Information and Communication Technology (ICT) as a Catalyst for Women Development in Africa

Josephine Abodunde
Department of Political Science and International Relations University of Abuja
abodunde9@gmail.com

Abstract: *The paper examines the opportunities information and communication technology presents for women in Africa. No doubt that information now flows to African women with less distortion; it equally provides access to same information as their male counterpart on the continent. ICT has proven to create and re-create new opportunities by expanding information horizon and educational thereby making communication more flexible and accessible. Data for this paper came from secondary sources while it adopted the strategic model as its theoretical framework and its core argument is that beyond the opportunity presented by ICT, women must tap into its full advantage. It was discovered that the gap between men and women in terms of access to development-oriented information has been drastically reduced, as such women, voice their opinions, demand for their rights and have more control over their destiny cannot be said to be hidden by the men. ICT today has proven to be a veritable tool in transforming socio-economic and political life globally, African women inclusive. Findings shows that ICT is a Veritable tool for empowering women of all status The conclusion of the paper is that African women now have an opportunity in ICT to maximize their potentials for the overall development of the continent. The paper however recommends among other things that to mitigate further economic marginalization women must wholly embrace all the opportunities presented by ICT.*

Keywords: information and communication technology, women, development, Africa.

INTRODUCTION

Africa is a continent of grand contradictions, while it is endowed with half of global reserved of solid minerals, it's also home to more than half the world's poor, vulnerable and illiterate people, most of whom are women and girl child. In a comparative analysis, the gender gap between male and female literacy rate, poverty rate, level of information rate, and access to information technology gadgets between men and women remains very wide. It is an incontrovertible fact that

no continent will progress satisfactorily until women, who constitute almost half of the continent's population are given equal or even more positive opportunities. The fundamental role of women in the family, community, local government, region and social environment and the continent of Africa in general cannot be underestimated. However, women more often than not remain vulnerable, unheard and invisible in the scheme of things on the continent. The contradiction of surviving in situation of extreme poverty has always been the burden of women than men, yet these women are relegated to the background from development discussions because they are often illiterate, they lack confidence, and they lack mobility, they are voiceless and powerless.

Information and Communication Technology (ICT) has become indispensable for enhancing effectiveness and efficiency in every aspect of human activities. ICTs have become very critical part of many organisations in the world. This is because ICT plays a strategic role in modern management. Organisations rely heavily on technical solutions in their everyday work and may face huge problems if ICT systems are not up-to-date. A great number of organisations have therefore integrated ICT into their procedures, products and services (Robert, 2010, Asgarkhani and Young, 2010).

The basic problem, the paper intent to interrogate is the causes of women subordination in Africa at the macro and micro levels and the role of information technology in making African women overcome the identified challenges, the specific research propositions are; the cognitive implication of women knowing the causes of their subordination it may involve making choices that may go against cultural expectations and norms. The implications of the economic component which requires women to have access to and control over information and communication resources, thus ensuring some degree of financial autonomy, hence we must note that changes in the economic balance of power do not necessarily alter traditional gender roles or norms. The implication that women having the capacity and capability to analyse, organise and mobilise for social change through the information and communication technology have not transformed to their development.

The principal objective of this research is to explain in clear terms the opportunities inherent in ICT and the ability for women in Africa to leverage on the innovation to salvage the continent. The specific objectives are;To erode the mindset that the condition that causes women subordination is natural, rather psychologically re-orientate African women that they possess the capacity and the will to act at personal and societal levels to improve their lives and the society which they live. To establish that women economic empowerment through information and communication technology will not necessarily alter her traditional gender roles and norms in African society.

This research intends to interrogate the following fundamental questions.
i)   Why did women consider the cognitive orientation that making choices may go against cultural expectations and norms?

ii)   What are the reasons for the believe that women having access to, control over productive resources, ensuring some degree of financial autonomy might alter traditional gender roles in Africa?

iii) Why are women consistently denied the opportunity to analyse, organise and mobilise for social change?

The design of this paper is an ex post facto research, hence the reliance on secondary materials. These materials are textbooks, journals, bulletins, reports, periodicals and newspapers that were mostly published on the topic under examination or related to it. Some were found in libraries, while others were sourced from the internet. They were however, subjected to content analysis in order to meet the objectives of the paper.

Concept of Information and Communication Technology
In the words of Anidi (2007) communication is the process of expression within and between a person, persons, group or groups. Chude (2007:144) opines that communication takes place when information passes from a sender to a receiver and the receiver acts or responds as a result of the information received. Man is a communicating animal or being. He is therefore almost always engaged in one form of communication or the other, in a near state of perpetuity and even in his sleep (Nwosu, 2007:2). Thus, communication is central and critical to all human activities, including social and grassroots mobilization and development.

The phrase; Information and Communication Technology received its first prominent usage in a Harvard Business Review article to promote a technical vision for the future of business management. Its initial definition was in conjunction with computers (Haigh, 2001). In the 1970s Thomas Haigh brought new meaning to Information Technology as a convergence of the computing and telecommunications technologies (Webster, 1995). As IT spread widely during the 1980s and 90s, it came to be associated with Information and Communication Technologies or ICTs.

