BUSINESS MODEL INNOVATION AND SUSTAINABILITY OF SMALL AND MEDIUM ENTERPRISES

BY

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UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA

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A Research Project Report Submitted to the Chandaria School of Business in Partial Fulfillment of the Requirement for the Degree of Masters in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

SPRING 2018
STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other institution, or University other than the United States International University-Africa Nairobi for academic credit.

Signed: ________________________    Date: ________________________
Grace Hiuko Muugi (ID 625970)

This research project has been presented for examination purpose with my approval as the appointed supervisor

Signed: ________________________    Date: ________________________
Dr. Joseph Ngugi Kamau

Signed: ________________________    Date: ________________________
Dean, Chandaria School of Business
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ABSTRACT

This study was meant to investigate Business model innovation and sustainability of small medium sized enterprises. The General objective of this study was to analyze Business Model Innovation and sustainability of small and medium Enterprises. The study explored three independent variables as the main objectives. They included Value Creation Innovation variable that was used to determine the effect of value creation innovation on SME sustainability, Value Proposition Innovation variable that was used to determine the effect of value proposition on SME sustainability and Value Capture Innovation variable that was used to determine the effect of Value Capture Innovation on SME sustainability. The study then used Organizations competitive advantage variable as the dependent variable that was used to measure Sustainability of SMEs. The research focused on SMEs, in Nairobi and Kiambu counties in Kenya. The research targeted small and medium sized business owners or managers at USIU-A. The study was done by administering 200 questionnaires, where 150 were returned. The response rate was 75% which was sufficient enough to analysis the data in figures and tables.

The study used inferential statistics in two phases; the first stage was the assessment of the measurement model that involved factor analysis which encompassed exploratory and confirmatory factor analysis. The second phase contained the estimation of the structural model. The Exploratory factor analysis (EFA) through Principal components analysis (PCA) extraction method was conducted to measure the essential dimension associated with 39 items. The factor loading of all items of each scale were above 0.6 which exceeded the threshold 0.5 indicating the evidence of convergent validity. Reliability for the constructs was tested using composite reliability and Cronbach's Alpha. Construct Validity was assessed by convergent and discriminant validity. Average variance extracted (AVE) was used to measure both convergent and discriminant validity. Adequate levels of convergent validity were achieved as AVE’s for the specific constructs was above the threshold 0.5. Discriminant validity was realised as the values of maximum shared variance (MSV) were less than the values of AVE. The correlation coefficients showed Value Capture Innovation was found to be positive and significantly related to Organisations Competitive Advantage (r=0.270, p-value<0.05). Value Proposition Innovation was found to be positive and significantly related to Organisations Competitive Advantage (r=0.390, p-value<0.05). Value Creation Innovation was found to
be positive and significantly related to Organisations Competitive Advantage (r=0.310, p-value<0.05).

Skewness and kurtosis statistics were computed to assess the normality of the study variables. The results of the normality test of the study variables indicated skewness and kurtosis in the range of -1 and +1 as shown in table 4.8. This implied that the assumption of normality was satisfied. The structural model was estimated to find the estimates of the relationships between study variables. The model’s fit indices of $\chi^2=335.921; df=207; \chi^2/df=1.623; CFI=.940; GFI=.927; RMSEA=0.067$ and $PCLOSE=0.064$ were adequate suggesting a reasonable good fitting model. The quality of the structural model was explained by the value of $r$ square on the endogenous latent variable. The predictive power of the model was 40%. Innovation (Beta=0.304) and the least important was Value Capture Innovation (Beta=0.197). The regression weight for Value Capture Innovation was positive and significant ($\beta= 0.423, t= 5.924, p < .05$). This indicated that a unit increase in Value Capture Innovation would result in 42.3% increase in Organizations Competitive Advantage. The regression weight for Value Proposition Innovation was positive and significant ($\beta= 0.304, t= 3.452, p < .05$). This indicated that a unit increase in Value Proposition Innovation would result in 30.4% increase in Organizations Competitive Advantage. The regression weight for Value Capture Innovation was positive and significant ($\beta= 0.197, t= 2.234, p < .05$). This indicated that a unit increase in Value Capture Innovation would result in 19.7% increase in Organizations Competitive Advantage. The beta values indicate the predictive importance of the indicators, Value Creation Innovation was the most important predictor (Beta=0.423) followed by Value Proposition. This was a clear correlation and relationship of the effects of business model innovation on sustainability of SMEs.
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I would like to express my sincere gratitude to the following persons for their immense and tireless efforts to see that I undertake this study to its conclusion. Their direct and indirect participation is greatly valued and appreciated.

I thank God for the opportunity, finance, health and favor to start, undertake and finish this study. It is my prayer that it will contribute to the scholarly world theoretically and practically to those that read it.

