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The Impact of Different Types of Innovations on Customer Satisfaction in Microfinance Bank in Nigeria

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Abstract

This study examined the impact of different types of innovation on customer satisfaction with the ABCD Microfinance Bank Ltd. in Nigeria. The main objective of the study was to propose recommendations to the managers of the ABCD Microfinance Bank Ltd. on how to improve customer satisfaction base on the evaluation of the different types of innovations.

The analyses in the study were based on theoretical insights from management literature to better understand how service innovation, process innovation and marketing innovation enhance customer satisfaction. Three research questions were used in attempting to reach the objective of the study: (1) Does service innovation influence the level of customer satisfaction in microfinance banks? (2) Does process innovation have a positive impact on customer satisfaction level in microfinance banks? (3) Is marketing innovation positively related to the satisfaction level of the customers of microfinance banks?

The study focused on one microfinance bank and used quantitative methods and a survey to obtain information from the customers of the case MFB. The findings suggested that service innovation had a significant and positive impact on customer satisfaction with the ABCD Microfinance Bank Ltd. Similarly, the results showed that process innovation has a significant impact on customer satisfaction. Furthermore, the relationship between marketing innovation and customer satisfaction was positive and significant. This study contributes to the existing literature by providing experience on the relationship between different types of innovation and customer satisfaction in an emerging market (Nigeria). The results of the study are useful in practice.

Keywords/tags: Customer satisfaction, innovation, process innovation, service innovation, marketing innovation, microfinance bank

Miscellaneous (Confidential information)

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1 Introduction

In a global and dynamic market, companies need to constantly monitor and keep track with the actual experience their brand is providing to customers (Meyer & Schwager, 2007). Moreover, globalization have made it possible to create businesses that were before unimaginable. Considering this, firms need to be innovative to deliver superior business performance and compete in their respective markets (Yokomizo, 2014; Baregheh, Rowley & Sambrook, 2009). Although, prior studies suggest that customer satisfaction have positive impact on business results, many companies still find it difficult to implement strategies to achieve them (Borowski 2015; Meyer & Schwager, 2007). Little academic research if any have been done on types of innovations and customer satisfaction in microfinance banks.

Recently, the awareness about innovation has been on the rise because of changes in consumers taste and demand. Moreover, innovation enable firms grow and sustain their market share (Baldassarre et al., 2017). Pitelis (2009) pointed out that innovation is an effective means for firms to create value and competitive advantage. Szirmai et al. (2011) opine that innovation involve creating new products, services, processes and taking advantage of new markets. Innovation is a radical change that involves speeding up idea generation and developing new products, services and industrial processes (Nwachukwu, Chladkova & Fadeyi, 2018). To remain competitive firms can create value through innovative activities. Innovation enables a company gain values from other businesses by optimizing key assets, resources or opportunities (Galloway et al., 2017; Saebi & Foss, 2016).

Adopting service, process and marketing types of innovations can make companies more efficient and adapt to changing market demand. Service innovation is beneficial to both the firm providing the service and customers and it enhances the service provider competitive edge (Hall et al., 2005). Process innovation focus on how the products are manufactured, delivered and consumed (Bessant & Tidd, 2007; Trott, 2012). Prajogo (2016) opines that process innovation has to do with the specific strategy firms use to respond to market demand and opportunities. Product and process types of innovation have dominated most discussions and empirical studies on innovations because they have significant strategic values in delivering competitive advantage for firms (Goedhuys & Veugelers, 2012).

Arguably, leveraging on firms' resources and capabilities is important to improve the process of innovation. Marketing innovation emphasizes the use of new marketing methods and effective use of marketing resources and capabilities (Nwachukwu et al., 2018). Marketing innovations involves changes in product design, packaging, promotion, distribution and pricing of goods and services (OECD, 2005). Customer satisfaction is an important performance indicator for companies. Customer satisfaction is an important driver of superior business results (Pulles et al., 2016). If customers are satisfied they will remain loyal to the company for a long time. Therefore, companies need to adopt innovative approach to improve the level of customer satisfaction and to retain their customers. Tracking customer satisfaction level provides a better understanding of how successful a firm is at providing products and/or services to its customers.

Globally, microfinance banks play strategic role in enhancing the socio-economic well-being of the poor. In Nigeria, microfinance banks and microfinance institutions provide finance that serves the needs of the poor who are mostly traders, street vendors, small farmers, hairdressers, barbers, GSM commercial operators, artisans and a host of others. It is a strong strategic tool for reducing poverty. The inefficiencies in the current state of microfinance in Nigeria and future challenges can be reduce by building innovative capabilities. Considering the growing population, high unemployment rate and youth restiveness, the importance of microfinance in the growth and development of the Nigerian economy cannot be overemphasized. EFInA, in its Access to Finance Survey in Nigeria in 2016, observed that 41.6 percent of the adult population does not have access to financial services. This showed the existence of a huge gap in the provision of financial services to many of the economically active poor and low-income households. Therefore, investment in innovative activities could enable more of the unbanked or un-served market have access to financial services.

Research context and development of Microfinance Banks in Nigeria

The Federal Republic of Nigeria is a country situated in the South-Eastern part of West Africa. Nigeria shares borders with Benin, Ghana, Cameroon, Chad, Niger, Equatorial

Guinea, and São Tomé and Príncipe. The country is the seventh largest country in the world with a population of 185.99 million (World Bank Databank, 2017). The capital city is Abuja while Lagos is the centre of commercial activities. The main languages spoken in Nigeria are English (official), Yoruba, Hausa, and Igbo. It is estimated that Nigeria has about 250 different ethnolinguistic groups. The major religions in Nigeria are Islam and Christianity. Nigeria has one of the largest economies in Africa with major dependent on revenue from sales of crude oil.

Table 1. Selected indicators about Nigeria

Population, total (millions)	185.99
GDP (current US$) (billions)	405.08
Agriculture, value added (% of GDP)	21
Industry, value added (% of GDP)	18
Services, etc., value added (% of GDP)	60

Source: Adapted from World Development Indicators database (2016)

In Nigeria, the Central Bank of Nigeria (CBN) is the regulator of the microfinance sector. Microfinance banks provide financial services to the poor who do not have access to the conventional financial institutions. Microfinance banks provide small loans without asking for asset-based collateral. Egboro (2015) notes that micro savings and microcredit are not new in various Nigerian rural and semi-urban communities. Nwankwo, Ewuim and Asoya (2013) observed that cooperative societies provide financial services in the rural areas of Nigeria. They render financial services in the areas such as agriculture, general commerce among others to their members.

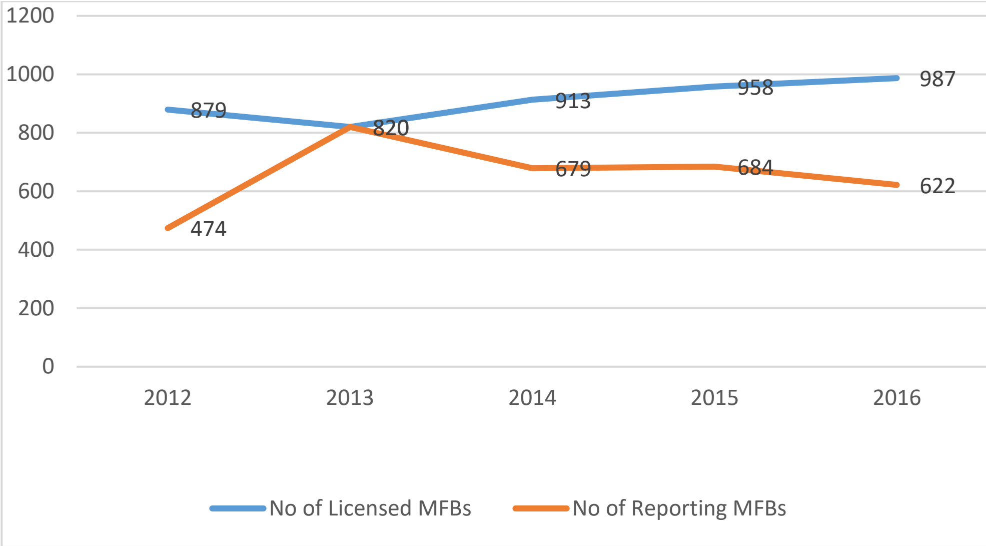

Figure 1: Numbers of Licensed and reporting Microfinance Banks
Source: Author's adaptation based on Central Bank of Nigeria (2016, online)

Figure 1 shows that the number of microfinance banks (MFBs) declined from 879 to 820 in 2013, then it rose to 913, 958 and 987 in 2014, 2015 and 2016 respectively. The number of reporting MFBs rose to 820 in 2013, decline to 679 in 2014, grew to 684 in 2015 and then declined to 622 in 2016.

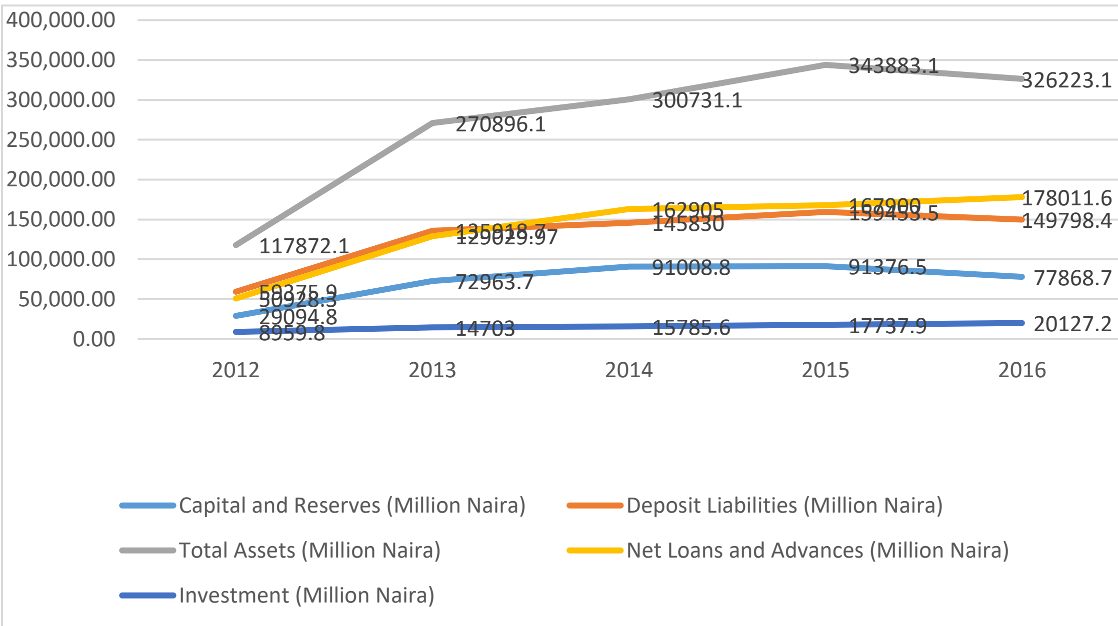

Figure 2: Financial Performance Indicators of Microfinance Banks

Source: Author's adaptation based on Central Bank of Nigeria (2016, online)

Figure 2. shows that total assets and total deposit liabilities of microfinance banks fell by 5.1 per cent and 6.1 per cent from N343.9 billion and N159.5 billion in 2015 to N326.2 billion and N149.8 billion in 2016, respectively. However, net loans and advances increased by 6.0 per cent to N178.0 billion in 2016 from N167.9 billion in 2015. Also, investments increased by 13.5 per cent from N17.7 billion in 2015 to N20.1billion in 2016.

