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Performance impact of Information and Communication Technology (ICTs) on women entrepreneurs in South Western Nigeria

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ABSTRACT

This study focused on the impact of ICTs usage on the performance of women entrepreneurs in the South Western States of Nigeria. The purpose of the research was to highlight the types of ICTs tools frequently used by women entrepreneurs and its effect on their performances. A total of 120 women entrepreneurs who were randomly selected participated in the study and data were analyzed using descriptive statistics. The results indicated that the use of mobile phones, television, radio, magazines and newspapers are the tools frequently used by entrepreneurs while internet services, electronic mails and computers are underutilized due to the fact that they are expensive and also because majority of the women entrepreneurs lack computer skills. Furthermore, it was discovered that mobile phones being one of the ICTs tools are sources of cheaper and faster communication and majority of the respondents believed that it has contributed positively to their performances. However, it was concluded that women entrepreneurs' use of ICT infrastructure and systems in South-Western Nigeria is limited and even the ones in use are not widely explored and channeled for business development. Therefore, the study recommended that efforts should be made by governments and service providers to ensure that women entrepreneurs are made aware of new ICT applications and innovative services that are of use to the business sector. Also, government should ensure prompt and adequate electricity supply in order to overcome the problems of incessant power failure which served as a major challenge to the usage of ICTs tools by the entrepreneurs.

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Introduction

The potential to advance women economically may be the most exciting transformative feature of ubiquitous technologies in our world. An increasing number of governments, international agencies, and corporations are beginning to recognize that women's economic power is essential for moving economies forward (ICRW, 2012). In addition, they understand the role of information and communication technologies (ICTs) for generating fast-paced growth while providing new and unimagined opportunities for these previously disadvantaged populations (ICRW, 2012).

Information and communications technologies (ICTs) include tools, devices, and resources used to communicate, create, manage, and share information. This includes hardware (computers, modems, and mobile phones), software (computer programs, mobile phone applications) and networks (wireless communications, Internet). Akpore 1999 stated that of all the technological changes that have influenced our lives in recent years, ICTs has had the greatest impact

They are increasingly a necessary part of daily life and are crucially important for sustainable development in developing countries (Crede and Mansell, 1998). For the past two decades, most developing countries have witnessed significant changes in business practices with respect to banking transactions and, to some extent, the buying and selling of goods and services, through the possibilities of ICTs to promote trade and commerce through wider access to prospective customers from anywhere on the globe for products and services (Thioune, 2003).

ICTs have thus transformed the business world, including the banking, trading and entertainment sectors, making the sectors more efficient and less limited by the barriers of time, distance and costs. ICTs also have the potential to contribute to poverty alleviation through websites promoting local products in international markets, and facilitating access to market information for competitive prices for locally produced crafts, clothing and farm produce. However, Technology and women are not often linked, and both historical and current data show that women's access to technology lags considerably behind that of men. The 2010 report, Women & Mobile: A Global Opportunity concludes that even in the mobile phone industry, which has experienced skyrocketing growth, there is a gender gap of 300 million fewer female than male mobile phone subscribers in low- and middle-income countries (GSMA Development Fund, 2010). Therefore, in the light of this, our research provides evidence of how intuitive and useful ICTs are for women entrepreneurs in South Western Nigeria and to highlight the problems associated with ICTs usage.

Statement of the Problem

Women's entrepreneurship in developing countries has been hindered by the continued use of primitive technologies which usually affects the output from their ventures. This hindrance is due to lack of or inability to access new dynamics in the world of technology to improve the growth of entrepreneurship. Part of the new dynamics is the emergence and growth of information and communications technology.

Despite this, only a small portion of the women business owners in developing countries are digitally empowered. (Tonneti,2001) This means that the proportion of women ICT literacy, exposure and application is low. Moreover in Nigeria, less revealing studies have been carried out on the involvement of women entrepreneurs in ICT and its impact on their performance.

Therefore, this study seeks to provide answers to the following research questions

- What are the types of ICTs frequently used by women entrepreneurs?
- Does ICTs usage affect the performance of women entrepreneurs?
- To what extent do women entrepreneurs benefit from the usage of ICTs?
- What are the challenges faced by entrepreneurs in the use of ICTs?
- What measures should be taken in order to improve the performances of women entrepreneurs?

