



## **Effects of ICT Applications and Gender Participation on the Sustainability of Tourism & Hospitality Industry in Nigeria**

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### **Abstract**

The hotel and tourism industry remains male-dominated, particularly in the upper echelons of management and ICT remained underutilized. While there is a massive revolution in this trend across the globe, it appears much progress has not been made in our nation Nigeria. This paper aimed at evaluating the relevance of ICT and Gender Participation to Sustainability of Hospitality and Tourism Industry in Nigeria. The research study was conducted in tourism organizations, travel agents, hotels, restaurants, resorts, professionals in tourism, travel and hospitality industry within Nigeria. The respondents are from the tourism/hospitality industries employees and entrepreneurs only.

**Keywords:** ICT, hotel, Gender Participation, Nigeria, tourism.

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### **Introduction**

Information communication technologies (ICTs) have been transforming tourism globally. The ICT driven re-engineering has gradually generated a new paradigm-shift, altering the industry structure and developing a whole range of opportunities and threats. ICTs empower consumers to identify, customize and purchase tourism products and support the globalization of the industry by providing tools for developing, managing and distributing offerings worldwide. Increasingly ICTs play a critical role for the competitiveness of tourism organizations and destinations. ICTs are becoming a key determinant of organizational competitiveness. The enhancements in ICTs' capabilities, in combination with the decrease of the size of equipment and ICTs' costs, improved the reliability, compatibility and inter-connectivity of numerous terminals and applications. ICTs provide a powerful tool that can bring advantages in promoting and strengthening the tourism industry's strategy and operations (Buhalis 1998, 2003; O'Connor 1999; Sheldon 1997; Poon 1993).

Tourism is rapidly growing into one of the largest industries in the world. Its potential role as a veritable instrument for economic progress of any nation cannot be ignored (Undeme, 2010).

This research paper focus mainly on relevance of ICT to tourism/hospitality business in Nigeria. The researcher's conduct an investigative research among workers and entrepreneurs in tourism organizations, travel agents, hotels, restaurants, resorts, professionals in tourism, travel and hospitality industry within Nigeria, with the aid of questionnaire and data were obtained in three sections as in; general Questions, Questions on ICT Presence in Tourism/Hospitality



Industry, and questions on ICT Relevance to Tourism/Hospitality Businesses and Operations. Data obtained was filtered, tabulated, analyzed and the result was discussed.

### **Purpose of the Study**

The tourism industry in Nigeria is in growth stage and has a high potentiality to grow and equipped with the number of tourist destinations to attract domestic and international tourists. Due to availability of several tourism destinations, Nigeria has more growth potential. However, the satisfaction level of the tourist is not high in terms of ICT in Nigeria. Hence, there is a need to study the ICT relevance and its implementation to increase the profitability of Nigeria tourism industry.

### **Research Questions**

This study, specifically intends to answer the following research questions:

- To what extent do Nigerians use the ICTs tools such as Internet, social media, CCTV cameral for travel and tourism purposes;
- To measure the correlation of ICTs tools applications towards Tourisms sustainability in Nigeria;
- Do Nigerians use the online social network in travel and tourism promotion?
- To what extent are ICTs tools reliable sources for sharing travel and tourism experiences?
- To measure the level of adoption of ICTs tools in Tourism/hospitality industries in Nigeria.
- To measure the levels of gender participation in Tourism/hospitality industries and it implication to its sustainability.

### **Research Objectives**

- To identify the relevance of ICT in tourism/hospitality industry in Nigeria;
- To identify the gaps in level of usage and application of ICT in tourism/hospitality industry in Nigeria;
- To analyze the opinion of hospitality/tourism industry workers towards ICTs in tourism sustainability in Nigeria;
- To suggest measures to improve the usage and application of ICTs tools in Tourism/hospitality.

### **Scope of the Research**

The research study has been conducted in tourism organizations, travel agents, hotels, restaurants, resorts, professionals in tourism, travel and hospitality industry within Nigeria. The respondents are from the tourism/hospitality industries employees and entrepreneurs only.

