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1	Gender and Information Communication Technologies ICTS in
2	Nigeria Challenges and Prospects
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7 Abstract

In contemporary civilized Nigeria, the Information Communication Technologies (ICTs) has 8 become a household name used in offices and at homes to access, receive and retrieve 9 information. Many innovations in the world today are as a result of the exposure and access to 10 the world of the ICTs and people all over the world can access any other parts of the world to 11 receive information about anything that borders on their interest in life. Women in their quest 12 for empowerment and societal recognition have adopted and accepted ICT as an instrument 13 for their advancement and empowerment. This is manifested in their previous two world 14 conferences in Nairobi, 1985 and Beijing, 1995, where among several areas of concern, the role 15 of the media in subordinating women featured prominently. But unfortunately, despite the 16 much emphasis placed on the use of ICTs in Nigeria, women are often underrepresented in 17 terms of access and use. It is against this background that this paper examines the challenges 18 and prospects of ICT utilization among women in Nigeria. These challenges include lack of 19 infrastructure, education and skills; urban-bias; and sociocultural and economic challenges. The 20 study concludes that to address these gender gaps in ICTs in Nigeria, all hands must be on 21 deck to change women?s attitudes towards ICT use by overcoming technophobia; women 22 should be provided with educational and economic empowerment; government ICT policies 23 and programs must address the needs of women; and the civil society should be part and 24 parcel of this crusade for the betterment of women and the society at large. 25

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27 Index terms—ict, gender, nigeria, discrimination, empowerment, technophobia, nana asma?u.

²⁸ 1 Introduction he concept of Information Communication

Technologies (ICTs) is an emerging field in the world of communication, which is wielding an unimaginable 29 influence on global activities. It restructures politics/governance, economy, culture, health etc. in many countries 30 and regions around the world. The ICT provides a great development opportunity by contributing to information 31 32 dissemination, providing an array of communication capabilities, increasing access to technology and knowledge 33 among others. Individuals and groups have accepted it globally as a tool for enhancing their varied interest. 34 According to Tiamiyu (2003) the ICTs are the electronic technologies for creating, acquiring, storing, processing, 35 communication and using information. This involves the process whereby computers and other related machines are used in the dissemination and retrieval of information. This is a new technology from what is originally 36 known in the traditional mass media of the print and broadcast. 37

In contemporary Nigeria, the ICT has become a household name, used in offices and at home to access, receive and retrieve information. Emphasis is being placed in the use of the ICTs to access the world at large. Similarly, many innovations in the world today are as a result of the exposure and access to the world of the ICTs, and people all over the world can access any part of the world to receive information about whatever that borders 42 their interests in life.Women in their quest for empowerment and societal recognition have adopted and accepted 43 ICTs as instrument for advancement and empowerment. It is also a tool for speedy global mobilization and 44 dissemination of information among women. Women have long been aware of the power of information and 45 knowledge sharing as a strategy for mobilization, advancement and empowerment.

The importance attached to information and knowledge sharing by women in pursuing their course is 46 manifested in their previous two world conferences in ??airobi, 1985 and ??eijing, 1995, where among several 47 areas of concern, the role of the media in subordinating women featured prominently. The fourth world conference 48 on women in Beijing in 1995 recommended that women equal access to economic resources, including land, credit, 49 science and technology, vocational training, information, communication, and markets, as a means to further the 50 advancement and empowerment of women and girls including the enhancement of their capacities to enjoy the 51 benefits of equal access to these resources by means of international cooperation. In addition, the conference 52 highlighted in its platform for action on women and the media, diagnosis: strategic objectives which include; 53 to increase the participation and access of women to expression and decision making in and through the media 54

and information communicationtechnologies as well as to promote a balanced and non-stereotyped portrayal of women in the media.

