technology employed was a dialup system with a Fidonet mailing system as a transport mechanism; then followed dial-up systems based on an Unix-to-Unix Copy (UUCP), hence, a suite of computer programs and protocols allowing remote execution of commands and transfer of files, email and netnews between computers that were replaced with an Internet connection across a leased line at 9600bps. This led to the advent of Internet Service Providers providing both dial-up and leased Integrated Services Digital Network connections on a commercial basis. According to Mike Jensen (1997), the pioneer countries in Internet development in Africa were Tunisia and South Africa in 1991, followed by Egypt in 1993 then Algeria and Zambia in 1994. Meanwhile forty seven (47) out of the fifty four (54) African nations toward the end of 1997 had gained access to either a gateway Internet or a full leased line service in terms of a local dial-up store and forward e-mail services (ibid).

As documented by the International Telecommunications Union (ITU) Internet Facts and Figures (2016), the number of Internet users has witnessed a rapid growth since its emergence. ITU data indicates that the number of Internet users has doubled since 2009 to 25% in early 2016, inclusive of Internet users in Africa. Despite the upward trend in the number of Internet users, about three-quarters of the African population does not have access to the Internet. For instance, over 70 percent of the population living in rural areas, the majority of those who need the Internet the most, such as rural schools, do not have it due to various factors ranging from inadequate supply of infrastructure that can't foster Internet access, wide spread poverty and the lack of political will to support Internet access by some African government, among other issues (*Africabandwidth Maps*, http://www.africabandwidthmaps.com/?page_id=27).

It is instructive to note that there is a significant diversity of Internet access in Africa, with only a few well connected countries like Kenya, Mauritius, Morocco, Nigeria, Seychelles, South Africa, and Tunisia attaining a connectivity level of around half of the population. These countries also lead in utilizing the Internet for education (ITU, Internet Facts and Figure 2016). And in 1998, at the start of Africa's telecommunications revolution, South Africa accounted for 86 percent of all subscribers in the region, but by 2008, that figure was down to 18 percent when Nigeria overtook South Africa as the region's biggest telecommunications market in 2008 (Mark D. J et al, 2011).

Together Nigeria and South Africa now account for 43 percent of the total number of mobile subscribers of Africa south of Sahara and more than 80 percent of its broadband Internet subscribers (ITU 2010; Wireless Intelligence; World Bank Development Data Platform). However, as reported in July 2002, all 54 countries in Africa now have access to Internet connectivity (Jensen, 2002).

In summary, over 334 million people in Africa have access to the Internet with youth constituting the majority, hence, potential lifelong learners (ITU, 2016). There were 147 million Facebook users in Africa as of June 2016 (<https://www.socialbakers.com/statistics/facebook>). However, such access to the Internet and heavy use of social media has not been harnessed systematically to advance education and learning at individual and institutional levels, while mobile, Internet and Facebook Users in Africa number 1,216,000,000; Facebook users 146,637,000 (43% of Internet users); Internet users 334,000,000 (55% of 15-64 year olds); Mobile subscribers 557,000,000 (46% of population); 15-64 year olds 619,510,000 (ITU Facts and Figures 2016).

At a policy level, an integrated approach for developing the Information Communication Technology sector in Africa may be traced back to the 21st meeting of the United Nations Commission for Africa (UNECA) conference of ministers in May 1995, where fifty-three African social and economic development and planning ministers adopted a resolution tagged "Building Africa's Information Highway".

This led to the drafting of the African Information Society Initiative (AISI), an action framework to build and use ICTs to accelerate the socio-economic development of Africa and its people. AISI catalysed African governments into action and led to the development of national ICT strategies and policies, regional frameworks, and various ICT divisions for development programmes and initiatives (Towela & Tesfaye 2015).

Internet Access in Africa: Opportunities and Challenges

Considering the wide-coverage, interactive and cost-effective nature of Internet access, it has become a veritable instrument for integrating the diverse world into a global village; highly strategic in deepening democracy, more useful in terms of information/knowledge sharing, helpful in projecting electoral outcomes, even before the official pronouncement, and foster transparency, responsiveness, accountability, sustainable development and good governance at large.

