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ARTICLES

Review

Roles of libraries in ensuring political integration

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This study is a qualitative review on the roles of libraries in enhancing political integration in Nigeria. There is need to foster national integration from the political dimension through library which is a key information institution. This view is presented in terms of the library enhancing political consciousness and participation, federalism, democratic governance, and individual's response to political campaign messages. It is concluded that library as a social-based information institution is rightly positioned to function outside the box to meet the political information needs of the public and equip them to become better citizens that are politically inclined. Thus, the authors recommend that libraries should provide equitable access to political information, provide media literacy skills, create awareness on the need for political participation and provide rural dwellers with information to meet their educational, medical, political, economic, and social needs.

Key words: Library services, political participation, democratic governance, federalism, national integration/development.

INTRODUCTION

Before the British colonial invasion, Nigeria lived as autonomous communities, kingdoms and caliphates, where political, social and economic administrations were carried out independently. At the invasion, Nigeria became a British protectorate, part of the British Empire in 1901. However, for administrative purposes the protectorate was divided into the Southern and Northern Protectorates. In 1914, both protectorates were merged into a single colony known as Nigeria by the effort of Sir Fredrick Lugard. This amalgamation was with the intent to unite the people and culture of the Northern and Southern protectorates into a sovereign nation called Nigeria. However, the success of this 1914 amalgamation

has been called to question given the ever widening gap in unity and continuous disparity among people, cultures, ethnicities and tribes especially between those in the north and south where this fusion endeavour emanated. According to Eric (2016), the amalgamation of Nigeria spurred ethnic conflicts, disunity in tribes, religions, and natural endowments which is hinged on politics of resource control and allocation. The fission of Nigeria into regions, states and ethnic groups seem to negate the original purpose of the nation's amalgamation, hence the cravings for national integration which is a core determinant of peaceful coexistence and a building block for national development. It can therefore be extrapolated

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that the ideology of national integration in Nigeria dated back to 1914 when Nigeria was amalgamated.

Integration is defined by Rex and Tomlinson in Rex and Singh (2003) as "not a flattening process of uniformity but cultural diversity, coupled with equal opportunity in an atmosphere of mutual tolerance". Whereas, national integration is a process of creating relationship between and among hitherto separate nations, after an understanding and reconciliation of the fundamental differences, and an establishment of an acceptable consensus that guide people for peaceful coexistence (Folarin et al., 2014).

National integration which is an emotional unity of different ethnic groups exists in the cultural, political, social, economic, and psychological dimensions (Gurung and Bhandari, 1993). While all these dimensions interact to anchor national integration, the crux of this work will be on political dimension which seems to champion the others.

Political integration (PI) or integration in a political sense (Ilievski, 2015), is considered as the condition "where state attempts to create a congenial atmosphere in order to secure people's genuine participation and their involvement voluntarily and spontaneously" (Gurung and Bhandari, 1993). It is the loss of sovereignty amongst integrating member states in favor of an increasingly sovereign supranational entity (Kingsolver, 2011).

Political integration helps to build political community by establishing rules, creating common institutions with the power of decision-making, and projecting an identity of the integrated community (Ilievski, 2015). Therefore, political integration enables people within a political constituency to participate in the political activities by which they are governed as well as develop the structure that governs people.

The development of any nation is influenced by the level of their political integration which is an integral part of national integration. It is thus pertinent for scholarly efforts to improve the level of political integration as a means towards national integration and development. While some literatures especially in Political Science have treated political integration, very few have considered factors that can spur political integration in Nigeria but there seem to be none that considers the concept of political integration from the field of Librarianship.

This study, therefore, seeks to investigate the roles of libraries as information institutions in enhancing political integration in Nigeria. In achieving this, the focus of presentation would be on political consciousness and participation, federalism, democratic governance, individual's response to political campaign messages.

SIGNIFICANCE OF THE STUDY

While national integration has been of great concern to government, this study will be of great significance to

government officials by providing ways with which the library can assist in enhancing political development which is a key dimension of national development. This can thus serve as a guide to influence the drafting and/or amendment of policies that helps to promote national integration and development.

The findings and by extension, recommendations made by authors in view of the study, will be useful to library management in rightly positioning libraries as development institutions, by promoting national development through political integration which has rarely been given attention in scholarship. This will also inform the redefinition of library services to accommodate new roles and functions in the light of national integration and development, thus extending the conventional practices of the libraries.

Also, at a critical time as this when the relevance of library is questioned in the face of rising technologies, this study is significant in further justifying the relevance of library in the 21st century. The misconception that Information and Communication Technologies (ICTs) and "disruptive" innovators like Google has displaced the relevance of library is corrected by this study in demonstrating other relevance of library especially those which directly correlates national development.

Moreover, there seem to be a dearth of literature on how libraries can enhance political integration, which further depicts the significance of this study. The study will add to the sparse existing literature connecting libraries to national integration especially from the political perspective.

METHODOLOGY

This study employed a literature based approach to collect, analyze and synthesize existing findings of research in respect to the roles of libraries in view of enhancing national integration and development. Literature from journal articles, books, web resources among others in the areas of librarianship and political science forms the basis of this review. The approach to this study helps to provide a summary of literature on the variables understudied.

ROLES OF LIBRARIES IN POLITICAL CONSCIOUSNESS AND PARTICIPATION

Political matters in Nigeria are so sensitive and decisive that it call for political consciousness and participation by all citizens, and can be beefed-up by libraries through awareness creation to the public.

Consciousness has to do with feeling or state of mind about something. Consciousness is someone's ideas, feelings or opinions about politics (Longman Dictionary of Contemporary English, 2012). Meanwhile, political consciousness is one's political state of mind which is

based on the personal awareness of politics, position in the political system and history, and actions one perceived as available to take in an effort to influence the political reality in which one operates. Political consciousness is closely related to the concept of political participation and the idea of social contract between the people and the government (Rulska-Kuthy, 2014).

Political participation connotes actions of citizens by which they seek to influence or to support governance and government. People with more education, higher incomes, and white-collar jobs are more likely than others to participate in politics. Reasons for political participation go beyond parties.

People participate in electoral matters to have freedom to speak out, hold offices at any level of government, have opportunity to register as candidates, vote and be voted for. They can also participate in politics to socialize and hence act as agents of socialization to empower the democratic society and foster social transformation as they take part in conducting public affairs through the following ways as outlined by Lauren (n.d) as information provision, privacy, equity of access, education, independent learners and intellectual freedom. Effort will be made to discuss the first two as stated in the following.

Information Provision

Information provision is required from library and information professionals to meet the challenges of Nigeria's political system and history, to influence political realities operational in the country.

A unique role of libraries as social institutions charged with responsibility of acquiring, organizing, and disseminating information to all members of the society, naturally position them to ensure that information is provided and that citizens have access to information that will enable them function reasonably and make useful contributions in politics.

A public library, regarded as the people's university and the custodians of knowledge, makes political information available publicly.

People need to be able to find and use information in order to understand how the political system works, and participate in formal and informal political activities (Lauren, n. d.); libraries should provide such information in order to contribute to democratic ideals, as a purveyor of information and knowledge.
The Australian Library and Information Association statement on Information for All Australian (2001) clearly stated that information alone is no democratic guarantor. However, Dinneya (2006) opined that without access to information, governance processes lack transparency and government officials will be at pain to earn the confidence of an uninformed citizenry. Access to information enables the citizenry to make informed judgments regarding government performance. Libraries

play a key role in making information readily available to enhance political consciousness and participation in Nigeria.

Privacy

Privacy is essential to the exercise of free speech, thought, and association. The possibility of surveillance, whether direct or through access to records of speech, research and exploration undermines a democratic society. Privacy, an interpretation of the library bill of rights protecting user privacy and confidentiality has long been an integral part of the mission of libraries. The ALA has affirmed a right to privacy since 1939. Rights to privacy and confidentiality also are implicit in the guarantee of free access to library resources for all users.

Libraries advocate the rights of people to unfettered access to information (Okeke et al., 2013). Libraries are the focal point for people's inquiry into the physical and social phenomena of their environment as it serves as a social instrument, a learning centre and an open university for all classes of people. Nevertheless, for political consciousness and participation/participatory citizenry, information literacy is essential. Libraries also serve as trusted providers of information literacy programmes to citizens required to spur their political consciousness and participation.

ROLES OF LIBRARIES IN ENHANCING FEDERALISM IN NIGERIA

Federalism has been operational in Nigeria since the former British colony was reorganized into a federation of three regions in 1946. Federalism can be seen as a system of government in which governmental powers that exist in a country are shared between central government and other component units, that is, state and local government (Adekoya, 2016). It is a political arrangement which admits a relationship of multiplicity of interest that can be managed in a compatible, just and equitable manner (Madubuike, 2007).

