The Key Drivers of Business Model Innovation in Developing Countries' Firms: Survey of Micro and Small Scale Enterprises in Nigeria

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Abstract: **Recently, the attention giving to Business Model Innovation (BMI) and also the amount of literature on BMI had been increased. However, controversies among scholars and business practitioners on the generic factors that drive BMI in firms mostly small businesses in developing countries are yet to be settled. Hence, this study sought to determine the key drivers of BMI in Nigeria's small businesses. Survey research design was employed, and items of instrument developed by previous researchers were adapted. The respondents of this study were Micro and small businesses owners/representatives in the study area, and data from 142 of them were subjected to Principal Component Analysis. The study employed an Orthogonal method of rotation using the Varimax approach. This study finding revealed that customer satisfaction and retention, market opportunities, regular assessment of operations, employee's capabilities, increment in revenue generation, and efficient channel functions are the key discriminating factors driving BMI in micro and small business enterprises (MSEs) in Nigeria. Thus, the study concludes that employing these attributes may influence performance-related outcomes in Nigeria MSEs.**

Keywords: **Business Model Innovation, Determinants of BMI, Micro and Small Enterprises, Nigeria**

I. INTRODUCTION

Micro, Small, and Medium-scale Enterprises (MSMEs) in developing countries generally, particularly in Nigeria, have been characterized by a lack of sustainable improvement in efficiency and productivity growth. There are indications in the literature that MSMEs lack steady improvement in efficiency and productivity growth because most operating MSMEs are not innovative. Few of them that are innovation incline focus only on technological innovation, but ignore business model innovation, which has to do with how to make money and profits. Combining technological innovation and business model innovation is an essential means for organisations to sustainably improve their competitiveness and performance (Wu, Shea, & Shiu, 2015).

Researchers (such as Daugherty et al., 2011; Grawe, 2009; Lin, 2007; Khazanchi, Lewis & Boyer, 2007; Hult et al., 2004; Tidd, Bessant, Pavitt & Wiley, 1998; Afuah, 1998; Bentz, 1998; Rogers, 1995; Damanpour, 1991; Drucker, 1985; Kimberly & Evanisko, 1981; Schumpeter, 1934) have conceptualised innovation in literature. However, a literature review revealed that scholars and management practitioners have widely agreed that innovation is multidimensional. Thus,

innovation has been divided into numerous dimensions such as technological innovation, managerial or administrative innovation, technological embedded and content embedded, radical or incremental innovation, disruptive innovation, business model innovation, and product or process innovation (Zawawi, Wahab, Al-Mamun, Yaacob, Samy, & Fazal, 2016; Gopalakrishnan & Damanpour, 1992). Technological innovation includes new technologies, new products, new services, and new processes. On the other hand, administrative innovation covers new policies, organizational forms, and new procedures (Yang, 2012; Draft, 1978; Utterback, 1996) while BMI can be classified as administrative innovation which will likely be radical, and in many cases, transformational (Kyllianen, 2019, Teece, 2010).

How business functions and makes money is referred to as a business model, while BMI is a fundamental change in how a company delivers value to its customers or captures it from the market (Kyllianen, 2019). According to Casadesus-Masanell and Zhu (2013), BMI can be regarded as the latest type of innovation. BMI is relatively complex compared with other innovation types because organisations, primarily the established ones, are rational when it comes to decision-making that has to do with their existing business that has been proven to be successful in the market so far. BMI is very challenging because the optimized capabilities and processes that make an organization attain its objectives become the objects for transformation (Kyllianen, 2019; Richter, 2013; Teece, 2010). Teece (2010) believed that if organisations plan to remain aggressive in a turbulent and complex business environment and attain a sustainable value creation, firms' ability to compete in rapidly changing business environments should be demonstrated in the dynamic Business Model. Companies should continue to fortifying their capability and reviewing their business models effectively whenever their environments are changing (DaSilva & Trkman, 2014; Najmaei, 2011). Therefore, to checkmate and outcompete the competitors, executives should be involved in BMI.

