



Strategic Governance and Sustainable Development in Africa

Editors: Maurice N. Amutabi and Magdalene Ndeto

**Published by the Centre for Democracy,
Research and Development CEDRED
Nairobi, Kenya**

Strategic Governance and Sustainable Development in Africa

Editors:

Maurice N. Amutabi and Magdalene Ndeto

Published by the CEDRED Publications, Nairobi, Kenya

ISBN 978-9966-116-59-8

ISBN 978-9966-116-59-8



Table of Contents

Dedication	ii
Copyright	iii
Acknowledgement	iv
Introduction By Maurice N. Amutabi and Magdalene Ndeto	1
Chapter 1 Governance Challenges on the African Continent and Implications for Democracy and Development: Experiential and Historical Retrospection By Maurice N. Amutabi	9
Chapter 2 Governance of Public Universities in Kenya and Trade Unionization of Academic Staff: The University Academic Staff Union (UASU) By Daniel N Sifuna	33
Chapter 3 From 'Globalization of Indifference' to 'Globalization of Compassion': Towards Personalization of World Peace and Development in Africa By Clement Chinkambako Abenguni Majawa	53
Chapter 4 Constraints in adopting Agricultural Innovations transmitted via Makeover Reality Television in Kenya By Caroline Biwott	74
Chapter 5 Dynamics of Curriculum Change in Kenya and Implications on Academic Progress and Stakeholders By Jane Kamau, Simon Ndungu and Jacqueline Onyango	88
Chapter 6 Role of Leadership Skills in the Management of Public Energy Sector Projects in Kenya By Annastacia Katumbi Musembi	109
Chapter 7 University Education and Sustainable Development in Kenya: The Role of the Commission for University Education (CUE) By Edwin Okoth Ogada and Maureen Ajiambo Muleka	125

Chapter 8	
Reflection on the Role of Trade Unions in Upholding Democracy in the Workplace, South Africa	
By John Mamokhere	137
Chapter 9	
Health-Facility Characteristics Influencing the Uptake of Sexual and Reproductive Health Services among Adolescents 15-19 years: A Case-Study of Homa-Bay County, Kenya	
By Faith Muhonja; Margaret Keraka; and Phoebe Ndayala	146
Chapter 10	
Decline in Government Funding and the Quality of Instructional Programmes in Public Universities in Kenya	
By Daniel N Sifuna & Isabella M Kamere	160
Chapter 11	
Problematizing the Question of Quality: Malawi's ODL Context and Implications on the Education Sector	
By Mackenzie Chibambo and Joseph Divala	173
Chapter 12	
Inclusive Library and Information Services for Gender Equality: Towards Achieving National Development in Nigeria	
By Murtala Ismail Adakawa and Zam'a Muhammad Al-Hassan	189
Chapter 13	
Factors Influencing the Sustainability of Electronic Information Services in University Libraries in Nigeria: The Librarians' Perspectives	
By Cyprian I. Ugwu	207
Chapter 14	
Impact of Library Usage on Medical Students' Academic Performance in College of Health Sciences, Bayero University Kano	
By Z. Muhammad Alhassan, M. Ismail Adakawa and M. Sani Kabir	227
Chapter 15	
Adoption of E-Commerce and the Influencing Factors: Case of Public Servants in Oyo State Government Agencies, Nigeria	
By Kemi Ogunsola and Adedayo Sunday Adetunji	239
Chapter 16	
Dynamics of Street Robbery in Urban Areas in Kenya and Implications on Security: A case of Nairobi City County, CBD	
By Kevin Mogire and Jeniffer Birçeh	261
Chapter 17	
The Impact of Socio-Cultural Attitudes on Gender Equity in Education: The case of Mixed Gender Government Secondary Schools in Tanzania	
By Milka Otieno	280

Chapter 18	
Towards the Saho Anthroponymy and Making Meaning from Naming Trends: A study of the Semantics and Cultural Aspects of Saho Personal Names	
By Moses James Olenyo Malande and Omer Romodan Omer	298
Chapter 19	
Information Needs and Seeking Strategies of People with Disability for Health Literacy in Sumaila Local Government Area of Kano State	
By Murtala Ismail Adakawa and Zam'a Muhammad Al-Hassan	311
Chapter 20	
Indigenous Knowledge and Sustainable Development in Kenya and Implications on Health and Healthcare: Experiential Views from the Grassroots	
By Catherine Wandera Solomon, Odoch Pido and Donna Pido	324
Chapter 21	
Dynamics of Microfinance and Implications on the Development of Small-Scale Medium Enterprises in Nigeria	
By Usman Ibrahim Zwal	336
Chapter 22	
Curriculum issues in Knowledge Generation, e-learning Education Synchronization and ICT policy framework in Nigeria	
By Ugochukwu O. Matthew, Jazuli S. Kazaure and Ado Saleh Kazaure	354

**Adoption of E-Commerce and the Influencing Factors: Case of Public Servants
in Oyo State Government Agencies, Nigeria**

By

¹Dr. Kemi Ogunsola

&

²Adedayo Sunday Adetunji

^{1,2} Africa Regional Center for Information Science
University of Ibadan, Nigeria

olukemi11@yahoo.com, adetenoch@gmail.com

Phone +234-8068125011, Phone +234-80321100064

Abstract

The study examined the adoption of e-commerce and the accompanying influencing factors, which are; Technology Acceptance Model (TAM) factors like perceived ease of use and perceived usefulness; Theory of Reasoned Action (TRA) factors which include attitude and subjective norm; and other factors such as trust; perceived risk; availability of infrastructure; socioeconomic factors; demographic factors and the intention to adopt e-commerce. Survey research design was adopted, and 302 public servants participated from 26 government agencies in Oyo State. Questionnaire was used for data collection with Cronbach's alpha reliability test scores ranging between 0.77 and 0.92. Nine research hypotheses were tested. Data Analysis involved frequency count, percentages, graphs, regression analysis, Chi-square test, and Spearman rank correlation using SPSS Version 20. Results show a significant joint influence of all the TAM and TRA factors on the public servants' intention to adopt e-commerce (Adjusted $R^2=0.38$; $F_{(8,247)}=21.283$). The relative contributions of the variables were: subjective norms ($\beta=0.108$), availability of infrastructures ($\beta=0.131$), perceived risk ($\beta=-0.186$), trust ($\beta=0.251$) and socioeconomic factors ($\beta=0.312$), while attitude, perceived ease of use and perceived usefulness does not influence the intention to adopt e-commerce. For demographic variables, the study shows a significant relationship between respondent's sex ($X^2(6, N=264)=0.033, P<0.05$) and intention to adopt e-commerce, but not age and educational qualifications. Intention to adopt e-commerce has a significant influence on the adoption of e-commerce (Adjusted $R^2=0.330$; $F_{(1,269)}=134.214$). It was recommended that the government should pay closer attention to the welfare of the public servants.

