

**Impact of Size on Innovative Performance of Small- and Medium-Sized Enterprises in  
Nigeria<sup>1</sup>.**

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## **ABSTRACT**

Firm size has been identified as playing a major role in stimulating innovations among firms. Large size for example confers some economies of scale advantages such as finance to undertake innovations that boost competitive advantage which smaller firms do not have. On the other hand, smaller firms are believed to possess a flexibility that is needed to generate innovations faster than large firms with more chains of command. This study examined innovative performance of firms with particular emphasis on the role of firm size on product and process innovations in Nigeria. Using descriptive statistics and logistic regression modeling, the study found that large firms or firms with affiliation to large firms were found with more likelihood of generating innovations than small firms. We also controlled for two corporate governance variables which are female board membership and managerial shareholding. We found that while female board membership had a positive impact on product innovations, managerial shareholding had a negative impact on process innovations. Top managers' work experience also impacts positively on innovation as managers with less than 10 years' experience were more likely to generate more process innovations than those with between 10-20 years of working experience.

## **INTRODUCTION**

Small and Medium Enterprises play a huge role in driving growth and employment, particularly in developing economies. They are crucial in solving many social and economic challenges, including poverty, unemployment, and inequality (Mohammed and Abimiku, 2015). SMEs represent the “driving forces of modern economies due to their multifaceted contributions in terms of technological innovations, employment generation, export promotion, etc.” (Subrahmanya, Mathirajan, & Krishnaswamy, 2010, p.1). They serve as an important driver of growth and development, accounting for 90% of businesses and more than 50% of employment worldwide (World Bank).<sup>2</sup> The ILO's (2019) study of micro and small enterprises across 99 low- and medium-income countries shows that they are responsible for 70% of total employment. These data suggest that, although termed ‘small’ and ‘medium’, the impact of SMEs in an economy is too large and significant to be ignored. SMEs are so significant that

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<sup>2</sup> <https://www.worldbank.org/en/topic/sme/finance>

their performance is a determinant of a country's economic success (Rumanti Rizana, Septiningrum, Reynaldo & Isnaini, 2022).

The successful operation of SMEs alongside their larger counterparts has attracted the attention of the academia to study the role and performance of SMEs in developing an economy. A central theme of academic research around SME performance is the level of innovations carried out by these enterprises. Innovation is the introduction of new products or processes into an organisation. Whether it's new to the firm or new to the industry, radical or incremental, formal or informal, innovation plays a vital role in guaranteeing a firm's survival within a competitive business environment. Innovation is a necessary condition for SMEs to compete in their industry and to maintain at least a break-even point (Sidik 2012). Low levels of innovation in SMEs will limit them from achieving their desired levels of growth and profitability (Jeptoo, Osodo & Nyiva, 2017).

It is necessary for SMEs, especially those in developing countries, to innovate in order to navigate through a difficult business environment. Given the poor rating of the ease of doing business in Nigeria, SMEs particularly face more daunting challenges to operate in the business environment, compared to larger firms. Innovation can thus serve as an important factor in providing a level-playing field for SMEs in Nigeria. According to Akoma, Adeoye, Akinlabi, & Ayeni (2023), SMEs' inability to innovate is deemed responsible for their poor performance and their low contribution to Nigeria's Gross Domestic Product. While SMEs clearly play a significant role in solving unemployment issues in Nigeria, their survival is strongly hinged on their innovativeness. It is thus pertinent to analyse the level of SME innovation in Nigeria by answering the following questions:

- i. How innovative are small and medium enterprises in Nigeria?
- ii. What nature of innovations are prevalent in small and medium enterprises in Nigeria?
- iii. Does firm size play an important role in stimulating innovations among the firms?

## **THEORETICAL FRAMEWORK**

The economist, Joseph Schumpeter, is credited with building the foundational theories and hypotheses for firm-level innovation (Serpe, Cherobim, Horst, & Andrade Junior, 2012). The Schumpeterian hypothesis supports the notion that large firms with market power are the drivers of technological change and innovation. Innovation is more in the domain of larger firms because (Symeonidis, 1996):

- i. Large firms have the financial capacity to bear the associated costs of Research & Development projects which can lead to the introduction of new products.
- ii. Production of innovations involves economies of scale and scope.
- iii. Large firms have better access to external finance than SMEs.
- iv. Large firms can better manage the risks of R&D investments.
- v. Large, diversified firms are in a better position to exploit unforeseen innovations.

A number of empirical studies have been carried out to test the Schumpeterian hypothesis of the nexus between innovation and firm size with inconclusive results (*ibid.*). Naturally, it is expected that SMEs will innovate less in comparison with big firms that possess huge resources for R&D. However, there is evidence of small firms efficiently operating in highly competitive environments for long periods of time, side-by-side with larger firms in their industry (Serpe *et al.*, 2012). There are two theories that explain why SMEs will engage and succeed in innovation: the Prospect Innovation Theory and the theory of Dynamic Capabilities (Mohammed and Abimiku, 2015).

Innovation involves some level of risks and uncertainty; it could lead to major financial losses for a firm if it fails. The Prospect Innovation Theory describes entrepreneurs' risk-averseness and how it influences the decision to innovate. The theory states that "profitable companies are likely to be risk averse and therefore are psychologically likely to reject potentially innovative ideas, particularly new products, new services, and ideas that offer an opportunity to increase income." (Mohammed and Abimiku, 2015, p.4). However, when the prospect of not making the decision to innovate is a loss to the company, entrepreneurs are willing to take the risk of innovations (José and José, 2023). Hence, loss-reducing innovations are more likely to be implemented by risk-averse firms.

Dynamic Capabilities are a "firm's ability to integrate, build, and reconfigure internal and external resources/competences to address and shape rapidly changing business environments" (Teece, 2010, p.). This speaks to a firm's capability to be versatile in its approaches and processes, thereby giving room for new changes when necessary. The Dynamic Capabilities perspective to innovation describes the firm's ability to innovate as a function of its dynamic capabilities and is "concerned with preparing the firm for the exploitation of new opportunities in future markets." (Borch and Madson, 2007, pp. 112-113). According to Subrahmanya et al. (2010), SMEs' flexibility and adaptability make them better placed to develop and implement

new ideas. Thus, based on this theory, innovation is likely to be more prevalent in smaller firms than in larger firms.

