

Women in Africa: Leveraging ICT in Closing the Gender Gap through Ethics and Values

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ABSTRACT

Significant shreds of evidence from literature revealed that women constitute half of the world's human capital. Shreds of evidence also show that women have the potentials to redress gender gaps if empowered through Information and Communication Technology (ICT), favourable laws, ethics, and values. Despite these important virtues, numerous investigations have shown significant gender gaps in internet use (23%), literacy rate (48.6%), pay gap (22%), political ambition, educational outcomes, etc., resulting majorly from restrictions placed by customary laws, ethics, and values that failed to incorporate no gender-sensitive ICT policies in Africa. This study highlights the strategy to leverage the economic empowerment of women in Africa through ICT adoption, and favourable ICT policies, culture, ethics, and values. The Unified Theory of Acceptance and Use of Technology (UTAUT) was adopted as the conceptual framework. In this study, the authors explored a narrative review methodology of related research findings from peer-reviewed articles to draw holistic findings that revealed significant information on strategies for leveraging ICT in closing the gender gap. Results show that gender gaps may result from women diverting time for circular works, due to unfavorable customary laws, ethics, and values, to meet family responsibilities or having less control over finances, which negatively impact their affordability of ICTs. Results also show that empowering women in ICT may advance sustainable goals, leverage their literacy abilities for ICT adoption; leverage ICT in closing gaps in gender discrepancy in sociability capital resources.

KEYWORDS: Gender gap, Cultural ethics, ICT, adoption, Values, UTAUT

1. INTRODUCTION

Globally, differences in male and female interaction at cultural, socio-economic, political levels have been studied over the years. These studies are still relevant. Gender, a tool used to measure male and female differences, influences usage patterns of ICTs in Africa. Sufficient shreds of evidence exist that suggest that ICT adoption and usage is gender-sensitive in that it reflects along gender lines, influenced by cultural beliefs and norms, ethics and values, social, economic, education barriers, as well as attitudes (Guvuriro & Booyesen, 2019; Magda & Cukrowska-Torzewska, 2019; Medie, 2019). Values explain what is important or the perception of what is important in one's life, or society. Ethics are the principles and standards by which behaviour is evaluated for their rightness or wrongness. Ethics explains what is or is not considered appropriate behavior in living one's life. Culture, ethics, and values impact negatively on African women in virtually all facets of life (Asante-Apeatu, 2018). Ethics and values are crippled by out-dated and non-sustainable rules and policies. Numerous investigations have shown significant gender gaps in internet use (23%), literacy rate (48.6%), pay gap (22%), political ambition, educational outcomes, etc., resulting majorly from restrictions placed by culture, ethics, and values that failed to recognize gender equality in these areas for African women. Gender pay gap,

for instance, shows the difference in the average hourly rate of pay between women and men in an organization, expressed as a percentage of average male earnings (Asante-Apeatu, 2018). According to United Nations Conference on Trade and Development (UNCTAD) Technology and Innovation Report 2017, the gender gap in mobile ownership is defined as one minus the proportion of males who own mobile (UNCTAD, 2017).

Culture is a subjective phenomenon that refers to the shared values among members of a group, organization, or nation. It is viewed as the entirety of a people's way of life that includes ethics, norms, values religion, politics, economics, technology, food habits, medicine, rules of marriage, the performing arts, law, and so on. To have a good national culture one must teach it, define it, live it, measure it, and reward it (Jahani & Salehi, 2013). The culture of a nation achieves two purposes: serves as the platform for facilitating and reaching the global goals, and a barrier on the edge of change and economic development and empowerment (Yeganeh, 2011). Every nation is expected to run the global goal of women empowerment irrespective of national conflict cultural setup. The global organization should dictate a set of professional and economic empowerment guidelines

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or vision for all nations to follow. However, a nation may adjust to the cultural settings of the culture they live in while maintaining or guiding the global culture and vision. If you do not guide the culture, the culture will guide you (Jahanian & Salehi, 2013).

