



# **ADVANCES IN MANAGERIAL SCIENCES**

A JOURNAL OF FACULTY OF MANAGEMENT SCIENCES, UNIVERSITY OF CALABAR

*Copyright* © Advances in Managerial Sciences, 2023

**A JOURNAL OF FACULTY OF MANAGEMENT SCIENCES,  
UNIVERSITY OF CALABAR**

**Preview Edition**

**Published by:**



University of Calabar Press

Calabar – Nigeria.

Email: [unicalpress@unical.edu.ng](mailto:unicalpress@unical.edu.ng)

[mathiassunday440@gmail.com](mailto:mathiassunday440@gmail.com)

Website: [www.unicalpress.unical.edu.ng](http://www.unicalpress.unical.edu.ng)

Telephone: +234 8061587467, +234 8062556950

**All Rights Reserved:**

No part of this Journal may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the copyright owner.

## Editorial Board

### Editor in Chiefs

**Prof. Joe Duke II**

**Professor B. B. Esu**

### Associate Editors

**Prof. Ahmed E-Masy**

Coventry University, UK

### Assist. Editor

**Prof. Nkanikpo Ibok Ibok**

**Prof. Collins G. Ntun**

University of Southampton, UK

### Web Manager

**Dr. John Otalor**

**Dr. Fred Bassey**

**Mr. Eyo Itan Eyo**

**Mr. Fali Ibrahim**

**Prof. Lynn Marn**

Anglia Ruskin University,  
East Road Cambridge, UK

### Business Manager

**Dr. Kechi Kankpang**

**Ayben Koy**

Istanbul Ticaret University, Turkey

### Assist. Business Manager

**Dr. Joe Anyadighibe**

Prof. S. I. Ocheni

Prof. P. A. Oti

Prof. B.E Bassey

Prof. A.I. Offiong

Prof. C. M. Ojong

Prof. B. J. Inyang

Prof. E. I. Akpan

Prof. N. F. Awara

Prof. E. T. Ebitu

Dr. A. I. Asuquo

Dr. (Mrs) Obal Usang

Dr. Hodo Riman

Dr. (Mrs) R. O. Enuoh

Dr. Alfred Edema

Dr. E. E. Essien

Dr. (Mrs) Glory S. Etim

Dr. Michael Agba

Dr. Uno Agbor

### Editor

## Table of Contents

Strategic Time Management in Manufacturing Activities and Organizational Productivity	-	-	-	-	-	-	-	1
<b>Alfred J. M. Edema, John I. Otalor</b>								
Tourists Awareness of Service Robots in the Hospitality Industry in Nigeria	-	-	-	-	-	-	-	6
<b>Bassey, Frederick Offiong, Mbaze-Ebock Vivian Arrey &amp; Prof. Bassey. B Esu</b>								
Information Communication Technology (ICT) Adoption and Medical Tourism Destination Choice in Calabar, Cross River State, Nigeria	-	-	-	-	-	-	-	17
<b>Orji, Nina Valenne, Prof. Nsobiari Festus Awara, Akpan, Joy Samuel</b>								
Enhancing Hotel Management through Accounting Practices: Does Management Commitment Matter?	-	-	-	-	-	-	-	31
<b>Obal Usang Edet Usang, Patrick Oloko Agu, Theresa Ebaye</b>								
Effect of Fair Value Accounting on Earnings Predictability of Listed Commercial Banks in Nigeria-	-	-	-	-	-	-	-	41
<b>Alphonsus Kechi Kankpang, Joseph Enyam Nkiri, Joseph Enyam Nkiri, Alphonsus Omang Bekom</b>								
Collaborative Governance and Wicked Problems: A Review of the Literature	-	-	-	-	-	-	-	53
<b>John I. Otalor &amp; Dr. Alfred J M Edema</b>								
Merger and Acquisitions and Organisational Performance of Commercial Banks in Nigeria	-	-	-	-	-	-	-	59
<b>Usoro, Abosede Abimbola, Effiong Charles, Lawal Suleiman Gbenga &amp; Mboto Helen Walter, Tapang Arzizeh Tiesieh</b>								
Social -Emotional Oriented Communication and Workers' Productivity in Processing Firms.	-	-	-	-	-	-	-	82
<b>Dr. (Mrs) A. A. Usoro; Okorie Ogechi Lilian &amp; Dr Nnenna Ukandu</b>								

## INFORMATION COMMUNICATION TECHNOLOGY (ICT) ADOPTION AND MEDICAL TOURISM DESTINATION CHOICE IN CALABAR, CROSS RIVER STATE, NIGERIA

By

<sup>1</sup>**Orji, Nina Valentine**  
princessninajohn@gmail.com

<sup>2</sup>**Professor Nsobiari Festus Awara**  
Professor of Services Marketing  
[nsoawara@yahoo.com](mailto:nsoawara@yahoo.com)

<sup>3</sup>**Akpan, Joy Samuel**  
[joysamakpan@gmail.com](mailto:joysamakpan@gmail.com)