Keywords: Electronic commerce, TAM, TRA, trust, perceived risk, socioeconomic factors

Adoption of E-Commerce and the Influencing Factors: Case of Public Servants in Oyo State Government Agencies, Nigeria

By

Dr. Kemi Ogunsola & Adedayo Sunday Adetunji

Background to the Study

There is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new order of things (Bradley, 2009). One of the most profound changes currently rocking the world of business is electronic commerce (e-commerce). E-commerce according to Abdul-Azeez (2012) is the wireless transfer of business information and transactions via electronic data interchange (EDI), e-mail, electronic bulletin boards, fax machines and electronic funds transfer among others. Oguntunde and Oyeyipo (2012); Shahriari and Saeid (2015) defined e-commerce as the buying and selling of products and/or services over electronic systems such as the Internet and other computer networks. Ogbu and Lawal (2015) referred to e-commerce as the production, distribution, marketing, sales or delivery of goods and services by electronic means. E-commerce in the opinion of Ogbu and Lawal (2015), is more than just electronics and commerce added together. It represents an entirely new way of doing business over an electronic medium that changes the way through which businesses have been done in the past.

Access to commodities or goods needed by individuals or households has now been made a click away through e-commerce, as individuals can get the needed goods while sitting in the comfort of their homes or offices. With the help of online order, a lot of time is saved as products purchased can be delivered to the customers in their addresses (Nazmun et al, 2017; Mirescu and Maiorecu, 2015). It has eliminated the problem of having to move from one store to another as consumers can compare goods, products or commodities directly online. On the part of the business organizations, e-commerce is far less expensive to conduct as most of the transactional requirements of traditional commerce like rent, fuelling and transport cost among others have been reduced. With e-commerce, stores are open for 24-hours a day, unlike traditional marketing which may be accessible only for a specific period of the day (Ogunsola and Akanji, 2018). There is no limit to the market place, people can buy and sell from any part of the world as long as they have access to the Internet. The application of e-commerce in business processes is vital for their competitiveness and survival in the increasingly dynamic and ever-changing world (Nantembelele, 2017).

The impact of e-commerce on procurement, shopping, business collaboration, and customer services as well as on delivery of various services is so intense that almost every individual and organization is affected (Benjamin and Elsie, 2011). This includes public servants who have always been the people through which the Nigerian government implements its various development goals and objectives (Aminu and Junaidu, 2015). This is because the public service is seen as the pivot for the growth of many economies, and it is not only responsible for the creation of a conducive environment within which all sectors of the economy function and operate, but also determines and mirrors the infrastructural and socioeconomic outlooks of the society (Ikeliowu, 2011). It is important to see if public servants have adopted e-commerce, as well as those factors influencing its adoption. These factors include perceived usefulness which is the user's perception of the helpfulness of e-commerce to their

shopping activities, perceived ease of use refers to how user-friendly the technology is in the user's perception. Perceived risk refers to a set of uncertainties which consumers have in their minds while purchasing certain product or services, while trust refers to the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action without being monitored or controlled. Attitude refers to a person's beliefs about the outcomes or attributes of performing specific behaviours, and the subjective norm is the influence which the views of families, friends and people around have on the potential user's decision. Demographic factors consist of age, sex and educational qualifications of the respondents, while the availability of infrastructure refers to access to technology, connectivity and telecommunications infrastructure. The socioeconomic factors include income level, bonuses and allowances. Intention to adopt e-commerce refers to an individual's willingness to transact business online, while the adoption of e-commerce refers to how public servants accept, approve and use the idea of buying, selling, and/or making payments online.

Statement of the Problem

There have been some studies on e-commerce in Nigeria. Fabowale (2016), for instance, looked at factors influencing the adoption of online shopping among the undergraduate students of the University of Ibadan. Orimobi (2015) considered issues that have stalled e-commerce development, the issue of formation of contracts in online transactions and the need for a unified document to regulate e-commerce activities in Nigeria. Okoye and Obi (2015) examined the entrepreneurial challenges and opportunities of e-commerce in Nigeria, while Oguntunde and Oyeyipo (2012) presented the abandonment factors affecting e-commerce transactions in Nigeria. Ogunsola and Akanji (2018) studied the relationship between perceived risks and consumers' online shopping behavior in Nigeria. However, none of these studies examined the adoption of e-commerce by public servants, a very important and representative segment of society. This study filled the knowledge gap.

Research Objective and Hypotheses

The objective of this study is to examine the factors influencing the adoption of e-commerce among public servants in Oyo State. The following hypotheses were tested:
H₀₁: TRA constructs (subjective norms and attitude) does not significantly influence public servants' intention to adopt e-commerce

H₀₂: TAM constructs (perceived ease of use and perceived usefulness) does not significantly influence public servants' intention to adopt e-commerce

H₀₃: Availability of infrastructure does not significantly influence the public servants' intention to adopt e-commerce.

H₀₄: Perceived risk does not significantly influence the civil servants' intention to adopt e-commerce.

H₀₅: Trust does not significantly influence the public servants' intention to adopt e-commerce.

H₀₆: Socioeconomic factors do not significantly influence public servants' intention to adopt e-commerce.

H₀₇: There is no significant relationship between demographic variables (age, sex and educational qualifications) and the public servants' intention to adopt e-commerce.

H₀₈: Public servants' intention to adopt e-commerce does not significantly influence the adoption of e-commerce



H₀₉: There is no significant joint predictive influence of the independent variables (subjective norms, attitude, and perceived ease of use, perceived usefulness, and availability of infrastructures, perceived risk, trust, and socioeconomic factors) on the intention to adopt e-commerce.

Review of Related Literature

Overview of E-commerce in Nigeria

Information and communication technology (ICT) is transforming the way individuals, organizations, and governments work (Tiamiyu and Ogunsola, 2008). The Internet in today's information societies has become an essential channel that is used for the dissemination of information, products, and services (Kabango, 2015). With more people becoming computer literate and open to adopting ICT usage, e-commerce is gradually gaining popularity among many Nigerians (Lawal and Ogbu, 2015). Awareness on e-commerce continued to increase in Nigeria with the introduction of Point of Sale (PoS) machine and Automated Teller Machines (ATMs). This has grown to the current state of using the Internet for order placement, processing, delivery, and payment (Olatokun and Igbinedion, 2009; Omotayo and Dahunsi 2015; Osho et al., 2016). With the continued increase of online payment systems in Nigeria, online shopping has continued to receive increased attention.

Studies such as Abdul-Azeez (2012), Oguntunde and Oyeyipo (2012) and Shahriari and Saeid (2015) emphasized two types of e-commerce transactions; business-to-customers (B2C) and business-to-business (B2B), while others like Mirescu and Maioreescu (2015) and Nazmun et al. (2017) discussed two additional types; Consumer-to-consumer (C2C), and Business-to-government and government-to-business (B2G/G2B) transactions. Business-to-customers (B2C) involve businesses where the sellers are organizations and the buyers are individuals. Emphasis is placed on providing goods and services directly to the consumers via the web. B2C e-commerce offers consumers the possibility to shop for a wider range of products and services from different merchants and at reasonable prices online. Examples include online shops like Konga and Jumia among others. In B2B e-commerce, business organizations focus on selling to other business organizations directly or through intermediaries. Companies do business with each other. Examples include manufacturers selling to distributors, and wholesalers selling to retailers. C2C type of transactions takes place between individuals who engage in business transactions such as buying from or selling to one another. B2G/G2B represent the type of e-commerce transactions that take place between companies and the public sector.

