

Evaluating Innovative Capabilities for Sustainable Customer Satisfaction in Nigerian Telecoms Industry

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ABSTRACT

The need to improve general business practices for sustainable long term customer satisfaction, create new revenue streams using inherent resources and capabilities in Nigerian telecoms industry is the concern of the study. Innovative capability dimensions as absorptive, dynamic and entrepreneurial capabilities available were examined with the indicators of sustainable customer satisfaction in telecoms industry. The study used quantitative and exploratory design on 594 surveyed respondents comprised of 55 staff of telecoms operators and 539 subscribers. Questionnaire was administered through electronic mail. Structural equation model (SmartPLS) was used to analyze the data. The model is excellent with composite reliability and Cronbach Alpha of above 0.9. The R-Square value is 83%. The three indicators of innovative capabilities have significant impact on customer satisfaction. While absorptive capability impact negatively, dynamic capability and entrepreneurial capital are positive. Conclusively, innovative practices have the domineering impact of assuring long term customer benefit in Nigeria Telecoms industry. The study recommends that operators should pursue more genuine practices through continuous innovation using inherent capabilities and the sector should be open for more firms in order to decongest network signal and have more base to pool resources for the growth of the industry.

Keywords: Absorptive capability, Entrepreneurial capital, dynamic capability, innovative capabilities.

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1. INTRODUCTION

Customer satisfaction measurement helps companies decide what direction they should go to improve their performance. The customer satisfaction becomes a key factor for providers of telecommunications services, where different tools allow different companies to maintaining and improving their market share while generating higher returns (Zhao, Lu, Zhang & Chau, 2012). Quality and satisfaction are two concepts of achieving increasing cash stream and they have been measured with various indicators and variables. In order to satisfy customer and boost competitive advantage, companies especially service sector has become innovation intensive and some of the significant sectors are the computer and telecommunications services (Howells, 2000). An important complex nature of innovation in service is the relationship between production and consumption.

That is, goods can be produced meaningfully without consumers (think of a firm producing a car), whereas services require the consumer (a student or insurance client). While also innovations in tangible products may be more easily recognized, possibly due to their physical and 'codifiable' nature, it takes wealth of resources and capabilities to offer a defendable innovation for service. Today, improving the technological innovation is one of the most demanding as it constitutes the vehicle for conveying commercial activities in the 21st century like e-banking, e-commerce, e-payment, e-education, e-health, e-agriculture etc. The oil and gas sector shrank by 1.2% while the telecommunications industry, Africa's biggest, expanded by 34.2% in 2009 (Bloomberg Business Week, 2009) and continue growing thereafter. As Nigeria targets to be one of the top twenty economies in the world by the year 2020, there is a general understanding that to remain sustainable in the current industry, the need to recreate existing products, diversify into new areas for which the capabilities and resources are near, improve on general business processes and navigate through the regulatory landscape are necessary requirements. Achieving all these majorly depends on the internal innovative capabilities of a company.

Innovative capabilities of company help to identify and apply dynamic capabilities (ability to use new knowledge), absorptive capabilities (ability to learn new knowledge for commercial ends) and entrepreneurial capital (deliberate risk taking and opportunity identification abilities) for customer satisfaction and increased returns to the company. Telecoms industry is the core infrastructural backbone for new digital economy that drives socioeconomic development across all sectors such as e-learning and online transactions. This notwithstanding, experience has shown that there are challenges and cautions in Nigerian telecoms business due to poor economic climate and the nature of rivalry within the industry. The rivalry within the industry has created artificial low prices; Nigeria having the lowest data bundle prices in sub-Saharan Africa, which many have submitted has the tendency to jeopardize the long term customer benefits. Even the regained rapid growth from 7.8% in Q2 of 2016 to 9.6% in Q4 of 2017 (Nigerian Communications Commission (NCC) report, 2019) contribution to GDP after the recession had led to network congestion and low quality of service (like charging for improper connected dropped calls & call masking). Till date, subscribers are been charged for unsolicited services/products where the regulator (NCC) had called on the service providers to refund their money.

