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TECHNOLOGICAL ENTREPRENEURSHIP AND PERFORMANCE OF ICT FIRMS IN SOUTH-EAST, NIGERIA

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ABSTRACT

The study evaluated Technological Entrepreneurship and performance of ICT firms in South-East, Nigeria. The specific objectives were to; ascertain the relationship between E-wallet and the market share and establish the relationship between online application portals and customer retention of ICT firms in South-East, Nigeria. The study adopted the survey method and the sample size for the study was determined using Cochran formula and sample size of 572 was selected from a population of 11242. The study made use of primary and secondary data sources while primary data were collected through copies of structured questionnaire on a 5-point Likert Scale format while analyses were represented in tables and percentages. The hypotheses were tested using linear regression and correlation analysis. The findings revealed that there was significant positive relationship between E-wallet and the market share ($p= 0.0003 < 0.05$) while there was no significant positive relationship between online application portals and customer retention ($p= 0.1690 > 0.05$) of ICT firms in South-East, Nigeria. The study concludes that the importance of technological entrepreneurship-based applications on ICT firms studied cannot be over emphasized as they remain very tangible assets in the development and managing of ICT frameworks in Nigeria. The study recommends among others that there is urgent need for sensitization on the ease of use and reliability of online application portals as it was found out that there was no significant positive relationship between online application portals and customer retention of ICT firms studied in South-East, Nigeria. In view of this discovery, South-East residents and visitors are encouraged to embrace online applications portals for transactions to improve their contribution to the market growth of ICT firms in the region.

KEYWORDS: Technological Entrepreneurship, E-wallet, market share, online application portal, customer retention.

INTRODUCTION

Recent developments in the World economy occasioned the relevance of knowledge based economy and globalized industries/markets are driving the developments and increase in innovative products and applications. Since the beginning of the early 1980s the comprehensive development of the highly technologically driven knowledge economy and globalization induced international competition has increased the importance of innovation in both developing and developed economies (Camagni, 1995; Feldman, 1994; Malmberg, 1997; Porter, 1990; Ritsila, 1999 and Storper, 1995). These developments also highlighted the importance of entrepreneurship with obvious emphasis on technological entrepreneurship as the most important variable for regional, national and international wealth creators. The imperative of technological entrepreneurship as a source of new wealth creator for individuals and organizations has continued to generate considerable interest and discourse in the environment of business (Venkataraman, 2004).

Entrepreneurship is a process and practice which stimulates and galvanizes innovation and creativity that lead to economic growth and prosperity (Baig, 2007). It is a key economic driver for both the developed and developing nations as they strive to achieve and maintain economic sustainability in a challenging competitive global business environment. Entrepreneurial orientation is a concept that provides and presents prior knowledge and information related to innovation, creativity and risk and ways of mitigating them through proactive actions and interventions. Lumpkin & Dess (1996) define entrepreneurial orientation as the process, practice and decision-making activities associated with new business entry.

Prodan (2020) confirms that there are several words and acronyms used in various articles and literature for technological entrepreneurship. They include technology entrepreneurship, technical entrepreneurship, and techno-entrepreneurship among others. Dorf and Byers (2005) defines technological entrepreneurship as a style of business leadership that involves the identification of high earning potential, technological-intensive commercial opportunities, collection of resources such as talent, skill and capital as well as managing rapid growth and high risk using principled decision making skills, processes and procedures. Technology oriented investments exploit breakthrough and advancements in science and engineering to develop better value driven products and services to their customers which in turn guarantees their continuous loyalty and patronage. Leaders of technologically driven enterprises exhibit focus, passion, drive and unrelenting will to succeed where others have failed.

Motivational factors of the technological entrepreneur are the key drivers of success and that distinguishes them from the non-technological entrepreneurs. The three identified motives for venturing into new businesses are; independence, wealth and exploitation. Most importantly the desire for independence into two sub-motive forms namely freedom and control. While the desire

for freedom constantly emerges from the need to exit the bottlenecks of bureaucracy of previous employment in large public or private organization and settle for the pursuit of personal research-oriented goal, the control motive is a more complex psychological driver (Oakey, 2003).

The availability of resources enabled by entrepreneurial networks greatly enhances the development, birthing, survival, and growth potential of new firms (Liao and Welsch, 2003). Entrepreneurship education is another beautiful way of teaching universal leadership skills which will psychologically condition the mind for constant change, contributing to an innovative team and demonstrating passion in all efforts to create and innovate. Personality perspective indicates that technological entrepreneurs are found to be more extroverts, more intuitive and more thinking oriented than their non-technological entrepreneurs (Roberts, 1989).