Empirical Review

The table below shows some empirical studies on e-commerce and their key findings/suggestions:

Table 1: Empirical Studies on E-Commerce

Author(s)	Study Focus	Findings/Suggestions
Ogunsola and Akanji (2018)	Relationship of six dimensions of perceived risk on online shopping in Nigeria; financial risk, product risk, time risk, psychological risk, privacy risk, delivery risk and social risk.	All the dimension of perceived risks except for social risk have a significant relationship with online shopping behaviour. The study suggested that retailers should have in place systems to find out why some customers postpone or cancel their decision to buy as this might be an indication that certain risks are perceived.
Yaseen, Dingley, Alhusban and Alhosban (2017)	Barriers, and drivers of e-commerce from the retailers' view, the readiness and willingness towards e-commerce adoption, and potential solutions on which e-commerce can take off among traditional retailers in Jordan.	There is a lack of government support. A conceptual model was developed to illustrate the essential requirements to help business organisations adopt e-commerce successfully.
Orimobi (2015)	Growth and development of e-commerce in Nigeria.	Need for a unified document to regulate e-commerce activities in Nigeria.
Oguntunde and Oyeyipo (2012)	Factors that could lead to the abandonment of e-commerce in Nigeria.	Factors identified are distrust, inaccessibility to credit and debit card, card information not being honoured, navigational problems and non-delivery of goods even after deductions have been made.
Abdul-Azeez (2012)	Security, authenticity, accessibility and infrastructure as factors limiting the adoption of e-commerce in Nigeria.	E-shop was suggested with online catalogue and online payments channels.
Efendioglu, Yip and Murray (2012)	Characteristics of local environments, both infrastructural and socio-economic factors in e-commerce adoption in China.	Development and diffusion of e-commerce in China are impeded largely by cultural issues such as transactional and institutional trust, while attitude towards debt plays a major role.

The studies reviewed looked at e-commerce adoption among several populations but none of them examined the factors leading to the adoption of e-commerce among these unique and representative class of e-commerce users; the public servants in Nigeria.

Models of E-Commerce Adoption

E-commerce has become an important channel for conducting businesses. Researchers, as well as market executives, are trying to better understand online consumer behavior. One model used by researchers to understand behavior in the

information systems field is the technology acceptance model (TAM). TAM variables are perceived usefulness, perceived ease of use, and behavioral intentions (Fayad and Paper, 2016). To develop an extended model of TAM, there is a need to understand its antecedent, the theory of reasoned actions, TRA (Fayad and Paper, 2016; Shareef, Kumar, Kumar, and Hasin, 2009).

TRA was developed to predict and comprehend human behavior and attitudes. The theory implies that actual behavior could be determined by previous intentions alongside the beliefs that a person has for the given behavior (Durodolu, 2016). TRA was first introduced in 1967 by Fishbein. It explains the relationship between beliefs, attitudes, intentions and behavior (Emmanuel, 2009). The direct determinants of people's behavioral intentions are their attitudes towards performing the behavior and the subjective norms associated with the behavior (Emmanuel, 2009).

Attitude is determined by a person's beliefs about the outcomes or attributes of performing a specific behavior (that is, behavioral beliefs), weighted by evaluations of those outcomes or attributes. It is the degree to which one has a positive versus negative evaluation of the behavior. The subjective norm of a person is determined by whether important referents (that is, people who are important to the person) approve or disapprove of the performance of the behavior, weighted by the person's motivation to comply with those referents (Dolores, Blair, Martin and Paige, 2001; Emmanuel 2009; Nisson and Allison, 2012)

The Technology Acceptance Model (TAM) has underpinned many studies relating to Information systems (IS) adoption and was established by Davis (1989) to describe user adoption of new technology innovation in organizations (Abdulhakeem, Edwards and McDonald (2017). TAM evolved from the TRA intending to explain the factors affecting computer acceptance (Lee, Kozar and Larsen (2003); Bradley, 2009). It gives a good picture of how the users or potential users evaluate the solution and its adequateness in general (Santti, 2011). In TAM, the three major constructs are Perceived Ease of Use (PEOU), Perceived usefulness (PU) and Attitude towards using the technology (Chuttur (2009); Santi (2011); Durodolu (2016). Perceived usefulness is the extent to which a person believes that utilizing a particular method or technique would enhance his or her job performance or responsibility. Perceived ease of use is the extent to which an individual considers that making use of a specific system would be effortless, that is freedom from complexity and trouble. The attitude of the user towards a particular technology or system is a major determinant of whether the user will eventually accept or reject it.

This study adapted the TRA and TAM models, using subjective norms and attitude from the TRA and perceived ease of use and perceived usefulness from TAM. The other constructs: perceived risk, trust, availability of infrastructure, demographic factors and socioeconomic factors were adapted from Efendioglu, Murray and Vincent (2004), Santti (2011) and Kabango (2015).

Methodology

The study adopted a survey design approach. The population for the study consists of public servants working with MDAs of the Oyo State government. The population (N) figure obtained from the Office of the Oyo State Accountant General shows the population of public servants working within Oyo State Secretariat, Agodi, Ibadan, excluding those outside the State secretariats, as 2,342. A sample size of 342 public servants was selected using a stratified sampling technique across the 26 MDAs. These are public servants between the grade levels 3-16. Grade level 1-2 a junior staff while grade level 11 does not exist in the State public service in Nigeria.

Sampling was done according to Slovin (1960) formula, as cited in Ryan (2013). The formula is given as:

$$n = N / (1 + Ne^2)$$

Where n = sample size

N = 2,342 (total population)

e = error tolerance

For a study carried out at the 95% confidence level, an error tolerance of 0.05 is used.

Therefore, $n = 2342 / (1 + 2342 (0.05)^2)$,

$n = 341.64$ or approximately 342.

This means 342 people were sampled from a population of 2,342 public servants across the 26 MDAs. To determine the actual number of people sampled from each MDA, for instance at the Oyo State Road Traffic Management was calculated as:

$$i = k/N \times n/1$$

where i = total number of copies of questionnaires to be distributed at the department,

k = 241 (total population of public servants at the department)

N = 2,342 (total population)

n = 342 (sample size)

The number of people sampled from the 241 public servants in the Oyo State Road Traffic Management was calculated as:

$$i = 241/2,342 \times 342$$

$$i = 0.1029 \times 342$$

$$i = 35.14$$

This shows that 35 copies of the questionnaires were allotted to be distributed within Oyo State Road Traffic Management Authority. A total of 342 copies of the questionnaire were distributed across the 26 MDAs, with 302 copies of the questionnaire returned and used for the analysis, this shows a response rate of 88.31%. The population of the various government agencies and the sample sizes generated is shown in Table 2.

