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# Professional Women's Information Needs in Developing Countries: ICT as a Catalyst

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### ABSTRACT:

Women form half of the world population, and they require information because as human beings it empowers them to make informed decisions based on the knowledge at their disposal. The availability of information and its use is of paramount importance to any group of people.

The paper discuses the special information needs of professional women. It focuses on Women Lawyers, Journalists, Librarians, Doctors, Pharmacists, Engineers, Bankers, Information Scientists and Architects in Nigeria.

Their general information needs can be basic, but special information needs such as social, domestic, economic, personal, professional, political, medical and religious are examined, while the impact information has on them is reviewed.

An attempt is made to analyze the peculiarity of professional women information needs in view of their status and profile. The importance of Information and Communication Technologies (ICTs) in attaining the goal of satisfying the information seeking behaviour of these women professionals is noted, especially in a developing country like Nigeria.

Information Technology (IT) can offer significant opportunities for virtually all girls and women in developing countries, including poor living in rural areas but the availability of such facilities is only limited to the urban areas. According to research, the exposure and ability to use the facilities was noted to be an exclusive advantage of educated elite women because of their educational background. Studies show that home access to a computer and the Internet is uncommon in developing countries and the professional women desire to be more adequately informed, thus the need for greater access is most required.

Questionnaire and Interview methods were used for data gathering. Respondents were contacted mainly through their professional bodies. Data analysis was done using the Statistical Package for the Social Sciences for Windows. Recommendations are made as to how women professionals in developing countries who lack ICT facilities can network with other groups.

#### **KEYWORDS:**

Professional Women ICT Information needs Networking Nigeria

### MAIN TEXT:

#### **1. INTRODUCTION**

Women constitute half of the world's population. In Nigeria, women represent about 49% of the population (Office of Statistics, 1992). They are a group of individuals who like any other require information because information empowers one to make informed decisions.

Information needs of people differ depending on what they intend to utilize information for. The information needs of women should be of concern to most because women are the bedrock of any society. They determine in a sense what a people or race eventually become. Information is crucial to the Nigeria woman especially the professionals at this stage when development efforts are increasingly becoming people-centered, interactive and participatory. Access to accurate, timely and relevant information which will meet their socio-economic, political and professional needs to enable them meaningfully contribute to the development process, cannot be over-emphasized.

Information is an essential data of value in planning, decision-making and the execution of programmes (Oyegade, Nassarawa & Mokogwu, 2002). Information seeking as such is a fundamental human process closely related to learning and problem solving (Marchionin, 1995). The desire to seek for information is often propelled by what the individual is doing or what he works at, that is, his profession. Information seeking processes depend on workers tasks.

Burkett (1992) also believes that information seeking behaviour is significantly influenced by the nature of the institution in which the user works, the searchers job, subject and rank academic training. Professional women have peculiar information needs that are crucial to their output and work performance. As Robinson et al (1995) in their research on the use of Information put it, "differences in the use of information sources and types exist among professionals".

According to Huyer (1997) "there has been little research done on women's information needs and access to appropriate information in developing countries". However, at the turn of the millennium, there have been tremendous changes in the information revolution. As economies become more and more information-driven the issue of women's access to producing and disseminating information will be increasingly important to Africa overall.

### 2. OBJECTIVES OF THE STUDY

The study was carried out

- To ascertain what the information needs of professional women are and by what means their needs are met.
- To determine the extent to which professional women's needs affect their professional and general output,
- To analyze the needs of professional women in view of their status or profile in their chosen profession.
- To determine if professional women have access to Internet facilities at home, office or Association offices.
- To ascertain how adequate the ICT facilities available to professional women are.
- To find out if and how professional women network, and how they think networking can be improved if the current facilities available to them are inadequate.

#### **<u>3. METHODOLOGY</u>**

The methods utilized in collecting data were (i) interviews and (ii) self administered questionnaires. These methods were adopted so that all classes of the respondents would be reached.