The non-opening up of the industry has constituted the few operators as oligopoly that may eventually influence the prices and make the sector inaccessible to small players. Another pressure on the industry is the double and heavy taxes and levies on ICT infrastructure and destruction of fibre lines (Bakare, Ekanem & Allen, 2017). Recently, the vice chairman of the regulatory agency (NCC) called for the institutionalization of research and development, improved human capability, ICT innovation and collaborative efforts as ways to shape the future of the telecoms sector. To ensure long-term growth and sustainability in telecoms industry, there is a need to improve on general business practices and products to create new revenue streams for which the resources and capabilities are available. Many studies such as (Odion, 2016; Adebisi & Ogunkoya, 2017; Wendra, Sule, Joeliaty & Azis, 2019) have assessed the foundation of development capabilities and the mobilization of organization in adapting to change; however, they lack established connection with the impact of improving innovative capabilities (absorptive, dynamic and entrepreneurial capital) for sustainable customer benefits especially at the telecoms industry in Nigeria. This is what necessitates the exigencies for conducting this study.

This study seeks to proffer answers to the following pertinent questions arising from the above disorder in Nigerian telecoms industry

- i. What is the impact of absorptive capabilities on customer satisfaction in Nigeria Telecoms industry?
- ii. How does dynamic capabilities relate to long term customer satisfaction in Nigeria telecoms industry?
- iii. To what extent does an entrepreneurial capital result to long term customer satisfaction in Nigeria telecoms industry?

The general objective of the study is to identify appropriate match between the innovative capabilities of the telecoms service providers with the various opportunities in the industry through improved innovative practices that will guarantee new stream of revenue for operators and ensures sustainable long term customer benefits. Specifically, the study seeks to:

- i. Identify the impact of absorptive capabilities on customer satisfaction in Nigeria Telecoms Industry.
- ii. Examine the relationship between dynamic capabilities and long term customer satisfaction in Nigeria Telecoms Industry.
- iii. Explain how an entrepreneurial capital results to long term customer satisfaction in Nigeria Telecoms Industry.

Hypotheses

This study was guided by the following hypotheses:

H₀₁: Absorptive capabilities do not have significant impact on customer satisfaction in Nigeria Telecoms Industry

H₀₂: Dynamic capabilities do not relate significantly with long term customer satisfaction in Nigeria Telecoms Industry

H₀₃: Entrepreneurial capital does not significantly results to long term customer satisfaction in Nigeria Telecoms Industry

The study is significant as continuous innovative practice in the infrastructural backbone of the Nigerian economy that contributes about 10.11% to the Nigeria GDP as at Q1, 2019 (NCC report, 2019) is imperative to achieving Nigeria Vision 2020. It emphasized the importance of appropriately matching the various capabilities inherent in the telecoms service providers in achieving long term customer/subscribers benefits. With the recent pronouncement of the vice chairman of NCC to urgently entrench research and development in the sector for future growth; this study has contributed to defining the path-way for the realization of such desire. The study has also demonstrated to the subscribers that so long as innovative practices are based on internal capabilities that are controllable, the continuous service improvement is assured.

The Study focused on how innovative practice in Nigerian telecoms industry can assure long term customer satisfaction using the innovative capabilities of the service providers. The capabilities identified are dynamic, absorptive (perceived and realized) and entrepreneurial capital. Customer satisfaction in telecoms industry was measured adapting indicators and variables developed by (Rendón, Vásquez, Benjumea-Arias & Valencia-Arias, 2017). The major service providers captured in the study are MTN, Globacom, Airtel and 9mobile with market shares of 37%, 27%, 26% and 9% respectively as at May, 2019 (NCC report, 2019). The study is based on the number of active telephony subscribers as at last quarter of 2018 which is 172,871,094 (NCC Report, 2019).

Noted limitations of the study are basically in two areas. First and foremost was the usage of innovative capability terms such as absorptive capabilities and dynamic capabilities which was difficult for some of the respondents to comprehend. This was addressed by having an introduction of the terms at the beginning of the questionnaire using layman's language that respondents understood and using the same consequently throughout the questionnaire. Secondly, it was not possible to reach all the telephony subscribers to administer questionnaire on customer satisfaction. So, the Walpole (1974) formula was applied to draw six hundred (600) telephony subscribers and a non-probability sampling technique in the form of convenient sampling was used to select the subscribers.

