THE ECOLOGY OF NATIONAL INFORMATION POLICY IN NIGERIA

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Abstract

The ecology of information technology policy in Nigeria is about the operating environmental reality of National Information Technology Policy in Nigeria. This has remained a turbulent one, mainly due to initial inexistence of coordinated Information Technology Policy in Nigeria, and later, a worrisome transition to a regime of multiple uncordinated and piece-meal regime of various IT policies. More often than not, these various IT policies are distorted with political regime change. Information is vital to national development as its use has grown from being an intangible resources for social development to a strategic tool in most instances; the need for a well mapped out regime is vital. Following critical content review of secondary data, this paper investigated the ecology of information technology policy in Nigeria. It found that while there was an initial vacuum in information policy regime in Nigeria, the country has grown to having critical hiccups in information policy articulation. First there are pockets of unsynchronized information policies being floated by different political dispensations as well as ministries of government. These different information policies are not coalesced into a single policy document applying to different aspects of information needs and use. More so, information professionals are short of commitment in terms of floating a formidable and unified thinktank group in the area of information policy administration. The paper concluded that information technology policy is vital for proper harnessing of information resources in Nigeria, and therefore recommends the standardization of information policy beyond the political regime distortions in Nigeria, while at the same time calling on information professionals to step to the center stage in sharpening the administration of information (technology) policy in Nigeria.

Keywords: Information, technology, information technology, policy, information technology policy, Nigeria

Introduction

The entire mechanism, computers, physical infrastructure, devices, processes and network for the storage and retrieval of information remain key resources to a country's national life, and at such needs to be regulated. At best, Information Technology is seen as "the bedrock for national survival and development in a rapidly changing global environment, and challenges us to devise bold and courageous initiatives to address a host of vital socio-economic issues such as reliable infrastructure, skilled human resources, open government and other essential issues of capacity building" (Nigerian National Policy for Information Technology, 2001). Everywhere, Information Technology policies are launched for the purpose of leveraging the Information Technology for addressing the challenges related to economic development of the country. It is based on the conviction that Information Technology (IT) will bring transformational changes in the lives of the people.

Public Policy is generally contrived to set a map, blueprint and roadmap for coordination of public goals by government. Information policy in general is concerned with making sure that the appropriate information is delivered to the right persons appropriately. While information is associated with data, 'technology' has to do with infrastructure. When collectively bonded, as Information Technology Policy, the concept envisages the total package for information delivery against the initial backdrop of information alone.

The significance of public policy to Information Technology lies on the place of information on social development. Information flows of the 21st century have a number of features that allow for effective influence on all aspects of the human life (Ludmila et al., 2018). Information in contemporary society has grown to become an intangible asset. Almost invariably, we now have an information economy which enables the syntheses of information to be combined with any material resource, and its easy penetration into various spheres of activity for national productivity. Appropriate information to an individual leads to rational decision making which impacts the entire dealing of such an individual and/or in specific areas such a decision is applied. Industries, policy makers, teachers, researchers, statesmen, sportsmen and other professionals not only need the right information for proper decision making, they also need to be guided by a regulatory regime in order to be in tune with what applies and what does not apply. This goes to include the

approved and appropriate infrastructure for such. For instance, the fifth generation mobile network (5G) has been a subject of national and strategic debate world over.

Overtly, a regulatory regime in terms of well-articulated information (technology) policy is a general norm that comes to play and in line with the critical assignment of states to regulate its affairs. However, the ecology of information (technology) policy in Nigeria is amenable to a whole dose of factors. Such ranging from the political context, the challenges of professionals and technological capacity and infrastructure. Politically, Nigeria is fraught in an unstable political environment. The country had oscillated from distorted military regimes to turbulent civilian regimes with no symmetry in policy environment. This regime of discontinuity in policy environment also goes to affect the information technology sphere. More so, Nigeria as a third world country is a dependent economy with its technological resources developed and patented by the developed countries. Much of the operations, services and control is out of the hands of local professionals and as such creates limits in proper framing of national policy in this regard.

Literature Review

The key terms and concept applicable to this research are the concepts of information, information technology and information technology policies. While Information Policy has been widely used in the literature, there is additional concept of information technology policy which has no distant meaning with the former but only has the active conscription of information infrastructure and wares as active component of the information process. To this extent, the literature does not in anyway, especially as applied to this work see information policy as distant from information technology policy. Currently, the debate about health implications of most IT wares and infrastructure and more recently, the global concern of the introduction of 5G network as well as attendant conspiracy theories and otherwise has come to solidify the justification of the bonding of 'technology' as inseparable component of information policy.