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LIST OF ABBREVIATIONS AND ACRONYMS

BMC- Business Model Canvas
BMI- Business Model Innovation
EFA- Exploratory Factor Analysis
GMR- Giant Magneto Resistance
KMO- Kaiser–Mayer–Olkin
KPMG- Klynveld Peat Marwick Goerdeler
MSMEs-Micro Small and Medium Establishments
NPD- New Product Development
PCA- Principal Components Analysis
R&D- Research and Development
SAQs- Self- Administered Questionnaires
SMEs- Small and Medium Enterprises,
VPD- Value Proposition Design
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the study

According to the Global Entrepreneurship Monitor, there was a call to emphasis more on the long-term sustainability and reduction of discontinuance of small business start-ups in Jamaica. A review of the literature suggests that Small Medium sized Entrepreneurs; owner/managers need to take a contingency approach when choosing strategies for coping with external business pressures. The study however, concluded from a correlation analysis of data from a survey of 262 SME owner/managers in Jamaica, that managers are inclined to use only price as the basis of competition. They thus realized the need to educate SMEs on why, when and how to use non-price strategies to cope with competition and thus sustain their businesses (Lawrence, 2012).

William agrees that SMEs are important for economic development and job creation in countries in Latin America and the Caribbean. Jamaica just like many other developing nations has a high rate of new business formation but also has a rising level of business discontinuation (Global Entrepreneurship Monitor, 2012). In his journal, he also affirms that external Pressures induce SME closures and destroy jobs at a rate that rivals national efforts to create new employment. According to William, small business discontinuance can happen when SME strategy is at odds with the external environment which was also in line with the contingency theory that states that organizational structure and the approach to any problem depend on the situation at hand. He states that, a strategy that works under one set of conditions can be ineffective in another hence the situational approach theory. He concluded that SMEs need to change strategy when required to avert problems.

A study carried out in International literature, examined four streams that respond to issues of SME declining performance. The study came up with the following streams: Innovation, Capital Structure, Private Work out and Court Action to restructure assets and debts. These strategies can be used to help increase SME efficiency depending on the situation (Lawrence, 2012). Another study that was carried out showed that firms that renew their resource base in line with the dynamic capabilities, can generate and sustain a competitive advantage and thus improve firm performance. The study involved high depth interviews that were conducted in six representative Information Technology, IT
firms. The results of the study suggested that, firms with a stronger commitment to deploying dynamic capabilities are more successful and hold the potential for a sustained competitive advantage. The study also found out that Innovation capability, Managerial capability and Human Resource capability are the most relevant capabilities that allow firms to successfully adapt to a changing environment and the highly demanding IT market (Breznik & Lahovk, 2014).

Firm’s growth and continuity can also be influenced by business orientations such as customer orientation (CO) and entrepreneurial orientation (EO). Research carried out on EO and CO however provides confusing results to some extent. Although there is a general understanding that these constructs are somehow related to increasing firm success, empirical studies assume different relationships between them. There are different measurements that have viewed them differently, and thus have obtained different results. It is not clear to what extent EO and CO represent distinct business philosophies, or whether these constructs contain negative redundancies. Assumptions that scoring high on the two orientations should contribute to the highest growth potential have been made, but this may not be the case. Literature, suggests a likely trade-off between being highly innovative and being particularly customer oriented at the same time. There are different results that come from entrepreneurship where the firm is tied to its customers and markets (Fabian, Kraus, Hughes, Laraway & Sncierski, 2013).

According to, Fabian et.al., (2013) entrepreneurial orientation is a key driver of business growth. They recognize that over the past decade, there is increased attention paid to the concept of “entrepreneurship” which in their context refers to, an individual opportunistic activity that creates value, bears risk, and is strongly associated with Innovation. Entrepreneurship at a firm level, emanates from entrepreneurial venture's orientation towards identifying market opportunities that competitors’ have not yet recognized or that are underexploited. In this case entrepreneurs create a unique set of resources and opportunities to exploit. Entrepreneurship and entrepreneurship Orientation respectively are seen as drivers of firm growth and are associated with firm performance success, particularly in the long run.

An article written by Hvass (2015) describes a sustainable business model as “a business model that creates competitive advantage through superior customer value and contributes to a sustainable development of the company and society”. In addition, innovating business models is increasingly recognized as a key to delivering greater
social and environmental sustainability in the industrial system. Traditional business model research mainly concentrates on the generation and delivery of economic value and value for the customer, on the other hand, sustainability oriented business model literature suggests that, value should be understood broader terms and value generation needs to be seen through value for the company, its customers and the wider public.