These declarations and strategies are clear indication that the women recognize and appreciate the place of 57 58 information in driving home their points. Unfortunately, despite the much emphasis placed on the use of ICTs in 59 Nigeria, women are often underrepresented in terms of access and use. In spite of the fact that women make up 60 the majority of the population as well as their workforce of any society and women also play a pivotal role in the development of their societies but still their impact has not been felt or has been silenced in this new technology 61 due to lack of access and the necessary skills for the operation amongst other several obstacles. Notwithstanding, 62 ICT if given the enabling environment can be used to empower women not only through access, but also through 63 control over the kind of information women access, receive, obtain and collect. Furthermore, women can also use 64 the ICT to adopt and to create collected information into new and localized knowledge for further sharing with 65 others in the community, thus contributing towards their empowered, selfdetermination and well-being. The thrust 66 of this paper therefore, is to examine the challenges and prospects of ICT utilization among women in Nigeria. 67 Prior to that, it is pertinent to clarify certain key concepts such as Gender and Information Communication 68 Technologies (ICTs). 69

70 **2** II.

71 **3** Operationalization of Some Concepts a) Gender

Gender is a socio-economic variable for analyzing roles, responsibilities, constraints, and needs of men and 72 73 women in a given context. It refers to the social and cultural constructs that each society assigns to behaviors, 74 characteristics and values attributed to men and women. The basis of the construct lies behind the idea that they 75 are natural or intrinsic, and therefore, unalterable. These gender constructs are shaped by ideological, historical, religious, ethnic, economic and cultural determinants. These are usually translated into social, economic and 76 77 political inequalities, where men's activities and their gender attributes are perceived as essentially superior to women's. Buttressing this notion, Okunna (2000) opines that gender relations in Nigeria are characterized by 78 a lot of imbalance, to the disadvantage of women, by keeping women in subordinate positions to their men 79 counterparts. The larger society and the male subculture still see women and their aspirations as subordinate, 80 resulting in a situation in which the marginalization, trivialization and the stereotyping of women becoming 81 glaring aspects of Nigerian life. 82

83 According to Civil Resource Development and Documentation Centre(CIRDDOC, 2001) gender could be 84 described as "a system of roles and relationships between men and women that are determined not biologically but by social, political and economic context" (p.1). Gender also involves the process by which individuals who 85 are born into social categories of male and female become the social categories of men and women through the 86 acquisition of locally defined attributes of masculinity and femininity which is beyond biological differences, all 87 other differences between men and women are socially constructed and have no logical relationships with their 88 biological composition. Burgos-Bebray(2010) asserts that though gender roles are distinctively different and 89 important in every existing human society, they are nevertheless not unequal and that during struggles, they 90 are irrelevant. As if invoking Burgos-Bebray (2010), Boserup (2007) argues that colonization came with gender 91 inequality as an instrument to strategize the perpetuation of women subordination, subjugation and exploitation. 92 In the developing nations like Nigeria, where people are raised in a culture highly dominated by role 93 94 differentiations, the women are often reminded of their natural roles as wives and mothers and that these are 95 the only places where they can fit in and perform. The effect therefore, is that women especially in Nigeria tend 96 to shy away from other roles they can comfortably fit into. This stereotype thereby strengthens the patriarchal 97 worldview amongst most African that women are not expected to participate in decision-making process. By implication therefore, women should be seen not heard. 98

⁹⁹ The concept of gender is used to understand the social and political relations between men and women as ¹⁰⁰ well as how the concepts of femininity and masculinity are constructed. Gender attributions are therefore often ¹⁰¹ justified on the basis of sexual or biological differences. For instance, women are perceived to be "naturally" ¹⁰² nurturing, a characteristic linked to their reproductive capacity as child bearers. This gender attribution has permeated the field of science and technology globally. This is because it is often categorized as "hard" and therefore "masculine", a field traditionally considered suited for men not women. For instance, the perception that women fare poorly in science and technology relative to men is often attributed to biological limitations of women, rather than to gender stereotypes in educational materials, teaching approaches, study opportunities and technological designs that contribute to gender gap in ICT use.

Encapsulating the above situation, Okunna (2000) argues that the Nigerian woman is characterized by low self-esteem because the society has continued to regard her as unimportant and inferior to her male counterpart. Right from the time immemorial, society prefers the boy child to the girl child. All through her growing-up years, the girl child is socialized to accept her subordinate position even when it is well known that Liberal Feminist theory is correct in its argument that boys and girls are born with equivalent potentials that could be fully

realized, given the proper and conducive environment. Consequently, men are assumed to be better equipped to

¹¹⁴ pursue science and technology compared to women, creating greater obstacles for women from entering the field.