## **REVIEW OF LITERATURE**

In this section, we consider the findings of some studies on the influence of firm size on innovation, and factors driving SME innovation in particular. Broadly, the quest for growth and the need to stay in business lays a demand on firms, their size irrespective, to continually improve their products and processes.

The study by Acs and Audretsch (1988) reveals that the higher the number of large firms in an industry, the higher the level of innovative outputs in that industry. This is because larger firms have the capacity to engage in more R&D expenditures. While it may appear that smaller firms will produce less innovative outputs due to their sizes, their innovative activities are also conditioned by the technological and economic environment in which they operate. This study further suggests that the disparity in innovation activities between large and small firms could vary across industries. While large firms could exhibit more innovative activities in some industries, the opposite is the case in other industries.

The performance of SMEs in Kenya is significantly affected by innovation as shown in Jeptoo *et al.* (2017). Their study adopted a Pearson Correlation analysis to examine the relationship between innovation and performance among a sample of 143 small and medium enterprises within a town in Kenya. The results reveal a strong positive association between the qualitative parameters used in measuring innovation and performance. Kitigin (2017), also using data from 100 SMEs in another Kenyan town, established a significant relationship between innovation and performance. The SMEs surveyed in this study engage in activities such as introducing new products or services, carrying out high-risk projects, encouraging creativity, venturing into new markets, introducing new brands ahead of competitors, among others.

Innovation can either be explorative (radical) or exploitative (incremental) in nature, and these two orientations can impact on SME performance. Prajogo and McDermott (2012) used a cross-sectional sample of small and medium service firms in Australia to test the impact of exploration and exploitation innovation on performance. The performance indices used include sales, profit, and market share. Individually, radical and incremental innovations do not affect firm performance; but combined, the two innovation types would improve firm performance.

Another interesting finding from their study suggests that firm size affects not just the type and level of innovation embarked upon, but also the innovation type (radical or incremental) that would be more effective for the firm.

The study by Borch and Madsen (2007) tests the hypothesis that a positive correlation exists between dynamic capabilities and SMEs' innovation strategies. SMEs benefit from a simple organizational structure where the owner is directly involved with operations, and minimal formalities allow for ease of making decisions and implementing changes. The different aspects of dynamic capabilities such as internal flexibility, external reconfiguration, integration capabilities were positively related to the introduction of creative strategies in the SMEs studied. In addition, employees in small firms are easily adaptable to changes and are supportive of new business concepts.

The direct and indirect effects of institutional and individual factors towards the innovativeness of micro and small enterprises in Ethiopia was analysed by Kassa and Mirete (2022). Government support in terms of provision of adequate infrastructure plays a key role in motivating entrepreneurs for innovation. SME innovation is also largely driven by entrepreneurial attitude towards innovation and entrepreneurial training. Gherghina, Botezatu, Hosszu, and Simionescu (2020) explored the impact of innovation expenditure on the turnover of Romanian businesses. A regional analysis of Romanian enterprises was carried out using statistics between 2009 and 2017 and the results reveal that regions with a more attractive business environment create better opportunities for innovation and growth. SMEs operating from regions with "suitable transport infrastructure, business opportunities, experience and better collaboration with the academic and research community, human resources of various specialisations, and a competitive and challenging environment" (p. 10) invest more in innovation than SMEs from other regions. This shows the importance of strong institutional support in driving the levels of SME innovation in an economy.

While the Nigerian business environment could be challenging and difficult to navigate for SMEs, particularly those in the manufacturing sector, Akoma *et al.* (2023) posits that risk-taking and proactiveness could make a significant difference in innovative performance. The study surveyed over 500 SME owners and managers across 120 manufacturing enterprises and across different sectors. The ability to take positive innovative actions ahead of competitors, and the ability to perceive and manage risks are relevant factors that entrepreneurs can leverage

to improve performance. SME performance via innovation can also be improved by an increase in R&D expenditure. Research and Development is a precursor to the introduction of new products and processes. Akinwale, Adepoju and Olomu (2017) found that R&D spending as well as product and process innovations by SMEs in Nigeria have significant impacts on firm performance. Their analysis suggests that an increase in R&D expenditure by SMEs could improve turnover by 20%. SMEs can thus significantly improve their sales and productivity by investing more in R&D activities.

SMEs are important and significant in driving economic growth both in developed and developing economies. Their survival and success is however dependent on continuous improvement in their products and processes. This study aims to examine the level of innovations carried out by Nigerian SMEs and its impact on their performance.

## METHODOLOGY

Two types of statistical modelling were adopted in this analysis. The first deals with descriptive statistics using visualizations to project innovative performance of the firms vis-à-vis the various dimensions i.e. age of the firm, education of the top managers, sector classification, location and size of the firms. The second type of analysis utilized logistic regression analysis to model the determinants of innovative performance of the firms. Following from similar studies (Shefer and Frenkel, 2005; Okrah and Irene, 2023), we formulate our model as follows:

$$Innovation = f(A, ME, LOC, SEC, FSHL, MGRSHL, SZE)$$

*A = Age of Firm*

*ME = Manager's Educational Level*

*LOC = Location of Firms (Region)*

*SEC = Industrial Sector of the firm*

*FSHL = Female Shareholding*

*MGRSHL = Managerial Shareholding*

*SZE = Size of the Firm (Affiliation with Large Firm)*

*Innovation = Process or Product (Binary variable)*

## Data Sources

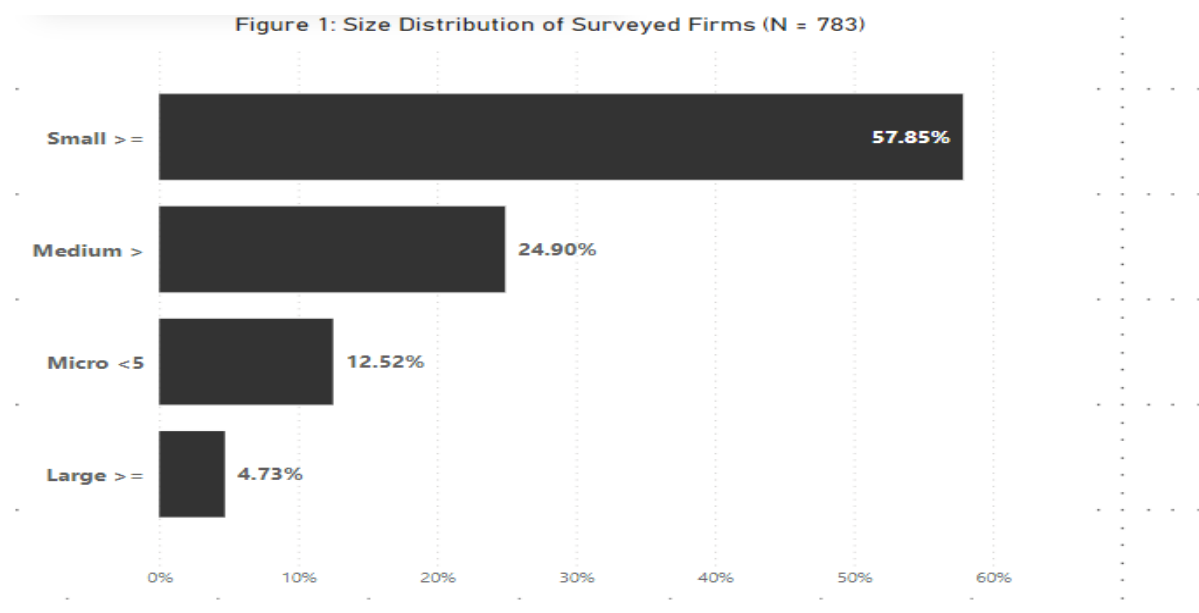
Our major source of data is the World Bank Enterprise Survey<sup>3</sup>. The data consists of firms in the 2007/2009 and 2014 panel. The panel consists of 8221 firms where we filtered for only those surveyed in 2014 bringing the number to about 2000. After cleaning up the data for missing cases, we were left with 783 firms.

## Descriptive Statistics

We present the result of our descriptive statistics in this section using all the available information from the dataset. However, in our logistic regression modelling, we excluded cases of missing data.

### Size Distribution of Firms

The distribution of the firms by size is presented in Figure 1. Since the major focus of this paper is to examine how the size affects innovative performance of firms, it is of utmost importance for us to understand the spread of the firms. Out of the 783 firms in the survey only 4.7% of them are large firms while others are micro, small and medium enterprises. However, a further analysis of the data shows that 486 of the firms were purely small and medium sized firms while a total of 287 firms, which represents 37%, have affiliation with large firms. Hence, in modelling our outcome, we relied on the distribution of the firms' affiliation with large firms to categorize them into either big or small to avoid imbalance of datasets in our estimation.

