

## Employee Commitment to Change, Innovation Strategy and the Performance of Small and Medium Enterprises

Yakubu Salisu\*<sup>1</sup> and Lily Julienti Abu Bakar<sup>2</sup>

<sup>1</sup>Department of Business Administration, Yobe State University Damaturu, Yobe State Nigeria.

<sup>2</sup>School of Business Management, College of Business, Universiti Utara Malaysia, 06010 Sintok Kedah Darul Aman Malaysia.

### ABSTRACT

*This study aims to evaluate the influence of employee's commitment to change on innovation strategy and performance of SMEs. Data were collected from 229 SMEs owner/managers in Nigeria. The study validates the constructs through confirmatory factor analysis as a prelude to the analyses of the relationships hypothesized. The study established that employee commitment to change positively relate to SMEs performance. Equally, employee commitment to change significantly influences all the component of innovation strategy. The findings also demonstrate that process and administrative innovation strategies positively affect SMEs performance. While product innovation strategy significantly and negatively relates to SMEs performance. However, the study confirmed that only process and administrative innovation strategies mediate the relationship between employee commitment to change and the performance of SMEs. Thus SMEs managers can develop and implement effective innovation strategy to enhance performance with adequate and efficient employee commitment to change. The study contributes to the body of existing literature on innovation by examining the mediating of innovation strategy on the relationship between employee commitment to change and the performance of SMEs in Nigeria. The study confirmed that employee commitment to change plays a fundamental role in innovation strategy which enables SMEs to achieve sustainable superior performance.*

**Keywords:** Commitment to Change, Innovation Strategy, SMEs Performance.

### 1. INTRODUCTION

Small and medium enterprises (SMEs) like any other business organization must anticipate and demonstrate commitment to adapt to the complex turbulent operating environment to survive and flourish. Technological changes in the turbulence's business environment goes far beyond mere technical progress; but also implies changes in customer base, business model, (Worch, Kabinga, Eberhard, and Truffer, 2012), firm structure, strategies and technologies (Hechanova, Caringal-Go, and Magsaysay, 2018, Kool and Dirk van Dierendonck, 2012), behavior, and the way in which different stakeholders in the firm relate to each other (Lee, Sharif, Scandura, and Kim, 2017, Santhidran, Chandran and Borrromeo, 2013, Cooke, Uranga and Etxebarria, 1997). Thus, to survive, business firms frequently engaged in innovation to sustained competitive advantage in this changing environment (Kaliappen and Hilman, 2017). However, unlike development effort, innovation entails some degree of uncertainty and challenges to existing phenomenon (Barnes and Soken, 2008). The face of changing has taken unrelenting forces, thus business firm are recognizing the role of committed culture from employee to sustain innovation for improving effectiveness (Hargie & Tourish, 1996). Hence, in this increasing globalization and liberalization of trade, deregulation, rapid change in technology, highly skills workers, and changing social and demographic trends, many have agreed that the critical

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\*Corresponding Author: ysalisu76@gmail.com

function of firms managers today is the effective control of the change process (Malik and Garg, 2017, Stensaker and Meyer, 2011, Markovic, 2008, Todnem, 2005).

Essential in this regards is the management of the most complex firm's resources (human/employees), whose by nature are averse to new ideas, knowledge and techniques mainly due to uncertainty, therefore firm must actively plan and motivate employee commitment to change (Hechanova *et al.*, 2018 Yu and Lee, 2018, Hakimian, *et al.*, 2016, Schalk, Campbell, and Freese, 1998). Nevertheless SMEs firms and employees must understand and accept that changes are inevitable (Denning, 2005). Employees in an SMEs are not only to expect changes but to actively induce and drive the changes (Raukko, 2009), to survive and sustain favorable innovative operation more than competitors in this rapidly changing environment (Hakimian *et al.*, 2016). Management decision on innovation are in most case define the frame for change, but not in detail, thus to fulfill their own side, employees tends to fill in this frame with supportive and operative decisions (Kesting and Ulhøi, 2010). Cottam, Ensor, and Band, (2001) maintained that people within the business organization are the major driver of innovation processes. Thus, managers require to have fresh perspective by challenging outdated assumptions that constraint successful innovation efforts and strategy (Loewe and Chen, 2007).

Employee commitment to changes in this study involves the commitment of employee to depart from the existing practice, routines, knowledge and skills to the new and better one. The process of abandoning the obsolete routine in a firm help establish a platform for successful innovation process (Aledo, *et al.*, 2017, Cegarra-Navarro *et al.*, 2014). Therefore, for a firm to improve and maintain effective innovation strategy in this rapidly changing environment, it must be committed to continually change its knowledge based (Jantunen, 2005). Equally, Cepeda-Carrion, Cegarra-Navarro and Jimenez-Jimenez, (2014) posit that SMEs can also create an environment where the newly acquired knowledge can be efficiently combined with established knowledge to develop superior process, techniques or product. This is achieved through firm's learning capability (Isaacs and Senge, 1992), however, firms learning alone is not sufficient to provide effective knowledge and insight, but also developing the employee's culture to accept changes by discarding obsolete knowledge is necessary to achieving this goal (Akgun, Lynn, & Byrne, 2006).