What drives BMI in organisations had been a subject of debate among researchers recently. Karande and Kalbande (2015) grouped factors influencing BMI into external and internal. The external factors comprise value chain, new entrants, competitors, customer preferences, customer segments, technology, regulatory, environment, partners,

legal. In contrast, internal factors are product or service, performance, resource availability, goal, and strategies. Similarly, Tian et al. (2019) came up with a study that showed that BMI is influenced by external, internal, and guarantee factors. These factors were further divided into seven sub-factors: culture and strategy, market pressure, government policy, technology, human resources, entrepreneurship, and organizational capabilities. In their study on BMI drivers, Latifi and Bouwman (2018) found ten mediating factors and twenty moderating factors. The mediating and the moderating factors are efficiency and cost reduction, new customers and revenue growth, organizational capabilities and firm characteristics, industry characteristics, BM implementation, BM practices, respectively. Furthermore, previous studies had shown that collaborators, content-oriented communication, customer knowledge management, customer-specific orientation, discovery-driven decision-making, dynamic capability, financial value, firm inexperience, firm size, industry improvement, leadership, operational value, organizational culture, organizational inertia, organizational structure, phased separation strategy, religiosity, self-initiative, transformational leadership, and value proposition are factors that capable of influencing BMI (Bashir & Verma, 2019; Jatnika, Effendi & Febrian, 2019; Ramdani, Binsaif & Boukrami, 2019; Savič, Ograjenšek & Buhovac, (2016). From the foregoing, there is yet to be a consensus on the determinants of BMI among researchers.

A Myriad of studies has been conducted on innovation by academics and management practitioners. However, much emphasis had been placed on technological innovation than organizational innovation, specifically, BMI (Hossain, 2017; Frankenberger et al., 2013). Many of these existing works were concentrated on developed economies such as the United States of America (Amit & Zott, 2001; Dubossaon & Torbay, 2002; Chesbrough & Rosenbloom, 2002; Morris et al., 2005; Johnson et al., 2008; Christensen et al., 2016), United Kingdom (Baden-Fuller & Haefliger, 2013), France (Kim & Mauborgne, 2000), and Switzerland (Matzler et al., 2013) while only little or no attention has been given to BMI in developing countries generally, and particularly in sub-Saharan African countries. Also, a colossal review of the literature on BMI showed that many of the previous studies (Tian, Zhang, Yu, & Cao, 2019; Minatogawa, Franco, Pinto, & Batocchio, 2018; Denner, 2017; Jatnika, et al., 2019; Wang & Kimble, 2016; Christensen et al., 2016; Baden-Fuller & Haefliger, 2013; Zott & Amit, 2013; Teece, 2010; Chesbrough, 2007; Bouchikhi & Kimberly, 2003, Chesbrough & Rosenbloom, 2002; Hamel, 2000) on the BMI focused on the importance, barriers, and the determinants of BMI in large firms while few studies concentrate on BMI in MSMEs. Thus, there is a gap in research on the drivers of BMI in MSMEs. The review of literature also showed a fusion of drivers and barriers of BMI in the bulk of the previous studies. Most of the research focused mainly on BMI determinants was theoretical (Minatogawa, Franco, Pinto, & Batocchio, 2018), while only a few studies were empirical. Even most of the

available empirical studies were case studies using mainly large firms. Hence, as they were case studies, the generalizability of their empirical findings is limited, as observed by Minatogawa et al. (2018). This paper is embarked upon to answer the calls of researchers (Tian et al., 2019; Latifi & Bouwman, 2018; Minatogawa et al., 2018; Bashir & Verma, 2019; Clauß, 2017) on the need for more incredible empirical research, more generalization results, and large-scale investigation on the drivers of BMI. We fill this gap by empirically examining the key factors influencing BMI in Nigeria's micro and small enterprises context.

II. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Definition of Business Model

According to Al-Debei and Avison (2010), there is little consensus among scholars and practitioners on the definition and compositional elements of business model. The concept has been subjected to much debate, and still, a universally accepted definition is yet to emerge (Al-Debei & Avison, 2010; Zott, Amit, & Massa, 2011; Schneider & Spieth, 2013). Different definitions had been advanced in literature by scholars to capture the essence and purpose of a business model (Pateli & Giaglis, 2004 cited in Clauß, 2017). Business models can surface from different perspectives (Stepanova, 2019). Massa, Tucci, and Afuah (2016) identified three such views: "business models as attributes of real firms, business models as cognitive/linguistic schemas, and business models as formal, conceptual representations of how a business functions." According to them, the three perspectives can be applied to innovation. Also, the business model had been captured in perspective of resource-based, organisation operation, and system integration.