A total of five hundred questionnaires (500) were distributed. These were distributed mainly through the Association offices. A few were distributed randomly. Three hundred and fifty five (355) were returned but three (3) were voided, as the information could not be analyzed due to improper filling out. This provided 70.4% response.

### 4. PROFESSIONAL WOMEN AND INFORMATION NEEDS

Professional women have general needs that are common to all women. Women need to have information about themselves i.e. personal and health needs especially information about their reproductive health. They need to maintain themselves and their families, therefore they have economic information needs. They need information about their social and economic environment and also they have political information needs because they have to function as members of a geopolitical area.

Above all, professional women need information about their career or profession. They need to be abreast of what is going on in their profession. Women are disadvantaged educationally especially in developing countries like Nigeria (Alao, 1998). They as such, have to compete with their male counterparts and struggle harder than them most times to achieve the same goal. This gender bias in some professions and fields of study e.g. mathematics, engineering and science-based professions put women on an unequal footing with the men. As a result, when women professionals eventually get to work, they have to be more up and doing.

As noted by the IDRC Gender and Information Working Group, most of the positive effects of the "information revolution" have bypassed women. There has been little research done on women's information needs and access to appropriate information in developing

countries. While this is changing, the "information highway" is still predominantly maleoriented, and often a forum for gender discrimination, intimidation and even harassment (Huyer, 1997).

Experience of some women professionals point to the fact that having vital information at the right time makes them more efficient at work and earns them acknowledgment as worthy professionals and promotion in their places of work. Women need to be complimented because they do a lot more at home in addition to their office work.

Access to adequate and timely information is thus a great priority of professional women. Their information needs should be met promptly. Easy access to Information and Communication Technologies (ICT), adequate training in their use and provision for participation in policy and decision-making for professional women is of utmost importance. As women become involved in making the policies affecting new technologies, then it is easy for them to be integrated in the development process.

Meeting professional women's information needs cannot but help in making sure that development information is generated, information which will ensure socio-economic and political growth. Development Information is the information, which derives from the attempt of people to build up and create a better environment for them.

Women's needs with respect to ICTs, then, do not concern only access to education and training that will support their participation but the social and policy acknowledgment that what women already do is technology, appropriate and worthy of recognition, and further, an important resource for development (Huyer, 1997). This environment being one in which all aspects of a group or community life are set out for improvement. Therefore, since professional women are part of the society, an educated section (even though not in the majority), they should be the pioneers of generating, using and storing development information for posterity. The rural majority of course should not be left out of this development information, but with professional women taking the lead, other groups of women can be encouraged to do more.

Professional women's Information needs be they personal, religious, social, domestic, professional or medical are thus an important factor in determining the quality of life they live, their output professionally or socially, at home and to the world generally. The information needs should not be overlooked, rather their should be methods devised to satisfy them.

### 5. PROFESSIONAL WOMEN AND NETWORKING

Professional Women as addressed by this paper are women who have a profession from which they make a livelihood and which keeps them occupied and employed. They are women who have carved a niche for themselves in their chosen professions, working and developing themselves in their career.

The women chosen for the study are in professions that interest them. Some are in professions that some decades ago used to be male dominated e.g. journalism, engineering, and architecture (See Table 1).

The women join professional associations in order to meet their professional information needs and to boost themselves personally and professionally. The Associations also make it possible for them to meet and interact with others in the same profession.

Garba (1997) states that professional women's organizations focus on the struggle to empower women in their respective professions. According to her,

"Most professional women use these groups to have a voice and to boost the capacity of women to influence decisions that affect their careers and their professions" As such, women should be listened to. They should be allowed to determine what they want and how they think their wants can be met because the "empowerment buck" stops on the crown of each disempowered woman. ....Widening the information content of a woman's choice (through awareness programs) and enhancing her capacity to actualize her choices (through skills and capacity assessment, capacity building and skills development and evaluation programs) would enable her to make better choices and to actualize them" (Garba, 1997).