Table 2: Sample Selection Based on the Ministries, Departments and Agencies of Oyo State Government

S/N	Ministry, Department/Agency (MDAs)	No of Personnel	No of Employee Sampled
1	Oyo State Road Traffic Management Authority	241	35
2	Office of the Head of Service	119	17
3	Ministry of Women Affairs	177	26
4	Ministry of Local Government and Chieftaincy Matters	47	9
5	Ministry of Local Government	29	4
6	Ministry of Agriculture	150	22
7	Ministry of Trade, Investments and Cooperatives	120	18
8	Ministry of Education	57	8
9	Ministry of Finance	28	4
10	Oyo State Planning Commission	52	7
11	Bureau of Statistics	59	9
12	Board of Internal Revenue	29	4
13	Office of the Accountant General	93	14
14	Oyo State Pension Board	30	4
15	Ministry of Health	30	4
16	Ministry of Youth and Sports	41	6
17	Ministry of Information	99	14
18	Ministry of Justice	69	10
19	Ministry of Works and Transport	131	19
20	Ministry of Lands, Housing and Urban Development	129	19
21	Office of the Surveyor General	61	9
22	Office of the Auditor General	149	22
23	Ministry of Environment	171	25
24	Public Service Commission	40	6
25	State Hospital Management Board	140	20
26	Teaching Service Commission (TESCOM)	51	7

Source: Adapted from Oyo State Auditor General Office Record 2019

The questionnaire was divided into ten sections. Section A contains questions on demographic information such as age, sex, ministry/department or agency of the respondent. Section B comprises of question on the respondents' attitude to the use of e-commerce; Section C was made up of questions on subjective norms; Section D contains questions on the perceived usefulness of e-commerce; Section E focused on questions on perceived ease of use. Section F contains questions on socioeconomic factors, while Section G contains questions on respondents' trust. Section H was made up of questions on the respondents' perception of risks associated with the use of e-commerce. Section I focused on questions on the respondent's behavioral intention to adopt e-commerce. Section J contains questions on the adoption of e-commerce. Questions in the Sections B to J were rated on a Likert scale of 1-5 with options ranging from Strongly Disagree, Disagree, Undecided, Agree and Strongly Agree in the listed order.

The internal consistency of the instrument was measured using Cronbach's alpha which suggested the instrument measured the variables well enough as the values of all the variables were higher than 0.70. The Cronbach's alpha values for each variable were given as follows: attitude (0.88), subjective norms (0.90),

perceived usefulness (0.89), perceived ease of use (0.92), availability of infrastructure (0.92), socio-economic factors (0.82), trust (0.88), perceived risk (0.91), intention to use e-commerce (0.86) and e-commerce adoption (0.86).

Results and Discussion of Findings

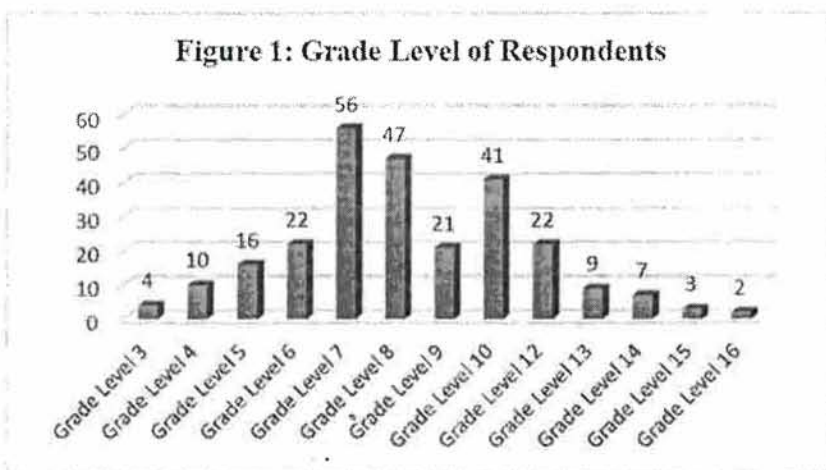
Table 3: Demographic details of Respondents (n = 302)

Variables	Categories	Frequency	Percentage (%)
Sex	Male	159	54.1
	Female	135	45.9
Age range	<=20 years	3	1
	21-25 years	49	13.4
	26-30 years	42	14.4
	31-35 years	35	12
	36-40 years	67	22.9
	41 years and above	106	36.3
Educational qualification	Ph.D.	7	2.4
	Postgraduates	56	19.2
	Tertiary Education	182	62.5
	Secondary Education	26	8.9
	Primary Education	4	1.4
	Missing value	15	5.2

Source: Field Data 2019

Table 3 shows the demographic details of respondents (sex, age, and educational qualification) using frequency counts and percentages. The highest number of respondents 106(36.3%) fall within the age group 41 years and above, while the lowest number of respondents 3(1%) fall within the age group of less than 20 years. The educational qualification with the highest number of respondents is tertiary education 182(62.5%) while primary education 4(1.4%) has the lowest number of respondents.

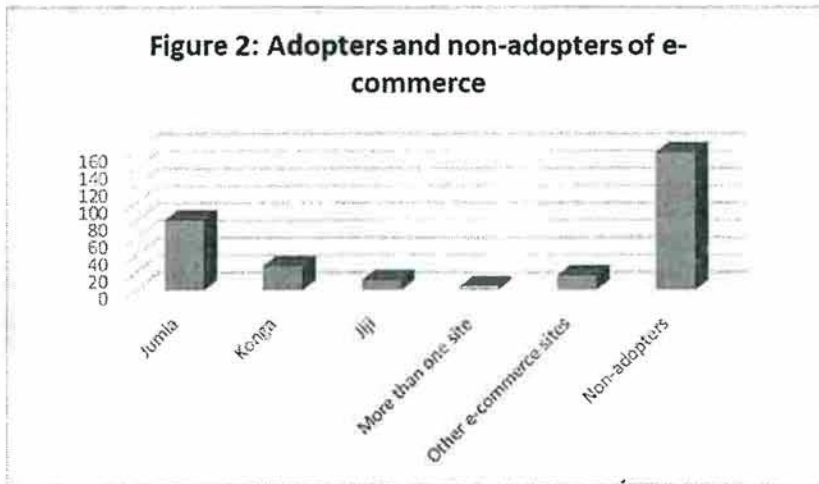
Figure 1 shows the grade level with the highest number of respondents 56(21.5%) as grade level 7, while the grade level with the lowest number of respondents 2(0.8%) is grade level 16.



Source: Field Data 2019

Figure 2 shows the distribution of adopters and non-adopters of e-commerce. For the respondents that have adopted e-commerce, the most visited e-commerce site by them is Jumia 81(54%), followed by Konga 28(8.7%), Jiji, 12(4%). Only 5(3.3%)

have used more than one e-commerce website. The visits of respondents to the other e-commerce sites like Yudala, Dealdey, Amazon and eBay are 17(11.9%). 159 (52.6%) respondents have not adopted e-commerce.



Source: Field Data 2019

Testing of Hypotheses

Hypothesis One: TRA constructs (subjective norms and attitude) does not significantly influence public servants' intention to adopt e-commerce

Table 4a: ANOVA Table for the Influence of TRA constructs (Subjective Norms and Attitude) on the Intention to adopt E-Commerce

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	13.908	2	6.954	16.333	.000 ^b
Residual	112.827	265	.426		
Total	126.735	267			

R = .331^a
R² = .110
Adjusted R-Square = .103

Source: Field Data 2019

As shown in Table 4a, TRA constructs significantly influence public servants' intention to adopt e-commerce ($F_{(2,265)} = 16.223$, $R = 0.331$, $R^2 = 0.110$, $\text{Adj. } R^2 = 0.103$; $P < 0.05$). Since the study was conducted at a 95% confidence level, $p < 0.05$ shows a significant influence of the predictors on the independent variable. The null hypothesis is rejected, and the alternate hypothesis accepted.

Table 4b: Coefficients Table for the Influence of TRA constructs (Subjective Norms and Attitude) on the Intention to adopt E-Commerce

	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.752	.188		14.628	.000
Subjective norms	.049	.043	.071	1.157	.248
Attitude	.233	.047	.302	4.939	.000

Dependent Variable: intention to adopt e-commerce

Source: Field Data 2019

Table 4b shows the individual contributions of the variables and reveals that attitude has a significant influence on public servants' intention to adopt e-commerce ($P < 0.05$), while $\beta = 0.302$ shows that attitude contributes 30.2% influence on intention to adopt e-commerce. The subjective norms do not show a significant influence on public servants' intention to adopt e-commerce ($P > 0.05$).