<sup>1,2,3</sup> Department of Marketing  
University of Calabar  
Calabar

### Abstract

*Medical tourism connotes the activities of tourists travelling outside their original place of abode to other destinations with the intention of receiving health and/or medical services. And, the choice of a particular tourism destination could be facilitated by information technology (ICT). Many residents in Calabar engage in medical tourism due to lack of adequate medical facilities and experts in the country to cater for their medical and health needs. This paper investigated the effect of information communication technology (ICT) on the destination choice of medical tourist residents in Calabar, Cross River State, Nigeria with a specific focus on social media and website adoptions by medical tourism organizations. The population of the study is unknown because there is no existing record of medical tourists in Cross River State. A judgemental sample of 100 medical tourists was drawn, while the opinion survey technique was employed to gather data for the study. Data collected were analyzed using Multiple Regression Analysis technique. Results of the findings revealed that both ICT tools (social media and website) significantly and positively affect the destination choice of medical tourists. Consequently, we recommended that medical institutions in Calabar should own interactive social media pages; and the website of health service agencies should be attractive, informative and interactive in order to appeal to medical tourists. And, medical institutions should encourage collaboration with foreign embassies in Nigeria in order to reach their target market (medical tourists).*

**Keywords:** Information communication technology, social media, websites, medical tourism.

### Introduction

Computer based interaction is expressly used in describing technological innovation and for explicitly advance communication. Computer based interactions are primarily focused on modern innovation that tilt towards communications, such as cellular hand set, the internet and wireless interconnection or network, just to mention a few (Regenesys, 2012). More so, ICT advances, implements and backs the technology-based services that enrich the essential purposes of any business like medical tourisms.

Medical tourism connotes the activities of tourists to travel outside the local abode to another country to obtain health services. Goodrich and Goodrich (1987) posit that, medical

tourism of a country thrives to appeal tourists by consciously stimulating own healthcare services and equipment, additionally to fixated tourists' or visitors' expectations. Laws (1996) defined medical tourism to be leisure travels or movements from one's original place of abode to other destinations with the intent of aim of enhancing one's wellness. This entails receiving either local or another country's medical services, or better still, other forms of visit one would be undertaken just for the prime objective to address any health related issues. Furthermore, Connell (2006) also describes medical visit or tourism to be an aggregate of culture where a sick or ill person travels to another country outside Nigeria to attain health-care services for example; any bodily related illness ( medical, dental and surgical cares) and this would also give opportunity to see the attractions of the country's destination.

The advent of internet has been of great benefit to the medical tourism sector. This is so because the best way to contact and attract potential medical tourists is through websites, social media and blogs as postulated by (Katsoni & Kavoura, 2013). It is worthy to note that conscious effort made in marketing of medical tourism has resulted in the global health marketing or service, while advertisement towards medical tourism marketing undeniably stresses technological equipment or facilities, reliability of product quality, as well as international trainings (Connell, 2006). The amalgamation of messages and communication innovations in creating medical tourism enterprises are fundamental keys to accomplishment. The inculcation of ICT in medical tourism service enterprises affect the entire marketing structure of sector and not only predominantly on the give and take premise but as well as medical tourism value chain or intermediary (Lunt, Mannion, & Exworthy, 2012). In the same vein, healthcare systems in most advanced nations (India, Thailand, Mexico, etc), where recent equipment and facilities (technologies) are speedily improved, in order to upgrade to a well-recognized world's medical tourism destinations. These countries are advanced and have introduced technologies that engage in western medical protocol emphasising on lower cost and prompt care and attention to the needy and also ensured that channels towards their technological innovation advancement are promoted and sustained (Connell, 2006).

The foregoing premise motivated the examination of the relationship between ICT and destination choice of medical tourists resident in Calabar.

### **Statement of problem**

Over the years, there has been frequent movement of people travelling to many foreign countries to receive medical care, that are either unavailable or requires long waiting times in the tourists' home country. Those who have engaged in medical tourism are of the opinion that medical treatments abroad are readily available with superior service quality. These testimonials can be obtained from the internet as satisfied medical tourists share photos of the destination, experiences and other appealing information on social media platforms, hence, medical tourism destinations also advertise their service offerings on websites.

Undoubtedly, there are medical tourists in Calabar, but the level of information on examining the relationship between ICT and the destination choice of medical tourist residents in Calabar is very scanty. There is yet no empirical study carried out in this context, thus this study was undertaken bring to the fore the relationship between ICT adoption and medical tourism destination choice in Calabar.

### **Objectives of the study**

The broad objective of the study is to examine the relationship between information communication technology (ICT) and the destination choice of medical tourists resident in Calabar. Specifically, the study seeks to:

1. investigate the effect of social media adoption on destination choice of medical tourists resident in Calabar.
2. determine the effect of website adoption on destination choice of medical tourists resident in Calabar.

### **Research questions**

1. What is the significant effect of social media adoption on destination choice of medical tourists resident in Calabar?
2. What is the effect of website adoption on destination choice of medical tourists resident in Calabar?

### **Research hypotheses**

- H<sub>01</sub>: Social media adoption has no significant effect on destination choice of medical tourists resident in Calabar.
- H<sub>02</sub>: Website adoption has no significant effect on destination choice of medical tourists resident in Calabar.

### **Literature review**

#### **The concept of medical tourism**

At the 9th National Health Conference held at Rostock/Germany in 2013, medical tourism was clearly defined as an aspect of tourism industry contributing to maintaining and recovering the well-being of an individual in general, using approved medical services. Medical tourism is not only the pathway to accelerate health, but also one of the economic activities entailing services marketing, which is representing a merger of not less than two viable economic environments which are tourism and medicine (Bookman & Bookman, 2007).

According to tourism segment classification issued by World Tourism Organization in 1995, depending on the journey, one of the major aspects or groups is for “medical treatment/health”. One of the integral portions of health tourism is called medical travel because it embraces the practice of travelling to different far and near countries just for the purpose of medical vacation (Ile & Tigu, 2017).