However, Internet access offers both opportunities and embedded challenges among different countries and between people within the same country depending on the approaches of the countries and individuals involved. According to Adesina (2012), the major negative consequence of IT most especially the Internet and cable networks to Nigeria in particular is the exposure of youth to negative western culture. In the same vein, Charles Omekwu (2006) also stated that the more dangerous dimensions of the digital revolution in Africa include exposure to pornography, money laundering, cultism, international terrorism and child abuse, which all constitute a threat to African cultural heritage.

Access to information is critical for enabling citizens to exercise their voice, to effectively monitor and hold government accountable, and to enter into informed dialogue about decisions which affect their lives. Indeed, it is seen as vital for empowering all citizens, including the vulnerable and excluded to allow them space to claim their broader rights and entitlements. In general, the impact of the Internet on governance manifested through efficient government, public sector reform, improved public sector capacities, strengthened democracy, increased government transparency, reduction in corruption, high level of citizen participation, greater citizen trust in government, increase in ICT diffusion and literacy among other aspects of life is commendable. Hence, the use of ICTs, especially the Internet to adopt a new conception and attitude of governing and managing where participation and efficiency are required of all the partners linked in a network is good which would allow governments to utilise e-governance to reinvent themselves, get closer to the citizenry and forge closer alliances and partnerships with diverse communities within the context of development (CAFRAD).

More importantly, wide spread of education and Internet access are becoming inextricably interwoven and to a large extent, it constitutes greater assets to the world community. This is true because through education, driving by Internet forces, billions of lives have been transformed.

Unfortunately, the interplay between these two and the utilisation of Internet to drive education in Africa is still very low compare to other continents of the world. It is instructive to note that, despite various critics, the importance of Internet access cannot be overemphasised.

Internet access has boosted social and economic development in many countries through provision of skilled workforce that utilizes ICTs effectively which is a key factor for competitiveness in the global digital economy in harnessing available resources for sustainable growth. And similarly, progress with Open Educational Resources (OER), Online Distance Learning (ODL), cloud computing, and mobile learning made possible with the surge of Internet revolution has also created options for expanding learning opportunities particularly for Africa and the rest of the world. Although, there has been limited success in OER, ODL and other mediums for mass open online education in African schools due to lack of resources and the absence of a holistic and integrated vision and strategy (Internet for Education in Africa (IEA) 2016). For example, Nigeria as the most populous African nation has recognized the potential of IT in her educational system wherein the national policy on computer education emphasizes the need for the integration of IT into the Nigerian educational system which dates back to the National Policy on Computer Education (FME, 1988) which emphasized the need for primary school pupils to be introduced to the basic computer skills via the use of the computer to facilitate learning and rudimentary use for text writing, computation and data entry. And for secondary school, they have also related goals which were to be achieved at higher levels of education (Agbetuyi and Oluwatayo, 2012).

In fact, the field of education has certainly been affected by the penetrating influence of IT worldwide. IT has made an impact on the quality and quantity of teaching, learning and research in the institutions using it (Kwacha, 2007). According to Ololube, Ubogu and Ossai (2007), the introduction of IT usage, integration and diffusion has initiated a new age in educational methodologies, thus, it has radically changed traditional methods of information delivery and usage patterns in the domain, as well as offering contemporary learning experience for both instructors and learners.

IT has the potential to accelerate, enrich and deepen skills, motivate, and engage students in learning; hence, it helps to relate school experiences to work places, helps to create economic viability for tomorrow's workers, it contributes to radical changes in school, it strengthens teaching, and provides opportunities for connection between the school and the world (Davis and Tearle, 1999 cited by Agbetuyi and Oluwatayo, 2012).

Many economists have observed a positive correlation between the level of telecommunications use and some indices of economic well being. Jipp (1963) studied the relationship between the income of a nation and telephone density, using data for different countries, and found a positive correlation between the two. In the same vein, Posu (2006) stressed that IT and the Internet can aid sustainable economic development when used appropriately, with the full participation of all stakeholders, especially in the developing economies.

In a country like Nigeria, Zimbabwe, Ethiopia, Somalia, DR Congo, Benin Republic and several other countries in Africa where a vast section of the population are living below the poverty line, IT and Internet access offer a chance to empower the populace, and transform them into more productive human capacities. Hence, public service delivery, improved health system, improved educational services, robust public private partnership (PPP) in economic and finance, eServices delivery and e-voting via Smart Card Reader have led to improved living condition of millions of African people and in the case of the Smart Card Reader which has allowed near-instant vote tallies, and avoiding conflicts about results in many African elections.