Hypotheses Two: TAM constructs (perceived ease of use and perceived usefulness) does not significantly influence public servants' intention to adopt e-commerce

Table 5a: ANOVA Table for the Influence of TAM constructs (Perceived Ease of Use and Perceived Usefulness) on the Intention to adopt E-Commerce

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	21.448	3	10.724	26.997	.000 ^b
Residual	102.880	259	.397		
Total	124.328	261			

R = .415
R² = .173
Adjusted R-Square = .163

Source: Field Data 2019

Table 5a shows TAM constructs significantly influence public servants' intention to adopt e-commerce ($F_{(3,259)} = 26.997$, $R = 0.415$, $R^2 = 0.173$, Adj. $R^2 = 0.163$; $P < 0.05$). The null hypothesis is rejected, and the alternate hypothesis accepted.

Table 5b: Coefficients Table for the Influence of TAM constructs (Perceived Ease of Use and Perceived Usefulness) on the Intention to Adopt E-Commerce

	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.331	.202		11.535	.000
Perceived ease of use	.238	.059	.269	4.032	.000
Perceived usefulness	.146	.048	.204	3.054	.002

Dependent Variable: intention to adopt e-commerce

Source: Field Data 2019

Table 5b shows that perceived usefulness has a significant influence on the intention to use e-commerce ($P < 0.05$). Perceived ease of use contributes 26.9. % as $\beta = 0.269$ and perceived usefulness contributes 20.4% as $\beta = 0.204$.

Hypothesis three: Availability of infrastructure does not significantly influence the public servants' intention to adopt e-commerce.

Table 6a: ANOVA Table for the Influence of Availability of Infrastructure on the Intention to Adopt E-Commerce

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	23.662	3	7.887	20.214	.000 ^b
Residual	100.667	258	.390		
Total	124.328	261			

R = .360^a
R² = .130
Adjusted R-Square = .127

Source: Field Data 2019

Table 6a shows that the availability of infrastructure significantly influences public servants' intention to adopt e-commerce ($F_{(3,258)} = 20.214$, $R = 0.360$, $R^2 = 0.130$, $Adj. R^2 = 0.127$; $P < 0.05$). The null hypothesis is rejected, and the alternate hypothesis accepted.

Table 6b: Coefficients Table for the Influence of Availability of Infrastructure on the Intention to Adopt E-Commerce

	Unstandardised Coefficients		Standardised Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.858	.150		19.039	.000
Availability of infrastructure	.259	.041	.360	6.255	.000

Dependent Variable: intention to adopt e-commerce

Source: Field Data 2019

Tables 6b show the contribution of the availability of infrastructure to intention to adopt e-commerce as 36% as $\beta = 0.360$.

Hypothesis four: Perceived risk does not significantly influence the public servants' intention to adopt e-commerce

Table 7: ANOVA Table for the Influence of Perceived Risk on the Intention to Adopt E-Commerce

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.625	1	1.625	3.519	.062
Residual	123.747	268	.462		
Total	125.371	269			

R = .114^a
R² = .013
Adjusted R-Square = .009

Source: Field Data 2019

Table 7 shows that there is no significant relationship between perceived risk and public servants' intention to adopt e-commerce ($P > 0.05$). Therefore, the null hypothesis is accepted.

Hypothesis five: Trust does not significantly influence public servants' intention to adopt e-commerce.

Table 8a: ANOVA Table for the Influence of Trust on the Intention to Adopt E-Commerce

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	20.021	1	20.021	50.229	.000 ^b
Residual	104.432	262	.399		
Total	124.454	263			

R = .401^a
R² = .161
Adjusted R-Square = .158

Source: Field Data 2019

Table 8a shows that trust has a significant influence on the public servants' intention to adopt e-commerce ($F_{(1,262)}=50.229$, $R=0.401$, $R^2=0.161$, Adj. $R^2=0.158$, $P<0.05$). The null hypothesis is rejected, and the alternate hypothesis accepted.

Table 8b: Coefficients Table for the Influence of Trust on the Intention to Adopt E-Commerce

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.823	.138		20.420	.000
Trust	.284	.040	.401	7.087	.000

Dependent Variable: intention to adopt e-commerce

Source: Field Data 2019

Table 8b shows that Trust significantly influences public servants' intention to adopt e-commerce ($P<0.05$). The contribution of trust to their intention to adopt e-commerce, is 40.1%, as $\beta=0.401$.

Hypothesis six: Socioeconomic factors do not significantly influence the public servants' intention to adopt e-commerce

Table 9a: ANOVA Table for the Influence of Socioeconomic Factors on the Intention to Adopt E-Commerce

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	11.834	1	11.834	27.614	.000 ^b
Residual	112.709	263	.429		
Total	124.543	264			

R = .308
R² = .095
Adjusted R-Square = .092

Source: Field Data 2019

Table 9a shows that socioeconomic factors significantly influence public servants' intention to adopt e-commerce ($F_{(1,263)}=27.614$, $R=0.308$, $R^2=0.095$, Adj. $R^2=0.092$, $P<0.05$). The null hypothesis is rejected, and the alternate hypothesis accepted.

Table 9b: Coefficients Table for the Influence of Socioeconomic Factors on the Intention to Adopt E-Commerce

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.993	.151		19.793	.000
Socioeconomic factors	.213	.041	.308	5.255	.000

Dependent Variable: intention to adopt e-commerce

Source: Field Data 2019

The contribution of socioeconomic factors to public servants' intention to adopt e-commerce is 30.8% as $\beta=0.308$.

Hypothesis seven: There are no significant relationships between demographic variables (sex, age, and educational qualifications) and the public servants' intention to adopt e-commerce.

Table 10a: Relationship between Sex and the Intention to Adopt E-Commerce Using Chi-Square Test

	Value	Df	Asymp. Sig. (2-Sided)
Pearson Chi-Square	13.745 ^a	6	.033
Likelihood Ratio	13.995	6	.030
Linear-by-Linear Association	7.425	1	.006
N of Valid Cases	264		
Pearson Chi-Square	13.745 ^a	6	.033

Source: Field Data 2019

Table 10a reveals a significant relationship between respondent's sex and intention to adopt e-commerce $X^2(6, N=264) = 0.033, P < 0.05$

Table 10b: Binary Logistics (Classification Table)

		Predicted		
		Respondent's Sex		
		Male	Female	
Respondent's Sex	Male	142	0	100.0
	Female	122	0	.0
Overall Percentage				53.8

Table 10b reveals 142 males and 122 female respondents have the intension to adopt e-commerce. Males are more likely to adopt e-commerce than females.

Table 10c: Coefficient Table for Respondent's Age and Intention to Adopt E-commerce Using Spearman Rank Correlation

			Respondent's Age	Intention
Spearman's rho	Respondent's Age	Correlation Coefficient	1.000	-.064
		Sig. (2-tailed)	.	.301
		N	292	262
	Intention	Correlation Coefficient	-.064	1.000
		Sig. (2-tailed)	.301	.
		N	262	271

Source: Field Data 2019

Table 10c there is no significant relationship between age and intention to adopt e-commerce ($P>0.05$).

