Information Needs and Response to ICTs by the Aged in Nigeria: A Conceptual Perspective Afolayan O. T. Department of Information Technology University of Ilorin, Ilorin, Kwara State, Nigeria Corresponding Author: afolayan.ot@unilorin.edu.ng

ABSTRACT: Information and Communication Technologies (ICTs) have now become part of our day-to-day living and existence and have revolutionized many aspects of life. While young people have easily adapted to the use of these tools because of some obvious reasons such as user-friendliness, simplicity, and ease of use among others. However, the aged in developing nations are still left far behind in the mastery of how to use these ICT gadgets. Consequently, these innovations have brought about a digital divide for the aged. This paper, with Nigeria in view, harnesses the diverse information needs of the aged in developing nations in relation to the challenges that have hindered the aged from fully benefitting from the use of these evolving technologies. The methodology adopted in this paper is the review of literature and documentary materials to find out the information needs of the elderly in Nigeria vis-a-vis the numerous challenges they face in the use of ICTs. The paper discovered that the information needs of the elderly are predicated on critical needs such as access to health care, information about retirement benefits and savings, and navigating diverse domestic challenges among others. Also, the aged most commonly use ICTs such as mobile phones, radio, television, and autoteller machines among others because they are convenient and easy to manipulate. However, some ICTs that are considered complex such as the internet, computers, and video conferencing were rarely used because of the absence or deficiency of social facilities such as power and internet connectivity. The paper, therefore concludes that conscious effort should be made by the government through the initiation of intervening policies that prioritize the welfare of the aged.

KEYWORDS: Aged, Information needs, ICTs, Attitude, Developing nations

1. INTRODUCTION

All over the world today, Information and Communications Technologies (ICTs) are being deployed to manage personal, and business transactions, the economy, and social advancement (Brown, 2020). The essence of deploying these tools is nor far- fetched, due to their unique capacities to rapidly enhance access to skills and opportunities, learning, and pedagogies among the different aged grades (Quadri, 2012). The revolution in the use of ICTs which began in the early 1980s has radicalized access to information by people today. Notwithstanding the barriers of space, gender, or age group, ICTs have benefitted different categories of people irrespective of social and educational background or affiliation without hindrance or discrimination.

Despite its array of benefits, however, ICT usage confronts different people with different challenges which must be addressed for them to harness the maximum potential of ICTs. One of the age groups at the center of this discussion

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on the use of ICTs and its challenges is the aged people. The aged, especially in a developing nation like Nigeria, are far from harnessing the benefits of ICT tools, perhaps because of their parochial insight or conservative nature towards embracing new ideas (Edewor, Ijiehuamhen, Emeka-ukwu, 2016). The unfortunate consequence of this disposition is that, whereas the aged are supposed to be getting better with their knowledge about how their world works they are trapped in the web of survival and limited in their service to their communities. It must be stated that the capacity to purchase these ICT tools is not a constraint for many old people, but the proper use of it. Therefore, for the aged to continue to be relevant in their world, it is expedient for them to get the ICT skills so that they can continue to be relevant in an evolving world, and ability to respond actively to situations they face daily.

This paper sets out to explore the literature and distill the motivations for the use of ICTs in relation to the aged people in Nigeria. To achieve this objective, concern is given to relevant theories that relate to the use of ICTs by the elderly, and the problems faced by them when they attempt to use ICTs. The justification for this research rests on the prospect, that, by identifying and exploring relevant literature that dwells on ICT use and the aged people, policymakers can come up with inclusive policies that will assist the aged in adjusting to the digital life. From the foregoing, therefore, the following research questions are raised in this paper as outlined below:

1.1 Research Questions

i. What are the various types of Information needs of the aged people in Nigeria?

- ii. What are those Information sources that the aged people consult frequently in Nigeria?
- iii. What are the types of ICTs that the aged people use mostly in Nigeria?
- iv. What are the factors militating against the information needs of the aged using ICT tools in Nigeria?

