DISRUPTIVE INNOVATION ON SUSTAINABLE ENTREPRENEURSHIP IN SELECTED TELE-COMMUNICATION INDUSTRIES IN SOUTH EAST NIGERIA

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Abstract

This paper seeks to examine disruptive innovation and sustainable entrepreneurship in selected telecommunication industries in south east Nigeria. The specific objectives were to; ascertain the effect of new market disruption on sustainable entrepreneurship opportunities and determine the effect of low- end disruption on uncertainty in sustainable entrepreneurship action. The researchers design adopted for the purpose of this study was descriptive survey design. The sample size of 201 was drawn from the population of 917. The hypotheses were tested using inferential statistical technique such as Regression Analysis and Pearson's Product Correlation Analysis computed using computer software for statistical package for social sciences (SPSS) version 20. The Study finding out that there is a significant positive effect on new market disruptions on sustainable entrepreneurship opportunities ($r = .568$; $F = 122.059$; $t = 11.048$; $P < 0.05$) and there is a significant positive effect on low- end disruptions on uncertainty in sustainable entrepreneurship action ($r = .776$; 387.760 ; $t = 19.692$; $P < 0.05$). The study therefore concludes that disruptive innovation influences sustainable entrepreneurship in selected telecommunication industries in south east Nigeria. The researchers recommends that new market disruptive innovation should be design in such a way that entrepreneurial opportunity will be radical oriented rather than incremental in nature so as to apply to product, service and business-model opportunities in used by companies.

Keywords: Disruptive Innovation, Sustainable Entrepreneurship

INTRODUCTION

Historically, the concept of disruptive innovation theory has been applied in real business environments and studied by various academics since its initial development in 1995. Management scholars found this theory fascinating and interesting, as such the concept has spread profusely among practicing managers and disruption has become one of the highly

seek word in management dictionary currently. Yet, the key concept has been misunderstood by some scholar regardless of its popularity (Christensen, 2006; Raynor, 2011). Thus; this theory seems reasonably well-positioned on any appraisal of important; even with extensive citations to the foundational study within different academic echelons ranging from; healthcare, technology strategy, economics, organizational theory, marketing, innovation (Christensen, Altman, McDonald and Palmer, 2016). Disruptive innovativeness plays a key role in the success of the world's top telecommunication industries.

Innovativeness comes under the purview of innovation, in other words the former is the product of the later including incremental (sustaining) innovations and radical (disruptive) innovations (Christensen, 1997; cited in Majamäki and Akpınar, 2014). The dramatic change within U.S. telecommunication industries is as a result of innovation which existed in the last 100 years. The deregulation principles which allowed opponents into definite market segments, has influence crucial systematic changes in the industry. Bell's famous New Jersey laboratory champion the innovation history, the industries is working seriously to offering new opportunities to expand and extend the our theories (Christensen, Scott and Erik, 2001). Dichotomizing any industry that invites both top engineers to resolve its problems and prominent government officials to expertise its multifaceted principles can only help supplement the academic study of the process of innovation across culture and other parts of the world.

In Africa, Telecom Groups like Airtel and Tigo have taken steps to measure down processes in the Continent to decrease their debts and relocate them to amalgamate their hold in their primary home markets in India and South America respectively. Airtel and Tigo have just agreed to amalgamate their processes in the Ghanaian telecom market. With fairly mature telecom Processes across Europe, Orange Group has in the last few years extended violently into Africa with recent acquisitions of setups in Sierra Leone, Burkina Faso and Liberia. The present Nigerian Telecom marketplace needs to be cross-examined in the light of the fluctuating Telecom World Order as pictured above. There are presently several Operators in the Nigerian Telecom market: GSM, CDMA Operators, and Operators with 3G/4G LTE band etc. Some of the Operators are Global or Regional players (Ikpoki, 2017). Disruptive innovation has really form part of economic advance and progress in both developed and under developed nations of the world; though it still have challenges on product result which most of the mainstream customers do not valued.

Innovativeness is defined here as the expansion of a new idea subsequent in the presentation of a new product, service or process (Damanpour 1996; Cumming 1998). Innovations are harvests of innovativeness, and they array from sustaining (also called incremental) innovations to disruptive (also called radical) innovations (Christensen 1997). Most telecommunication industries tend to focus on nourishing innovations, i.e. using existing technologies to improve and add to established mainstream products that are favored by majority of customers (Majamäki and Akpınar, 2014). However disruptive innovation initially motivate companies without large possessions to serve low-end markets that recognized company overlooks because of the markets' low profit margins (Christensen, Raynor, and McDonald, 2015).