Table 10d: Table for Relationship Between Educational Qualification and Intention to Adopt E-commerce Using Spearman Rank Correlation

			Educational Qualification	Intention
Spearman's rho	Educational Qualification	Correlation Coefficient	1.000	.055
		Sig. (2-tailed)	.	.376
		N	271	263
	Intention	Correlation Coefficient	.055	1.000
		Sig. (2-tailed)	.376	.
		N	263	291

Source: Field Data 2019

Table 10d shows there is no significant relationship between educational qualification and intention to adopt e-commerce ($P>0.05$).

Hypothesis eight: Public servants' intention to adopt e-commerce does not significantly influence the adoption of e-commerce

Table 11a: ANOVA Table for the Influence of Intention to Adopt E-Commerce on the Adoption of E-commerce

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	55.767	1	55.767	134.214	.000 ^b
Residual	111.772	269	.416		
Total	167.539	270			

$R = .577^a$

$R^2 = .333$

Adjusted R-Square = .330

Source: Field Data 2019

Table 11a shows there is a significant influence of the intention to adopt e-commerce on the adoption of e-commerce ($F_{(1,269)} = 134.214$, $R = 0.577$, $R^2 = 0.333$, $\text{Adj. } R^2 = 0.330$; $P < 0.05$). The null hypothesis is rejected, and the alternate hypothesis accepted.

Table 11b: Coefficients Table for the Influence of the Intention to Adopt E-Commerce on the Adoption of E-commerce

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.118	.219		5.113	.000
Intention to adopt e-commerce	.663	.057	.577	11.585	.000

Dependent Variable: intention to adopt e-commerce

Source: Field Data 2019

Table 11b shows the contribution of the intention to adopt e-commerce by public servants on the adoption of e-commerce is 57.7% as $\beta=0.577$.

Hypothesis nine: there is no significant joint predictive influence of the independent variables (subjective norms, attitude, and perceived ease of use, perceived usefulness, and availability of infrastructures, perceived risk, trust, and socioeconomic factors on the intention to adopt e-commerce.

Table 12a: ANOVA Table for the Influence of the TRA, TAM Variables on the Adoption of E-commerce

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	66.369	8	8.296	21.283	.000
Residual	96.283	247	.390		
Total	162.652	255			

R = 0.639
 $R^2= 0.408$
 Adjusted R-Square = 0.389

Source: Field Data 2019

Table 12a shows that the predictors have a joint significant influence on the intention to adopt e-commerce ($F_{(8,247)} = 21.283$, $R = 0.639$, $R^2= 0.408$, Adj. $R^2=0.389$; $P<0.05$). The null hypothesis is rejected, and the alternate hypothesis accepted.

Table 12b: Coefficients Table for the Influence of the TRA, TAM Variables on the Adoption of E-commerce

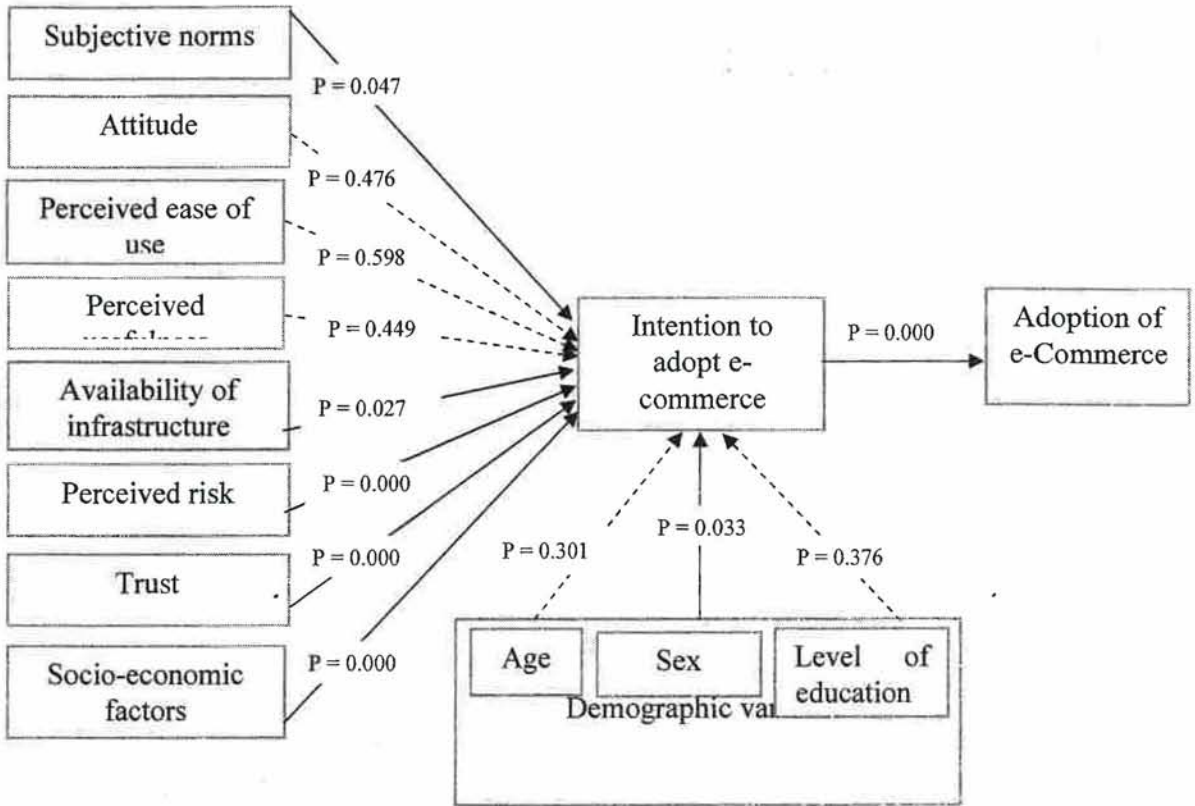
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.009	.310		6.479	.000
Subjective norms	.088	.044	.108	1.994	.047
Attitude	-.042	.059	-.047	-.714	.476
Perceived ease of use	-.033	.063	-.032	-.529	.598
Perceived usefulness	.045	.059	.054	.758	.449
Availability of infrastructure	.108	.049	.131	2.227	.027
Perceived risk	-.150	.042	-.186	-3.566	.000
Trust	.208	.051	.251	4.045	.000
Socio-economic factors	.248	.051	.312	4.823	.000

Dependent Variable: intention to adopt e-commerce

Source: Field Data 2019

Table 12b shows the individual contributions of each variable; subjective norms ($\beta=0.108$, $P<0.05$), availability of infrastructure ($\beta=0.131$, $P<0.05$), perceived risk ($\beta=-0.186$, $P<0.05$), trust ($\beta=0.251$, $P<0.05$) and socioeconomic factors ($\beta=0.312$, $P<0.05$) to the adoption of e-commerce. Out of all the factors which were found to influence the intention to adopt e-commerce, socioeconomic factors have the highest influence. Also perceived risk has a negative influence on the intension to adopt e-commerce. This indicates that the higher the perceived risk, the lower the adoption of e-commerce. However, attitude ($\beta=-.047$, $P>0.05$), perceived ease of use ($\beta=-.032$, $P>0.05$) and perceived usefulness ($\beta=.054$, $P>0.05$) have no significant influence on the intention to adopt e-commerce by public servants in Oyo State.