¹¹⁵ 4 b) Information Communication Technologies (ICTs)

Information and communication technologies are often synonymously used with New Media or New Communi-116 cation Technologies. They are simply communication gadgets or equipment that have modernized, improved 117 and eased exchange of ideas and information of various kinds between and among people within or across 118 119 distant boundaries/frontiers. ICTs extend and change the entire spectrum of technological possibilities for public 120 communication. Tiamiyu (2003) describes ICTs as a generic name used to refer to a number of communication hardware adopted in ensuring instantaneous dissemination of information and social values across the globe. It 121 is also a disparate set of communication technology that shares that digitization made possible and is widely 122 being made available for personal use as communication device. The essential features of the ICTs lie in their 123 interconnectedness, their accessibility to individual users as senders and/or receivers, their interactivity, their 124 multiplicity of use and open ended character and their ubiquity and delocatedness. These featuresessentially 125 126 describe a computer-mediated medium -the internet.

127 According to Biagi and Foxworth (1997) the internet is a combination of thousands of computer networks sending and receiving data from all over the world -competing interests joined together by a common purpose, 128 129 but without common owner. It is used mainly as a communication channel for electronic messages (such as e-mail), but it also holds an enormous amount of useful information (much of it consisting of multimedia) stored 130 by individuals, governments, educational and research establishments and by commercial establishments. The 131 Internet brings the cost of communication to a level where many can afford it. Thus, this affordability makes a 132 133 person an instant publisher with access to an audience of millions of Internet users, creating a whole new class 134 of mass communicators (Dominick, 2002).

With the emergence of the ICTs, the traditional mass media i.e. print and broadcast, which was believed to have brought the age of the media to a 'zenith', began to dwindle. The technology was being replaced by an age of personal or participatory mediathe ICTs. With the ICT culture, people no longer passively 'consume' media but actively participate in them. Thus, the boundary between audiences and creators is blurred and often invisible. Some of the ICTs, which upset the traditional mass media, include: a. Wikipedia -These are web pages that allow anybody who is allowed to log into them to change them. It is similar to an encyclopedia. Among the ICTs, the Wikipediais perfect compliments of blogs. III. Gender Differences in ICT use in Nigeria

In Nigeria, gender differences in ICT use is linked to patterns of discrimination in the society at large as well 142 as with patterns of power relations within the home. According to Jensen (1997) only 10 percent of the people 143 riding the information superhighway via the internet are women. In the same line of thought, Okunna (2000) 144 posits that this is the twenty-first century, but yet tradition, culture, religion and other factors have continued 145 to widen the disparity between Nigerian men and women at the expense of women. Furthermore, in many parts 146 of the world, high female illiteracy rates mean that women have little access to the print media. As for television 147 and radio, women may not always be able to watch or listen to their preferred programmes due to so many 148 obstacles, including spending most of their times caring for children. 149

Recognizing the vital role of women in the development of less industrialized societies, Scanlan (2004) argues 150 that, it is undoubtedly a fact that regardless economic development level, population pressure, democratization, 151 globalization, or region, women are in the fore front of development. Where then is the problem? Part of 152 it is in colonization as Boserup (2007) argues. But there are still many other factors, including the way and 153 manner women's narratives are written. For example, Women in Nigeria have taken an active role as partners 154 in nationalist struggles, and at times spear-heading the movement to declare war against many forms of colonial 155 impositions even prior to decolonization periods. The early stages of nationalist revolt against entrenched British 156 157 rule in West Africa took the form of localized skirmishes like the Aba Women's fight against colonial tyranny 158 of 1929. The Igbo women of eastern Nigeria feared that the head-count being carried out by the British was 159 a prelude to women being taxed. Yet, the Perham's (1937) negative connotation The Aba Market Women's 160 Riot in Nigeria, 1929 presents the women and their actions as violent and unlawful, ignoring the fact that about 25,000 of these women faced colonial repression and over a two-month period of insurrection, during which 50 of 161 them were killed. These silences, stereotypes, prejudices and negative narrations against women further "justify" 162 discrimination and bracketing of their immense contributions to sustainable development. 163