2.0 LITERATURE REVIEW

2.1 Information Needs of the Aged People in Nigeria

There is no doubt that the need to get information is very crucial to the survival of the aged people in our dispensation of information or the digital age. More than the younger ones, the aged people need rapid access to quality information so that they can make well-informed and accurate decisions, be involved in social or official activities, and be relevant in the local or global communities (Dunning, 2005). Unfortunately, although information is commonly available in the information age, the well-being or existence of the aged is threatened by poor or lack of access to information. The implication of this lack has been identified to have a negative toll on the aging process of the old because for the aged people to age well and be fully active in their various endeavors, access to information is very germane. (WHO, 2007).

Generally, the categories of human needs are delineated into three basic areas: the physiological, cognitive, and affective needs which make it imperative that for all these needs to be adequately met, people need to cultivate the

habit of seeking information (Wilson, 1981). This fact makes the information needs of the aged people not only diverse but based on different contexts and priorities (Older & Bolder, 2012). Research findings have shown that the diverse and multiple needs of the aged include income, finance, housing and accommodation, health, retirement benefits and entitlements, recreation and leisure, and services in the home and community among others (PutPutri & Lestari, 2018; Ajani, 2014). But of all the areas of needs identified in the literature, most attention is given to the physiological needs of the aged. Specifically, those needs are connected to food, shelter, clothing, housing, and health. Access to timely and accurate information becomes very critical at this stage, because by the arrangement of nature, the aged people are in their transition phase, many of them are no longer in active service and the liabilities of old age such as being functionally disabled, management of medical conditions and other life challenges may set in (Edewor, Ijiehuamhen, Emeka-Ukwu, 2016). Even when the aged are conscious of their need for information, the transition phase also has affected the way and manner the aged seek information, and their attitude towards information especially in the areas of the sources of information in meeting their numerous needs.

The seeking behaviour of the aged is therefore predicated upon personal experiences, economic and environmental conditions, and individual lifestyle (Older & Bolder, 2012). Therefore, this accounts for the differences in the information-seeking behavior of the aged, which can be explained from the point of view that the aged people are not a homogenous group (Older and Bolder, 2012). This means that there are distinctions that vary across individuals based on personal, situational, and environmental experiences.

Although a comparison of what obtains in Nigeria and other global spaces are similar in terms of the needs and seeking behaviorr of the aged. However, there is a wide range of differences when we consider the indices of environmental differences and the very low priority accorded by policymakers in developing nations to meeting the needs of the aged and improving on their ways of seeking information. For instance, Edewor, Ijiehuamhen, Emeka-Ukwu (2016) investigated the information needs of the elderly in Igueben Local Government Area of Edo State, Nigeria. Findings revealed that the information needs of the elderly covered pension/finance (92%), government policies (34%), current affairs (53%), health conditions (98%), and transport (63%). The most preferred sources of information as revealed in the study include members of the family (98%), followed by the use of radio/television (92%) and information on health issues (92%) respectively.

2.2 Sources of Information for Aged People

A cursory look at relevant literature shows that the information sources available to the aged are quite numerous. Family members such as close acquaintances and friends are the most important source of accessing information for the elderly, followed by the media such as newspapers and television (Turner, Osterhage, Taylor, Hartzler, & Demiris, 2018). In other words, aged people prefer informal sources of information rather than formal sources such as libraries and information centers that require more time and effort are least consulted (Older & Bolder, 2012).

The aged people prefer 'word of mouth' for seeking information and maintaining social contact (Older & Bolder, 2012). The aged people also have electronic media such as television and radio as one of their main sources of information (Edewor, Ijiehuamhen, Emeka-Ukwu, 2016). They are more familiar with these devices because they have been familiar with them in their youthful years and they find these technologies more convenient to use. Generally, technologies, such as the electronic media, which deliver information rapidly are often preferred by the aged to source for information (Edewor, Ijiehuamhen, Emeka-Ukwu, 2016). Interestingly, Choi and DiNitto (2013) discovered that very few aged people use computers as a tool, even though many aged people that are low-income earners cannot afford computers and the few that have the technology are unable to put it into maximum use because of their unfamiliarity with the device. In all, it is established that aged people are confronted with obstacles that hinder access to these sources because of their general apathy towards ICT, lack of internet access, and other physical or infrastructural deficits in their environments. (Anderson & Perrin, 2017).

