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# PRODUCT INNOVATION AND ORGANIZATIONAL AGILITY IN THE BANKING SECTOR OF NIGERIAN ECONOMY

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**ABSTRACT**

This study examined the relationship between product innovation and organizational agility in the banking sector in Nigeria economy. The study adopted a cross sectional survey research design. 36 top and middle managers from 18 Deposit Money Banks formed the population of the study and the 36 respondents were the size of our sample. Pearson Product Moment Coefficient was used in testing the hypotheses at a 95% confidence interval and a 0.05 level of significance. The reliability of the research instruments with all the items attaining coefficients surpassing the threshold of 0.70with the aid of Statistical Package for Social Sciences version 20.0. The study findings revealed that there is a significant relationship between product innovation and organizational agility in the banking sector in Nigeria economy. Therefore, product innovation in the banking sector in Nigeria led to high sensing agility, decision agility and acting agility. The study recommends that there should be more emphasis on product innovation for the attainment of sensing agility in the pursuit of organizational agility.

**Keywords: Product Innovation, Organizational Agility, Sensing Agility, Decision Agility, Acting Agility**

## INTRODUCTION

The business environment is drastically facing tremendous changes such that the world has never seen; the rapid technological advancements, globalization, increased customer sophistication, the spread of democratic processes, plethora of safety regulations and laws, political upheavals, cut-throat competitions, and global terrorism, just to mention a few (Felip, Roldan & Leal-Rodriguez, 2016).The aforementioned changes have their attendant impacts on organizations as they struggle to cope and annul the potential negative consequences the environment has thrown

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on them in order to survive and prosper. The alternative is for organizations to watch and do nothing at all; a sure bet to entropy. The fierce rivalry among organizations in a given environment, raises the bar to the international standards and equally regulates pricing so much so that staying aloof brings a dire consequence to a firm (Adim, Lebura & Adubasim, 2017; Wyman, 2018).

The perturbation in the business climate is highly worrisome in Nigeria owing to yesteryears maladministration, corruption, nepotism, kidnapping, incessant regional agitations, rising unemployment and its attendant crime wave, poverty, and religious bigotry, just to mention a few. In the midst of these changes, for an organization to operate successfully, it must devise a way to respond to these vagaries and uncertainties entrenched in the environment in an effective fashion so that is not submerged by these forces at play. Organizations are traditionally inclined to embark on retrenchment in the face of recession but a more creative way is to effectively and rapidly meet the challenges with some form of agility which brings fortunes to the organization even in bad times (Glenn, 2009).

Globalization and advances in technology have enthroned a heightened competition for many organizations so much so that any organization that fails to innovate might eventually go into extinction or experience retarded growth. In order to beat competition, organizations are charged to embark on innovation so as not to only compete for the same finite customers but equally create and expand the market space for all players (Hyde, 2013). Innovation strategies are asserted to produce more profits than competitive strategies (Kim & Mauborgne, 2005). Many organizations innovate to increase their chances of survival and prosperity. Additionally, organizations, particularly public institutions, innovate to increase their legitimacy (Demircioglu, 2016).

Just like organizational agility, the changes in the business environment are the necessary drivers of corporate innovation. To add value and keep up with the pace of ever changing customer demands and preferences, innovation is one of the inevitable tools an organization needs to achieve competitive edge and stay afloat (Winby & Worley, 2014; Wyman, 2018).Innovation and change follow the same process and are said to be closely tied to each other with only a thin line that differentiates them (Robbins & Coulter, 2013). Every change introduced into an organization is certain to meet some form of resistance from the employees and sometimes from

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some members of top management team. The reasons change is resisted are often grouped into the following; uncertainty, concern for personal loss, habit, and the belief that the change is not in the best interest of the organization in question (Robbins & Coulter, 2013).

To differentiate between 'innovation' and 'change', Daft, Murphy and Willmott (2010) have the following to say: 'Innovation is the adoption of behaviour or idea that is new to the organization's industry, market or environment. When the idea or behaviour adopted is only new to the organization in question, it is known as change'. Robbins and Coulter (2013), define organizational change 'as any alteration of people, structure, or technology'. Accordingly, the resistance to change can be reduced or minimized using the following techniques; a) education and communication, b) participation, c) facilitation and support, d) negotiation, e) manipulation and co-optation, and f) coercion (186-187). Lopez (2015) divided innovation into four types which are; a) incremental innovation, b) architectural innovation, c) disruptive innovation, and d) radical innovation. Trott (2008) sees innovation as a process rather than a single event and thus defines it as 'the management of all the activities involved in the process of idea generation, technology development, manufacturing and marketing of a new (or improved) product or manufacturing process or equipment'. This definition of innovation as a management process also offers a distinction between an innovation and a product, the latter being the output of innovation.

