

**Research Article***Copyright © All rights are reserved by Elizabeth Abiola Oke*

Ict Usage and Tourism Destination Patronage in Nigeria

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Due to the level of innovation expansion in the world today, it is expedient that organizations align themselves to these expansions to enhance their operations and relevance in the face of competition. In line with this, tourism organizations and Destination Management Organization has identified the essence of Information and Communication Technology, hence, it's utilization in tourism industry today. As a result of the level of development and, acceptance of the Information and Communication Technology, most tourism organizations and destinations now adopts its usage in their operations. Its adoption is seen to aid increase in the level of patronization. This is because potential customers are able to access good and quality information before making a purchase of the tourism services.

This study, therefore, was carried out to research into the impact of ICT usage on tourism promotion and to understand the perspective of people on its usage and usefulness. Hence, having reviewed literature, an online questionnaire was designed using a survey method. In analyzing the data, both inferential and descriptive analysis were used with the aid of Statistical Package for Social Sciences (SPSS). The findings, therefore, indicated a significant relationship exists between the usage of ICT devices and tourism promotion in terms of patronization.

Keywords: ICT; Theory of Reasoned Action; Tourism; Tourism Promotion; Tourism; Patronage; Tourism Industry**Introduction**

Information and Communication Technology (ICT) is an umbrella term for any communication device or application such as: radio, television, cellular phones, computers and network hardware and software, satellite systems and so on, and the various services and applications associated with them, such as videoconferencing and distance learning (Rouse, 2005). In the words of Olifer & Olifer [1], Information communication technology (ICT) involves the use of computer hardware, software and telecommunication devices to store, manipulate, convert, protect, send and receive data.

ICT offers new opportunities for businesses, mainly in four (4) different aspects: gaining a competitive advantage, improving productivity, developing new businesses and facilitating new ways of management. The main effect that ICTs have on businesses is

to keep them afloat, [2-5]. The most important advantage of ICT is both availability of information to the increasing number of people and reduced production cost due to increased efficiency [6]. An important variable of ICT is innovation because, ICT affects the change of internal strategies, rendering them more flexible to changes, helping them to adopt to the new needs of the market, [7]. The adoption of ICT is considered to be a means to enable businesses to compete on a global scale, with improved efficiency, and closer customer and supplier relationships (Chong et al, 2001).

According to Januszewska, Jaremen, & Nawrocka [8], the unabated advances and innovation of ICT has been observed to have impact since the early 1960s on tourism organizations and stakeholders, and there has been continuous development in terms of new ICT solutions. Earlier, in 1998, Buhalis identified three main

waves of technological developments in tourism enterprises which are Computer Reservations Systems (CRS), Global Distribution Systems (GDS) and the internet. Most of the research carried out in the area of ICT and tourism has basically been focused on the impact of ICT in travel distribution, and search of information on tourist destinations, thereby purchasing the tourism services available at such destinations according to Buhalis and Main [2] cited by Januszewska, Jaremen, & Nawrocka [8]. In the views of Petti & Passiante [9], ICT usage is an opportunity for tourism industry even at the local level for growth and strength, as well as the development of the economics [1] of destinations totally.

Buhalis [2] explains the impact of ICT in tourism industry as innovation that has been changing the global tourism industry rapidly. The implications of the internet and other growing interactive multimedia platforms for tourism promotion are far reaching and they alter the structure of the industry, (Buhalis, 2004). ICTs have transformed tourism globally by offering a large range of new products for development making the tourism industry an economical key system globally. The tourism industry gains more opportunities in the market from the use of the internet, [10]. According to the World Tourism Organization cited by Bethapudi, [11], international tourist arrivals around the world grew by 4.6% totally 943 million from 940 million in 2010 and every year, the industry can grow at a rate of 5% in the first four months in 2012 based on the growth rate experienced in 2010 [12]. Tourism today has become one of the engines of growth for the economy with a contribution of 3.20% to national Gross Domestic Product (GDP) and providing 2.7% of total employment in 2013, thereby contributing to GDP by an envisaged rise by 1.9% in 2014 and rise by 6.1% annually from 2014 to 2024 [13].