The work therefore focuses on the key concepts of 'information', 'information technology' and 'information technology policies' as herein explained in the following sub-sections.

Information

Information is considered a great value. One which has a significant impact on an individual, society and the globe at large. Information is defined as, any fact or set of facts, knowledge, news, or advice, whether communicated by others or obtained by personal study and investigation; any datum that reduces uncertainty about the state of any part of the world; intelligence; knowledge derived from reading, observation, or instruction. Invariably, information qualifies as a potentially useful fact, quantity or value that can be expressed uniquely with exactness (Eghworo et al., 2015). Information is whatever is capable of causing a human mind to change its opinion about the current state of the real world (deWatteville and Gilbert, 2000). Generally, Buckland (1999) identified three principal interpretation of 'Information' in the literature:

1) ***Information-as-process***, here information plays transformational role to the recipient, and as such, when someone is informed what he or she knows is impacted and changes. To this extent, information implies communicating knowledge, news or some facts.

2) ***Information-as-knowledge***, this imply that the information comes as a new thing to the recipient. In this sense, information serves to inform of the hitherto unknown, eliminate doubt about confused areas of data; and in the long run, clarifies and reduces uncertainty in order to possibly improve existing knowledge and/or introduce a new one. Information is communicated about certain specific fact, knowledge and ideas and when gotten intends to change the recipient's existing knowledge.

3) ***Information-as-thing***, such as data in documents or any of such that is regarded as informative, that is defined attributively to be impacting of knowledge or communication.

It is imperative to state that modern societies are formed on the basis of information revolution which conditions every aspect of life (Shcherbakova, 2018). The quality of information available to the larger population conditions a whole lot about critical aspect of life, while the concept of information continues to be dynamic following the ever evolving trends in the society. For instance, Olatokun and Tiamiyu (2005) observed that in the 1950s and 1960s information had remained in the corridor of efforts to reduce uncertainty in the context of communication signals or symbols. However, around 1980s, it meant decision-relevant data, while it continues to grow in context to its recent association with processed data. While for sure, there are varied perception and definitions of 'information, nonetheless, the concept has been stripped of any ambiguity if the

concern is to transit recipient from the zone of uncertainty and ignorance to the sphere of being informed and knowledgeable.

In the contemporary time, modern information is intangible and at the same time virtual, which enables its combination with any material resources, and its easy penetration into various spheres of activity. Modern information is not only diversified but has increased in the speed of processing and transmission due to the existence of Information Technology (Ludmila et al., 2018).

Be these as they may, information is however a strategic tool and of global concern. No wonder such reputable global bodies like UNESCO and others have consistently been committed to the understanding of the roles of information on national development. In fact, unrestricted and free flow of information between countries has been seen as a critical tool of develop and obliterating the global inequality divide.

Information Technology (IT)

Information Technology (IT) is generally associated with issues pertaining to the human and mechanical tools and techniques that are, or can, be used for information life cycle activities (Olatokun and Tiamiyu 2005). First, 'Technology' is understood as "the use of scientific knowledge to invent tools that assist human beings in their efforts to get work done, overcome environmental hazards and impediments to comfort" (Eghworo, 2015: 41). While the definition gave an insight on the understanding of 'Technology', it however didn't capture the real import of 'technology, which includes to get work done, faster, efficiently and efficaciously with greater and better outcome. In this regard, tools in the bracket of technology includes: the computer, telephone, GSM handsets, television, radio, etc.

'Information' and 'Technology" put together, therefore, has come to refer to: the acquisition, analysis, manipulation, storage and distribution of information and the design and provision of equipment and software for these purposes (deWatteville and Gilbert, 2000). In another sense, "Information Technology refers to the development, maintenance, and use of computer software, systems, and networks. This goes to include their use for processing and disseminating data. Data means information, facts, and statistics, collected for analysis, storage or reference" (Trypilka, 2019). According to Ehikamenor (2005), information technology comprises an integration of computers, telecommunication and office equipment. IT is the most important vehicle for the

transportation and management of information (Durodoye, 2005). IT provides a quality dose of efficiency, speed and capacity in the entire cycle of information management, including providing the capacity for an organization to achieve competitive and strategic advantage.