Innovation literature emphasizes the outcomes of innovation but undermines the significant of underlying factors like behavioral changes and strategy toward innovation (Wang and Ahmed, 2004). Rogers, (1976) had for decades underscore the role of human behavioral change to the diffusion of innovation. Although several firms change literature have relates the occurrence of changes to successful firm's innovation; yet however, it has been slow to be embraced by the researchers in innovation; preferring largely to focus on the technical aspects rather than the human processes (Becker, 2008). Consequently, the concept remains one of the least understood phenomena in the study of firm's innovation and performance (Akhshik, 2014). Equally, it has been opined that the success of business firms depends on its effectiveness in managing changes and innovation (Hargie and Tourish, 1996). Nybakk and Jenssen, (2012) sought for an examination of the role of innovation on factors influencing firm's performance. However, limited attention has been given to the behavioral change and innovation strategy. Therefore, this study aimed to examine the mediating role of innovation strategy on the relationship between employee commitment to change and the performance of SMEs.

## **2. LITERATURE REVIEW**

Employees commitment to changes is essential to firm's operational process (Chen, Gupta, and Chung, 1996), promoting behavior and culture (Foote, Seipel, Johnson, and Duffy, 2005), and the ability to innovates product that best satisfied the market needs (Hasu, Laura Honkaniemi,

Saari, Mattelmäki, and Koponen, 2014 Barnes and Soken, 2008, Bartridge, 2006). Julia Leong and Craig Anderson, (2012) maintained that developing positive culture among employees is essential in building innovative capability. Herscovitch and Meyer (2002) believed that without commitment to change, innovation effort may be difficult to succeed. Consequently, the poor performance of many innovation processes underscore the facts that enterprises are frequently ineffective in achieving adequate levels of commitment to change from employees (Marks, 2006). Thus, managers that aspire for quick alignment to innovation encourages employees to identify and experiment their assumption, take unfamiliar positions and risk and looks at problem from different perspective (Barnes and Soken, 2008).

## **2.1 Employee Commitment to Change and Firm Performance**

Firms keep on changing their strategies in reaction to significant environmental shift and the planned internal efforts to attain superior quality, greater profitability, and effectiveness (Whelan-Berry, Gordon, and Hinings, 2003). Hence, a firm that fails to accept corporate changes and enhance employee commitment to changes where necessary cannot achieve a desired financial and non-financial benefit, even if employee's remains committed to their assigned duties and responsibilities (Adil, 2016). Furthermore, Erkutlu and Chafra (2016) opined that firm's value congruence positively relates to employee's commitment to change. Thus employee commitment to changes is an imperative strategy for businesses determined to become leaders globally (Santhidran, Chandran and Borrromeo, 2013). Commitment of employees contributes to the enhancement of internal firms integration which in turn both directly and indirectly improves performance (Alfalla-Luque, Marin-Garcia and Medina-Lopez, 2014).

Nafei (2014) reported that employees with high commitment are more willing to put more effort in the firm change project. Nohe, *et al.*, (2013) in their study conducted on 33 managers and 142 employees of German companies reported that commitment to change positively influence employees perceptions which in turn improves performance. Chen, Wang, Huang, and Spencer-Rodgers (2012) confirmed that employee's commitment to change is positively related to changes in performance. Similarly, Kohtamäki, Kraus, Mäkelä, and Rönkkö (2012) in their study confirmed that employees commitment to new strategy implementation positively enhances firm's performance of Finnish IT businesses. Erkutlu and Chafra, (2016) opined that employee's commitment to change influence customer satisfaction and well-being which ultimately affects organization profit and growth. Thus this study hypothesizes that:

*H1: Employee commitment to change is positively related to the performance of manufacturing SMEs in Nigeria*

## **2.2 Employee Commitment to Change and Innovation Strategy**

The operating business environment of today is characterized by frequent changes in almost every aspect of operating process, thus firms must understand the requirements to adapt to new environmental changes to achieve and maintain better innovation performance (Buil-Fabregà, Alonso-Almeida, and Bagur-Femenías, 2017). Conscious innovation strategy reflects the employees and management (adopter) preference and commitment to innovation (Nybakk and Jenssen, 2012). All forms of innovation be it the introduction of advanced technologies, new product, process or method require that employees perform new functions and responsibility that is expected to stimulate the changes.