### **Literature Review**



### **ICT as a Tool for Tourism Development**

(Ogbu, Idris, and Ijagbemi 2011) in their work ICT as avertible tool for tourism development in Nigeria discussed the importance of ICT in the development of tourism in Nigeria and they demonstrated various ways by which ICTs have been adapted for the course in tourism. They are of opinion that almost every tourism products (Booking of flights and hotel reservations can be done online through e-mail, telephone calls and other internet services thereby helping to reduce if not remove entirely the time wasting processes of the old system) can be sold online without the consumer necessarily visiting the place before making any choice since tourism products are not already manufactured goods. They concluded that adoption of ICT in tourism is necessary for for sustainable tourism

### **Revolutionizing Tourism via ICT**

Buhalis and O'Connor 2005 in their work titled Information Communication Technology Revolutionizing Tourism identify a number of key changes in Information Communication Technologies (ICT) that gradually revolutionize the tourism industry such as E-tourism and the Internet. They are of opinion that;

- Only those organizations that appreciate the opportunities which ICTs bring and manage their resources successfully will be able to enhance their innovation and competitiveness in the future.
- ICTs evolve constantly, providing new tools for tourism marketing and management. They support the interactivity between tourism enterprises and consumers and as a result they re-engineer the entire process of developing, managing and marketing tourism products and destinations.
- ICTs will provide the 'info-structure' for the entire industry and will take over all mechanistic aspects of tourism transactions.
- Innovative tourism enterprises will have the ability to divert resources and expertise to servicing consumers and provide higher value-added transactions.
- Agile strategies are required at both strategic and tactical management levels to ensure that the ICT raised opportunities and challenges are turned to the advantage of tourism organizations to enhance their innovation and competitiveness.

### **E-tourism in the Future**

ICTs have profound implications for tourism and e-tourism reflects the digitization of all processes and value chains in the tourism, travel, hospitality and catering industries. Tactically, e-tourism enables organizations to manage their operations and undertake e-commerce. Strategically, e-tourism revolutionizes business processes, the entire value chain as well as strategic relationships with stakeholders. E-tourism determines the competitiveness of organizations by taking advantage of intranets for reorganizing internal processes, extranets for developing transactions with trusted partners and the Internet for interacting with all stakeholders (Buhalis 2003).



### **ICT Role in STD Sustainable Tourism Development**

Alisha and Andrew (nd) in their investigative study into the uses and applications of information and communication technology for sustainable tourism development are of the opinion that use of ICT technologies can be a practical approach which destinations may use to mitigate some of tourism's negative impacts. In their work they present an array of ICT-based tools/applications for use by destination managers and discuss the opportunities in destination management for applying ICT to Sustainable Tourism Development.

### **Role of ICT in Tourism Industry**

Anand Bethapudi 2013 in his work Role of ICT in Tourism Industry, in this work he explains the gaps between tourism business and ICT influence and suggests measures to fill the gaps in tourism enterprises. He is of the opinion that;

- The Integration of ICT in the tourism industry is an essential for success of tourism enterprise. ICT facilitates an individual to access the tourism products information from anywhere any time.
- Tourism enterprises can also reach the targeted customers across the globe in a single click on the keypad after emergence of mobile computers, web technologies etc.
- The strategic goal is to integrate ICT with tourism that will enable more accessibility, visibility of information, availability of variety of products and satisfaction.
- It is essential that the current information and communications technologies should be updated, upgraded and seamless integration both internally and externally should be done to improve the tourism business operations.
- The integration of ICT in tourism would benefit both, service providers and customers bringing together other stakeholders as well, on a common platform.

### **Research Methodology**

#### **Data collection and Analysis**

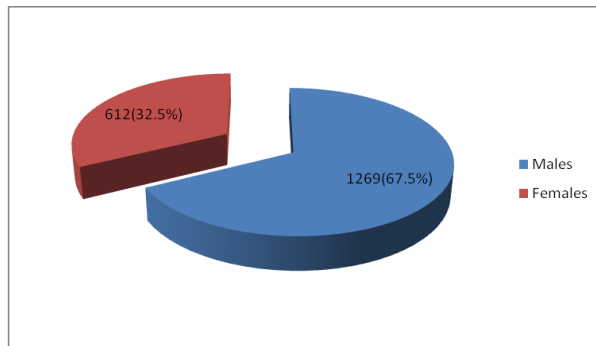
Survey is one of the most cost effective ways to obtain information from a large number of people; it gives better results - more specific, accurate, faster and most cost effective ways, [McQueen, R.A., and Knussen, C. 2002].