According to Smith and Puczko (2014) “medical tourism is termed as a trip outside person’s place of residence for the purpose of receiving a medical treatment, investigation or therapy. In the same vein the tourists make use of destination’s infrastructure, attractions and facilities for their well - being. There are several meanings of medical tourism, but most indicate that medical tourism is a form of health tourism, together with wellness tourism (Fetcherin & Stephano, 2016). The difference between the two forms of health tourism is in the fact that medical tourism implies existence of a medical distress that needs to be investigated, diagnosed and treated by medical procedures, while wellness tourism is a practical one, which implies preventing or maintaining health using alternative procedures, without involving expert clinics, medical personnel or clinical procedures”.

#### **Medical tourism situation in Nigeria**

Over 100 billion dollars has been estimated by the global medical tourism industry and anticipated to grow at an annual rate of between 20% and 30% (Leggat, 2015). Nigerians’ medical tourism expenditures on medical tourism can be estimated to be between one and 20 billion US dollars annually, these are undoubtedly major contributors to this industry (Elebeke, 2014). Over the years, Nigerians have been spending huge amount for treatment outside the shores of the nation. This however spells doom for the health sector and the



nation's economy at large, because over a billion naira is sucked out every year by medical tourists to India, Germany, America, China, Dubai, etc. (Ismail, 2017)

Various treatments such as cardiac surgeries, neurosurgeries, cosmetic surgeries, orthopedic surgeries, and renal transplant surgeries have made many Nigerians to travel to other countries (Maheshwari, Animasahun, & Njokanma, 2012; Idowu & Adewole, 2015). For instance, in the year 2005, the wife of a serving Nigerian president died after undergoing cosmetic surgery in Spain (Casanova, 2007), also the current president of Nigeria, M. Buhari undertook medical tourism to the UK in June 2016 in order to treat "a persistent ear infection", (BBC News, 2016). Over the years, in their quest for perceived better service quality prominent Nigerians have reportedly received health care services for various ailments and in diverse countries (Makinde, 2016).

The quest for better medical care has dramatically increased in recent times. This has consequently heightened the demand for medical tourism among most Nigerians. Business Day Nigeria (2013) stated that 47 percent of Nigerians visited India in 2012 for medical procedures, while the remaining 53 percent did so for other reasons. The 47 percent of Nigerians who visited India for medical procedures were estimated to be 18,000 persons and they spent ₦41.6 billion (\$260 million) in limited foreign exchange in their bid to travel for medical procedures. This trend signifies that there are potent reasons for embarking on medical tourism. According to Onyeji (2017) thousands of Nigerians travel abroad each year to seek medical treatment mainly because the nation's health care system remains poorly funded and inadequate. He also attributed the cause of medical tourism to poverty and lack of universal health coverage.

### **Conceptualizing information and communication technology (ICT)**

Information and communication technology (ICT) refers to "an all-encompassing variety of technologies that allow users to get, produce, and share ideas and resources (Paul, 2003). ICT is not only stream-lined to e-mail, decision support, and health information systems. According to Lynne and Baldwin (2006), for health care to be easily propagated today, inculcation of ICT is very vital. Involving ICT aids in assisting medical professionals in medical coding, medical billing, registering, accounting, communicating among others. Ahmad (2008), opined that to attain high increase demand for health tourism in Malaysia, the hospitals need to improve their healthcare services so as to meet international standards. However, this is derived from increased pressure for governments to elevate the healthcare industry and today's tech-savvy conscious consumers demanding better healthcare and customer services which are some motivating factors in adopting computerization in the healthcare industry in this country".

### **Information and communication technology (ICT) in medical tourism**

Katsoni and Kavoura (2013) posited that "the internet is of distinct importance to the tourism industry since websites may be the first viable and only contact with the potential customers. The hotel industry has realized the vast importance of the internet as an advanced distribution channel for propagating information of their service renderings, online purchases and opportunity to communicate directly with e-consumers (Katsoni & Venetsanopoulou, 2012). More so, thoughtful marketing of medical tourism has resulted to globalisation of health services, and advertisements for medical tourism has invariably intensified technology, quality reliability, and overseas training (Connell, 2006). Thus, the integration of information and communication technologies (ICTs) into the organizational fabric of medical tourism business is undoubtedly the key to success. ICTs set up in medical tourism affects the whole structure of the medical tourism industry, not only on the supply and demand side, but also prevalent on medical tourism intermediaries (Lunt, Mannion & Exworthy, 2012)".



Connell (2006) asserts that “the rapid advancement of health care systems in some key countries where new technologies have been adopted, (for example India, Thailand and Mexico), have upgraded and imported technology, absorbed western medical protocols, emphasized low cost and prompt attention, in order to become important global medical tourist destinations, also involving advertisement as an important link to their IT industry. The upsurge of the internet and the access to price information has facilitated enormous progress in medical tourism, it has also helped in the emergence of a third party intermediary rather than being directly referred or receiving informal recommendations from a domestic consultant”.

“The emergence of new companies, according to Cormany and Baloglu (2010); Crooks, Kingsbury, Snyder and Johnston (2010) which are not health specialists but brokers between international patients and hospital networks act as advisers or consultants and help the consumer/patient select, negotiate and access health care abroad. Moreover, lack of technical knowledge to assess quality and appropriateness of healthcare services as well as foreign language barrier and ease of navigating different healthcare system stems from the creation of these intermediaries (Legido-Quigley, et al, 2008).

