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NEW-MARKET DISRUPTIVE INNOVATION AND CORPORATE AGILITY OF  
TELECOMMUNICATION FIRMS IN LAGOS STATE

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*Abstract*

*The study investigated the relationship between new-market disruptive innovation and corporate agility of telecommunication firms in Lagos State. The cross-sectional survey design was adopted under the research philosophy of positivism. The study population is 2650 departmental managers of all the 530 registered telecommunication firms in Lagos State. Using Krejcie and Morgan's (1970) formula, a sample size of 336 respondents was initially determined and adjusted by 10% to make provision for outliers and non-responses. To ensure that each member of the population has an equal chance of being selected, the simple random sampling was applied. Primary data collection entails the use of questionnaire and the Cronbach's alpha reliability statistics threshold was set at 0.7. Mean and standard deviation were used to describe the characteristics of the categorical data, while the Kendall's tau-b ( $\tau_b$ ) correlation coefficient was used to test the bivariate relationship. The study recommends that telecommunication firms should strive to move to new-market opportunities to becoming market/industry incumbent, so as to use new market disruptions to bring about corporate agility. Furthermore, telecommunication firms should be quick to switch suppliers to take advantage of lower costs, better quality or improved delivery items, in order to enhance corporate agility.*

*Keywords: new-market disruptive innovation, corporate agility and telecommunication firms.*

**Introduction**

Continuous innovation sustains customers' assurance and it's an essential measurement used in determining the efficiency of a business in terms of service delivery.

Since the multiple telecommunication services in Nigeria were introduced with the view of providing increased ability to the demands of its subscribers in 2001, the industry has witnessed diverse changes (Kuboye, 2010). However, the poor performance of the telecommunication network has incited customers' complaints, thereby leading to customers' dissatisfaction and boycotting of some of the network providers. The boycott has also led to the close down of some of these firms, especially in Lagos state (Adegoke, Babalola & Balogun, 2008). Since the Fixed network infrastructure is limited outside Lagos State, the national holder, Nitel experienced privatizations wars, indigenous issues and management changes during its existence. The outcome created a decline in its fixed service and subscribers with a revenue reduction despite the huge telecommunication market growth (Mason, 2011). These developments illustrate that in order to achieve competitive advantage and development, corporate entities have to create new products and services, indicating they have to be innovative to last. Innovation is undoubtedly the core of growth irrespective of the condition of a larger economy (Trott, 2003). Therefore, without corporate agility, innovation will be misdirected and unguided (Heskett, 2007).

Corporate Agility models are designed and used within organizations to support corporate interest in building agile systems, processes and people and also for creating resilience capabilities that may be suitable for the kind of tension and dynamism in their environment. Nafei (2016) reported that corporate agility is a proactive management strategy that aims at maintaining the organization's resources and achieving the desires of customers in a timely manner. Corporate agility enables an organization to eliminate procedural and behavioral barriers to a timely reaction in every day activity and also provides the right kind of structural versatility needed for thriving in a dynamic business environment. Sarker and Sarker (2009) viewed corporate agility as a multifaceted concept that has three dimensions, namely: resources, processes and linkages (Hitt, Ireland, Camp & Amp; Sexton, 2001). Zitkiene and Deksyns (2018) contended that corporate agility could deliver global marketplace competitiveness for firms and agile firms should consequently have structures that are flexible and appropriately responsive. Nafei (2016) also asserted that the characteristics of an agile organization are rooted in two related concepts, namely; organizational adaptability and organizational flexibility. Various models of corporate agility are available in literature along with diverse research streams that attempt to provide insights and strategies for understanding and building agile people and systems. Kumaraswamy, Garud and Ansari (2018) and Christensen, McDonald, Altman and Palmer (2018) contended that the consequence of disruptive innovation is that incumbent firms are typically unmotivated to develop disruptive tendencies to captive lower margins, target smaller markets, and introduce inferior products and service that their existing customers will not and cannot use.

Despite the enormous studies on corporate ability, the connection between new-market disruptive innovation and corporate agility have not been sufficiently examined. Therefore, this study seeks to investigate the relationship between new-market disruptive

## **Literature Review**

### **Concept of New-Market Disruptive Innovation**

The phenomenon of new-market disruptive innovation occurs in relatively and completely new value market networks whose prior customers have not experienced or used their initial generation of products and service; in which case these disruption entrants compete for customers that would without it go for the product or service. What then plays out is that because the new-market disruption competes against non-consumption, existing

market gains tend to ignore the new entrants or may not even identify or detect them. The attendant consequence again is that the smaller ignored or undetected new market entrants gain ground, and in most cases take over market from the incumbent firm. A typical example of new market disruption is that of the eSim innovation by MTN, where eSim permits the use of one network with one phone number associated, making it easier to switch between network operators and was launched in Lagos State by MTN on the 15th of July 2020 with free activation for all MTN subscribers (Kolawole, 2020). The former SIM disruption foretells the prospect of eSim, this is illustrated in the progress in the number of M2M and the growth of consumer eSim provisions by the GSMA, the distribution of eSim was quoted to out-grow that of traditional Sim cards over the next several years by a large margin. (Meukel, Schwar & Winter, 2016).