The survey in this research work covered tourism organizations, travel agents, hotels, sampled of the questionnaire used is in appendix 1. Two thousand and fifteen questionnaires were distributed (2015) of which only one thousand eight hundred and eighty-One (1881) were returned with complete responses to the questions, and one hundred and thirty four was rejected due to incomplete responses to the questions. The survey covered Tourism organizations, travel agents, and hotels within Lagos, Ogun, Oyo, Osun, Ekiti, Ondo and Kwara States Nigeria. Data obtained from the analyzable questionnaires are tabulated as in table 1, 2, and 3 below.



**Table 1a: Distribution of Respondents Based On Gender**

Sex	Frequency	Percentage
Male	1269	67.5
Female	612	32.5
<b>Total</b>	<b>1881</b>	<b>100</b>



**Figure 1a: Distribution of Respondents Based On Gender**

Employee gender distribution in business enterprises could vary from one firm to other and based on the nature of work done. The statistical table 1a shows that majority of the respondents are males, constituting 67.5% of the entire population sample while the remaining 612 respondents constituting 32.5% are females which aligned with the conclusion of (Baum, Amoah & Spivack, 1997; Li & Leung, 2001; Wong & Chung, 2003) on the subject that women still tend to take a back seat to men in jobs and do not actively participate in the hospitality industry for social, cultural and traditional reasons and again according to Peacock, 1995 male managers are more focused on achieving financial goals for the hotels. This finding supports the study of Magablih (2000), which reported that women play an insignificant role in the tourism and hotel industry. Similarly, Timo and Davidson's (2005) study on Australian MNCs reported that only 34.5 per cent of hotel industry managers were female, compared to 65.5 per cent male.

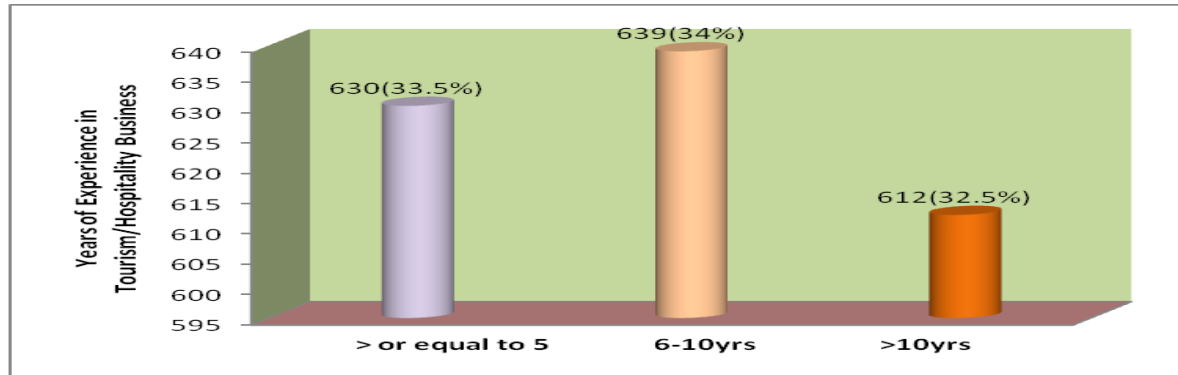
**Table 1b: Year of Experience in Tourism/Hospitality Business**

Years of experience	Frequency	Percentage
< or equal to 5	630	33.5
between 6 and 10	639	34.0
greater than 10	612	32.5
<b>Total</b>	<b>1881</b>	<b>100</b>



Table 1b seeks to extract the years of experience in tourism and or hospitality business. Thus, 630 respondents constituting 33.5% has their experience years to be less or equal to 5years, 639(34%) are in the category of those having between 6-10years working experiences while the remaining 612 respondents constituting 32.5% has 10years and more working experiences in tourism and or hospitality business.