But the point is that women cannot do it individually alone but as groups of women. Even as groups and in associations, it is necessary to interact and share ideas. Networking thus becomes an important factor for professional women. With the help of new ICTs women should be able not only to gain information but also to disseminate the information they already possess and generate.

By providing opportunities for women to air and share their views, ICTs help them develop confidence and experience in expressing their viewpoints publicly by allowing space for experimentation and enabling them to find allies across communities, nations and regions. In addition, electronic networks facilitate the participation among women in different sectors and in different regions. They can make the information women need to improve their own well-being (personal information needs) and that of their families available to more efficiently fulfill their triple roles as mothers, wives and workers.

In all this it is important to note that recommendations by researchers on women and ICT strongly point in the direction of women becoming involved in ICT policy formulation. The starting point for participation in this process they say will be to make women aware of the importance of the information revolution. Women must understand their own information needs and develop sufficient technical knowledge to be credible advocates of their views in policy debate (IDRC, 2000).

#### 6. WOMEN AND ICT

The world is going through an information technology revolution that has drastically changed many facets of the human life, from education, industry, economy, politics to entertainment (Ajayi, 2002). The emergence and convergence of Information and Communication Technologies (ICT) has therefore remained at the centre of global socioeconomic transformations.

According to Hafkin and Taggart (2001) Information Technology has become a potent force in transforming social, economic, and political life globally. Without its incorporation into the information age, there is little chance for countries or regions to develop.

Information has become a strategic resource, a commodity and foundation of every activity. Aiyepeku (1982) describes 'information' as being used to describe man's cumulated knowledge in all subjects, in all forms, and from all sources that could help its users makes rational decisions. Information technology can be an important tool in meeting women's basic needs and can provide access to resources to lead women out of poverty. It is also a forceful tool to improve governance and strengthen democracy. Information technology can contribute to the political empowerment of women as tools for networking women to perform social and political advocacy, to strengthen women's participation in the political process, to improve the performance of elected women officials, to improve women's access to government and its services, to educate, and to disseminate indigenous knowledge.

Information Technology presents unique and timely opportunities for women. It promises better economic prospects, fuller political participation, communication with the outside world, easy access to information, and an enhanced ability to acquire education and skills and to transcend social restrictions (Hafkin and Taggart, 2001). They further noted that

except in the upper-income enclaves, most women who have access to a computer and the Internet do so at work. Users at work generally divide up between these who use it as a tool of production (routine office work, data entry, manufacturing, computer industry jobs, programming and related work) and those who use it as a tool of communication (creating and exchanging information).

ICT can be used as a tool for the empowerment of women and the promotion of gender equality. There are many challenges and benefits with regard to ICT usage. According to Huyer (1997) "in assessing and promoting women's access to and use of ICTs in Africa, it is important to understand the gendered nature of the social, economic policy and technology systems which frame opportunities for women. Women's need for information are also structured according to their gendered roles and responsibilities which in turn influence their use of and response to ICTs".

"These technologies can give women immediate access to information and avenues for expression and also allow us to participate in discussion and influence policy in very tangible way, but only if we use them.

The fundamental first step is opening up access to technology to women and girls, because access to technology equals information and influence" (Abrams, 1996).

The professional woman who basically lives in the rural area is already literate, thus training in the use of ICT is much easier than the majority of women who are illiterate and live in the rural areas. However, studies show that men continue to crowd out women's access to the training required for higher skilled technological work.

### 7. BENEFITS AND CHALLENGES OF ICT

The IDRC Gender and Information Group, identified the critical information issues for women as:

- Type of Information what kind, access to it, and gender-consciousness.
- Information technology process availability of technologies to women, their ease of use, policy processes around these, and the effects on women. Active involvement of women in the identification and definition of their information needs, and in the choice of mechanisms and processes to meet these needs is critical for their productive participation in production and dissemination of information as well as definition of access to the information they need.

Communication technologies are important for the distribution of alternate, balanced and equitable portrayals of women and their potential. The Beijing Conference NGO Forum on Women is an example of the use of ICTs by women as a tool for information dissemination, communication and organization. The arrangement in respect of information about the Conference was done mainly on the Internet, email distribution took place through listservs, electronic conferences set up by the Association for Progressive Communication (APC), and the International Women's Tribune Centre Newsletter, *Globalnet*.