2. LITERATURE REVIEW

2.1 Innovative capability (IC)

Wang and Ahmed (2004) defined innovative capability as the ability to develop new products and/or markets, through aligning strategic innovative orientation with innovative behaviours and processes. According to the definition there are multiple dimensions that are encompassed in innovative capabilities e.g new production methods, mapping new markets, exploring new suppliers, and advancing on new organizational forms. The above factors as highlighted by Wang and Ahmed (2007) are the most important component factors of dynamic capabilities as a concept and that they help in building a firm's ability to integrate, reconfigure, renew and recreate its resources and capabilities to address the changes in the external environment. This brings in an alignment between the internal and the external environment.

2.1.1 Absorptive capabilities (ACs)

Cohen and Levinthal (1990) defined absorptive capacity as the ability of a firm to recognize the value of new, external information, assimilate it and apply it to commercial ends. Absorptive capability is a multidimensional construct and consists of four component factors as knowledge acquisition, assimilation, transformation and exploitation (Zahra & George, 2002). The first two dimensions, namely acquisition and assimilation capabilities, constitute an organization's potential absorptive capacity (PAC). The other two dimensions which are transformation and exploitation capabilities constitute an organization's realized absorptive capacity (RAC) (Zahra & George, 2002). In other words, PAC represents the external knowledge that an organization could acquire and assimilate or the creation of knowledge; RAC represents the external knowledge that an organization has transformed and exploited or the utilization of knowledge (Setia & Patel, 2013).

2.1.2 Dynamic capabilities (DCs)

Dynamic capabilities (DCs) are defined as the ability of an organization to integrate, build and reconfigure internal and external competences to address rapidly changing environments in order to achieve new forms of competitive advantage (Teece, Pisano & Shuen, 1997). Barreto (2010) describes dynamic capabilities as the inclination of the organization; to identify opportunities and threats, compose well-timed judgment, construct market-oriented conclusion and modify its resource. Li and Liu (2014) questioned the third dimensions of Barretto's (2010) dynamic capabilities and argue that in reality, market-oriented decisions cannot be implemented purely due to limited resources access. While there has been an inconclusive debate on the nature and characteristics of DCs, the consensus view seems to be that DCs encompass creating change that is determined by market dynamism (Eisenhardt & Martin, 2000), which are path-dependent and embedded in processes (Wang & Ahmed, 2007), and are often firm specific (Amit & Schoemaker, 1993). In a highly competitive business environment, possessing resources are inadequate to make organization stays ahead of its competitor (Eisenhardt & Martin 2000; Wang & Ahmed 2007; Li & Liu 2014).

2.1.3 Entrepreneurial Capital

Recently, scholars have proposed entrepreneurial capital as an element of intellectual capital (Hussinki, Ritala, Vanhala & Kianto, 2017) in addition to the tripartite model of intellectual capital which are structural, relational and human capital (Buenechea-Elberdin, 2017). Entrepreneurial capital is related to creative and innovative behaviour performed by organizational members (Inkinen et al. 2017). The entrepreneurial capital is measured by three variables namely; deliberate risk taking, business opportunity identification and making bold decision.

2.2 Relationship between Dynamic Capabilities and Innovation Performance

Dynamic capabilities are very crucial for innovation creation (Giniuniene & Jurksiene 2015). Dynamic capabilities update, integrate and reconfigure current operational capabilities and resources (Helfat & Peteraf 2003; Helfat et al. 2007; Helfat & Winter 2011). In other words, the mobilization of resources and capabilities happens as a response to opportunities and changes (Liao et al. 2009; Pavlou & El Sawy, 2011).

In this sense, dynamic capabilities support the organizational effort to develop new products and process in the intended time (Wu, 2006). Consequently, organizational inability to change its resources base would undermine its effort to create new products (Danneels, 2011). Empirical evidence shows that dynamic capabilities influence innovation in public listed companies in Taiwan securities market (Hsu & Sabherwal 2012).

2.3 Customer Satisfaction Indicators in Telecoms Industry

The following model was proposed by Rendón et al (2017) to assess the level of customer satisfaction or benefits with the service provided by telecommunication service companies. The indicators and variables are as follows:

Call Center Service (CCS): It is associated with variables related to call centers service satisfaction offered by the telecommunication service companies. The evaluated services respond to aspects such as: the waiting time to listen to the options menu, the clarity of the menu, the kindness of the staff who answers the call, the knowledge among advisers about the services provided by the company, the waiting time for resolving customers concerns and the overall service provided by the call center.