164 It is in line with the above that Guha (2002) argues "Self-consciousness exists in and for itself when, and by the

fact that, it so exists for another: that is it exists in being acknowledged" (p.18). This kind of selfconsciousness is what Nigerian women need, and the best way to achieve this in the contemporary state is through the ICT. If the Aba women in the early 20th century succeeded in mobilizing fellow women against the colonial tyranny without the use of any advanced technology as available today, what would they achieve by the year 2020, when effectively and efficiently utilizing the ICTs? As Gallagher (1995) notes, issues relating to policy making in technological fields often ignore the needs, requirements, and aspirations of women unless gender analysis is involved.

A sociologically relevant observation at this juncture is that, the post-colonial policies that we have are an 171 extension of the British colonial strategies of inequality. To this end therefore, it is worthy to note that, the 172 benefits of favorable policies do not accrue only to women but to both men and women with very positive 173 impacts on the economy and society at large. With the current situation, it is inevitable that the women are left 174 out. Jorge (2001) described the fate of the women as vastly under-represented in government, business, political 175 and social institutions and men still hold most of the management and control positions in telecommunication 176 companies and regulatory or policy making bodies; regulatory decisions are made without any impact analysis; 177 service licenses are attributed to companies without equal opportunity policies and controlled mostly by men. 178

Women's marginalization from ICT stems from the assumption that women benefit less from new educational 179 and employment opportunities. Gender differences also exist with regard to access to information, access to 180 181 ICTs, developing skills to search for information, and the very use of these technologies. In an entrenched 182 patriarchal society like Nigeria, women were much less likely to use media especially computerbased media. This 183 is partly because women lack the necessary skills to make use of the ICTs and had many negative attitudes about these media. Notwithstanding, in recent years there are some changes in women's use of the ICTs whereby 184 they are now developing skills needed to operate this new technology effectively. The potential of the ICTs for 185 the advancement of women is considerable. Networking, research, training, sharing of ideas and information-all 186 these could be infinitely easier through relatively affordable computer-mediated communications such as E-mail, 187 Internet hypertext and hypermedia (Steffen, 1995). 188 IV. 189

¹⁹⁰ 5 The Challenges of ICTS use for Women

The challenges or obstacles to ICT utilization for women's development are a global phenomenon but it is more 191 obvious in developing countries. As a result of Africa's numerous problems such as poverty, high level of illiteracy 192 among others, it is the worst hit. Just as in many areas of development (e.g. agriculture, health, and education), 193 women face enormous challenges in ICT for their own development. The success for the utilization of any 194 ICT rests in the availability of the infrastructure that is set up in the environment. ICT infrastructure in most 195 developing countries and costs are exceedingly high. The little infrastructure available is even concentrated in 196 the urban areas, and the bulk of women live in the rural areas. This tends to pose a huge gender gap in access to 197 communication. It affects the majority of women, who in most African countries including Nigeria are poor and 198 are living in rural areas. They lack access to these infrastructures in terms of access to computers, electricity, 199 phone lines, computer hard and soft wares, servers etc. The infrastructure deficit of the rural areas coincides with 200 gender demographics -more women live in rural areas than men. Therefore, majority of the population in rural 201 areas, women have a smaller chance than men to access new technologies. As the UNDP Report (2000) noted, 202 women with their special responsibilities for children and the elderly, find it less easy than men to migrate to 203 towns and cities. The urban bias in connectivity thus deprives women more than men, of the universal right to 204 communicate. Findings of George (2005) show that economic mobility as well as professional achievements mostly 205 conceal certain underlying conditions of social upheavals among immigrant families and communities. This does 206 not imply that women need to be encouraged to migrate to the cities as bread winners, rather, to show the 207 trickledown effects of their engagements, and to whistle-blow the dangers associated with urban-bias. 208