The technological entrepreneur is an acknowledged key catalyst in the process of industrial formation and growth. There exist various technological entrepreneurs involved in the numerous processes of establishing robust and sound new innovative technology-based organizations. Most often, technological entrepreneurs have diverse knowledge, skills, abilities, and other attributes more than the non-technological entrepreneurs. They are equipped with sufficient knowledge both technical and business-related skills required for their success (Dorf and Byers, 2005).

The rate of mortality of technology-based companies has become a source of concern and worry for economic planners in many nations of the world. Nigeria is not isolated from this phenomenon and South-East Geopolitical zone remains an economic hub in Nigeria with lots of technology-based companies and their products/services that have gone down the drain. Currently, the fear of sustaining thriving technology-based business concerns operating in South-East Nigeria necessitated this study so that the trans-generational problems experienced by other businesses in the region where they failed to progress beyond the generation of their founders can be properly addressed. The rate of technological advancement which renders existing technology obsolete when organizations fail to innovate is worrisome and has led to the early morbidity of fixated technology companies. This study will address the challenge of obsolescence in technology which has led to the failure of ICT firms and reverse the failure trend for them because of the negative economic implication on the economy and job losses associated with the failure.

CONCEPTUAL REVIEW

Concept of Technological Entrepreneurship

Technological entrepreneurship, also referred to as technology-based entrepreneurship, can be defined as the setting up of new enterprises by individuals or corporations to exploit technological innovation. It can also be described as the commercialization of emerging technological discoveries or innovation. Technological entrepreneurship is defined as a style of business leadership that involves identifying high-potential, technology-intensive commercial opportunities, gathering resources such as talent and capital, and managing rapid growth and significant risk using principled decision-making skills, (Dorf & Byers, 2007).

Technological entrepreneurship is a complex phenomenon that encompasses not only multiple disciplines and levels of analysis to be investigated using different perspectives, but also a case-by-

case approach for the analysis to be meaningful. The concept of technological entrepreneurship incorporates four main sets of activities relating to (i) creating new technologies or identify existing technologies (but previously undeveloped), (ii) the recognition and matching of opportunities arising from the application of these technologies to emerging market needs, (iii) technology development/application and (iv) business creation.

The dominant theme of studies on technological entrepreneurship focuses on small technology firms and on external factors that influence the formation of technology firms (Bailetti, 2012).

Features of Technological Entrepreneurship

Flaszewska & Lachiewicz, (2013) affirms that there are certain attributes that characterize technological entrepreneurship. These attributes are elaborated below:

- i. **High Potential Opportunity:** A new technology-based venture is described as having a high potential opportunity if it is capable of creating new value for its customers, it has a significant level of technology understanding which is difficult to replicate and can often be protected (patented), it has a significant first mover advantage, it has a level of scalability, it creates a barrier to entry, and it also has a high level of initial risk which can be translated into high levels of return.
- ii. **Technology-Intensive Opportunity:** Technological entrepreneurship is described as a technology-intensive opportunity involving a process of problem solving, raising and safeguarding the quality of life, needing technical skills and applications, identifying potential market, improvement in quality of products in order to improve competitiveness of the firm with expectation of saving in process cost. Furthermore, the sufficient reason for embarking on technological entrepreneurship in borne out of the need to commercialize significant innovations that are expected to guarantee suppliers of materials, long-term stability of firms and increase output.
- iii. **Unique Technology Capable of Driving a New Business:** As firms can be viewed as bidding and competing for customers' purchases, and markets can be evaluated based on the extent to which the profitability of a firm hinges on meeting consumers demands, if possible, better than its rivals. Consequently, aside from having more share of the market through aesthetic changes, price reduction, and better performance and so on, technological entrepreneurship has the characteristic of being able to advance new technologies that can institutionalize new ventures that adequately meet consumers' need.
- iv. **High Risk of Failure:** One of the true measures of success for technological entrepreneurs is the extent to which they are able to develop and bring to market radically innovative new products. Developing new products is especially a risky business endeavor, because a technically feasible innovation might not be economically profitable, and the product may not survive the commercialization process. Literature reported that success rates for new inventions ranged from 1% to 85% Cooper, (1978), & Ilori, (2006). From their observations, less than 2% of potential technology-based venture ideas (technology innovations) end up being registered as patent or intellectual property. Also less than 1% of business plans received by venture capitals get funded. In fact, many innovations that should have been commercialized into a technology-based venture end up in shelves. For instance, it was found that there is lack of faith in the Nigerian Patent Law, which in turn provided little protection for local innovations [9]. Innovators consider this a major problem in the commercialization of their products and processes; 89% had not explored the use of the patent law, even though the law had been enforced since 1970 and 6644 patents have been registered with only 177 owned by Nigerians.