Any nation that refuses to guide the culture or refuse to adhere to rules and regulations of the global culture of women's technological empowerment will be guided by her local culture of discretionary behavior (i.e. their culture guides them) there the global objectives leaves off. This is the case with Africa where cultural ideas, ethics, and values were structured to favour men and maintain their dominance over women that exclude women from decision-making roles in the society, thereby reducing women to be seen as homemakers, baby-makers, and home keepers without a place for paid work. As a result, substantial gender gaps exist in governance practices, internet access, and use, literacy level, pay gap, political ambition, educational outcomes, ICT adoption and usage, and the ability to own ICT devices which are heavily dependent on income and affordability. In this paper, we postulate an ICT system interfaces and contents that are perceived as useful and easy-to-use and aligned with women's cultural values, literacy level, and effort expectancy so as to impact the economic empowerment of women in Africa in a sustainable manner. Globally, gender equality is of greatest importance (UNESCO, 2017). Our purpose in this narrative study was to suggest ways to leverage ICT in closing gender gaps or

existing barriers to gender equality created by poor cultural norms, ethics and values, and poor ICT adoption and use among women in Africa.

2. Conceptual Framework

The Unified Theory of Acceptance and Use of Technology (UTAUT) was adopted as the conceptual framework for this study. UTAUT model, proposed by Venkatesh, Morris, Davis, & Davis (2003), claims that users' behaviour towards accepting a technology is determined by the benefits of using the technology and the factors that drive users' decision to use it. The theory considers two major factors: user adoption behaviour toward intention to use ICT, and users' usage behaviour of ICT. UTAUT model further claims that both user adoption behaviour and usage behaviour of ICT are affected by four constructs: performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC), and four moderators: literacy level, gender, age, experience and voluntariness of use. UTAUT model is theoretically justified based on measuring instruments that are quite strong, consistent, valid, and reliable. (Arumugam, Yahya, Rozalina, & Mohd, 2014; Zhou, Lu, & Wang, 2010). UTAUT was adopted as our theoretical foundation to study how to these non-technological factors: literacy level, gender, age, experience and voluntariness influence ICT adoption and usage among women in Africa for sustainable empowerment, productivity, and economic development that will close or minimize gender gaps.

3. Literature Review

Women constitute half of the world's human capital and population. In Africa, these women are marginalized and disadvantaged in virtually all sectors of the economy, especially in human development sectors, governance practices, education, the labor market, religion, job opportunities, and decision-making where their views are given little or no credence. The African culture, ethics, and values are often defined by outdated rules, concepts, and beliefs such as forced/early marriages, girls' abandonment of schooling, poor reproductive health, high fertility, and limited opportunities for sustainable development, which are alien to civilized rules but unfavourable to women (UNESCO, 2017). These cultural practices are often structured to favour males and maintain their dominance over females. African cultural ideas tend to exclude women from decision-making roles, where gender inequalities amplify gender gaps in problem-solving more than in academic disciplines (Borgonovi & Greiff, 2020), and reduce women, especially in Africa, to be seen as homemakers, baby-makers, and home keepers without a place for paid work (Guvuriro & Booyesen, 2019). Figures 1 below show the percentage of men and women occupying various key positions in Africa, while Figure 2 shows the gender gap in Internet use and mobile ownership in Africa