²⁰⁹ 6 b) Education and Skills

Gender imbalances in education access still persist in most developing countries, despite the fact that education 210 of women has been shown repeatedly to effect improvements in health and economic welfare. Education involves 211 literacy, language, computer skills and information literacy. In each case, women in developing countries are less 212 likely than men to have the requisite education and knowledge. According to the United Nations Report ??2000), 213 two-thirds of the world's 876 million illiterates are women who reside mostly in developing countries. Similarly, 214 women are also less likely to know the international languages that dominate the web. Therefore, given their 215 216 limited access to schooling, women especially those living in the rural areas, are also much less likely than men 217 to have computer skills. This results to limited exposure and isolation of many women in developing countries 218 particularly those in rural areas to have access to education and other skills, which will enhance the utilization 219 of these infrastructures.

The case of Nana Asma'u, the daughter of Sheikh Usman ?an Fodio is a good example for reference at this point. Mack and Boyd (2000) have done a terrific job by writing about the historical, spiritual, and literary portraits of this remarkable Muslim woman, who at age 20, was a warrior, a teacher, a poet, and a key adviser to her father in his struggle to bring about a revolution (1804). It was in recognition of Nana Asma'u's intellectual contributions to the revolution that made Mack and Boyd to give the title of their work One Woman's Jihad: Nana Asma'u, Scholar and Scribe ??2000). One major take-home from her case is if Nana Asma'u (1793 -1864), was able to utilize her educational skills and assist in making a successful revolution at a time when cell phones were not invented, what can the current women of the 21st Century achieve, utilizing the powers of ICTs?

²²⁸ 7 c) Socio-Cultural and Economic Problems

There are several issues related to the above factor as it affects women. This leads to various discriminations which 229 extend to the realm of ICTs. Women generally tend to have more limited direct access than men to information 230 and they are even restricted to accessing the Internet in some countries including Nigeria due to culture and 231 religion. The African Gender Institute (2003) stated that in some societies there is disapproval of women's 232 request to overnight browsing in a public cyber café especially married women. In addition, rural information 233 centers are located in areas that women may not be comfortable frequenting. Although, there is recently a 234 transformation in the access to internet through cellphones, it nevertheless has its own limitations including the 235 lack of resources to constantly buy recharge cards for the phones; the power failure to charge the phones; and role 236 conflict with the women's expectations as wives, as mothers, and as workers or full-time housewives. In other 237 words, women have problems of time given their multiple roles and heavy domestic responsibilities. Their leisure 238 hours are few and the centers may not be open when women can visit them. To yield positive results therefore, 239 every meaningful policies should therefore reflect women's moral, spiritual, and cultural values. 240

Traditional cultural attitudes in most societies discriminate against women, depriving them access to education and technology. Girls are encouraged to take any job or encouraged to get married rather than seek higher education. There is also the issue of gender bias in attitudes towards women studying or using information technology. Many people hold outmoded views that girls cannot think or work scientifically and that science is too mechanical and technical for girls, thus discouraging female students.Phobia is also another obstacle in that most women have developed it for ICT especially considering the negative perception of the ICT tool as a tool for domination and oppression of NGOs to disabuse the minds of women on ICT as a negative tool.

Lack of financial resources can hinder women to participate fully in ICT community. This is because almost all 248 communication facilities cost money and majority of women are afflicted by poverty. Poverty is rooted in gender 249 imbalances, which are in turn rooted in gender inequality dynamics that stem from issues which cut across race, 250 religion, status, culture and geographical location among others. Thus in comparison to men, women are worst 251 252 hit as a result of their very limited involvement in economic activities in relation to their male counterparts. 253 Okunna (2000) stressing on this maintains that the major cause of poverty among women especially in Nigeria 254 is their low access to credit and income-earning opportunities, as well as marginalization from major economic 255 activities. Since most women in Africa are full housewives without paid employment, they cannot fully participate in information technology. The ICT has its financial implication for every user requires money. To use cell phones, 256 it must be recharged and to browse the internet and design web sites require money. Most women do not make 257 much money as men, so they cannot afford the necessary computers, hardware and online services cost. More so, 258 those that have the money believe to spend it on something else than ICT. 259 V. 260