3.0 BARRIERS FACED BY THE AGED IN THE USE OF ICT TOOLS: A NIGERIA PERSPECTIVE

Aged people in Nigeria are confronted with a lot of obstacles that may obstruct their access to ICT tools and consequently impede their capacity to meet their numerous needs. ICT tools that are available for use by the aged people include mobile phones, computers, and telephones, television, radio, call centers, automated teller machines among others.

Many aged people are also hindered in the use of ICT because of the low value placed upon them in our society where elderly people are perceived, and consequently, treated as liabilities. Many aged people when pushed into passive roles accept their fate, and accept their prevailing conditions as associated with aging and therefore remain in their shells (Marston Genoe, Freeman, Kulczycki & Musselwhite, 2019).

The other challenges that confront the aged can be appreciated from three perspectives: attitudinal, functional, and physical. The natural attitude of the aged is to be sceptical about the suitability of ICT for them as old people. For instance, some of them may have prejudiced views about computers, they may think it is only for the young generation to use and, consequently, hold on to the negative view that computers are complex tools that are not easy for older people to use (Czaja & Lee 2007).

Another paramount factor that obscures the use of ICTs by the aged in Nigeria is the literacy level and their economic status or power. The economic power of the aged, which may be dependent on their level of literacy determines the choices of information they use. In other words, aged people that are educated are more likely to choose a variety of channels and sources. For instance, the aged with better income may prefer the Internet as a source of information compared to other sources such as newspapers, magazines, and other formal information channels (Basu & Chakraborty, 2011). For the aged that are non-income earners, the challenges are two folds: One is that the ICTs, such

as internet services, are not available and where they are available they are not affordable due to the charges required for access. The limited access to ICTs by the aged in Nigeria is compounded by social conditions of infrastructural deficits that are associated with incessant power failure and interruptions, poor or lack of internet connectivity, and others (Akanbi & Akanbi, 2012). These barriers explain the fact that the aged in Nigeria hardly make use of sophisticated ICTs because it is not convenient and its use is not flexible. In other climes in the world where the aged avail themselves with the use of ICTs, the internet, for instance, the supportive infrastructure is available and functional. However, there are some technological devices such as mobile phones, which are not used optimally by the aged due to their inability to master some functions, such as the lower and upper cases, and inability to handle some functionalities on the phone such as sending messages. These functions are generally seen as unfriendly to users who are aged, especially those with physical challenges (Kurniawan, Nugroho & Mahmud, 2006). Therefore, agerelated frailties affect ICT adoption among the aged as they advance in age, due to loss in cognition, learning, and intelligence (Lee & Kim, 2019).

3.1 Relevant Theories on the Aged People's Information Needs, Seeking Behavior, and Use of Technology

Three related theories have explained the way of life of the aged in relation to their state of mind, information-seeking behavior patterns, and level of technology use. These theories are explained in detail as discussed below:

3.1.1 Disengagement theory

Way back in 1961, Cummings and Henry came up with the disengagement theory. The theory holds that gradual withdrawal from societal activities, and a decline in relationships with others is a natural way of aging. It is believed that the imminence of death brings along a decline in the physical and mental state of man which makes it natural to abstain from relationships and society. By this, they are more separated from what is going on in society and are excluded from having access to the reinforcements that should tune their conformance to the changing norms of society. (Cummings & Henry, 1961). Although this theory suggested that aged people naturally withdraw from society as they age, it is a known fact that the experience of aging in people is varied and dependent on diverse experiences or conditions (Hothschild, 1975).

3.1.2 The Need Fulfilment Theory

Abraham Maslow propounded the Need fulfilment theory in 1943. The significance of this theory is that Maslow pioneered the discovery of the hierarchical status of human needs by designing a five-stage pyramidal tree of diverse needs. The five stages from the lowest hierarchy are Physiological, Safety, Belongingness and Love, Esteem, and Self-Actualization needs. Although Maslow did not focus on old age, his hierarchy of Needs unravels the idea of what propels the elderly in satisfying their needs. According to Maslow's Hierarchy of Needs, each need must be satisfied in turn, starting with the Physiological needs, which denote the essential needs for survival in life. It is when the lower-order needs have been satisfied, that the higher-order needs can be considered. Relating this to the aged, therefore,

means that the aged are first inclined towards fulfilling their lower-order needs which are essential for survival and sustenance, before considering their higher-order needs.