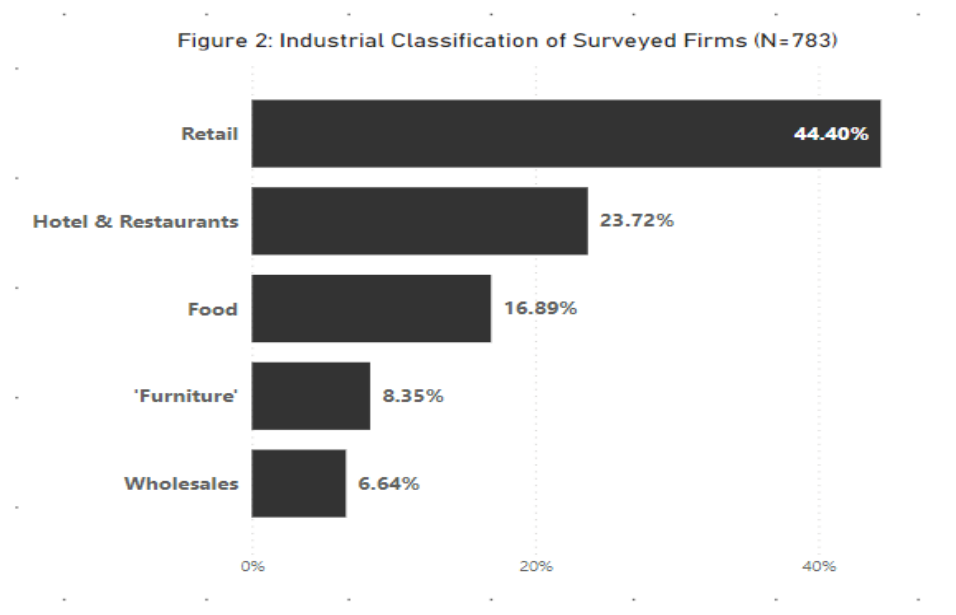


<sup>3</sup> World Bank Enterprise Surveys, <http://www.enterprisesurveys.org>



## Industrial Classification of firms

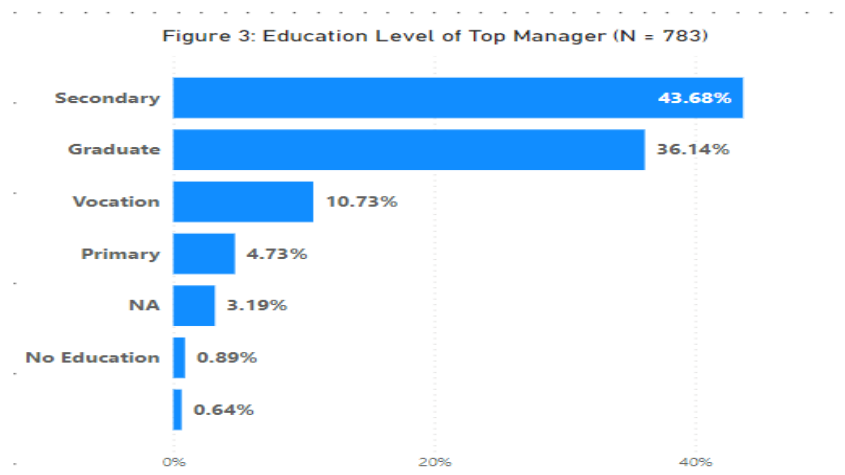
The distribution of the surveyed firms by industrial classification is presented in Figure 2. There are 20 different industrial classifications represented in the survey, but 5 of them accounted for over 60% of the 783 total firms. The top 5 industrial classification present in the dataset shows that retail sector accounted for 44% of the firms, while hotel & restaurants accounted for 24%. Food and furniture accounted for 16.89% and 8.3% respectively, while 6.64% belongs to the wholesales sector.



The analysis of the industrial classification is based on the fact that certain industries may be more amenable to rapid innovations as opposed to whether they were big or small. For instance, the information and technology sector have a fast rate of technological obsolescence which accounts for rapid innovation in that sector.

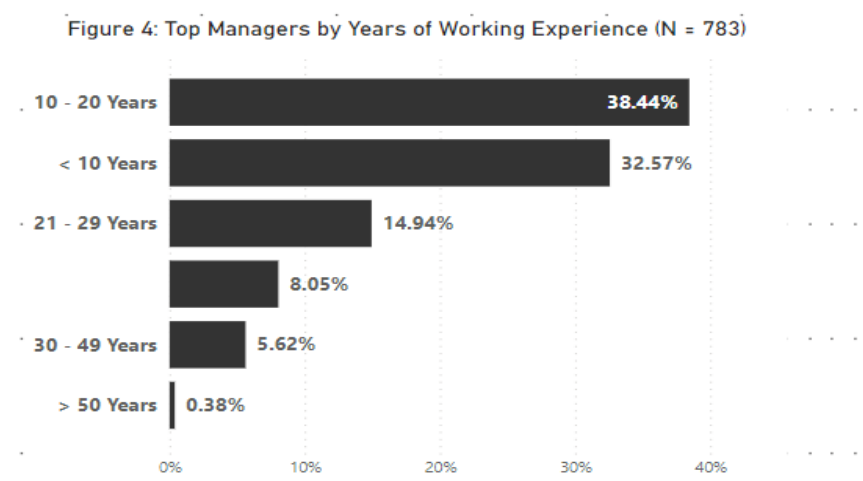
## Educational Level of Top Managers

Given that the educational background of the managers of the firms can play a significant role in generating innovations in the firms, the educational background of the top managers is presented in Figure 3. More than 40% of the 783 managers represented in the dataset possess secondary education while 36% possess a graduate degree. Another 10% possess vocational education while 4.73% possess elementary education. About 4% of the sample had either no education or their level of education could not be accounted for in the dataset.



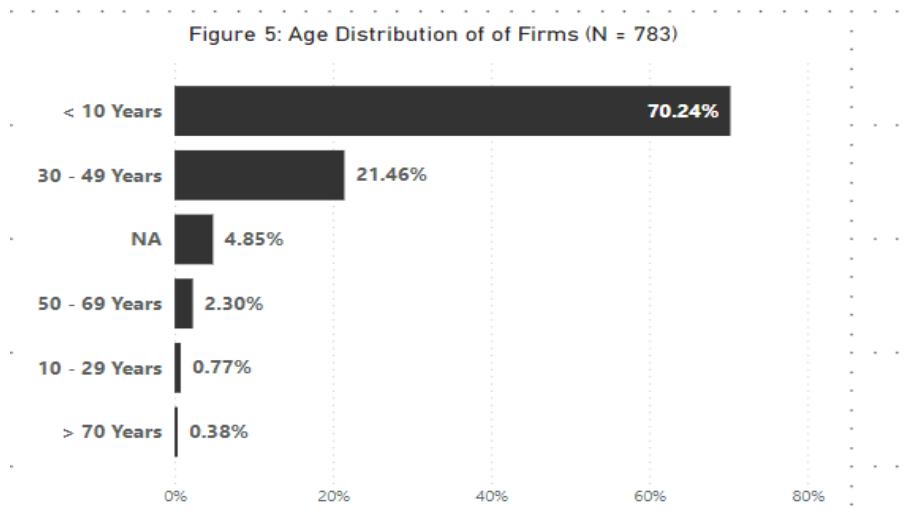
### Working experience of managers

The working experience of the top managers of the firms is presented in Figure 4. A good proportion of the managers possess significant working experience that could drive the growth of innovations within the firms. For instance, about 38.4% out of the 783 managers possess working experience of between 10 and 20 years, while another 15% possess between 20 and 29 years. It is also of note that about 33% possess less than 10 years. The experience of about 8% of the managers could not be accounted for in the data, while about 5% possess between 30- and 49-years working experience.



### Age Distribution of the Firms

The long-term survival of firms can be due in part to their level of innovations. Firms that are not innovative in an industry will be consumed by the innovative ones. This leads us to examine the age of the firms surveyed. Out of the 783 firms sampled, an overwhelming 70% of them were less than 10 years old, followed by 21% between 30-49 years. Only very few of the firms were more than 50 years old. The age distribution of the firms is presented in Figure 5.