Telephone Service (TS): The variables measure the perception of customers of the clarity and sharpness of the signal and communications in general, with no cuts or interruptions, review the quality of additional services and the equipment used for those purposes.

Users' satisfaction with the service provided (USP): It refers to the satisfaction experienced by users at the Customer Care Center from different companies of telecoms services. In this regard, items related to the location, accessibility, timeouts, kindness, respect, attention and interest provided by the customer service advisor are evaluated.

Responses to questions, requests or complaints (RQC): This factor has variables of evaluating all related issues according to responding requests, inquiries or complaints. The purpose of these variables is to identify how quickly the company gave response to customer concerns and ensured the compliance promised to solve their applications.

Service and Promotion plans (SPP): Associated to variables related to plans and promotions that the company integrates to its market strategy, specifically in the field of the easiness to purchase new services or make changes to the ones already acquired, compliance of the plans and promotions, the variety and availability in additional services offered.

Cost- Benefit perception of the service (CBS): The variables contained in this component correspond to the cost-benefit analysis, in which the relationship between the service provided and what the customer pays for purchase is evaluated.

Internet Service (IS): This factor has the responsible variables for measuring customer satisfaction against providing internet service and signals.

Customer Care Center (CCC): This component consists of two items related to satisfaction experienced by users facing the Customer Care Center which are location of the CCC and its accessibility.

IT Services (ITS): This component is associated with variables related to the compliance of the service provided by the company. Where it is measured, the correct dress code of the technical staff, their friendliness and knowledge to address the concerns of users are the variables.

2.4 Theoretical Base - Resource-Based Theory

According to some resource-based theorist, the development of this paradigm could be traced back to the 1960s. Barney (1986) argued that back from the 1930s, the focus of “Chamberlinian” economics begun with the impact of distinctive individual firm’s idiosyncratic assets and capabilities on the strategies a firm pursues as well as the returns derived from those strategies. However, whether resource-based perspective has evolved as far back as the 60s or not, that is not an attractive subject of discussion, what matters is whether the paradigm in question is effective and efficient in explaining company performance as indicated by long term customer satisfaction. Nevertheless, the current popular resource-based paradigm has gave rise to both knowledge-based, which is more or less subdivision of the former (Nieves & Haller, 2014) and dynamic capabilities perspective as an offshoot as well as integrative paradigm (El Akremi, Perrigot, & Piot-Lepetit, 2013; Teece et al., 1997).

2.5 Empirical framework

Suraj (2016) studied the role of intellectual capital (IC) management in explaining the mismatch between performances of the Nigerian telecommunications industry's annual growth rate (16.3%) and that of the nation's economic average growth rate (4.3%) over the last two decades (1986– 2010). Data were collected from 320 managers from 29 telecommunication companies using stratified random sampling technique. The major findings of the study as highlighted by the regression analysis (Partial Least Square techniques) of the data, revealed that the sampled telecommunication companies lack the organizational know-how and communication aptitude to leverage their embedded organizational knowledge (Structural capital) into business performance ($\beta = - 0.046$, $p > 0.05$) notwithstanding their knowledge creation and retention strategies. Hence, Knowledge utilization rather than knowledge creation appears the main challenge of the industry which has made it perform below expectation despite the industry's tremendous infrastructural investment.

The significant of this present study can also be seen from the above findings as the study establishes the relationship between the realized absorptive capabilities (knowledge utilization) which constitute the main challenge of the operators and desire customer satisfaction. The study also covered other forms of capabilities in addition to intellectual capital. Bakare et al (2017) appraised the contribution of the Global System for Mobile Communication (GSM) in Nigeria and the effect so far. Using purely secondary data, the study highlighted the areas of reconsideration and future expectations as compared to developed countries. It was affirmed that, GSM has become one of the world’s greatest achievements in the field of science and has changed the world of telephony and communication. Also, with the introduction of GSM, Nigerians now have access to a variety of different services that were never possible with Government Owned Telecommunication Company (NITEL), such as mobile banking and so on. The study concludes that the deregulation of the Nigerian telecommunication sector, hence, the introduction of GSM technology has made very significant positive impact on the economic situation of Nigeria. However, the biggest challenge facing the mobile industry in Nigeria is Energy especially the issue of electric power supply.