3.1.3 Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a compressed perspective of earlier proponents on information systems usage patterns and the technology acceptance model (TAM) by Davies (1989). Venkatesh, Morris, Davis, and Davis (2003) propounded this model to explain the disposition of users to new information systems in terms of their attitude. Four constructs were identified in this theory: performance expectancy, effort expectancy, social influence, and facilitating conditions as what determines the intention of users and their attitude to new technologies. Apart from these four major constructs, other moderating variables such as gender, age, experience, and voluntariness can have a positive impact on users' intention and usage attitudes.

Relative to the aged people's use of Information and Communication Technologies (ICTs), its importance lies in its juxtaposition of the peculiar differences in aged people's perception of the use of ICTs and their actual use of ICT tools The intention of the aged people to use ICTs and their actual usage can be determined by any of the four major constructs listed. Performance expectancy has to do with individual beliefs of the aged in the use of technology, that is, whether it will be beneficial or not to living an independent life. Effort expectancy, on the other hand, is the extent of ease associated with the use of technology by the aged. Social influence has to do with societal expectations in the use of technology by the aged. In all of these, a favourable condition for using these technologies is dependent on having a standard infrastructural development plan coupled with quality support for the aged will be able to motivate their interest in the use of technology. Notwithstanding, it is expected that gender, age, experience, and voluntariness, which are the four moderating variables, will intervene in the impact that each of the four constructs would have on the intention and use of technology by the aged.

4.0 ICTS AND THE INFORMATION NEEDS OF THE AGED IN NIGERIA

Information and Communication Technologies also known as ICTs refer to devices, applications, or tools used for communication such as mobile phones, radio, television, hardware and software, computer networks, satellite systems, internet, and all other related applications (Brown, 2020). Depending on their capacities and functions, ICTs have been divided into old and new categories. As its name implies, the old ICTs are those tools that have been in use for many years, the common examples are the radio and television while internet-enabled tools such as broadband, satellite, mobile phones, Automated Teller Machines (ATMs), and other emerging tools are examples of new ICTs. ICTs, old and new, have the potential for information that opens various benefits for the aged people, for example, in the area of making available to them information on how and where to manage their health at reasonable charges, how to access caregivers, how they can cater for their domestic needs, how they can maintain or improve on their living conditions and how they can make informed decisions (Gabner & Conrad, 2010). The other benefits of ICTs to the

aged include enhancing social interaction with friends and family members; facilitating learning, sharing, and developing skills and experiences, participating in meaningful work and activities; and coping with transitional changes such as retirement, bereavement, and decline in health (<u>www.independentage.org.uk</u>). In a nutshell, ICTs are critical for elderly people's personal growth and development, interacting with the outside world and improving their mental and cognitive abilities (Gabner & Conrad, 2010).

The use of ICT tools by aged people is predicated on the usefulness of these tools in meeting their diverse needs. Therefore, the information-seeking behavior of the elderly may be propelled by their willingness to satisfy their needs using the available tools. For instance, it was revealed that aged people were more disposed to using the Internet for seeking health information, however, they prefer seeking medical information directly from a physician, rather than using the Internet (Campell & Nolfi 2005). In a study conducted in the United Kingdom across the age range from sixty-five to eighty years and above on the use of ICTs, the result revealed that seventy percent of those over sixtyfive years reported non-internet use, while aged people that are eighty years and above with low or no educational qualification are deficient in the use of technology (One voice, 2009). It was also reported that aged people's access to technology declined dramatically with age. Although, the result revealed that thirty-three percent of the aged between sixty-five to seventy-five years have broadband, eighty-one percent of sixty-five to seventy-four years owned a mobile phone, while fifty percent of those above seventy-five years also owned a mobile phone. This shows that elderly people's use of technology dwindles with age. This may be due to factors such as lack of confidence, lack of interest, anxiety, and physiological problems such as nervousness or medical conditions of sight (Lee & Kim, 2019). On the contrary, a Research group tagged 'Age Concern and Help the Aged' revealed that older people are the fastestgrowing group online, even though a smaller percentage of them are online (www.ageconcern.org.uk). The study also revealed that people who are sixty-five years and above spend more hours online than the average for all ages. The reason for this may be that the aged have more time for leisure and social activities. It was submitted that sixty-eight percent of internet users aged sixty-five and above mostly use the internet for communicating with members of their family, relatives or children who reside in far countries or locations that are far off.