In terms of resource-base, business model is viewed as the arrangement of organizational resources to spawn new profit opportunities, while from organizational operation view, a business model is considered as an elucidation of the whole firm's business process through the formation of a value network to attain the aspirations of its stakeholders. From the perspective of system integration, a business model is seen as an organisation of interrelated activities that transcends the focal firm and stretch its limits, including transaction structure, transaction content, and transaction governance (George et al. 2011; Voelpel, Leibold & Tekie, 2005; Amit et al., 2001). In their work, Zott et al. (2011) submitted that business models accentuate both a system-level and holistic approach to describing how firms conduct business. Another laudable contribution is from Ricart et al. (2011). According to them, "a business model is an activity system that embracing numerous interdependent activities, including value chain activities, customer choice, product or service selection, etc. Clauß (2017) opined that scholars' early definitions in literature (Timmers, 1998; Mahadevan, 2000; Tapscott, 2001) were quite similar. According to him, these definitions view the business model "as an architecture and

address the business network with a focus on the different roles of the actors and their interactions and relationships". The architecture-oriented definitions had been suggested by Foss and Seabi (2018) as unifying definitions because of the emphasis in most existing definitions of BM and BMI on value proposition, customer segments, value chain organization, revenue mechanisms. Foss and Seabi (2018) added that the significant aspect of business model and business model innovation is that all the fundamental activities are connected in an architecture. In his view, Fielt (2014) defines a business model "as a representation of the value logic of an organization in terms of how it creates and captures customer value." He stressed that business model can be represented by an interrelated set of elements that address the customer, value proposition, organizational architecture and economics dimensions. A literature review had shown that scholars and managers understand the concept more than before though from different views. Business model is seen now as the delineation of value creation, value delivery, and value capture (Foss et al., 2017; Bocken, Short, Rana & Evans, 2014; Teece, 2010).

2.1.2 Business Model Innovation

Business model innovation, just like business model, has no commonly accepted definition. Researchers had made several attempts to conceptualise business model innovation (Foss & Saebi, 2017; Demil & Lecocq, 2010). For instance, Taran, Boer, and Lindgren (2015) pictured business model innovation as a salient starting point of the organizational core competitiveness. According to them, it is a means of creating value by discovering new opportunities, new markets, and new profit-making methods. Similarly, Casadesus-Masanell and Zhu (2013) suggested that BMI creates and captures value for organizational stakeholders by exploring new business logic and processes. In a simple term, Markides (2006) affirmed that BMI is the disruption of the existing business model. Johnson, Christensen, and Kagermann (2008), cited in Tian, Zhang, Yu, and Cao (2019), explained that BMI involved the innovation of customer value proposition, profit model, significant resources, and key processes. Frankenberger et al. (2013) stated that BMI transcends the scope of the trivial introduction of a new product or service offering; instead, it presupposes utterly new business opportunities. Frankenberger et al. (2013) advanced four different business model innovation processes: Initiation, Ideation, Integration, and Implementation. Paiola and Gebauer (2020) stated that business model innovation might crop up due to modification of or improvement on at least one of the value dimensions of a company. Foss and Saebi (2017), defined BMI "as a way of exploring new possibilities related to value creation, distribution and capture for customers, suppliers, and partners." Very recently, Bocken and Geradts (2020) described business model innovation as "innovation to create significant positive impacts, and significantly reduced negative impacts for the environment and society, through changes in the way the organization and its value-network create, deliver and capture value or change their value propositions".