**Figure 1a: Year of experience in Tourism/hospitality business**



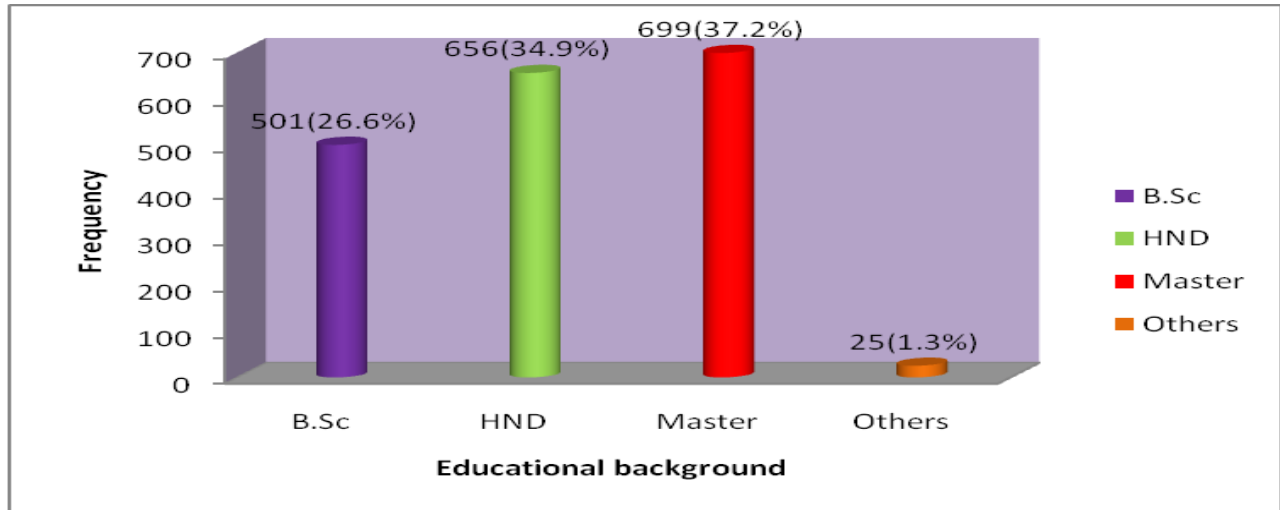
**Table 1c: Distribution of Respondents Based On Qualification**

Qualification	Frequency	Percentage
B.Sc	501	26.6
HND	656	34.9
Master	699	37.2
Others	25	1.3
<b>Total</b>	<b>1881</b>	<b>100</b>

The education system existing in an economy determines the nature of the human resource available for hire in business enterprises in terms of educational qualification and technical competencies. Government policies towards prevailing education system also determine the kind of human asset to be hired in various sectors. Table 1c depicts the academic qualification of the respondents. Thus, 501 respondents constituting 26.6% are B.Sc holders, 34.9% are HND holders, 37.2% are in the category of those who has second degrees (M.Sc) and the remaining 25 respondents constituting 1.3% has other qualifications.



**Figure 1c: Showing the Educational Qualification of the Respondents**



**Table 2: ICT presence in Tourism/Hospitality Industry**

Items	Yes	No
Do you have CCTV or any other ICT security tools in your firm :	991(52.7%)	890(47.3%)
Is your firm utilizing internet tool e.g. social medial for Business development purpose	731(38.9%)	1150(61.1%)
Does your organization own a personal website	613(32.6%)	1268(67.4%)
Did you have any ICT training before or after joining the tourism/hospitality industry	1081(57.5%)	800(42.5%)
Is their Local area network for back office in your hotel	883(46.9%)	998(53.1 %%)
Is their e-check out from rooms	631(33.5%)	1250(66.1%)
Is their internet facilities available in your hotel for customers	885(47%)	996(53%)
Can potential tourist do online booking in your firm	481(25.6%)	1400(74.4%)
Do you currently have tourist/hospitality software currently in used in your hotel/business operation	679(36.1%)	1202(63.9%)