Many studies have established a significant relationship between commitment to change and firm innovation processes. For instance, Wang *et al.* (2013) reported that change in beliefs and routines has significant effects on both radical and incremental innovations of the firm. While the results of a study by Yang *et al.* (2014) showed that change positively influence radical innovation, while forgetting negatively relates to firm's innovation activities. Hong, Hou, Zhu, and Marinova, (2018) established a positive links between employee's creativity and all forms

of innovation. Similarly, Mieres, Ángel and Leticia (2012) agreed that commitment to change in attitude and routine considerably improve the firm's ability to innovate. Yanqiu, Yingxin, Yuchui and Xiangyang (2014) reported that change in attitude and routine significantly and positively influence innovative performance. Hakimian, Farid, Ismail, and Nair, (2016) reported that commitment to change positively relates to innovation behavior. Burcharth, Præst Knudsen, and Søndergaard, (2017) opined that employees commitment influence openness and innovation sales as well as introduction of new product. Thus this study hypothesizes that:

*H2: Employee commitment to change positively relates to the SMEs' product innovation.*

*H3: Employee commitment to change positively relates to the SMEs' process innovation.*

*H4: Employee commitment to change positively relates to the SMEs' administrative innovation.*

### **2.3 Innovation Strategy and Performance**

Increasing consideration has being devoted to innovation as an essential factor for successful, sustainable competitive advantage and performance particularly for SMEs (Kaliappen and Hilman, 2017, Nybakk and Jenssen, 2012). Innovation which designates the creation of new product, process and services has been investigated for decades (Chesbrough, 2003, Damanpour and Gopalakrishnan, 2001, Hurt, Joseph, and Cook, 1977, Zahra and Covin, 1994). This study defined innovation as ability of SMEs firm to introduce or adopt new product, process and administrative system. Innovation is an effective means of creating differentiation and competitive advantage (Porter, 1985). However, the success of firm innovation activities is determined by the innovation strategy (Nybakk and Jenssen, 2012).

Strategy defined firm's configuration of resources, product, system and process to successfully adapt to business environment (Akman and Yilmaz, 2008). Thus, innovation strategy has been described as the conscious plan and techniques to guide product, process and administrative innovations. Innovation strategy facilitates the development of firm formal innovation setting that enhances commitment to innovation activities. Formalized innovative system improve the chance of achieving effective innovation system and competitive advantage (Jenssen and Randøy, 2002). Numerous previous studies have established that innovation positively impacted on firm's performance. However, innovation strategy was found to be the most effective predictor of firm's innovativeness (Jenssen and Randøy, 2002). It has been recognized that successful innovativeness and competitiveness in most cases are the product of purposeful and conscious strategy for innovation opportunities searches (Akman and Yilmaz, 2008, Lawson and Samson, 2001).

Innovation strategy has been studied in various economic endeavors and has been classified into several dimensions. Nybakk and Jenssen, (2012) and Jenssen and Randøy, (2002) described innovation strategy as consisting of product, research and development, process and business/market system. Innovation strategy has further been postulated to comprises futurity and pro-activeness (Akman and Yilmaz, 2008). Damanpour and Gopalakrishnan, (2001) in their study demonstrated the adoption of process, product, technical and administrative innovations as component of innovation strategy. Equally, innovation strategy have been operationalizes as product, process and administrative innovation strategies (Ndubisi, Capel, and Ndubisi, 2015). Hilman and Kaliappen, (2015) demonstrated innovation strategy as consisting of product/service and process innovation. Product, process and administrative innovation are found to be closely related to SMEs innovation strategy (Ndubisi, Capel, and Ndubisi, 2015, Hilman and Kaliappen, 2015, Nybakk and Jenssen, 2012). Based on this tradition this study adopted the product, process and administrative innovation as the constituents of innovation strategy.

Product innovation involves the introduction of new product/service (Hilman and Kaliappen, 2015) or significantly improved in features, target users, technical specification, material and components, user-friendliness and other utilities (OECD/Eurostat, 2005). Product innovation utilizes new technologies or knowledge or the combinations of existing technologies and knowledge (Gunday, Ulusoy, Kilic, and Alpkan, 2011). Product innovation emphasizes the outcomes of innovation capability, but undermines the significant of underlying factors like behavioral changes and strategy toward innovation (Wang and Ahmed, 2004). Product innovation creates great opportunities for business firms in terms growth and market expansion.

The process of introducing new techniques or technology into use demonstrated what is termed process innovation. This type of innovation affects the process of production and service delivery. Process innovation entails refining and re-engineering business internal operation such as R&D, technical design, management and method of service delivery (Cumming, (1998) cited in Hilman and Kaliappen, 2015). Process innovation stresses firm's improvement in knowledge, system, procedure, techniques and skills in transforming the process of service or product creation (Gunday, Ulusoy, Kilic, and Alpkan, 2011, Oke, Burke, and Myers, 2007). Process innovation enables firm's cut production cost, enhance delivery method and quality of product, improve market share and achieve competitive advantage and performance (Gunday, Ulusoy, Kilic, and Alpkan, 2011).