2.2 Empirical Review

### 2.2.1 Factors Influencing Business Model Innovation

Bashir and Verma (2019), in their work titled "internal factors and consequences of business model innovation," 104 conceptual and empirical articles on BMI from the year 2000 to 2017 were analysed. The study revealed that organizational culture, organizational structure, organizational inertia, leadership, and technology influence BMI. Also, firm size and firm inexperience mediated the relationship between BMI and a firm's competence. In the study conducted by Tian et al. (2019) in Shaanxi Blower, a high-end equipment manufacturing group in China, using grounded theory, primary data were used, and 18 respondents participated in the interview. The outcome of the study showed that BMI is drive by three types of factors namely; external, internal, and guarantee factors. A total of seven (7) sub-factors were identified as drivers of BMI. The study's outcome market pressure, government-driven policy, entrepreneurship, culture and strategy, technology, human resources, and organizational capabilities. Karande and Kalbande (2015) stated that BMI factors are grouped into external factors: value chain, new entrants, competitors, customer preferences, customer segments, technology, regulatory, environment, partners, legal. Internal factors: product or service, performance, resource availability, goal, strategies. More so, in the study carried out by Jatnika, Effendi, and Febrian (2019), Islamic Bank in Indonesia was used as a case study, and the data used for the study were collected through a questionnaire. The research found that religiosity variables and customer knowledge management and dynamic capability variables influence BMI. Latifi and Bouwman (2018) conducted a research titled "Business model innovation and firm performance: The role of mediation and moderation factors.", their study was theoretical in which they reviewed115 publications. The Duo identified twenty moderating factors, and these factors were grouped into four sub groups. The groups and the subgroups are as follows: (1) Firm-Characteristics; firm size, age, advertising and R&D expenditures, and type of ownership (2) Industry-Characteristics; industry subgroups and life cycle, competition intensity, environmental dynamism, and level of technology (3) BM Implementation; top management support, employees' commitment and skills, communications among different stakeholders and, having detailed environmentalism (4) BM Practices; BM tooling, BM experimentation, scope of change, Speed of Change, and Degree of Novelty. Also, Latifi and Bouwman (2018) found ten mediating factors, and these variables were classified into three sub-groups as follows: (1) Efficiency and cost reduction; productivity, market, and partnership (2) New customers and revenue growth; new value propositions, customer engagement, service bundling and creating lock-in effect (3) The organizational capabilities; innovativeness, organizational learning, organizational

culture, developing opportunity recognition and fostering entrepreneurial orientation. Furthermore, Verma and Bashir (2016) conducted a study titled "Business model innovation: Scale development & validation" The study was carried out using a rigorous methodological procedure based on a qualitative pre-test. The study revealed eight factors as a reliable and valid measurement scale for business model innovation. According to Duo, the eight factors are value proposition, channels, costs, human capital, value network, linkage with partners, assets & capabilities, and revenue sources. A study titled "Business model innovation: a review and research agenda" was conducted by Ramdani, Binsaif, and Boukrami (2019). They systematically reviewed existing business model innovation literature between 2010 and 2016 by analyzing 219 papers. The research highlighted the following as the key areas of innovation: value proposition, operational value, human capital, and financial value. Also, Savič, Ograjenšek, and Buhovac (2016) explored BMI drivers by using a single longitudinal case study design together with a grounded theory approach on a selected medium-sized, high-tech, and globally oriented company. Data for the study were collected using on-site visits, interviews, and secondary documentation. the research identified six generic drivers of successful business model transformation: Content-oriented communication, self-initiative collaborators, transformational leadership, discovery-driven decision-making, industry improvement – customer-specific orientation, and phased separation strategy. To address the unavailability of an agreed and comprehensive measurement scale for BMI, Clauß (2017) developed a scale for measuring BMI. Three main dimensions of BMI were identified and used to explain a firm's business model. According to Clauß (2017), the BMI dimensions are value creation, value proposition, and value capture. The way and modalities in which firms create value along the value chain are referred to as value creation. While value proposition and value capture are position as "a portfolio of solution that can be achieved along the process" and "how value propositions are converted into revenue," respectively. The three main dimensions of BMI specified by Clauß (2017) were further divided into ten different sub-constructs, namely; new capabilities, new technologies/equipment, new processes/structures, new partnerships, new offerings, new customers/markets, new channels, customer relationship, new revenue model, and cost structures. A literature review revealed that the BMI measurement scale developed by Clauß (2017) demostrated high reliability and validity, is comprehensive, and is suitable for capturing BMI in small businesses. Hence, this study adopted the measurement scale.