Bratton & Gyimah-Boadi (2005) and Mattes & Bratton (2007) argue that for nondemocratic regimes to transit to democracy, and for young democracies to consolidate and stabilize, a majority of the citizens need to be committed to democracy as their preferred form of government through the help of information technologies like the Internet. They emphasize that the attitudes of citizens and information technologies are important components of the democratization process. Almond and Verba (1963) describe the Internet as one of the online tools having great democratic potential because it does allow for feedback and encourages the development of “participant” citizens, thus, rather than acting as passive receptors of political information, participant citizens are more sophisticated and engage with political information provided to them, and subsequently respond or make “demands” from it.

Other scholars who equally emphasize the Internet’s capacity for the promotion of political change regarding a pluralistic media platform include Bratton et al., (2005); Groshek, (2009); and Lei, (2011). For example, Bratton and his colleagues argue that new social media use in transitioning or emerging democracies “expands the range of considerations that people bear in forming their political and economic attitudes,” and that it promotes democratic citizenship and a greater demand for democratic processes and reform (Bratton et al., 2005: 209).

Notwithstanding the numerous benefits of Internet access to African development, access to the Internet without some form of regulation, control and supervision also has potential for negative development in terms diversion of IT knowledge meant for societal development into various illicit acts such as cyber-fraud, terrorism, human/drug trafficking, smuggling, kidnapping, online prostitution, online cultism, cyber-bullying, online gambling and hacking/disruption of classified website, among others. As observed by Uddin Sabah, et al (2016) in some countries, children have become victims of ‘cyber addiction’, mainly as a result of overuse of technology for gaming and social interaction.

It was further reiterated by the opponents of information technology and Internet access that the aforementioned benefits of Internet access were over-exaggerated, misleading and to a greater extent represents strategic techniques by the global West to further their exploitative and oppression of Africa, thereby leading to the protection and projection of international capitalism interests across the globe.

They argued also that Internet penetration systematically destroys all the cherished socio-cultural value systems and ideological positions based on African culture and history (see Aimiwu, 2004; Alimi and Atanda, 2011).

Legal and Political Constraints to Internet Access and Implications for Sustainable Development in Africa

In Africa and in many other developing areas of the world, there are several challenges confronting the access to and utilization of the Internet which include legal, bureaucratic, financial, infrastructural and political barriers, among others. The aforementioned challenges have directly or indirectly impeded on peoples' leverages and utility of Internet and information communication technology to produce desirable outcomes for sustainable development and good governance through a guaranteed right to information. As earlier stated, the inability of most African governments to manipulate and assert monopolistic control over access to the Internet and information communication technology and a perceived unabated influence of the Internet on national economy, socio-cultural values system, politics and the issues of governance at large has resulted in the onslaught and negative reactions towards the access to Internet, and Internet users by some African governments.

In most cases where the political system is pervaded with unprecedented levels of corruption and poor leadership, as the case may be with many African nations, the government may not be actively supportive of the right to information, particularly its unhindered use if such right is perceived as threat to their personal aggrandizement and hegemonic tendencies. Whereas, where the right to information and unhindered use of Internet is permitted, citizens in some cases may be reluctant to exercise such right due to fear of government intimidation, and unlawful punishment.

Given the crucial role of the Internet as the mouthpiece of the voiceless and the most reliable platform for oppositions' yearnings, more often than not, the use of the Internet has compelled the incumbent government to either act or react to certain demands or criticism that could have been ignored ordinarily. And in the recent time, the governments of most African countries are arduously striving to assert control over the provision and access to Internet services through various means, ranging from monopolistic control of Internet Service Providers (ISPs) through the existing government owned telecommunications services, the imposition of legal barriers and political constraints, outright Internet shutdowns, unlawful arrest of Internet users and the purposeful disruption of Internet services by government agents, among others.

At this juncture it is pertinent to state categorically that in all of the above strategies employed by most African governments to curtail the influence of Internet access on socio-economy and political issues in Africa, such strategies constitute a threat to established principles of freedom of expression as promulgated by the United Nations, the African Union and the constitution of respective African nations.