Results from hypothesis seven, eight and nine were used to draw the research model for e-commerce adoption as shown in Figure 1:



1: Research Model for E-Commerce Adoption

- ▶ Significant relationship
- ▶ Non-significant relationship

Source: Field Data 2019

Discussion of Findings

Findings from the study reveal a joint significant influence of all the variables (TAM constructs, TRA constructs, trust, and availability of infrastructures, socioeconomic factors, and demographic factors) on the intention to adopt e-commerce. This finding corroborates studies conducted by Christian, Petr, Miloslava and Stephen (2014), Fabowale (2016) and Ngatia (2014).

The findings relating to each independent variable revealed that subjective norms, availability of infrastructures, trust and socioeconomic factors had significant influences on the intention to adopt e-commerce except for attitude, perceived ease of use and perceived usefulness. The finding is supported by Ngatia (2014) who stated that infrastructure, risk, trust and socioeconomic factors affect e-commerce adoption in Nairobi. The finding is also supported by Dorothy and Taylor (2012) who established that socio-economic factors among other factors like infrastructures and cultural factors affect e-commerce adoption among their population of interest.

The studies by Ogunsola and Akanji (2018), Lee, Park and Ahn (2001); Oguntunde and Oyeyipo (2012) supported the fact that perceived risk influence e-commerce adoption. However, Oguntunde and Oyeyipo (2012) believe that perceived ease of use influences e-commerce adoption, this contradicts the finding from this study. Findings from this study also show the availability of infrastructure as a major contributory factor to public servants' intention to adopt e-commerce. This finding

was corroborated by Chepnego (2017), Shemi and Procter (2013), Fichter (2003) that the availability of needed infrastructure (ICT) strongly and significantly influence e-commerce adoption.

Findings show that sex has a significant contribution to e-commerce adoption, however, there was no significant relationship between educational qualification and intention to adopt e-commerce. Age also does not have a significant relationship with intention to adopt e-commerce. This result contradicts the result of Chepnego (2017) which says that the level of education of individuals has a significant influence on e-commerce adoption.

5.2 Conclusion

Subjective norms, availability of infrastructures, trust and socioeconomic factors have a significant influence on public servants' intention to adopt e-commerce. There is Intention to adopt e-commerce influence e-commerce adoption. Socioeconomic factors have the highest contributing factor to the public servants' intention to adopt e-commerce. Perceived risk has a negative influence on public servants' intention to adopt e-commerce. This implies that the more risk people perceived about e-commerce, the less they will likely adopt e-commerce. Sex has a positive relationship with public servants' intention to adopt e-commerce.

1.3 Recommendations

Recommendations from the study are as follows: The government is urged to pay closer attention to the welfare of public servants. Developers and owners of e-commerce sites are urged to work more on making their sites safer for the users. There is a need to educate people on how best to safely make transactions using e-commerce sites. E-commerce owners are to embark on constant research and development to understand their consumers' preferences and the possible reservations they might have for their products or sites, enabling them to get them closer to the end-users and also enable them to feel the market pulse for their products or sites.

References

- Abdul-Azeez, O. E. and Pekka, M. (2012). Adoption of E-commerce in Nigerian Businesses: A change from traditional to e-commerce business model in Richbol Environmental Services Limited.
- Abdulhakeem I., Edwards H., and McDonald S. (2017). E-commerce adoption in Developing Countries SMEs: What Do the Prevailing Theoretical Models Offer Us? In: 4th International Conference on E-Commerce, 18-20 September 2017, Putrajaya, Malaysia.
- Aminu, M. and Junaidu, B. (2015). Public Service in Nigeria: An Overview of Functions and Code of Conduct. *European-American Journals*, 61-69. www.eajournals.org/journals
- Benjamin, P. and Elsie, O. (2011). The Impact of Electronic Commerce on Procurement. *Journal of Organisational Computing and Electronic Commerce*, 13 (3), 167-189. <https://doi.org/10.1080/10919392.2003.9681159>. Retrieved on March 2, 2019
- Bradley, J (2009). The Technology Acceptance Model and Other User Acceptance Theories. Handbook of Research on Contemporary Theoretical Models in Information Science, IGI Global, United States of America.
- Chepngeno, W. (2017). Factors Influencing the Adoption of E-commerce within Small and Medium Enterprises: The Case of Selected Small and Medium Enterprises in Kamukunji Constituency, Nairobi, Kenya. Master of Arts Thesis in Project Planning and Management, University of Nairobi, Kenya.
- Christian, N., Petr, K., Miloslava, C and Stephen, N. (2014). A Comparative Study of Consumers' Readiness for Internet Shopping in Two African Emerging Economies: Some Preliminary Findings. *Mediterranean Journal of Social Sciences*, 5(14), 1882-1889. Doi:10.5901/mjss.2014.v5n23p1882
- Chuttur, M.Y. (2009). Overview of the Technology Acceptance Model: Origins, Developments and Future Directions. Indiana University, USA. *Sprouts: Working papers on Information Systems*, 9(37).
- Dolores A., Blair T., Martin, F and Paige A. (2001). Theories of Reasoned Action and Planned Behavior as Models of Condom Use: A Meta-Analysis. American Psychological Association. *Psychological Bulletin*, 127(1), 142-161. DOI: 10.1037//0033-2909.127.1.142
- Durodolu, O. (2016). Technology Acceptance Model as a Predictor of Using Information System to Acquire Information Literacy Skills. Lincoln Library Philosophy and Practice, University of Nebraska.
- Efendioglu, A., Murray, w and Vincent, F. (2004). E-Commerce in Developing Countries: Issues and Influences. Retrieved on 10 January 2019 from <http://userwww.sfsu.edu/~ibec/papers/25.pdf>
- Emmanuel, R. (2009). The Application of the Theories of Reasoned Action and Planned Behavior to a Workplace HIV/Aids Health Promotion Programme. D.Phil. Thesis, University of South Africa, South Africa.
- Fabowale, O. (2016). Factors influencing the adoption of online shopping among the undergraduate students of University of Ibadan. Master's Degree Project. Africa Regional Centre for Information Science, University of Ibadan, Ibadan.
- Fayad, R and Paper, D. (2015). The Technology Acceptance Model E-Commerce Extension: A Conceptual Framework *Procedia Economics and Finance*, 26, 1000 – 1006 <http://www.elsevier.com/locate/procedia>
- Fichter, K. (2003). E-Commerce Sorting Out the Environmental Consequences. *Journal of Industrial Ecology*, 6(2).