Turner (2012) opined that “several medical tourism companies have carved niches for themselves differing from their competitors, by consistently managing to attract news coverage and developing strategies that take advantage of free marketing opportunities provided by social media such as YouTube, Facebook, Twitter, etc. The main source of information on quality is provided by a consumer friendly website created by intermediary organizations which provide reassurance about the quality of treatment, qualification and competences of foreign providers as well as individual clinicians. However, most medical tourism companies find it difficult to keep abreast with the ever-dynamic-trend of new technologies, the emergence of innovative advertising strategies, the changes in the consumer market, limited financial and human resources and the growing competition due to increasing globalization (Lunt, et al, 2010)”. “All these aspects impact the way medical tourism destinations are promoted and developed. A very good instance of this profound competition is wrapped up in the case of medical tourism companies in Canada, which operated with distinct business models, and exhibited varying degrees of business know-how and marketing sophistication, nevertheless, in spite of widespread claims about the rapid growth of medical travel and the emergence of a global marketplace for health services; approximately half of all medical tourism companies established in Canada since 2004 are no longer in business, they failed (Turner, 2011; Turner, 2012). The most possible threats in medical tourism intermediary’s existence and function are somewhat interconnected to the profound competition and lack of regulation of information provided by the same intermediaries.

### **Factors influencing ICT adoption in medical tourism industry**

The adoption of information communication technology (ICT) in the medical tourism industry is influenced by several factors which are outlined below.

- i. Integration of decision support tools across accessibility: To initiate ways of reaching healthcare for the teaming citizens without hindrances at appropriate time and location affect ICT adoption by all practitioners. This is also vital for those healthcare services consumers who are living in villages and other small towns. Understandably, ICT is advantageous in villages because when a hospital is close to people, it saves them from travelling a long distance in search of medical services (Rudowski, 2006).
- ii. Quality of care: Prompt ICT adoption will undoubtedly contribute meaningfully to a better quality of care. The need for healthcare practitioners to provide better services for patients is very important, therefore, adopting ICT will definitely lead to

- minimizing laziness in work or searching for patients' information. This would help general practitioners to improving the quality of healthcare services in the medical industry (Rudowski, 2006).
- iii. Market demands: The major provider of healthcare services in Nigeria is the Federal Ministry of Health and affiliate agencies. They ensure that health care structures conform to set rules and regulations. The conformity has been seen in the rapid expansion of the health care sector which has targeted more wealthy population in recent years. However, more efforts need to be inputted to increase the knowledge which will lead to increase in demand towards a better and improved healthcare points or facilities. As a result, this will drive building and installation of advanced technological systems in our hospitals in countries like Nigeria. Thus, it is recommended that all government or public and private hospitals should adopt ICT intelligence in the healthcare sector (Ahmad, 2008).
  - iv. Cost: The incessant rising cost is the main problem of the present-day health services sector in many countries. These costs may not be acceptable both for developing and developed countries, thus, ICT adoption can decrease the cost of health care by decentralizing the care that enables medical services at a lower level where they are cheaper (Rudowski, 2006)".
  - v. Increased internal efficiency: The success of ICT adoption was studied by Quayle (2002), and findings showed that the factors that influenced ICT by small medium enterprise managers are: reduced administration costs, reduced stock, improved marketing and improved quality of information. Nevertheless, it was proven by Tetteh (2001) that the adoption of ICTs substantially increased internal efficiency".

### **Empirical reviews and gap in literature**

There are several empirical studies on medical tourism in relation to Information and Communication Technology (ICT). They are reviewed in this section.

The investment of medical tourism in Greece tourism companies and the ICT infrastructure underlying it were investigated by Sarantopoulou, Vickyb and Geitonac (2014). For this to be achieved, the researchers carried out a nationwide survey in 2012 on all "the 337 5-star hotels across the country and 28 companies-members of the Hellenic Association of Professional Congress Organizers (HAPCO), therefore, to investigate the executives' opinion and experience regarding the characteristics of the tourism facilities of their company data was gathered by emailing a structured questionnaire to the executives of the companies, their evaluation of the existing medical tourist infrastructure in Greece and perspectives for future investment in the field. Descriptive and econometric analyses were performed and the statistical technique applied was logistic regression. Based on their findings, high class hotels seem to be willing to invest in medical tourism, because they have the ability and the relevant infrastructure to develop it. They also found that medical tourism in Greece could constitute an important source of national income and successively be an alternative for the country to exit the economic crisis. It is therefore worthy to note that provided care is given to ICT infrastructure and legislation procedures".

Azlan, Yusof and Razali (2012) examined the benefits of Information and Communication Technology (ICT) adoption and implementation in medical centres in Kuala Lumpur, Malaysia. The primary objective of this study was to pinpoint the factors and benefits derived from ICT adoption among nurses. Quantitative research was applied in the study where questionnaire was used as the instrument. Based on the data, it was gained that information storage and retrieval were the major benefits of ICT through four selected factors namely: type of ICT applications, type of ICT skills, ICT adoption factors and benefits of ICT adoption. The outcome of the result was that most of the nurses agreed that improved

ICT boosts business efficiency as well as assist them in daily communication in their interpersonal relationships. From the findings, it was recommended that hospitals should make concerted efforts to improving ICT skills and knowledge among their nurses to ensure job efficiency”.