- v. **Longer Time to Market:** This refers to the uncertainty surrounding the commercial success of an innovation because it is difficult to predict the time lag between the launching of a product in the market and the growth of sales due to unforeseen circumstances that could influence the demand for the product.
- vi. **Demand of Infrastructure, Facilities and Resources:** Technological entrepreneurs are faced with several challenges to development. Literature opined that the challenge that innovative entrepreneurs face are attributable to inadequate resources, expensive patents and unavailability of equity Nwafor, (2007). To this list we add the non-availability of venture capital within the Nigerian environment.

Technological Entrepreneurship Development in Nigeria

The literature on technological entrepreneurship is sparse in Nigeria and technological entrepreneurs are very few. For instance, in a study of technological and non-technological women entrepreneurs in South-Western Nigeria, the women in non-technological businesses were about twice as many as those in technological businesses (Aderemi, Ilori, Siyanbola, Adegbite & Abereijo, 2008). Entrepreneurs are catalysts of change in a market economy. They spur efficient use of resources and facilitate transactions between parties with different preferences and endowments. Central to entrepreneurial behaviour is the acceleration, generation, dissemination and application of innovative ideas. In the developing countries such as Nigeria, high level of entrepreneurship is important in reducing the adverse socioeconomic impacts by creating new employments. A society with a strong entrepreneurial culture have a positive influence on the rate at which new firms are created and their chances of survival and growth as well as the fate of already existing firms (Arzeni, 1998). In a more specific sense, entrepreneurship is the vehicle on which innovation, which is the application of knowledge in production, rides. Indeed, innovation is at the heart of entrepreneurship. Within this context, entrepreneurs are considered as “champions” of some sort who convert ideas into products and services and ultimately create wealth and reduce unemployment (Othman, Ghazali, Ezlika & Yeoh, 2006). In this section, we consider some critical issues and current research regarding technological entrepreneurship in Nigeria.

The relationship between Easy payment applications and the market share of ICT firms

The success of companies in the South West Nigeria is often linked to the ability to innovate, which includes adopting new information communication technologies (ICT). Banks have to adopt new technologies such as e-banking and e-payments to maintain competitive positioning in a market (Martins, Olivera, & Popovic, 2014). The purpose of this quantitative correlational research is to determine if a relationship exists between the variables of security, usability and support and e-payment adoption.

In a review of (Kabir, Saidin, & Ahmi, 2015) they identified many of the factors behind the increased adoption of e-payments as a viable substitute for cash in all types of transactions. The review indicated that the stakeholders in e-payment systems often adopt a marketing perspective in which they design the system to meet the perceived needs of customers and communicate the benefits of the system to persuade users to conduct e-payment transactions. The majority of the research examining e-payments has been conducted in the banking industry in emerging economies. Consequently, there is some uncertainty as to whether the same factors influence e-payment adoption in developed nations and in industries other than banking. The greatest barriers to the

adoption of e-payments among users was lack of knowledge and skills in how to use a specific e-payment system and the fear of a security breach that would lead to loss of funds or compromise of personal information.

Treiblmeyer, Pinterits, & Floh, (2006) Conducted quantitative research to identify the factors influencing users to adopt online e-payment systems in the context of e-government. The model developed for the study proposed that past experience with the use of an e-payment system had a direct effect on perceived frictionless use, which is similar to ease of use. Past experience also has an effect on the degree of trust in the system, which is a function of the users' understanding of the security protocols used to provide user protections. Perceived frictionless use and trust are the two key variables affecting attitude towards the use of the e-payment system. The findings showed that the characteristics of the users including education level and age have a significant influence on attitudes towards and intention to use e-payment systems.