Bakare¹, et al (2017) obviously was more emphatic on the external environment of the industry and how its needs to be improved but failed to mention that companies would be in a better position if there is understanding that, it is better to make necessary changes in the internal environment and capabilities rather than trying to change the external environment on which they have a limited control (Enriquez & Francisco 2015). This study filled this gap using the internal resources and capability approach for improved innovative practices for sustainable customer benefit. The study also used secondary data but this study is an explanatory survey design. Rendón, et al, (2017) conducted a study to propose a model for measuring customer satisfaction in users of telecommunications services. The methodological design was quantitative, descriptive and explanatory type and surveyed of 415 users of telecommunications services (landline telephone, television and Internet services) in the city of Medellin was adopted. Among the results, it was found that the service in the Call Centers and timely response to requests, inquiries, or complaints, and an effective service are among the factors that have the most influence in the satisfaction of users of telecommunications services.

In addition, it was noted that the perception of a favorable cost-benefit services influenced the offered plans and promotions and the proper settlement of claims and applications in their companies are issues that need to be strengthened in telecommunication services companies. Very reach study but left a gap to align the internal capabilities of telecoms industry to the model recommended for customer satisfaction. By matching the internal capabilities of the companies with the customer satisfaction indices recommended in Rendón et al (2017), this study will clearly defined the path-way for future sustainable customer satisfaction and benefits in Nigeria telecoms industry.

Banerjee, Farooq and Upadhyaya (2018) in their study on the relationship between dynamic capabilities, competitive Advantage and organizational performance, discussed the importance of dynamic capabilities as a growing area of research and fits into the rapidly changing dynamic business environment. The study reviewed the evolution of the dynamic capabilities approach from the resource based view over the years and how it is suitable for firms to survive in the dynamically ever-changing environment. It also draws attention on how resources and capabilities in the internal environment help build-up the dynamic capabilities and its component factors and help to create competitive advantage. Using the case of Indian pharmaceutical industry, the study concluded that, the swiftness with which the firm successfully addresses the challenges that it faces in the external environment by adjusting its internal resources and capabilities works to its advantage and thereby leading to the attainment of organizational performance. The importance of dynamic capabilities and internal resource utilization for competitive advantage and organizational performance was clearly established in the study of Banerjee et al, 2018, but this present study used the case of Nigeria Mobile Network Industry and used quantitative data as mode of inquiry in place of Indian pharmaceutical Industry and secondary data respectively.

3. METHODOLOGY

This is a quantitative and explanatory research study based on a questionnaire survey, using purposive sampling. The unit of analysis is the Directors, HODs and managers of famous telecoms operators (MNOs) which are MTN, GLO, 9Mobile and Airtel. The minimum required sample size is based on Hair, Ringle, Sarstedt, & Vinzi (2014), who recommended a minimum of 52 respondents for a structural model with a maximum of 2 arrows pointed at an endogenous construct, 5% significance level, and 80% statistical power to detect a minimum R^2 value of 0.25. The sample size for this study is 660 comprises of 60 staff of Telecoms service providers and 600 subscribers. 600 subscribers/customers were arrived at using Walpole (1976) formula for infinite population to administer questionnaire on customer satisfaction. The data were collected through a self-administered online questionnaire, which was distributed through Email. Due to the limitation of the data sample, SmartPLS was used to conduct the statistical analysis.

3.1 Measures

Construct measurements consist of a 5-point rating list scale as suggested by Cooper and Schindler (2014). Absorptive capability was measured with four (4) variables (training programme, technology assimilation, crime detection, technology transformation), dynamic capabilities was measured with four (4) variables (benchmarking, market survey, conflict resolution, reward system, customer complaint management) as adapted from Wendra et al, 2019 having composite reliability of above 0.8 which is termed as good and entrepreneurial capital was measured using deliberate risk taking, business opportunity identification and making bold decision abilities. Indicators of customer satisfaction were adapted from the developed model of Rendón, et al (2017) as measures of customer satisfaction in telecoms industry.