Disruptive technologies, in its place, are rare and, initially offer worse product result and are not normally valued by conventional customers; however, these disruptive technologies will

become the conventional solution and result in the failure of the existing ones belonging to new customers coming into the system (Majamäki and Akpınar, 2014). Disruption can take place in any product or service market, and they often attract new types of customers by offering an entirely new type of solution to the existing problem (Christensen et al. 2004). These could be typically inexpensive, simpler and smaller products with upgraded suitability of use. They have occurred in numerous businesses when steamships have disturbed sailing ships, music downloads have disturbed the CD industry, old-style newspapers are facing interruption by online news services, and online shopping is troublemaking high street retailing (Trott 2012). Disruptive innovations have had a transmuting consequence on many industries and absolutely added towards customer benefit and corporate revenues. 86 percent of disruptive innovations accomplish above financial forecasts, and there is evidence that succeeding in disruptive innovations can lead to high growth (Christensen 2007). Disruptive innovation can be described as a form of entrepreneurial prospect that is radical rather than incremental in nature (Shane and Venkataraman, 2000; Eckhardt and Shane, 2003).

Entrepreneurship is the development of new relics at the product and firm level that substitutes long-standing with novel value through entrepreneurial action under circumstances of indecision and change. This applies to product, service and business-model prospects, and the definition that is implemented in this work (McKelvey, 2004). Innovation is a precise purpose of entrepreneurship; hence defensible entrepreneurship centers on making product and services perform better in a ways that customers in the mainstream market already value and address the next generation needs in existing market. Entrepreneurial activity can only be labeled supportable, and therefore satisfy workable expansion, if there is an equal coming together of the 3Ps (People, Planet, Profit) -which called 'triple bottom line'- within the business creativity (Saoudi, Medjahdi and Brahimi, 2017). On this note, the researcher deems it feet to explore a research on Effect of Disruptive Innovation and Sustainable Entrepreneurship in Selected Tele-Communication Industries in South East Nigeria.

1.2 Statement of the problem

Disruptive innovation focus on the creation of entirely new market for a new kind of product and services and also fail to address the next generation need of customers in existing market; but concentrate on how new market can emerge. On the other hand, it is a fact that many telecommunication industries do not pursue disruptive innovations as they are highly risky, and a majority of the pursuers fail to successfully develop and market them.

The telecommunications Industry has now become a critical part of the Nigerian economy. We cannot overlook the challenging signs with loan defaults by one of the outstanding telecom industries in Nigeria. There are new global challenges that are a hindrance to the growth of Nigerian Telecom industries if drastic change is not taken place; since Nigeria is at the point of recovery from economic trauma. The good news is that the government now has a clear economy recovery growth plan (2017 – 2020).

We need to have a hearty telecom Industry to support Nigeria's medium-term economic recovery objectives. Nigeria needs to meet the set objectives of the National Broadband Plan. It will require a deep, calm and objective commitment of all the key stakeholders on the ultimate Industry concerns in the light of the new Telecom World Order. When these is done, entrepreneurs will be more innovative responsive and sustain in making product and services

perform better in a ways that customers in the mainstream market will value and address the next generation needs in existing market.

1.3 Objectives of the study

The broad objective of the study is the effect of disruptive innovation and sustainable entrepreneurship in selected telecommunication industries in South East, Nigeria. The specific objectives were to;

- I. Ascertain the effect of new market disruption on sustainable entrepreneurship opportunities entrepreneurship in selected telecommunication industries in South East, Nigeria.
- II. Determine the effect of low- end disruption on uncertainty in sustainable entrepreneurship action in selected telecommunication industries in South East, Nigeria.

1.4 Research question

- I. What is the effect of new market disruption on sustainable entrepreneurship opportunities in selected telecommunication industries in South East, Nigeria?
- II. What is the effect of low- end disruption on uncertainty in sustainable entrepreneurship action in selected telecommunication industries in South East, Nigeria?

1.5 Research Hypotheses

H₁: there is a significantly positive effect on new market disruption on sustainable entrepreneurship opportunities in selected telecommunication in South East, Nigeria.