Information Technology Policies

First, policy is "a set of ideas or a plan of what to do in particular situations that has been agreed officially by a group of people, a business organisation, a government or political party. According to Ikelegbe (2005: 1) policy is "a statement of what an organisation wants to do, what it is doing, what it is not doing and what it would not be done". Policy is usually "a definite course or method of action selected from alternatives and in the light of given conditions to guide and usually determine present future decisions" (Presthus, 1975). A policy is generally characterized by the following (Ikelegbe, 2005:2, 3);

- it involves (an important or critical) choice,
- it involves proposed course of actions or projected sets of decisions,
- policy is goal oriented,
- policies have to do with particular needs or problems/problem areas,
- a policy is a course setting action.

In essence "public policy" also referred to "national policy" as the case may be, is considered as the highest level of state craft, embodying both the objectives of the state and the means of attaining them in order to have a coordinated application of national power (Ugwu, 2006). To this extent, it is viewed as a plan of action, a statement of aims and objectives, especially when made by government. Policy can be an individual matter or an official enactment (Uhegbu, 2008). More often than not, many areas of public life as it relates to government are guided by varieties of policies as promulgated, enacted, decreed or legislated by different governments, political dispensations and regimes. Information and technology is not left out as it has come to be considered as strategic to the national life of a government.

Information Technology Policy is essentially and much more, a set of public laws, regulation and regulatory infrastructure for the guidance and control of both information and information technology. The concept of information policy has gone a long way. First, the earliest application and interpretation of "information policy" by governments actually referred to propaganda efforts during World War I. During the 1970s and 1980s, national governments around the world toyed

with the notion of developing comprehensive "national information policies." Such discussions marked a significant turning point in appreciation of the salience of information policy (Braman, 2011).

"Colloquially, information policy provides an umbrella term for all laws, regulations, and doctrinal positions that deal with information, communication, and culture" (Braman, 2011). Information policy is comprised of laws, regulations, and doctrinal positions – and other decision making and practices with society-wide constitutive effects – involving information infrastructure, creation, processing, flows, access, and use.

Significance of Information Technology Policy

There are varied significance of Information Technology Policy much of which has been articulated by Uhuegbu (2004):

1. A well-crafted information Technology Policy will enable the right information to get to the right persons at the right time.
2. Information Technology Policy is necessary in a country for a balanced flow of development.
3. Information Technology Policy will also ensure that professionals are well guide with requisite information. This includes industrialists, policy makers, businessmen, bankers and other professionals, who will at least be provided with information by properly equipped libraries and information centres.
4. It should also encourage the provision of minimum standards of operation in the areas of acquisitions, personnel, accommodation, equipment and quality of services.
5. Information Technology Policy would necessarily provide the structure and process for information inclusiveness of rural communities in order to stamp out zone of exclusion and bridge the information literacy gap.
6. Absence of a sound and workable information policy may dislocate the proper flow of information and lead to a lopsided development of infrastructure as well as hampering human resources efficiency and distribution of wage.
7. Information Technology Policy will delineate the political frame of information use and scope, set boundaries and establish the unacceptable practices as well.

The Ecology of National Information Technology Policy in Nigeria

The Nigerian Information Policy environment is one that grew from having zero regulation as initially argued by Uhegbu (2004), to a recent time of multiple, uncoordinated and seeming contradictory regulation. Information regulation and policy has long been a global concern. The revolution in Information Communication Technology in Nigeria was birthed by the return of Nigeria to democratic rule. This saw the liberalization of the telecommunications sector and massive surge in access to information.

Within the current dispensation of democratic rule in Nigeria, the Federal Government of Nigeria first adopted the National Telecommunications Policy (NTP) in 2000 to guide the development of the telecommunications industry in Nigeria. This was subsequently backed-up by the enactment of the Nigerian Communications Act (NCA) 2003 to give legal effect to the NTP. Before then, the National Mass Communications Policy had recommended need to birth a regulatory platform for the control of broadcasting in Nigeria. This was heeded to and led to the promulgation of Decree 38 of 1992 that established the National Broadcasting Commission (NBC).

In a similar vein, the National Policy for Information Technology was approved in 2001 to guide the IT industry in Nigeria, and was followed by the enactment of the National Information Technology Development Agency Act in 2001 which became the legal platform for the creation of the National Information Technology Development Agency NITDA. It is noteworthy that there has never been a National Postal Policy; however, Decree No. 41 of 1992 established the Nigeria Postal Service (NIPOST) to provide postal services in Nigeria. These policy and regulatory developments along with other government agencies and private sector initiatives has resulted to a boom in Information Communication Technology and as such there has been the need for a well galvanized and implementable National Information Policy (Ministry of Technology, National ICT Policy, 2012).