Profile of ABCD Microfinance Bank Limited

For confidentiality purpose, the name ABCD Microfinance Bank Limited is adopted to represent the microfinance bank use as a case study. ABCD Microfinance Bank Limited was incorporated as a private limited liability company in 2007 and received its license from Central Bank of Nigeria (CBN) to operate as a microfinance bank in June 2010. The bank is one of the eight Microfinance Banks operating with a national license in Nigeria. Microfinance national license allows banks to set up branches in all the thirty-six states in Nigeria, including Abuja. ABCD MFB gives microfinance loans to micro-enterprises and low-income households, with more focus on women. The Bank also render financial services to small and medium scale enterprises (SMEs) operating in agriculture, housing and renewable energy sectors of Nigeria. The Bank's head office is in Benin City, Edo State Nigeria. As at 2017, the bank has 462 branches spread across twenty-eight states in Nigeria. At the end of 2016 financial year, ABCD had 6,392 employees. The Bank strategic options are focused on new market expansion (particularly semi-urban and rural areas), sustaining leadership in the Nigerian microfinance sector and optimizing technology to improve service delivery.

ABCD Microfinance Bank is the largest microfinance bank operating in Nigeria with total assets of ₦ 62.7 billion in 2016. Profitability indicators grew, with the pre-tax return on average assets (ROA) and pre-tax return on average equity (ROE) at 11.7 % and 56.3 % respectively, from 10.6 % and 53.5 % in 2015. Agusto & Co assigned A-rating to ABCD Microfinance Bank Limited based on good liquidity position, with liquid assets accounting for 35.2 % of total deposit liabilities, which is more than the 20 % required for microfinance banks. It is instructive to note that in 2016, ABCD's total assets of N62.7billion and total deposit liabilities of N27.6 billion accounted for 19.21

% total assets and 18.42 % total deposit liabilities of the Microfinance Bank sector in Nigeria (see figure 2). The choice ABCD Microfinance Limited is justified based on the abovementioned financial information and access to data.

Table 2. Financial data of ABCD Microfinance Bank Limited

	FY 2016	FY 2015
Total assets and contingents	N62.7 billion	N54.4 billion
Total deposit liabilities	N27.6 billion	N25.7 billion
Pre-tax return on average assets	11.7%	10.6%
Pre-tax return on average equity	56.3%	53.5%

Source: Bank website online (http://www.lapo-nigeria.org)

Motivation for the research

Most studies on innovation focused on understanding the effect of internal organisational factors on innovation (Oke et al., 2013; Murat Ar & Baki, 2011; Herzog & Leker, 2010). Little attention has been focused on the impact of external factors like customer demand, competitors on innovation (Corrocher & Zirulia, 2010; Yalabik & Fairchild, 2011). Microfinance banks (MFBs) supports economic growth and development in Nigeria. These banks provide loans to individuals and small businesses in Nigeria. Akangbe et al. (2012), note that financial empowerment of rural areas is important for achieving sustainable economic growth and development. MFBs are established to satisfy the needs of various stakeholders. Arguably, small and medium enterprises (SMEs) constitute a large proportion of the business sectors in Nigeria. MFBs provide services to these small businesses to support their growth. One of the aims of MFBs in Nigeria is to reduce poverty and improve the standard of living by providing loans for personal and business use. Despite the importance of MFBs in developing economies, little attention has been given to management practices of MFBs in Nigeria. Although, few studies have examined, for instance, human resource practice and employee satisfaction (Nwachukwu & Chladkova, 2017), visionary leadership and corporate social performance (Nwachukwu, Chladkova, Zufan & Olatunji, 2017) in MFBs. Contextually, this study focus is on an emerging market. Most empirical studies on innovation in service firms were conducted in developed economies (e.g. Grawe et al., 2009; Carlborg et al., 2014), suggesting that the benefits or costs associated to innovation in emerging economies are unknown. The literature shows that the benefit of a firm's strategic orientation such as innovation may be context specific (e.g. Li & Zhou, 2010). Furthermore, there is growing call by researchers for more study that focuses on innovation in services and its impact on customer satisfaction within the African context (e.g. Mahmoud, Hinson & Anim, 2017; Li & Zhou, 2010). To the best of my knowledge, no study has investigated the impact of different types of innovations on customer satisfaction in MFBs in Nigeria. The dearth of research, the importance of innovation and customer satisfaction to the survival and growth of firms especially MFBs motivated this study.

Objectives of the study

The main objective of this study is to propose recommendations to managers of microfinance banks in Nigeria on how to improve customer satisfaction base on the evaluation of different types of innovations. This study seeks to achieve the following specific objectives;

1. to find out if service innovation influence customer satisfaction.
2. to determine if process innovation have an impact on customer satisfaction.
3. to determine if marketing innovation is positively related to customer satisfaction.

In specific terms, this study sought answers to the following questions:

- does service innovation influence the level of customer satisfaction in microfinance banks?
- does process innovation have a positive impact on customer satisfaction level in microfinance banks?
- Is marketing innovation positively related to the satisfaction level of customers of microfinance banks?

Structure of the thesis

The thesis is divided into six chapters. Chapter 1 introduces the topic of the study, development of microfinance banks in Nigeria, the motivation for study, the study objectives and research questions. Chapter 2 briefly summarizes the theoretical foundation and literature review of the concepts of innovation, service innovation, process innovation, marketing innovation and customer satisfaction. Chapter 3 focused on methodology where methodological considerations, method of data collection, the sampling procedure, the execution of the survey, the hypotheses and the conceptual framework are discussed. The results of the research are presented in chapter 4. Chapter 5 presents and explains the findings from the analyses conducted, contributions of the study, recommendations, limitations and directions for future research. Chapter 6 presents the conclusion of the study.

2 Theoretical Framework

Theories give insight into the conceptual framework, guide the study and enable researchers to give meaning to the findings of the research (Kombo & Tromp, 2006). This chapter presents an overview of the theories used in this study.

Resource-Based Theory

The resource-based theory (RBT) provide the lens for understanding a firm's competitive advantage and performance (e.g. Vorhies & Morgan, 2005). Internal resources and capabilities explain the profit and value of the firm (Wernerfelt, 1984; Barney, 1991). The RBT suggests that differences in performance is as a result of a firm having or controlling valuable resources that competitors do not possess (Wernerfelt, 1984). Specifically, RBT suggests that competitive advantage is achieved only when resources are valuable, rare, imperfectly imitable, and the firm's organization (VRIO) allows the efficient use of the resources (Barney & Hesterly, 2012). Several studies have used RBT as a theoretical lens in showing the competitive value of innovation strategies in relation to business performance (Cheng et al., 2014; Terziovski, 2010; Wang, 2014). Technological facilities and trained workforce are important resources that support innovative activities. Capabilities involve the use of information, tangible or intangible processes to improve the effectiveness and efficiency of other resources possessed by the firm (Makadok, 2001).

From RBT perspective, a firm can use innovation capabilities to exploit market-based resources, such as building brands, relationships, and knowledge to deliver products and services that exceed customer expectations. Past studies suggest that there is a connection between different resources, capabilities and customer value (e.g., Orr et al., 2011). Firms can use existing resources to expand into new markets or/and expand into a new market to develop new resources that can benefit both new and existing markets (Barney & Hesterly, 2012). The optimization of resources during the process of innovation may increase the company's ability to create new products, services, process and grow existing and new markets. In the light of Resource-Based Theory (RBT), firms can use their resources to deliver innovative products and services and enhance customer satisfaction. A bundle of well-managed resources can enhance a firm service, process and marketing innovations initiatives and customer satisfaction level. Thus, creating economic value for divergent stakeholders. Furthermore, firms can use their resources and capabilities to provide innovative products and services that meet customers' needs and thus improve their level of satisfaction.

Expectancy disconfirmation Theory

Expectancy disconfirmation theory draws on the cognitive dissonance theory, which was developed by Leon Festinger in 1957, to understand how dissonance between a person's cognition and reality affects his/her subsequent cognition and/or behaviour (Bhattacherjee & Premkumar, 2004). Expectancy disconfirmation amongst other theories has been used to explain how customers form satisfaction judgements (Athiyaman, 2004). The basic assumption of the EDT model is that customers form expectation before buying or using the product or service. These expectations are used as a standard in the evaluation/judgment of the actual performance perception. Customer satisfaction develops after comparing perceived performance and expectations before buying or using the product or service. The difference between expectations and perceived performance is known as disconfirmation of expectation or desire (Spreng & Jr, 2003; Bhattacherjee & Premkumar, 2004). If a customer's like the quality of a product or service after using it, positive disconfirmation will occur. Similarly, if customers perceive that the performance of the product is below their expectation about the quality of a product or service, negative disconfirmation will occur. Positive disconfirmation leads to customer satisfaction and negative disconfirmation implies that customers are not satisfied with the offering (Yi, 1990).

EDT has been used as lens to explore customer satisfaction in various field of study, for instance psychology (Gotlieb et al., 1994), marketing (Oliver, 1980; Santos & Boote, 2003; Diehl & Poynor, 2010), tourism (Fallon & Schofield, 2003), information technology (Hsu et al., 2006; Khalifa & Liu, 2002), repurchase behavior and retention (e.g. Hsu et al., 2006), and the airline industry (Chen, 2008). The initial expectation of such customers consists of feedback from customers about their expectations. This is vital to enhance service, process and marketing innovations and to meet customers' requirements. Additionally, adopting an innovative approach to service, process and marketing can improve customer's experience after using products or services. EDT further gives a better understanding of how customers become satisfied with an introduction of a new product or service.

Equity theory

The equity theory suggests that the relationship between outcomes and inputs should be the same across participants in an exchange. Based on Equity Theory, customers are satisfied when they perceive their output/input ratio as being fair (Swan & Oliver, 1989) and equal to that of the exchange person (Athiyaman, 2004). Whether a person feels fairly treated or not may depend on factors such as the price paid, the benefits received, the time and effort spent during the transaction and the experience of past transactions (Woodruff, et al.,1983). Equity models are derived from the Equity Theory are based on the assumptions of input-output ratio, which plays an important role in satisfaction (Oliver & Swan, 1989). Equity models of customer satisfaction seem to be different from the other models, in that satisfaction is assessed by comparing it to other parties (people) in an exchange. In the literature, the importance of equity theory in understanding satisfaction issues in related areas or disciplines is well documented. Fairness was found to have a significant influence on user satisfaction with the IS function (e.g Janssen 2001).