4. DATA PRESENTATION AND ANALYSIS

4.1 Summary of Response

Table 4.1: Summary of Response Rate

Item	No of Copies	Percentage
No of Questionnaire Distributed	660	100
No of Return Questionnaires	594	100

Table 4.1 shows the summary of the number of questionnaire distributed and the number of returned questionnaire. A total number of 660 questionnaire were distributed to respondents (Operator and subscriber) and 594 questionnaire were returned constituting 90% response rate, which were found to be valid and useful for the analysis.

Table 4.1.1: Rate of Respondents Category

	Frequency	Percent	Valid Percent	Cumulative Percent
Operator	55	9.3	9.3	9.3
Subscriber	539	90.7	90.7	100.0
Total	594	100.0	100.0	

Table 4.1.1 shows that from 594 respondents, 55 out of 60 staff of telecoms operators responded constituting 9.3% while 539 subscribers out of 600 sampled responded which is 90.7% of the total respondents.

4.2 Assessing Model Fit

Data analysis via structural equation model (SEM) was used to examine the reliability and validity of the instruments. The figure 1 presents the examined measurement of the model of the study.

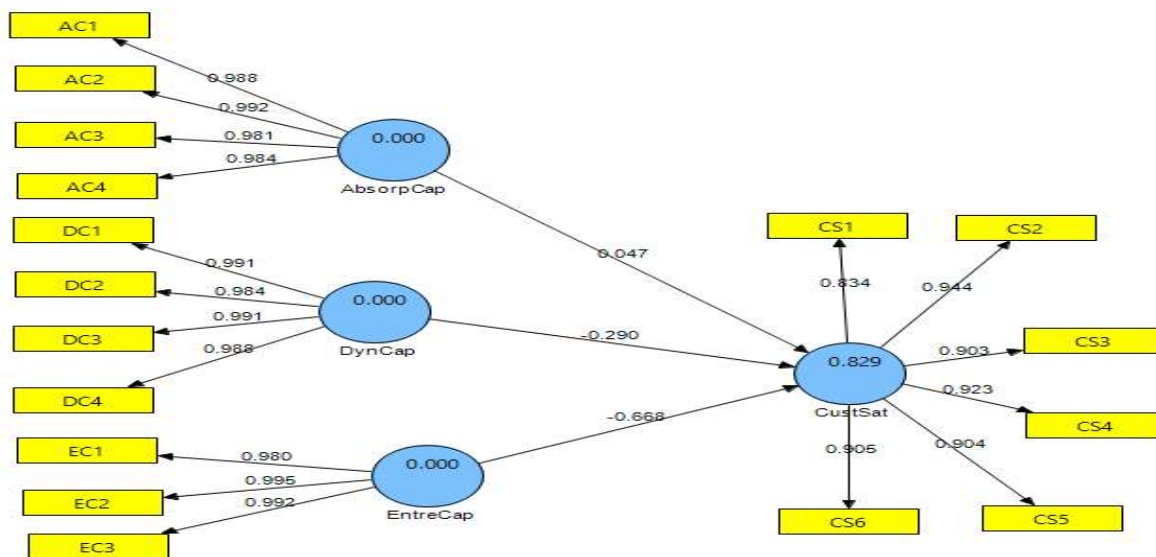


Fig 1: Measurement Model

4.2 Reliability Test

Reliability was used to assess the internal consistency in the construct.

Table 4.2: Construct Validity and Reliability

Constructs	Loading	C. Alpha	CR	AVE
AC1	0.988	0.991	0.993	0.973
AC2	0.992			
AC3	0.981			
AC4	0.984			
DC1	0.991	0.992	0.994	0.977
DC2	0.984			
DC3	0.991			
DC4	0.988			
EC1	0.980	0.989	0.993	0.978
EC2	0.995			
EC3	0.992			
CS1	0.834	0.954	0.964	0.815
CS2	0.944			
CS3	0.903			
CS4	0.923			
CS5	0.904			
CS6	0.905			

Note: AVE represents Average Variance Extracted; CR represents Composite Reliability.

From table 4.2, composite reliability ranges from 0.994 to 0.964 and Average Variance Extracted of the variables ranges from 0.978 to 0.815. The constructs met the minimum benchmark for composite reliability and AVE, as the constructs have coefficients greater than 0.7 and 0.5 respectively. By the rule of thumb, composite reliability should be greater than .7 and AVE is expected not to less than 0.5 (Hair, Black, Babin, & Anderson, 2014). This implies that the overall reliability measurement of the instrument is acceptable in terms of reliability thus depicting its internal consistency.