H₂: there is a significantly positive effect on low- end disruptions on uncertainty in sustainable entrepreneurship action in selected telecommunication in South East, Nigeria.

LITERATURE REVIEW

2.1 The Concept of Innovations

The term innovation is seen as the life blood of entrepreneurial activity, innovations have been acknowledged for long as a foremost foundation for creating competitive advantage creating economic growth and technical progress (Schumpeter 1934). However, a methodical investigation of the innovation-performance association in growing businesses is missing (Rosenbusch. 2011), and a better comprehension of what makes a fruitful innovation and innovation procedure is needed (Rothwell 1992; Leifer. 2000; Becheikh. 2006). This is real particularly in disruptive innovation where doubts concerning their market potential and reception prevail (Assink 2006).

Despite dissimilar viewpoints between entrepreneurs, researchers and policy makers, innovations are distinct broadly as the improvement and use of new concepts and conducts in organizations and barely as implemented technologically new products and processes (Damanpour and Wischnevsky 2006; Massa and Testa 2008). They can be mechanical innovations such as new merchandises or new facilities, and managerial innovations such as new markets or new managerial structures. Innovations are categorized as product innovations and process innovations, closed innovations and open innovations, and radical (disruptive) innovations and incremental (sustaining) innovations. Whereas product innovations are high-skill demanding and convert into greater development rates in auctions

and engagement, workers with secondary education are more appropriate for process innovations which automatically do not need to achieve any significant growth (Goedhuys and Veugelers 2012). In both types of innovations, keeping fit concentration of the right staff is establish to impact administrative innovativeness (Freel 2005).

Damanpour and Wischnevsky (2006) further distinguish between generation of innovations and adoption of innovations. The previous denotes the conception of an idea and its marketable development (i.e. invention plus exploitation), and the second discourses the integration of new products, services and technologies by the adopting association (i.e. initiation plus implementation). This study takes the group perception and describes innovation process as a set of investigation activities starting from need/problem/opportunity acknowledgment to exploration, development (idea formulation, problem solving, and prototype solution) and commercialization (Roberts 1988; Rogers 1995). Innovations occur in communal knowledge procedures as they involve collective formation of new information or novel recombination of prevailing information (Lundvall 1992; Freel 2003). Pointers of innovation dimensions can be based on inputs or outputs of the innovation process. Pointers based on inputs can be R&D budget, existence of dignified R&D, and number of R&D staff, whereas pointers based on outputs can be quantity of patents, quantity of innovations, absolute sum of sales of innovative products, and upturn in market portion (Massa and Testa 2008).

Patterns of innovative activity are determined by the importance of science and technology push and demand pull. Based on differences in foundations of technology, users' needs, and means of seizing benefits, Pavitt (1984) offers taxonomy of four types of minor innovative firms: supplier-dominated businesses, scale-intensive businesses, focused equipment dealers, and science-based businesses. De Jong and Marsili (2006) further analyze the features of these types of businesses. Supplier-dominated businesses are the smallest innovative ones, and they carry out process innovations only. Their in-house R&D competences are weak, and dealers are their main source of innovations. Scale-intensive organizations allocate financial and time possessions to innovation, but R&D employees and the use of external networks for innovation are limited. Their degree of innovativeness is at standard level, stable among product and process innovations. Innovativeness of focused tackle suppliers is highest in product innovations and lowest in process innovations. They rely on client requirements as foundations of innovation and use in-house specialized human resources rather than exterior foundations in innovating. Finally, science-based firms display highest level of innovativeness both in products and processes. These firms differ from other types in that they rely on information from universities and research institutes as a source of innovation.

2.1.2 Disruptive Innovation Theory

Disruptive innovations change the demand and needs of an prevailing market and as a result disrupt an prevailing technical route (competence-destroying) while sustaining innovations upgrade and improve it (competence-enhancing) (Gatignon et al. 2002). The source of disruption can be a technological disjointedness, a commercial disjointedness, or both, resulting in significant enhancements in product presentation or price tag (Leifer et al. 2001). As illustrated in Figure 1, disruptive innovations either offer more accessible or lower prices to customers at the low end of an prevailing market (i.e. low-end disruptions) or create new markets by conveying new structures to non-customers (i.e. new-market disruptions). Low-end disruptions mark overran customers with lower-cost business prototypes. They are

humbler and cheaper but lower-performing at first, thus promising lower profit margins. The reasoning behind their appearance is that by over-satisfying customers' needs in hopes of higher margins; large occupants create a space at lower price points permitting competitors with disruptive technologies to develop (Christensen and Raynor 2003). New-market disruptions which mark non-consumption are ground-breaking. In both types of disruptions the common denominator is that entrants are not competing with large occupants and do not therefore apparently position an instant peril to them. That is why they are frequently not documented as contestants at their outline.