In the light of equity theory, firms can use innovation capability to develop products and services that are affordable and surpass customers' expectations in terms of quality and functionality. Furthermore, marketing innovations can make the products and services assessable and readily available with minimal search efforts. Arguably, paying attention to customers expectation in terms of product quality, affordability and availability can enhance customer satisfaction and business performance. Thus, both the customers and the firm are happy.

The Concept of Innovation

In today's complex and dynamic business environment, it has become important for firms regardless of size and industry to manage innovation (Chesbrough, 2006).

Innovation involves the introduction of new or significantly improved goods or services, or a process, a new marketing method, or a new organisational method in workplace or external relations (OECD, 2005). Innovation is an important factor that enables companies to be successful in a competitive environment (Wang, Zhao & Voss, 2016). Innovation is considered as the main factor to increase productivity (Mainardes, et al., 2016). Nwachukwu et al. (2018) assert that innovation is a holistic approach to renewing and increasing a firm's range of products, services and markets by using new methods or changing existing methods. Innovation means creating a viable new product or service which represent adopting new ideas (Fagerberg, 2005; Keeley et al., 2013).

Szirmai, Naudé and Goedhuys (2011) opine that innovation is not limited to the development of new products, services, new sources of supply and new processes but also involves taking advantage of new markets. Innovation is a multi-dimensional concept comprising various types such as product, process, service, marketing among others. Szirmai et al. (2011) pointed out that innovation refers to first introduction by the innovator and the spread of innovation to other areas of the economy. Arguably, innovation is important to grow and sustain business performance, though, it is a very difficult process to manage.

In their study of services and manufacturing companies, Keeley et al. (2013) observed that 95% of all innovation efforts fail to achieve desired results. Many factors are responsible for the success or failure of innovation efforts. Several scholars argue that innovation is the end results of learning and knowledge creation processes that are needed by companies to remain competitive (e.g. Dohse, 2007; Asheim & Coenen, 2005).

Laursen and Salter, (2006) found that creating new ideas has a positive impact on organizational performance. Firms invest a lot of money to product and process innovation activities which has a positive contribution on organisational performance. Stocka et al. (2001) observed that huge investment in product and process innovation contributes positively to business performance.

Empirically, Namusonge (2016) investigated the relationship between innovation and the performance of companies listed on the Nigerian Stock Exchange. It was observed that innovation has a negative relationship with both returns on assets and returns on equity.

In their study of strategy formulation process and innovation performance of microfinance banks in Nigeria, Nwachukwu et al. (2018) found that strategy formulation process has a positive effect on process innovation performance, product innovation performance and marketing innovation performance. They concluded that a systematic strategy formulation process is important to achieve process, product and marketing innovation performances.

Empirically, Daragahi (2017) examined the relationship between innovation and customer satisfaction in health products manufacturing companies in Tehran Province. Using the survey method and a sample size of 400 respondents, it was observed that innovation (open or closed) has a positive effect on customer satisfaction (the quality of a product, satisfaction with sales, satisfaction with after-sales services, and the brand of product). He concluded that as the companies adopt more innovations, the level of customer satisfaction is enhanced.

In Pakistan, Naveed, Akhtar, Cheema (2012) found a strong significant association between innovation, customer satisfaction and brand loyalty in mobile telecommunication firms. Using the survey method, Nemati, Khan and Iftikhar (2010) explored the relationship between innovation and customer satisfaction and brand loyalty in Pakistan. Primary data were collected from 300 mobile phones users Rawalpindi and Islamabad. The results show that innovation has an impact on customer satisfaction and brand loyalty. Arguably, firms that are innovative will experience higher customer satisfaction, brand loyalty and more customer patronage.

Service Innovation

To remain competitive in a highly competitive market, firms need to develop new solutions in the customer interface, new distribution channel, apply new technology in the service process, and adopt a new approach to organize and manage services. Arguably, a firm that delivers innovative products to meet the needs of its customers will have loyal customers and enjoy a competitive edge. The key to remaining competitive and surviving in the market is the firm's ability to provide products tailored to meet the needs of its customers.

According to Schumpeter (2002), Service innovation is a service product or service process that depend on some technology or systematic method that provide benefit to its developer. Innovation in service processes is new or improved methods of designing and producing services in service firms and industries. Service innovation emphasizes non-technological areas rather than the novelty of the technology itself. Arguably, the level of customer satisfaction depends on the implementation of successful service innovation.

Despite the importance of service innovation to customer satisfaction and business performance, the literature showed scanty studies in service innovation (Küpper, 2001; Hauser et al., 2006; Jaw et al., 2010), manufacturing has continued to dominate innovation studies (Jaw et al., 2010; McDermott & Prajogo, 2012). Some researchers have suggested further studies into the area of innovation in services (e.g. Ettlie & Rosenthal, 2012; Ostrom et al., 2010). Although, authors have explored different aspects of service innovation (Carlborg et al., 2014; Yusif, 2012; Flint et al., 2005; Oke, 2007), there is lack of attention on the service innovation measurement, particularly from the customers perspective (Janssen, 2011). It is important to give attention to the first three years of introducing innovations into the marketplace. Darroch and McNaughton, (2002) noted that as trends, customer needs and perceptions keep changing, firms need to adopt a culture of innovation to meet customer needs. Aligning with the submission of Darroch and McNaughton, (2002), Mahmoud et al. (2017) pointed out that innovation improves the ability of firms to meet the need of customers and thus satisfy them.

Using statistics education, Fan, Chen and Miao (2018), investigated the impact of leisure farms' service innovation on customer satisfaction. The study used a questionnaire to collect data from 330 employees of Qianjiangyue Leisure Farm. The finding from the study shows that service innovation is associated with customer satisfaction.

In their study of service innovation and customer satisfaction in telecommunication firms in Vietnam, Ta and Yang (2018) obtained data from 402 telecom service users to assess the impact of interactive and supportive dimensions of service innovations, on customer satisfaction. It was observed that the two dimensions of service innovation, interaction and support, are important predictors of customer satisfaction and customer retention. Shang-Ping, Chuan-Chung and Pi-Yun (2017) examined the innovation activities in cultural parks in Taiwan. This study used the survey method to elicit information about service innovation and customer satisfaction. They concluded that service innovation is significantly and positively related to customer satisfaction dimensions of product price, and perceived value, whereas a partial positive association exist between service innovation and service efficiency dimension of customer satisfaction. The results further show that customer characteristics moderates the relationship between service innovation and customer satisfaction.

Empirically, Mahmoud et al. (2017) examined service innovation and customer satisfaction in mobile telecommunication firms in Ghana. It was observed that service innovation in creating customer value has a positive effect on customer satisfaction. They concluded that innovative services that meet customers' functional, social and emotional value expectations will enhance customer satisfaction.

Bellingkrodt and Wallenburg (2015) used an online survey to collect data from 778 service providers. Resultant data were analysed using Structural equation modelling. They concluded that close customer relations in terms of innovativeness lead to a higher level of customer satisfaction. Empirically, Aas and Pedersen, (2011) observed that manufacturing firms in Norway focusing on service innovation experience better financial performance than firms not focusing on service innovation. Whereas in firms in the service industries, focusing on service innovation do not have better financial results compared to firms not focusing on service innovation.

It is evident in the literature that service innovation enhances customer satisfaction level and performance. I argue that microfinance banks in Nigeria that adopt service innovations will have satisfied customers. The literature review on service innovation suggests that a contextual gap exists which this study attempt to fill. Prior studies focused on telecommunication firms, leisure farm, cultural parks and logistics service providers. Contextually, these studies are different from the current research.

Process Innovation

O'Sullivan and Dooley (2009) assert that a process involves linking a set of activities designed to change input into output which is offered to the consumer. Bergfors and Larsson (2009) note that process innovation is driven by a firm's internal production objectives. Arguably, process innovation tends to enhance the operational effectiveness and efficiency of a firm. Omachonu and Einspruch, (2010) argue that process innovation involves implementing improved production or a new delivery method using new equipment, techniques and software. Polder et al. (2010), contend that process innovation aims to improve supporting activities such as computing, accounting, purchasing and maintenance. Arguably, process innovation involves several aspects of a business day to day functions such as human resource, manufacturing, commercial activities and management, technical design and commercial activities. Some scholars argue that process innovation is connected to technological innovations in service firms (He & Wong, 2004; Atandi & Bwisa, 2013).

Noorani (2014) pointed out that process innovation allows firms to deliver less expensive, reliable, quality products that add value and meet customer's needs. Consequently, sustained customer loyalty, patronage will, in turn, lead to sales growth, increase market share, image improvement and better business performance. Firms can use process innovations to compete in the mature market by manufacturing and delivering products to customers in higher values, in a more flexible way, faster and cheaper (Klingenberg et al., 2013; Prajogo, 2016). Additionally, firms can protect their markets advantage (Porter, 1985), by using process innovations as a strategy to increase entry barriers for competitors.

Companies can use process innovation to enhance product quality (Sipos & Ionescu, 2015; Gunday et al., 2011), reduce cost efficiency (Fonseca, 2014), and reduce unit costs of delivery. Habidin, Khaidir, Shazali, Ali and Jamaludin (2015) identified service process innovation, incremental process innovation and radical process innovation categories of process innovation. O'Sullivan and Dooley (2009) assert that service process innovation is a method of improvement that enables firms to meet their goals. Reichstein and Salter (2006) opine that incremental process innovation focuses on making changes or improvements in firms' internal process without affecting the industry.

Radical process innovation involves major improvements or new changes to the firms' elements of the internal process that have effect on the industry (Kim et al., 2012). Process innovation is an important factor for achieving competitive advantage (Oke et al., 2013), organisation growth (Massa & Testa, 2008; Morone & Testa, 2008) and performance (Tether, 2003; Van Auken, 2008; Varis & Littunen, 2010; Ar & Baki, 2011; Olughor, 2015).

Soi (2016) explored the relationship between innovation strategies and performance of telecoms firms in Kenya. It was observed that process innovation has a linear relationship with organisational performance. Empirically, Raja and Wei (2014) found that process innovation has a strong effect on customer results and innovation results. Letangule and Letting (2012) examined the impact of market innovation on performance of telecommunication companies in Kenya. They concluded that telecommunication firm that optimize process innovation have better profitability.

It is evident in the literature that there is lack of studies on process innovations and customer satisfaction. Consequently, the impact of process innovation on customer satisfaction is unclear and need to be explored. This study attempts to fill this gap in the literature. Nonetheless, process innovation will have a positive impact on customer satisfaction.