²⁶¹ 8 ICT Prospects for Women

Equal rights and full participation of women in all spheres of life is a sine-qua-non for full and complete 262 development of any modern civilized nation. Women constitute majority of the population of many nations, 263 and therefore need to be incorporated in the activities and affairs of those societies. In the area of information 264 265 technology, for women's access and use of the media to be addressed it is necessary to consider, appreciate, and utilize their potentials, which could accrue from their full access and equal participation in the ICTs. To this 266 end, certain measures must be put in place to address gender discrimination in information and communication 267 technology. What are some of these measures? a) Educational Empowerment Education and information are 268 central to building human capabilities. Education builds cognitive skills for processing information. 269

Women's empowerment educationally will help them strengthen their individual and collective capacity as 270 women. It will also enable them to advance their status as women in the society as well as give them the 271 opportunities that ICT offers. Women should be encouraged in the area of education. Educational empowerment 272 for the women can only be realized through universal access to and completion of basic education with resources 273 adequate to ensure that the functional literacy and numeracy are instilled in a sustainable sense. This will enable 274 275 them to understand the language of information technology and be in a position to use it efficiently. Hafkins 276 (2001) maintains that women need to educate themselves on technical areas, so that they can translate the 277 technical terms into reality. Similarly, the level of literacy must be addressed by way of providing training for 278 women to learn the use of ICT facilities. As mentioned earlier, this task is not only a government's responsibility, but equally that of the civil society. 279

As Arimah (2001) posits, the informal sector in Nigeria needs value-based reforms that can be achieved through government's exploration of new ways of engaging the viability of the sector, and through public private partnership (PPP). Thus, the private sector should accrue part of whatever profit it makes to the community in the form of Corporate Social Responsibilities (CSR) and the education sector needs the largest share from that. Additionally, such policies and sharing formulae should be favourable to the girlchild and women, as educating them is as good as educating the community as a whole.

²⁸⁶ 9 b) Economic Empowerment

Poverty and illiteracy remain the primary obstacles to internet growth in developing countries like Nigeria. Women and children are still the majority of those living in poverty. Reducing the gender gap in education will invariably increase the opportunity for women's economic empowerment. There is also the need to reduce job discrimination at their work places to financially empower women. In addition, creating cooperative societies for women will enable them have access to small scale loans that would help start small scale businesses. In the long run, it will increase women's finances and make them less dependent on men, and eventually increase their financial access to ICT facilities.

²⁹⁴ 10 c) Provision of Infrastructural Facilities

To achieve the right to communicate as a basic human right for women in Nigeria, women have to take on 295 themselves the difficult task of gaining access to the necessary infrastructures that will enable them use the ICTs. 296 This entails the provision of more infrastructures that will take care of the majority of women who reside in 297 rural areas as well as making available the latest infrastructure for users' needs. This means an understanding 298 of the system of access and use of the ICTs by majority of the people in the society. Similarly, women must be 299 involved in the technical complexities of information technology in order to reflect gender issues. into concerns 300 related to consumers' ability to pay for services, particularly in rural and poor areas. Universal access policies aim 301 at developing solutions that provide community access at affordable prices. New technologies have made these 302 efforts promising and many developing countries are investing in such policies. For instance, Nigeria has adopted 303 the rural telephoning policies and with the collaboration of some international agencies that are working towards 304 305 realizing this goal. Expansion of public telephones and ICT access point's example, in post offices, community viewing centers etc. are some of the efforts. 306

³⁰⁷ 11 d) Attitudinal Change Towards the Use of Icts

For women and girls to enter the information age for ICT use to be engendered, women must transcend some 308 attitudinal barriers. Since science and technology disciplines are domainsthat are historically ascribed to males, 309 women and girls find it intimidating and alienating. They therefore tend to see the ICT sector as a realm 310 that is unfriendly and dominated by men. Thus they assume that technology and its production, application 311 and maintenance as areas that fall more easily into the male domain. Women therefore need to overcome 312 this technophobia; they need to be encouraged to change such attitudes that act as 'internal' barriers to their 313 participating in the ICT sector; andthey should be encouraged to take up the challenges of the new information 314 and communication technology in order to excel in it as they have done in other fields of endeavor in Nigeria. 315