The fact that innovation is inevitable in today's changing environment, firms have shifted from competing in innovation for market pioneering to innovation for superior competitiveness (Lin and Chen, 2007). This development underscores the importance of administrative innovation in enhancing firm's performance and competitive advantage. Administrative innovation involves the administrative components and their relationship with the organizational social system (Pennings, 1998). Administrative innovation involves changes in firm's structural and administrative processes that are ultimately relate to the firm's fundamental activities (Carmen and José, 2008). Lin and Chen, (2007) maintained that administrative innovation appeared to be the utmost factor in explaining firm sales resulting from radical or incremental innovation.

Generally, innovation strategy is critical to SMEs firms' survival, growth and competitive advantage. Akman and Yilmaz, (2008) reported that innovation strategy significantly influence firms innovation capability. Equally, Nybakk and Jenssen, (2012) in their study established that innovation strategy consisting of product, process, business system and R&D expenditure significantly affects firm's performance. Hilman and Kaliappen, (2015) confirmed that service and process innovation significantly and positively affects SMEs performance. Gunday *et al.*, (2011) found in their study that product, process and market innovation significantly affects several components of firm's performance including production, innovativeness, market and financial performance. Nybakk, Crespell, and Hansen, (2011) innovation strategy positively impacted on firm's financial performance. Thus

*H5: Product innovation positively relates to SMEs performance.*

*H6: Process innovation positively relates to SMEs performance.*

*H7: Administrative innovation positively relates to SMEs performance.*

#### **2.4 Mediating Role of Innovation Strategy**

Innovations expedite the achievement of firm's long-term goals of survival, success and competitive advantage. Innovations is an essential requirement for the existence in this dynamic customer's need of quality, quick delivery, preferences and changing technologies (Yusr, 2016, Ozkaya, 2011). Hence, to stay competitive in this rapidly changing environment SMEs must develop conscious innovative strategy (Kaliappen and Hilman, 2017). Numerous studies have established the mediating role of innovation (Obeidat, 2016, Yusr, 2016, Leal-

Rodríguez, *et al.*, 2015, Ozkaya, 2011, Vincent, Bharadwaj and Challagalla, 2005). Nevertheless, Abu Bakar and Ahmad, (2012) opined that the problems of SMEs innovativeness tied with their strategy to innovation. However, the success of firm innovation activities is determined by innovation strategy (Nybakk and Jenssen, 2012). Nybakk and Jenssen, (2012) further, demonstrated the need for study on mediating role of innovation strategy on factors influencing performance. Consequently, this study hypothesizes that:

*H8: Innovation strategy mediates the relationship between employee commitment to change and SMEs performance.*

### **3. METHODOLOGY**

Quantitative survey research design was adopted to collect the data of this study. To achieve this, the study used subjective measures to assess the views of owner/managers of SME about the items on the entire variable under study. Consequently, 370 questionnaires were personally administered to owner/manager of manufacturing SMEs in Bauchi state, Kano state and Niger state of Nigeria. Personal administration of questionnaires allows the researcher in creating understanding and relationships with the respondents (Sekaran and Bougie, 2013). The method also provides an avenue for the respondents to seek clarification instantly from the researcher, and the rate of responses is usually high as questionnaires were immediately filled and retrieved. The questionnaires were close-ended, the study found this method appropriate because of its advantage over other means of collecting data. It has better and forthright benefits in generation of statistical values (Tayie, 2005). Moreover, the technique is amongst the commonly used steadfast data collection tool. Close-ended questionnaire enable the target respondents to simply and speedily make optimal selection among the various alternative option, and it also makes easier the data coding process and analysis by the researcher (Sekaran and Bougie, 2013).

Measurement items were adapted from the extant literature, specifically, 6 items were adapted from Santos and Brito, (2012), equally employee commitment to change were measured with 6 items adapted from Halac, (2015), while the 15 measurement items of innovation strategy (5 for each of product, process and administrative) were adapted from Ndubisi, Capel and Ndubisi, (2015). All the items of the questionnaire were measured using five-point Likert scale. Out of 370 questionnaires administered 241 were retrieved, out of which 3 were not correctly filled, therefore only 238 questionnaires were coded into Statistical Packages for Social Sciences (SPSS 24) for the management and analysis of outliers. Consequently, the result of the univariate reveals 9 outliers, while none was found to be potential outlier using the multivariate criterion. Thus, 229 valid responses were used for the analysis.

#### **3.1 Treatment of Common Method Variance**

The fear of common method variance and how to reduce it in social science is increasing; as it constitute the main sources of measurement errors. In this study, the data on the predicting variables (commitment to change and innovation strategy) and the criterion variable (SMEs performance) were collected from single source (owner/managers), thus this self-reported data from owner/managers may generate a possibility for common method bias. However, CMV can be removed or reduce by a way of statistical and procedural approaches (Podsakoff, *et al.*, 2003). Hence, to minimize the problem of common method variance, both procedural and statistical techniques were used in this study. Specifically, as part of the procedural techniques, the study guaranteed the respondent anonymity and eliminate ambiguity words in the measures (Chang, Van Witteloostuijn, and Eden, 2010, Podsakoff, MacKenzie, Lee, and Podsakoff, 2003).