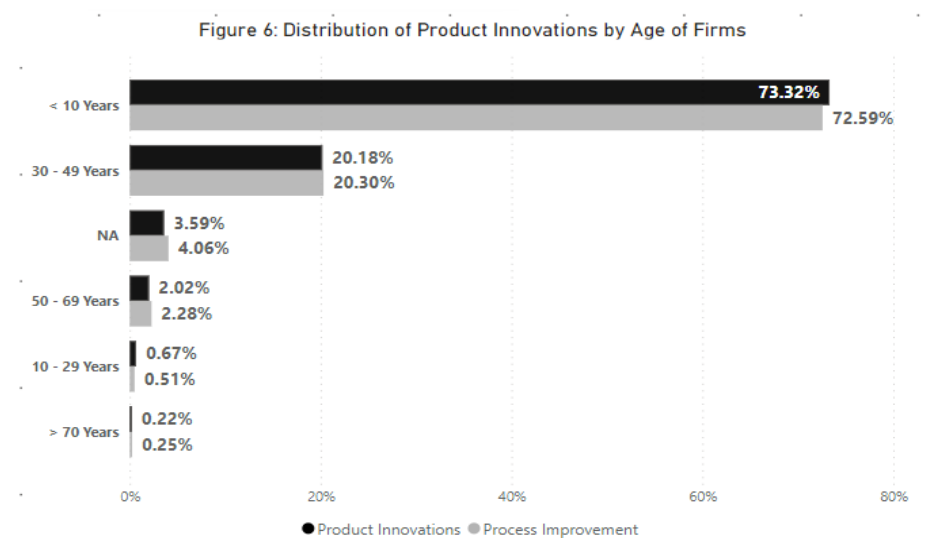


## Analysis of Innovation performance

Our analysis documented the number of process and product innovations generated by the firms. Out of the 783 firms surveyed, 394 of the firms claimed to have generated process innovations while 446 claimed to have generated product innovations.

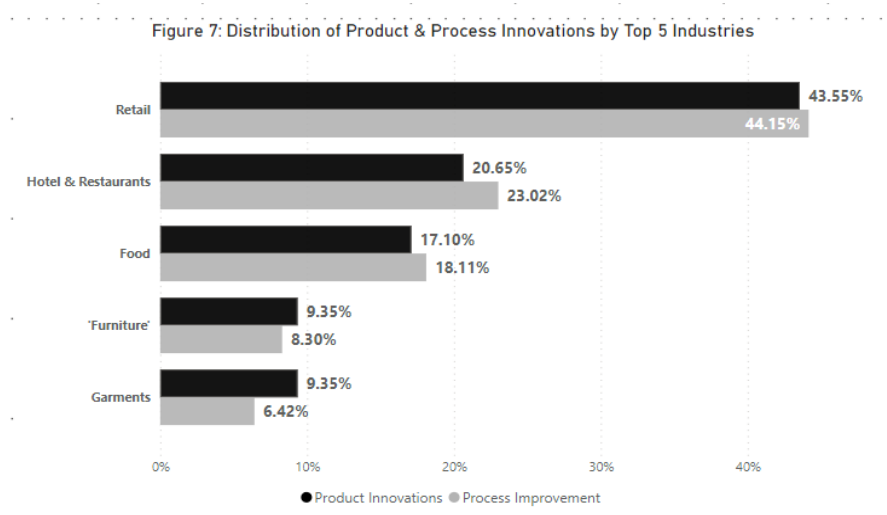
## Age Distribution and Innovative Performance

Innovative performance by age distribution of the firms is presented in Figure 6. Out of 446 product innovations generated, 73% of them were made by firms that were less than 10 years old, similarly with process innovations. Out of the 394 innovations recorded, 72.6% were equally produced by firms that were less than 10 years old. Firms that were between 30 and 49 years performed next to those that were less than 10 years old. About 20% of process and product innovations were generated by firms in this age group. About 20% of process and product innovations were generated by firms in this age group.



## Industrial Classification and Innovative Performance of Firms

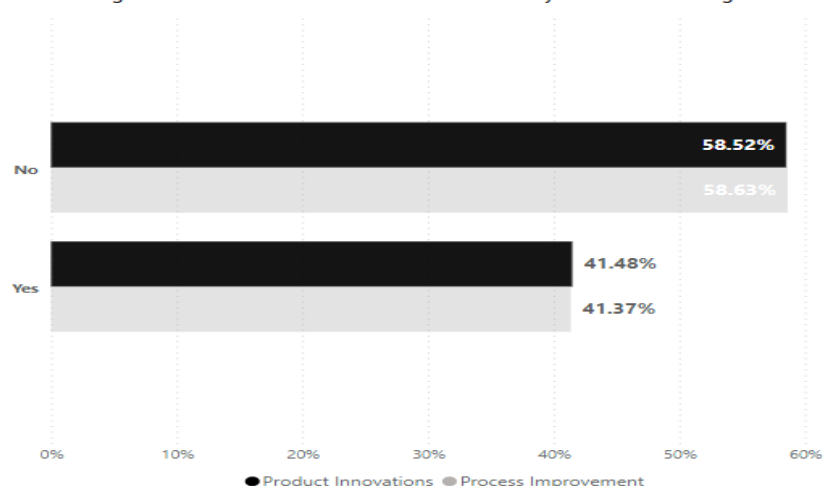
The innovative performance of the firms by industrial classification is presented in Figure 7. The bulk of the innovations were recorded among the top 5 industries presented, with the retail sector emerging as the highest sector both in product and process innovations. For instance, out of the 446 process innovations recorded, 44.2% were recorded in the retail sector while another 43.4% were recorded for product innovations. Hotel and restaurants ranked second place by making 23% of total process innovations and 21% of product innovations. Food production ranked third place with 18 and 17 percentage points in both process and product innovations, respectively. The furniture and garments industries ranked fourth and fifth with both experiencing more product innovations than process innovations.



## Firm Sizes and Innovation Performance

The innovation performance of the firms according to their sizes is presented in Figure 8. Given that we have operationalised small or big size in terms of their affiliation with large firms. A total of 348 process and product innovations were recorded by firms with affiliations to large firms: 186 product innovations and 163 process innovations. Among the firms affiliated with large firms, 41.5% recorded product innovations while 41.4% recorded process innovations.