Figure 1. Disruptive innovation theory. Source: Christensen et al. (2004, xvi).

Huge incoming will desire supporting innovations over disruptive innovations (Christensen 1997; Christensen et al. 2004; Raynor 2011). This may be due to three reasons. First, as they are focused on their prevailing clients, they will give their clients what they want and “kill” any other ideas. Secondly, small evolving markets where disruptive technologies typically are aimed at originally are not good-looking to large firms due to their low profit prospective. Thirdly, the inflexible competences of large firms can set restrictions for tactical movements to track disruptive innovations. According to disruptive innovation theory, large new entrants are likely to beat entrants when the competition is about supporting innovations, but lose

contrary to entrants with disruptive innovations. This is because respectable administration for large new entrants implies market research and in-depth forecasting, which are suitable practices when dealing with supporting innovations. However, in the case of disruptive innovations, the markets are unidentified and market data does not occur. Therefore, predictions and selected strategies can be wrong. Tolerance of failure is a major concern that large efficacious incumbents fight with. Because of their suppleness to be able to cope with indecision and tolerate catastrophe, start-ups are more likely to prosper in disruptive innovations. Many large incumbents have a habit of waiting until these markets will propagate “to be interesting” and terminate disruptive innovations (Christensen and Bower 1996). This gives small start-ups substantial defense to originally attain important first-mover compensations.

According to disruptive innovation theory, disruptive innovations do not aim the conventional market at first, because they underachieve likened to prevailing products. However, over time these innovations will convert performance-competitive due to fast technical advances. Mainstream customers will switch to them when they accomplish their existing desires and offer additional rewards not provided by new products and/or when the unit prices of the innovations are expressively lower than those of new products (Christensen and Bower 1996; Adner 2002). As a result of this development, the small entrant company will propagate and replace the incoming ones.

2.1.3 Entrepreneurial disruption elements

As a method of Schumpeterian ‘creative destruction’, disruptive innovation falls directly within the dissertation and customs of entrepreneurship study. Nevertheless, there is a scarcity of investigation in this field that assumes an entrepreneurial view point. There are at least three significant components from entrepreneurship investigation that are not well agreed in the context of disruptive innovation: (1) the sources of opportunity (2) uncertainty in entrepreneurial action and (3) entrepreneurial logic.

Entrepreneurial opportunity as a form of disruptive innovation can be term as radical rather than incremental in nature (Shane and Venkataraman, 2000; Eckhardt and Shane, 2003). This relates to product, service and business-model openings, and the meaning that is adopted in this article. While present-day investigation into disruptive innovation has made a difference between disruptive and sustaining innovation, a significant question has remained unreciprocated: the question of where an opening comes from, i.e. the cradles of entrepreneurial opportunity. Do entrepreneurial openings related to disruptive innovation occur, independent of the sensitivities of entrepreneurs and are they waiting to be revealed? Or are these openings imaginary, endorsed and then formed by the actions of entrepreneurs? Are they the result of a difficult quest by entrepreneurs according to the behavioural theory of the firm? Do disruptive innovations occur more effortlessly when produced internally or externally? These are imperative questions that entrepreneurship investigation often inquires (see Kirzner, 1997; Shane, 2000; Alvarez and Barney, 2007; Shepherd et al., 2007).

Outstandingly, what kind of entrepreneurial opportunities lead to disruptive innovation? Do certain forms of opportunity tend on the way to disruption more than the others? Does it follow a truly ground-breaking or evolutionary pattern? In other words, considering the nature of opportunities is critical as it has significant consequences on the usefulness of a wide diversity of entrepreneurial engagements in diverse backgrounds. Any debate of entrepreneurship may be imperfect without making mention of one of its central perceptions: uncertainty.