Various researchers in the past have used different dimensions of corporate innovation. Studies of innovations in organizations are multidimensional, multilevel, and context-dependent (Damanpour, 2017). Sledzik (2013), writing on Schumpeter's view on innovation and entrepreneurship, had the following as the dimensions of innovation; a) the introduction of a new product, b) the introduction of a new production process, c) the introduction of a new market, d) the acquiring new sources of supply or semi-finished product, and e) the creation of new industry structures. Jorfi, Feizi and Alipour (2013), used gradual innovation and fundamental innovation as the dimensions of corporate innovation in their study. Amidst the available literature on innovation, there is still paucity of researches on how corporate innovation relates to organizational agility in the banking sector in Nigeria. This study therefore examined the relationship between product innovation and organizational agility in the banking sector of the Nigerian economy. Furthermore**,** this study was also guided by the following research questions:

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i. How does product innovation relate with sensing agility in the banking sector of Nigerian economy?
ii. How does product innovation relate with decision-making agility in the banking sector of Nigerian economy?
iii. How does product innovation relate with acting agility in the banking sector of Nigerian economy?

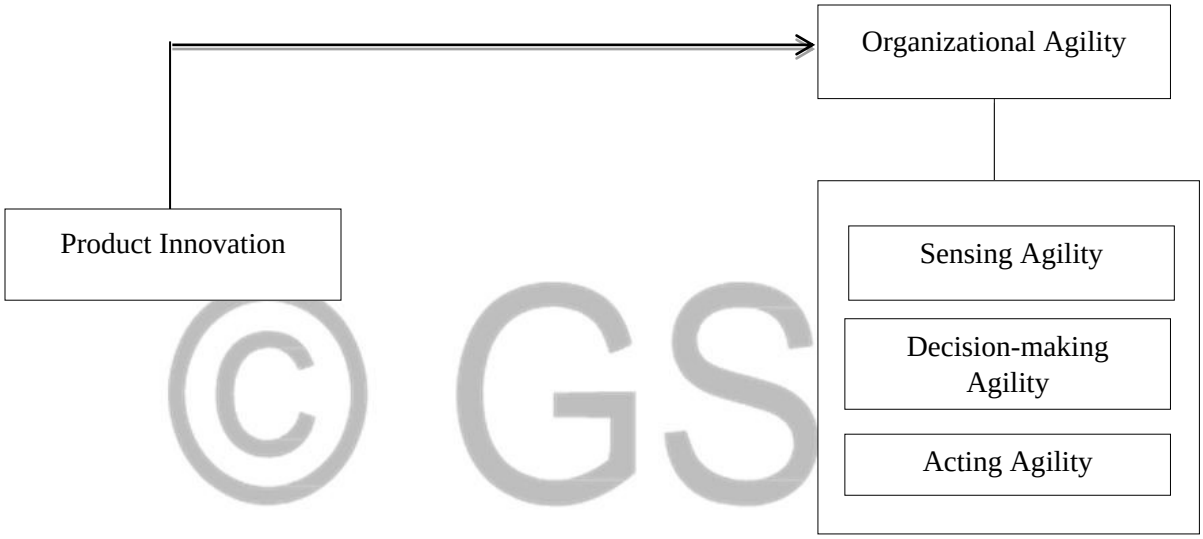


***Fig.1 Conceptual framework for the relationship between product innovation and organizational agility***

***Source: Author's Desk Research, 2019***

## LITERATURE REVIEW

### Theoretical Foundation

### Population Ecology

Population ecology forms the baseline theory of our research. The theory was formulated by Hannan and Freeman (1977), to account for the changes and innovation going on in the population of organizations within an environment. Population of organizations refers to all organizations engaged in similar businesses, with similar pattern of resource utilization and outcomes (Hannan &Freeman, 1977 cited in Gupta, Gollakota and Srinivasan, 2016). They