2.3   Conceptual Framework

According to Clauß (2017), value creation has a new capability, new technology/equipment, new partnership, and new processes/structures as sub-constructs. At the same time, the value proposition contains new offerings, new customer segments, new channels, and new customer relationships. The last dimension, value capture, comprises a new resource model and cost reduction. According to Clauß (2017), all the sub-constructs have influence either direct or indirect on BMI. Based on the work of Clauß (2017), the authors designed the below as a conceptual framework for the study.
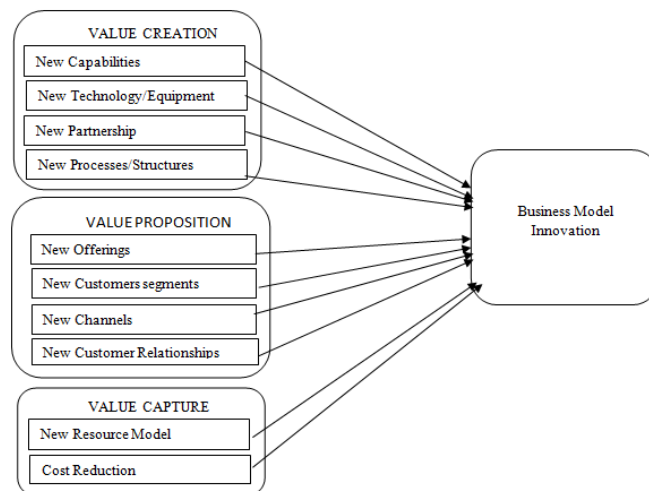
Source: Authors' Design, 2021

III. RESEARCH METHOD

This study was carried out in nine (9) towns within Ondo State: Ikare, Akungba-Akoko, Owo, Akure, Ondo, Idanre, and Ile-Oluji Ore/Odigbo, and Okitipupa. These towns were selected because they are commercial towns, and many MSMEs are situated in these towns. This study utilized a survey research design because of the large study population. A questionnaire developed by Clauß (2017) on the determinants of BMI was adopted for the study. The questionnaire was adopted because it provided a more consistent picture of business model innovation in SMEs and has a high Cronbach's alpha ranging between 0.70 and 0.79 for all items. The questionnaire consists of three (3) dimensions, namely; value creation, value proposition, and value capture, ten (10) sub-constructs, namely; new capabilities, new technologies/equipment, new processes and structures, new partnership, new offerings, new customer's segments/markets, new channels, new customer relationships, new revenue model, and latest price and/or cost structure, and thirty-three (31) items. The study population consisted of all registered (Formal) and non-registered (Informal) Micro and Small scale enterprises (MSEs) in the three (3) Senatorial District in Ondo State, Nigeria. Informal MSEs were included in the study because most of the MSEs operating in the State were not registered with the appropriate authorities (Fatusin, 2012). As a result of the lack of comprehensive documentation of the majority of the MSEs in the State, the researchers were unable to identify all the MSEs in the study area. Based on this, nonprobability sampling for data collection was adopted for the study (Sekaran & Bougie, 2016). The study sample was chosen based on MSEs presence in the selected towns within Ondo State, and therefore, the sampling was not randomized. In each chosen town, 50 MSEs were purposively selected across four business lines: trade and

distribution, Services, Manufacturing, and Agro-Allied. Altogether, 450 MSEs were purposively selected in the sampled towns for this study, and questionnaires were administered to them with the help of the research assistants. Out of the 450 questionnaires distributed, 182 were returned. However, only 142 (31.56%) questionnaires were duly completed. The response rate was low, probably because of the lockdown following the COVID 19 pandemic. However, the researchers believed that the response rate is representative enough. Hence, generalizing the findings from the sample to the broader population may be possible. The data obtained were subjected to descriptive and inferential statistics using SPSS 23.0 version software.

IV. RESULTS AND DISCUSSION OF FINDINGS

This study sought to determine the key drivers of Business Model Innovation in a low-income economy with respect to SMEs in Ondo State, Nigeria. In an attempt to identify the key drivers, data collected during this study were subjected to descriptive and factor analysis. The results of the research and the discussion of findings thereof are presented as follows:

4.1 Descriptive Statistics

The respondents' characteristics in terms of gender, qualification, age, work experience, and status were descriptively analyzed using a percentage as a statistical parameter. The distribution of the respondents indicated that male respondents are more into micro and small enterprises than female respondents in the locations of the selected SMEs. The male respondents constituted 52.1 percent, while the female respondents constituted 47.9 percent of the total respondents. The descriptive findings on gender distribution corroborated the literature that, in the Nigerian context, both males and females are involved in the formation and ownership of micro, small, and medium ventures. The distribution of respondents in terms of age shows that respondents between age brackets 30-39 years constituted 33.8 percent of the total respondents, followed by the respondent within the age bracket of 40-49 years constitute 30 percent, and 29.6 percent of the total respondents were within the age bracket of 20-29 years. The proportion of respondents with few MSEs was 5.6 percent, and those respondents were within the age bracket of 50 years and above. This analysis provides an understanding of the characteristics of Nigeria's environment where young adults are involved in the processes and activities of venture formation. The descriptive findings revealed that people at the age of 50 years and above were less involved in creating and managing MSEs, and this typically depicts attributed of Nigeria environment where people above age 50 years preferred to engage in medium and large scale businesses than the young adults' preference for micro and small businesses. The findings revealed that the owners of micro and small businesses are educated, with 66.2 percent of the respondents had degrees in both University and Polytechnic education. The proportion of respondents with Secondary education constituted 21.1 percent, and

respondents with degrees in postgraduate education included 12.7 percent of the total respondents. The distribution of the respondents in terms of qualifications obtained therefore revealed that the respondents are believed to have had the requisite knowledge of what MSEs are all about. In terms of the experience of the respondents to MSEs, 43.7 percent of the respondents had 1 to 5 years of operating MSEs, followed by 23.9 percent of the respondents with 6 to 10 years' experience. In addition, 19.7 percent of the respondents constituted respondents with 11 to 15 years of experience. Also, respondents with 16 years and above in operating and managing MSEs included 12.7 percent of the total respondents. The distribution of the respondents revealed that 35.2 percent of the respondents are directors in the selected MSEs while 32.4 percents are both managers and representatives, respectively.

4.2 Factor analysis

This study applied factor analysis to the data collected from respondents to decide which items This study applied factor analysis to the data collected from respondents to decide which items best measured the constructs explaining the business innovation model employed by MSEs in Nigeria's business environment. Data collected from 142 respondents in this study were subjected to factor analysis using Principal Component Analysis (PCA) method. PCA is considered suitable for factoring of items subject to meeting of some specific conditions: (1) correlation matrix must show some coefficients (r) of .5 and above, (2) Bartlett's Test of Sphericity must be significant at $P < 0.05$, and (3) Keizer Meyer Olkin (KMO) sampling adequacy must have a value of .6 and above. These conditions have been leveraged in research studies to ascertain the adequacy of items in explaining variables of interest. The anti-image correlation matrix was computed, as suggested by Coakes and Stud (2003), to ascertain that the acceptable level of measures of sampling adequacy is maintained above the adequate level of 0.5000. As such, five items, OFF2, RLN1, TEC1, PAT2, and REV3, were deleted because they had values less than the acceptable level. The computation of Cronbach's alpha ascertained the reliability of measurements. The researchers did this to be sure that the items that constitute the factors produce a reliable scale. As indicated in Table 1, the requirements for factoring of items were met as the KMO measure of sampling adequacy was high above the generally agreed upon lower limit of Cronbach's alpha, and Bartlett's Tests of Sphericity were statistically significant (0.000). All factors expect efficient channel function, which had Cronbach's alpha of 0.655, had KMO above 0.8, and Bartlett's Tests of Sphericity for all the Factors were significant.

Table 1: Reliability of independent variables

Factor	Label of Variable	Number of Construct	Cronbach's Alpha	Bartlett's Tests of Sphericity
1	Customer Satisfaction and Retention	6	0.874	0.000

2	Market Opportunities	7	0.891	0.000
3	Regular assessment of operations	6	0.877	0.000
4	Employee's Capabilities	5	0.841	0.000
5	Increment in revenue generation	5	0.838	0.000
6	Efficient channel functions	3	0.655	0.000

Source: Data Analysis, 2021

An orthogonal method of component rotation using the Varimax method (Pallant, 2005) was employed to determine the component solution for 31 items measuring BMI subject to a threshold of 0.5 set as a minimum value for accepting any item considered best loading. The results of the component solutions are shown in Tables 2 and 3. As shown in Table 2, the PCA revealed six-component solutions explaining 70.8 percent of the total variation in BMI.