Uncertainty is a vital constituent of the entrepreneurial theory of action (McMullen and Shepherd, 2006). Entrepreneurship investigation marks a difference between ‘risk’, which is predictable and comprehensible, and ‘Knightian uncertainty’ (or true uncertainty), which is unpredictable and incomprehensible (Knight, 1921; Langlois and Cosgel, 1993; Miller, 2007). Questions arise as to what type of uncertainty is connected with disruptive innovation opportunity and how entrepreneurs, either new entrants, recognize and deal with uncertainty. Understanding the nature of uncertainty is critical since each type wants dissimilar types of entrepreneurial achievement. Dealing with Knightian improbability using approaches that are more suitable for risky circumstances may lead to extraordinary problems, and vice versa. The third element infrequently stated in the current theory of disruptive innovation is decision-making logic: *causal* versus *efficacious* and how this links to the view of product and market survival (see Sarasvathy, 2001; Wiltbank *et al.*, 2006). Christensen’s (2006) statement – ‘maybe there is something about good management that sows the seeds of subsequent failure’ – could be a reproduction of the parameters of the logic-in-use that hampers large incumbents’ capability to deal with uncertainty created by new, small entrants: Which logic is to be used re-counts to the awareness and thoughtful of the nature of uncertainty. However, little investigation has been assumed to study the connections between these two business logics and their impact on disruptive innovation.

2.1.4 Co-evolutionary entrepreneurial process as a Disruptive innovation

Sketch on the entrepreneurial logic theory (Sarasvathy, 2001), the entrepreneurial theory of action (McMullen and Shepherd, 2006), as well as the explanation of entrepreneurial changing aspects (McKelvey, 2004), entrepreneurship is defined here as the establishment of new relics at the product and organizational level that substitutes old with new worth through entrepreneurial action under circumstances of uncertainty and modification. The relics here denote to not-yet-in- current products (including services and business models) which are tremendously unique in their degree of innovation (e.g. the creation of electricity, internet) to radical development of already-in-existence merchandises which are high in their degree of novelty (e.g. the creation of no-frills airlines, online brokerage, digital cameras, small disc drives and MP3s) that reasons the auxiliary of incumbents by new entrants. Disruptive innovation can be well-thought-out a subdivision of the entrepreneurial process where persistent conflict between divergent forces (i.e. the defenders versus challengers), logics and trajectories occurs in the formation of new relics to replace old with new worth. This permanent battle is a fundamental reason for what Schumpeter called ‘creative destruction’ in the economy. This segment suggests a new background that clarifies the situations and causal instruments that drive disruptive innovation (see Figure 2). The background mixes the effectuation theory of entrepreneurship, evolutionary entrepreneurship, lead-user innovation and opportunity tournament literature. The framework proposes disruptive innovation as a supportive fact of entrepreneurial process among firms, artifacts they create and consumers. Each of these evolutionary forces is described below.

Fig 2 Disruptive Innovation as a co-evolutionary entrepreneurial process: a theoretical
Source: Yanto Chandra, (2011)

2.2 Empirical Review

Majamäki, and Akpınar, (2014) carried out a study on the Challenges and success factors in pursuing disruptive innovations: A Finnish high-tech start-up case study. This work adds to increase the knowledge in this field by reviewing the case of a Finnish high-tech start-up's fruitful new-market disruption in business-to-business framework. Recognizing disruptive innovations that have market prospective, obtaining acceptable funding at initial stages of the business, marketing of the disruptive innovation, and the length and insecurity of the process are main encounters in Finland. Success factors resultant from the case study and perceptions of an expert consultant of the field provide a roadmap for start-ups to overcome these encounters. Results from this business-to-business study reveals that the disruptive innovation theory which has been formed in the framework of business-to-consumer innovations.

Christensen, Scott and Erik, (2001) conducted a study on frameworks and observations intended to help industry participants understand the forces of innovation and change within the U.S. telecommunications industry. There are two goals we hope to accomplish with this paper: (1.) Present a clear analysis of the powers of innovation that have impact and will continue to impact the industry. (2.) Define a set of implements and backgrounds that give industry contributors and experts a new and common language to recognize, better understand and discuss the signposts that will reveal the industry's future direction. The target audience for this work is industry participants (e.g., current businesses, forecasters, undertaking entrepreneurs, etc.), with an importance on service workers, defined as the old-style businesses betrothed in providing telecommunications services in the United States, namely Interexchange Carriers (IXCs) and the Regional Bell Operating Companies (RBOCs).