Adekoya (2016) outlined the major reasons for the introduction of federalism in Nigeria as follows; cultural diversity, fear of domination by minority, geographical factor, economic factor, effective administration, and bringing government nearer to the people. He opined that the fear of domination by minorities was the major reason why the Nigerian government included federal character principle into the constitution to prevent tribal or regional dominance of any government or its agency. Federal character ordinarily protects the minorities but, its inappropriate application in Nigeria led to inequality, tribal dominance, lack of transparency and corruption.

The role of libraries in enhancing federalism in Nigeria can be traced to the Universal Declaration of Human

Rights (1948) and the International Covenant on Civil and Political Rights (1966) which include the Right to Education. Nigerian Library Association (NLA) should rise up to persuade the government to comply with the Universal Declaration of Human Rights (1948). The move towards a more democratic form of education in the 1960's and 1970's resulted to a shift in the concept of education from one that was authoritarian and elitist to one that advocated 'equal opportunity in education' seen as a democratic right of all individuals irrespective of race, status, age or ability (Prajapati, 2015).

Political education in a democracy involves conscious efforts for and by citizens to acquire cognitive, procedural and habitual democratic skills. Cognitive skills ensure a certain level of awareness of the political system's institutional structure (Dinneya, 2006).

Political education programme is also necessary for Nigerians below voting age. However, the education level of political appointees should be above school certificate. Libraries should enhance the awareness for the institutionalization of political education, as this will foster a healthy democratic development and directly address Nigeria's worst economic problems of the time. Information professionals are to act as advisory bodies in the formulation of broad government policies (Advisory Committee on Political Matters).

Through public education (as provided by libraries), a nation is kept alive, and cherished values and virtues are passed to the next generation (Eze et al., 2015). Information and Communication Technologies (ICT) can also be used to support literacy rate/education. The information literate persons are those who are able to recognize their need for information, identify, locate, access, synthesize, evaluate and apply the needed information.

ROLES OF LIBRARIES IN DEMOCRATIC GOVERNANCE

The Nigerian society and its sectors crave for good democratic governance because of the progress of the society and its citizenry. The library inevitably has to join this crave by using the information and knowledge materials under their custody to provide the necessary information for the understanding of what it takes to govern, what governance is and how the rulers should rule exposing the fundamental human rights of the land to them.

Democratic governance, according to Bello-Imam and Obadan (2004), represents the exercise of state power with the consent of the people either directly or indirectly through their elected representatives. The library houses users from different places, who would learn from one material to another in order to get educated and give back to the society. It is through studying that the users who happen to be the citizens get exposed to know that democratic governance guides such indispensable prerequisites as economic equality, fraternal feeling and political liberty within a defined territory.

Libraries are involved in various jobs and engagements in the day to day activities that they carry out. The libraries are not just built or kept for book keeping and welcoming of users. Their jobs are numerous, ranging from guidance, referrals, and internet services to information literacy. Their activities also are geared towards a good and governable environment as they house and give out materials that will help in educating citizens of their nation run a better democracy. The idea of democracy as a universal commitment is quite new, and it is quiet essentially a product of the twentieth century. But today, we are in twenty-first century and need better democratic governance through roles played by the entire nation, of which the library is inclusive.

According to Jaeger and Burnett (2005), every democratic society relies on deliberation and dialogue between social groups with varying perspectives to provide for the representation of the diverse members of the society. The library in its own case is ready to maintain certain basic skills through organizing talks on elections using the information resources housed in it, that would empower the citizens and the leaders to become self-reliant, and foster interactions in order to move away from social vices like stealing, embezzlement, hijacking of voting materials, election violence, etc., that could jeopardize the democracy. Skills like digital literacy, information literacy, are better delivered to the citizens through the library to enable them use the computers effectively during elections/voting exercises to get information, to vote for their candidates and source for election better practices.

According to Amieye-Ofori (2009), the crucial role of democratic governance to the success of the political system was reinforced after the Second World War. And this was conquered through deliberations and contributions from learned Nigerians. These learned Nigerians could not have succeeded without studying. All that is required to study are kept in the libraries. Meaningful deliberation is another role the libraries could use to bring about good governance. This is based on open access to information which the libraries provide. The library makes information available during the electioneering campaigns and accommodates those who want to know more about politics, assist in bridging the gap between the poor, and the less privileged who could not afford newspapers, magazines, etc., but rush back to the library (ies) for newspapers, to read and get educated about what had happened and the things happening in the society.

Figure 1 shows that the library at the centre depicts an interconnectedness between political parties (and their candidates), the public who constitute the electorates and the political activities. Nigerian has a multi-party system with multiple ideologies; the people (citizens) belong to
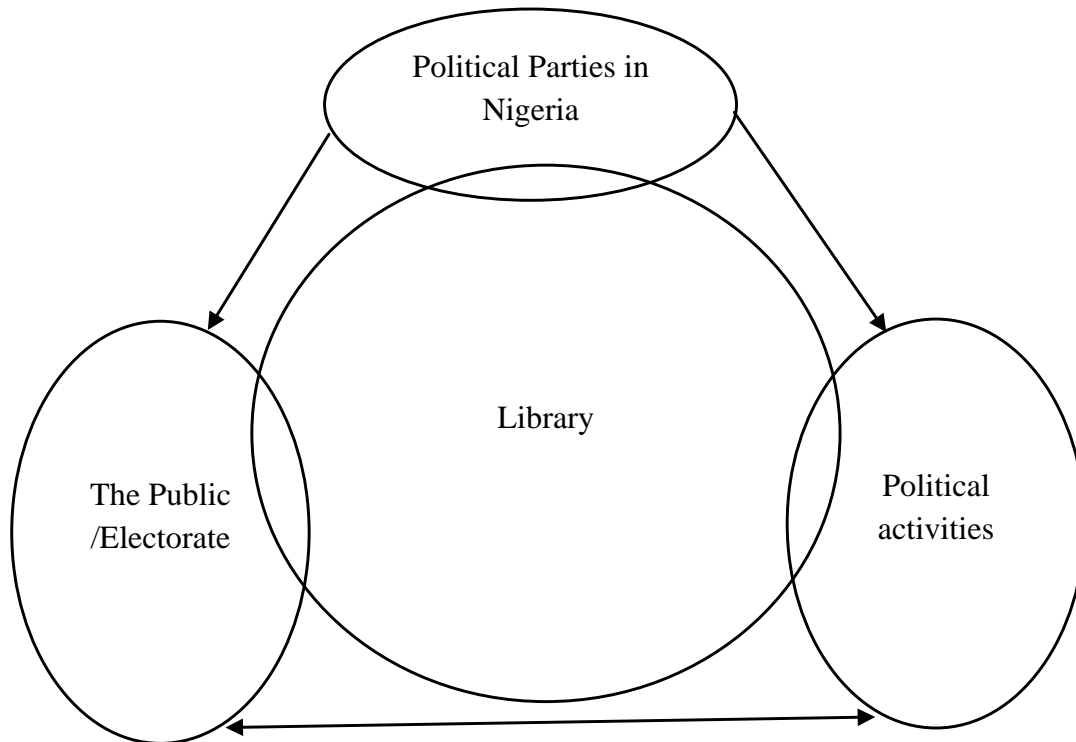
Figure 1. Libraries and democratic governance.
Source: (Researchers' Contribution)

parties of their choices which in line perform different activities on how the society could be governed democratically. The parties either gather information from their members, radio, television, newspapers or magazines during and after elections. Some citizens of the country miss these information materials for information, but are informed by the library (ies) through these materials as they come requesting for newspapers, magazines, and bulletins. Anele (2015) stated that the information that the society requires are acquired and housed in the libraries because they are custodians of intellectual knowledge put in papers and represented accordingly.

ROLES OF LIBRARIES IN ENHANCING INDIVIDUAL'S RESPONSE TO POLITICAL CAMPAIGN MESSAGES

One key element of political integration is democratic governance characterised by electoral practices at time interval, usually four years in Nigeria. Democratic governance birthed communication between political parties or its candidates and electorates in seeking the support of the latter, through political campaign messages. During this period, candidates and their parties flood the atmosphere with a myriad of campaign messages (containing diverse information) which, according to Graber (1988), are not easy to understand.

The avalanche of information puts pressure on the capacity of the voter to process and comprehend information contained in campaign messages. This results in errors (Fiske and Taylor, 1991) which could pervert electorates' decision with negative implications on democratic governance. Accurate and timely information is the "live-wire" of democracy as it equips individuals to make sound voting decision. According to Desposato (2007), many voters only have basic or no formal education and little or no access to political information which makes voting decision as part of "clientelistic" exchange and not policy debates. Libraries as social and information based institutions are well equipped to carry out information literacy programmes that could develop the ability of electorate to discern political campaign messages regardless of the media by which they are communicated.