Moreover, Podsakoff, MacKenzie, and Podsakoff, (2012) maintained that to reduce method bias a thoughtful, experienced and knowledgeable respondents must be identify and answer the issues raised in the study. Equally, the questions are pretested to ensure that the questions are designed in a word that can be comprehended by the respondent (MacKenzie and Podsakoff, 2012, Podsakoff, *et al.*, 2003). Consequently, this study used owner/manager as the respondents; since owner/manager in SMEs are assumed to be knowledgeable enough with the affairs of their enterprises (Zahra and Covin, 1994). Based on the respond and report from the series of validations appropriate adjustments were made on the questionnaire.

Furthermore, statistical technique was also employed to evaluate the CMV. In this method all the items measuring the variables were taken and subjected to principal component factor analysis using the Harman's single-factor test (Podsakoff, *et al.*, 2003). The result of the analysis shows 6 factor which collectively accounts for 81.940% of the whole variance, with a large majority variance of 29.936 by a particular factor which is less than 50% (Kumar, 2012). Thus, from the result also no single factor accounts for the majority variance (50%) in both the criterion and predictor variables (MacKenzie and Podsakoff, 2012, Kumar, 2012). Consequently, the problem of CMV in this study cannot create serious threat to the validity of the data.

#### 4. RESULTS AND DISCUSSION

In this section, the valid data collected were further analyzed. The analysis aims to establish the reliability and validity of instruments and to test the hypotheses.

##### 4.1 Reliability

Specifically, table 1 below presents the statistical values of the reliability test. Cronbach's alpha and composite reliability were used to assess the internal consistencies reliability. Composite reliability and Cronbach's alpha indicate internal consistency which means the measures consistently represent the construct under study. From the table 1 below both the criterion for Cronbach's alpha and composite reliability of 0.60 and 0.70 respectively were achieved. The statistical values for Cronbach's alpha of all the variables ranges from 0.842 (process innovation) to 0.936 (SMEs performance) has satisfied the criterion requirements for reliability. Similarly, the composite reliability of the call the variables have values more than the acceptable threshold, specifically the values ranged from 0.897 to 0.951. Moreover, the average variance extracted (AVE) values were also used to assess the convergent validity of the variable under study. The acceptable value to established convergent validity is 0.50 (Hair, Black, Babin, and Anderson, 2010). Therefore, from Table 1 below the requirements for convergent validity were achieved based on the acceptable AVE value of 0.5 and above. The AVE values range from 0.622 to 0.797.

**Table 1** Reliability and convergent validity tests

	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
ADMI	0.864	0.897	0.639
ECCM	0.874	0.906	0.622
PERF	0.936	0.951	0.797
PRCI	0.842	0.907	0.765
PRDI	0.890	0.914	0.690

**Source:** Researcher (2019).

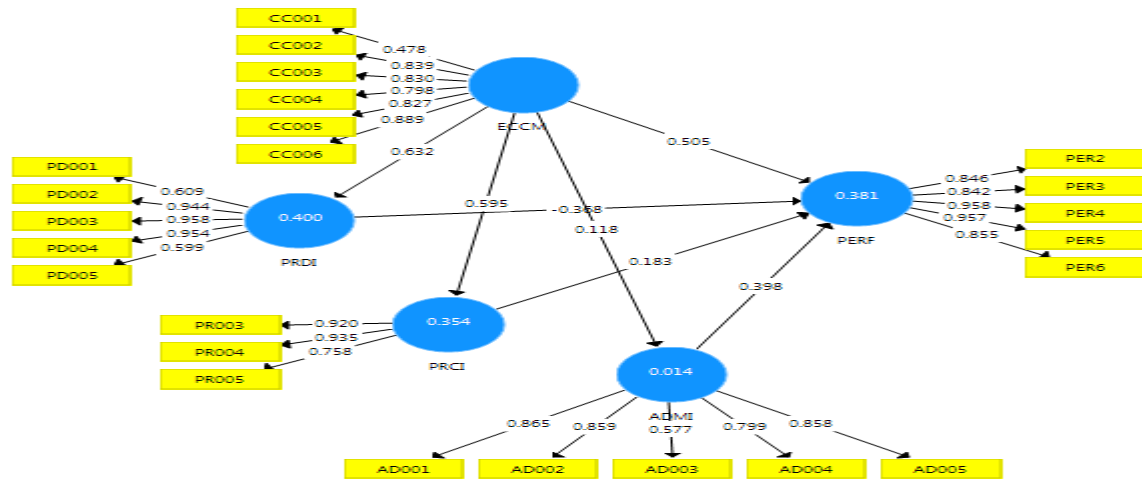


Figure 1. PLS-SEM algorithms.

Source: Researcher, (2019).