Marketing Innovation

To improve competitive advantage, firms can use marketing innovations to meet customer needs, develop new markets, or position their product in the market. Zuńiga-Collazos and Castillo-Palacio (2016) suggest that innovative marketing strategies can improve customer satisfaction and the image of companýs products and services. Marketing innovation activities can help firms to penetrate and satisfy new markets (OECD & Eurostat, 2005; Schubert, 2010; Varis & Littunen, 2010). Arguably, firms can use marketing innovation activities to satisfy new and existing customers and to enhance the image of companýs products and services. Besides, firms that adopt innovative approach to marketing may have better understanding of both customer needs and are able to create a good image of products and services offered. A firm level of engagement in marketing innovation depend on the activities of firm and the industry they operate. Nonetheless, firms in the service sector are more likely to use marketing innovation than those in the manufacturing sector. Wang (2015) notes that marketing innovation studies focus on three main streams; marketing innovation as a source of competitive advantages, relationships between marketing innovations and other innovation dimensions and the characteristics of firms that use marketing innovations. Marketing insight (Linoff, 2004; Roberts & Eisenhardt, 2003) and marketing imagination (Andrews & Smith, 1996) are two key antecedents that allows a firm to develop and implement marketing innovation. To change these internal antecedents, require substantial effort and time because they are highly embedded in the firm. More so, firms may need to change their structure, top management or capital structure to alter marketing insight and marketing imagination. Well managed marketing innovation initiative can contribute to better business result (Naidoo, 2010; Desouza et al., 2009). Market based perspective suggests that intensity of firm's innovation activities is contingent on market conditions (Trott, 2012). Empirically, Simiyu (2013) observed that commercial banks use strong brands, appropriate pricing, customer retention and satisfaction as part of their market innovation strategies.

Marketing innovations are important drivers of small firm's profitability (Soltani, Azadi, Hosseini, Witlox, & Passel, 2015). Several prior studies affirm the connection between marketing innovation and business performance in different contexts (Otero-Neira et al., 2009; Olughor, 2015), competitive advantage (Naidoo, 2012). However, in the study of cars supplier industry in Turkey, Atalay et al. (2013) concluded that there is no significant and positive relationship between firm performance and market innovation. Arguably, the relationship between marketing innovation and performance is mix and inconclusive.

Empirically, Zuñiga-Collazos and Castillo-Palacio (2016) examined marketing innovation in companies in the tourism sector in Colombia. Using a sample of 364 firms, they concluded that innovative marketing strategies enhances customer satisfaction and the image of company's products and services in tourist companies in Colombia.

Using a survey administered to 538 respondents in Taiwan, Lee et al. (2015) explored the impact of attitude toward using mobile app services on customer satisfaction. The results suggest that usage attitude of this marketing innovation is the major predictor of customer satisfaction. Senguo and Kilango (2015) found that marketing innovation improve customer satisfaction in Vodacom in Tanzania. They concluded that marketing innovation was used by telecommunication firms in Tanzania to enhance performance and sustain competitive edge.

Empirically, Raja and Wei's (2014) observed that marketing innovation had a strong impact on a company's society results and consumer results. They concluded that marketing innovations can be used to create a better image of the firm to customers and the society. Contextually, this study seeks to fill the gap in the literature regarding marketing innovations and customer satisfaction. I argue that firms need to adopt marketing innovation to deliver high quality products to their customers. Thus, marketing innovations will contribute positively to customer satisfaction level in microfinance banks in Nigeria.

The Concept of Customer Satisfaction

Firms are faced with both threats and opportunities that arise from consumer trends (Aaker & McLoughlin, 2010). The growth of firms depends to a large extent on the type of products and services offered to customers. The customers prefer quality, less expensive and easy access to products and services. Firms exist to satisfy their customers, employees and other important stakeholders (Ezzi & Jarboui, 2016). Past studies in the field of innovation suggest that customer should be involved to create their own innovations (Von Hippel & Katz 2002; Harden & Heyman, 2009; Prahald & Ramaswamy, 2004). Through customer collaboration and information sharing companies can get better insights on how to meet customer requirements, provide better products and improve performance (Prahalad & Ramaswamy, 2004), creates a successful customer experience (Vargo & Lusch, 2004). The customers are important source of knowledge and play vital role in the process of innovation.

Customer satisfaction is used as a measure of how company products and services meet or exceed customer expectation. A firm can measure its customer satisfaction index by comparing the total satisfied customers against dissatisfied customers. Customer satisfaction connotes the difference between customer expectation and the product performance in term of service/product quality (Papaioannou et al., 2006). Thus, satisfied customers do not bother about the price of the product and are loyal to the firm. Measuring customer satisfaction is important for firms because it enable them to know how well they are meeting the needs of their customers (Hill, Roche & Allen, 2007). Additionally, measuring customer satisfaction give important and objective feedback about customer expectations and priorities (Mortara, 2009).

Customer satisfaction is one of the most important consequences pertaining to different trading organizations. Galloway et al. (2017) opine that there is a link between customer satisfaction, philosophy of customer-orientation and sustainable improvement. Arguably, if customers are satisfied with how a firm behaves and provides services, they will continue to patronize them. Customers want to get value for their money and time, so they expect the company to provide quality products or services (Iberahim et al. 2016).

Customers show satisfaction by indicating whether a product, trademark or store meet their expectations (Zain & Saidu, 2016). A loyal customer always buys a product or service from a particular company (Angelova & Zekiri, 2011). Consequently, the firm will experience increased sales, profitability and better business performance. Customer satisfaction has been measured using perceived product quality (Grigoro udis & Spyridaki, 2003), and customer loyalty or any other variables, which influence business results (Erjavec, 2015). In this study, a single dimensional scale which sought answers in term of perceived product quality and customer loyalty is used.

3 Methodology

The goal of this section is to present the method used in this study. The sources of data, methodological consideration, sample, sampling size, conceptual framework among others are presented.

Methodological consideration

This study draws on positivism research philosophy which suggest that "causes probably determine the effect or outcome " (Creswell, 2003, p.7). In this study, hypotheses formulated based on theoretical underpinnings and findings from literature were tested through empirical research. This study which adopts descriptive and quantitative research approach is guided by positivism research philosophy. The current study focuses on empirical testing of hypotheses that was developed to objectively predict observed phenomena. The benefit of this research philosophy is that it allows a researcher to test for statistical significance from obtained samples.

Research design

Sekaran and Bougie (2010) suggest that research design focus on important issues such as type of investigation, purpose of study, location of study, extent of researcher interference, time horizon and the unit of analysis that relate to a research project. A research design is the plan for collecting, measuring, and analyzing data. This study adopts a descriptive and quantitative correlational approach using a cross sectional data. The design is easy to use, less expensive when using small surveys and data can use by researchers investigating a phenomenon for the first time. Both cross-sectional survey and correlational approaches are considered appropriate for this study because researchers can capture a population's characteristics and test hypothesis quantitatively. However, correlational research does not determine causation (Talbot, 1995; Sousa, Driessnack, & Mendes, 2007). An empirical relationship between relevant variables must be proposed before causality can be explored (Polit & Beck, 2012). Several researchers used this design to test hypotheses and draw conclusions (e.g. Tan & Litschert, 1994). This study used primary data to test formulated hypotheses.

Sources of data

In this study, primary and secondary data were employed. First, secondary data is analysed based on scientific journals, textbooks and web publications of the sample microfinance bank. Primary data were obtained from questionnaires designed and administered to selected customers of ABCD Microfinance Bank Limited. Responses from questionnaires were complemented with other secondary data sources for better triangulation purposes. This enhances trustworthiness of the results in this study (e.g., Yin, 2003).

Quantitative research approach

To investigate the relationship between types of innovations and customer satisfaction in ABCD Microfinance Bank Limited, an empirical study was done within the scope of this thesis. To achieve the study objectives, primary data is collected and analysed using the quantitative research approach. In light of the research topic described here, this study developed and tested three hypotheses, make both theoretical and practical recommendations for action. Quantitative research is used to test theories by investigating the relationship among variables. The correlational design uses measure the degree or association (or relationship) between two or more variables (Creswell, 2012).

Quantitative research must meet the common quality criteria of reliability and validity. Sekaran and Bougie (2010) define reliability as a test of how consistently a measuring instrument measures the chosen concept. It is concerned with stability and consistency of the measurement. Concerning internal consistency, this is usually tested using split-half reliability, Cronbach´s alpha or Kuder-Richardson's (Sekaran & Bougie, 2010). Cronbach’s alpha is widely used in literature to test reliability (Bryman & Bell, 2015). A Cronbach’s alpha coefficient of 0.7 and above is adequate to confirm the reliability of research instruments (Cooper & Schindler, 2006). In this study, Cronbach’s alpha is used to test reliability of the research instrument. Validity is a test of how well the instrument that is developed measures the concept it is intended to measure (Sekaran & Bougie, 2010). To test for content validity, a comprehensive review of literature was conducted by identifying the necessary items to measure the variables of the study as shown in the conceptual model. The use of a panel of experts to review the test specifications and the selection of the item can improve content validity (Bailey, 1994). The questionnaire was subjected to supervisors', academic and non academic experts' review in order to ascertain face validity, comprehensiveness and coherency (Saunders, Lewis, & Thornhill, 2007). Exploratory factor analysis was used to check the validity of the constructs.

Sample size and sampling

To test the hypotheses, the target population (Bryman & Bell, 2015) was defined as the customers of ABCD Microfinance Bank Limited in Benin City Nigeria in 2018. It is often not possible to obtain data from all the relevant members of a population (Baines & Chansarkar, 2002). Researchers are often faced with the problem of selecting the appropriate sample from the population of study. The sample size for this study is 203 customers selected based on their level of education, access to internet and email. Most customers of microfinance banks are not literate and may not be able to provide reliable information on the subject. The respondents were randomly selected from the list of customers of the sample bank's head office in Benin City. Sampling frame of at least 30 or more cases per group is adequate for correlational studies (Bryman (2004). Thus, sampling size of 203 customers is adequate for a correlational study. This study adopts the combination of purposive and simple random sampling methods. Purposive sampling method is useful to select participant who can give reliable information to achieve the objectives of the study (Kumar, 1996; Leedy & Ormrod, 2005). Purposive sampling method is less costly and saves time.

Data collection instruments

The surveys methods are used for collecting large data from respondents (McDaniel, Lamb, & Hair, 2008) either by means of interview surveys or self-completion questionnaires. The study used a set of questionnaires and secondary data obtained from the website of sample microfinance bank. The survey methods are faster, cheaper and allows consistent instruments, which reduces bias. Respondents were allowed time to fill-in the questionnaires at their conveniences while they remain anonymous. The questionnaire was written in simple English language which eliminates translation biases. A set of questions was designed to collect information on study items covering firm respondents' characteristics, service innovation, process innovation, marketing innovation and customer satisfaction. A web-based survey was combined with sending emails to respondents to participate in the study. I used “esurvey creator’’ online platform to obtain data from participants between last week of September 2018 and October 2018. Structured questions were used to elicit information from the respondents.

The instrument was designed in two main parts; Part A was used to collected data on respondents’ profile. Part B of the questionnaire collected data on service innovation, process innovation, marketing innovation and customer satisfaction. To simplify processing of the responses, a five-point scale was used, from 1 (strongly disagree) to 5 (strongly agree) was employed to measure different types of innovations. Four questions were used to collect data on service innovation, which included: (i) my bank improves the reliability of its service (ii) my bank strives to keep it services above competitors (iii) my bank adopt speed in service delivery (iv) My bank use advance technology to deliver service.

Four questions were used to collect data on process innovation, which included: (i) my bank reduces the time it takes to develop new products (ii) my bank is flexible in providing products/service that meet customers’ demands (iii) my bank develops in-house solutions to improve its processes (iv) my bank actively works to adjust its business processes.