Studies reveal audiences' deficiency in complex skills for a sufficiently critical understanding in dealing with highly sophisticated media messages (Livingstone, 2004). However, the same media may collude with politicians to conceal useful information from the public when it is in the interest of the politicians, thereby leaving the voter to his/her fate (Nwanne, 2007); whereas, the number of people who receive political information from the media keep increasing (Swanson and Mancini, 1996). It is therefore imperative to provide electorates with a source of information that is objective and without political

sentiment. Libraries can function outside their conventional practice by arming the public with skills necessary for understanding the media and media messages in a bid to identify media bias.

Libraries could provide objective information about candidates, political parties, issues in a bid to negate widespread negativity which, according to Desposato (2007), will simply reinforce general pessimism about the ability of democracy to address the challenges of development. In doing this, libraries are promoting development by enhancing democratic governance via people-centered elections.

CONCLUSION AND RECOMMENDATIONS

Political integration which is an integral part of national integration is necessary to sustain democratic governance, peaceful coexistence and national development.

Democracy strives in an atmosphere of quality and equitable access to political information and the library as a social-based information institution is rightly positioned to perform "outside the box" to meet the political information needs of the public and equip them to become better citizens that are politically inclined, hence contributing much more to nation building. In view of this, the following recommendations are made:

(1) Libraries should give the public equitable access to political information using various electronic, social and print media platforms at their disposal. Such political information should include voters right, election's schedule, among others, should be done with the intent to increase political participation and awareness. This free and equitable access to information will enable individuals bridge the gap in the state of their political knowledge which will enhance their political participation and invariably spurs national integration.
(2) Libraries should provide information and media literacy skills to members of the public in order to enable them respond properly to political campaign messages regardless of the media. These media literacy skills will also equip them with skills to detect "fake news" propagated during campaigns thereby enabling well informed decisions.
(3) Nigerian Library Association should liaise with the government through the Ministry of Education to instate the 1948 Universal Declaration Rights, the one for education in particular.
(4) Libraries should create awareness on the need for members of the public to participate in political activities as a means to democratic sustenance. This awareness could be through the library's blog/website, radio jingles, telecast, library notice boards, flyers, posters, banners among others.
(5) Library services and resources should be extended to

those in the rural areas with limited access to scientific information. Such services and resources should focus on meeting their information needs in all aspects of human endeavour to include educational, medical, political, economical and social. These information will provide equitable access to opportunities for members of the public which is germane to building national integration.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

Adekoya A (2016). Problems and prospects of Federalism in Nigeria. Information Guide in Nigeria. Retrieved from infoguidenigeria.com/problems-prospects-of-federalism-in-Nigeria

Amieye-Ofori T (2009). Democratizing without the people: The story of Nigeria. Pearl Publishers, Port-Harcourt.

Anele T (2015). Political governance. Igweocha: P & T Publishers. http://www2.fiu.edu/~milch002/CPO3643/outlines/participation.htm

Australian Library and Information Association (2001). Statement on Information Literacy for All Australians, ALIA, Canberra.

Bello-Imam IB, Obadan M (2004). Democratic governance and development management in Nigeria's fourth republic *1999-2003* (eds). Ibadan: Centre for Local Governance for Local Government and Rural Development Studies (CLGARDS)

Desposato S (2007). The impact of campaign messages in new democracies: Results from an experiment in Brazil. Available at https://sites.lsa.umich.edu/polisci-cpw/wp-content/uploads/sites/223/2015/02/desposato.pdf

Dinneya G (2006). Political economy of democratization in Nigeria. Lagos: Concept publications limited.

Eric P (2016). The Amalgamation of Nigeria: Revisiting 1914 and the Centenary Celebrations. Canadian Soc. Sci. 12(12):66-68. Available from: http://www.cscanada.net/index.php/css/article/view/9079

Eze SGN, Achuonye KA, Uzoechina GO (2015). Teacher education in Nigeria; Innovations and reforms. Global academic group online. Onitsha: Academic Resource, P 18.

Fiske ST, Taylor SE (1991). Social Cognition. (2nd Ed.). New York: Mc Graw Hill.

Folarin SF, Olanrewaju IP, Ajayi LY (2014). Cultural plurality, national integration and the security dilemma in Nigeria. Covenant Univers. J. Polit.Int. Affairs. 2(1):81-92

Gurung G, Bhandari B (1993). National integration in Nepal. Occasional Papers in Sociology and Anthropology, 3:69-95. https://www.nepjol.info/index.php/OPSA/article/view/1077

Ilievski NL (2015). The concept of political integration: The perspectives of neofunctionalist theory. J. Libe. Int. Affairs. 1(1):1-14.

Jaeger PT, Burnett G (2005). Information access and exchange among small worlds in a democratic society: The role of policy in shaping information behavior in the post-9/11 United States. The Library Quarterly. Retrieved from: http:///www.journals.uchicago.edu/doi/full/10.1086/502787 75(4):464-95.

Kingsolver JD (2011). Prospects for continued European political integration: A case-study analysis of the United States and its implications for Europe.

Lauren S (n.d.). What librarians can do to support political participation, youth activism and resistance. Available at laurensmith.wordpress.com@walkyouhome

Livingstone S (2004). The challenge of changing audiences: European J. Commun. 19(1).

Longman Dictionary of Contemporary English (2012). 6th ed. Pearson Education Limited.

Madubuike I (2007). Politics, leadership and development in Nigeria. Abuja: Root books and journals limited.

Nwanne BU (2007). Organisational/business communication and globalisation: A Nigerian perspective. Mojaye EM, Salawu A, Oyewo OO. Eds. Ebenezer Soola Conference on Communication: Proceedings. Ibadan: Ebenezer Conference on Communication, 353-363.

Okeke RJ, Ibegbulam I, Orakpor A, Asom F (2013). Libraries as change agents for promoting knowledge society for sustainable development. Global Review of Library and Information Science. Vol. 9.

Prajapati RS (2015). Theories and practices of library management. New Delhi: Discovery Publishing House, PVT. Ltd.

Rulska-Kuthy AM (2014). Political Consciousness. InEncyclopedia of Quality of Life and Well-Being Research. Springer Netherlands pp. 4865-4868. https://springer.com/referenceworkentry/

Rex J, Singh G (2003). Multiculturalism and political integration in modern Nation-States – Thematic introduction. In Koenig, M. (ed) on multiculturalism and Political Integration in Modern Nation-States. Int. J. Multicultural Soc. 5(1):1-103.

Universal Declaration of Human Rights (1948). United Nations. Available at http://www.un.org/en/universal-declaration-human-rights/

Full Length Research Paper

Factors affecting adoption of social media by women's non-governmental organisations (WNGOs)

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While the adoption of social media gets prominence in the developed world, its widespread adoption has not yet occurred across many organisations in developing countries and very little empirical research focusing on Women's Non-Governmental Organisations (henceforth, WNGOs) has been conducted to date. The aim of this study is to fill this knowledge gap by investigating the factors affecting adoption of social media by WNGOs in North-West of Nigeria. Built around the Diffusion of Innovation Theory (DOI), Technology-Organisation-Environment (TOE) Framework and Information Sharing Behaviour (ISB) factors, the study develops an integrated model consisting of twelve variables to investigate factors that affect WNGOs' social media adoption. The study employed the quantitative approach. To test the research's proposed model, a survey questionnaire was self-administered to a sample of 327 respondents drawn from eighty-seven registered WNGOs. Out of the 327 questionnaires distributed, 250 usable questionnaires were completed and returned, giving a response rate of 76.5%. Data collected were analysed by means of descriptive statistics, correlation analysis and multiple regression techniques. The results of multi-linear regression analysis indicate that the environmental factors are the strongest predictor of WNGOs' social media adoption. Similarly, organisational and information sharing behaviour factors all have a significant impact on social media adoption. In contrast, the technological factor was found to be the least predictor. Major implications for the study are policy implications, improving WNGO practice, advancing scholarly research on Information Technology (IT) adoption and theoretical contributions through extending previous research conducted in developed countries in a new setting.

Key words: Social media, information and communication technological, social/environmental organisations, social change(s).

INTRODUCTION

Information is a fundamental component of human actions and its value to individuals and organisations is overwhelming. Various studies (Aguolu and Aguolu, 2002; Kamba, 2007) have discussed what information is

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in general and in non-governmental organisations (NGOs) context (Palomino, 2006; Rudasill, 2006). Ifidon and Ifidon (2007) suggest that in a world where interactions at every stratum of society have become imperative, information plays a predominant role in every process of the interaction among people and between nations. In the context of NGOs, Palomino (2006) posits that NGOs produce and disseminate information in order to further awareness and encourage a change in reality.

Traditionally, numerous methods are adopted by organisations to share information. Such methods include storytelling, memorizing, repetition, dancing, acting, observing and demonstrations. To enhance cooperation and meet information sharing needs, WNGOs in Nigeria share information through seminars, workshops, conferences, face to face conversation and through phone calls (Saleh, 2012). Similarly, they share information in more conventional ways, such as national, zonal and local level meetings. However, WNGOs in Nigeria have several unique characteristics that cause their efforts to adopt technologies for information sharing challenging. Characteristics, such as a weak financial base, lack of office spaces, lack of technical expertise or understanding of the resources, illiteracy and socio-cultural attitudes, are almost usual (Oyelude and Bamigbola, 2013). As a consequence of these characteristics, the WNGOs in Nigeria and as in most developing countries are challenged by a poor record of information sharing among them, high communication cost, duplication of activities, lack of access to global information resources and delays in the dissemination of information (Reade-Fong and Gorman, 2005).