The use of eSim platform implies that the competent app developers will negotiate with hardware smart appliances manufacturers directly, and the industry value chain may face reconfiguration. The manufacturing and distribution of physical Sim cards become obsolete, although reconfiguration and profile management services have now formed a significant part of the value created for the traditional Sim card vendors. Physical Sim cards are not expected to disappear from the market within the next few years. Rather, a relatively long phase of side-by-side existence between Sim technology and the new eSim standard is expected

### **Concept of Corporate Agility**

Corporate agility is the ability to sense environmental change and quickly respond to unpredicted change by flexibly assembling resources, processes, knowledge and capabilities (Yang & Liu, 2012; Appelbaum, Kogan, Vasarhelyi & Yan, 2017). While organizations are required to be capable of responding to changes in their environment, it's been noted that within rapidly changing and high uncertainty environment, the speed and rapidity of organizational response to change will be one of the most critical factors of success. Sherehiy and Karwoski (2014) noted that corporate agility is an enabler of competitive advantage and business performance. The concept of corporate agility in management sciences has originated from the notion of "agile manufacturing" in production systems, which are attempts to enable organizations meet the needs of a changing marketplace, shift quickly between products and also, factor the evolution of customers' needs. (Zitkiene & Deksyns, 2018). Furthermore, corporate agility emphasizes speed and flexibility as the primary attributes of resilient organizations (Gunasekaram, 1999; Nafei, 2016). The study by Bessant, Von Stamm, Moeslein, and Neyer (2011) supporting selection strategies for discontinuous innovation defines corporate agility as the proactive response to change. Corporate agility requires that organizations practice and perfect the timely use of its people, resources and "know-how" in order to build a rapid response to any change or perceived change. It suggests that organizations that are constrained by slow systems and bureaucratic decision-making routines may fail to react in a timely manner towards environmental change and may consequently fail to overcome inherent challenges. Thus, corporate agility encompasses all the capabilities of a firm that aids responsiveness in structure and function and which are often applied to match the competitive interest of the firm.

### **Theoretical framework:**

#### **The Knowledge Based Theory**

The knowledge-based theory is the baseline theory that underpins this study. The knowledge-based theory states that knowledge is a resource which is difficult to imitate, which differentiates and creates a competitive advantage (Leonard-Barton, 1992). Grant (1996) highlights the fact that knowledge is “the critical input in the production and the primary source of value”. According to Spender (1996), organization is seen as a lasting alliance between independent entities that create knowledge regardless of whether they are individuals, teams, or other organizations, with the material resources subordinated to the provided services. This implies that in a dynamic environment, the most successful firms are those which generate new knowledge, apply it in the organization and quickly transform it into innovative products. There’s need for today’s firms to be increasingly concerned with innovations posing a threat to their core businesses, given the emergence of technologies such as the artificial intelligence, Internet of Things, alternative energy, cloud computing, 3-D printing, blockchain, etc. There is a lot of hype about the rapid pace of change in technology, and whether you are a ‘disrupter’ such as Uber, Netflix and Amazon, or the ‘disrupted’ such as Nokia, Blackberry and Kodak. The latter being organizations that failed to react quickly enough to changes in market conditions and consumer demands and ultimately paid the price. The same goes for cyber-attacks or ICT outages – it is a case of when, not if – there is complacency that it is inevitable and there is not a lot you can do about it. Thus, an organization will either be disrupted and fail or be the disruptor and succeed.

The objective of the study is to investigate the relationship between new-market disruptive innovation and corporate agility of telecommunication firms in Lagos State.