According to Bethapudi [11], an essential of success for tourism enterprises is the integration of ICT in the tourism industry as this empowers the consumers in identifying, customizing and purchasing tourism products which supports tourism industry globalization by providing tools to develop, manage and distribute these products worldwide. Successful usage of the internet by travel agents/ tourism organizations as a channel of distribution enhances easier access to the global markets by creating a possibility to penetrate new market segments, global alliances encouragements to enrich tourist offer, advertising and cross-organizational booking systems [14]. According to Mamaghani, [15], these channels of distribution which are categorized as new cannot be seen as separate from the operating segments. Introduction of new technologies such as, mobile payment application, short information service and Global Positioning System (GPS) from time to time is quite necessary.

ICT is seen as a powerful tool that is capable of bringing advantages in terms of promoting and strengthening the strategy and operation of the tourism industry [11]. These applications could make customers have access to information through terminal mobile phone whenever and wherever they may be. In the end, the application of ICT will keep tourism electronic services in a better condition than it is now, [16]. The application of ICT in the tourism industry makes personalized travel possible, it enhances easy communication between tourism organizations and their customers through their official websites and mobile applications,

and using this method, the traditional method- advertising via television, radio, paper brochure, person-to-person sales, etc. will fade in the tourism sector [17].

Considering the rarity of study to the best of the researcher's knowledge, this study seeks to establish the effect of ICT usage on tourism destination patronage. The study also seeks to establish the most significant construct in determining tourism destination patronage.

Review of Literature

ICT and tourism industry

According to [18], ICT is an indispensable part of the contemporary world that culture and society have to be adjusted to meet the challenges of the knowledge age. Therefore, tourism industry is not an exception as to the usage of ICT. ICT is a major enhancer of tourism businesses, both on the part of the organization and the customers.

The communication and marketing medium created by ICT such as websites of tourism players, also that of the tourism industry, mobile apps of the tourism organizations and some review sites are means by which tourism organizations are able to promote their products and hence, increase the level of patronage. Of the various medium of communication, review sites can either promote or demote an organization or a destination depending on the reviews of people on such websites. Hence, the information gathered using any of the communication and marketing medium is of utmost importance.

According to Apulu & Latham [19], to organizations adopting the usage of ICT, it helps to give their company a competitive edge over other organizations not making use of it, and also enhance efficiency in the delivery of services. Hence, the adoption of ICT in the travel industry. The diagram above shows the areas in which ICT is being utilized in the travel industry. According to Obong [20], Nigeria is the fastest growing ICT sector in Africa with major telecommunication companies trooping into the sector. With the availability of these communication companies, there is the enhancement of communication and information distribution. This, therefore, has enhanced the activities of tourism organizations.

Tourism patronage

The level of promotion of a product will go a long way in influencing its patronization. In the case of tourism, since the product of tourism is more of service than of actual product, which can only be experienced, the promotion of destinations has to be effective and efficient. One of the means used for the promotion of tourism in this modern day is the adoption of ICT. According to Januszewska, et al., [8], there are benefits of the application of ICT to tourism industry based on different authors. These benefits are of different perspectives but basically, of the benefits highlighted, two are seen to help in the level of patronage of tourism product. They are

1. Gaining competitive advantage due to: access to reliable and accurate information or to large size and global market, the larger market share, building closer relationships with

suppliers and customers, maintaining price leadership in the market or/and the differentiating and improving their products [3]

2. Enables promotion and distribution of tourist products directly to consumers, reduce dependency on intermediaries (disintermediation) and sales commission and, direct and nearly free of charge access to information [2]

3. Sales analysis aimed at monitoring the increasingly frequent changes in demand

ICT usage and nigeria's tourism sector

According to the findings of Abdulhamid, Nicholas, & Imonih [21] while researching into the usage of ICT in developing countries in tourism, the incidence of ICT usage has a significantly positive relationship with hotel promotion, availability of ICT and its integration have significant influence on tourism and operational productivity and, ICT usage by Hotels helps to handle and deal with customers' complaints. Hence it was deduced from their study that ICT has a significant positive relationship with customer satisfaction and operational productivity.