However, with the advent of information technology, NGOs over the years have adopted a mixture of technologies for different functions like social networking and advocacy (Nah and Saxton, 2012), internet publishing and information sharing (Jain, 2011) and advocacy, mobilisation of support and fundraising (Rudasill, 2006). Among these technologies, social media is an important technology that takes into account an increasing scope of interaction and an easy path for users to generate and consume various contents. These contents include Telepresence applications (Skype, Face Time), Video sharing (YouTube), Video conferencing and Wikis, blogs, and micro-blogs (Twitter, Tumblr).

Social media offer diverse benefits in information sharing practices (Constantinides, 2014; Palomino, 2006). The emerging global information sharing practice is one where social media creates a seamless gateway, which challenges organisations, their communication strategies and, of course, engagement with the public. The greatest contribution of social media is to enhance global outreach that is efficient and cost effective. With this benefit, social media allows WNGOs to widely disseminate information and expand their activities locally and globally. Through these new platforms, WNGOs have also found a medium to promote ideas and commit

people to activities as well as promote access to comprehensive and reliable information. Consequently, there is a great potential for the improvement of WNGO's information sharing practice. Although, there are many benefits of the social media applications in enhancing information sharing among WNGOs, their adoption rate has not been very significant. The adoption of social media applications by WNGOs in Nigeria is less evident.

The problem why some organisations adopt social media applications for information sharing and others (more especially in developing countries) do not is an important issue that needs to be addressed. This issue is important, particularly in the case of inter-organisational relationships due to the earnest attention social media had received since its inception at the beginning of the 21st century from youth, academia, profit and non-profit organisations and governments worldwide. Unfortunately, its adoption density in most developing countries, including Nigeria, is low (Internet World Stat, 2016). Likewise, only a handful of studies (Bortree and Seltzer, 2009; Greenberg and MacAulay, 2009; Walter et al., 2009) mostly in the developed countries have investigated any aspect of non-governmental organisations social media adoption and use. Therefore, there is the need to understand the factors that surround social media adoption to speed up its adoption among WNGOs. Understanding the factors affecting social media adoption would help government appreciate its importance and take cogent policy measures that will promote its adoption by WNGOs.

The objective of this paper is to investigate the factors affecting social media adoption in terms of its information sharing benefits for a non-profit organisation (WNGOs) in a developing country, Nigeria. A vast literature on the subject of social media adoption exists in the developed countries. Most of the literature in this field focuses on aspects of profit organisations and ground on traditional organisational information systems adoption theories, such as the diffusion of innovation (DOI) theory (Roger, 1995) and the technology-organisations-environment (TOE) framework (Tornatzky and Fleischer, 1990). Such studies as well as the existing theoretical approaches do not adequately advance our understanding of what factors affect social media adoption in WNGOs. Therefore, the study is guided by these key research questions:

(1) What factors influence WNGOs' social media adoption?
(2) What adoption factors have a significant relationship with social media adoption among WNGOs?

Theoretical background

For the purpose of this study, theories and models that focus on organisational technology adoption, where

decisions are made at the organisational level, are pertinent. To study technology adoption in an organisational context, the Diffusion of Innovation (DOI) (Rogers, 1995) and the Technology-Organisation-Environment Framework (TOE) (Tornatzky and Fleischer, 1990) are the most frequently employed models.

The DOI is a theory that tries to explain the degree to which new ideas and technology spread through communities, operating at both the individual and organisational levels (Oliveira and Martins, 2011). Rogers (1995) proposes that the attributes of innovation, such as relative advantage, compatibility, complexity, trialability and observability, are perceived as the individual's attributes that affect the rate of adoption of innovations (Alrawabdeh, 2014). For Rogers (1995) innovations that are perceived by individuals to have a higher relative advantage, compatibility, trialability, observability and less complexity will be adopted faster than other innovations (Arpaci et al., 2012).

The DOI model has been used to investigate the adoption of information technology in organisations in general (Bultum, 2012; Chong, Lin, Ooi and Raman, 2009; Sahin, 2006) and in social media context (Dahnil et al., 2014; Kim et al., 2010). However, despite the extensive usage of the DOI theory, some researchers have expressed concern about its multifaceted nature. This, in essence, has made the DOI theory difficult to be associated with a single purpose or area (Totolo, 2007). One other limitation of the DOI is that the theory ignores the impact of demographic differences among adopters, such as age, gender, income and education, which have been found to have a significant influence on users' attitudes towards the adoption of technological innovation (Abukhzam and Lee, 2010). In addition, the DOI is based on the innovation's characteristics and the social system surrounding it. Due to this, the constructs are limited and any variations are restricted to the variables in the model. The limitation in variables indicates inadequate constructs in the adoption behaviour (Khan and Woosley, 2011). Yet, the limitations of DOI have not impacted on its usage in areas such as sociology, psychology, anthropology and information technology (Christensen and Remler, 2009). DOI is aimed at explaining the actual adoption of technologies; the model similarly offers a relatively holistic basis for analysing the technology adoption at the organisational level. Likewise, it can be implemented in multiple fields beside IT and is a good predictor of social and technological change. Thus, this paper considers the model suitable for this study.

Tornatzky and Fleischer (1990) proposed and developed the Technology-Organisation-Environment (TOE) framework. According to Bultum (2014), it is intended for studying the prospect of the successes of technological innovations. The TOE framework identifies three determinants that influence the adoption of new innovations in an organisation: the technological, the organisational and the environmental contexts. The technological context describes the technology (internal and external) relevant to the organisation. The technology aspect may comprise both equipment and processes (Bagale, 2014). The organisational aspect describes the characteristics of the organisation, such as the organisation's size, slack and degree of centralisation, the quality of human resources, managerial structure and complexity (Arpaci et al., 2012). The environmental characteristic is the area in which an organisation operates. This includes government regulations, technology support, infrastructures, size and structure of the organisation and competitors.

Several studies have applied and adopted the TOE framework to investigate various information technologies (Arpaci et al., 2012; Bagale, 2014). Some of these studies have adopted only the TOE as a theoretical framework while others have combined it with other theories, such as the Diffusion of Innovations and the Institutional Theory to understand various technological innovations. Even though results from these studies are generally mixed, organisational factors tend to predict better technology adoption than environmental effects. Despite the mixed results, the TOE is acknowledged to be a holistic and well received framework in the context of innovation adoption by organisations. As the TOE framework focuses on the entire organisational characteristics of technology adoption and disregards the individual aspect, the TOE framework is, therefore, appropriate for this study.

Limitations in the technology adoption theories to appropriately study all types of innovations have prompted studies to further move beyond the dominant paradigms of the DO1 theory and the TOE framework. In this study, we define an innovation as any idea, practice or object that is perceived by an individual or other unit of adoption (Rogers, 2003; Rogers, 1983). In this regard, we consider both social media platforms and their adoption for information sharing as innovation. Social media as a technological innovation is different from existing IT technologies. Its features, including effective crowd sourcing tool for testing new products and services as well as supporting intra and inter-organisational operations (Fosso Wamba and Carter, 2014), supporting peer to peer interaction and social networking, which in turn allow for the democratisation of knowledge and information (Constantinides, 2014), enabling stakeholders and government to communicate, collaborate and engage in governance (Oliveira and Welch, 2013) and creating a user-oriented information sharing ground where any people or organisation can create or circulate information content (Kim et al., 2010), considerably differentiate it from other IT technologies.

Against this backdrop, in order to understand the factors affecting the adoption of social media by WNGOs there is the need to develop a new model. In this study, we follow an approach similar to that used by (Chong et al., 2009) and merges the study to a set of determinants

related to the Diffusion of Innovation (DOI), the Technology-Organisation-Environment (TOE) framework and an additional new determinant in adoption studies called Information Sharing Behaviour (ISB). The model proposed comprises of four dimensions: technological, organisational, environmental and information sharing behaviour dimensions.

Technological factor dimension

The first dimension, technological factor, refers to the barriers of technology adoption and its perceived benefits (Aghaunor and Fotoh, 2006). Technological factors such as relative advantage, complexity and compatibility significantly influenced innovation adoption (Robinson, 2009). Relative advantage is defined as the degree to which an innovation is perceived as being better than the idea it supersedes (Rogers, 2003). According to Aghaunor and Fotoh (2006), what affects the adoption of an innovation is whether the innovation is seen as beneficial.