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rightly observed that in a bid to cope with the environments fraught with changes, organizations are constantly trying to adapt to these changes which result in the birth of new organizational forms. Turbulence in any given environment is beyond what any organization could cope with; organizations are continually making efforts to match with perturbations the environment throws up (Gupta *et al*., 2016; Daft, Murphy & Willmott, 2010).Most new organizational forms are brought about by new and small organizations while the old and well established ones are tilted to being a dinosaur. According to Hannan and Freeman (1977) cited in Daft (2007: 95), the following are the reasons big organizations hardly adapt to the fast changing environments: 'The limitations come from heavy investment in plants, equipment, and specialized personnel, limited information, established viewpoints of the decision makers, the organization's own successful history that justifies current procedures, and the difficulty of changing corporate culture.'

The survival of organizations is purely determined by the environment as such, organizations strive to be able to adapt to the continually changing and dynamic environments. New and small organizations are usually more fitted for this form of adaptation as the well-established ones are often bugged by phenomenon known as 'structural inertia'. Worthy of note is that 'Population Ecology Theory' is developed from the theories of natural selection in biology, and the terms 'evolution and selection' are used to refer to the changes in the nature of an entire population, rather than an individual organism (Gupta *et al*., 2016). Daft (2007: 96), asserts as follows: 'Organizational form is an organization's specific technology, structure, products, goals, and personnel, which can be selected or rejected by the environment. Each new organization tries to find a niche (a domain of unique environmental resources and needs) sufficient to support it. The niche is usually small in the early stages of an organization but may increase in size over time if the organization is successful. If the niche is not available, the organization will decline and may perish.' Ahiauzu and Asawo (2016) hold a similar view when they posit that if an organization has the requisite fit between environment and the organization then it will survive. However, if the organization does not have this fit, it will experience facilitated entropy.

**Product Innovation**

Product innovation is indeed considered as new and evolving area in industrial engineering (Tohidi & Jabbar, 2012). Product innovation is most visible to customers and outsiders than other forms of innovation. Product innovation comprises the following: 1) Development of a new

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product, such as the Fitbit or Amazon's Kindle. 2) An improvement of the performance of the existing product, such as an increase in the digital camera resolution of the iPhone7. 3) A new feature to an existing product, such as power windows to a car (Baer, 2018). Griffin (2005, p.423), defines product innovation as 'a change in the physical characteristics or performance of an existing product, service or the creation of new ones'. Product innovation is inherently risky more so that the customer might find the new product or service not appealing (Daft, 2007). Daft *et al*. (2010) are of the view that for product or service to be successful at the market, the following conditions should be met: a) Paying close attention to the need and a good deal of marketing the product. b) Utilization of outside technology and devices despite much work in-house. C) Top management must lend their support to the innovation process. According to Requia (2014), he succinctly defines product innovation in the following manner: 'Product innovation is the development of new products, making changes in the current product design or using new techniques and means in the current production methods, in other words, it focuses on existing markets for existing products, differentiating through features and functions that current offers do not have. We can look at the product innovation from two sides; internal side where it depends on knowledge, capacities, resources and the technologies used in the company, however; from the external side product innovation focuses on the consumers' needs and the owners' expectations. According to Roozenburg and Ekels (1998) cited in Requia (2014), the following are the stages of product innovation process: 'product planning, product policy, idea finding, strict development, the technical development process, and the commercial development process.'



**Organizational Agility**

According to Garbie, Parsaei and Leep (2008) cited in Groover (2001), they assert that 'in 1991, an industry-led study was accomplished under the auspices of the Iacocca Institute at Lehigh University. The study was sponsored by the US Navy Mantech program and involved 13 US companies. The objective of the study was to consider what the characteristics would be that successful manufacturing companies will possess in the year 2006'. The outcome of the study brought about 'Agile manufacturing' into the management literature. In the unpredictable and competitive world of today, the organizations must have different competitive features to compete; otherwise, they will move towards annihilation. One of these features that

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organizations need in the turbulent environments of today is agility. Agility provides the organization with the possibility of quick response and compatibility with environment and allows the organization to improve its efficiency (Yeganegi & Azar, 2012). Agility is the successful application of competitive bases such as speed, flexibility, innovation, and quality by the means of the integration of reconfigurable resources and best practices of knowledge-rich environment to provide customer-driven products and services in a fast changing environment (Yusuf, Sarhadi & Gunasekaran, 1999 cited in Nafei (2016).