Li and Buhalis (2008) studied the factors that influence the behaviour of Chinese to use the e-commerce application in travel and tourism sector. Data was gathered with the help of questionnaire. A total of 872 questionnaire copies were retrieved and only 644 were usable. The statistical technique applied were factor analysis and logistic regression techniques to examine the composed information. The findings revealed that types of travel websites, attitude of customers and perceptions of the tourists were significant factors to tourists’ behaviour.

The varying technologies that have been emerging in the tourism industry were studied by Park and Gretzel (2007). The options and varieties of travel search engine were also studied by them. A 7 point Likert scale questionnaire was framed to collect the data from graduate students in the University of United States. To further authenticate the study, factor analysis was applied to analyze the collected data. The significances were the perceived usefulness, trust and new norms emerging in the e-tourism scenario. It was based on these three factors people were motivated to adopt search engine to explore travel related information. Therefore, the adoption of the internet is an essential factor in the tourism industry”.

In Northern Ontario at Canada, “Mulholland and Cachon (2004) checked the effectiveness of websites among tourist lodge operators. For data collection, a telephone survey of 330 tourist lodge operators, representing one half members of NOTO was used. A total of 22 questions were asked on some issues such as website development, information available, e-mail usage etc. The respondents were managers or owners of the lodges. A model of website inputs was developed. Statistical tool used to analyze collected data was the T-test. Findings of the study showed that there was a correlation between age of websites and level of responsiveness from the view point of potential clients. Again, there was significant positive correlation between the lengths of time firms had a website and the variables included in the study, also there is a negative response from the local customers but positive from outsiders which may motivate owners to develop their site according to outsiders”.

The important factors of using electronic commerce (EC) in tourism sector was explored by Liu and Arnett (2000). Information to carry out study was composed with the help of primary sources. Data was analysed using the factor analysis. It was depicted that information, website design, liveliness and usability are significant factors for the survival of tourism service providers in online tourism.

From the reviews above, it is clear that although there are existing empirical literature on Information Communication Technology and medical tourism, the available literature are not within the Nigerian context. This work attempts to close the gap by examining the role of ICT in destination choice of Nigerian medical tourists, especially residents in Calabar, Cross River State.

### **Research methodology**

Opinion survey technique was adopted in gathering primary data for this study. Online questionnaire comprising of 12 items on a five point Likert-scale was the instrument used for data collection. The first section comprised 4 items measuring social media adoption; the second section comprised 4 constructs measuring website adoption; and the last section comprised another 4 constructs used to measure medical tourism destination choice. The demographic characteristics of the respondents were also obtained. The link to the

questionnaire was shared with individuals who had engaged or planned to engage in medical tourism within and outside Nigeria.

A sample size of 100 potential and actual medical tourists was selected for the study because medical tourists are not found in specific locations. They are accessed through referrals from medical tourism agencies and health service providers. While, data gathered were analyzed descriptively (using percentage and frequencies) as well as Multiple Regression Analysis to test the hypotheses.

### Data analysis and discussion of findings

At the end of the survey, 97 questionnaire copies were retrieved. This shows a success of 97 percent. The remaining 3 percent were considered invalid as they were not completed by the respondents. The data obtained from the 97 respondents are thus analysed and the findings are discussed as well.

### Data analysis

The response rate of the survey was 97 percent. This indicates that 97 responses were retrieved while 3 were not. The respondents' demographic data showed that 38 (39.2%) were males while 59 (60.8%) were females; 11 (11.3%) were in the age bracket of 15 to 18 years; 38 (39.2%) in the age range of 19 to 30 years, 41 (42.3%) were aged between 31 to 40 years, while the remaining 7 (7.2%) were either 41 years or above. For their educational qualifications, 8 respondents or 8.2% had only O'Level; 37 respondents or 38.1% were currently university students, 36 respondents or 37.1% had First Degrees, while the remaining 16 respondents or 16.5% had either Masters Degrees or PhDs or were undergoing their post graduate studies. On their years of medical tourism experience, 85 respondents or 87.6 percent have less than a year experience in medical tourism; 9 respondents or 9.3% have one to two years' experience, while the remaining 3 respondents or 3.1% have more than 3 years' experience in medical tourism.

**Table 1**  
**Responses on social media adoption by medical tourists**

S/N	Item	SA	A	U	D	SD
1.	I gain information about medical services and geographical conditions through social media advertising	32 (33.0%)	9 (9.3%)	16 (16.5%)	40 (41.2%)	0 (0 %)
2.	Testimonial are shared by fellow medical tourists on social media platforms	51 (52.6%)	23 (23.7%)	23 (23.7%)	0 (0%)	0 (0 %)
3.	I have access to medical travel information through social media platforms	39 (40.2%)	58 (59.8%)	0 (0 %)	0 (0%)	0 (0 %)
4.	I interact with other medical tourists on social media	0 (0%)	46 (47.4%)	23 (23.7%)	28 (28.9%)	0 (0 %)

**Source: Field survey**

Table 1 shows the medical tourists' responses on **social media adoption**. From the table it can be seen that 32 respondents (33.0 percent) strongly agree that they gain information about medical services and geographical conditions through social media advertising. 9 respondents (9.3 percent) agreed, 16 respondents (16.5 percent) were undecided, 40 (41.2 percent) disagreed and none strongly disagreed with this.

Table 1 also reveals that 51 respondents (52.6 percent) strongly agreed that testimonials are shared by fellow medical tourist on social media platforms. 23 respondents (23.7 percent) agreed, 23 (23.7 percent) were undecided, none disagreed and none strongly disagreed with this.