4.1 Key Strategies for Improving the Use of ICTs of the Aged in Nigeria

In order to mitigate the many challenges facing the aged in their quest to use technology, conscious steps must be taken to attract the aged people to embrace the use of technology to satisfy their desired information needs. The aged people need to be rescued from their phobia of ICTs and be informed about the important role that ICTs can serve in their daily activities. This is coming from the background of the disengagement theory which holds that old people tend to withdraw from new changes that occur in society. One of the ways of achieving this objective is to organize formal and informal training, awareness, and support programs that would address the fears, anxieties, and negative misconceptions that the aged have concerning the use of ICTs. This proposal agrees with the research on the aged

which recognizes that aged people use technology if they are aware of its benefits and they are given the support and the right training (Communications Consumer Panel, 2006).

In the context of Nigeria, there is a wide disparity that exists between the aged in the rural and urban spaces that should be bridged. In order to achieve this task, several resources tailored to the aged living in rural areas have to be domesticated by their trainers so that they can teach the aged those skills seamlessly. The government has a critical role to play in this, they can provide telecentres in urban and rural areas for the aged where facilities are always available so that older people can learn independently or in their social groups. These centers should also be equipped with other ICT facilities that would help the aged in meeting their daily needs so that they are always current with what is going on in society and can actively relate to the events as they unfold.

It is a fact that ICT facilities are capital-intensive and not affordable to many aged people because of their low access to funds. Government should not stop at merely building community information centers for the aged people but must ensure that the venues have medical facilities, playgrounds, and libraries, to mention a few. The centers will provide free internet access and other related services for aged people to meet their numerous needs. Information service personnel must be on the ground to render customized services to the aged who are seeking information and advise them accordingly.

5.0 Policy Recommendations

Based on the foregoing, the use of ICTs by the aged people in Nigeria is limited to common tools such as mobile phones, radio, television, and ATMs due to their ease of use, flexibility, convenience, and affordability. On the other hand, ICTs such as the Internet are rarely used by the aged people in Nigeria because they are complex to handle and there are infrastructural deficits such as lack of power supply, and epileptic network service that cause connectivity problems among others.

In view of these problems facing aged people in their use of ICTs to meet their numerous information needs, the following policy recommendations are hereby made:

Firstly, Government should promulgate an ICT policy that takes care of the aged people. In other words, the hard and software being developed should consider the peculiar needs of the aged who have diverse challenges that bother social and health conditions.

Again, customized training and awareness programs such as workshops should be organized for the elderly in urban and rural areas to sensitize and enlighten them on the benefits of ICTs. The focus of such training should be on the needs of the aged and the ways of using technologies to meet those needs. There is no doubt that the training programs will diffuse the phobia and encourage aged people to improve their use of ICTs.

Lastly, there is a need to conform to international standards on the way that the aged should be treated in our nation. For instance, there is the UN International Day for Older Persons dedicated to the celebration of old people in society. One of the events for such a day would not only be to recognize and appreciate old people but also to sensitize them on the rudiments of the 21st century, and how they can continue to be relevant in their communities through access to information.

5.1 Conclusion

The paramount roles that the aged play in society cannot be undermined, although they have used their youthful years to serve their communities in different ways, they are still very useful because they have with them a wealth of experience they can share which can solve some of the problems confronting the present generation. On this premise, therefore, the aged need to be given the chance to continue to be relevant since the benefits of their relevance are not unto themselves but to their communities. One of the ideal ways to make the aged people continually relevant is by equipping them with ICT skills so that they can be in sound health and be on the same wavelength as other citizens in meeting national goals and objectives geared towards development.

5.2 Suggestions for Future Studies

This research work is documentary/literature research, therefore, findings from the literature have not been proven empirically. It is therefore expedient that future researchers should undertake empirical studies that would further validate these findings as earmarked by the researcher.

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