### 4.2 Discriminant Validity

Accordingly, to determine the problems of multicollinearity between the variables under study the discriminant validity test was evaluated. Discriminant validity weighs the variance-extracted value of the study measurements with the square of the parameter estimate between the measurements (Hair *et al.*, 2010). They further maintained that discriminant validity problems exist amongst study variables if the variance-extracted values are greater than the value of the square of the correlations of the variables. Consequently, based on the above opinions, this study proven that the values of the correlation between the variables are smaller than the respective square root of the average variance extracted, as designates by the boldly number in table 2 based on Fornell-Larcker criterion.

Table 2 Discriminant validity

		1	2	3	4	5
1	ADMI	<b>0.799</b>				
2	ECCM	0.118	<b>0.789</b>			
3	PERF	0.359	0.428	<b>0.893</b>		
4	PRCI	-0.080	0.595	0.328	<b>0.875</b>	
5	PRDI	0.226	0.632	0.102	0.334	<b>0.831</b>

Source: Researcher (2019).

### 4.3 Hypotheses Testing of the Direct Relationship

To test the hypotheses, bootstrapping techniques of Partial Least Square Structural Equation Model (PLS-SEM) were used. Employing 5000 bootstrapping resamplings of 229 cases was run to obtain the statistical values to analyze the hypotheses established for the study. Figure 2 and Table 3 present the statistical results of the direct relationship hypotheses testing.



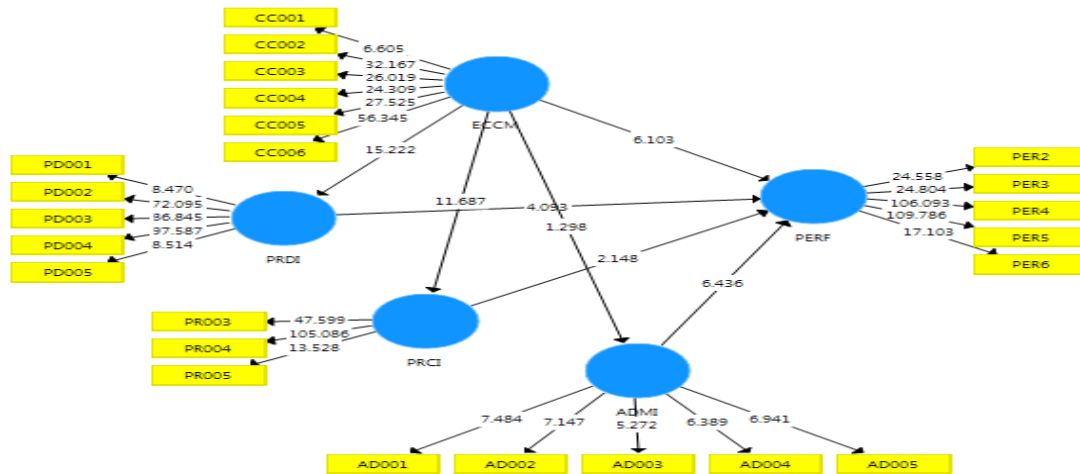


Figure 2. PLS bootstrapping.

Source: Researcher (2019).

Table 3 Coefficient of direct relationship test.

Path Coefficient	Sample Mean	Standard Deviation	T-Statistic	P-Value
ADMI -> PERF	0.398	0.062	6.436	0.000***
ECCM -> ADMI	0.117	0.091	1.298	0.097*
ECCM -> PERF	0.429	0.061	6.991	0.000***
ECCM -> PRCI	0.596	0.051	11.687	0.000***
ECCM -> PRDI	0.637	0.042	15.222	0.000***
PRCI -> PERF	0.176	0.085	2.148	0.016**
PRDI -> PERF	-0.367	0.090	4.093	0.000***

Note: \*\*\*, \*\* and \* indicates the relationship is significant at  $p < .01$  and  $p < .05$  and  $0.1$  respectively.

Source: Researcher, (2019).

The result from Table 3 above shows a support for six (6) of the seven direct hypotheses tested. Precisely, the H1 that test the relationship of employee commitment to change (ECCM) and performance was supported ( $\beta = 0.429$ ;  $t = 6.991$ ;  $P < .000$ ). Similarly, the statistical value of ( $\beta = 0.637$ ;  $t = 15.22$ ;  $P < .000$ ) supported the H2 testing the relationship of employee commitment to change (ECCM) with SMEs product innovation strategy (PRDI). H3 that test the relationship of employee commitment (ECCM) and process innovation strategy was supported based on this statistical result ( $\beta = 0.596$ ;  $t = 11.687$ ;  $P < .000$ ). Equally, H4 that test the relationship between employee commitment to change (ECCM) and administrative innovation (ADMI) was also supported as demonstrated by the statistical value ( $\beta = 0.117$ ;  $t = 1.298$ ;  $P < .097$ ). H6 that test the relationship between process innovation (PRCI) and performance was supported ( $\beta = 0.176$ ;  $t = 2.148$ ;  $P < .016$ ). Furthermore, H7 which test the relationship of SMEs administrative innovation strategy and performance was supported ( $\beta = 0.398$ ;  $t = 6.436$ ;  $P < .000$ ).