Still in Table 1, 39 respondents (40.2 percent) claimed that they have access to medical travel information through social media platforms. 58 respondents (59.8 percent) agreed, no respondent was undecided, none disagreed and none strongly disagreed with this item.

Furthermore, the table shows that no respondent strongly agreed to have interacted with other medical tourists on social media. 46 respondents (47.4 percent) agreed, 23 respondents (23.7 percent) were undecided, 28 respondents (28.9 percent) disagreed and none strongly disagreed with this.

**Table 2**  
**Responses on website adoption by medical tourists**

S/N	Item	SA	A	U	D	SD
1.	Medical tourism destinations have website for publishing and advertising.	32 (33.0%)	16 (16.5%)	39 (40.2%)	10 (10.3%)	0 (0 %)
2.	The websites offer the possibility of prior consultation with physicians or surgeons at the medical tourism destination	62 (63.9%)	16 (16.5%)	9 (9.3%)	10 (10.3%)	0 (0%)
3.	There is a possibility of follow-up treatment after discharge from hospital through the websites	34 (35.1%)	33 (34.0%)	21 (21.6%)	9 (9.3%)	0 (0%)
4.	Payment is made easy through the website of health service providers at medical tourism destination	44 (45.4%)	30 (30.9%)	23 (23.7%)	0 (0%)	0 (0 %)

**Source: Field Survey**

Table 2 shows the medical tourists' responses on **website adoption**. From the table it can be seen that 32 respondents (33.0 percent) strongly agreed that medical tourism destinations have website for publishing and advertising. 16 respondents (16.5 percent) agreed, 39 respondents (40.2 percent) were undecided, 10 respondents (10.3 percent) disagreed and none strongly disagreed with this.

Table 2 also reveals that 62 respondents (63.9 percent) strongly agreed that the websites offer the possibility of prior consultation with physicians or surgeons at the medical tourism destination. 16 respondents (16.5 percent) agreed, 9 respondents (9.3 percent) were undecided, 10 respondents (10.3 percent) disagreed and none strongly disagreed with this.

Furthermore, the table shows that 34 respondents (35.1 percent) strongly agreed that there is a possibility of follow-up treatment after discharge from hospital through the websites. 33 respondents (34.0 percent) agreed, 21 respondents (21.6 percent) were undecided, 9 respondents (9.3 percent) disagreed and none strongly disagreed with this.

The last item in Table 2 reveals that 44 respondents (45.4 percent) strongly agreed that payment is made easy through the website of health service providers at medical tourism destination. 30 respondents (30.9 percent) agreed, 23 (23.7 percent) were undecided, no respondent disagreed and none strongly disagreed with this.



**Table 3**  
**Responses on tourism destination choice**

S/N	Item	SA	A	U	D	SD
1.	Medical tourism destinations I have visited are exciting	16 (16.5%)	62 (63.9%)	10 (10.3%)	9 (9.3%)	0 (0%)
2.	Medical tourism destinations are worth visiting	23 (23.7%)	30 (30.9%)	44 (45.4%)	0 (0%)	0 (0%)
3.	I prefer to get treated abroad than in my home country	21 (21.6%)	34 (35.1%)	33 (34.0%)	9 (9.3%)	0 (0%)
4.	I recommend medical tourism to anyone who seeks medical treatment	39 (40.2%)	32 (33.0%)	0 (0%)	10 (10.3%)	16 (16.5%)

**Source: Field Survey**

Table 3 shows the medical tourists' responses on **destination choice**. As seen in the table 16 respondents (16.5 percent) strongly agreed that the medical tourism destinations they have visited are exciting. 62 respondents (63.9 percent) agreed, 10 respondents (10.3 percent) were undecided, 9 respondents (9.3 percent) disagreed and none strongly disagreed with this.

Table 3 also reveals that 23 respondents (23.7 percent) strongly agreed that medical tourism destinations are worth visiting. 30 respondents (30.9 percent) agreed, 44 respondents (45.4 percent) were undecided, no respondent (0 percent) disagreed and none strongly disagreed with this.

Furthermore, the table shows that 21 respondents (21.6 percent) strongly agreed that they prefer to get treated abroad than in their home country, Nigeria. 34 respondents (35.1 percent) agreed, 33 respondents (34.0 percent) were undecided, 9 respondents (9.3 percent) disagreed and none strongly disagreed with this.

Finally, Table 3 reveals that 39 respondents (40.9 percent) strongly agreed that they recommend medical tourism to anyone who seeks medical treatment. 32 respondents (33.0 percent) agreed, no respondent (0 percent) was undecided, 10 respondents (10.3 percent) disagreed and 16 respondents (16.5 percent) strongly disagreed with this.

### **Test of hypotheses**

#### **Hypothesis one**

**H<sub>01</sub>:** Social media adoption has no significant effect on destination choice of medical tourists resident in Calabar.

**H<sub>02</sub>:** Website adoption has no significant effect on destination choice of medical tourists resident in Calabar.