Some research concerning e-payment adoption has focused on identifying the factors leading users to reject the use of any type or online e-payment system. (Lee, 2009) conducted quantitative research to identify the most significant concerns of online banking and e-payment customers. The results showed that consumers balance the perception of financial and security risk with the anticipated benefit from using the e-payment system. In addition, the degree of perceived financial risk can be a deterrent to adopting e-payments with financial risk as the possibility of financial loss due to error. In addition, the degree of support to assist with the learning process necessary to use e-payments was an important factor influencing adoption. The findings of (Kabir, Saidin, & Ahmi, 2015) provide support for the findings and conclusion drawn by (Lee, 2009) concerning the importance of ensuring the users of e-payment systems have enough knowledge and skills to use the technology.

The relationship between online application portals and customer retention of ICT firms

Flaszewska & Lachiewicz, (2013) affirm that the world has been significantly changed by the internet and its follow-up products. The most influential impact has been on the banking sector, which demands fast service and a high level of customer satisfaction. The adoption of internet technology triggered the development of the banking sector, with the most eye-catching feature being a customer focus regarding their relationship with banks. The internet promotes the concept of retention, which also underlines the value of an old and loyal customer. With the help of internet technology, banks can provide better service to their customers and offer new features which speed up the process, enabling them to gain a competitive advantage in the market without the need for physical contact with the customer. Nowadays, people use banking services without much effort through the internet and communication technology. Self-service technology also helps the customer to use customized banking services. From a marketing perspective, SST is not merely another marketing tool, but it can also be a strategic tool to help banks increase consumer recruitment, retention and development (the buying of additional products and services).

In the service provided using SST, retaining existing customers should be more cost-effective than acquiring a new customer. The banking companies today have entered a race of acquisition for new customers and may have forgotten their old, loyal customers. Banks should focus on the long-term

relationship with the customer rather than a one-time service relationship. Customer retention is very important for all service sector firms and will receive increasing attention in the next few years. Internet technology improves efficiency and lowers the cost of service, whereby the best use of the internet has been shown in developed countries. Many banks have websites and provide 24-hour assistance to their customers. Now this wave has moved to Saudi Arabia and Middle Eastern countries, whose markets have full potential. With the growth of the internet and communication technology, customer retention has been a problem and this is partially due to the lack of literature focusing on this perspective. Therefore, this study aims to explore the studies and theoretical models built around technology adoption, customer satisfaction and customer retention (Dorf & Byers, 2007).

THEORETICAL FRAMEWORK

Theory of Innovative Diffusion

The study is anchored on the theory of innovative diffusion. The market diffusion process describes how an innovation spreads through a market. According to Kotler (2012), adoption is an individual's decision to become a regular user of a product. He maintained that an innovation of any product, service or idea that is perceived by someone as new even when it has a long history. Rogers (1983) as used in Kotler, (2012) defines Innovation diffusion process as the spread of a new idea from its source of invention or creation to its ultimate users or adopters.

Continuing, he maintained that innovations are not adopted by all individuals in a social system at the same time. Instead, they tend to adopt in a time sequence, and can be classified into adopter categories based upon how long it takes for them to begin using the new idea. Practically speaking, it's very useful for a change agent to be able to identify which category certain individuals belong to, since the short-term goal of most change agents is to facilitate the adoption of an innovation. Adoption of a new idea is caused by human interaction through interpersonal networks. If the initial adopter of an innovation discusses it with two members of a given social system, and these two become adopters who pass the innovation along to two peers, and so on, the resulting distribution follows a binomial expansion.

METHODOLOGY

The study adopted the survey method and the sample size for the study was determined using Cochran formula and sample size of 572 was selected from a population of 11242. The study made use of primary and secondary data sources while primary data were collected through copies of structured questionnaire on a 5-point Likert Scale format while analyses were represented in tables and percentages. The hypotheses were tested using linear regression and correlation analysis. The study was conducted in 10 ICT firms in South-East, Nigeria using purposive non-probability sampling technique. These ICT firms were selected because they are the major stakeholders in the geographical scope of the study. The instrument used for data collection was a structured questionnaire designed by the researcher. The copies of questionnaire were designed for easy comprehension of the respondents. It consists of two (2) Sections A and B. Section A will contain the demographic and personal information about the respondent. They include respondents' sex, age, marital status; educational qualification and part two consist of items of the research questions meant to be answered by the respondents. Concerning the survey scale, the quantitative close-ended

statements were scaled according to the 5 point Likert Scale format, a technique designed to measure attitudes, typically using a continuum of "Strongly Disagree" to "Strongly Agree. This survey has a scale of five responses which are "Strongly Agree (SA)," "Agree (A)," "Undecided (U)" "Disagree (D)," and "Strongly Disagree (SD)."