Chief Executive Officers face a clear challenge: their old model required them to make long-term commitments to goals and strategies, deploy considerable resources to implement them, and ensure that every part of the firm was dedicated to achieving them. In contrast, the new, more agile model requires them to stay flexible, seek out new evidence, always be ready to reassess past choices, and change direction in light of new information, often via small, iterative improvements (Wyman, 2018).Agility is the ability of an organization to renew itself, adapt, change quickly, and succeed in a rapidly changing, ambiguous, turbulent environment. Agility is not incompatible with stability—quite the contrary (De Smet, 2015). Agility needs two things. One is a dynamic capability, the ability to move fast—speed, nimbleness, responsiveness. And agility requires stability, a stable foundation—a platform, if you will—of things that don't change. It is this stable backbone that becomes a springboard for the company, an anchor point that doesn't change while a whole bunch of other things are changing constantly. Organizational agility is the organization's ability to respond quickly and effectively to unexpected opportunities, in addition to providing, in advance, solutions that meet potential needs (Nelson & Harvey, 1995).

Agility refers to the ability of rapid and easy movement and rapid thinking with a thoughtful method. The root or origin of agility is derived from agile production and this is a concept that has been presented during later years. The agile production has been accepted as a successful strategy by producers that prepare them for a considerable performance (Mehrabi, Siyadat & Allameh, 2013). Wyman (2018) defines organizational agility as 'a company's capacity to be infinitely adaptable without having to make a radical change.

**Measures of Organizational Agility**

**Sensing Agility**

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Sensing agility is the organizational capacity to inspect and monitor events and changes in the surrounding environment (customer preferences changes, the movements of the new competitors, new technology) in a timely manner (Park, 2011) cited in Nafei (2016: 299). The task of sensing means the strategic monitoring of environmental events that could have an impact on organizational strategy, competitive work, and future performance, including several activities such as access to information related to the events which show environmental change, on the one hand, and getting rid of the trivial information, on the other hand, in light of predetermined foundations and rules (El-Sawy, 1985). This task is related to decision-making and its execution (Dutton & Duncan, 1987). It is interested in organizational adaptation to change in the surrounding environment (Smircich & Stubbart, 1985). According to Wyman (2018: 7), 'Sensing (or sensitivity) is the ability to detect, identify, and assess the opportunities and challenges presented by the changing external environment. It supports informed decision making. In sectors where the pace of technological development is extremely rapid, or the impact of consumer and social factors is uncertain, it is clear the importance of effectively "sensing" the need to change (when) and the areas where adaptation or innovation is required (where)'.

Environmental forces alone do not drive investment in system capabilities; a firm must be alert and responsive to the environmental cues. Entrepreneurial Alertness is a catalyst to business process agility. Entrepreneurial alertness is a firm capability in which the firm has strategic foresight and systematic insight capabilities (Sambamurthy, Bharadwaj & Grover, 2003). Strategic foresight is the capability to anticipate disruptions, threats, and opportunities in the environment whereas strategic insight is the capability to visualize and assess the threats and opportunities within the context of the firms' resources and capabilities. Entrepreneurial alertness allows for a firm to take strategic actions (Raschke & David, 2005). Market sensing involves two key activities. It starts with an open-minded approach to the market rather than inquiry simply to confirm pre-existing beliefs about the environment. The second activity of market sensing is to disseminate information and insights through-out the organization, such that it becomes a collective understanding of the marketplace. Ensuring that market information is understood requires ensuring that the market-sensing activity is followed by a sense-making activity. This involves an act of interpretation and is dependent on mental models of the organizational collective (Ahmed & Shepherd, 2010). Ahmed and Shepherd (2010) posit that the following steps are necessary for market sensing: a) Create a spirit of open-minded enquiry, b) carefully

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analyse competitor actions, c) listening to the market pulse, d) seeking out latent needs, e) actively scan the market periphery, and f) encouraging experimentation and improvement.

With the increasing rate of industry disruption, efficiency is now secondary to organizational agility. Many large organizations have too little capacity for external sensing, strategic reflection, and business transformation (Popper, Power & Stanton, 2013). Organizations need to develop two management systems; The operational system that manages the short-term execution of work- what we call the 'surface system' and the second system that focuses externally on sensing and driving strategic change- what is referred to as the 'Deep system'. Without spending money now on dedicated resources (with long-term payoffs) to manage the deep system'- processes to sense and respond to deep customer unmet needs, the threat of potential competitors, possible uses of new technology, and useful demographic trends- organizations would not have the capacity and muscle to compete and survive.