### **Statistical tool: Multiple Regression Analysis**

Table 4

Multiple regression result showing the effect of information communication technology (ICT) adoption on medical tourism destination choice in Calabar

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.642 <sup>a</sup>	.412	.604	1.940

a. Predictors: (Constant), Social media adoption and Website adoption

b. Dependent Variable: Destination choice of medical tourists

Source: SPSS output, 2022

Table 5

Analysis of variance (ANOVA) showing the effect of information communication technology (ICT) adoption on medical tourism destination choice in Calabar

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	519.649	2	259.824	69.042	.000 <sup>b</sup>
	Residual	741.371	197	3.763		
	Total	1261.020	199			

a. Dependent Variable: Destination choice of medical tourists

b. Predictors: (Constant), Social media adoption and Website adoption

Source: SPSS output, 2022

Table 6

Coefficients result showing the effect of information communication technology (ICT) adoption on medical tourism destination choice in Calabar

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	T	Sig.	Tolerance	VIF
1	(Constant)	-1.114	.519		-2.147	.033		
	Social media adoption	.428	.077	.305	5.588	.000	.999	1.001
	Website adoption	.618	.061	.556	10.176	.000	.999	1.001

a. Dependent Variable: Destination choice of medical tourists

Source: SPSS output, 2022

Multicollinearity test was executed using tolerance value and Variance Inflation Factor (VIF) to see if there are very high intercorrelations or inter-association among the predictor variables. Table 6 revealed that there were no multicollinearity issues as the tolerance values are above 0.1 and Variance Inflation Factors are less than the acceptable value of 5. A multiple regression analysis was performed to determine the effect of information communication technology (ict) adoption on medical tourism destination choice in Calabar. Table 4, 5 and 6 show multiple regression result of effect of the predictors; social media adoption and website adoption on destination choice of medical tourists in Calabar, Cross River State. The regression results revealed an R value of .642, R-square of .412 and adjusted R-square of .604 all these estimates indicated goodness of fit of the data to the model. The value of adjusted R-square (.604) implied that the variables (social media adoption and website adoption) account for 60.4 percent of the destination choice of medical tourists in Calabar, Cross River State. 39.6 percent of destination choice of medical tourists was not accounted for by the variables. The two variables all affect destination choice of medical tourists as seen from their p value which is less than 0.05. Both variables have a positive slope ( $\beta$ ) respectively indicating that they affect destination choice of medical tourists positively. The result of the regression requires that we reject the two null hypotheses and accept the alternatives which state that there is a significant effect of social media adoption on destination choice of medical tourists in Calabar, Cross River State. In addition,



the result also shows that there is a significant effect of website adoption on destination choice of medical tourists in Calabar, Cross River State.

### **Discussion of findings**

The result of hypothesis one indicated that there is a significant effect of social media adoption on destination choice of medical tourists resident in Calabar. Park and Gretzel (2007) had the same findings on technologies that have been emerging in the tourism industry. Their study pointed out that perceived usefulness, trust and new norms emerging in the e-tourism scenario were found significant. These undoubting three factors motivate people to adopt search engine to explore travel related information. The implementation of internet is the most important influence in the tourism industry. Social media as one of the emerging technologies in tourism is known to possess those three factors (perceived usefulness, trust and new norms).

The result of hypothesis two revealed that there is a significant effect of website adoption on destination choice of medical tourists resident in Calabar. This finding is in tandem with that of Li and Buhalis (2008) which held that type of travel websites was initiated as a significant factor influencing the behaviour of Chinese tourists to use the e-commerce application in travel and tourism sector. It also aligns with the finding of Liu and Arnett (2000) which stated that information, website design, liveliness and usability are the significant factors for the survival of tourism service providers in online tourism.

### **Conclusion and Recommendations**

The study examined the effect of Information Communication Technology (ICT) on destination choice of medical tourists resident in Calabar. A good understanding of the effect of information communication technology is crucial towards developing the medical tourism industry and even the tourism system as a whole. Following an extensive review of relevant literature on the concepts of medical tourism and ICT, this study considered how two ICT tools (social media and websites) adopted by medical tourism organizations affect the destination choice of medical tourists. The research findings reveal that both tools significantly and positively affect with destination choices of medical tourists in Calabar.

Following the findings of this study, it is recommended that:

- i. Private or public medical institutions in Calabar should own social media pages in order to interact with potential and actual medical tourists resident within or outside the country.
- ii. The website of health service agencies should be made attractive, informative and interactive to create appeal to medical tourists.
- iii. Medical organizations or businesses should collaborate with embassies in Nigeria by possibly advertising their product and services on the embassies' websites and social media platforms. This would enable them reach their target market (tourists) even more easily.