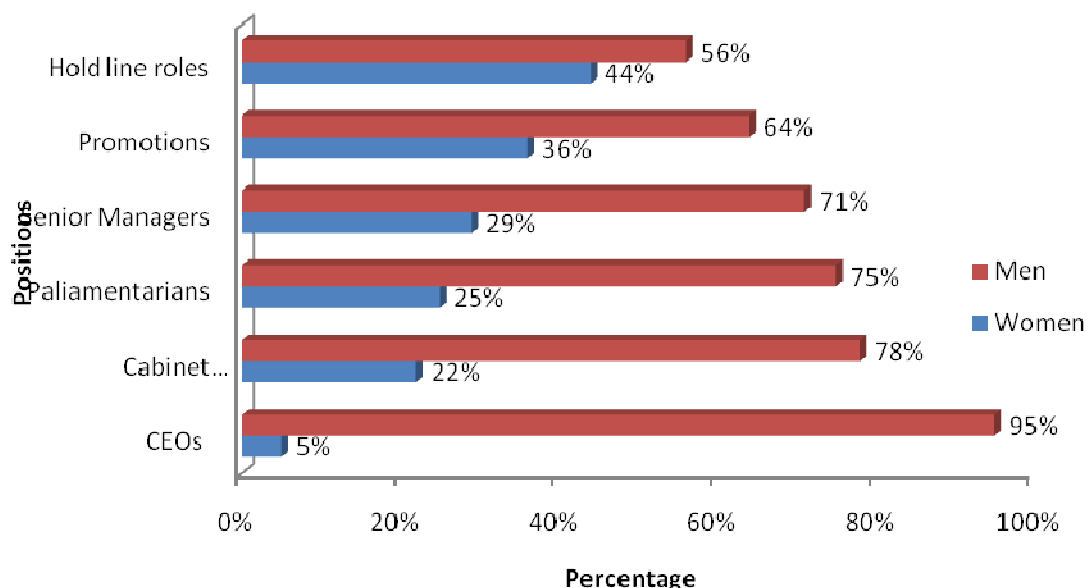


Figure1. Percentage of Men and Women Occupying Various Key Positions in Africa

Source: <https://gga.org/west-african-boardrooms-and-the-gender-gap/>

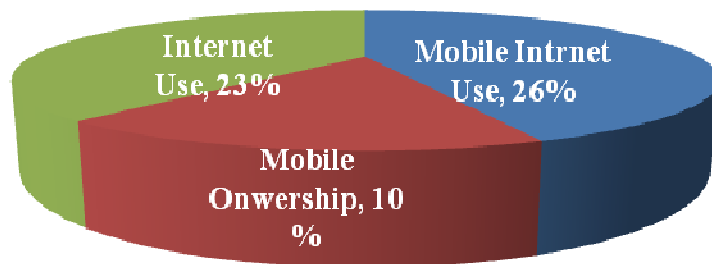


Figure 2. Gender Gap In Internet Use And Mobile Ownership In Africa

Source: <https://gga.org/west-african-boardrooms-and-the-gender-gap/>

The effect of these out-dated and unfavorable cultural values and ethics created substantial gender gaps in governance practices (Guvuriro & Booyesen, 2019), internet access and use (UNCTAD, 2017), literacy rate (UNESCO (2015), pay gap (Arbache, Kolev, & Filipiak, 2010; Magda & Cukrowska-Torzewska, 2019), political ambition, educational outcomes, and ICT adoption (Kagumba, & Wausi, 2018). According to a study by the International Bank for Reconstruction and Development, African women's wages represent about 55 percent of male wages, while their pay differential with men tends to get lower as they grow older (Arbache, et al., 2010). Paramount among the top development goals of the United Nations is gender equality and the empowerment of women. But both gender equality and empowerment of African women have been negatively affected by culture, ethics, and values that play down on women's role in the society and the pace at which societies achieve these goals. Gender equality is farfetched in the face of these cultural norms that are harsh to women, and without gender equality, there cannot be sustainable empowerment and development of women in Africa. There are also significant shreds of evidence of gender gap in the level of access and use of ICT (Asante-Apeatu, 2018; UNCTAD, 2017), possibly because ICT interfaces, contents, and applications are often not women-friendly or women-user centered (Pribeanu, 2014), but rather tailored to favour men's interests and needs, who are in the majority among developers of ICT interfaces, contents, and applications (O'Donnell & Sweetman, 2018). Moreover, ICT interface innovations reflect the culture and societies of the developers. As a result, ICT access and usage are affected by literacy level, culture, gender, ethnicity, age, social class, geography, and disability, among others, of users whose culture is alien to the culture of ICT developers.

For the African women, ICT interfaces and contents are not user-centered in relation to their literacy capabilities, and cultural backgrounds, but appear to be intended for only the province of the specialist user (Oh & Moon, 2013). Globally, Africa has the highest internet user gender gap of 23%, which is 100% above the world internet and ICT adoption gender gap of 12%. This is followed by Arab States, Asia and the Pacific, Europe, CIS (Commonwealth of Independent States), and America with 20%, 16.9%, 6.9%, 5.1%, and 1.8% respectively as shown in Figure 3. below (ITU, 2016).