Hypothesis of the study

- ICTs usage do not affect the performance of women entrepreneurs

Entrepreneurship and ICTs usage

Entrepreneurship is the recognition of an opportunity to create value, and the process of acting on this opportunity, whether or not it involves the formation of a new entity (FaCs, 2003). However, this view of entrepreneurship has been preceded by certain basic understanding of what an entrepreneur do.

For instance, Cantillon (1730) sees an entrepreneur as a self-employed person with tolerance for risk inherent in providing for his own economic well being while Say and Turgot (1830) considered the entrepreneur to be a person who possesses managerial skills, creates and develops new business. Schumpeter (1934) on the other hand considered entrepreneurship as the primary engine of economic development and the entrepreneur as an innovator.

The amalgamation of all these views presents entrepreneurs as both innovators and establishers of micro-scale enterprises to pursue opportunities and economic development both of which work towards a single goal of improving the quality of life of the people.

In recent times, the role of the entrepreneur has been expanded with the advent and prevalence of ICT, a general-purpose technological era with a pervasive impact on the economy.

ICT introduces a new paradigm for the configuration of economic activities by radically changing the approach to technology for development (UNCTAD, 2011). Components of ICT include such gadgets as the telephone; analog, digital or GSM; the television, radio, fax machine and all other emerging technologies that make it possible to communicate ever more conveniently across borders and cultures.

Women entrepreneurs and ICTs usage

ICTs have potential for self- development of women. Natasha (2003) asserts that ICTs have the potential to give a major boost to the social, political and economic empowerment of women, and the promotion of gender equality. However, this potential can only be realised if the gender dimensions of the information society are properly understood and adequately addressed by all stakeholders. Marcelle (2002), in a report of several case studies among women, concludes that when used effectively ICTs can be a powerful tool for women's

empowerment. They can create better opportunities for women to exchange information, gain access to online education and engage in e-commerce activities.

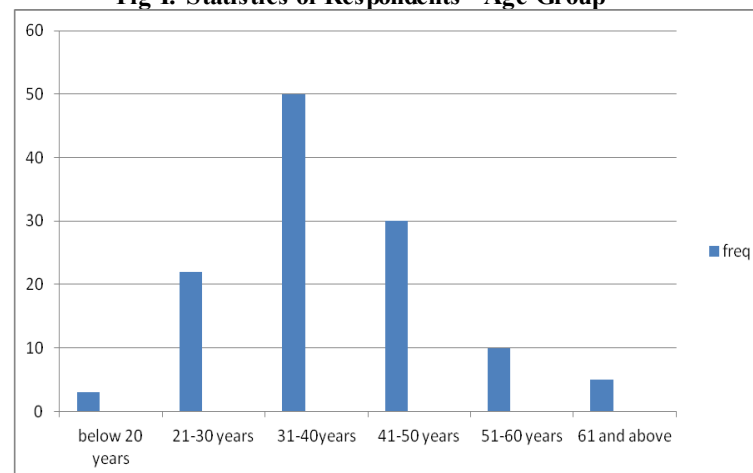
Research Methodology

This study was conducted in Ibadan North Local government area of Oyo State, South-Western Nigeria. The economy of the study area revolves round trading,, agriculture, civil service, artisans and sawmilling The focus groups within the area of study are women entrepreneurs in the tailoring, trading and catering enterprises. It covered 120 respondents randomly selected from the total population of 1480 respondents which were initially identified through a preliminary survey. The research made use of primary sources to collect data and they were analysed using descriptive statistics such as frequency and percentages, distributions, various tables and charts

Results and discussion

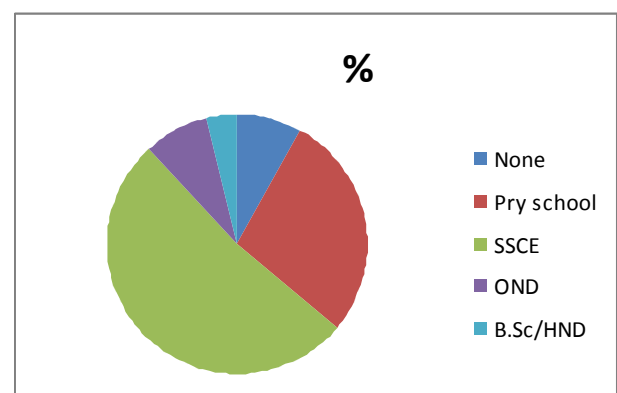
The figure below showed the results of the field research conducted .Majority of the respondents are within the age range of 21 and 50 years (Fig 1). The age group 31-40 has the highest number of respondents, followed closely by the age range of 41-50 with 30 respondents. This is an indication that the entrepreneurs were predominantly middle aged. These are age groups which are known to be energetic, innovative and strong. They are therefore expected to be economically active in order to achieve an enviable result

Fig I: Statistics of Respondents' Age Group



The educational qualification of the respondents are indicated in the Figure below, majority of the respondents are secondary school leavers (54%) while only 8.33% of the respondents had no formal education. By implication, the majority of respondents have basic literacy education which serves as a catalyst for the usage of ICTs by the women entrepreneurs.