In Africa, Nigeria is the biggest economy with a GDP of \$487bn in 2015 according to the World Bank which enables the country to assume the mantle of the continent's largest economy in 2013

[22]. According to (Oxford Business Group, 2012) cited in Ariyo [23], there is an increase accounted in the number of internet users from 8 million users to 48 million users between 2007 and 2012. This shows the level of exposure of the people towards the usage of internet in Nigeria.

Theory of reasoned action (TRA) By ajzen and fishbein (1980)

This study is hinged on the Technology Acceptance Model. According to Moore & Benbasat [24], researchers have attempted to identify more generic ways to define beliefs citing examples of Davis [25] who introduced a variant of TRA called the Technology Acceptance Model (TAM) identifying two major constructs—perceived ease of use and perceived usefulness of the system. For the purpose of this study, this theory will be viewed from the approach of Davis [25]'s Technology Acceptance Model.

This model helps to identify the acceptance rate of information technology in the world. From the two perspectives of this model, it can be seen that ease of use of any technology and its usefulness is paramount to its successful acceptance by any industry in the world. In the case of Tourism, it is seen based on research that Technology aids the promotion of tourism around the world due to the easy access to information. Below is the model's diagram (Figure 1).

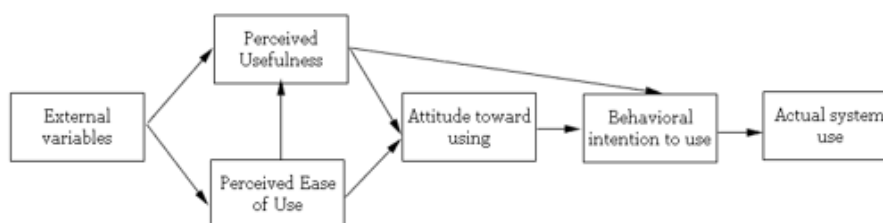


Figure 1: Technology Acceptance Model from Davis, Bagozzi et Warshaw (1989).

Perceived ease of use in the perspective of this study is looked at in identifying the most used Information and Communication Technology which was limited to just three and these are websites, social media, and mobile application. Also, possible challenges to the usage of these ICT devices were identified from the participants. Perceived usefulness of these ICT devices were also tested by looking at the most reliable of the devices to the participants, the

usefulness of the information obtained via the usage of ICT devices.

Research hypotheses

H01: ICT usage does not have significant effect on tourism Sites

H02: ICT usage does not have significant effect on level of domestic tourism patronage (Figure 2).

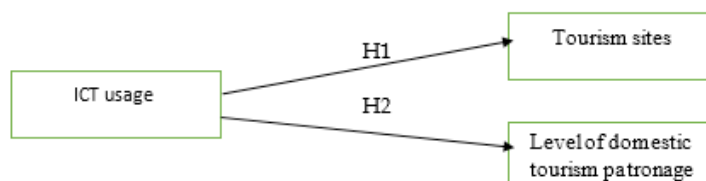


Figure 2:

Methodology

Descriptive survey research was employed in this study. According to World Bank (2019), there are about 1,889,000 tourists in Nigeria. Using the raosoft sampling estimator at 5% margin of error and 99% confidence interval, the aggregate sample size for the study is 643 tourists. The study was conducted at the osun osogbo festival which is one of the biggest tourists attractions in Nigeria. A seven Likert scale structured questionnaire was administered to the correspondents.

Validity and reliability of instrument

Face and content validity of the research instrument was adopted. The questionnaire was subjected to scrutiny by the researchers in order to ensure face validity. The content validity was achieved by adapting the instrument of Fedeli (2017) who has related objective. The construct validity was achieved by subjecting the measurements of items to confirmatory factor analysis. A pilot test was conducted to ascertain the clarity and internal consistency of the research instrument. The test-retest reliability was used in verifying the internal consistency of the research instrument. The Cronbach's Alpha shows $\alpha = 0.766, 0.883, 0.751$ and 0.719 ICT usage, tourist site, level of domestic tourism patronage and level of accessibility to tourist destination respectively.