ICT can facilitate participation among women in different sectors and regions. Professional women can be empowered in the use of ICT because it allows leapfrogging, which means that in their development, countries and societies can leap across several generations and stages of technology, introducing and applying directly state-of the-art technologies.

However, there are some constraints in the use of ICTs which include: lack of time, because of the home-keeping nature of women; the cost of Internet access at all levels which also makes it inaccessible for developing countries, while erratic electric supply and breakdown of telephone lines constitute major constraints.

Finance could also constitute a limiting factor. According to a study economic hardship makes it impossible for women who have to pay school fees and cater for other basic needs, to save money to buy computer hardware.

Despite all these problems, electronic communication offers enormous advantages over other means (telephone, fax). It is cheaper, permits communication instantaneously or in very little time, and it is democratic to the extent that it allows for horizontal communication and debate among all those using it. Nevertheless, the democratic nature is valid only if we think in terms of who has access to the network. If we know how to use it, it will be a tool for empowerment. If not, we will generate a new disparity between those who have broad access to information and communication and these who do not.

#### **8. ICT IN NIGERIA**

Information technology remains a specialized tool, and there is no thought of questioning its relevance or potential benefit for Nigerian women at this time.

As a developing nation, Nigeria aspires to participate effectively and become a key player in the emerging information age. The poor telephone infrastructure in Nigeria has been a stumbling block to the development of information technology, especially Internet penetration in Nigeria. Internet penetration for Africa is less than 1% despite a 12% world population; the situation is even worse in Nigeria (Ajayi, 2002). However, the emerging technologies such as broadband satellite, VSAT and wireless telephony provide wonderful opportunities for Nigeria to leapfrog in the information society age. These technologies have been exploited in order to accelerate IT development in Nigeria.

The Federal Government of Nigeria has accorded IT a national priority. This is evident by the approval of the National Information Technology Policies (NITP) and the subsequent establishment of the National Information Technology Development Agency (NITDA) as the implementation agency.

A Nigerian firm, Zinox Technologies Limited has developed the first indigenous and made in Nigeria set of computer systems. The systems were designed to work with unfriendly operating environment of the country, which most of the foreign branded systems normally cannot cope with. Zinox is the first step towards the creation of made in Nigeria IT technologies.

### 9. DISCUSSION OF RESULTS

The professional women under the study were picked because of the importance of their profession and their relevance to the society.

They were approached mainly through their association offices in order to minimize non-return of the questionnaires. Others were approached based on personal contact, and thus it was easy to interview them. Table 1 shows the distribution of the respondents by their professions. It is noted that women Librarians (54) provided the highest percentage of respondents (31.4%). Only twenty-eight women Lawyers (8.23%) responded while twenty-nine female Engineers (8.5%) returned their questionnaires. It is observed that the two professions which had the lowest returns were highly technical and had fewer women involved than the other professions.

The special information needs of women were identified to be as follows:

- Social
- Domestic
- Economic
- Personal
- Professional

- Political
- Medical
- Religious

It is interesting to note that respondents preferred religious information as the most important. Some of the women interviewed believed their closeness to God will enhance the clarity of their vision and destiny, thus they reckon that their professional needs will come after religion. Table 2 indicates that 36.3% (128) of the respondents gave first priority to religious information, while 30.3% (107) of them chose to seek professional information as priority. Political information was rated the lowest, scoring 1.3% in the scale of preference.

The professional women interviewed and questioned got their information primarily from newspapers, magazines and newsletters, 16.8% (311) of the respondents attested to it. The attendance of workshops, seminars and conference was rated as the second primary source of information.

The extent to which information needs affect the respondent's professional and general output is very great; the information received was noted to be a potent force for transforming their professional, social, economic and political lives.