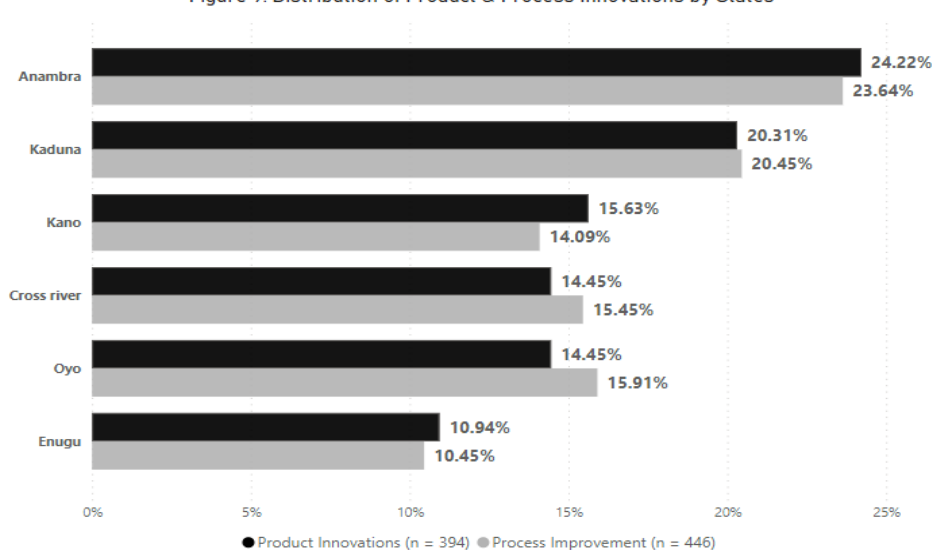
Figure 8: Product & Process Innovations by Affiliation to Big Firms



## Innovation of Firms by Geographical Location

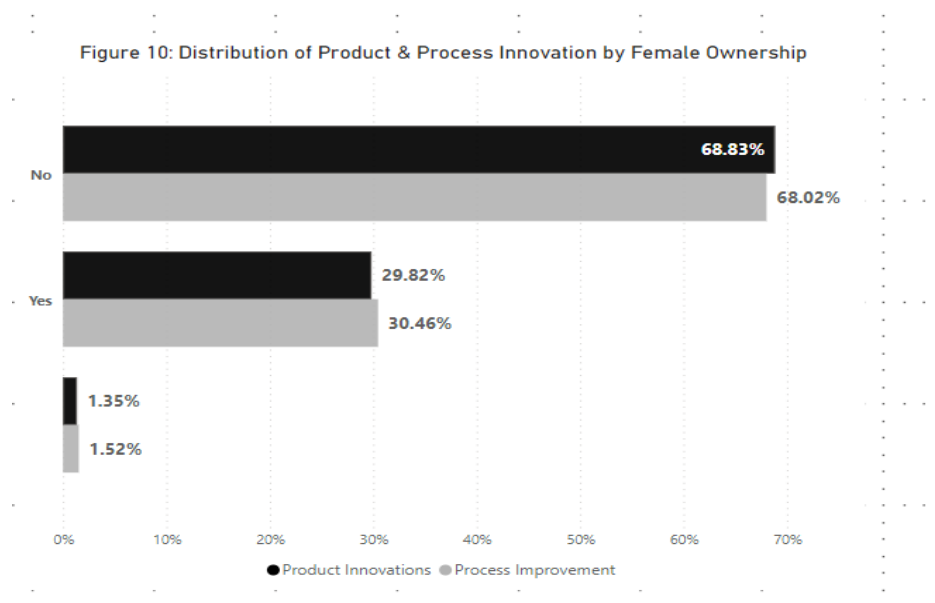
The distribution of innovation by survey area is presented in figure 9. Twenty states were surveyed, and all the geo-political zones were well represented except for the North East where only Gombe state was surveyed. The six states presented represent the bulk of the areas in which innovations really occurred. Two states from the North west, two states from the South East, one state from the South-South and one from South-West were among the top 6 states with the majority of the innovations. According to the figure, a good number of the firms recorded product innovations more than process innovations in 3 of the states. These states are Anambra, Kano and Enugu, while more process innovations were recorded in Kaduna, Cross River and Oyo. Overall, Anambra and Kaduna states recorded the highest number of innovations, followed by Kano and Cross River states.

Figure 9: Distribution of Product & Process Innovations by States



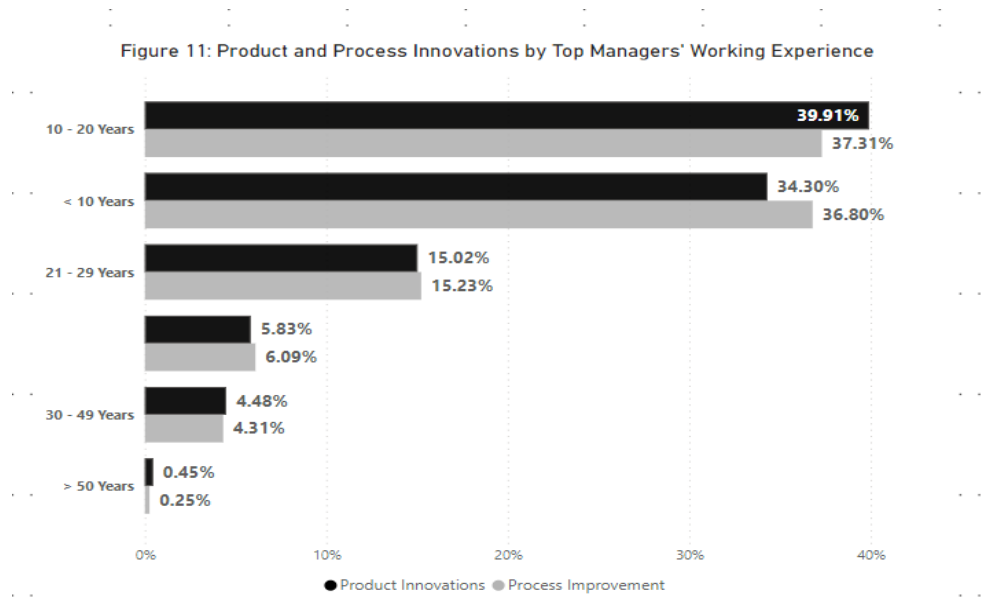
## Female Board Membership and Innovation Performance of Firms

The presence of female board members in a firm is a signal for board diversity which may improve performance. The distribution of innovative performance of the firms with respect to the presence of female members on the board is presented in Figure 10. According to the figure, there are few firms with female board members. Among those firms with female board members, about 29% of them recorded product innovation while about 30% of them recorded process innovation. This suggests that process innovations are slightly more prevalent than product innovations in firms with female leadership.