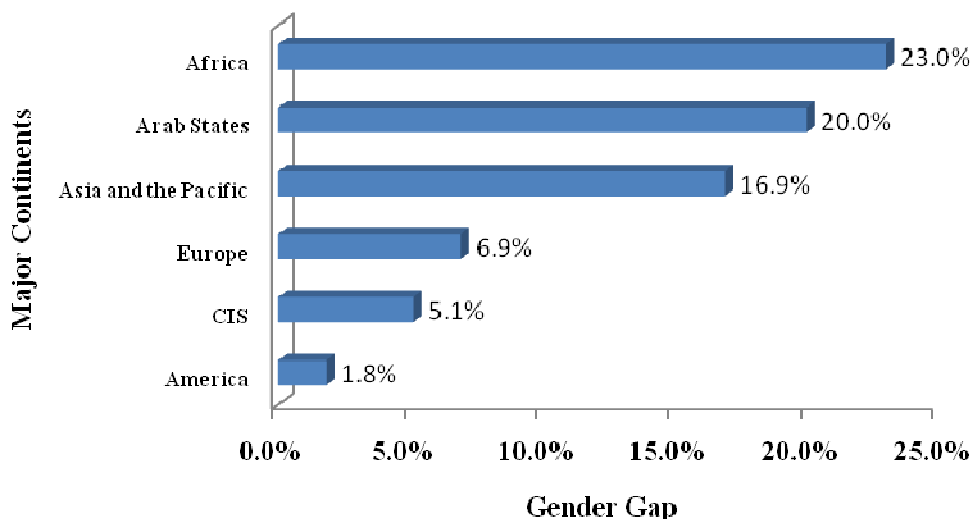


Figure3. Internet Use Gender Gap in Africa Compared to Other Continents.

Source: "How can we close the digital gender gag" (ITU, 2016).

Nevertheless, ICT is increasingly recognized as enablers of modern technology-dependent innovations to improve the lives of women everywhere (Cotter, 2018), reduce gender productivity inequality, and strengthen the position of women for ICT adoption and sustainable empowerment, productivity, and economic development in any society, including Africa (Aguboshim & Chijioke, 2019). Women do not perceive ICT system interfaces as usefulness and ease-of-use, among others, when compared to men (Joo, Lee, & Ham, 2014). "It is thus only logical that African cultural identity, values, and ethics should become critical factors for Africa's re-emergence onto the global stage by 2063" (UNESCO, 2017, p. 23) This statement of fact, though ridiculous, calls for a critical approach to put African women into the global ICT stage. Nevertheless, there are shreds of evidence pointing to the fact that women in Africa have the potentials to remedy gender gaps if empowered through ICT literacy, favourable laws, ethics, and values (Hyysalo & Johnson, 2014).

4. Methodology

A narrative review methodology was adopted in this study to review analyze and synthesize significant information and prior research findings based on the study conceptual framework, and existing challenges that plagued gender equality and the empowerment of women in Africa. A narrative review is best suited where analysis, synthesis, and summaries of different related research findings are required to draw holistic interpretations or conclusions based on the reviewers’ own experience, existing theories, and models (Bowden, Caine, & Yohani, 2017). Narrative studies fit more when studies are of a qualitative rather than a quantitative (Scarnato, 2017). When the objective of the researchers are to comprehend the diverse and numerous understanding around scholarly research topics and to incorporate self-knowledge, understanding, reflective practice, and acknowledgment of shared views and knowledge (Malcolm, 2017). Narrative research methodology has been adopted as best suitable where comprehensive ideas are sort among researchers with diverse understandings (Caine, Estefan, & Clandinin, 2013; Rutherford, 2017). In this paper, within the narrative inquiry, we have made the search criteria and the criteria for inclusion explicit. We adopted the use of keywords and term identification, article identification, quality assessment, data extraction, and synthesis to facilitate our narrative inquiry. Methodological triangulation, a methodology that employs the use of multiple sources of data to gain multiple perspectives, and maximize reliability and validation of data (Oleinik, 2017) were also adopted to ensure the reliability and validity of data, and justification of interpretations from the reviews.

5. Data Collection

Data collected comprised of reviewed research findings that are relevant and related to our study. Many of such findings came from the ProQuest databases, ScienceDirect, Walden University international library databases and peer-reviewed, and other related texts. We used phrases and terms as key search words in the databases for related literature on “Cultural ethics”, “gender gap resulting from culture ethics and values”, “leveraging economic empowerment of women in Africa through ICT adoption”, “leveraging women resources via ICT”, and many others. Our reviews incorporated 29 references. Twenty five (93%) of total references incorporated in the study is peer-reviewed, while twenty one (76%) are peer-reviewed journals that are within the last 5 years.

6. Findings

ICT literacy, coupled with favourable culture, ethics, and values have been identified as important innovation-enablers that can remedy gender gaps and impact the economic empowerment of women in Africa in a sustainable manner. (Hyysalo & Johnson, 2014). Guarded by the conceptual framework for this study, the authors observed a synergic link between ICT adoption, ICT literacy, ICT interface, content and application, culture, ethics and values. These relationships can be represented as a continuing sequence of stages, tasks, or events in a circular flow, each shape having the same level of importance with no emphasis on the direction of impact, as shown in Figure 4 below.