Compatibility is defined as the degree to which an innovation is perceived as consistent with a pre-existing system. Previous innovation adoption studies have found compatibility to positively and significantly influence innovation adoption in organisations (Kinuthia, 2015; Li, 2010). Issues including compatibility with users' value, beliefs and past experiences of their social system are considered as the factors influencing adoption of innovation (Fichman and Kemerer, 1999).

The next feature "complexity", been reported to have negative associations with innovation adoption (Rogers, 2003). A high level of perceived complexity will negatively affect innovation, such as the social media adoption. According to Nagy et al. (2014), innovations that are simpler to understand and use are adopted faster than those requiring the development of new skills and understanding. Accordingly, we hypothesise that:

H1: There is a direct relationship between technological factor and WNGOs social media adoption decision.

Organisational factor dimension

The organisational context describes the internal factors that influence an innovation adoption in an organisation. Common organisation characteristics are top management support, financial and human resources.

Top management support is an important factor used to determine the readiness of organisations to adopt an innovation (Olupot et al., 2014). In the context of social media, Hoffmann et al. (2014) posit that members of an organisation need the support of their top managers to successfully realise a social media project. This support can include considerable investment on IT infrastructure

like hardware and software implementation and maintenance (Khoumbati and Thermistocleous, 2006).

Financial resource is a significant factor affecting the operation of organisations. In the context of social media, Hoffmann et al. (2014) state that financial resource allocation is a critical element of a successful social media adoption project. One important organisational factor is human resource.

Human resources: the possession of necessary IT skills and the experience of members are valuable assets of an organisation. According to Newton (2014), resource availability, including employees, to undertake social media communications and the availability of training in relation to social media have a significant association with organisations innovativeness. Therefore, we hypothesise that:

H2: There is relationship between organisational factor and WNGOs' social media adoption decision.

Environmental factors dimension

Environmental factor attributes: government support, IT infrastructure and legal framework affect the adoption of social media.

Many studies (Li, 2010; Park and Lee, 2014) have reported government support to have significant impact on the adoption of innovation. Dahnil et al. (2014) posit that policies put forward by government have a significant effect on how fast innovations are taken up or diffuse in a population. As the world continues to witness amazing growth in computer and telecommunication technology, governments are now redirecting and focusing into IT investments, from policy formulation to heavy infrastructure development.

IT infrastructure, in its turn, entails the level of IT resources of an organisation. This infrastructure is indispensable for organisation's innovativeness. Wide ranges of IT infrastructure such as communication technologies, the internet, hardware and software and other mobile web-based information transmission technologies are used in organisations. Studies on innovation adoption, including social media have described the current IT infrastructure in organisations and countries as a key factor in operational accomplishments (Federal Republic of Nigeria, 2012; Olupot et al., 2014).

The third attribute refers to the legal and regulatory framework. Previous innovation adoption studies have established that a lack of legal and regulatory framework is significant barriers to IT adoption (Alrawabdeh, 2014; Kapurubandara and Lawson, 2006). Social media legal issues include privacy and attached risk, disclosures of confidential information and security and attached risk (Al Barki and Kisswani, 2014). Li (2008) states that lack of guidelines and monitoring issues, with respect to social media, are also crucial in controversial circumstances.

Thus, we hypothesise that:

H3: There is relationship between environmental factor and WNGOs' social media adoption decision.

Information sharing behaviour factor

The fourth dimension is that of information sharing behaviour factor, which is used to evaluate whether an organisation has the necessary information sharing attribute for overall adoption of new technology (Chong et al., 2009). Attributes such as trust, information and cost are usually included under the information sharing behaviour construct.

With respect to trust, Chong et al. (2009) posit that winning the trust of employees, customers and collaborating partners is essential to organisational technology adoption. Previous studies have indicated that trust has a significant association with technology adoption (Bultum, 2012; Chong et al., 2009). In the context of social media, Constantinides (2014) states that trust had a positive relationship with social media adoption to source, create, exchange and share information. It is also a significant determinant of information sharing in a virtual community (Bousari and Hassanzadeh, 2012; Rogers and Stemmle, 2011; Dawes, Cresswell & Pardo, 2009).

Information distribution denotes the process by which an organisation shares information among its units and members (Chong et al., 2009). The more organisations distribute information the greater the information sharing process. In this regard, organisations that adopt and use IT applications to distribute information are more likely to have an information sharing behaviour in place (Chong et al., 2009).

Cost in turns, has a significant relationship with IT adoption in organisations. Previous studies have established that it is an essential factor for technology adoption and use in organisations (Ghobakhloo et al., 2012; Khoumbati and Thermistocleous, 2006). According to Kuikka and Äkkinen (2011), the cost of adopting social media is typically lower than the cost of adopting more traditional organisation-wide information system as services are often free or can be used with small monthly payments, but they still incur measurable costs in terms of resource usage and time. We hypothesise that:

H4: There is relationship between information sharing behaviour factor and WNGOs' social media adoption.

Research framework

This study proposes an integrated organisational social media adoption framework that includes the elements of the TOE framework, the DOI theory and ISB. Thus, the proposed framework consists of twelve common factors (independent variables) drawn from technology, organisational, environmental and information sharing behaviour factors. The relationships of these factors with the adoption of social media in WNGOs are as shown in Figure 1.

RESEARCH METHODOLOGY

In this study, a quantitative approach was used by administering a survey questionnaire as the research tool. Data are collected to test the hypotheses or answer questions about people's opinions on some phenomenon (Gay et al., 2009). The survey is one of the predominant research strategies for IT/IS research (Lee and Shim, 2007). Similarly, survey allows a researcher to collect data from a large population that cannot be observed directly. Thus, the survey method was employed so as obtain data at one point in time and to have wider perspective through a bigger sample than what is usually obtainable through in-depth interviews. The research population includes 2175 registered members and management officials of 87 WNGOs in North-West Nigeria. Probability sampling using simple random sampling technique was used in this study because the population studied is dispersed around the North West, therefore to make the study feasible and to generalise the results to the entire population, the simple random sample was proposed. Also, the simple random sample has been found to be one of the best methods for inferential statistics (Babbie, 2013). The random sample targeted all the registered members and management officials of the WNGOs. The sample was drawn from a list of WNGOs names recorded in SPSS in order to use SPSS functions to randomize the sample. Using the Raosoft sample size calculator (which is an Internet based sample size determining software), a sample of 327 participants was calculated using the following equation:

$$X=Z \ (^{C}/100)^2 \ r \ (100\text{-}r), \ n = N \times (C^{\ N\text{-}1}) \ E^2 + (x), \text{ and } E = \text{Sqrt} \ (N\text{-}n)^{\ X/n} \ (N\text{-}1)$$

where N = is the population size, r = is the fraction of responses that you are interested in, Z (^{c}/100) = is the value of the confidence level C, using a margin of error of 5%, Confidence level at 95%, population size of 2,175 and a response rate of 50%. From the 327 respondents sampled, 250 completed and returned their questionnaire, giving a response rate of 76.5%.

Empirical data for this study was collected using self-administered questionnaire. The process of administering and collecting the survey questionnaire lasted for about eight weeks. Each questionnaire was distributed to the participants and a covering letter was attached describing the objectives of the survey. An incentive of N400 ($2) worth of a recharge card was offered for completion of the study. Completed copies of questionnaire from the respondents were picked up by the research assistants. In addition, follow-up was used to make sure questionnaires were filled.

The questionnaire was designed using prior IT adoption literature (Aghaunor and Fotoh, 2006; Chong et al., 2009; Arpaci et al., 2012; Hoffmann et al., 2014). The questionnaire items from the previous studies were modified and structured to make them more relevant to the social media adoption context. A total of 35 questionnaire items measure WNGOs social media adoption decision. Respondents were asked to specify the level of their agreement or disagreement with various statements concerning factors affecting social media adoption on a five-point Likert scale with response options ranging from 1-5 (1= Strongly Disagree 2= Disagree 3= Neither Agree nor Disagree 4= Agree 5= Strongly Agree).
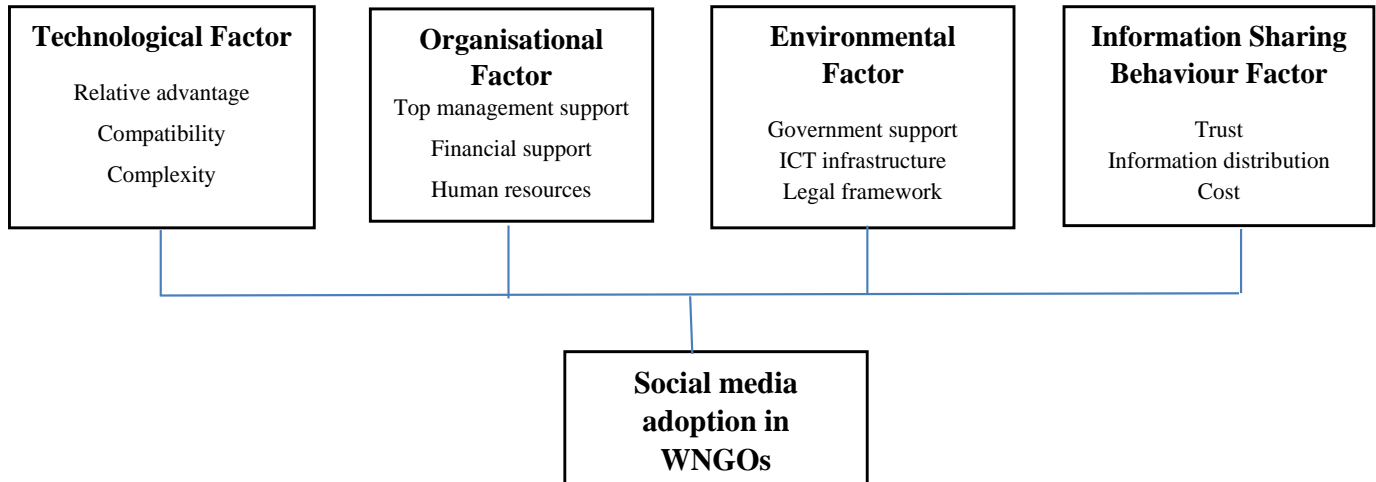
Figure 1. The research model.