Table 2: Total Variance Explained and Initial Solution									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.935	48.177	48.177	14.935	48.177	48.177	4.839	15.609	15.609
2	1.731	5.583	53.759	1.731	5.583	53.759	3.890	12.549	28.157
3	1.489	4.804	58.563	1.489	4.804	58.563	3.774	12.174	40.331
4	1.345	4.338	62.902	1.345	4.338	62.902	3.750	12.096	52.427
5	1.260	4.064	66.966	1.260	4.064	66.966	3.685	11.888	64.315
6	1.189	3.835	70.801	1.189	3.835	70.801	2.011	6.486	70.801
7	.979	3.157	73.958						
8	.871	2.809	76.766						
9	.735	2.371	79.137						
10	.719	2.318	81.455						
11	.657	2.120	83.575						
12	.595	1.920	85.496						
13	.537	1.731	87.227						
14	.485	1.565	88.791						
15	.447	1.443	90.234						
16	.408	1.316	91.550						
17	.345	1.112	92.662						
18	.316	1.020	93.682						
19	.282	.911	94.592						
20	.246	.793	95.385						
21	.236	.762	96.147						
22	.221	.714	96.861						
23	.165	.533	97.395						
24	.150	.484	97.879						
25	.143	.462	98.340						
26	.131	.424	98.764						
27	.110	.355	99.119						
28	.086	.279	99.398						
29	.082	.265	99.662						
30	.056	.180	99.843						
31	.049	.157	100.000						
Extraction Method: Principal Component Analysis.									

The results from the rotated component matrix showed (see Table 3) that there are six factors, with Initial Eigenvalues greater than 1, which explained 70.8 percent of the total variance. A varimax rotation was applied, which converged in 11 iterations. 0.50 was used as the accepted guidelines for identifying significant factor loadings (Hair *et al*., 1995). Four items namely; our products or services are very innovative in relation to our competitors (OFF2), relative to our competitors our technical equipment is very innovative (TEC1), we regularly utilize opportunities that arise from integration of

new partners into our processes (PAT2), and we recently complemented or replaced one-time transaction revenues with long-term recurring revenue models (e.g. Leasing). (REV3) were removed because their anti-image correlation values were below the accepted guideline of 0.5. There were some items that were cross-loading. In this case, the assignment of items to respective factors was based on higher loadings. In naming the factors, the item with the highest loading was first taken into account. The six factors that were identified formed the main factors underlying the perceptions of the owners/managers about the key drivers of BMI in the selected MSEs in Nigeria. The six factors are customer satisfaction and retention, market opportunities, regular assessment of operations, employee's capabilities, increment in revenue generation, and efficient channel functions. These six factors will form the independent variables for further analysis.

Table 3: Varimax Rotated Component Matrix

ITEMS	ACRONYM	Components					
Customer Satisfaction and Retention							
We regularly address new, unmet customer needs.	OFF1	0.649					
Our products or services regularly solve customer needs, which were not solved by competitors.	OFF3	0.691					
We are constantly seeking new customer segments and markets for our products and services.	CST3	0.716					
We regularly utilize new distribution channels for our products and services.	CHN1[c]	0.523	0.515				
We try to increase customer retention by new service offerings.	RLN1	0.745					
We recently took many actions in order to strengthen customer relationships.	RLN3	0.693					
Market Opportunities							
Relative to our competitors our technical equipment is very innovative.	TEC2[c]		0.550	0.513			
We regularly utilize new technical opportunities in order to extend our product and service portfolio.	TEC3		0.516				
We utilize innovative procedures and processes during the manufacturing of our products.	PRO2		0.561				
We regularly take opportunities that arise in new or growing markets.	MKT1		0.740				
We regularly address new, unserved market segments.	MKT2		0.555				
We regularly utilize new distribution channels for our products and services.	CHN1[c]	0.523	0.515				
We consistently change our portfolio of distribution channels.	CHN3		0.545				
Regular assessment of operations							
Our employees constantly receive training in order to develop new competences.	CAP1[c]			0.567	0.552		
We constantly reflect on which new competencies need to be established in order to adapt to changing market requirements.	CAP3			0.539			
Relative to our competitors our technical equipment is very innovative.	TEC2			0.513			
We regularly evaluate the potential benefits of outsourcing.	PAT3			0.778			
We were recently able to significantly improve our internal processes.	PRO1[c]			0.536	0.576		
Existing processes are regularly assessed and significantly changed if needed.	PRO3			0.620			
Employee's Capabilities							
Our employees constantly receive training in order to develop new competences.	CAP1[c]			0.567	0.552		
Relative to our direct competitors, our employees have very up-to-date knowledge and capabilities.	CAP2				0.736		
New collaboration partners regularly help us to further develop our business model.	PAT4				0.685		
We were recently able to significantly improve our internal processes.	PRO1[c]			0.536	0.576		
We increasingly offer integrated services (e.g. maintenance contracts) in order to realize long-term financial returns.	REV2				0.726		
Increment in revenue generation							
We emphasize innovative/ modern actions to increase customer retention (e.g. CRM).	RLN2					0.621	
We recently developed new revenue opportunities (e.g. additional sales, cross-selling).	REV1					0.697	
We regularly reflect on our price-quantity strategy.	CST1					0.511	
We actively seek opportunities to save manufacturing costs.	CST2					0.774	