The first business application of computers in organisations in the mid- 1950s performed repetitive, high-volume, transaction-computing tasks. The computers summarise and organize transactions and data in the accounting, finance, and human resources areas. Such systems are generally called Transaction Processing Systems (TPSs).

According to David (2009), in the 1960s, another role was added to the use of computers in the processing of data into useful reports. The concept of management information systems (MIS) was born. This new role focused on developing business applications that provided managerial end-users with predefined management reports that would give managers the information they needed for decision-making purposes. By the 1970s, the concept of decision support systems (DSS) was born. The new role for information systems was to provide managerial end users with interactive support of their decision-making processes (David, 2009). In the 1980s, the introduction of

microcomputers into the workplace ushered in a new era. The rapid development of application software packages, telecommunication devices and networks gave birth to a more enhanced Information and Communication Technology (ICT) package to end-users (David, 2009). To this end, ICT involves the linking of humans to valuable information through the instrumentality of human developed computer systems.

The strategic paradigm theory aim is to develop a common ground between the information and technology driven society and gender equality agenda and to identify areas of actions for gender equality. This entails the most sensitive areas within the new paradigm for dismantling the hegemonic gender system while assisting women in all their diversity to became protagonist of socio-economic development, the strategic theory is an emerging debate, its interrogate the meaning of present and future development one of its first argument is to reform the thinking pattern in which women's unpaid work has historically not been treated as work, the strategic thinking also move a step further by not just simply acknowledging economic, production and technological changes, it's about how to take full advantage of the opportunities presented by the information and knowledge society for attaining economic, physical, political decision making autonomy, and gender equality in all its ramification (DiMaggio, 2004).

THE ROLE OF ICT IN EMPOWERING AFRICAN WOMEN

ICT has open up direct window for African women to the world, same information is available to their male counterpart, there is a close interaction between information and communication technology and ability to effect change; information and communication technology can create and re-create new opportunities by widening information flows and by making communications readily available, African women living in poverty can make better choices, voice their opinions, demand their rights, organise and mobilise themselves and have more powers over their own lives. ICT has become a veritable tool in transforming social, economic, and political life all over the world, more and more innovation has advance the need for women in Africa to embrace information technology as a strategy to avoid further economic and social inequalities as well as offer opportunities for growth and diversification of their economies, women in Africa are in the deepest part of the divide one of the recent concern is the gender gap in the digital divide, if accessibility to and the use of technologies is asymmetrically linked to economic and social development, then it is imperative to ensure that women in African continent understand the importance of these technologies and used them or also ignorance of the inherent opportunities in information and communication technologies becomes another instrument to further the marginalization of women from the social, environmental, cultural, economic and political mainstream of their countries and the continent.

Without full and consistent participation in the use of information technology by the African women, participation in the global world economy of the twenty-first century is invisible,

information and communication technology is a powerful catalyst for social, political and economic empowerment of women, and the promotion of gender equality (Sinha &Sahary, 2004). ICT provides a platform where women can interact with each other without fear as they are unaware of each other identity, it allow women to express their emotions, views, feelings and opinion more openly ICT gives the opportunities for direct, interactive communication in various languages pictorial images in local dialect even by those who lack skills, who are illiterate, lack mobility and have little self-confidence (Suresh Hussain & Ahmed, 2004).

With the understanding of new concepts and innovation in information technology, it will enhance and assist adult women education through indigenous knowledge.Information and Communication Technologies improves household incomes as well as access to job, market, improve entrepreneurship using ICT tools i.e Facebook, WhatsApp, YouTube, as for women all over the world, Information and Communication Technologies (ICT) can be leverage for personal security, better educational and job opportunities and financial inclusion, summarily ICT help women to increase their monthly income and improve living standard of household and above all education empower women to be economically soured that is the fundamental of all types of women empowerment.

ICT AS AN INSTRUMENT OF WOMEN EMPOWERMENT

The following are specific areas where women can be empowered and push for development using the opportunities provided by information and communication technology:

E-Economy:
21st Century Information and Communication Technologies provide windows to reorganise economic activities in manners that provide alternatives to the traditional dependence of women producers on male-dominated and exploitative market structures including middle-men.
Several innovations are being usedby women traders, artisans that will give access directly to global markets through the internet i.e (Hair stylist cannot snap and publish their Handy work on the internet for the world to see and make order) as well enhance their activities with the market and productive information. i.e lessons from India where the inter-city marketing network of women entrepreneurs project in Chennai. A Community Based Organization (CBO) set-up a communication network among women to market their produce the CBO's have trained women on how to maximize the use of telephones to market their products not only in their immediate environments but also navigating new markets within the city, the gain is that poor women who are members of the (CBO's) restricted by mobility and time pressure are able to take the advantage of market demand by trading through their peer CBO's members thereby achieving cost effectiveness (Mokta, 2018).