For marketing innovation, Five questions were used to elicit information, which included: (i) my bank constantly looks for new ways to deliver its products to customers (ii) my bank use social media to create awareness about its products (iii) my bank implements new marketing methods to deliver its products (iv) my bank make improvement in terms of customer relationship (v) my bank evaluates and implement new ideas from customers/suppliers

The questions on customer satisfaction requests a choice, among five alternatives, from 1 (very dissatisfied) to 5 (very satisfied). Four questions were used to measure customer satisfaction, which included: (i) value added services e.g electronic banking services (ii) customer relationship i.e marketing communication, customer service (iii) flexibility in delivery products/services (iv) the time it takes for customers to get service. The variables in this study were measured based on the customers’ perceptions.

Operationalisation of variables

Measurable constructs were used to operationalize service innovation, process innovation, marketing innovation and customer satisfaction. Service innovation, process innovation, marketing innovation are the independent variables whereas customer satisfaction is the dependent variable. I used appropriate statistical techniques to assess, test formulated hypotheses and model the relationships between the variables.

Table 3*:* Operationalization of research variables

Objectives	Variable	Scale	Research approach	Test of analysis	Type of data analysis
to find out if service innovation influence customer satisfaction	Independent Service innovation	ordinal	Quantitative	β values R^2 F-value P-value	Descriptive and inferential
to determine if process innovation have an impact on customer satisfaction	Independent Process innovation	ordinal	Quantitative	β values R^2 F-value P-value	Descriptive and inferential
to determine if marketing innovation is positively related to customer satisfaction.	Independent Marketing innovation	ordinal	Quantitative	β values R^2 F-value P-value	Descriptive and inferential
Customer satisfaction	Dependent	ordinal	Quantitative	β values R^2 F-value P-value	Descriptive and inferential

Source: Own, 2018

3.1 Variables and relations considered within the thesis

Three hypotheses were formulated and tested based on literature review.

H1: Service innovation has a significant and positive relationship with customer satisfaction.

H2: Process innovation has a significant and positive association with customer satisfaction.

H3: Marketing innovation is positively and significantly related to customer satisfaction.

3.2 Conceptual framework

The conceptual framework presented the perceived relationship between the variables as formulated for testing. According to the model, customer satisfaction depend on different types of innovations namely service innovation, process innovation and marketing innovation. The Model in figure 3, show that service innovation, process innovation and marketing innovation has direct relationships with customer satisfaction. The model presented in figure 3, serves as a guide and gives direction for this study.

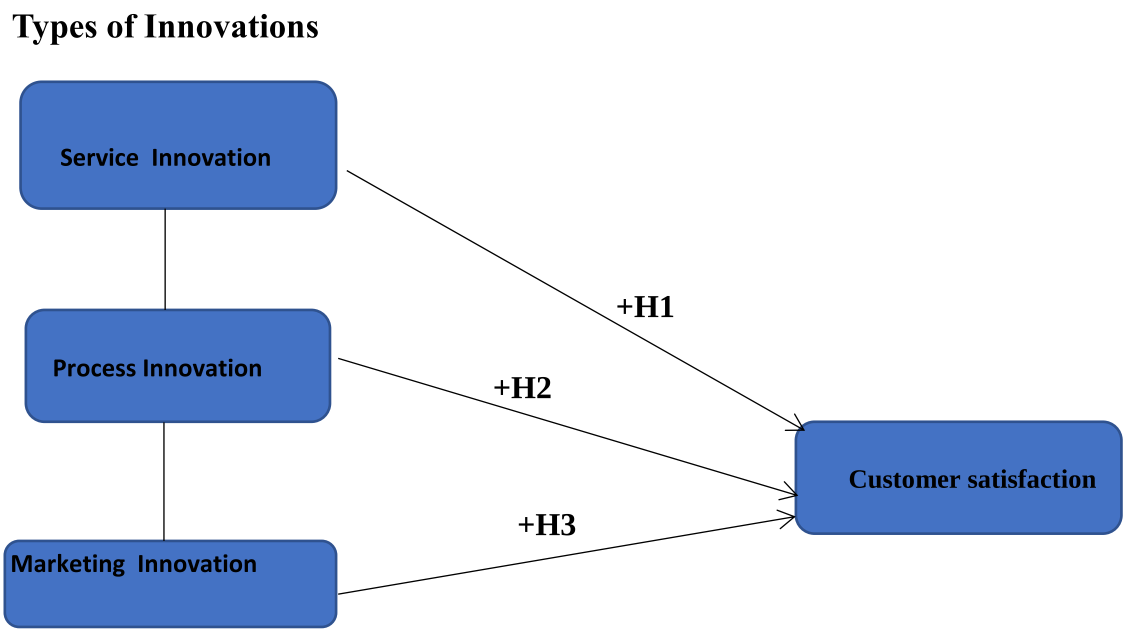

Figure 3: Conceptual Model of Innovation Types and Customer Satisfaction

Source: Own, 2018.

Model specification

The regression model for this study takes the form:

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Customer satisfaction= β_0 + β_1 *(service innovation)* + β_2 *(process innovation)* + β_3 *(marketing innovation)* + ε

CUSSAT= $\beta_0 + \beta_1 X_1 + \varepsilon$ ……………. *(1) Service Innovation*

CUSSAT = $\beta_0 + \beta_2 X_2 + \varepsilon$……. *(2) Process Innovation*

CUSSAT = $\beta_0 + \beta_3 X_3 + \varepsilon$…………………………. *(3) Marketing Innovation*

Where Y = *CUSSAT* = dependent variable (Customer satisfaction)

β0 = Constant or intercept which is the value of dependent variable when all the independent variables are zero.

β1-n = Regression Coefficient for each independent variable.

ε = error term.

X_1- X_3 = Independent variable indicators representing: service innovation, process innovation and marketing innovation constructs.

Data analysis and presentation

Data is analysed using both descriptive and inferential statistics. Descriptive statistics and frequencies were estimated for all variables and information presented in form of frequency tables and charts. Descriptive statistics is used to present and describe the distribution of scores using a few indices (Saunders et al., 2007). Data frequency distribution tables and charts were used in describing and explaining the situation as it is in the firms. Fundamental statistical measures (averages, frequencies, percentages) were used to analyse respondents' profile.

Regression analysis is the mostly used statistical techniques in strategy research (Wiersema & Bowen, 2009). Univariate, multiple regression and correlation analysis were used as the statistical tool to analyse the relationship and strength of association between the variables. To test the hypotheses, both regression analysis and Pearson correlation was conducted using customer satisfaction as the dependent variable and types of innovations as predicting variables. Regression analysis beta (β) equivalent to the Karl Pearson Correlation Coefficient (r) (Sekaran, 2003) was used to determine the effect of the independent variables on the dependent variable. The hypotheses were tested at 0.05 = 5% significance level, with 95% confidence. Statistical package for social sciences (SPSS 25) was used for data analyses.

4 Research results

The chapter presents the results of the study performed to test the conceptual model and research hypotheses. Also presented are response rate, reliability tests, information of the respondents and the descriptive analyses of the study variables

Response Rate

The response rate is calculated by dividing the number of questionnaires returned by the sample size and multiply the results by one hundred (Baruch & Holtom, 2008; De Vaus, 2002). The result of the response rate is presented in table 4.

Table 4: Study response rate

Questionnaires issued	Returned questionnaires	%
203	**112**	**55.2**

Source: Own, 2018

The questionnaire was sent to 203 respondents as indicated in the methodology chapter. 112 respondents completed and returned the questionnaires which account for 55.2% response rate. A feedback rate of 55.2% is adequate for data analysis and drawing conclusions (Mugenda & Mugenda 2009; Bryman & Bell, 2015). Thus, the response rate is high enough to warrant the analysis of the collected data.

Reliability analysis

Sekaran and Bougie (2010) suggest that Cronbach alpha shows how well the items in a set in the questionnaire are positively correlated to one another. Cronbach alpha was used to assess the internal reliability of the items in the questionnaire. The decision matrix used for the assessment is shown in table 5.

Table 5: Cronbach alpha decision matrix.

Cronbach alpha coefficient	Strength of association
Less than 0.60	Poor
0.60 and less than 0.70	Moderate
0.70 and less than 0.80	Good
0.80 and less than 0.90	Very good
Greater than 0.90	Excellent

Source: Adapted from Zikmund, Babin, Carr, & Griffin (2013).

Cronbach alpha values range between 0 and 1.0. A value of 1.0 represents perfect reliability. Acceptable Cronbach alpha value should not be below 0.70 (Zikmund, Babin, Carr & Griffin, 2013). The results of reliability statistic for each variable are presented in table 6.

Table 6: Reliability statistic

Variable	No. of Items	Cronbach's Alpha	Decision
Process Innovation	4	0.883	Accepted
Service Innovation	4	0.818	Accepted
Marketing Innovation	5	0.745	Aceepted
Customer Satisfaction	4	0.796	Accepted
All items	17	0.930	Accepted

Source: Own, 2018

The Cronbach alpha result for each variable is higher than the lower limit of acceptability of 0.70. process innovation had α = 0.883, service innovation had α = 0.818, marketing innovation had α = 0.745, customer satisfaction had α = 0.796 and the overall scale α = 0.930. All the Cronbach alpha results are greater than 0.70, which indicate good internal consistency among the items.

Validity

Representatives of the relevant populations and experts' ratings can be used to assess content validity (Burns & Grove, 1993). Yaghmale (2009) suggests that expert raters for content domains of a scale should be between five and ten and this rule was followed in the current study. This study used the expert rating method to analyze the content validity of the instrument. The instrument was subjected to the evaluation of a group of six academic and non-academic experts who provided their comments on the relevance of each item in the questionnaire.

Normality

According to Pallant (2007) violation of the normality assumption should not cause major problems with large sample sizes (> 30 or 40). Field (2009), Elliott and Woodward (2007), submitted that in large samples (> 30 or 40), the sampling distribution tends to be normal, regardless of the shape of the data. Nevertheless, parametric procedures can be used when the data are not normally distributed (Elliott & Woodward, 2007). Hence, the sample size of 112 will have a normal sampling distribution.

4.1 Descriptive statistics on Respondents Profile

The descriptive analysis presents the profile of the respondents which included: gender, age, education and years of banking with sample MFB. This information is important because it allows research to effectively capture respondent's background and expertise which are relevant in discussing research findings of sample size composition. The results of the descriptive statistics pie charts, table of frequencies and percentages.

Gender

The question sought to find out the gender of the respondents. Figure 4 shows that 68% of the respondents are male and 32% are female.