**Decision-making Agility**

Decision-making agility process is the ability to collect, accumulate, restructure and evaluate relevant information according to a variety of sources to explain the implications of the business without delay, and to identify opportunities and threats based on the interpretation of events along with the development of action plans, which direct the reconfiguration of resources and the development of new competitive procedures. The decision-making task consists of several interrelated activities, which explain many events and identify opportunities and threats in the surrounding environment. The task of decision-making focuses on collecting information from multiple and diverse sources in order to understand the implications of their work (Thomas, Clark & Gioia, 1993). The task of decision-making seeks to capture the utmost opportunities and minimize the impact of threats on the life of the organization (Houghton, El Sawy, Gray, Donegan & Joshi, 2004).

The key is to add value to the market data. Meaning and value depend on the way the information is processed by the cognitive lens of the organization. These organizational cognitive filters are called mental models. The mental models organize, structure and pattern given information in particular ways. Thus, different mental models can embody the same information with very different meanings. As a result, mental models can have important ramification for organizational action. If different types of mental models exist in an

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organization, it could result in the cacophony of interpretations (Ahmed & Shepherd, 2010). To avert this, the duo suggest the harmonization of the mental model that a company has adopted, and conscious effort be made to hear the voice of everyone if decision-myopia is to be avoided.

Dubois (2018) opines that agility in decision-making is key to capitalize on business opportunities or to respond to market threats. Yahoo, during the 2000s, lacked the urgency and provided google an opportunity to catch up. Decision-making ability within large organizations is driven through three key levers: People, governance and strategic planning. The first lever is to ensure that the decision-makers in place are qualified, decisive and committed to support the outcome of the decision. Once these people are identified, establishing flexible governance ensures that they receive the support needed and remove the bureaucratic barriers in the process. To streamline the activities and ensure focus, introducing standard planning provides decision-makers the tools to succeed and reduce the decision cycle time.

Larson (2017) opines that organizations can greatly improve the quality of their agile decision-making when they observe the following steps: (a) a firm should know what the biases that reduce their decision-making ability and take steps to correct them. Track the process and results of decision making and use that information to improve future decisions. b) Gather the good enough information and share among those that will take decision. c) Maintain a feedback loop so as to know which aspect works and the one that fails so as to learn from the whole exercise and improve on it.

**Acting Agility**

The acting task consists of a set of activities for re-assembling organizational resources and modifying business processes on the basis of the principles of work resulting from the task of decision-making in order to address the change that occurs in the surrounding environment (Eisenhardt & Martin, 2000). Organizations can change the business processes by various procedures and resources, redesigning the organizational structure of the organization (Dutton & Duncan, 1987; Thomas *et al*., 1993). This is the doing stage; it requires implementing whatever is arrived at in the course of decision-making. This stage is the most critical determinant of organizational agility. It requires correcting whatever is seen as the challenge and has been agreed it should change at the level of decision-making. Opportunities are capitalized when

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organizations act quickly before others get to act and vice versa. This is the stage to annul or reduce the threats to organization and maximizing the opportunities that the organization has.

**Product Innovation and Organizational Agility**

Product innovation comprises the following: (1) the development of a new product, such as the Fitbit or Amazon's Kindle. 2) An improvement of the performance of the existing product, such as an increase in the digital camera resolution of the iPhone7. 3) A new feature to an existing product, such as power windows to a car (Baer, 2018). It is one aspect of innovation that is obvious to customers and that directly appeals to them. Agility refers to the ability to survive and progress in the variable and unpredictable environment (Dove, 2001) cited in Nafei (2016). Jacob, Droge, Vickery and Calantone (2011) in their popular research opine that product innovation has positive relationship with organizational agility. Nafei (2016) in his research on Organizational agility: The key to organizational success, affirms that product innovation is positively related to organizational agility. Christofi, Leonidou and Vrontis (2015), in their research carried out in Cyprus and titled: Cause-related marketing, product innovation and extraordinary sustainable leadership; the root towards sustainability, posit in their findings that product innovation leads to sustainable competitive advantage which implies that product innovation actually leads to organizational agility. Meeus and Edquist (2006) carried out a research on process and product innovation. In the said study, Europe and America were compared to know how much of innovation that goes on in each region. They duo affirm that product innovation especially the disruptive ones, help organizational agility and survival.