As documented by CIPESA (2016) the first official attempt to censor the Internet in Africa took place on February 1996 when the Zambian government succeeded in removing a banned edition of *The Post* from the newspaper's website by threatening to prosecute the country's main Internet Service Provider (ISP), Zamnet. Subsequently the Zambian government banned the offending edition of *The Post* under the Preservation of Public Security Act which followed attempts by Zimbabwean government to establish a monopoly on telecommunications in order to be able to control the Internet Service Providers to closely monitor access to the Internet and the activities of Internet users. However, the Zimbabwe Supreme Court ruled to end state owned PTCs monopoly of telecommunications because it violated section 20 of the Constitution guaranteeing freedom of expression.

According to the Cyber Crimes Act (2015, No. 14), placing controls on information flows and freedom of expression in the online sphere have their rationalisations because it helps to deter crimes such as cyber-fraud, child pornography, hate speech, and terrorism. Unfortunately, many African governments have resulted to violating peoples' freedom of expression under the guise of fighting against terrorism, cybercrimes, illicit financial crimes, and hate speech, etc. For example, the Nigerian government newly proposed law against "hate speech" which recognised hate speech as an act of terrorism; however, it did not succinctly define what constitute hate speech. Thus, their definition of whatever constitutes hate speech should be pertinent for the government to address the root cause of hate speech which some Nigerians believed that "hate speech" is speech that is critical of bad governance and poor leadership. Therefore, the attempt to enact law against hate speech has been regarded as an attempt by the government to use the state arsenals to silence the oppositions, cover up corrupt practices, and shields themselves from public scrutiny.

In Uganda, the government communication regulator ordered a blockage of access to all social media and mobile money as the country went to elections on February 18, 2016, and then in March of the same year, police arrested Henry Mutyaba and Robert Darius Tweyanbe in Kampala for circulating pictures claiming that President Museveni was dead on social media and they were subsequently charged for abused of social media (<http://www.monitor.co.ug>, March 2016). And in the same vein, the denial of access to the local loop used by some governments in West African countries is a violation of regulatory provisions and has hindered public access to a high-capacity transmission technique to engage a wide range of frequencies to enable a large number of messages to be communicated simultaneously (broadband) which also impedes on competition and does not promote lower fares to Internet access, although the Act A/SA of February 2007 on the issue of access and interconnection of networks and services in the ICT sector within the Economic Community of West African States (ECOWAS) established the principle of separation the wired local loop... (ITU, March, 2013).

Indeed, Africa is currently lagging behind the rest of other continents in terms of Internet access as Internet penetration among African rural dwellers is almost invisible and insignificant when compare to that of the urban dwellers; and several factors such as low availability of basic infrastructure including regular electricity supply and the high cost of access and usage of Internet hinders progress. Obviously, most African countries have one of the highest median costs of broadband access when compare to the rest of the world compounded by a lack of awareness and low digital literacy with only few percent of transactions and business activities in Africa offered online services and online payment, compared to majority of countries in Europe and North America that operate on a cashless/e-economy. These conditions need to change in order for Africa to advance both economically and technologically. The lack of mass usage of online facilities and a required broadband to drive education as stipulated by UNESCO is an example a retardation of colleges and universities in Africa that still heavily rely on face-to-face teaching/interaction with students as the concept of open access and e-library systems has not taken root in most African nations. And similarly, the use of the Internet to drive health care service delivery to the populace is also very insignificant in Africa, and the same trends are also applicable to citizen access to online government services across the continent as most government data are either available in print format only or are in outdated ICT platforms.

Conclusion

The new millennium marked a turning point in terms of information technology and widespread Internet access in Africa. During this period, many African nations have experienced a steady growth in Internet penetration from 0.78% in 2000 to 20.71% in 2014. In contrast, Internet penetration in Europe was 3.9 times greater than that of Africa, compare to 2005 when Internet penetration in Europe was 19.6 times greater than that of Africa (ITU Facts and Figures, 2016). This shown tremendous improvement in Africa's access to the Internet via a high-capacity transmission technique to engage a wide range of frequencies that enable a large number of messages to be communicated simultaneously, with its accompanied benefits for socio-economic and political development.