Most of the professional women who use the Internet to seek for information do so in their offices, many of them do not have Internet facilities at home, while a few make use of association offices. Time is a great constraint for most professional women because of their triple roles. It is observed that many of them utilize the e-mail services. 35.5% (252) of the respondents use the e-mail mainly while (32.4%) 230 obtain general information from the Internet via browsing websites for information. It was discovered that the ICT facilities are inadequate because the basic infrastructure e.g. electricity power supply, telephone services could be erratic while the cost of maintaining ICT facilities is another factor. Some of the professional women opined that though Mobile phones are useful and time saving, the cost of maintaining one is high.

Most of the respondents sometimes network with members of their professions and rarely with other professionals. Internet, telephone, personal contacts and association meetings were mentioned as means of networking adopted by them. The respondents suggested Internet use for networking, 37.5% (84) out of two hundred and twenty-four (224) that responded to this question. 28.1% (63) respondents preferred symposia, workshops and conferences.

#### **10. CONCLUSIONS AND RECOMMENDATIONS**

Professional women certainly have special information needs. Religious information is paramount to them followed by professional information. Economic information follows closely. Political information is the least sought out by the women. This is not surprising as it is really reflected in the way women in Nigeria often take a back seat in political issues. Political awareness is only slowly being imparted in their psyche and the less educated rural women seem to be those whose consciousness is being awakened.

Professional women seek most for information through newspapers, magazines and newsletters. The Internet is important to them in satisfying their information needs. Libraries and Archives are fairly used but workshops, seminars and conferences provide means of getting information on an average. Television and Radio are important and the least information is sourced through books and friends. This may be due to the fact that Libraries and Archives are time-consuming in terms of information provision in Nigeria. Workshops, Seminars and Conferences as a source of getting information may also be expensive.

Information needs affect the professional and general output of professional women to a great extent. The Internet provides a means of getting at e-mail and general information to professional women. It was discovered that majority of professional women in Nigeria do not have Internet facilities at home and office. Internet facilities in Association offices are almost non-existent. Only a few of the Association Offices of the study have Internet facilities right there. Many depend on cyber cafés around to get their e-mails and other information.

Inadequate ICT facilities continues to be the bane of professional women and they sometimes network with members of their profession at association meetings, and make contact by telephone or fax but only occasionally through the Internet.

Only sometimes do professional women in Nigeria network with other professionals or professional bodies. They do this when they have to interact with professionals in aspects relevant to their day to day activities e.g. the Architects and Engineers interact when on the same project; Doctors and Nurses work together, Information Specialists and Librarians collaborate and so on.

The views of professional women on how networking can be done with other groups given the ICT limitation shows that effective information flow is an integral part of development, thus we would advocate the expansion of women's access to ICTs. The Nigerian government should continue to encourage professional women's contribution to economic development by increasing women's access to information. More participation of women in the polity and exposure to higher skill training will enhance productivity.

Women must be encouraged to become involved in ICT policy formulation, and the starting point for participation in this process will be to make women aware of the importance of the information revolution.

Professional women must be encouraged to acquire systematic skills and capacity training

- To impart basic computer literacy
- To acquire web-browsing skills
- To learn desktop publishing and e-mail communication
- To handle servers
- To learn HTML and other website creation tools.

Networking among women is of utmost importance. Professional women can utilize Information Technology to perform social and political advocacy, to strengthen women's participation in the political process. IT will also help women to disseminate indigenous knowledge. The advocacy for ensuring the inclusion of gender concern in national IT policy will ensure that even women living in rural areas can be educated and given adequate training in the use of new ICTs.

Increasing women's access to information and communication technologies in developing countries involves increasing availability of communication in areas where women live especially in rural areas. Given the high profile of this issue, the time is ripe to ensure that professional women in Nigeria can enter the information age.

#### **REFERENCES**

Abrams, Robin (1996), The impact of Technology. In Friedlander, E. (ed.), Look at the World through Women's Eyes. Plenary Speeches from the NGO Forum on Women, Beijing '95.