Thus, this study hypothesized as follows:

**$H_{o1}$**: There is no significant relationship between product innovation and sensing agility in the banking sector of Nigerian economy.

**$H_{o2}$**: There is no significant relationship between product innovation and decision agility in the banking sector of Nigerian economy.

**$H_{o3}$**: There is no significant relationship between product innovation and acting agility in the banking sector of Nigerian economy.

## METHODOLOGY

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The study adopted a cross sectional survey research design. 36 top and middle managers from 18 Deposit Money Banks formed the population of the study and the 36 respondents were the size of our sample. Pearson Product Moment Coefficient was used in testing the hypotheses at a 95% confidence interval and a 0.05 level of significance. The reliability of the research instruments with all the items attaining coefficients surpassing the threshold of 0.70with the aid of Statistical Package for Social Sciences version 20.0.

## DATA ANALYSIS AND RESULTS

### Test of Research Hypothesis One

**$H_{o1}$**: There is no significant relationship between product innovation and sensing agility in the banking sector of Nigeria economy

**Table 1: Product Innovation and Sensing Agility**

| | | Product Innovation (PI) | Sensing Agility (SA) |
|---|---|---|---|
| Product Innovation (PI) | Pearson Correlation | 1 | .619** |
| | Sig. (2-tailed) | | .000 |
| | N | 34 | 34 |
| Sensing Agility (SA) | Pearson Correlation | .619** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 34 | 34 |

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

***Source: SPSS20.0 data Output, 2019***

From the outcome in table 1, it is shown that a positive association exists between product innovation and sensing agility. The *correlation* value 0.619 indicates this association and it is significant at p 0.000<0.05. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected. Thus, there is a significant relationship between product innovation and sensing agility.

### Test of Research Hypothesis Two

**$H_{o2}$**: There is no significant relationship between product innovation and decision agility in the banking sector of Nigerian economy

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**Table 2: Product Innovation and Decision Agility**

| | | Product Innovation (PI) | Decision Agility (DA) |
|---|---|---|---|
| Product Innovation (PI) | Pearson Correlation | 1 | .417** |
| | Sig. (2-tailed) | | .000 |
| | N | 34 | 34 |
| Decision Agility (DA) | Pearson Correlation | .417** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 34 | 34 |

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

***Source: SPSS20.0 data Output, 2019***

From the outcome in table 2, it is shown that a positive association exists between product innovation and decision agility. The *correlation* value 0.417 indicates this association and it is significant at p 0.000<0.05. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected. Thus, there is a significant and positive relationship between product innovation and decision agility.



**Test of Research Hypothesis Three**

**$H_{o3}$**: There is no significant relationship between product innovation and acting agility of the banking sector of Nigeria economy.

**Table 3: Product Innovation and Acting Agility**

| | | Product Innovation (PI) | Acting Agility (AA) |
|---|---|---|---|
| Product Innovation (PI) | Pearson Correlation | 1 | .540** |
| | Sig. (2-tailed) | | .000 |
| | N | 34 | 34 |
| Acting Agility (AA) | Pearson Correlation | .540** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 34 | 34 |

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

***Source: SPSS20.0 data Output, 2019***

From the outcome in table 3, it is shown that a positive association exists between product innovation and acting agility. The *correlation* value 0.540 indicates this association and it is

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significant at p 0.000<0.05. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected. Thus, there is a significant relationship between product innovation and acting agility.

## DISCUSSION OF FINDINGS

Our study reflects the fact that the deposit banks in Nigeria are very much into product innovation. The implication is that banks are constantly in touch to know what their teeming customers want and they respond accordingly by developing new products and services, improvement of existing products and addition of features to the old products. The very fact that they are involved in product innovation boosts their capacity to monitor and inspect the happenings in their environment. According to the research carried out by Meeus and Edquist (2006), they affirm that product innovation especially the disruptive ones, help the firm to sense the distant and immediate happenings in the environment. Their study adds credence to our findings that product innovation strongly associates with sensing agility in the money deposit banks in Nigeria. The work of Demircioglu (2016), lends credence that product innovation leads to organizational adaptation, survival and prosperity. Christensen *et al.,* (2015) equally affirms our position.