Hence, qualitative research method was utilized based on broadband penetration in Africa. The study investigated the mode of governments intervention on Internet access in Africa with the intention to examine the implications of attacks on Internet access/resources, and the notion of sustainable developmental in Africa as the data utilized was basically sourced from secondary methods such as official reports on Internet broadband usage in Africa, extant literature, and media reports on the subject matter and Internet resources. Thus, the data collected was analyzed based on the nature and practical experience of how access and the use of the Internet have been hindered through undue intervention by government in Africa.

And finally, African nations must: (1) technologically developed their public institutions to be able to compete favourably with private led Internet/ICT service providers particularly in rendering e-services and e-governance solutions for numerous public needs craving for remedies; (2) concerted efforts to implement policies that favour open access information and creating the necessary ecosystem for ICT integration into education in Africa; (3) realize that the potential of access to Internet in development activities that improve the quality and quantity of life, efficiency of socio-economic and political activities is evident; (4) review ICT policy needs in order to benefit from the opportunities offers by the rapid growth in Internet broadband activities; (5) invest more in infrastructural capacity like electric power supply and play an active role in diffusing technologies to every sector of the economy; and (6) develop better policies for equitable access to information technology with an understanding that he need to provide equitable access should not undercut the connection of information delivery agencies, business and private institutions to high bandwidth networks.

References

United Nations General Assembly. (1987). Report of the world commission on environment and development: Our common future. Oslo, Norway

CIPESA, (2016) State of Internet Freedom in Africa 2016: Case Studies from Select Countries on Strategies African Governments Use to Stifle Citizens' Digital Rights

Towela, N. J & Tesfaye, B (2015) Internet development and Internet governance in Africa, Internet Society, Galerie Jean-Malbisson: Geneva Switzerland. Retrieved from: <http://www.Internetsociety.org>

Mike Jesen (1997) Internet Connectivity for Africa: The Status of the Internet and Related Developments in International Electronic Publication of Internet Society. Retrieved from: <https://www.isoc.org/oti/articles/0997/jensen.html>

Toffler, Alvin. (1980). The third wave. New York: MorrowInternet Worldstats.com.

Almond, G. A., & Verba, S.1963. The civic culture: political attitudes and democracy in five nations. Princeton, NJ: Princeton University Press.

United States *Federal Communications Commission (August 6, 2010)*.

Dale Hatfield, et al. (2001) Broadband Internet Access, Awareness, and Use: Analysis of United States Household Data. University of Colorado: Boulder FCC.

- Adomi, E. E. and Kpangban, E. (2010). Application of ICTs in Nigerian secondary schools. *Library Philosophy and Practice*.
- Kebede, Gashaw. (2004). The information needs of end-users of Sub-Saharan Africa in the digital information environment. *International Library and Information Review*, vol. 36 (1): 273–279.
- Nulens, G., et al. (2001). *The digital divide in developing countries: towards an information society in Africa*. Brussels: University Press.
- Seers D (1979). “The Meaning of Development, with a Postscript.” In Seers, Nafziger, Cruise O’Brien, & Bernstein, pp. 9-30.
- Leftwich A (2000). *States of Development on the Primacy of Politics in Development*, Cambridge: Polity Press
- Leni W, Victoria C, Maia K, Dan H (2012). *Common Constraints and Incentive Problems in Service Delivery*. Overseas Development Institute: London. Retrieved from: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publicationsopinion-files/7791.pdf>
- Cerin, P. (2006). Bringing economic opportunity into line with environmental influence: A Discussion on the Coase theorem and the Porter and van der Linde hypothesis. *Ecological Economics*, 209-225.
- Stoddart, H. (2011). *A Pocket guide to sustainable development governance*. Stakeholder Forum.
- Dernbach, J. C. (2003). Achieving sustainable development: The Centrality and multiple facets of integrated decisionmaking. *Indiana Journal of Global Legal Studies*, 247-285.
- World Commission on Environment and Development (WCED) (1987) *Our Common Future*, New York: Oxford University Press
- The Johannesburg Declaration on Sustainable Development (2002), 4 September. http://www.housing.gov.za/content/legislation_policies/johannesburg.htm.
- Porter, M. E., & van der Linde, C. (1995). Toward a new conception of the environmentcompetitiveness relationship. *Journal of Economic Perspectives*, 97-118.