The northern part of Nigeria is known to be the most educationally backward region in Nigeria as Hajiya Aishatu Jibril, the Minister of State for Education estimated the number of child beggars in the region at more than 10million, and the menace is on the increase. Undoubtedly, the girl-child is the worst hit. Now, the from the Nana Asma'u's case, we can understand that, the Nigerian women, notably the northerners, have a role model that can inspire them in changing their attitudes in favor of seeking for the both religious and secular knowledge including the ICTs' for the betterment of their lives and sustainable development.

322 **12 VI.**

323 13 Conclusion

It is obvious that women have embraced ICT as a way forward in their quest for empowerment. Notwithstanding, 324 they are caught in a web of numerous challenges some of which have been highlighted earlier on. To wriggle 325 out of these problems in Nigeria, ICT policy and programmes must address the needs of women. Similarly, 326 using and benefitting from ICT requires learning, training, affordable access to the technology, availability of 327 information relevant to the user and a great amount of support for enabling environments. Solving ICT problems 328 and enhancing the position of women in access and utilization would indeed facilitate development in the various 329 areas of women endeavours. In addition, sensitizing women's organization and civil society in general to the 330 331 gender impact of ICT issues in Nigeria would yield greater dividends for women. There is an urgent need to 332 improve the representatives of women in the use of the new technology to enhance their status. This will increase 333 their visibility as women in the society as well as eliminate discriminative tendencies against them. Women in Nigeria need to be committed in the use and access to ICT in order to demystify the general notion that ICT is 334 a field exclusively reserved for men. Furthermore, engendering ICT policies in Nigeria will secure the benefits of 335 the information age for girls and women. This will make them reap the benefits of the information age. Finally, 336 the Nigerian woman needs all the help she can get to free herself from the forces that subjugate her in the wider 337 society and in the world of the ICTs, which are powerful instruments for creating and reinforcing herself-image. 338

Bibliography $\mathbf{14}$ 339



Figure 1:

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According to Weinberger

cited in The Economist (2006), it is the purest form of participatory creativity and intellectual sharing and represents a socialization of expertise. Wikis allow groups of people to get on the same page. b. Blogging - A blog is an online journal. It has to do with a web page to which the owner regularly adds new entries or posts which tend to be short and often containing hyperlinks to other blog or web page (The Economist, 2006). Blogs usually have a raw unpolished authenticity and individuality that makes it participatory in nature. A blog provides commentary or news, functioning as more personal online diaries. A typical blog combines texts, merges and links to other blogs, web pages and other media related to its topic. The ability of readers to leave comments in any interactive format is an important part of many blogs. music etc.

d. Pod casting -The word is derived from a combination of pod from Apple's iPod -a fashionable portable music player, and casting from broadcasting. It is all about Internet broadcasting. It involves sending a radio signal to an entire population in a particular geographic area at a particular time. Pod casting involves recording of anything from music to philosophical ramblings, professional news or snorting noises -into a computer with the aid of a microphone, then posting the audio file onto the Internet. There, people can listen to it and more importantly, subscribe to a "feed" from the same pod caster, so that all new

[Note: c. Metaverse-This stands for "metaphysical universe" as created by Linden Lab, San Francisco Internet Company. Metaverse means a second life. Something that is happening not in the real life. Second life according to The Economist (2006) is not a video game, but a place where people make things. People who log on to second life create an "avatar", an online extension of themselves. As avatars, they mingle, go to parties, create what they wear and drive in, build houses where they live, paint pictures and compose music. Avatars are futuristic in nature as a lot of things created in the second life are exported into real life as fashion, audio files from the source are automatically pulled down as soon as they are published. Pod casts are different from blogs and Wikis in that they cannot link directly to other pod casts. This makes pod casting a less social and probably less revolutionary medium.]

Figure 2:

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Figure 3:

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