Model Specification

$$TDP = f(ICTUSA) \quad (1)$$

$$TDP = \beta_0 + \beta_1(ICTUSA) + \mu \quad (2)$$

TDP= (TS and DTP

$$TS = \beta_0 + \beta_1(ICTUSA) + \mu \quad (3)$$

$$DTP = \beta_0 + \beta_1(ICTUSA) + \mu \quad (4)$$

Where

TDP= Tourist Destination Patronage

TS= Tourist Site

DTP= Level of Domestic Tourism Patronage

ICTUSA= ICT usage

β_0 = Intercept

β_1 = Coefficient

μ = Error Term

Apriori Expectation

Hinged on the study of Boluwaji [26] it is expected that there will be appositive relationship between ICT usage and the dimensions of tourism destination patronage. That is, $\beta_1 < 0$.

Measurement of variables

In measuring ICT usage, five questionnaire items were used. The constructs were adapted from the international telecommunication union indicators (ITU, 2019). The dimensions of tourism destination patronage were adapted from the study of Boluwaji [26]. The measures are tourist site and level of domestic tourism patronage. Both dimensions were measured using three items each.

Initial measurement modification and model fit

The result here shows the refinement and modification of the constructs. The confirmatory factor analysis was done to achieve the overall fit of measurements items in the study. ICT usage was measured by five items. All the constructs were subjected to confirmatory factor analysis. The observed measures show significant enrichment to the latent variables in the overall model fit. The measures exhibited acceptable loading. This suggests that the five items are valid and reliable in measuring the ICT usage construct (Table 1).

The Tourism site variable was measured using three items. The findings in the inter item correlation shows that all items in the reliability scale exhibited acceptable loadings. The loadings reveals that all items are significant and as such there is no need for modification of the items (Table 2).

Level of domestic tourism patronage in the evaluation of tourism domestic patronage was measured with three items. The confirmatory factor analysis result reveals that the three items are good measures of the level of domestic patronage construct (Table 3 & 4).

Table 1

ICT usage Items	Items Wordings	Standardized Loading		
1	Availability of fixed internet broadband in tourist location	0.75		
2	Access to television, radio, computer and telephone	0.72		
3	There is no regulation on the use of ICT devices	0.88		
4	Availability of Information on the tourist destination on the web	0.77		
5	Affordability of ICT resources	0.83		
Achieved Fit Indices				
CMIN/DF	RMSEA	IFI	TLI	CFI
6.318	0.101	0.988	0.919	0.962

Table 2

Tourism Site Items	Items Wordings	Standardized Loading		
1	The accessibility conditions of tourist site	0.83		
2	Infrastructural facilities at the site.	0.69		
3	Awareness of the tourist destinations.	0.72		
Achieved Fit Indices				
CMIN/DF	RMSEA	IFI	TLI	CFI
4.663	0	0.911	0.953	.121

Table 3

Domestic Tourism Patronage Items	Items Wordings	Standardized Loading		
1	There is high patronage of the tourist centre	0.74		
2	Attractiveness of the tourist Centre	0.77		
3	High presence of Foreigners	0.73		
Achieved Fit Indices				
CMIN/DF	RMSEA	IFI	TLI	CFI
4.783	0.019	0.067	0.919	1

Table 4

Tourism Site					
Variable	B	SE	β	t-stat	p
ICT usage	0.369	0.015	0.372	24.8	0
R ²		0.138			
F		66.032** (p=0.000)			
Collinearity Statistics		1.076			

H01: ICT usage does not have significant effect on Tourism Sites

The result shows the effect of ICT usage on tourist site. The result reveals 13.8% ($R^2 = 0.138$, $p=0.000$) variation in tourism site is brought about by ICT usage. This indicates 86.2% variation in tourist site is determined by other factors. The unstandardized beta (B) reveals that for every unit increase in ICT usage, tourist site awareness increases by 0.369 units. The standardized Beta (β) reveals that there is an upward movement relationship between ICT usage and tourist site awareness. It shows the direction of the

relationship to be weak at 0.372. The t-statistics value ($t= 24.8$, $p=0.000$) reveals that ICT usage is a significant predictor of tourist site awareness. The F-statistics result shows reveals the value $F=66.0321^{**}$, $p=0.000$. This shows that ICT usage has significant effect on tourist site. The result corroborates the findings of Boluwaji (2017), established that ICT could be a perceived factor affecting the patronage of tourism.

Therefore, the null hypothesis (H_0) is rejected, and the alternative accepted that there is significant effect ICT usage on tourist site in Nigeria (Table 5).