- Ikelionwu, C. (2011). Assessment of Civil Service Reforms in the Nigerian Public Sector (A Study of Power Holdings Company of Nigeria, Onitsha District). Master's Degree Project. Business Administration (MBA), Department of Management of the Faculty of Business Administration, University of Nigeria, Enugu Campus
- Kabango, M.C and Asa, R (2015). Factors Influencing E-Commerce Development: Implications for The Developing Countries. *International Journal of Innovation and Economic Development*, 1 (1), 64-72. <http://researchleap.com/category/international-journal-of-innovation-and-economic-development-issn18497020>
- Lee D., Park, J. and Ahn J. (2001). On the Explanation of Factors Affecting E-Commerce Adoption. Proceedings of the International Conference on Information Systems, ICIS 2001, December 16-19, 2001, New Orleans, Louisiana, USA
- Lee Y., Kozar, K.A. and Larsen K.R.T. (2003). The Technology Acceptance Model: Past, Present, and Future. *Communications of the Association for Information Systems*, 12(50), 752-780
- Mirescu, S.V and Maioreescu T. (2015). The Premises and the Evolution of Electronic Commerce. *Journal of Knowledge Management, Economics and Information Technology*. <http://www.scientificpapers.org>. Retrieved on April 24, 2018.
- Nantembelele, F. And Gopal, S. (2017). E-Commerce Technology Usage in Business Processes in Tanzania: Is There a Significant Gap in Perceived Value and Perceived Risk? *The International Journal of Business Management and Technology*, 1 (2).
- Nazmun, M., Shaheena, S., Fernaz, N and Saifuzzaman, M (2017). A Literature Review of the Trend of Electronic Commerce in Bangladesh Perspective. *Global Journal of Management and Business Research, Economics and Commerce*, 17(3)
- Ngatia, R. (2014). Factors Influencing Adoption of Electronic Commerce by Exhibition Stalls Businesses in Nairobi's Central Business District. Master of Arts in Project Planning and Management, University of Nairobi, Kenya.
- Nisson, C and Allison, E. (2012). The Theories of Reasoned Action and Planned Behavior: Examining the Reasoned Action Approach to Prediction and Change of Health Behaviours. University of Michigan
- Ogbu and Lawal, A. (2015). E-Commerce, Problems and Prospect in Nigeria. *International Journal of Scientific Engineering and Applied Science (IJSEAS)*, 1 (3), Pg 230 - 236
- Ogunsola and Akanji (2018). Influence of Perceived Risk on Consumers' Online Shopping Behavior in Nigeria, *African Journal of Sustainable Development*, 8(3), Pg 73-96.
- Oguntunde T. and Oyeyipo T. (2012). Abandonment Factors Affecting E-Commerce Transactions in Nigeria. *International Journal of Computer Applications*, 46 (23), Pg. 41 - 47
- Okoye H and Obi C. (2015). Development of E-Commerce in Nigeria: The Entrepreneurial Opportunities and Challenges. *IOSR Journal of Business and Management (IOSR-JBM)*, 17 (5), 34-39. DOI: 10.9790/487X-17543439
- Olatokun, W. and Igbinedion, L. (2009). The Adoption of Automatic Teller Machines in Nigeria: An Application of the Theory of Diffusion of Innovation. *Issues in Information Science and Information Technology*, 6

- Omotayo, F. and Dahunsi, O. (2015). Factors Affecting Adoption of Point of Sale Terminals by Business Organisations in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 5 (10). DOI: 10.6007/IJARBSS/v5-i10/1856
- Orimobi, T. (2015). The Growth of E-Commerce in Nigeria - A Brief Overview. [http://tolegalgroup.com/wp-content/uploads/2017/02/E-commerceArticleThegrowthofe-commerce in Nigeria-A Brief Overview.pdf](http://tolegalgroup.com/wp-content/uploads/2017/02/E-commerceArticleThegrowthofe-commerce%20in%20Nigeria-A%20Brief%20Overview.pdf)
- Osho, O., Onuoha, C. and Ugwu, J. (2016). E-Commerce in Nigeria: A Survey of Security Awareness of Customers and Factors that Influence Acceptance. *International Conference on Computing Research and Innovations*, Ibadan, Nigeria
- Philips Consulting (2014). A study of Current Trends in Online Shopping in Nigeria. Retrieved on October 23, 2018, from <http://www.philipsconsulting.net>
- Ryan, T. (2013). Sample Size Determination and Power. John Wiley and Sons. Retrieved on October 26, 2018, from <https://onlinelibrary.wiley.com>
- Santti, R. (2011). Technology Acceptance Factors in E-commerce Environment - Case DHL Express. Department of Information and Service Economics. Masters' Degree Project, Aalto University School of Economics, Finland.
- Shahriari, S and Saeid, G (2015). E-Commerce and its Impacts on Global Trend and Market. *International Journal of Research – Granthaalayah*, 3 (4), 49-55.
- Shareef, M. A., Kumar, V., Kumar, U. and Hasin, A. A. (2009). Theory of Planned Behavior and Reasoned Action in Predicting Technology Adoption Behavior, In *Handbook of Research on Contemporary Theoretical Models in Information Systems*, Dwivedi et al. (Eds.), IGI Global Publications, USA, Chapter XXXI, 544-562.
- Shemi, A. and Procter, C. (2013). Explaining Contextual Factors Affecting E-Commerce Adoption Progression in Selected SMEs: evidence from Botswana. *International Journal of Management Practice*, 6 (11).
- Tiamiyu, M. A. and Ogunsola, K. (2008). Preparing for E-Government: Some Findings and Lessons from Government Agencies in Oyo State, Nigeria. *South Africa Journal of Libraries and Information Science*, 74 (1), 58-72.
- Yaseen, H., Dingley, A., Alhusban, M. and Alhosban, K. (2017). Making Sense of E-Commerce Customers Awareness in a Developing Country Context: A Framework for Evaluation. *The Electronic Journal of Information Systems*, 20 (2), 102-115

Strategic governance is necessary in moving Africa forward. This book *Strategic Governance and Sustainable Development in Africa* contains many chapters whose major focus is strategies on arresting poverty, and helping in Africa's quest for sustainable development. The chapters use contemporary data to present accounts of massive wealth as well as constructing nuanced and detailed pictures of development trajectories and experiences in African countries, from peasant and bourgeois production to industrial and post-industrial phase. The authors work with outstanding and exceptional sets of sources, consisting of both primary and secondary sources, showing how poverty is a created condition in a continent that is perhaps the wealthiest in the world. The use of primary data in various chapters gives unparalleled insights into the past, present and future. The authors challenge much of the narratives on development in Africa which often associate poverty with lack of hard work, initiative, innovation and creativity, demonstrating how farmers, herders and other producers in Africa spend many quality hours trying to improve their lot but get frustrated by poor governance. The chapters have unique specificity and use examples of deep and captured states, often helpless in cushioning their citizens from predatory internal and external dynamics due to lack of strategic governance. Readers from development studies, area, gender, youth, women and minority studies and all social sciences and humanities will find the book useful.

Prof. Maurice Nyamanga Amutabi is Professor of History, Fulbright Scholar and has published over 30 books and over 100 articles in refereed books and journals. He has worked in many universities in Africa and United States. He holds a PhD in History from the University of Illinois at Urbana-Champaign, USA, and Master's and Bachelor's degrees from the University of Nairobi, Kenya. He is the editor-in-chief of the *Journal of Popular Education in Africa (JOPEA)* and the *Journal of African Interdisciplinary Studies (JAIS)*. He is the chairperson of the board of the Centre for Democracy, Research and Development (CEDRED) and President of African Interdisciplinary Studies Association (AISA).

Dr Magdalene Ndeto Bore holds a PhD in Human Resource Management from Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenya. She holds Master's Degree in Human Resource Management from Jomo Kenyatta University of Agriculture and Technology (JKUAT), Bachelor's degree in Education from Kenyatta University Kenya, and she is also a certified Human Resource Management Professional (CHRP-K). Dr Bore has published many refereed articles in journals and edited books. She serves on the editorial boards of the *Journal of African Interdisciplinary Studies (JAIS)* and the *International Journal of African Business Studies (IJABS)*. She has taught at many universities such as JKUAT, Kisii and Lukenya where she has served as Dean, School of Business and Economics and Amity Education Foundation as Dean Academics and Head of Corporate Training.

ISBN 978-9966-116-59-8



9 789966 116598