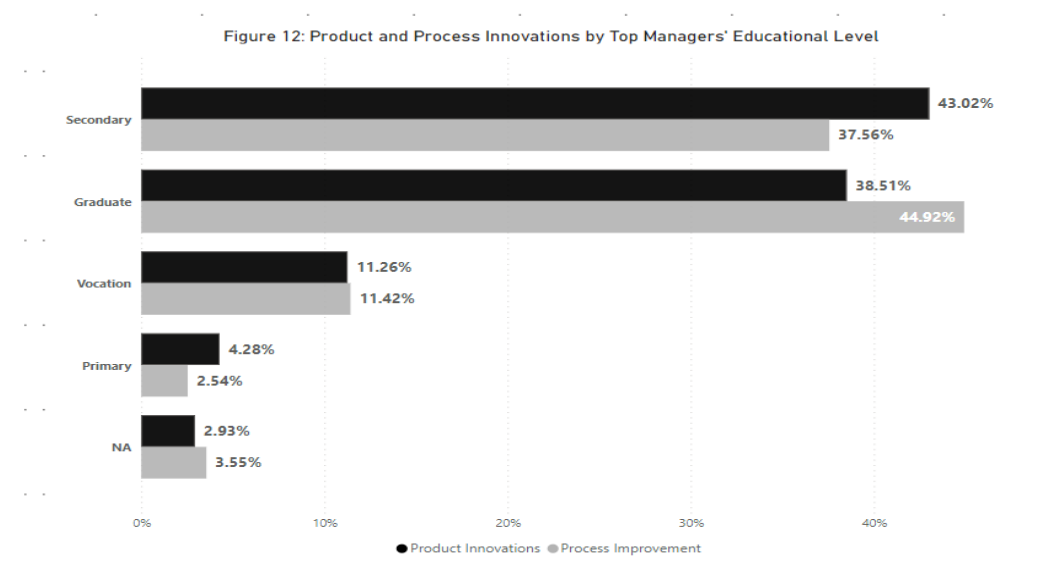
## Top Managers' Working Experience and Innovations

The distribution of product and process innovations according to the working experience of the managers shows that the bulk of the innovations were recorded among managers whose working experience was between 10-20 years. About 40% of product innovations and 37% of process innovations were recorded by firms in this category. Similarly, firms whose managerial experience was less than 10 years also performed relatively well; 34% of product innovations and 36% of process innovations were recorded by this group. Firms whose managers have more than 20 years' experience recorded just about 20% of product and process innovations. This shows that firms with more experienced managers produce less innovations than firms whose managers have fewer years of experience. This is presented in Figure 11.



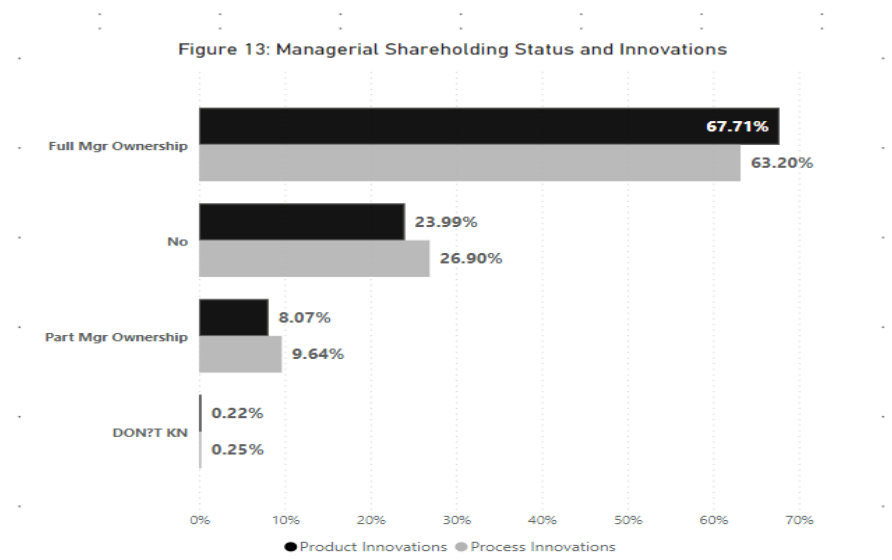
### Managers' Educational Experience and Firm Innovation

The distribution of innovations according to the educational experience of the top managers shows that managers with secondary education performed relatively better in product innovation than those with degrees. While about 43% of the product innovations were made by firms whose managers possess secondary education, 39% were made by those with graduate education. On the other hand, firms whose managers possess graduate education performed better in process innovation than those with secondary education. About 45% of process innovations recorded were made by managers with graduate education as against 38% made by those with secondary education. There seems to be no difference in product and process innovation performance of firms whose managers possess vocational education.



## Managerial Ownership and Innovative Performance of the Firms

The distribution of product and process innovations recorded by the firms according to managerial ownership is presented in figure 13. According to the figure, 67.7% of product innovations recorded were made by firms that are fully owned by their managers while 63.2% of process innovation were also made by such firms. Fewer innovations were made by firms that were run by professional managers who did not own majority shares in the business.



## Econometric Results

The econometric results of the impact of firm size on innovation performance is presented in Table 1<sup>4</sup>. Looking at the product innovation model results, the industrial classification impacts significantly on the innovative performance of the firms. For instance, the odds of generating a product innovation increases by 2.75 times when the firm belongs to the construction sector rather than belonging to Basic metal industry. This result is also similar for firms in electronics (2.76), Food (2.08), Furniture (2.24), Garments (3.78), Hotel and restaurant (1.49), Leather (3.88), Metal Fabrications (2.39), Non-Metal Fabrications (1.92), Publishing (3.28) Retail (1.90), IT (2.2156), and Textiles (1.90). Similar results were obtained for the process innovation model.