Table 5

Level of Domestic Tourism Patronage					
Variable	B	SE	β	t-stat	p
ICT usage	0.677	0.032	0.679	21.219	0
R ²		0.461			
F		48.772** (p=0.000)			
Collinearity Statistics		1.193			

H02: ICT usage does not have significant effect on Level of Domestic Tourism Patronage

The result shows the effect of ICT usage on level of domestic tourism patronage. The result reveals 46.1% ($R^2 = 0.461$, $p=0.000$) variation in level of domestic tourism patronage is brought about by ICT usage. This indicates that 53.9% variation in level of domestic tourism patronage is determined by other factors. The unstandardized beta (B) reveals that for every unit increase in ICT usage, level of domestic tourism patronage increases by 0.677 units. The standardized Beta (β) reveals that there is an upward movement relationship between ICT usage and level of domestic tourism patronage. It shows the direction of the relationship to be weak at 0.679. The t-statistics value ($t= 21.219$, $p=0.000$) reveals that ICT usage is a significant predictor of level of domestic tourism patronage. The F-statistics result shows reveals the value $F=48.772^{**}$, $p=0.000$. This shows that ICT usage has significant effect on level of domestic tourism patronage. The result corroborates the findings of Boluwaji [26], established that ICT could be a perceived

factor affecting the patronage of tourism.

Therefore, the null hypothesis (H_0) is rejected, and the alternative accepted that there is a significant effect of ICT usage on level of domestic tourism patronage in Nigeria.

Path analysis

Figure 1 reveals the effect of ICT usage on the combined measures of tourism destination patronage. The path coefficients reveals that there is a weak relationship between ICT usage and the combined dimensions of tourism destination patronage. The standardized Beta ($\beta = -0.207$) reveals that there is an inverse movement relationship between ICT usage and the combined measures of tourism destination patronage. The path diagram also reveals that the 4.3% variation in the combined measures tourism destination patronage ($R^2=0.043$) is brought about by ICT usage. Tourism Site is the most significant variable ($\beta = 0.955$) determine tourism destination patronage (Figure 3).

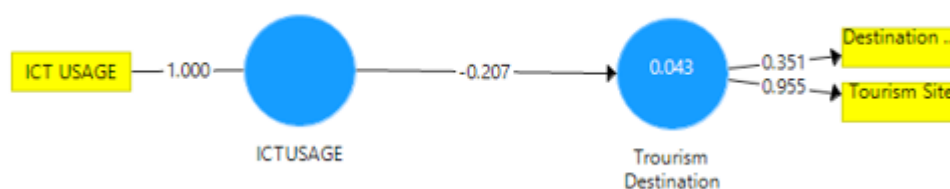


Figure 3:

Discussion

Just like any other business organization, tourism industry also enjoys great benefits from ICT. Basically, the business of tourism cannot be easily operated without the usage of ICT, even now, due to the level of innovation taking place in the world, the usage of ICT is now beyond just passing information, it has now given opportunity to businesses to be able to reach a lot of people with their product information. Not only that, the customers are now able to give feedback to the organization and also discuss about the product.

This study examined the effect of the usage of ICT devices tourism destination and patronage. The results revealed that ICT usage has significant effect on tourist site and level of domestic tourism patronage. The findings from this study corroborates the assertions of Boluwaji [26] who established that ICT usage could have effect on tourism destination. From the results obtained, the null hypotheses were rejected. Hence, it can be inferred that the availability of ICT devices and it's usage by the people is pivotal to tourism destination patronage [26-34].

Conclusion and Recommendation

In line with submissions by Connor (2009), information is the life blood of any organization; it is needed in every facet of life,

especially in this contemporary world where ICT has ensured that information is at the fingertips. Hence, for any destination to be promoted, more efforts have to be put into ensuring the availability of information at the right time to the clients. This can help further promote tourism and enhance increased patronage of a destination. Measures should be put in place to limit the problems or challenges encountered by the tourists. Most times, people are skeptical on imputing some basic details on the websites of service providers in Nigeria, this is because they are not certain of the level of security available on these websites, hence, better security measures should be put in place to ensure protection of vital information provided by clients on the online platforms.

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Conflict of Interest

No conflict of interest.

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