Data analysis

The data was analysed using descriptive statistics and multiple regression analysis. The dependent variable was WNGOs social media adoption decision; independent variables were the technology, organisational, environmental and information sharing behaviour factors. All responses were entered to the statistical package (SPSS) version 23 – Statistical Product and Service Solution, and IBM product acquired by IBM in 2009 (Hejase and Hejase, 2013).

Profile of organisations

The demographics of WNGOs showed that 65.6% (n = 164) are national-based WNGOs compared 34.4% (n = 86) community-based ones. In terms of organisation size, 47.2% (n = 118) of these WNGOs have more than 400 memberships, 30.0% (n = 75) of them have between 301 and 400, 14.0% (n = 35) 201 and 300, 5.6% (n = 14) 101 and 200 and 3.2% (n = 8) 100 or less. In the years of operation, the result indicated that most 91.6% (n = 229) of the WNGOs have been running in Nigeria for more than 20 years. Furthermore, on the level of education attained by members of the WNGOs, most of the memberships 73.6% (n = 184) are on the diploma/NCE/degree demographic. The second largest grouping was the secondary school certificate holders with 19.2% (n =48) and the last was the postgraduate degree holders with 7.2% (n = 18). On the WNGOs' experience with social media tools in information sharing. The findings reveal varying results. As the results showed, the majority (71.2%) (n = 178) of the respondents revealed that their organisations have no social media experience in the sharing of information. However, 12% (n = 30) indicated that their organisations have less than one-year experience, 10.8% (n = 27) one to five years' experience and 6% (n = 15) above five years' experience.

Normality test

To examine the data for normality, Sharpiro-Wilk test of normality for checking the assumptions about a normal distribution was performed. The significant level of the Sharpiro-Wilk test shows a p < 0.05, therefore we reject the H_0, thus confirming the data is normal.

Scale reliability and factor analysis

Reliability was tested in terms of the Cronbach's alpha reliability coefficient. The reliability coefficients of each element of adoption factors for social media, that is, technological factor, organisational factor, environmental factor and information sharing behaviour factor were 0.785, 0.776, 0.801, and 0.774, respectively (Table 1). The Cronbach alpha measures of internal consistency showed high reliability at 0.785 for the nine statements of technological factor: relative advantage, compatibility and complexity, 776 for eight statements of organisational factor: top management support, financial and human resources, 801 for nine statements of environmental factor: government support, IT infrastructure and legal and regulatory framework and 774 for eight statements of information sharing behaviour factor: trust, information distribution and cost.

Factor analysis was carried out to test the construct validity of the survey questionnaire. Kaiser-Meyer-Olkin's (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were used to assess the suitability of the respondent data. The guiding rule of thumb suggests that the KMO index ranges from 0 to 1, with 0.50 considered suitable for factor analysis. The Bartlett's Test of Sphericity should be significant (p < 0.50) for factor analysis to be suitable (Williams et al., 2012). The KMO index and the Bartlett's Test of Sphericity (Table 2) reveal that the survey data is suitable for factor analysis. The factor analysis suggests that the measurement model has satisfactory convergent and discriminant validity. With regards to the convergent validity, most of the items exhibited a loading higher than 0.50 on their respective components. For the discriminant validity, the results suggest that the measurement exhibited somewhat reasonable discriminant validity in the context of this study.

Principal component analysis (PCA) was used to extract four factors (components). The Kaiser's criteria (eigenvalue > 1 rule) were applied to determine the factor extraction. The results of the eigenvalue of all the factors are greater than 1.0. Together, these four factors explained approximately 43.3% of the variance in the 35 measures. The maximum variance that is explained by a single factor is 13.49 (Table 3). Thus, approximately 13.5% is the variance

Table 1. The Cronbach's Alpha for Each factor (Field Data, 2015).

Variable	No. of Items	Cronbach's alpha
Technological factors	RA1+RA2+RA3+CT1+CT2+CT3+CXT1+CXT2+CXT3	0.785
Organisational factors	TMS1+TMS2+TMS3+FS1+FS2++HR1+HR2+HR3	0.776
Environmental factors	GS1+GS2+GS3+IT1+IT2+IT3+LF1+LF2+LF3	0.801
Information sharing behaviour factors	TR1+TR2+TR3+ID1+ID2+CT1+CT2+CT3	0.774

Table 2. Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.669
	Approx. Chi-Square	882.104
Bartlett's Test of Sphericity	df	45
	Sig.	0.000

Table 3. Component extraction and total variance (Field Data, 2015).

Total variance explained				Rotation sums of squared loadings		
	Initial Eigenvalues		Cumulative%			
Component	Total	VARIANCE (%)		Total	Variance (%)	Cumulative (%)
1	4.725	13.499	13.499	4.579	13.083	13.083
2	4.309	12.312	25.81	3.877	11.077	24.16
3	3.621	10.346	36.157	3.662	10.464	34.624
4	2.494	7.127	43.284	3.031	8.659	43.284

Extraction Method: Principal Component Analysis.

explained by a single factor, indicating that the data do not suffer from the common method bias because the variance explained by a single factor is less than 50%.

RESULTS

Correlation analysis

Predictably, the relationships between all the adoption factors were positively correlated with WNGOs social media adoption decision. The relationship between technological factors (r = 0.566, p < 0.001), organisational factors (r = 0.639, p < 0.001), environmental factors (r = 0.781, p < 0.001), information sharing behaviour factors (r = 0.605, p < 0.001) and WNGOs social media adoption decision were positive and statistically significant.

Multiple regression analysis

The hypothesised relationship between the dependent variable and the four independent variables were tested using regression analysis. Result summary is shown in Table 4. Variance-Inflation Factor (VIF) and Tolerance statistics were used to test for multicollinearity among the independent variables in the model. A severe multicollinearity problem is assumed to exist if the variance inflation factors (VIF) for β's is greater than 10 (Ngo Theresa, 2012). Tolerance can vary from 0 to 1 with 0 denoting complete independence and 1 showing total dependence, meaning that the bigger the value of tolerance the better (Totolo, 2007). In this study, it appears that multicollinearity is not a problem because the VIF for the β's is less than 10. Similarly, the tolerance indicator for all the four factors were found to be greater than 0.1. These results, therefore, argue that there is no multicollinearity problem. Similarly, the Durbin-Watson value of 1.978 indicated that there is no autocorrelation problem in the data.

The global F test, which tests the significance of the independent variables as a group for predicting the response variable, was used for determining the adequacy of the model. The calculated P-value 0.000 was found to be lower than the 0.05 level of significance. This indicates that the model $y = \beta_0 + \beta_1 T + \beta_2 O + \beta_3 E +$

Table 4. Regression analysis on adoption factors in social media adoption decision

Independent variable	Beta	t	Sig.	Results	Tolerance	VIF
Constant	-	7.837	-	-	-	-
Technological factors	0.566	10.817	0.000	Supported	0.892	1.122
Organisational factors	0.639	13.082	0.000	Supported	0.654	1.530
Environmental factors	0.781	19.666	0.000	Supported	0.596	1.679
Information sharing behaviour factors	0.605	11.970	0.000	Supported	0.761	1.315

Overall model F = 1690.027, p < 0.05, R^2 = 0.934, Adjusted R^2 = 0.872, β = 0.934.

β_4ISB + Ɛ is significant for predicting WNGOs social media adoption on the four independent variables.