- International Fund For Agricultural Development (1999) Executive Board – Sixty-Seventh Session Rome, 8-9 September tagged Good Governance: An Overview http://www.ipa.government.bg/sites/default/files/pregled-dobro_upravljenje.pdf
- International Telecommunications Union (ITU) Internet Facts and Figures (2016), <http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2016.pdf>
- Mark D. J et al, (2011) Africa’s ICT Infrastructure Building on the Mobile Revolution. The International Bank for Reconstruction and Development / The World Bank: Washington D.C.
Retrieved:http://siteresources.worldbank.org/INFORMATIONANDCOMMUNICATIONANDTECHNOLOGIES/Resources/AfricasICTInfrastructure_Building_on_MobileRevolution_2011.pdf
- ITU (2010) Wireless Intelligence; World Bank Development Data Platform
- Jensen, Mike. (2002). Information and communications (ICTs) in Africa- a status report. Paper presented at the Third Task Force Meeting of the UN ICT Taskforce, September 2002–October 2002. New York, United Nations Headquarters. Retrieved on 12/ 2/04 from www.unicttaskforce.org/thirdmeeting/documents/Jensenv6.doc.
- Adesina, Olubukola S. (2012), *The Negative Impact of Globalization on Nigeria. International Journal of Humanities and Social Science Vol. 2 No. 15; pp.193*
- Federal Ministry of Education (FME) (1988). Report on National Policy on Computer Education. Lagos: NERDC Press.
- Agbetuyi, P. A. and Oluwatayo, J. A. (2012), Information and Communication Technology (ICT) in Nigerian Educational System. *ISSN 2039-2117 Mediterranean Journal of Social Sciences Vol. 3 (3) September 2012 41*
- Kwasha, P. Z, (2007). The imperative of information and communication technologies for teachers in Nigerian higher education. *Merlot Journal of Online Learning and Teaching. 3(4).*
- Ololube, N. P. M.; Ubogu, A. E. & Ossai, A. G. (2007). ICT and distance education Nigeria: A Review of Literature and Accounts. International Open and Distance Learning (IODL) Symposium.
- Davis, N. E. and Tearle, P. (1999). A core curriculum for telematics in teacher training. Tele-teaching 98 Conference; Vienna. <http://www.ex.ac.uk/telematics/T3/corecurr>.

- Adeniyi Oluwatosin Ademola (2009), '*Development Economics*' department of economics, first edition, published by DLC, UI. Chp 2
- Jipp, A., (1963), "Wealth of Nations and Telephone Density", *Telecommunications Journal*, July
- Posu Sunday Mauton A. (2006), *Information and Communication Technologies in the Nigerian Economy*. International Conference on Human and Economic Resources, Izmir, 2006. Olabisi Onabanjo University
- Bratton, M., Mattes, R., & Gyimah-Boadi, E. 2005. Public opinion, democracy, and market reform in Africa. New York, NY: Cambridge University Press.
- Mattes, R., and Bratton, M. 2007. Learning about democracy in Africa: Awareness, performance and experience. *American Journal of Political Science*, 51, 192–217. DOI:10.1111/j.1540-5907.2007.00245.
- Groshek, J. 2009. The democratic effects of the Internet, 1994–2003: A cross-national inquiry of 152 countries. *The International Communication Gazette*, 71, 115–136. DOI:10.1177/1748048508100909
- Lei, Y. 2011. The political consequences of the rise of the Internet: Political beliefs and practices of Chinese netizens. *Political Communication*, 28, 291–322. DOI:10.1080/10584609.2011.572449
- Aimiuwu, L. E. (2004). Globalization: the Human Resource Challenge. *Management in Nigeria. Journal of Nigerian Institute of Management*, 39/40(1/2): 19-28.
- Alimi, Olorunfemi Y and Atanda, Akinwande A (2001), *Globalization, Business Cycle and Economic Growth in Nigeria* © JournalsBank.com
- Tanzania Cyber Crimes Act (2015, No. 14)
(ITU, March, 2013 Study on international Internet connectivity in sub-Saharan Africa. https://www.itu.int/en/ITU-D/Regulatory-Market/Documents/IIC_Africa_Final-en.pdf)
- ITU Facts and Figures, (2016) op cit.
- OECD (2010) *The Economic and Social Role of Internet Intermediaries* <https://www.oecd.org/Internet/ieconomy/44949023.pdf>