Aiyepeku, W. O. (1982), National Information System and National Panning in Nigeria. Ibadan NLA, Oyo State Division.

Ajayi, G.O. (2002), African Response to the Information Communication Technology Revolution. Case study of the ICT Development in Nigeria. (ATPS Special Paper Series No 8). p.1

Alao, K. (1998) Women in Nigerian Education System. In Sesan, A & Odebiyi A. (eds) Nigerian Women in Society and Development. Ibadan. Dokun Publishing House, p. 85.

Burkett, J. (1992), The growth of industries and information services in the U. K. (3<sup>rd</sup> ed.), London. The Library Association.

Ehikhamenor, F.A. (1990), The use of formal information sources in physical science research in Nigerian Universities. <u>International Library Review</u>. 22;149-161.

Garba, P.K. (1997), A strategy for empowering women: Application to Trade Union Activities. In Garba, P. K., Akanji, B., & Isiugo-Abanihe, I. (eds.), Women and Economic Reforms in Nigeria. Ibadan: WORDOC. 224-276.

Government of Nigeria, Provisional Population Census Report, Office of Statistics, 1992.

Hafkin, N and Taggart, N. (2001), Gender, Information Technology and Developing Countries: An Analytical Study. USAID Office of Women in Developing Countries. http://www.usaid.gov/wid/pubs.html.

Huyer, S. (1997), Supporting Women's use of Information for Sustainable Development. Gender and Development Unit. IDRC pgs 1-14.

International Development Research Centre (2000), Gender and the Information Revolution in Africa. Executive Summary. By E. M. Rathgeber and E. O. Adera. <u>http://www.idrc</u>

Marchionin, G. (1995), Information seeking in the Electronic Environments. Cambridge; Cambridge University Press.

Oyegade, E. A., Nassarawa, S. A. & Mokogwu, W. O., (2002), 40 years of Public Library Services to Nigeria: Past, Present and Future. Nigerian Library Association. 40 years of Library and Information Service to the Nation: A compendium of papers presented at the 40<sup>th</sup> National Annual Conference and AGM. 12-21.

Robinson, J. et al. (1995), Information usage by biological researchers. <u>Journal of Information</u> <u>Sciences</u> 22:1 1995;47-53.

Warren, S. T. (1992), Women and Environments: Lessons from Social Forestry and Natural Resource Management. Toronto. Aga Khan Foundation.

Wilson T. D. (1981), On user Studies and Information Needs. <u>Journal of Documentation</u> 37:1; 3-15.

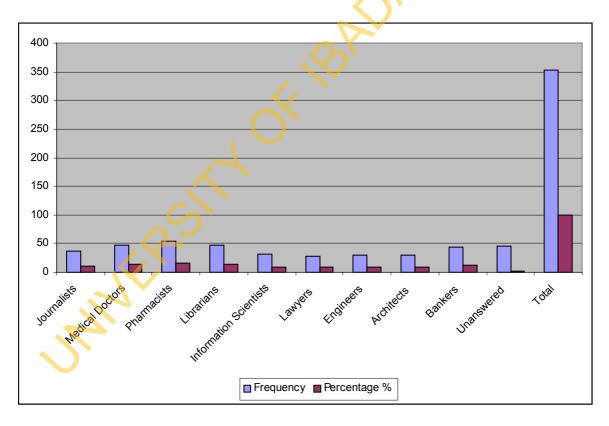
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### **APPENDICES**

Profession	Frequency	Percentage %
Journalists	36	10.2
Medical Doctors	47	13.3
Pharmacists	54	15.3
Librarians	48	13.6
Information	32	9.1
Scientists		
Lawyers	28	7.9
Engineers	29	8.2
Architects	30	8.5
Bankers	44	12.5
Unanswered	45	1.4
Total	352	100

### **TABLE 1 – PROFESSIONS OF THE RESPONDENTS**

FIGURE 1 - PROFESSIONS OF THE RESPONDENTS



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#### **TABLE 2 - INFORMATION NEEDS OF PROFESSIONAL WOMEN**