Product innovation has moderate relationship with decision agility in the banking sector in Nigeria. It means that as the deposit banks roll out new and improved products to their customers, they are invariably better positioned to gather, restructure, and evaluate relevant information that enables them ascertain which opportunities and threats that they should address in their environment. This phenomenon is expedient especially in a highly competitive environment like ours in Nigeria. Meeus and Edquist (2006) are of the view that innovation especially product innovation is made necessary in a highly competitive environment for survival, adaptation and prosperity. The studies of Christensen *et al*., (2015) and Christensen (2016) support our findings that product innovation leads to decision agility.

Our findings also reflect moderate relationship between product innovation and acting agility in the deposit banks in Nigeria. It means that as the banks embark on product innovation, it stimulates their ability to align resources and processes to quickly address the changes in the environment for adaptability and survival. Opportunities are capitalized when organizations act quickly before others get to act and vice versa. Acting agility is a quality on demand in our today

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Nigeria especially since the introduction of 'single treasury account' (TSA). The free chunk of Government Fund that was at the disposal of deposit banks before now is no longer available to them. The situation calls for swim-or-sink among competing money deposit banks in Nigeria. Our findings are in tandem with the studies of Christensen *et al.*, (2015), Meeus and Edquist (2006), and Christensen (2016).

## CONCLUSION AND RECOMMENDATIONS

This study concludes that the production of new or improved products leads to the capacity of an organization to quickly monitor and inspect the changes in the environment of the deposit banks in Nigeria. Again, the production of new and better products in the deposit banks in Nigeria, leads to the organizations being able to quickly gather, restructure and evaluate relevant information that makes the concerned organizations to be aware of the opportunities and threats that they should respond to in their environment. Finally, product innovation leads to ability of organizations to engage in a set of activities that enable them to re-assemble organizational resources and business processes in order to address the identified changes in the environment of deposit banks in Nigeria.

The study thus recommends that Deposit Money Banks should engage in more innovative products tailored to meet and exceed their customers' needs and business environment in which they operate; this also ensures their survival in the industry.

## REFERENCES

Adim, C.V., Lebura, S., &Adubasim, E.I. (2017). Innovation culture and organization survival in hospitality firms in Port Harcourt. *Nigerian Business and Social Review,* 9(1), 66-79.

Ahiauzu, A.I. & Asawo, S.P. (2016). *Advanced social research methods*. Port-Harcourt: CIMRAT Publications.

Ahmed, P.K., & Shepherd, C.D. (2010). *Innovation management: Context, strategies, systems and processes*. England: Pearson Education limited.

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ISSN 2320-9186

Cristofi, M., Leonidou, E., &Vrontis, D. (2015). Cause-related marketing, product innovation and extraordinary sustainable leadership: The root towards sustainability. *Global Business and Economics Review*, 17(1), 93-111.

Daft, R.L., Murphy, J. & Willmott, H. (2010). *Organization theory and design*. Croatia: South-Western.

Daft, R. (2007). *Understanding the theory and design of organizations*. China: Thomson South-Western.

Damanpour, F. (2017). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management*, 34(3), 555-590.

De Smet, A. (2015). The key to organizational agility. https://www.mckinsey.com/business-functions/organization/our-insights/the-keys-to-organizational-agility. Retrieved on 12th march, 2019.

Demircioglu, M.A. (2016). Organizational innovation. www.researchgate.net/publication/313177635. Retrieved on 11th April, 2019.

Dove, R. (2001). *Responsibility: The language, structure, and culture of the agile enterprise*. New York: Wiley.

Dutton, J., & Duncan, R. (1987). The creation of momentum for change through the process of strategic issue diagnosis. *Strategic Management Journal*, 8, 279-295.

Dubois, A. (2018). Increasing agility in decision-making to improve competitiveness. www.reddal.com. Retrieved on 3rd May, 2019.

El Sawy, O. (1985). Personal information systems for strategic scanning in turbulent environments: Can the CEO Go Go-Line? *MIS Quarterly*, 9(1), 53-60.

Eisenhardt, M., & Martin, J. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21, 1105-1121.

Felip, C.M., Roldan, J.L. & Leal-Rodriguez, A.L. (2016). An explanatory and predictive model for organizational agility. *Journal of Business Research*, 69, 4624-4631.

Garbie, I.H., Parsaei, H.R., &Leep, H.R. (2008). A novel approach for measuring agility in manufacturing firms. *International journal of Computer Applications in Technology*, 32(2), 95-103.