4.3 Bootstrapping Analysis

It is important to carry out a bootstrapping analysis to determine the direct impact of absorptive capabilities, dynamic capabilities and entrepreneurial capital on customer satisfaction in telecoms industry. Bootstrapping was done by using 3,000 sub Samples of 594 cases. Based on the result, figure 2 is presented, which shows the structural model of absorptive capabilities, dynamic capabilities and entrepreneurial capital on customer satisfaction.

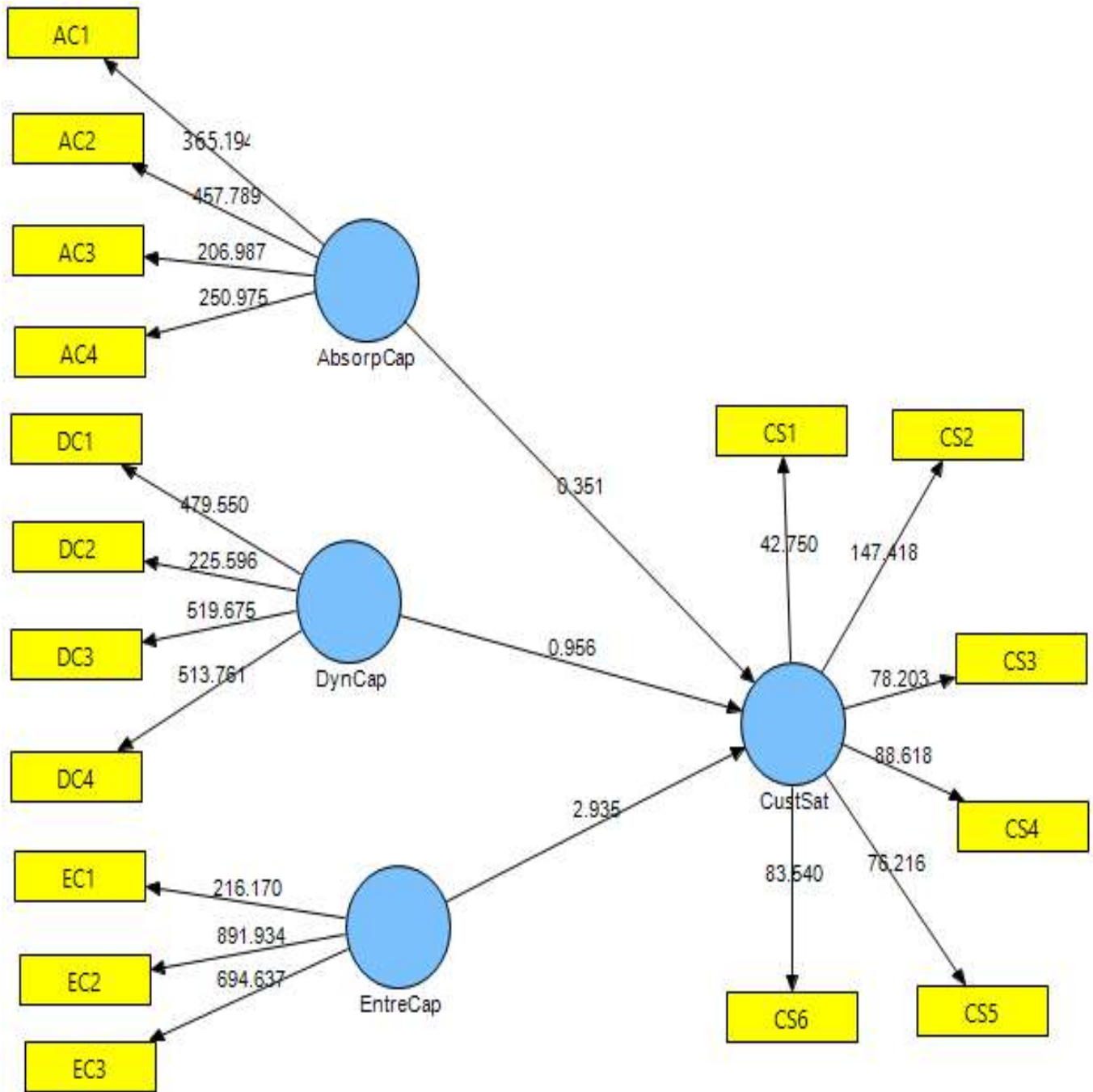


Fig 2: Structural Model

4.4 Test of Hypotheses

H₀₁: Absorptive capabilities do not have significant impact on customer satisfaction in Nigeria Telecoms Industry