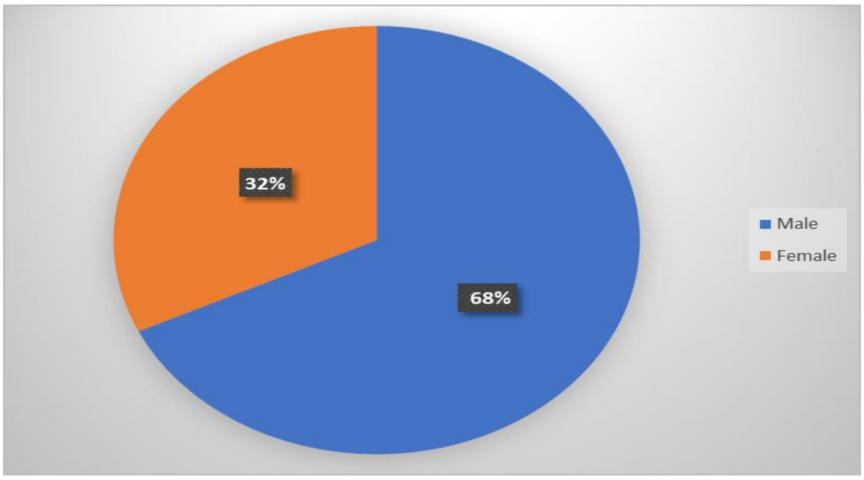

Figure 4: Respondents Gender
Source: Author, 2018

Age of respondents

The question sought to find out the age group of the respondents. The respondents were classified into four groups of age: below 30 years old; 31-40 years old; 41-50 years old; 51 years and above. The results show that 23 % of the respondents are below 30 years old. More than half (75 %) of the respondents were between 31-40 years of age. About (2 %) between 41-50 years old. There are no respondents whose age was 51 years and above. This result suggests that the majority of ABCD microfinance bank customers are active and young people.

Respondents Education

This study was designed to collect information about the respondents' highest qualification. The data collected from the field on respondents' qualifications were analysed and the results are presented using a pie chart in figure 5.

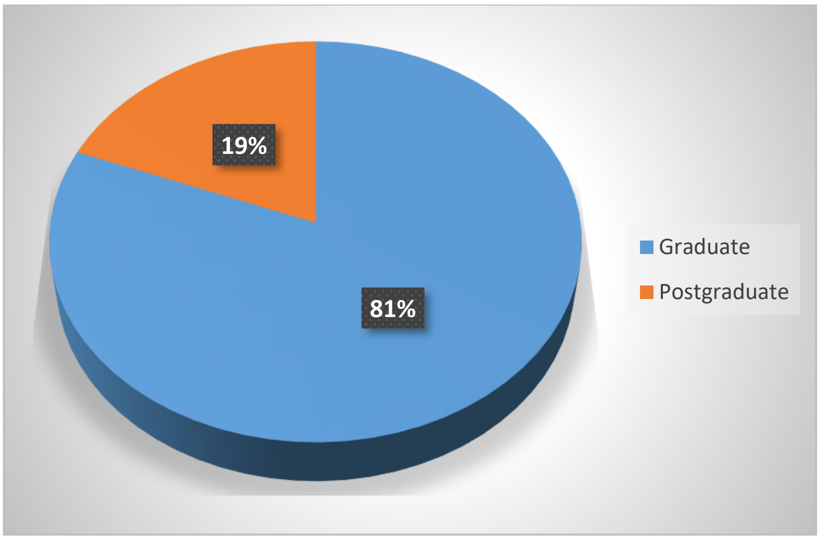

Figure 5: Respondent education

Source: Own, 2018

Figure 5, shows that 81% of respondents are graduate, 19% were postgraduate degree holders, none of the respondents were holders of ND/NCE and ordinary school level certificates. This study suggests that majority of the respondents were college/university graduates. Thus, the responses of the participants in this study were well informed as a result of their educational background.

Respondents years of banking with ABCD microfinance Bank Limited

This study also sought information about the number of years the respondents have been banking with ABCD microfinance bank Limited. The data obtained from the field on this question was subjected to statistical analysis and the results are presented using a pie chart in figure 6.

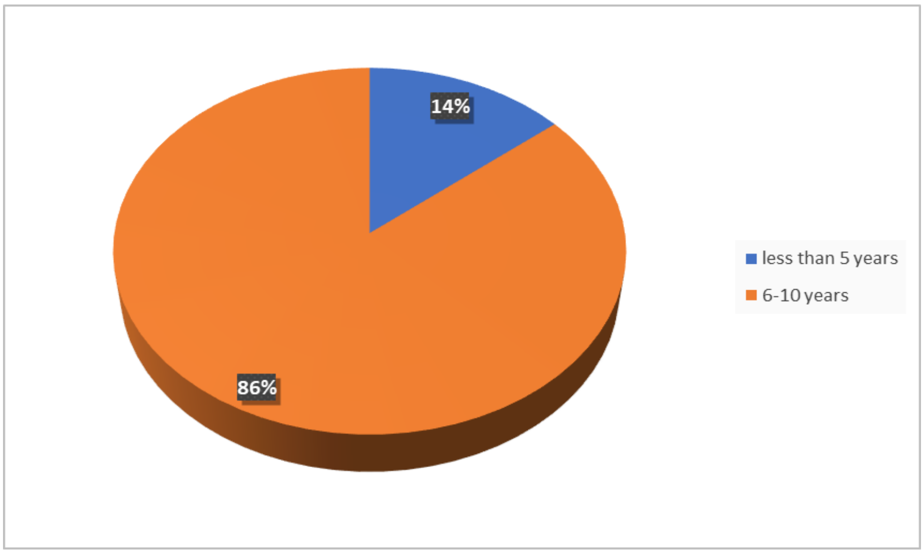

Figure 6: Respondents years of banking with ABCD microfinance Bank Limited

Source: Own, 2018.

The results in figure 6, show that out 112 respondents only 14 % had banked with ABCD MFB Limited for less than five years. Majority of the people who participated in the survey had banked with the MFB between 6 and 10 years, 86 %. Thus, they were in the best position to provide reliable and appropriate answers to the questions. ABCD microfinance bank Limited have a pool of loyal customers. The sample is considered adequate in terms of the distributions of these characteristics.

4.2 Descriptive Statistics on Variables Considered in the Thesis

In this study, customer satisfaction was the dependent variable. Customer satisfaction was assessed using four questions, based on the perceptions of the customers of ABCD microfinance bank Limited. Frequencies and percentages were used for the statistical analysis of the responses.

Table 7. Descriptive Statistics on Customer Satisfaction

	VS		S		N		DS		VDS	
	F	%	F	%	F	%	F	%	F	%
value added services e.g electronic banking services	42	37.5	52	46.4	6	5.4	3	2.7	9	8
customer relationship i.e marketing communication	12	10.7	35	31.3	36	32.1	21	18.8	8	7.1
flexibility in delivery of products/services	25	22.3	55	49.1	18	16.1	10	8.9	4	3.6
the time it takes for customers to get service	29	25.9	56	50	14	12.5	7	6.3	6	5.4

Source: Own, 2018

The results in table 7, shows the respondents opinion on the following statements concerning their level of satisfaction: value added services e.g electronic banking services (37.5 %) are very satisfied, (46.4%) are satisfied, (5.4%) are neutral, (2.7 %) are dissatisfied and (8 %) are very dissatisfied, customer relationship i.e marketing communication (10.7 %) are very satisfied, (31.3%) are satisfied, (32.1%) are neutral, (18.8 %) are dissatisfied and (7.1 %) are very dissatisfied, flexibility in delivery of products/services (22.3 %) are very satisfied, (49.1%) are satisfied, (16.1 %) are neutral, (8.9 %) are dissatisfied and (3.6 %) are very dissatisfied, the time it takes for customers to get service (25.9 %) are very satisfied, (50 %) are satisfied, (12.5 %) are neutral, (6.3 %) are dissatisfied and (5.4 %) are very dissatisfied.

Table 8. Descriptive Statistics on Service Innovation

	SA		A		U		DA		SD	
	F	%	F	%	F	%	F	%	F	%
Bank improves the reliability of its service	39	34.8	49	43.8	14	12.5	5	4.5	5	4.5
Bank strives to keep it services above competitors	31	27.7	50	44.6	14	12.5	9	8	8	7.1
Bank adopt speed in service delivery	39	34.8	48	42.9	18	16.1	3	2.7	4	3.6
Bank use advance technology to deliver service	49	43.8	48	42.9	10	8.9	1	0.9	4	3.6

Source: Own, 2018

The study results in table 8 shows the respondents opinion with the following statements concerning service innovation: my bank improves the reliability of its service (34.8 %) strongly agree, (43.8%) agree, (12.5%) undecided, (4.5 %) disagreed and (4.5 %) strongly disagreed, my bank strives to keep its services above competitors (27.7 %) strongly agree, (44.6 %) agree, (12.5 %) undecided, (8 %) disagreed and (7.1 %) strongly disagreed, my bank adopt speed in service delivery (34.8 %) strongly agree, (42.9 %) agree, (16.1 %) undecided, (2.7 %) disagreed and (3.6 %) strongly disagreed, my bank use advanced technology to deliver service (43.8 %) strongly agree, (42.9 %)

agree, (8.9 %) undecided, (0.9 %) disagreed and (3.6 %) strongly disagreed.

Table 9. Descriptive Statistics on Process Innovation

	SA		A		U		DA		SD	
	F	%	F	%	F	%	F	%	F	%
Bank reduces the time it takes to develop new products	50	44.6	46	41.1	6	5.4	2	1.8	8	7.1
Bank is flexible in meeting customers' demands	60	53.6	36	32.1	6	5.4	4	3.6	6	5.4
Bank develops in-house solutions to improve its processes	40	35.7	38	33.9	20	17.9	7	6.3	7	6.3
Bank actively works to adjust its business processes	63	56.3	35	31.3	5	4.5	1	0.9	8	7.1

Source: Own, 2018

The study results in table 9 shows respondents opinion with the following statements concerning process innovation: my bank reduces the time it takes to develop new products (44.6 %) strongly agree, (41.1%) agree, (5.4 %) undecided, (3.6 %) disagreed and (5.4 %) strongly disagreed, my bank is flexible in meeting customers' demands (53.6 %) strongly agree, (32.1 %) agree, (5.4 %) undecided, (3.6 %) disagreed and (5.4 %) strongly disagreed, my bank develops in-house solutions to improve its processes (35.7 %) strongly agree, (33.9 %) agree, (17.9 %) undecided, (6.3 %) disagreed and (6.3 %) strongly disagreed, my bank actively works to adjust its business processes (56.3%) strongly agree, (31.3 %) agree, (4.5 %) undecided, (0.9 %) disagreed and (7.1 %) strongly disagreed.