Glenn, M. (2009). Organizational agility: How business can survive and thrive in turbulent times. *The Economist Intelligence Unit*, 1-25.

Gupta, V., Gollakota, K., & Srinivasan, R. (2016). *Business policy and strategic management: Concepts and applications*. 2. Delhi: PHI Learning Private Limited.

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ISSN 2320-9186

Hannan, M., & Freeman, J. (1977). The population ecology of organizations. *American Journal of Sociology*, 82(5), 929-964.

Houghton, R., El Sawy, O. A., Gray, P., Donegan, C., & Joshi, A. (2004). Vigilant information systems for managing enterprises in dynamic supply chains: Real-time dashboards at western digital. *MIS Quarterly Executive*, 3(1), 19-35.

Hyde, A. (2013). Innovation- the way forward for competitive advantage? A critical review of blue ocean strategy, disruptive innovation, and strategic innovation. *Otago Management Graduate Review*, 11, 31-40.

Kim, W.C., & Mauborgne, R. (2005). *Blue ocean strategy; how to create uncontested market space and make the competition irrelevant.* Boston: Harvard Business School Press

Jacob, M., Droge, C., Vickery, S.K., &Calantone, R. (2011). Product and process modularity's effects on manufacturing agility and firm growth performance. https://onlinelibrary.wiley.com. Retrieved on 3 April, 2019.

Jorfi, M., Feizi, M., &Alipour, H. (2013). Surveying the relationship between organizational innovation and organizational agility at Ramin station of Ahwaz. *International Journal of Management and Social Sciences Research,* 2(10), 83-88.

Lopez, J. (2015). Types of innovation. https://techblog.constantcontact.com/software-development/types-of-innovation. Retrieved on 15th March, 2019.

Mehrabi, S., Siyadat, S., &Allameh, S. (2013). Examining the degree of organizational agility from employees' Perspective (Agriculture-Jahad Organization of Shahrekord City). *International Journal of Academic Research in Business and Social Sciences*, 3(5), 315-323.

Meeus, M., & Edquist, C. (2006). Introduction to part I: Product and process innovation. https://www.researchgate.net/publication/241861288. Retrieved 3rd June, 2019.

Nafei, W. (2016). Organizational agility: The key to organizational success. International *Journal of Business and Management*, 11(5), 296-309.

Nelson, A., & Harvey, F. (1995). Technologies for training and supporting your agile workforce. In creating the agile organization: Models, metrics and pilots. 4th Agility Forum Annual Conference.

Park, Y. (2011). The dynamics of opportunity and threat management in turbulent environments: The role information technologies. Doctoral dissertation.

Popper, W., Power, B., & Stanton, S. (2013). Make agility part of your process. https://hbr.org. Retrieved on 5th May, 2019.

GSJ: Volume 8, Issue 1, January 2020
ISSN 2320-9186

Raschke, R.L., & David, J.S. (2005). Business process agility. http://aisel.aisnet.org/amcis2005/180. Retrieved on 2nd May, 2019.

Robbins, S. P., & Coulter, M. (2013). *Management*. England: Pearson Education Limited.

Sambamurthy, V., Bharadwaj, A., & Grover, V. (2003), Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms. *MIS Quarterly*, 27(2), 237-263.

Sledzik, K. (2013). Schumpeter's view on innovation and entrepreneurship. https://www.researchgate.net/publication/256060978. Retrieved on 2nd January, 2019.

Smircich, L., &Stubbart, C. (1985). Strategic management in an enacted world. *Academy of Management Review*, 10(4), 724-736.

Thomas, J., Clark, S., & Gioia, D. (1993). Strategic sense-making and organizational performance: Linkages among scanning, interpretation, action, and outcomes. *Academy of Management Journal*, 36(2), 239-270.

Tohidi, M., &Jabbar, M.M. (2012). Product innovation performance in organizations. : https://www.researchgate.net/publication/257743844. Retrieved on 5th May, 2019.

Winby, S., & Worley, C.G. (2014). Management processes for agility, speed, and innovation. *Organizational Dynamics*, 43, 225-234.

Yusuf, Y., Sarhadi, M. & Gunasekaran, A. (1999). Agile manufacturing: The drivers, concepts and attributes. *International Journal of Production Economics*, 62(1-2), 33-43.