In 2012, the administration of President Goodluck Jonathan had the Ministry of Communication Technology published a National Information and Communication Technology (ICT) Policy. The major aim of this policy document as contained in the number one agenda of the terms of reference of the committee involved with the assignment, was to harmonise all existing policies in information and communication technology sectors into a single Information and Technology Policy. Seven (7) years after, by May 2019, the Federal Ministry of Education published yet

another document, National Policy on Information and Communication Technologies in Education. According to the Ministry, the policy framework was informed by the need to have a standardized and coordinated deployment of ICT in Education.

Table 1: Various Regimes of National Information Policy Efforts in Nigeria

SN	DATE	POLITICAL REGIME	POLICY FRAMEWORK	COORDINATING AGENCY/MINISTRY
1	1992	General Ibrahim Babangida	National Postal Policy	Postal Service (NIPOST)
2	1992	General Ibrahim Babangida	National Mass Communication Policy	Nigerian Broadcasting Corporation
3	2000	Olusegun Obasanjo	National Telecommunication Policy	Nigerian Communication Commission
4	2001	Olusegun Obasanjo	National Policy for Information Technology	National Information Technology Development Agency NITDA
5	2012	Dr. Goodluck Jonathan	National Information and Communication Technology (ICT) Policy	Ministry of Communication Technology
6	2019	Muhammadu Buhari	National Policy on Information and Communication Technologies in Education	Federal Ministry of Education

Sources: This table was compiled from the following sources, https://ictpolicyafrica.org, https://nitda.gov.ng, Ministry of Technology, and National ICT Policy, (2012)

With these varied regimes of contradictory dispensing of partly repetitive and viciously piece-meal Information Policy documents, one is left to wonder which of the document has a nationally unifying grasp in all areas of Information Policy? More so, whether a national policy of strategic importance in the level of National Information Policy is pitched on a short-cycle of political tenure?

Insight on Irregular History of Information (Technology) Policy in Nigeria

From the foregoing, it is glaring that Nigeria's policy regime as far as Information Technology is concerned is a checkered one. As earlier alluded to, the country moved from the era of zero policy on information and technology to the era of multiple and uncoordinated information policies. The context of the turbulent political environment, bureaucratic factors and administration, dilemma

of professionals as well as infrastructural deficits have combined to impede the provision of seamless and coordinated national information policy in Nigeria.

Quite a lot of scholars have given insight on why government policies in Nigeria have failed to achieve the desired objectives. To Obodo (2016), it is basically "because of either lopsided implementation or total failure to give effect to the motive of the policy". In essence, there are basically political and institutional factors that had been considered by a lot of scholars for the reasons for policy failure in Nigeria (Wilson and Epelle, 2018).

With what can be seen from the appraisal of different regimes of information policies in Nigeria, the political environment has been one of enormous negative influence on the framing up of a standardized, all inclusive Information Technology Policy in Nigeria. The general challenge of sustainable policy formulation and implementation in Nigeria has been that the policies has always been distorted by the life cycle of the politicians in power. Each regime/political dispensation seem to act as if government is no longer a continuum that entails building, strengthening, and continuing with implementing already existing policies.

There is also another factor, which is the dilemma of Information Professionals: information personnel and professionals are uncoordinated. This makes plugging a collective force and pressure on government difficult. The lack of coordination by information professionals also affects the capacity of the professionals to market a collective professional agenda for the institution of quality information policy. With these deficits they are left at the whims of the politicians and political actors to contrive whatever they feel should serve as an information policy.

Infrastructural deficits remain yet another factor in Information Technology Policy sustenance. The infrastructure – hardware, software and even technical personnel for provision of information communication technology are expatriate-based and out of the grasp of local personnel. This makes appraisal, control, and regulation difficult.

Institutions of government is also said to be weak, corruption is also a factor, while there are excessive bureaucratic bottlenecks that impedes quality policy making. The character of the Nigerian politician is usually one that is more committed to self-service rather than rational patriotic engagements. This no doubt extends to the fractured order of Information Policy engineering in Nigeria.

On a final analysis, Information Technology Policy making, and implementation regime in Nigeria is checkered on the ground of the political milieu of policy making, weak institutions, bureaucratic bottlenecks, corruption, deficient infrastructure as well as the dilemma of gross uncoordinated information practitioners and professionals.