Table 10. Descriptive Statistics on Marketing Innovation

	SA		A		U		DA		SD	
	F	%	F	%	F	%	F	%	F	%
Bank constantly looks for new ways to deliver its products	39	34.8	48	42.9	18	16.1	3	2.7	4	3.6
Bank use social media to create awareness about its products	49	43.8	48	42.9	10	8. 9	1	0.9	4	3.6
Bank implements new marketing methods to deliver products	39	34.8	49	43.8	14	12.5	5	4.5	5	4.5
Bank make improvement in the way it relates with customer	12	10.7	35	31.3	36	32.1	21	18.8	8	7.1
Bank evaluates and implement new ideas from customers	31	27.7	50	44.6	14	12.5	9	8	8	7.1

Source: Own, 2018

The study results in table 10 shows the respondents opinion with the following statements concerning marketing innovation: bank constantly looks for new ways to deliver its products (34.8 %) strongly agree, (42.9 %) agree, (16.1%) undecided, (2.7 %) disagreed and (3.6 %) strongly disagreed, bank use social media to create awareness about its products (43.8 %) strongly agree, (42.9 %) agree, (8.9 %)

undecided, (0.9 %) disagreed and (3.6 %) strongly disagreed, bank implements new marketing methods to deliver products (34.8 %) strongly agree, (43.8%) agree, (12.5 %) undecided, (4.5 %) disagreed and (4.5 %) strongly disagreed, bank make improvement in the way it relates with customer (10.7 %) strongly agree, (31.3 %) agree, (32.1 %) undecided, (18.8 %) disagreed and (7.1 %) strongly disagreed, bank evaluates and implement new ideas from customers (27.7%) strongly agree, (44.6%) agree, (12.5 %) undecided, (8 %) disagreed and (7.1%) strongly disagreed.

4.3 Inferential Statistical Analysis

Pearson correlation and regression analysis techniques were used to assess the strength of association and for testing the study hypotheses.

Table 11: Pearson Correlation Results: All Variables.

		CUSAT	PROCINV	SERVINV	MTKINV
Customer Satisfaction	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	112			
	Pearson Correlation	0.642**	1		
Process Innovation	Sig. (2-tailed).	0.000			
	N	112	112		
	Pearson Correlation	0.505**	0.670**	1	
Service Innovation	Sig.(2-tailed).	0.000	0.000		
	N	112	112	112	
	Pearson Correlation	0.643**	0.684**	0.956**	1
Marketing Innovation	Sig. (2-tailed).	0.000	0.000	0.000	
	N	112	112	112	112

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

Source: Own, 2018

Table 11 shows the bivariate linear correlations among the different types of innovation in this study and customer satisfaction with ABD microfinance bank Limited. The results suggest that process innovation has a strong positive and significant relationship with customer satisfaction ($r = 0.642^{**}$, $P = 0.000 < 0.01$). Process innovation has been identified in the literature as an important activity that contributes positively to superior business performance. Similarly, the study also show that the association between service innovation and customer satisfaction is positive and significant ($r = 0.505^{**}$, $P = 0.000 < 0.01$). Furthermore, the correlations results showed that marketing innovation has a strong positive and significant correlation with customer satisfaction of ABCD microfinance bank Limited ($r = 0.643^{**}$, $P = 0.000 <$ 0.01).

Durbin-Watson test

The test was conducted to establish the viability of using all the independent variables for further regression analysis. The result shows a value of 2.189 which is within the acceptable limit. This suggests that there is no autocorrelation in the model. These results indicate good measurement properties of the model.

Regression analysis results

The regression analysis was conducted to examine whether the regression model $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$ where; X_1 – service innovation, X_2 – process innovation, X_3 – marketing innovation (independent variables) can reliably predict customer satisfaction (dependent variable).

Table 12: Analysis of overall variance test (ANOVA) on multiple regression model

Predictors	R	R^2	F-value	Sig.
X_1, X_2, X_3	.804	.646	65.598	.000[b]

Dependent variable (Y): Customer satisfaction

Where X_1, X_2, X_3 are independent variables

Table 12 show that the linear regression F test results for the multiple regression model is statistically significant ($F = 65.598$, $p = 0.000 < 0.001$). Based on the results it can be concluded that the independent variables as a group can reliably predict customer satisfaction. Additionally, $R^2 = .646$ implies that service innovation, process innovation and marketing innovation jointly accounts for 64.6% variations in the customer satisfaction with ABCD microfinance bank Limited. The study used multiple linear regression analysis to determine the linear statistical association between the independent and dependent variables. This means that adopting service, process and marketing innovations initiatives contribute positively to the satisfaction of customers of the microfinance bank.

Relationship between service innovation and customer satisfaction

A univariate linear regression model $Y = \beta 0 + \beta_1 X_1 + \varepsilon$ was used to evaluate the impact of service innovation on customer satisfaction with ABCD microfinance bank Limited. The results in table 13, showed that service innovation explains 25.5% of the total variations in customer satisfaction ($R^2 = 0.255$). The coefficients in the regression model as shown in table 13, implies that service innovation has a positive and significant impact on customer satisfaction ($\beta 1 = 0.517$, $P = 0.000 < 0.001$). This result is consistent with the findings of the bivariate correlations in table 11 which suggest that service innovation and customer satisfaction moves in the same direction. Thus, when service innovation improves, customer satisfaction will also improve significantly.

Table 13: Service Innovation and Customer Satisfaction: Coefficients

Model	Unstandardized Coefficients		Standardardized Coefficients			
	B	Std. Error	Beta	R^2	t	Sig.
Constant	5.026	0.727			6.909	.000
Service Innovation	.517	.084	.505	.255	6.132	.000

a. Dependent variable: Customer satisfaction

i) Test of Hypothesis One:

H1. Service innovation has a significant and positive relationship with customer satisfaction.

This hypothesis intended to test whether there is any relationship between service innovation and customer satisfaction with ABCD microfinance bank Limited. The results from the bivariate correlation in table 11, indicates a significant and positive relationship between service innovation and customer satisfaction (r = 0.505**, P =

0.000 < 0.001). In the same direction, the univariate regression results in table 13, reveal that service innovation has a positive and significant impact on customer satisfaction with ABCD microfinance bank Limited in Nigeria ($\beta 1$= .517, P = 0.000 < 0.001). The findings, therefore, support ***H1***, that Service innovation has a significant and positive relationship with customer satisfaction. This implies that adopting service innovations can enable MFBs to deliver superior and excellent services that satisfy their customers.

The Relationship between Process innovation and customer satisfaction

A univariate linear regression model $Y = \beta 0 + \beta_2 X_2 + \varepsilon$ was used to assess the effect of process innovation on customer satisfaction with ABCD microfinance bank Limited. The results in table 14, showed that process innovation accounts for 41.2% of the total variations in customer satisfaction (R^2= 0.412). The coefficients in the regression model as shown in table 14, implies that process innovation has a positive and significant effect on customer satisfaction ($\beta 1$= 0.567, P = 0.000 < 0.001). This result is in line with the findings of the bivariate correlations in table 11, which implies that as the MFB adopt innovative processes, customer satisfaction improves.

Table 14: Process Innovation and Customer Satisfaction: Coefficients

Model	**Unstandardized Coefficients**		**Standardardized Coefficients**			
	B	Std. Error	Beta	R^2	t	Sig.
Constant	4.925	0.540			9.120	.000
Process Innovation	.567	.065	.642	.412	8.786	.000

a. Dependent variable: Customer satisfaction

ii) Test of Hypothesis Two:

H2. Process innovation has a significant and positive association with customer satisfaction.

This hypothesis intended to test whether there is any relationship between process innovation and customer satisfaction of ABCD microfinance bank Limited. The results from the bivariate correlation in table 11, suggest that a significant and positive relationship exists between process innovation and customer satisfaction (r = 0.642**, P = 0.000 < 0.001). Similarly, the univariate regression results in table 14, reveal that process innovation has a positive and significant effect on the customer satisfaction of ABCD microfinance bank Limited in Nigeria (β1= .567, P = 0.000 < 0.001). The findings, therefore, support ***H2***, that process innovation has a significant and positive association with customer satisfaction.

Relationship between marketing innovation and customer satisfaction

The result on marketing innovation was subjected to further analysis where a univariate linear regression model $Y = \beta_0 + \beta_3 X_3 + \varepsilon$ was employed. Table 15, revealed that marketing innovation accounts for 41.3% of the total variations in customer satisfaction of ABCD microfinance bank Limited ($R^2 = 0.413$). Marketing innovation was found to be positively and significantly related to customer satisfaction (β1= 0.595, P = 0.000 < 0.01). This implies that, as the MFB adopts a new innovative approach to creating awareness about their products and how they relate with their customers, it improves customer satisfaction.

Table 15: Marketing Innovation and Customer Satisfaction: Regression Weights

Model	Unstandardized Coefficients		Standardized Coefficients			
	B	Std. Error	Beta	R^2	t	Sig.
Constant	2.739	0.769			3.563	0.001
Marketing Innovation	0.595	0.068	0.643	0.413	8.803	0.000

a. Dependent variable: customer satisfaction

iii) Test of Hypothesis Three:

H3. *marketing innovation is positively and significantly related to customer satisfaction.*

The results from pearson correlations in table 11 show that there is a significant and positive association between marketing innovation and customer satisfaction of ABCD microfinance bank Limited (r = 0.643**, *P= 0.000* < 0.01). Similarly, the univariate regression results in table 15 suggest that, the effect of marketing innovation on customer satisfaction (β_1= 0.595, *P= 0.000* < 0.01) is positive and significant. Therefore, marketing innovation is positively and significantly related to customer satisfaction with ABCD microfinance bank Limited in Nigeria, ***providing support for H3***.

Consistent with my expectation, all the three hypotheses are supported, thus providing support for the study objective.

5 Conclusions

The study examined the impact of different types of innovation and customer satisfaction with ABCD microfinance bank Limited in Nigeria. The main objective of this study is to propose recommendations to managers of microfinance banks in Nigeria on how to improve customer satisfaction base on the evaluation of different types of innovations. This study addresses this objective through the following questions:

1. does service innovation influence the level of customer satisfaction in microfinance banks?

2. does process innovation have a positive impact on customer satisfaction level in microfinance banks?

3. Is marketing innovation positively related to the satisfaction level of customers of microfinance banks?

This research focused one microfinance bank using descriptive and quantitative research approach. The response rate was 55.2 %, that is, 112 respondents returned the questionnaires out of 203 respondents.

The empirical study was analysed using theoretical insights from management literature to better understand how service innovation, process innovation and marketing innovation affect customer satisfaction. The study adds to the innovation/customer satisfaction literature, thus contributing to the fields of innovation and marketing in an emerging market. In this study, the literature review and survey offer insights on the impact of different types of innovation on customer satisfaction. Based on the literature review, a conceptual framework including influencing variables of service innovation, process innovation, marketing innovation-customer satisfaction relationship was developed. The main message conveyed by the study was that types of innovations exert positive and significant influence on customer satisfaction with ABCD microfinance bank in Nigeria. The first research question sought to find out if service innovation influences the level of customer satisfaction in microfinance banks. The study findings suggest that service innovation has a positive and significant impact on customer satisfaction.

The second research question sought to find out if process innovation has a positive impact on customer satisfaction level in microfinance banks. The findings suggest that process innovation has a significant and positive effect on customer satisfaction.

The third research question was about the relationship between marketing innovation and the satisfaction level of customers of microfinance bank. The findings suggest that marketing innovation has a positive and significant effect on customer satisfaction. This study concludes that based on the findings, service innovation, process innovation and marketing innovation contributes significantly to the satisfaction of customers of ABCD microfinance bank Limited.