## References

- Ahmad, N. (2008). Malaysia: Healthcare information technology. *Public Health Services*, 1-7.
- Azlan, M. H. M., Yusof, M. M & Razali, M. Z. M. (2012). ICT adoption and implementation benefits in medical centers: a study of Pusrawi Hospital, Malaysia. *International Proceedings of Economics Development and Research*, 56 (13), 62-66
- BBC News (2016). Nigeria's Buhari 'broke promise to end medical tourism' [Internet]. BBC News, Jun 7. Retrieved from <http://www.bbc.com/news/business-36468154>.
- Bookman, M. Z., & Bookman, K. R. (2007), Medical tourism in developing countries. *Tourism*, 86(2), 76–77.
- Casanova, E. (2007). The whole package: Exploring cosmetic surgery tourism. Paper presented at the annual meeting of the American Sociological Association, Aug 11; New York City (NY), USA. Retrieved from <http://195.130.87.21:8080/dspace/handle/123456789/46>.
- Connell, J. (2006). Medical tourism: Sea, Sun, Sand and ... Surgery. *Tourism Management*, 27 (6), 1093-1100.
- Crooks, V. A., Kingsbury, P., Snyder, J. & Johnston, R. (2010). What is known about the patient's experience of medical tourism? A scoping review, *BMC Health Services Research*, 10, 266-277.
- Cormany, D. & Baloglu, S. (2010). Medical travel facilitator websites: An exploratory study of web page contents and services offered to the prospective medical tourist, *Tourism Management*, 32, 709–16.
- Elebeke, E. (2014). Nigerians spend \$1 billion annually on medical tourism. Vanguard Newspaper [Internet]. Retrieved from: <http://www.vanguardngr.com/2014/05/nigerian-spends-1bn-annually-medical-tourism/>
- Fetcherin, M. & Stepheno, R. M. (2016). The medical tourism index: Scale development and valuation. *Tourism Management*. 50:539-556
- Goodrich, G. & Goodrich, J. (1987). Healthcare tourism: An exploration study. *Tourism Management*, September, 217-222
- Idowu, E. O. & Adewole, O. A. (2015) Spectrum of neurosurgical complications following medical tourism: Challenges of patients without borders. *African Health Science*, 15, 240–245.
- Ile, F. L. & Tigu, G. (2017). *Medical tourism market trends: An exploratory research*. Proceedings of the 11th International Conference on Business Excellence held at Bucharest, Romania, 1111-1121
- Ishmail, A. R. (2017). The influence of perceived social media marketing activities on brand loyalty: The mediating effect of brand and value consciousness. *Asia Pacific Journal of Marketing and Logistics*. 29 (1), 129-144
- Katsoni, V., & Kavoura, A. (2013). The use of content analysis on hotels' websites as communication tools, 3rd International Conference: *Quantitative and Qualitative Methodologies in the Economic and Administrative Sciences* (QMEAS), 23-24 May, Athens, Greece, 443-448.
- Katsoni V., & Venetsanopoulou, M. (2012). Use of tourism distribution channels and marketing segmentation strategies, *Studia UBB Negotia Journal*, 57 (4), 3-26.
- Laws, E. (1996). Health tourism: A business opportunity approach. In S. Clift and S.J. (Eds.) *Health and the International Tourist*. London and New York: Routledge
- Leggat, P. (2015). Medical tourism. *Australian Family Physician*, 44, 16–21.

- Legido-Quigley, H., McKee, M., Nolte, E. & Glinos, I. (2008). *Assuring the quality of health care in the European Union: a case for action, European observatory on health systems and policies*, Report No 12, Copenhagen: World Health Organization on behalf of the European Observatory on Health Systems and Policies.
- Li, L. & Buhalis, D. (2008). Influential factors of internet users booking online in China's domestic tourism. *China Tourism Research*, 4(2), 172-188
- Liu, C., & Arnett, K. (2000). Exploring the factors associated with website success in the context of electronic commerce. *Information and Management*, 38(1), 23-33
- Lunt, N., Hardey, M. & Mannion, R. (2010). Nip, tuck and click: medical tourism and the emergence of web-based health information, *Open Medical Informatics Journal*, 4, 1-11
- Lunt, N., Mannion, R. & Exworthy, M. (2012). A framework for exploring the policy implications of UK medical tourism and international patient flows. *Social Policy & Administration*, 17 (1), 61-81.
- Lynne P. & Baldwin, M. C. (2006). Telemedicine and its role in improving communication in healthcare. *Logistic Information Management*, 309-319.
- Maheshwari, S., Animasahun, B. A., & Njokanma, O. F. (2012). International patients with congenital heart disease: What brings them to India? *Indian Heart Journal*, 64, 50-53.
- Makinde, O. A. (2016). Physicians as medical tourism facilitators in Nigeria: Ethical issues of the practice. *Croatian Medical Journal*, 57(6), 601-604.
- Mulholland, R. & Cachon, J. C. (2004). Online marketing communication in the tourism industry: An exploratory study of website effectiveness among tourist lodge operators in Northern Ontario. *Journal of Small Business and Entrepreneurship*, 17 (3), 177-188
- Onyeji, E. (2017). Medical tourism draining Nigeria's reserves. VON DG Okechukwu. Available at <https://www.premiumtimesng.com/news/health/241443>.
- Park, Y. & Gretzel, U. (2007). Success factors for destination marketing web sites: A qualitative meta-analysis. *Journal of Travel Research*, 46 (1), 46-63
- Paul, D. (2003). Information communication technology (ICT): Integrating digital tools into your project. *Information collection and Exchange Publication*, 1-85.
- Quayle, M. (2002). E-commerce: the challenge for UK SMEs in the twenty-first century. *International Journal of Operations and Production Management*, 1148-1161.
- Regenesys (2012). An introduction to information and communication technology. Retrieved from <https://free.regenesys.net/pages/BBA/Year%202/BBA2 ICT SG.pdf>
- Rudowski, R. (2006). Impact of information and communication technologies (ICT) on health care, 1-10.
- Sarantopoulou, I., Vickyb, K. & Geitonac, M. (2014). A supply side investigation of medical tourism and ICT use in Greece. *Procedia - Social and Behavioral Sciences*, 148 (2014), 370 – 377
- Smith, M. & Puczko, L. (2014). *Health, tourism and hospitality. spas, wellness and medical travel*. New York: Routledge.
- Tetteh, E. A. (2001). Global strategies for SME-business: applying the small framework. *Logistics Information Management*, 171-180.
- Turner, L. (2011). Canadian medical tourism companies that have exited the marketplace: Content analysis of websites used to market transnational medical travel, *Global Health*, 7, 40-48.
- Turner, L. (2012). Canada's turbulent medical tourism industry, *Canadian Family Physicians*, 58 (2), 371-373.