Conclusion

Information is at the core of national development. Information has in recent time grown to become a strategic tool to any nation. In order to properly explore a coordinated use and benefit from information, a well framed Information Technology Policy need to be put in place. As it is, there is no doubt a regime of coordinated national disorder as far as National Information Technology Policy is concerned. Contributions from professionals is one that ordinarily should serve to guide, guard and gauge the regime of sustainable national information policy in Nigeria.

The ecology of National Information Technology Policy in Nigeria is largely turbulent, with multiple less coordinated policy options. This finding is a critical indictment on both policy professionals and government agencies responsible for national policy engineering.

Recommendation

This article therefore recommends as follows:

- Standardization of information (technology) policy bureau insulated from hiccups in political regime change and guarded, guided and gauged by the watchful eyes of Information professionals and practitioners.
- Integration of various droplets of information policies for different purposes. That is, information technology policy, education information technology policy and various other information related policies into a unified and single policy entity. At most, a single national information policy entity would go farther to define information policies of other sectors as a sub-sect of a unified national policy.
- Wake up call for information professionals for an integrated, coordinated and single-umbrella approach and organ for roles in national information technology policy articulation and monitoring.
- The political society, politicians and government actors need to imbibe the culture of policy continuum in national policy engineering.

- There is the need for the training of manpower, capacity and capability for home-grown competence in information technology handling.

References

Braman, S. (2011). Defining information policy. *Journal of information policy*, *1*, 1-5.

Buckland, M. K. (1999). Information as a Thing, *Journal of the American Society of Information Science,* 42(5), 351-360.

De Watteville, A., & Gilbert, L. (2000). *Information and Communication Technology*. Heinemann.

Durodoye, K. K. (2005). Strategic Planning of Information Systems: Research Concepts and Frameworks, in Tiamiyu, M. A. *Information Science: Concepts, Models and Applications,* Ibadan: ARCIS

Eghworo, O. R., Ogo, E. P., & Ayomanor, K. E. (2015). Information communication technology: A catalyst for enhancing the role of libraries in the creation of an information society. *European Journal of Research and Reflection in Arts and Humanities*, *2*(3), 39-47.

Ehikhamenor, F. A. (2005), Information Systems Development: Managerial Strategies and Methods, in Tiamiyu, M. A. *Information Science: Concepts, Models and Applications,* Ibadan: ARCIS

Ikelegbe, A. (2005) Public Policy Analysis: Concepts , Issues and Case. Lagos : Imprint Services.

Ministry of Technology, (2012), National Information Technology Policy, Ministry of Technology, Federal Republic of Nigeria.

Obodo, N. A. (2016), Challenges of Policy Implementation in Nigeria: A Case of Policy, International Journal of Social Sciences and Management Research Vol. 2 No.1 2016

Olatokun, W. M. (2005), National Information Technology Policies: Issues and Frameworks, in Tiamiyu, M. A. *Information Science: Concepts, Models and Applications,* Ibadan: ARCIS

Shcherbakova, L., Zobova, L., Evdokimova, E., & Savintseva, S. (2018). Features of information technologies influence on social development. In *Proceedings of the International Conference on the Theory and Practice of Personality Formation in Modern Society (ICTPPFMS 2018)* (Vol. 198, pp. 70-75).

Shcherbakova, L., Zobova, L., Evdokimova, E., & Savintseva, S. (2018). Features of information technologies influence on social development. In *Proceedings of the International*

Conference on the Theory and Practice of Personality Formation in Modern Society (ICTPPFMS 2018) (Vol. 198, pp. 70-75).

The Web's Largest Resource for Definitions and Translations, Information, *https://www.definitions.net/definition/information*

Trypilka, A. (2019). Challenges of Nowadays Information Technology. *InterConf*.

Ugwu, S. C. (2006). *Public Policy Analysis: Issues, Principles, Theories and Applications,* Enugu: Chiezugo Ventures

Uhegbu, A. N. (2004). Constraints on the formulation and implementation of national Information policy for Nigeria. *Journal of Information Science*, *30*(1), 41-47.

Uhegbu, A. N. (2008). Globalization and national information policy in Nigeria. *Library Philosophy and Practice*.

Wilson, G., & Epelle, A. (2018). Public policy formulation and implementation in contemporary igeria. *International Journal of Research in Social Sciences*, *8*(6), 175-185.