Source field 2014

The statistical table 2 reveals the ICT presence in Tourism/Hospitality Industry. Thus most of the respondents with a frequency of 991 participants constituting 52% were of the view that they have CCTV or any other ICT security tools in their firms, while the remaining 47.3% were of contrary views, similarly the study wish to know if the respondents' firm utilizes internet tools such as social media for Business development, thus from the responses of the respondents



it was observed that majority of the respondents with a frequency of 1150 participants constituting 61.1% does not use this platform while the remaining 38.9% does. The table showed that majority of the respondents 67.4% doesn't have a personal website in their organization while the remaining 613 respondents constituting 32.6% does. And in a similar direction the researcher wishes to know if the respondents have any ICT training before or after joining the tourism hospitality industry, thus most of the respondents were in support of this assertion with a frequency of 1081 participants thereby constituting 57.5% while the remaining 42.5% obliged. Also the table seeks to know if the local area network for back office in the respondents' organization, thus 883 respondents constituting 46.9% were positive in their reaction to this proposition while the remaining 53.1% which constitute the larger population of the respondents were of different opinions. The statistical table portrays the minority group 33.5% of the respondents as having e-check out from rooms while the majority 66.1% of the participants does not. The researcher also wish to know if the internet facilities available in their hotel for customers, howbeit, from the responses of the respondents most of the participants 53% were of the views that customers were been restricted from accessing the internet facilities in their hotel while the remaining 47% made the internet facilities available to their customers. The study showed that most of the respondents were of the opinion that potential tourists were not allowed to do online booking in their firms while the remaining 481 participants constituting 25.6% allowed their potential tourist to do this. And in conclusion, the researcher wish to know if the respondents currently have tourist hospitality software's currently in used in their hotel business operation, thus majority of the respondents 63.9% negated this proposition while the remaining 679 participants constituting 36.1% were in support of it.

**Table 3: ICT relevance to tourism/Hospitality Business and Operations**

<b>Questions</b>	<b>Agree</b>	<b>Strongly Agree</b>	<b>Disagree</b>	<b>Strongly disagree</b>
Improved computer technology with website presence will increase hospitality and tourism related business, development and sustainability	791(42.1%)	883(46.9%)	179(9.5%)	28(1.5%)
Social media such Face-book, twitter, instagram etc. could replace other media as an effective medium of marketing and promotion in tourism and hospitality business.	637(33.9%)	897(47.7%)	103(5.5%)	244(13%)
Internet medium/tools occupies equal opportunity along with mass mediums such TV, newspaper/magazine, radio in hospitality and tourism promotion.	519(27.6%)	813(43.2%)	101(5.4%)	448(23.8%)



Marketing through internet medium will convey hospitality/tourism products to wider audience compare to mass medium.	771(41%)	881(46.8%)	109(5.8%)	120(6.4%)
E-financial operation such as internet banking, online payment, is a very useful and better alternative to physical cash handling in tourism/hospitality business.	107(5.7%)	523(27.8%)	615(32.7%)	636(33.8%)
Mobile communication will facilitate tourism destination and marketing in Nigeria.	617(32.8%)	779(41.4%)	181(9.6%)	304(16.2%)
A single tourism firm website for which tourism/hospitality industry distributes their products directly to customers is essential to enhance tourism development in Nigeria.	771(41%)	891(47.4%)	131(7%)	88(4.7%)
Virtual tours will contribute to considerable tourism development and marketing pull factor to tourists.	611(32.5%)	883(46.9%)	111(5.9%)	276(14.7%)
Do you feel that your core target group tourists will readily accept and absorb ICT trends?	101(5.4%)	121(6.4%)	889(47.3%)	770(40.9%)
Potential tourist will prefer online booking compare to manual and physical booking.	711(37.8%)	879(46.7%)	9(0.5%)	282(15%)
Installing CCTV or any other ICT security tools in your hospitality industry will enhance security of property and life and promote tourism sustainability.	611(32.5%)	781(41.5%)	102(5.4%)	387(20.6%)
Presence of tourism software management will enhance efficiency in tourism/hospitality business.	411(21.9%)	893(47.5%)	11(0.6%)	566(30.1%)