Fig II: Respondents Educational Qualification



The different types of ICTs frequently used by women entrepreneurs are shown in Table I below, usage of the mobile phone is high among the women entrepreneurs, followed closely by television sets and radio. However, only few of the respondents make use of electronic mails, internet services and computers. All the respondents have mobile phones. They indicated that by using ICTs they were able to communicate and deliver products faster. The mobile phones are used to enhance business activities, business networking and communication. Some of the entrepreneurs used their mobile phones to receive calls, SMS, and “flash back” free services e.g. “please call me service”. Apart from this, most of these phones have radio and some, television therefore, making them to be indispensable to the women entrepreneurs.

Table I: Types of ICTs used by women entrepreneurs

Sources of ICTs	Frequency	Percentage (%)
Mobile phones	120	100
Electronic mail	20	16.67
Internet facilities	25	20.83
Computers	30	25.00
Printers	15	12.50
Fax machine	-	-
Television	110	91.67
Radio	100	83.33
Newspapers and magazines	50	41.67

The frequency of ICTs usage by the women entrepreneurs is indicated in the table II below. Mobile phones usage ranked highest as one of the ICTs tools that are frequently used by the entrepreneurs as they responded that it is embedded with many facilities like calling, chatting texting, surfing the web and radio. One of the respondents said “it is only voice calling, SMS and beeping I use most of the time. When I beep or flash a friend, she knows I have a business deal to communicate”. Also, television and radio facilities are not left behind as they ranked second and third respectively in the frequency of ICTs usage to the entrepreneurs. 35% of the respondents always use newspapers and magazines, 15% of the respondents seldom use it while half of the respondents never subscribed to the use of newspaper and magazines. Those that make use of magazines and newspaper especially the fashion designers (tailors) said that they use it to get new styles for their customers so that it can enhance their business performance. The frequencies of those that use computers, internet facilities and electronic mails always are very low indicating that the women entrepreneurs are not familiar with the usage of all the ICTs tools. This result is in conformity with the report of Olanmi *et al.*, (2012) who found out mobile phones, SMS and magazines are mostly used in business information and communication, while websites, e-mail, the Internet, and Bluetooth devices are not always in use as most of the entrepreneurs lack knowledge in their usage.

The benefits derived from the usage of ICTs tools are highlighted in table III below. The results showed that ICTs tools being sources of cheaper and faster communication means ranked highest as the entrepreneurs said that even with little amount of money they can get across to their customers and suppliers without wasting time. This is supported with the findings of Abler, 1977; Bertolini, 2001; Katz, 1999 who reported that ICTs tools save time and reduces travel expenses.

Furthermore, sharing of Information, reduction in activities of middle men, easy access to customers and suppliers and means of business opportunity ranked next. This implies that networking with their customers, business partners and suppliers

has been made easier and faster with ICTs tools and this enhanced their performances.

Table II: Frequency of ICTs usage by women entrepreneurs

ICTs Tools	Frequency (Always)	%	Frequency (Seldom)	%	Frequency (Never)	%
Mobile phones	120	100	-	-	-	-
Electronic mail	5	4.17	15	12.5	100	83.33
Internet facilities	10	8.33	15	12.5	95	79.17
Computers	15	12.5	15	12.5	90	75.00
Printers	5	4.17	10	8.33	105	87.5
Fax machines	-	-	-	-	120	100
Television	110	91.67	10	8.33	-	-
Radio	100	83.33	10	8.33	10	8.33
Newspapers and magazines	35	29.17	15	12.5	70	58.33

One respondent said this has simplified their efforts to venture into new markets. For instance, the entrepreneurs were also able to contact new customers through their mobile phones and it also enabled them to call numbers obtained from advertisements by potential customers requiring them to tender. The phones are also used to store telephone contacts they obtain from business cards. Finally, by issuing their telephone contacts to several people they are able to extend their business networks and hence their chances of venturing into new markets. The findings of these results are in consonance with the reports of Katz and Aakhus, (2002) who found out that ICTs tools offers constant connectivity with friends, family, and business contacts.