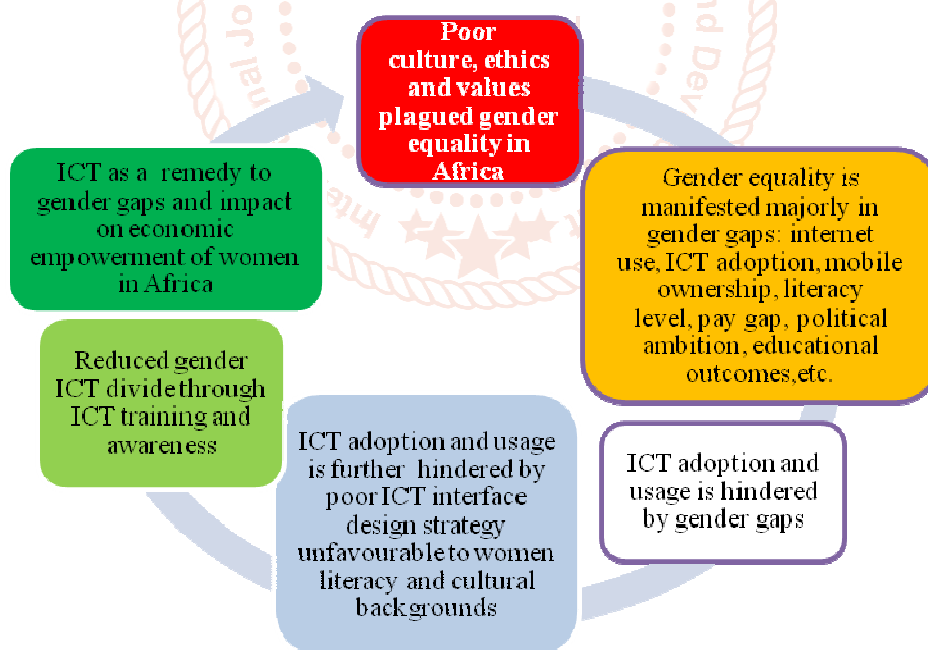


Figure 4 Relationship between ICT adoption, Gender Gaps, Culture, Ethics and Values

Women in Africa need to be aware and trained to understand and be able to perceive available ICT innovations as useful and easy-to-use. This may bring about sustainable ICT that will close gender gaps manifested by poor culture, ethics, and values, thereby leveraging women’s economic development and social change, and bridge the gender gap in ICT adoption.

7. Conclusion and Recommendation

The relational effects between African culture, ethics, and values on women empowerment and the use of ICTs is complex. However, women’s access to, and use of ICTs cannot be understood in isolation from their gender

positions and identities and how these positions and identities interact with their literacy levels, cultural backgrounds, political, and economic situation (Aguboshim & Chijioke, 2019). Poor culture, ethics, and values are seemingly on the increase, creating gender gaps, and

encouraging researches towards ICT solutions. ICT innovations are becoming ubiquitous making its literacy to be most demanded globally. Significant gender inequality still exists in terms of access, ownership of digital devices as well as digital fluency or literacy (Aguboshim & Chijioke, 2019). There cannot be effective education, political participation, and civil rights among women in Africa without effective leveraging of ICT innovations, literacy, adoption, and usage. This is because digitization affects all areas of human lives. It takes digital inclusion such as ICT adoption and usage and mobile phones, to gain fairly paid jobs, partake in online employment, or search for online jobs. Adoption of mobile technologies may play a substantial role in shortening the gender divide by providing women with access to information, financial services, and employment and life-enhancing opportunities that can leverage the economic empowerment of women and drastically reduce gender inequalities. Meaningful social changes, as experienced in the developed world, such as working from home, sharing household labour, and parental leave, may help to alleviate the strenuous conditions many African women experiences. When women are included in high-level positions on equitable representation of males and females, there are improved performance, more innovation, enhanced quality of decision-making resulting in improved quality of national and global development.

To overcome the hindrances of ICT adoption by women, stakeholders must make available for women, ICT system interfaces that are easy-to-use, and that incorporates the cultural backgrounds and literacy levels of women. ICT developers should put in place, ICT interfaces that are user-centered, and can cater for the literate, semi-literate and illiterate female users in order to encourage ICT adoption, acceptance, and sustainability among female genders. This may positively close the gap in gender discrepancy in ICT usage, and may bring about positive social change and economic empowerment. ICT content must be pertinent to take account of the limited free time available to women, and the language and environment that is comfortable and gender-sensitive. Women must have the opportunity to develop competency on all ICT platforms, and be encouraged and trained to become producers of all ICTs interfaces alongside with their male counterparts. ICT policies need to be developed with relevant areas of interest that will incorporate feminine attractions so that women can use these ICT tools with ease for their capability enhancement and economic empowerment.

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