The two board characteristics included in the model, female board membership and managerial shareholding, were also significant factors influencing innovations. However, while the odds

<sup>4</sup> We have extracted the significant variables from the regression results. The full details of the regression result can be found on [https://github.com/fobembe/fobembe-github.com/blob/dd1bdd8c886d3b0454407652a228371b1c7a3427/SMEs-Innovation/SMES\\_Innovation.ipynb](https://github.com/fobembe/fobembe-github.com/blob/dd1bdd8c886d3b0454407652a228371b1c7a3427/SMEs-Innovation/SMES_Innovation.ipynb)



of generating innovation for firms with female board members increases by 0.365 and 0.3319 for product and process innovations, respectively, the odds of generating process innovation for firms with managerial ownership were 0.5187 less likely than firms without managerial ownership.

Furthermore, the impact of location on innovative activities shows that location has no significant impact on product innovations. However, firms in the South-West Geo-Political Zone were found with the increasing odds of generating product innovations by 1.19 times than firms in the North-Central Geo-Political Zone. For process innovations, firms in the North-West, South-East, and South-West were found with decreasing odds of generating process innovations than firms in the North-Central part of the country. For instance, firms in the North-West were found to be 0.688 times less likely to generate innovations than firms in the North-Central. This similarly goes for firms in the South-East (-1.011) and South-West (-0.9105).

Managers' work experience was found to have a positive impact on innovation among the firms. Organisations with managers having less than 10 years of experience were surprisingly found to be more likely to generate process innovations than firms whose managerial experience was between 10 and 20 years. This finding also corroborated that of Okrah and Irene (2023). The level of top manager's educational attainment was found to play a role in generating innovations. Managers with primary and secondary education were found to be significantly less likely to generate innovation than firms whose managers possess graduate degrees. This was however found with process innovations while it was not significant for product innovations.

Our main variable for this investigation, which is firm size, shows that indeed large size or affiliation with a large firm has a positive impact on both product and process innovations. For product innovation, the odds of generating innovation increases by 0.517 times for large firms, while for process innovation, it increases by 0.4026.

## **Summary, Recommendations and Conclusions**

This study was initiated to validate the hypothesis of the role of firm size on innovative performance of firms in Nigeria. Data on 783 firms was sourced from the World Bank Enterprise survey of 2014 and was analyzed using descriptive and econometric techniques. The

factors that were found to influence innovation performance among the firms include geo-political zone of the firms, as firms in the North Central were found to be less likely to generate product innovations than firms in the South West while firms in the North Central and North East were found to be more likely to generate more process innovations than firms in the South West. Moreover, while female board membership impacts positively on product innovation, managerial shareholding was found to impact negatively on process innovation.

We also found that size confers advantages on firms to generate both product and process innovations. Given that large firms were found to be more likely to generate innovations in Nigeria, it is imperative for government to reevaluate its policies towards the growth and development of SMEs in Nigeria. Large firms could access funds from banks and other lending institutions which may put them at an advantage to initiate necessary innovations. Small firms, however, face major obstacles to accessing funds from lending institutions; hence, there would be a need for government to intervene in ensuring how finance can be made available to innovative small and medium size enterprises to boost their growth and development.

Furthermore, government can broker a partnership agreement between SMEs and the universities or research institutes to meet the innovation needs of the firms. Given that universities possess large research capacity in terms of infrastructure and personnel, SMEs can be structured to benefit from this capacity.

Another policy that government might need to put in place is that of ensuring that cost of doing business in Nigeria is brought to a bearable level. With a reduction in the cost of doing business, small firms can have access to additional funds to pursue innovative activities. In this regard, unnecessary spending by SMEs on providing electricity, security and other utilities must be addressed. Given the role of SMEs in a nation's economic development, government must ensure that these enterprises enjoy a conducive environment to carry out their operations.

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**Table 1: Presentation of Logistic Regression Results**

	<b>Product Innovation</b>	<b>Process Innovation</b>
Intercept	-1.7165 (1.602)	-0.6041 (1.449)
Sector: Construction	2.7660 (1.200)**	2.2436 (1.210)*
Sector: Electronics	2.6565 (1.482)*	2.8433 (1.488)*
Sector: Food	2.0944 (0.887)**	1.7258 (0.898)*
Sector: Furniture	2.2227 (0.916)**	1.5127 (0.920)*
Sector: Garments	3.7908 (1.050)***	1.5630 (0.933)*
Sector: Hotel & Rest.	1.5151 (0.872)*	0.0041 (0.882)
Sector: IT	2.2156 (1.047)**	2.0481 (1.055)*
Sector: Leather	3.8856 (1.368)***	3.2454 (1.196)***
Sector: Metal Fabrications	2.3958 (0.971)**	1.5697 (0.967)
Sector: Non-Metal Fabr.	1.9216 (0.928)**	1.2163 (0.939)
Sector: Publishing	3.2834 (1.019)***	2.4624 (0.988)**
Sector: Retail	1.9079 (0.855)**	1.3590 (0.865)
Sector: Textiles	2.0805 (1.074)*	1.2234 (1.071)
Large Firm Size	0.5166 (0.198)***	0.4026 (0.191)**
Female Board member	0.3645 (0.214)*	0.3319 (0.205)*
Managers' Educational Level: Primary		-1.0438 (0.481)**
Managers' Educational Level: Secondary		-0.7275 (0.201)***
Work Experience of Manager <10 yrs		0.4181 (0.207)**
Geo-Political Zone: SS	1.1885 (0.507)**	
Geo-Political Zone: NW		-0.6881 (0.303)**
Geo-Political Zone: SE		-1.0110 (0.326)***
Geo-Political Zone: SW		-0.9105 (0.374)**
Managerial Ownership		-0.5187

		(0.214)***
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