Other benefits derived from the use of ICTs tools are saving of their records, receiving advice, receiving up to date market information, loan service and ICTs information. These results indicated that ICTs tools are invaluable and serves to enhance the efficiency and competitiveness of small business owners.

Table III: Purposes of ICTs usage as perceived by the respondents

Purposes	Frequency	Percentages
Cheaper and faster communication	120	100
Entrepreneur's Information sharing	100	83.33
Reduces activities of middle men	100	83.33
Easy access to customers and suppliers	100	83.33
Business opportunity	100	83.33
Record saving	80	66.67
Advice	70	58.33
Market information	70	58.33
Loan service	50	41.67
ICTs information	80	66.67

Table IV below highlighted various problems militating against the use of ICTs tools by women entrepreneurs, frequent power blackout was identified by all the entrepreneurs as the major problem militating against the use of ICTs tools. Another major challenge that also affect the usage of ICTs tools by entrepreneurs are high cost of airtime, connectivity, ICTs tools and lack of basic ICTs skills. Some respondents also identified connectivity and privacy problems as major setback to ICTs usage. They said there were very high risks of tapping

conversations over the mobile phone, making discussion of confidential information difficult. Use of ICTs tools at times puts the user at risk of being located by other people, especially those with the wrong motives and intentions. Other respondents cited lack of confidentiality, especially in terms of text messages, and limited social space.

Table IV: Problems militating against the use of ICTs by women entrepreneurs

Problems	Frequency	Percentage
Connectivity problems	90	75.00
Lack of basic education	25	20.80
High cost of ICTs tools	100	83.33
Lack of ICTs skills	100	83.33
High cost of connectivity	100	83.33
Frequent power blackout	120	100
ICTs not user friendly	70	58.33
Privacy problems	80	66.67
High cost of Airtime	100	83.33

The table below showed the contribution of ICTs to entrepreneurship performance, this was measured by 16 Likert-type items. Each item is measured by five scales from no contribution (0), low (1), moderately high (2), high (3), and very high (4). Cross tab analysis was used and the results were grouped into four categories. For the first category, ranged from 0-20 was categorized as low, 21-40 categorized as moderately high, 41-60 was categorized as high and 61-80 categorized as very high. Table V summarizes the results of the cross tab analysis. First, the table shows that majority of the respondents believe that ICT has contributed positively to their performances, a total of 25% believe that ICT has a moderate contribution towards their performances while half of the respondents (50%) believe that ICT improved their performances significantly. Only few of the respondents (8.33%) indicated that ICT has small contribution towards their performances. The results implied that usage of ICTs tools by entrepreneurs cannot be underestimated as it is crucially important for sustainable development of their enterprises. This result correlates with the findings of Hassan *et al.*, (2008) who carried out a study on the use of information and communication among Agri – based Entrepreneurs in Malaysia. He found out that ICTs contributed significantly towards agricultural productivity

Table V: Level of ICTs contribution to performance of women entrepreneurs

Contribution	Frequency(n=120)	Percentages
Low	10	8.33
Moderate	30	25
High	60	50
Very high	20	16.67
Total	120	100

Conclusion and Recommendation

The study attempted to evaluate the impact of ICTs on the performance of women entrepreneurs, the findings of the result showed that mobile phones, television and radio are the ICTs tools mostly used by the entrepreneurs. Internet services, electronic mails and computers are also underutilized due to the fact that they are expensive to explore and some women even lack the entrepreneurial drive to explore the opportunities therein.

Furthermore, the study showed that most of the women entrepreneurs are not computer literates therefore making ICTs usage difficult for the entrepreneurs. However, the major

challenge identified by entrepreneurs militating against ICTs usage was frequent power blackout followed closely by the high cost of ICTs tools, airtime and connectivity.

Based on these findings, it is recommended that efforts should be made by governments and service providers to ensure women entrepreneurs are made aware of new ICT applications and innovative services that are of use to the business sector. Also, government should ensure prompt and adequate electricity supply in order to overcome the problems of incessant power failure which served as a major challenge to the usage of ICTs tools by the entrepreneurs.

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