Our production costs are constantly examined and if necessary amended according to market prices.	CST3[c]						0.506	0.521
Efficient channel functions								
We are constantly searching for new collaboration partners.	PAT1							0.580
Constant changes of our channels have led to improved efficiency of our channel functions.	CHN2							0.616
Our production costs are constantly examined and if necessary amended according to market prices.	CST3[c]						0.506	0.521

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 11 iterations.

b. OFF2, TEC1, PAT2, and REV3 were removed due to anti-image correlation value were below 0.5, loadings value below 0.50 were suppressed.

c. 'C' represents a cross loading items.

V. CONCLUSION

This study sought to determine the key drivers of Business Model Innovation in MSEs. There were 31 items adopted from the previous instrument for measuring BMI by Clauß (2017), and these items were subjected to factor analysis using the PCA method. The PCA method revealed that four items were not consistent in measuring the construct of BMI. Therefore, removing these items resulted in the factorability of twenty-seven items that generated six-factor solutions with a better total variance explanation than the component solutions for the initial 31 items. Drawing from insights from the Schumpeterian Innovation model that emphasized product, process, market, and organizational innovation as bases for earning profit by entrepreneurs, the PCA of items in this study further supports the insights that owners of micro and small enterprises can innovate beyond the ideas of technological and non-technological innovations. This study has revealed that customer satisfaction and retention, market opportunities, regular assessment of operations, employee's capabilities, increment in revenue generation, and efficient channel functions are the six discriminating factors driving MSEs in Nigeria. This research finding can be utilized to promote BMI in developing countries' MSEs. Therefore, it is concluded that the key drivers of business model innovation in sub-Sahara countries MSEs generally, and Nigeria specifically, mainly revolve around these six identified factors, and employing these attributes may attract better firms' performance outcomes, especially in micro and small enterprises.

VI. LIMITATIONS AND SUGGESTION FOR FURTHER STUDY

This study examined, in general, the critical drivers of Business Model Innovation for micro and small enterprises in a selected location in Ondo state, Nigeria. However, the outcome of this study may not be able to be generalized because Nigeria as the country is made up of 36 states, with Abuja as the Federal Capital. Therefore, using the data collected from a single state in Nigeria may not appear adequate. Thus, future studies can be fronted to find what constitutes key drivers of BMI among MSEs across several states in Nigeria to generalize findings better. Besides, the sample size of this study is small. Although the internal validity has shown to be significant, it is always good to expose the model to larger sample size. Besides, the six factors (customer satisfaction and retention, market opportunities, regular assessment of operations, employee's capabilities, increment in revenue generation, and efficient channel functions) identified by this study as the key determinants of BMI in MSEs need to be exposed to empirical research. Furthermore, the total variance explained of 70.8 percent in this study indicates that there are still other variables or items that could explain BMI in the Nigerian context, and future research studies can use it as a basis for fronting empirical investigation. This study is only limited to determining drivers of BMI using PCA. Therefore, there is a need to find whether any relationship may exist between BMI and performance-related outcomes among MSEs in the developing countries generally, and particularly in Nigerian.

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