However, H5 that test the relationship between product innovation strategy and SMEs performance was not supported ( $\beta = 0.367$ ;  $t = 4.093$ ;  $P < .000$ ). This negative relationship indicates that the more, the businesses strategizes in their product innovation the lower the performance. This is contrary to previous findings of (Hilman and Kaliappen, 2015, Rosli and Sidek, 2013, Nybakk and Jenssen, 2012).

#### 4.4 Testing the Mediating Role

Specifically, in section three (3) indirect relationships were tested. The mediating roles of product, process and administrative innovation strategies were tested. Two (2) of the hypotheses were supported, while one was not supported. Process innovation positively mediates the relationship between employee commitment to change and performance of SMEs ( $\beta = 0.105$ ;  $t = 2.048$ ;  $P < .020$ ). Similarly, administrative innovation strategy was found to mediate the relationship between employee commitment to change and SMEs performance. Nevertheless, product innovation strategy does not mediate the relationship between employee commitment to change and performance ( $\beta = -0.234$ ;  $t = 3.782$ ;  $P < .000$ ) as shown in table 4 below.

**Table 4** Testing the mediating role.

Path Coefficient	Sample Mean	Standard Deviation	T-Statistic	P-Value
ECCM -> ADMI -> PERF	0.045	0.035	1.326	0.092*
ECCM -> PRCI -> PERF	0.105	0.053	2.048	0.020**
ECCM -> PRDI -> PERF	-0.234	0.062	3.782	0.000***

Note: \*\*\*, \*\*, \* indicates the relationship is significant at  $p < .01$  and  $p < .05$  and  $p < .1$  respectively.

Source: Researcher, (2019).

#### 4.5 Discussion

The results of the hypotheses testing supported all the hypotheses established except one. Specifically, employee commitment to change by way of discarding old knowledge, routines and practices to accept new one have significant positive influence on the performance of SMEs. This findings support the findings and views of numerous scholars (Erkutlu and Chafra, 2016, Chen, *et al.*, 2012, Cegarra-Navarro, *et al.*, 2012, Kohtamäki, Kraus, *et al.*, 2012, Cegarra-Navarro, *et al.*, 2011, Parish, *et al.*, 2008), who demonstrated that employee's commitment to change influence customer satisfaction and well-being which ultimately affects organization profit and growth. This implies employee commitment to change is significant firm's resources that help create superior competitive advantage which creates better performance, sustainability and growth.

Similarly, employee commitment to change was found to be important predictor of SMEs innovation strategy in product, process and administrative innovations. This agreed with some extant literatures which indicate that discarding obsolesces knowledge, skills, techniques and procedure play a significant role in firm's innovativeness (Burcharth, *et al.*, 2017, Hanaysha, 2016, Hakimian, *et al.*, 2016, Yanqiu, *et al.*, 2014, Lee, *et al.*, 2011, Stjernen, 2009, Herscovitch and Meyer, 2002). This proves that for SMEs to improve the quality, speed to market and overall success of product, process and administrative innovations, their established routines, mindset and knowledge need to be abandoned, as abandoning old routine and knowledge to give room for new one facilitates new product development and encourages NPD team to absorb new knowledge concerning customer needs, new technologies and other market demand (Cegarra-Navarro, *et al.*, 2011, Yoh, 2009).

The result of the study also demonstrated that process and administrative innovation are critical to SMEs performance. Specifically, process innovation strategy was found to impact positively and significantly on the performance of SMEs firms as previously reported by (Hilman and Kaliappen, 2015, Gunday, *et al.*, 2011, Jenssen and Aasheim, 2010, Oke, Burke, and Myers, 2007). This type of innovation affects the process of production and service delivery as well as refining and re-engineering business internal operation such as R&D, technical design, management and method of service delivery. Equally, administrative innovation was found to positively affect SMEs performance. This results also confirmed the findings of several previous studies that administrative innovation are crucial to firm's performance (Ajayi and Morton,

2015, Camisón and Villar-López, 2012, Gunday, *et al.*, 2011, Carmen and José, 2008, Lin and Chen, 2007).

However, product innovation was found to negatively and significantly relate to SMEs performance. This finding was contrary to the extant literature (Hilman and Kaliappen, 2015, Olughor 2015, Atalay, *et al.*, 2013, Camisón and Villar-López, 2012) who reported that product innovation has substantial positive effect on the performance of SMEs firms. Nevertheless, product innovation involves the introduction of new product/service (Hilman and Kaliappen, 2015) or significantly improved in features, target users, technical specification, material and components, user-friendliness and other utilities (OECD/Eurostat, 2005) which utilizes new technologies or knowledge (Gunday, Ulusoy, Kilic, and Alpkán, 2011). However, in Nigeria, manufacturing firms were constrained by obsolete technology and non-functional infrastructures (SMEDAN and NBS, 2013) and inadequate funds to acquire the new technologies, lack of technical skill and improper choice of technology (Mefuna and Abe, 2015). These may be the reasons why manufacturing SMEs cannot innovate competitive products that would positively influence performance. The Nigeria market was fully dominated by foreign imported products, (Bloch, Makare, Yunusa, Papachristodoulou and Crighton, 2015).