In addition, the p value 0.000 of the calculated F statistics (F = 1690.027) is <0.05. This result, therefore, signifies that the relationship between the dependent and independent variables is strong, thus confirming the utility of the model. Additionally, the individual standardised coefficients that explain the contribution each factor has on the criterion reveals that the highest (β = 0.781) for environmental factors also shows it is the strongest predictor that explains the WNGOs' social media adoption decision. The result further reveals that organisational factor (β = 0.639) and information sharing behaviour factor (β = 0.605) are rather than technology factor (β = 0.566) were more positively associated with the WNGOs' social media adoption decision. The value of R-square for the final model was found to be (R^2 = 0.872), which means about 87.2% of the total variation of WNGOs social media adoption decision is accounted for by the independent variables. Therefore, the regression model suggests that all the four factors are significant determinants of the WNGOs' social media adoption decision. Consequently, all the hypotheses, H1, H2, H3 and H4 are supported.

DISCUSSION

The study reveals that the technology factor is the least significant predictor of the WNGOs' adoption decision. Consistent with IT and social media adoption literature, technology factors have a significant impact on social media adoption decision in organisations. In this study, technology attributes relative advantage, compatibility and complexity have been found to have significant impact on the adoption of social media by WNGOs. This result is consistent with prior studies (Ghobakhloo, 2012; Newton, 2014; Kinuthia, 2015) which reported that these variables significantly influence technology adoption.

The regression model findings reveal that organisational factor is significant and positively linked to social media adoption decision. The result indicates that hypothesis 2 is supported. The result of this study further shows that organisational factor variables, top management support, financial and human resources have significant impact on the adoption of social media by WNGOs. This finding has precedence in previous studies on social media from Hoffmann (2009), Kuikka and Äkkinen (2011) and Nah and Saxton (2012). The finding indicates that WNGOs that have enough management support, financial and human resource are more likely to adopt social media.

In addition, the result reveals that the environmental factor is perceived to contribute the most predictors to social media adoption decision (β = 0.781), which implies that Hypothesis 3 is supported. Existing studies on IT adoption, including social media, have found other factors to contribute most to innovation adoption. For example, Rad et al. (2014) reported that technology and social characteristics have more impact on the adoption of the Social Research Network Site. The results of this current study suggest that the environmental factor requiring government support, legal and regulatory framework and IT infrastructures all have a substantial impact on the adoption of social media applications by WNGOs. This finding supports prior studies on technology adoption, including social media (Alrawabdeh, 2014; Bagale, 2014; Bultum, 2014). The finding implies that the WNGOs that are hindered by poor government support and inadequate IT infrastructure and lacking legal and regulatory policies are less likely to adopt social media tools for information sharing.

The result of the regression model further suggests that the information sharing behaviour is a significant determinant of social media adoption decision. This result, therefore, indicates that Hypothesis 4 is also supported. This is a significant finding, given the fact that past studies on social media adoption by Bultum (2014), Fosso Wamba and Carter (2014) and Newton (2014) have not studied the effects of information sharing behaviour factor in the social media adoption context. However, this finding is not without precedence in IT adoption study. For example, Chong et al. (2009) revealed that information sharing culture has the most significance in the adoption of c-commerce. Among the information sharing behaviour factors, this research examines how trust, information distribution and cost affect social media adoption. Both variables were found to have a significant impact on the adoption of social media by WNGOs. This finding supports relevant and

extant literature (Newton, 2014; Oliveira and Welch, 2013; Park et al., 2011).

CONCLUSIONS, IMPLICATIONS AND LIMITATIONS OF THE STUDY

This study has attempted to explore and assess the factors affecting the adoption of social media by WNGOs in a developing country, Nigeria. By applying dominant IT adoption paradigms: Diffusion of Innovation Theory, Technology-Organisation-Environment Framework and an additional new factor in technology adoption study, the information sharing behaviour factor, the study offers an integrated model that can be used to explore the impact of different technology, organisational, environmental and information sharing behaviour characteristics on the adoption of social media by WNGOs. Regression analysis results reveal that technological, organisational, environmental and information sharing behaviour attributes constitute the key factors that impact significantly on the adoption of social media in organisations.

This study contributes to both research and practice. The theoretical contribution includes the integration of information sharing behaviour factor into the Diffusion of Innovation Model and the Technology-Organisation-Environment Framework to form one comprehensive model. This has, therefore, contributed to furthering our understanding of social media adoption decision among WNGOs. Past studies (Fosso-Wamba and Carter, 2014; Nah and Saxton, 2012) have identified lack of organisational-level research on social media adoption as well as dearth of appropriate theory to understand what constrains non-profit organisations to adopt social media tools or drives them to different communication strategies. The proposed model incorporates the information sharing behaviour factor, which has not been given attention in previous social media adoption studies. In particular, this study has added an information sharing construct consisting of trust, cost and information distribution as additional dimensions of adoption determinants in the model. Although trust has been studied in existing inter-organisational relationship studies (Chong et al., 2009), studies on social media adoption did not include the cost and information distribution elements. Also, the study model has extended previous research in the developed countries to a new setting, that of NGOs in less develop countries, and WNGOs in North-Western Nigeria in particular.

Regarding practical implications, this study demonstrated that there is a statistical significant relationship between environmental factor and social media adoption decision. The empirical results show that environmental factors such as government support, national IT infrastructure and legal and regulatory framework significantly impact on adoption of social

media by WNGOs in Nigeria. This finding thus suggests several policy implications. First, policy makers should provide comprehensive policies and support to encourage the WNGOs to adopt and use the social media. The policies should be periodically re-evaluated to suit the dynamic features of the organisations, the social media applications and the inter-organisational relationship arrangement. Second, the government should make the adoption of IT infrastructure more affordable to the WNGOs. This can be achieved through the reduction of tariff on IT applications and accessories. Lastly, adequate legislations, such as 'cyber laws', should be put in place to regulate, protect and secure online transactions. For practitioners wanting to encourage the adoption of social media should address these challenges by developing requisite strategies.

This study also shows that there is a significant and positive relationship between organisational factors and social media adoption. The empirical findings study suggest that top management support, financial resources and human resources are important determinants to the WNGOs' social media adoption. These findings hold implications for both policy makers and practitioners with regard to investment on IT infrastructure, financial and human capacity development. WNGOs' leadership should be proactive (credible, committed and inspiring) in advancing the adoption of social media through the provision of adequate resources in terms of management, knowledge, skills and finances. Given the numerous capacity challenges associated with social media adoption in WNGOs, this finding may help policy makers to provide support. Providing staff development, capacity building training and financial support can help to enhance the adoption.

Information sharing behaviour factors also had a significant and positive relationship with social media adoption. This study demonstrates that trust, information distribution and cost are critical factors affecting social media adoption. This finding has several implications. For practitioners, it indicates that the leadership of WNGOs will need to develop strategies that will allow the organisations to take advantage of social media as a means of information sharing. This can be accomplished by creating safety and security measures to guarantee confidence and trust among collaborating partners. Findings also show that cost affects the adoption of social media. In this respect, policy makers and donor agencies may be able to leverage the WNGOs capacities to strengthen the adoption of the social media.

This study indicates that the technology factor is the least predictor of social media adoption. Apart from the technology variables of relative advantage, compatibility and complexity, future studies should explore other such variables that may significantly affect adoption. For example, security concerns of social media could be an interesting variable worth exploring. The higher the

perceived security concerns of the services, the less likely social media will be adopted.

There are limitations associated with this study. Firstly, social media adoption is relatively new in Nigeria. As such, the area of study could not boast of sizeable amount of relevant literature. Secondly, the study was conducted in North-West Nigeria which may not be representative of other zones of the country. This may decrease the generalisability of the findings of the study. However, it could be interesting to conduct this study in other zones and compare the results with this study. Thirdly, there is a possibility of self-report bias: where some of the respondents could hide genuine information, or could have hidden genuine information.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

Abukhzam M, Lee A (2010). Workforce attitude on technology adoption and diffusion. Built Hum. Environ. Rev. (3):60-71.

Aghaunor L, Fotoh X (2006). Factors affecting e-commerce adoption in Nigerian banks. Jonkoping International Business School, (Master's Thesis). Jonkoping University.

Aguolu CC, Aguolu IE (2002). Libraries and information management in Nigeria. Maiduguri: Ed-Linform Service.

Al Barki A, Kisswani N (2014). Social media: Adoption and legal issues impact on business innovation. Cambridge Conference Business and Economics. July 1-2, Cambridge, UK.

Alrawabdeh W (2014). Environmental factors affecting mobile commerce adoption- An exploratory study on the telecommunication firms in Jordan. Int. J. Bus. Soc. Sci. 5(8):151-164.

Arpaci I, Yardimci Y, Ozkan S, Turetken O (2012). Organisational adoption of mobile communication technologies. European, Mediterranean and Middle Eastern Conference on Information System. June 7-8, Munich, Germany.

Babbie E (2013). The practice of social research. Canada: Wadsworth.

Bagale GS (2014). Determinants of E-Commerce in Indian MSME sector: A conceptual research model on TEO framework. Universal J. Manage. 2(3):105-115.

Bortree D, Seltzer T (2009). Dialogic strategies and outcomes: An analysis of environmental advocacy groups' Facebook profile. Public Relat. Rev. 35:317-319.