Table 4.3: Path-Coefficient

Hypotheses	R Square 0.829	B Value	Std. Error	T Stat'	P Value	Decision
AbsorpCap -> CustSat		-0.265	0.134	1.980	0.002	Rejected
DynCap -> CustSat		0.703	0.303	2.320	0.021	Rejected
EntreCap -> CustSat		0.668	0.227	2.934	0.001	Rejected

P value* < 0.05

The path coefficients in table 4.3 shows absorptive capability has a negative but significant effect on customer satisfaction with P value of .002 < .05. The R square of 0.829 implies that sustainable long term customer satisfaction in Nigerian telecoms industry is assured at 83% when the operators combined their absorptive capabilities, dynamic capabilities and entrepreneurial capital to create and utilize existing and new knowledge. Thus, Ho₁ which states that absorptive capability has no significant impact on customer satisfaction in Nigerian telecoms is hereby rejected.

H₀₂: Dynamic capabilities do not relate significantly with long term customer satisfaction in Nigeria Telecoms Industry

Table 4.4: Latent Variable Correlations

	CustSat	AbsorpCap	DynCap	EntreCap
CustSat	0.903			
AbsorpCap	-0.900	0.986		
DynCap	0.901	-0.908	0.989	
EntreCap	0.902	-0.901	0.945	0.989

The results from table 4.4 revealed that dynamic capability has very strong positive relationship with customer satisfaction i.e 0.901 and the relationship can be seen to be significant from table 4.3 as the p-value > 0.05. Therefore, the second hypothesis that states that dynamic capabilities do not significantly relate to customer satisfaction in Nigeria telecoms industry is rejected.

H₀₃: Entrepreneurial capital does not significantly results to long term customer satisfaction in Nigeria Telecoms Industry

Table 4.3 revealed that for every entrepreneurial behavior exhibited be it deliberate risk taking or business opportunity identification, customer satisfaction is likely to increase by 67%. This is significant at p-value=0.001. So, it is evident that entrepreneurial capital results to customer satisfaction in Nigeria telecoms industry. The third hypothesis is therefore rejected.

5. DISCUSSION OF FINDINGS

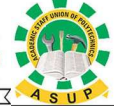
This study established that absorptive capabilities (ability to learn) through acquisition, assimilation, transformation and exploitation is capable of sustaining customer satisfaction in the telecoms industry in Nigeria. Getting outside knowledge through collaborative efforts as measured in the study by the culture of training programmes, technology assimilation, crime detection and technology transformation will certainly renew customer hope in the services provided by the operators. The study also revealed the relationship between dynamic capability (ability to use internal and external knowledge) and customer satisfaction. This finding is consistent with Li & Liu, 2014 and Suraj, 2016 who argued that possessing the resources in a highly competitive industry like telecoms is not sufficient but it appropriate utilization. Establishing standard/benchmarking in performance, market survey, conflict resolution, reward system and prompt customer complaint management will boost the loyalty customer/subscribers have in the sector. This corroborate with Rendón, et al, (2017) & Banerjee, et al (2018). The entrepreneurial capital possess by the operators has also been empirically linked to sustainable customer satisfaction in telecoms industry in Nigeria in this study. As a dimension of intellectual capital, Hussinki et al (2017) asserted that it impact significantly on customer satisfaction which this study has proven.

6. CONCLUSION AND RECOMMENDATIONS

Based on the findings from this study, the domineering way to guarantee long term customer satisfaction in Nigerian Telecoms industry is continuous service improvement through all the dimensions of innovation the study has discussed. All is not well in the industry as seen on paper since there are still issues of unsolicited services to customer, charges for improper connected calls and call masking which the regulator is not pleased with. The study therefore recommend that telecoms operators should pursue more genuine practices through innovation using inherent capabilities and the sector should be open for more firms in order to decongest signal and have more base to pool resources for the growth of the industry.

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