The statistical table 3 presents ICT relevance to tourism/Hospitality Business and Operations. The table showed that majority of the respondents agreed that improved computer technology with website presence will increase hospitality and tourism related business, development and sustainability with a frequency of 1674 respondents constituting 89%



meanwhile the remaining 11% respondents have different opinions. The statistical table 3 revealed that majority of the respondents with a frequency of 1534 participants constituting 81.6% was of the view that social media such Face-book, twitter, instagram etc. could replace other media as an effective medium of marketing and promotion in tourism and hospitality business while others were in different in their opinions. The study showed that 70.8% participants agreed that internet medium/tools occupy equal opportunity along with mass mediums such as TV, newspaper/magazine, radio in hospitality and tourism promotion meanwhile the remaining 29.2% respondents were of contrary views. In the same direction the study showed that majority of the respondents with a frequency of 1652 participants constituting 87.8% agreed that Marketing through internet medium will convey hospitality/tourism products to wider audience compare to mass medium. More so, the study showed that most of the participants with a frequency of 1251 participants constituting 33.5% disagreed that E-financial operation such as internet banking, online payment is a very useful and better alternative to physical cash handling in tourism/hospitality business. The table revealed that 1396 participants constituting 74.2% said mobile banking will facilitate tourism destination and marketing in Nigeria. The statistical table 3 portrayed a large number of the respondents with a percentage of 88.4% as people having the view that a single tourism firm website for which tourism hospitality industry distributes their products directly to consumers is essential to enhance tourism development in Nigeria, while the remaining 11.7% declined. The table shows that 79.4% of the respondents believe that virtual tours will contribute to considerable tourism development and marketing pull factor to tourists. And in the same vein the above statistical table showed that majority of the respondents 88.2% obliged to the fact their core target group tourists will readily accept and absorb ICT trends while the remaining 11.8% concurred to this. The table portrayed most of the participants 84.5% as having the belief that potential tourist will prefer online booking compare to manual and physical booking. The study also showed that 74% of the respondents were of the view that installing CCTV or any other ICT security tools in their hospitality industry will enhance security of property and life and promote tourism substantiality. And in conclusion, the study showed that 69.4% of the total respondents were of the belief that presence of tourism software's management will enhance efficiency in tourism and or hospitality business.

### **Findings**

The following findings were discovered through recycling of waste discarded cow horn to artistic relevance:

- ❖ Installing CCTV or any other ICT security tools in hospitality industry will enhance security of life and property, thereby, promote tourism sustainability.
- ❖ Information Communication Technology (ICT) has little or no effect on tourism and or hospitality industry in Nigeria.



- ❖ Tourism and or hospitality industry in Nigeria is seldom in the usage of modern technology such as e-check out in the hotel rooms, on-line booking, personal website and social media for Business development purpose etc.
- ❖ Tourist/hospitality software's in hotel/business operation has little or no impact on tourists/hospitality industry in Nigeria.
- ❖ The study however revealed that tourist/hospitality industry in Nigeria engages in a continual ICT training from time to time.
- ❖ Awareness of officials in tourism/hospitality industry on E-financial operation such as internet banking, on-line payment which serves as a better alternative to physical cash handling in tourism/hospitality business is low.
- ❖ Marketing through internet medium will convey hospitality/tourism products to wider audience compare to mass medium.
- ❖ A single tourism firm website for which tourism/hospitality industry distributes their products directly to customers is essential to enhance tourism development in Nigeria.
- ❖ Improved computer technology with website presence will increase hospitality and tourism related business, development and sustainability

### **Recommendation**

It is hereby recommended that tourism industries in developing countries should hook up to the current trends in information technology and subsequently endeavor to keep up with relevant developments in information and communication technology. At the same time, the policy maker should endeavor to make policies and laws that will enhance tourism development in our dear country, Nigeria.

Worldwide, tourism is a particularly important sector for women, who make up to 46% of the tourism labor force. This percentage is higher than in the workforce in general, where 34 - 40% are women. The numbers of women working in tourism vary greatly amongst countries - from 2% up to over 80%. In countries in which tourism is a more mature industry, women's participation is around 50% (Maureen and Lorena 2000). Refer to table 1a we have 67.5% male and 32.5% female. This implied that tourism is not yet a mature industry in Nigeria, consequent to that we recommended that further research should carry on to investigate the sharp dichotomy in the gender participation in tourism industry in Nigeria.

### **Conclusion**

The influence of information and communication Technologies (ICTs) which is a product of marriage between information and technology has also touched the field of tourism. It is playing vital roles in the development of tourism. This work has demonstrated that tourism sustainability is prone to application of ICT in tourism businesses operation. ICTs application into tourism cannot be ignored if this part of the globe is to be included and meet up with emerging challenges and transformation in tourism and hospitality industry



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