### **Research hypothesis**

**H<sub>01</sub>:** There is no significant relationship between disruptive innovation and corporate agility.

### **Methodology**

The study adopted the cross-sectional survey design as the variable were not manipulated by the researcher. The epistemological underpinning of the study is positivism. This study aimed at ascertaining the relationship between new-market disruptive innovation and corporate agility of telecommunication firms in Lagos State. An adjusted sample size of 370 respondents was determined from the population of 2650 managers of strategic units of all the 530 registered telecommunication firms in Lagos State. In order to ensure that each member of the population has an equal chance of being selected, the simple random sampling was adopted and the instrument for data collection was questionnaire. A Cronbach’s alpha reliability threshold of 0.7 was taken as the cut-off point to ensure internal consistency of the instrument. Convergence validity was ensured by accepting only constructs with factor loadings  $\geq 0.6$  (Brown, 2014); average variance extracted (AVE)  $\geq 0.5$  and composite reliability  $\geq 0.6$  (Fornell and Larcker, 1981), while discriminant validity was ensured using the criterion that "the square root of the average variance extracted must be more than a construct correlation with other constructs" (Fornell & Larcker, 1981). Mean and standard deviation were used to describe the characteristics of the categorical data, while the Kendall's tau-b ( $\tau_b$ ) correlation coefficient was used to test the bivariate relationship.

### **Results and Discussions**

#### **Respondent Demography**

370 copies of questionnaire were administered to respondents, however, only 366 instruments were retrieved and after the cleaning process, only 360 copies (97.29%) of the questionnaire were completed and usable. They were 278 (77.2%) males and 82 (22.8%) females. 244 (67.8%) were married, 50 (13.9%) were single, while 66 (18.3%) were separated.

**Test of Hypothesis**

*H<sub>05</sub>: There is no significant relationship between new-market disruptive capacity and corporate agility.*

**Table 1.1: Analysis of the effect of new market disruptive innovation on corporate agility Correlations**

			New_Market _Disruption	Corporate_ Agility
Kendall's tau_b	New_Market_Disrupti on	Correlation Coefficient	1.000	.523**
		Sig. (2-tailed)	.	.000
		N	360	360
	Corporate_Agility	Correlation Coefficient	.523**	1.000
		Sig. (2-tailed)	.000	.
		N	360	360

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 1.2: Result of Test of Hypothesis**

S/N	Mediation Stage	Hypothesis	Partial Correlation	Sig. (2-tailed) (P-values)	Remark
1	NMDI→CA (Hypothesis 1)	There is no significant relationship between new-market disruptive innovation and corporate agility.	0.523 (N = 360)	0.000	Not support ed

**Source:** SPSS 25.0 output on research data, 2021

Tables 1.1 and 1.2 reveal that the Kendall’s tau-b Correlation coefficient is 0.523 which reflect a strong positive linear relationship between new-market disruption and corporate agility. The p-value is less than 0.05. Therefore, null hypothesis was rejected. Following this finding, the study suggests that there is a positive and significant relationship between new market disruption and corporate agility of telecommunication companies in Lagos State.

**Discussion of the Findings**

The objective of this study was to evaluate the relationship between new-market disruptive innovation and corporate agility. This objective was captured by a research question and expressed under H<sub>0</sub>:1. As indicated in the findings, new-market disruptive innovation has a significant relationship with corporate agility. Following these findings, it is said that organizational agility encompasses all the capabilities of a firm that aids responsiveness in structure and function and which are often applied to match the competitive interest of the firm. This will enable them to take full advantage of new-

markets opportunities that are very attractive to the firm and thus becoming the industry incumbents. A lack of agility suggests that organizations are constrained by slow systems and bureaucratic decision-making routines making them fail to react in a timely manner towards environmental change or new market disruptions consequently fail to overcome inherent challenges. In order to benefit from the opportunities inherent in new market disruptions, corporate agility is required from these organizations to practice and perfect the timely use of its people, resources and “know-how” in order to build a rapid response to any change or perceived change. This finding is in consonance with the Knowledge Based Theory which suggests that knowledge is a resource which is difficult to imitate, which differentiates and creates a competitive advantage (Leonard-Barton, 1992).

### Summary, Conclusion and Recommendations

The study concludes that there is a significant relationship between disruptive innovation and corporate resilience of telecommunication firms in Lagos state. This study aligns with the theoretical assertions and predictions of the knowledge-based theory - suggesting that that if an innovation was sustaining and the telecommunication firm was an incumbent in the target market, the venture would be successful. The management revolution now under way is about working smarter, not harder, and achieving more value from less work, with much greater adaptability and corporate agility. This study recommends that telecommunication firms should strive to move to new-market opportunities to becoming market/industry incumbent, so as to use new market disruptions to bring about corporate agility. Furthermore, telecommunication firms should be quick to switch suppliers to take advantage of lower costs, better quality or improved delivery items, to enhance corporate agility. The awareness from this study will play a key role in helping both managers and the working staff to have a sound understanding of how new-market disruptive innovation influences business values to bring about corporate agility.

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