Data Presentation and Analyses

In this part of the research, information generated through the distribution of copies of structured questionnaire was analyzed using the frequency tables and corresponding percentages of the demographic characteristics of the respondents. The hypotheses of the study were tested using regression and correlation analysis.

Analysis of Items in the Questionnaire based on Research Questions

This study made use of percentages, frequency and measures of central tendency (5-point Likert scale mean rating) in the analysis of the responses developed from questionnaire responses.

Research Question one

What is the nature of the relationship between E-wallet and market share of ICT firms in South-East, Nigeria?.

Table 1 Analysis of Research Question Two

S/n	Questionnaire item	SA 5	A 4	UD 3	D 2	SD 1	TOTAL	--- X
1	E-Wallet aids business growth.	204 1020 (38.8%)	158 632 (30.1%)	22 66 (4.2%)	53 106 (10.1%)	88 88 (16.8%)	525 1912	3.64
2	E-Wallet improves continuous customer loyalty	199 995 (38.0%)	205 820 (46.3%)	19 57 (12.4%)	40 80 (10.0)	62 62 (13.7%)	525 2014	3.84
3	Customer traffic benefits from E-Wallet adoption	254 1270 (48.4%)	1 89 756 (45.2%)	48 144 (17.8%)	13 36 (2.5%)	21 21 (5.3%)	525 2227	4.24
4	Youths are more attracted to digital currencies which aids organizational market share	178 890 (33.9%)	251 1004 (47.8%)	12 36 (2.3%)	67 206 (12.8%)	17 17 (3.2%)	525 2081	3.96
	Total	835	803	101	173	188		3.92
	Grand Total	1638 (78.0%)		101 (4.8%)	361 (17.2%)	100%		

The findings from the study on table 1 show that overwhelming number of respondents, 1638(78.0%) agree/strongly agree that there is a significant relationship between E-wallet and market share of ICT firms in South-East, Nigeria?.. This is validated by the mean values of 3.92. Meanwhile, 361 (17.2%) of respondents disagree/strongly disagree to the above assertion while, 101(4.85) did not indicate any opinion.

Research Question Two

What is the nature of the relationship between online application portals and customer retention of ICT firms in South-East, Nigeria?.

Table 2 Analysis of Research Question Four

S/n	Questionnaire item	SA 5	A 4	UD 3	D 2	SD 1	TOTAL	--- X
5	Online application portals affects customer loyalty	63 315 (12%)	41 164 (7.8%)	19 57 (3.6%)	187 374 (35.6%)	215 215 (41.0%)	525 1125	2.14
6	Search engine visibility of technology based companies affects customer satisfaction.	47 235 (9.0%)	52 208 (9.9%)	27 81 (5.1%)	219 438 (41.7%)	180 180 (34.3%)	525 1142	2.18
7	Digital feedback system enhance continuous customer patronage	98 490 (18.7%)	43 172 (8.2%)	11 33 (2.1%)	174 348 (33.1%)	199 199 (37.9%)	525 1242	2.37
8	Organizational expansion can be enhanced by online application portal system.	32 160 (6.1%)	65 260 (12.4%)	18 54 (3.4%)	309 618 (58.9%)	101 101 (19.2%)	525 1193	2.27
	Total	240	201	75	889	695	2100	2.24
	Grand Total	441 (21%)		75 (3.6%)	1584 (75.4%)		100 %	

In order to establish the relationship between online application portals and customer retention of ICT firms in South-East, Nigeria, four research questions were formulated. The result of the analysis based on the aggregate responses from the respondents as shown in table 2 indicates that 1584(75.4%) Disagree/strongly disagree, while 441(21.0%) Agree/Strongly agree and 75(3.6%) did not indicate any response/opinion. Following from the acceptance cut off point of 3.0 and the grand mean of 2.24 which is below the cutoff point, suggests that there is no significant relationship between online application portals and customer retention of ICT firms in South-East, Nigeria?.

Test of Hypothesis One

Step One: Restatement of hypothesis in null and alternate forms.

H₀: There is no significant relationship between E-wallet and the market share of ICT firms in South-East, Nigeria.

H₁: There is a significant relationship between E-wallet and the market share of ICT firms in South-East, Nigeria.