3.0 METHODOLOGY

The study was carried out primarily through the use of descriptive survey design. The survey design is employed to draw a sample from the four major TELE communications Industries in South East Nigeria. The purpose is to collect responses from employees of these firms to determine, evaluate, assess, and examine the Effect of Disruptive Innovation and Sustainable Entrepreneurship in Selected Tele-Communication Industries in South East Nigeria. Primary data was collected from responses of the questionnaires from the four major TELE communications Industries in South East Nigeria while Secondary data was collected from textbooks, journals, articles, published data sourced from the internet, statistical bulletins. A sample size of 201 was drawn from the population of 917 at 5% Employee Performance level of significance using Star Trek's Planning Wizard Tool. 201 questionnaires were administered, 195 of them were returned while 6 were not returned, making a responds of rate of 100% and it was designed in two sections. Section A was for the bio-data of the respondents while section B focused on issues of disruptive innovation and sustainable entrepreneurship in selected telecommunication industries in south east Nigeria. The questionnaire was structured in five Likert scale format. The questionnaire was properly designed and a conduct of a pre-test on every question contained in the questionnaire was carried out to ensure validity. The researchers subjected the instrument to face and content validity by giving it to management's experts of Institute of Information Management and Technology (IMT) Enugu State who studied the instrument thoroughly to ensure that they were in line with objective of this study. The researchers pre tested (50) copies of the test instrument before the actual study. The response obtained from the pre study was subjected to Cronbach Alpha's internal consistency test by using SPSS (statistical package for social sciences) version 17.0. Since the item on the questionnaire were uniformly scaled and in accordance with the Nunnally and Bernstein (1994) which state that Cronbach Alpha should be 0.700 or above, based on the inter-item correlation of eleven (11) items on the questionnaire the result of the reliability test is 0.762. This indicates that the item on the questionnaire are internally consistent, hence they are highly reliable. Data collected were presented in frequency tables. A simple linear regression coefficient statistical tool was used to test the hypotheses.

4.0 TEST OF HYPOTHESIS

Table 4.1 Questionnaire Distribution

COMPANIES	No Distributed	No Returned	No not Returned	Population
ETIZALAT	20	19	1	105
GLO	30	28	2	179
AIRTEL	51	49	2	245
MTN	100	99	1	388
Total	201	195	6	917

Source: Fieldwork 2019

In the table above, 201 copies of questionnaire were distributed, 195 were returned, while 6 were not returned.

4.2 Test of Hypotheses

Hypothesis one

H₁: there is significantly positive effect on new market disruptions on sustainable entrepreneurship opportunities in selected telecommunication in South East, Nigeria.

Table 4.26:Model Summary^b

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.568 ^a	.323	.320		.57224	.529

a. Predictors: (Constant), New Market Disruptions

b. Dependent Variable: Sustainable Entrepreneurship

Table 4.27:ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.969	1	39.969	122.059	.000 ^b
	Residual	83.829	256	.327		
	Total	123.798	257			

a. Dependent Variable: New Market Disruptions

b. Predictors: (Constant), Sustainable Entrepreneurship

Table 4.28:Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.502	.069		21.756	.000
	New Market Disruptions	.346	.031	.568	11.048	.000

a. Dependent Variable: Sustainable Entrepreneurship

Result Summary

R = .568

R² = .323

F = 122.059

T = 11.048

DW = .529

Interpretation of the Result

A linear regression analysis was conducted to examine that New Market Disruptions has a significant positive effect on Sustainable Entrepreneurship opportunities in selected telecommunication in South East, Nigeria. The result of the regression indicates that there is strong positive relationship between New Market Disruptions and Sustainable Entrepreneurship (R- coefficient = .568^a). The R square, the coefficient of determination, shows that only 43.2% of the variation in patronage can be explained by New Market Disruptions with no auto correlation as Durbbin-Watson (.529) is less than 2. With the linear regression model, the error of estimate is low, with a value of about .031. The regression sum of the square 39.969 is greater than the residual sum of the square 83.829 indicating that the variation is not due to chance with F-statistics = 375.754 showing that the model is significant.