6 Discussion

The findings of multiple regression model ($F = 65.598$, $p = 0.000 < 0.001$) in table 12 show that service innovation, process innovation and marketing innovation as group reliably predict customer satisfaction. This implies that adopting different types of innovations affect the satisfaction of ABCD microfinance bank Limited customers. This result is consistent with findings made by earlier scholars that creating new ideas enable firms to achieve superior business performance (Laursen & Salter, 2006; Stocka et al., 2001), enhance customer satisfaction and brand loyalty (Daragahi, 2017; Naveed et al., 2012; Nemati et al., 2010). However, this result disagrees with Namusonge (2016) who found a negative relationship between innovation and performance of companies listed on the Nigerian Stock Exchange.

Service innovation may enable firms to create satisfied and loyal customers. Additionally, firms can outwit competitors by using advanced technology to deliver rapid and reliable services to customers. Developing and implementing appropriate service innovation strategies may help companies to remain competitive and create satisfied customers. Therefore, it important for firms to configure their activities and resources to deliver exceptional services to improve customer satisfaction. The results from the bivariate correlation in table 11, indicates a significant and positive relationship between service innovation and customer satisfaction ($r = 0.505^{**}$, $P = 0.000 < 0.001$). Similarly, the univariate regression results in table 13, reveal that service innovation has a positive and significant impact on the customer satisfaction of ABCD microfinance bank Limited in Nigeria ($\beta 1= .517$, $P = 0.000 < 0.001$). A comparative analysis of the previous studies showed that the findings of this study align with the works of several scholars who attempted to relate service innovation to customer satisfaction. (Fan, Chen and Miao, 2018) who found that service innovation is related to customer satisfaction of Qianjiangyue Leisure Farm, (Ta and Yang, 2018) who observed that two dimensions of service innovation, (interaction and support), are important predictors of customer satisfaction and customer retention among telecom service users, (Shang-Ping, Chuan-Chung and Pi-Yun, 2017) who concluded that service innovation is significantly and positively related to customer satisfaction dimensions of product price, and perceived value, whereas a partial positive association exist between service innovation and service efficiency dimension of customer satisfaction. The results further show that customer characteristics moderates the relationship between service innovation and customer satisfaction. (Mahmoud et al., 2017) who observed that service innovation initiatives that meet customers' functional, social and emotional value expectations will enhance customer satisfaction in mobile telecommunication firms in Ghana, (Bellingkrodt and Wallenburg, 2015) who submitted that close customer relations in terms of innovativeness lead to a higher level of customer satisfaction. Indeed, service innovation is important if firms want to create satisfied and loyal customers.

Process innovation plays an important role in improving the effectiveness and cost efficiency along diverse lines of production (Fonseca, 2014). The results from the bivariate correlations in table 11 showed that process innovation has a significant and positive relationship with customer satisfaction ($r = 0.642^{**}$, $P = 0.000 < 0.001$). Also, the univariate regression results in table 14, reveal that process innovation has a positive and significant effect on the customer satisfaction with ABCD microfinance bank Limited in Nigeria ($\beta 1 = .567$, $P = 0.000 < 0. 001$). Implementing notable or novel improvement on delivery and production methods is vital to providing superior customer service, thus creating satisfied and loyal customers. Additionally, process innovation should focus on several aspects of a firm day to day functions like human resource, commercial activities and management, technical design and commercial activities. Firms can adopt a systematic approach to process innovation that focuses on reducing the time it takes to develop new products and services to improve customer satisfaction. The findings from this study is consistent with the studies of other authors who found a positive relationship between process innovation and customer results (Raja & Wei, 2014), competitive advantage (Oke et al., 2013), organisation growth (Massa & Testa, 2008; Morone & Testa, 2008) and performance (Tether, 2003; Van Auken, 2008; Varis & Littunen, 2010; Ar & Baki, 2011; Olughor, 2015). However, there are limited studies, if any that examined process innovation and customer satisfaction which is a major contribution of this study.

Marketing innovation is important to meet the needs of the market and to respond swiftly to new market opportunities (Cooper, 2009). Marketing innovation involves major changes in the marketing mix to achieve organizational objectives. Firms can use major improvement in product, pricing, packaging, design, placement or promotion to create satisfied and loyal customers. Additionally, marketing innovative initiatives can enable firms to cope with changing consumer expectations, wants and needs. Furthermore, high technological marketing tools such as the use social media make it possible for firms to be able to reach actual and potential customers across the globe very fast. Responding to changing market required calls for continual marketing innovation efforts. Therefore, it is important for firms to optimize their resources and capabilities to explore new ways to deliver their services and how they relate with their customers to improve customer satisfaction. The results from the bivariate correlation in table 11, indicates a significant and positive relationship between marketing innovation and customer satisfaction with ABCD microfinance bank Limited ($r = 0.643^{**}$, $P = 0.000 < 0.01$). In the same direction, the univariate regression results in table 15, suggest that marketing innovation has a positive and significant impact on customer satisfaction with ABCD microfinance bank Limited in Nigeria ($\beta_1 = 0.595$, $P = 0.000 < 0.01$). A comparative analysis of the previous studies showed that the findings of this study agree with the works of other scholars who attempted to relate marketing innovation to customer satisfaction. (Zuñiga-Collazos and Castillo-Palacio 2016) who reported that innovative marketing strategies improve customer satisfaction and the image of company's products and services in Colombia, (Lee et al., 2015) who observed that usage attitude of marketing innovation is the major determinant of customer satisfaction among mobile app services users in Taiwan, (Senguo and Kilango, 2015) who concluded that marketing innovation improve customer satisfaction, performance and sustain competitive edge Vodacom in Tanzania, (Raja and Wei’s, 2014) who concluded that marketing innovations can be used to create a better image of the firm to customers and the society.

Recommendations

Firms cannot afford not to develop and implement innovative initiatives because of the adverse implications it may have on customer satisfaction and the overall performance of firms. This study recommends that ABCD microfinance bank Limited should optimize its resources and capabilities to create and implement service innovation, process innovation and marketing innovation to improve customer satisfaction.

Firstly, ABCD microfinance bank Limited should constantly adopt service innovation to outperform competitors. This can be achieved by using robust technology to deliver fast and reliable services better than what competitors are offering in the market.

Secondly, ABCD microfinance bank Limited should pay attention to process innovation to enhance operations efficiency. This can be achieved by adopting a flexible approach to meeting customers' demands and developing in-house solutions to work, adjust and improve its business processes.

Thirdly, ABCD microfinance bank Limited need to adopt new marketing methods to reach their customers. This can be achieved by taking advantage of social media to create awareness about its products to reach a larger audience. The bank needs to evaluate and implement new ideas from customers and suppliers. Hence, the bank should give close attention to feedbacks from customers and suppliers.

Study Contribution

The results from this study contribute to the existing knowledge innovation management and marketing literature by providing experience on the relationship between service innovation, process innovation, marketing innovation in a microfinance bank operating in an emerging market (Nigeria). In the literature, it was observed that scanty studies focused on types of innovation and customer satisfaction, especially process innovation. Therefore, the findings from this study have contributed to filling this gap in knowledge. In light of fast-changing customers' expectations, it is important for firms to develop innovative products and services to meet and satisfy customer's needs. Considering the above, a considerable contribution of this study lies in explaining whether service innovation, process innovation and marketing innovation is related to improved customer satisfaction of ABCD microfinance bank Limited. The study affirmed that ABCD microfinance bank Limited give attention to service innovation, process innovation and marketing innovation, which is associated with improved customer satisfaction. By recognising the importance of types of innovations, bank managers and executives can significantly improve customer satisfaction. On the other hand, if they give less attention to the importance of service innovation, process innovation and marketing innovation, the bank may fail to satisfy their customers.

The result of this study can be used for decision-making in companies operating in the Nigerian market particularly, microfinance banks. It provides executives and managers of ABCD microfinance bank Limited a unique and valuable information about the importance of service innovation, process innovation and marketing innovation, and their impact on customer satisfaction. Finally, findings and knowledge gained from this thesis can be used to teach courses in management case study in polytechnics and universities in Nigeria and other countries.

Limitations and Suggestions for Future Research

The study used cross-sectional data obtained from customers of one microfinance bank in Nigeria which limits the generalisation of these findings beyond this context. To get new important insights of the subject, it would be interesting to use longitudinal data, qualitative research approach and a larger sample size. Other researchers should carry out more studies on the impact of different types of innovation on customer satisfaction especially process innovation in other sectors and other countries. Finally, further research should search for mediating or moderating variables, for instance, size and age to explore if there is any significant difference between types of innovation and customer satisfaction.

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Appendices

Appendix 1. Research Questionnaire

Dear Respondent,

I am an MBA student from the JAMK University of Applied Sciences, School of Business Jyvaskyla Finland carrying out a research on: **The Impact of Different Types of Innovation on Customer Satisfaction in Microfinance Bank in Nigeria.** Please fill in the information needed for the completion of this research. All information supplied will be used only purpose of this study and will be treated with utmost confidentiality.

Thank you.

Chijioke Nwachukwu

Section A: PERSONAL BIO-DATA

1. Sex : Male ( ) Female ( )

2. Age : (a) Below 30 ( ) (b) 31 – 40 ( ) (c) 41 – 50 ( ) (d) 51 and above ()

3. Years of banking with the Bank:

(a) Less than 5years ( ) (b) 6-10years ( ) (c) 11- 15years ( ) (d) 16 years above ( )

4. Highest Academic Qualification:

(a) O' Level ( )

(b) ND/NCE ( )

(c) Graduate ( )

(d) Postgraduate ( )

Section B

Kindly tick (√) against the options that most closely agree with your views by indicating the extent to which you agree or disagree with the relevant statement. The abbreviations are explained as follows:

5- Strongly Agree, 4- Agree, 3- Undecided, 2- Disagree, 1-Strongly Disagree

	SERVICE INNOVATION	**SA**	A	**U**	**D**	**SD**
1	My bank improves the reliability of its service					
2	My bank strives to keep it services above competitors					
3	My bank adopt speed in service delivery					
4	My bank use advance technology to deliver service					

	PROCESS INNOVATION	**SA**	**A**	**U**	**D**	**SD**
1	My bank reduces the time it takes to develop new products					
2	My bank is flexible in providing products/service that meet customers' demands.					
3	My bank develops in-house solutions to improve its processes					
4	My bank actively works to adjust its business processes					

MARKETING INNOVATION	SA	A	U	D	SD
1 My bank constantly looks for new ways to deliver its products to customers					
2 My bank uses social media to create awareness about its products					
3 My bank implements new marketing methods to deliver its products					
4 My bank make improvement in the way it relates with customers					
5 My bank evaluates and implement new ideas from customers/suppliers					

CUSTOMER SATISFACTION

5- Very Satisfied, 4- Satisfied, 3- Neutral, 2- Dissatisfied, 1- Very Dissatisfied

	VS	S	N	DS	VS
1 Value added services e.g electronic banking services					
2 Customer relationship i.e marketing communication, customer service					
3 Flexibility in delivery of products/services					
4 The time it takes for customers to get service					

Thank You