Step Two: Presentation and Analysis of Result

Dependent Variable: MARKET SHARE

Method: Least Squares

Date: 04/28/23 Time: 06:56

Sample: 1 525

Included observations: 525

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.184348	0.120493	1.529952	0.1266
E-WALLET	0.947724	0.025987	36.46961	0.0003
R-squared	0.717760	Mean dependent var	4.493333	
Adjusted R-squared	0.717220	S.D. dependent var	1.018181	
S.E. of regression	0.541438	Akaike info criterion	1.614627	
Sum squared resid	153.3204	Schwarz criterion	1.630869	
Log likelihood	-421.8397	Hannan-Quinn criter.	1.620987	
F-statistic	1330.032	Durbin-Watson stat	0.175509	
Prob(F-statistic)	0.000000			

Source: Researcher's computation using E-views statistical software 2023

The regression output for hypothesis two clearly shows that the numerical coefficient of E-Wallet yielded a positive value at the magnitude of 0.947724. This empirically entails that E-Wallet contributes positively to market share ICT firms in South-East, Nigeria. The adjusted R-Squared yielded 0.717220 which measures the explanatory power of the independent variable clearly shows that the variations in market share is explained by the changes in the E-Wallet at approximately 72%. This is high and significant. The p-value which measures the level of significance yielded 0.0003.

Decision Rule

The decision rule is to accept the alternate hypothesis (H1) if p-value is less than 0.05 and to reject H1 and accept H0 if p-value is greater than 0.05.

Step Three: Decision

From the above analysis, it is clearly seen that the p-value = 0.0003 is less than 0.05. This compels the rejection of the null hypothesis (H₀) and the acceptance of the alternative (H₁). Hence; there is a significant positive relationship between E-wallet and the market share of ICT firms in South-East, Nigeria.

Test of Hypothesis Two

Step One: Restatement of hypothesis in null and alternate forms.

H₀: There is no significant relationship between online application portals and customer retention of ICT firms in South-East, Nigeria.

H₁: There is a significant relationship between online application portals and customer retention of ICT firms in South-East, Nigeria.

Step Two: Presentation and Analysis of Result

Dependent Variable: CUSTOMER
 RETENTION
 Method: Least Squares
 Date: 04/28/23 Time: 07:55
 Sample: 1 525
 Included observations: 525

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.908636	0.116781	33.46993	0.0000
ONLINE APPLICATION PORTALS	-0.051153	0.037142	-1.377236	0.1690
R-squared	0.003614	Mean dependent var	3.779048	
Adjusted R-squared	0.001708	S.D. dependent var	1.586182	
S.E. of regression	1.584826	Akaike info criterion	3.762629	
Sum squared resid	1313.605	Schwarz criterion	3.778870	
Log likelihood	-985.6900	Hannan-Quinn criter.	3.768989	
F-statistic	1.896778	Durbin-Watson stat	0.042440	
Prob(F-statistic)	0.169028			

Source: Researcher's computation using E-views statistical software 2023

It can be clearly seen from the regression output above that the numerical coefficient of online application portals yielded a negative value at the magnitude of -0.051153. This entails that for the time of this analysis, online application portals has a negative contribution to customer retention of ICT firms in South-East, Nigeria. The adjusted R-Squared yielded 0.001 708 which measures the explanatory power of the independent variable shows that online application portals is weak in explaining the variation in customer retention. The p value yielded 0.1690.

Decision Rule

The decision rule is to accept the alternate hypothesis (H1) if p-value is less than 0.05 and to reject H1 and accept H0 if p-value is greater than 0.05.

Step Three: Decision

From the above analysis, it is clearly seen that the p-value 0.1690 is greater than 0.05. This compels the acceptance of the null hypothesis (H0) and the rejection of the alternate hypothesis (H1). Hence; there is no significant positive relationship between online application portals and customer retention of ICT firms in South-East, Nigeria.

CONCLUSION AND RECOMMENDATIONS

The study in conclusion justified the importance of technological entrepreneurship on the performance of ICT firms which are tangible assets in the development and managing of ICT frameworks in Nigeria. The variable of technological entrepreneurship studied E-wallet was positive and significant in the performance of ICT firms induced proxies of market share. However the other variable of technological entrepreneurship online application portals and online transport applications were not positive and significant in customer retention of ICT firms in South-East, Nigeria.

The study recommends that the newly launched Central Bank of Nigeria Digital currency should be embraced by Nigerians as part of the global digital currency revolution as it was discovered that there was significant positive relationship between E-wallet and the market share of ICT firms while there is need for sensitization on the ease of use and reliability of online application portals as it was found out that there was no significant positive relationship between online application portals and customer retention of ICT firms in South-East, Nigeria.

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