Decision Rule

Reject alternative hypothesis (H_1) if P-Value < 0.05 and do not reject H_1 if otherwise

Decision

Since the P-Value $0.000 < 0.05$, we reject the alternative hypothesis (H_1) and then conclude that New Market Disruptions has significantly positive effect on Sustainable Entrepreneurship opportunities in selected telecommunication in South East, Nigeria.

Hypothesis two

H_2 : there is significantly positive effect on low- end disruptions on uncertainty in sustainable entrepreneurship action in selected telecommunication in South East, Nigeria.

Descriptive Statistics**Table 4.29 Model Summary^b**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.776 ^a	.602	.601	.64831	9.389

a. Predictors: (Constant), Low- End Disruptions

b. Dependent Variable: Sustainable Entrepreneurship Action

Table 4.30:ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	162.979	1	162.979	387.760	.000 ^b
	Residual	107.599	256	.420		
	Total	270.578	257			

a. Dependent Variable: Sustainable Entrepreneurship Action

b. Predictors: (Constant), Low- End Disruptions

Table 4.31:Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.679	.074		9.165	.000
	Low- End Disruptions	.573	.029	.776	19.692	.000

a. Dependent Variable: Sustainable Entrepreneurship Action

Result Summary

R = .776

R^2 = .602

F = 387.760

T = 19.692

DW = 9.389

Interpretation of the Result

A linear regression analysis was conducted to determine the effect of Low- End market Disruptions on uncertainty in sustainable entrepreneurship action in selected telecommunication in South East, Nigeria. The result of the regression indicates that there is strong positive effect on Low- End Disruptions and Sustainable Entrepreneurship Action (R-coefficient = .769). The R square, the coefficient of determination, shows that only 59.1% of the variation in Sustainable Entrepreneurship Action can be explained by Low- End Disruptions with no autocorrelation as Durbin-Watson (.225) is less than 2. With the linear regression model, the error of estimate is low, with a value of about .029. The regression sum of the square 162.979 is greater than the residual sum of the square 107.599 indicating that the variation is not due to chance with F-statistics = 387.760 showing that the model is significant.

Decision Rule

Reject alternative hypothesis (H_1) if P-Value < 0.05 and do not reject H_1 if otherwise

Decision

Since the P-Value $0.000 < 0.05$, we reject the alternative hypothesis (H_1) and then conclude that Low- End market Disruptions has significant positive effect on uncertainty in sustainable entrepreneurship action in selected telecommunication in South East, Nigeria.

Discussion of Findings

Hypotheses one was tested using linear regression analysis, ascertain the effect of new market disruption on sustainable entrepreneurship opportunities. The result shows that new market disruption has a significant positive effect on sustainable entrepreneurship opportunities in selected telecommunication in South East, Nigeria ($r = .568$; $F = 122.059$; $t = 11.048$; $P < 0.05$).

Hypotheses two was tested using linear regression analysis, determine the effect of low- end disruption on uncertainty in sustainable entrepreneurship action. The result shows that low- end disruption has a significant positive effect on uncertainty in sustainable entrepreneurship action in selected telecommunication in South East, Nigeria ($r = .776$; 387.760 ; $t = 19.692$; $P < 0.05$).

SUMMARY OF FINDINGS

Base on the objective of the study the following findings were made;

- I. There is a significant positive effect on new market disruptions on sustainable entrepreneurship opportunities.
- II. There is a significant positive effect on low- end disruptions on uncertainty in sustainable entrepreneurship action.

CONCLUSION

Base on the findings, the study concludes that new market disruption has a significant positive effect on sustainable entrepreneurship opportunities in selected telecommunication in South East, Nigeria and low- end disruption has a significant positive effect on uncertainty in sustainable entrepreneurship action in selected telecommunication in South East, Nigeria.

RECOMMENDATION

- I. New market disruptive innovation should be design in such a way that entrepreneurial opportunity will be radical oriented rather than incremental in nature so as to apply to product, service and business-model opportunities in used by company.
- II. Low-end disruptions innovation should be model by management of telecommunication industries to target overshoot customers with lower-cost business models. The rationale behind their emergence is that by over-satisfying customers' needs in hopes of higher margins; large incumbents create a vacuum at lower price points enabling competitors with disruptive technologies to emerge.
- III. Government should implement policies that have an overwhelming influence in shaping the opportunities that entrepreneur's target. Legislation created to respect the forces of innovation can create an environment ripe for yielding disruptive change.

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