E-Health:
The E-health technology are being effectively adopted in many places for information sharing about women health i.e in India the Self Employed Women Association (SEWA) a trade union of women workers from the informal sector in India uses recorded videos, voice notes to convey basic health information to its members in tackling the scourge of Diarrhea and Malaria, rural women themselves develop a video on oral rehydration therapy and shared through their networks, the African women can also do same by producing a short video footage on how to combine lemon grass, dogoyaro, pawpaw leaves, mango leaves and guava leaves to cure high fever through steaming and drinking.

The new information and communication technology has played a vital role in health service delivery, the use of networked information exchange systems, and offline information tools like CD-ROMs will certainly enhanced public healthcare delivery in Africa.

E-Education:
Just as the radio, television and satellite offer many avenues for many non-formal and continued education, information and communication technology tools can also provide educational content to the door step, of women and public places, this can have important gender implication, technologies are being used all over the world for open and distance learning education and the content can be translated in various local dialect in India for instance Azim Premji Foundation is one of the NGO's that work with the government to strengthen the public education system, the organization produces CD-ROMs with creative and innovative content based on primary school curriculum, which is gender sensitive, uses local dialect and is designed to appeal to rural women, African women can also take a lessons from this information and communication technology innovations provide equal access for all.

THE IMPLICATION OF INFORMATION & COMMUNICATION TECHNOLOGY ON AFRICAN WOMEN

i. Information technology enhances political participation. The major plight of African women is the assumption that women are powerless, voiceless and vulnerable to the vigorous of political decision, however information and communication technology can give the African women a voice for their rights, feel decision making capacity networking or meeting with people in government and industry to ventilate matters affecting African women and women communities and to organise various actions for inclusive governance.

ii. Information and communication technology for social empowerment, its vital that women in Africa gain access to current and useful knowledge, information and full understanding of topical issues that concern women, engaging in varying activities with other women and people in position of authority where African women can openly and freely analyse issues, share concerns and experience and reflect on issues affecting their family without any prohibition.

iii.   Information and communication technology has the capacity to create psychological awareness that will increase self-confidence and self-esteem of women and the feeling of been inestimable valued, also information technology has provided a platform for women celebration through various tools, it enhanced greater motivation, inspiration enthusiasm and interest to enhance skill to develop a new one.
iv.   Information and communication technology has the capability to deliver education, information and entertainment to the whole world in a language and manner they understand and in a medium that they would be comfortable with, it guaranteed abroad knowledge.

BARRIERS TO WOMAN EMPOWERMENT IN AFRICA

In Africa the revolution of Information and Communication Technology has not been delivered to the women majority due to the social structure, values and beliefs system, though some urban women in Africa has stated tapping into the benefits of this technology revolution. In the same vain some African states & NGO's are making efforts as we are doing now to enlighten women on the huge opportunities in the ICT world, there is still a long way to go some of the major hurdles area.

Majority of the African women are poor their primary occupation basically is to meet their basic needs they are struggling to earn a living and assumed information and communication technology is only a source of entertainment they cannot afford. Literacy the female literacy role is Africa is about 46.8%, the statistics reveals that over 54% females are deprived of basic education and moreover the role of drop-out are also high by the time they reach high school, though various government in Africa are working towards changing the tide the situation is still not encouraging because it is this basic education that will enhance the acceptability of digital education therefore the most fundamental of all empowerment programme is educational.

Computer education is taught to students from middle school onwards, though various African countries are trying to review their primary school curriculum to include computer education to properly place ICT in its rightful position for example in Nigeria the junior secondary school curriculum make the computer course mandatory for all pupils the computer are not there for the practical, however there are private computer institutes spreading rapidly at the urban centres it is not affordable by many.

Also, there are socio-cultural barriers that hundred the potential for empowerment of information and communication technology among women and girls child such as class, age, ethnicity and race, women from the same social context may not enjoy access to ICT in Africa the social orientation is such that boys are given preference over girls, the girls child is expected to perform her traditional roles, involved in house chores, for example in Nigeria in many parts of the country going out of the house, learning and getting any type of special training is considered a taboo, most of the women are caught from the outside world so their chance of access to ICT is reduced.

Conclusion and Recommendations:

The Division of labour between men and women and the additional burden of unpaid work carried out by women hamper their full incorporation into the new process of structural change, for any innovation to be impactful, such policies must pay special attention to aspect that could undermine structural equality. The research however discovered that socially the majority of African women are still traditionally bound and have put themselves in a disadvantageous position. Findings however shows that the believe of majority of the women in embracing ICT or being in control of production may go against the cultural norms and expectation was a transgenerational orientation pass down from one generation to another , therefore there is a need for massive reorientation of women to embrace ICT.

ICT has become a rapid force in transforming economic, social and political life globally, African women must give it what it takes to key into information and communication technologies at all level both as a way to avoid further, socio-economic marginalisation as well as to provide opportunities for both growth and diversification of their economies, the lessons from India can also be domesticated in various African countries where women in the same line of informal trade form a WhatsApp group to share market information, health information and even trade with other bigger buyers of their raw materials. ICT gadgets should be socio-cultural compliant in Africa, especially by accommodating major African indigenous languages for easy adoption and adaptation by non-western literate women.

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