Finally, this study demonstrates the mediating role of process innovation as well as administrative innovation strategies on the relationship of employee commitment to change and performance of SMEs firms. This means that process and administrative innovations not only directly impacted on performance, but also enhance the influences of other factors on performance. However, product innovation was not found to mediate the relationship of employee commitment to change and performance.

## 5. CONCLUSION

Business firms frequently engaged in innovation to sustain competitive advantage in this changing environment. However, this study demonstrates that unlike development effort, innovation involves degree of uncertainty and challenges to existing phenomenon. Thus SMEs must recognize and appreciate the role of employee commitment to change to sustain innovation for improved performance. Hence, with the increasing globalization and liberalization of trade, deregulation, rapid change in technology, highly skilled workers, and changing social and demographic trends, the study agrees that the key job ahead of SMEs management today is to ensure the effectiveness and control of the behavioral change process.

The results of the study presented and analyzed above offer some vital implications for both knowledge and practice. Based on the results, the study makes tremendous contributions to the body of knowledge and literature on employee commitment to change, innovation strategy and performance. The study offers some insight on the role of employee commitment to change on firm's innovation strategy and performance. Therefore, conducting this study has provided a substantial contribution to the body of existing literature and knowledge. Practically, the study suggests that managers need to ponder on the antecedents to improve creativity and innovation particularly through capitalization on employees' innovative behavior. Employee commitment to change toward enhancing innovation is an essential tool to achieving competitive advantage through utilizing the creativity and knowledge potential of employees. Therefore, for a firm to improve and maintain an effective innovation process in this rapidly changing environment, it must be committed to continually change its knowledge base.

The study employed self-reported survey techniques which may be prone to bias to collect the data. Similarly, size and age of the business under study were not controlled. Size and commitment may differ amongst firms under study and this has not been explored, therefore future study should consider these differences. Equally, the data collected for the study was

cross-sectional in nature; this may limit the outcomes to be generalize, therefore longitudinal study in this context and in different environment are required in future. The one-dimensional approach used to measure employee commitment to change may be a potential limitation to this study, future studies should consider the measuring commitment to change from multi-dimensional perspective of employee's affective, continuance and normative commitment to change. Although the statistical test indicate that CMV in this study was not as serious as concerned, however, caution must be taken while considering the result because of the potential CMV as a result of self-reported data set.

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## APPENDIX

### Measurement of the study variable

Latent Variable	Codes	Items Descriptions
Performance	FP001	Over the past few years, our firm have being recording success
	FP002	Our firm profit have improved over the past few years
	FP003	Over the past few years our employee's satisfactions have improved.
	FP004	Over the past few years our customer's satisfactions have improved.
	FP005	Over the last few years our firm's social performance have improve
	FP006	Over the past few years our firm's performance in environmental protection have improved
Commitment to Change	CC001	In line with the new knowledge, our employees adopt themselves to change easily.
	CC002	In line with the new knowledge, our employees do not resist to changes.
	CC003	In line with the new knowledge, our employees do not regret the changes in working approaches.
	CC004	In line with the new knowledge, our employees do not hesitate to implement new ideas.
	CC005	In line with new knowledge, our employees accept revised routines, practice and procedures easily concerning change.
	CC006	In line with new knowledge, our company discards obsolete knowledge structures
Process Innovation	PR001	Over the past few years, our firm have relentlessly set its operating system to global standard
	PR002	To increase productivity, our firm have constantly updates its work practice over the past few years.
	PR003	Over the past few years, our firm have been regularly using technology in improving the quality of our product
	PD004	Over the past few years, our firm have been investing adequately in developing new operating system
	PR005	Over the past few years, our firm have been regularly training its employees on new technology
Product Innovation	PD001	Over the past few years, our firm have presents numerous new product to the market
	PD002	Over the past few years, our firm have been modifying its product
	PD003	Over the past few years, our firm have been regularly assessing the need for new product
	PD004	Over the past few years, our firm have introduces many new product than competitors
	PD005	Over the past few years, the new product we have been introducing has cause substantial changes in a positive fashion within the industry we serve

Administrative Innovation	AI001	Over the past few years, our firm has been regularly introducing new ways of managing our affairs
	AI002	Over the past few years, our firm have been investing substantially in updating administrative techniques
	AI003	Over the past few years, our firm have been empowering employees to initiate
	AI004	Over the past few years, our management have been regularly assessing for new administrative system
	AI005	Over the past few years, our administrative system has served as a benchmark to competitors

Note: FP = SMEs performance; CC = Employee commitment to change; PR = Process innovation; PD = Product innovation; AI = Administrative innovation