Bousari RG, Hassanzadeh M (2012). Factors that affect scientists' behavior to share scientific knowledge. Collnet J. Scientometrics and Inf. Manage. pp. 1-10.

Brad Sago DBA (2013). Factors influencing social media adoption and frequency of use: An examination of Facebook, Twitter, Pinterest and Google+. Int. J. Bus. Commerce, 3(1):1-14.

Bultum AG (2014). Factors affecting adoption of electronic banking system in Ethiopian banking industry. J. Manage. Inf. Syst. E-commerce 1(1):1-17.

Chong AY, Lin B, Ooi K, Raman M (2009). Factors affecting the adoption level of c-commerce: An empirical study. J. Comput. Inf. Syst. 50(20):13-22.

Christensen M, Remler D (2009). Information and communication technology in U.S. health care: Why is adoption so slow and is slower better? J. Health Polit. Policy Law. 34(6):1011-1034.

Constantinides E (2014). Foundation of social media marketing. Procedia- Soc. Behav. Sci. 148:40-57.

Dahnil MI, Marzuki KM, Langgat J, Fabeil NF (2014). Factors influencing SMEs adoption of social media marketing. Procedia - Social and Behavioral Sciences. 148:119-126.

Dawes S, Cresswell AM, Pardo TA (2009). From "need to know" to "need to share": Tangled problems, information boundaries, and the building of public sector knowledge networks. Public Admin. Rev. 69(3):392-402.

Fichman RG, Kemerer CF (1999). The illusory diffusion of innovation: An examination of assimilation gaps, Inf. Syst. Res. 10(3):255-275.

Fosso Wamba, S, Carter L (2014). Social media tools adoption and use by Smes: An empirical study. J. End User Organ. Comput. 26(1):1-6.

Federal Republic of Nigeria (2012). National Information and Communication Technology (ICT) Final Draft Policy 2012. Abuja; Ministry of Communication Technology.

Gay LR, Mills GE, Airasian P (2009). Education research: Competence for analysis and application. Upper Saddle River, New Jersey: Merrill.

Ghobakhloo M, Hong TS, Sabouri MS, Zulkifli N (2012). Strategies for successful information technology adoption in small and medium-sized enterprises. Information 3:36-67; doi: 10.3390/info3010036

Greenberg J, MacAulay M (2009). NPO 2.0? Exploring the web presence of environmental nonprofit organisations in Canada. Global Media Journal- Canadian Edition. 2:63-88.

Hejase AJ, Hejase HJ (2013). Research Methods a Practical Approach for Business Students. (2nd edn.), Philadelphia, PA, USA: Masadir Inc.

Hoffmann CP, Lutz C, Meckel M (2014). Social media readiness in public administration-developing a research framework. Retrieved March 10, 2015, from :http://ssrn.com/abstract=2408737 or http://dx.doi.org/10.2139/ssrn.2408737

Ifidon SE, Ifidon IE (2007). New directions in African library management. Ibadan: Spectrum Books.

Internet World Stats (2016). Internet users in Africa, June 2016. Retrieved October 15, 2016 from http//.www.internetworldstarts.com/stats.1htm

Jain V (2011). How social networking is changing NGOs. Retrieved February 18, 2014 from http//www.perspectivist.com/culture/how-social-networking-is-changing-ngos.

Kamba MA (2007). Access to information: The dilemma for rural community development in Africa. Paper presented at GLOBELICS International Conference on Poverty Dimensions 6-8 October 2007, Dakar, Senegal.

Kapurubandara M, Lawson R (2006). 'Barriers to adopting ICT and e-commerce with SMEs in developing counties: An exploratory study in Sri Lanka', CollECTeR, Adelaide.

Khan A, Woosley JM (2011). Comparison of contemporary technology acceptance models and evaluation of the best fit for health industry organisations. IJCSET, 1(1):709-717.

Khoumbati K, Thermistocleous M (2006). "Integrating the IT infrastructure in health care organisations: A proposition of influential factors". The Electronic Journal of e-Government, 4(1):27-36.

Kinuthia JN (2015). Technological, organizational, and environmental factors affecting the adoption of cloud enterprise resource systems planning (ERP) systems. A paper presented at the Twenty-First American Conference on Information System, Puerto Rico. pp. 1-15.

Kim Y, Kim M, Kim K (2010). Factors influencing the adoption of social Media in the perspective of information needs. Paper presented at the iConference held at Urban-Champaign University of Illinois 3-6 February 2010, Illinois, USA.

Kuikka M, Äkkinen M (2011). Determining the challenges of organisational social media adoption and use. ECIS 2011 Proceedings. Paper 248.

Lee C, Shim JP (2007). An exploratory study of radio frequency identification (RFID) adoption in the health care industry. Eur. J. Inf. Syst. 16(6):712-724.

Li C (2010). Open Leadership: How Social Technology Can Transform the Way You Lead, Jossey-Bass.

Li YH (2008). An empirical investigation on the determinants of e-procurement adoption in Chinese manufacturing enterprises". 2008 International Conference on Management Science & Engineering (15th), California, USA, Vol I and II, Conference Proceedings, pp. 32-37.

Nagy D, Collins R, Nord W (2014). Extend your TOEs- An organizational approach to IT. Proceedings of the Southern Association for Information Systems Conference, March 21st- 22nd, Macon, GA, USA.

Nah S, Saxton GD (2012). Modeling the adoption and use of social media by nonprofit organisations. New Media & Society, forthcoming

Newton J (2014). Models of social media adoption in emergency management organisations. In Australia and New Zealand Disaster Management Conference: Earth: Fire and Rain, 5-7 May 2014, Surfers Paradise, Gold Coast, Queensland.

Ngo Theresa HM (2012). The steps to follow in a multiple regression analysis. Statistics and data analysis. SAS Global Forum Paper 333.

Oliveira GHM, Welch (2013). Social media use in local government: Linkage of technology, task, and organization context. Government Information Quarterly, http: //dx.dio.org/10.1016j.gip.2013.05.019

Oliveira T, Martins MF (2011). "Literature review of information technology adoption models at firm level" TElectron. J. Inf. Syst. Eval. 14(1):110-121.

Olupot C, Kituyi MG, Noguera J (2014). Factors affecting the adoption of electronic customer relationship management information system in SMEs. J. Stud. Soc. Sci. 8(1):25-45.

Oyelude AA, Bamigbola AA (2013). Women empowerment through access to information: The strategic roles of non-governmental organizational in Nigeria. US-China Educ. Rev. 3(2):63-115.

Palomino N (2006). Information for action: The approach used by NGOs to foster and strengthen civic life: A case study from Argentina. In K.G. Saur (Ed.) changing roles of NGOs in the creation, storage and dissemination of information in developing countries. Hague; IFLA publication. pp. 61-76.

Park Y, Lee J (2014). Factors affecting electronic medical record system adoption in small Korean Hospitals. Health Res. Inf. 20(3):183-190.

Park H, Rogers S, Stemmle J (2011). Health organizations' use of Facebook for health advertising and promotion. J. Interact. Advertising, 12(1):62-77.

Rad MS, Dahlan HM, Iahad AN, Nilashi M, Zakaria R (2014). Assessing the factor that affects adoption of social research Network Site for collaboration by researchers using multicriteria approach. J. Theoretical Appl. Inf. Technol. 65 (1):170-182.

Reade-Fong E, Gorman GE (2005). NGOs, ICTs and information dissemination in Asia and Oceania. IFLA J. 31(1):45-51.

Robinson L (2009). A summary of diffusion of innovations. Enabling Change.

Rogers EM (2003). Diffusion of innovations (5th Ed.). New York: The Free Press.

Rogers EM (1995). Diffusion of Innovation. New York: The Free Press.

Rogers EM (1983). Diffusion of innovations (3 Ed.). New York: Free Press

Rudasill LM (2006). The warning voice- NGOs and information. In K.G. Saur (Ed.) changing roles of NGOs in the creation, storage and dissemination of information in developing countries. Hague; IFLA publication. pp. 9-21.

Sahin I (2006). Detailed review of Rogers' diffusion of innovation theory and educational technology-related studies based on Rogers' theory. Turk. J. Educ. Technol. 5(2):14-23.

Saleh AD (2012) Information as a major criterion for success in the women's group activities in Borno State, Nigeria. Library Philosophy and Practice.

Tornatzky L, Fleischer M (1990). The Process of Technology Innovation, Lexington, MA, Lexington Books.

Totolo A (2007). Information technology adoption by principals in Botswana secondary schools. Electronic Theses, Treatises and Dissertations. Paper 1229.

Walters RD, Burnnet E, Lucas J (2009). Engaging stakeholders through social networking: How nonprofit organisations are using Facebook. Public Relat. Rev. 35:102-106.

Williams B, Brown T, Onsman A (2012). Exploratory factor analysis: A five-step guide for novices. Aust. J. Paramedicine 8(3):1-13.

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