Clauss (2017) in his journal went ahead to explain innovation with a focus on the Business Model innovation as a key factor important for business sustainability. He explored three dimensions regarding value creation, value proposition and value capture innovation in detail. He emphasized that new ways of conceptualizing the later would bring about business sustainability and continuity. He followed a rigorous scale development approach to ensure validity and reliability of the findings. He carried out a study of samples of 126 and 232 firms to specify and assess the scale. He came up with a hierarchical three-level scale for measuring business model innovation. The business model innovation is discussed as a formative measure of three dimensions, namely value creation innovation, value proposition innovation and value capture innovation. In his study, Thomas considered suppliers and external collaboration partners as the providers of values who belong to the value creation dimension. He also classified customers as the primary receivers of values and that they primarily belong to the value proposition dimension.

According to Thomas, Value creation innovation consists of 40 components with 33 unique components and four sub-constructs including: New capabilities, New Technologies/Equipment, New Processes /Structures, and New Partnerships. He also stated that most of the business model components relate to value proposition innovation which comprise of 49 components, with 25 unique components some of which include: New Offerings, New Customer Segments/Markets, New Channels, and New Customer Relationships. The third component is the, Value capture innovation which captures 26 components with 13 unique components of two sub constructs that include: New Revenue Models and New Price and/or Cost Structures (Clauss, 2017). Innovation continues to come out clearly and evidently as a key component in business sustainability. Authors associate innovation with change and renewal that helps businesses adapt to current trends and needs of the consumer. Change, however is viewed differently by employees, when employees hear that their companies are planning to make changes, they are very
likely to feel threatened and distressed (Perkins, 2012). Kathleen Perkins however says that in an ideal world, people should like the idea of initiating organizational change and welcomes the idea of change with eagerness and excitement rather than distress or resistance. She says that the latter is attainable. In her article, she demonstrates how lasting organizational change can be achieved by engaging employees in work that is meaningful. Kathleen affirms on the need for firms to emphasize on employee efforts to link innovation with sustainability. She says that companies can contribute to solving the world's problems and at the same time achieve business success. The article shows the steps that companies can take to unleash the imaginations of their employees in service to their companies, communities and the world (Perkins, 2012).

Perkins attributes sustainability and its relevance in business for the long term in the current messy and demanding world to the companies’ ability to excel in maneuvering through the vicissitudes of global economic conditions, customer preferences, and employee expectations. She urges people to change their perception of looking at change as a threat and instead look at it as ‘innovation’. She has therefore encouraged and challenged employees to embrace change as innovation, since the word ‘change’ implies adjusting or amending, whereas ‘innovation’ suggests creating, improving and advancing.

Kathleen Perkins says that there are 3 steps involved in making innovation bring about sustainability: one is, changing the mindset of employees to look at change as innovation, two is to, link innovation to sustainability and three is to, involve interaction of cross organizational boundaries to exchange ideas and discuss on problem solving solutions by employee involvement hence bring about motivation that brings about better performance.

With the above background of the study on Business model innovation and sustainability of SMEs, It is evident that certain factors influence the continuity and sustainability of a business, in this case SMEs. It is also evident that entrepreneurship has been increasingly embraced and accepted as a major economic driver that creates value inform of products and services and also creates employment that sustain a society. Innovation comes out strongly as an important aspect of business today innovation enhances continuity and development of new possibilities and ease of carrying out businesses. Under innovation with regards to SME, business model fundamentals of value proposition also evident. It is therefore important to access, innovation with regards to value creation, proposition and
capture innovation with the aim of creating a firm basis for business sustainability in the long run under turbulent situations.

1.2 Statement of the Problem

Many studies that have been carried indicate that there is a great increase in the number of businesses being set up in the world today. This increase has led to high dependency of many countries on SMEs for job creation and economic development (Lawrence, 2017). William Lawrence in his study in Jamaica strongly agrees that SMEs are important for economic development and job creation in countries in Latin America and the Caribbean. He affirms that Jamaica just like many other developing nations has a high rate of new business formation in this era of technological advancement and global dependency and openness. Interconnectivity of states has made business interaction easier and faster. It is therefore ideal to say that, SMEs are sufficient in running a country's economy and providing a sustainable income, services and products to its employees and clients respectively. Studies that have been carried out however indicate that there are high levels of business discontinuity and closure within the first years of a business lifespan (Lawrence, 2017). Jamaica for example, like many other developing nations has a high rate of new business formation but also has a rising level of business discontinuation. Many other sources including, International literature have examined streams that show that there is a high rate of SME declining performance.

One of the most outstanding factors revealed in this studies is innovation and capital structure, among others. In Kenya, the Kenya national Bureau of statistics, 2016 in partnership with other bodies have carried out numerous studies on SMEs, in this case, Micro Small and medium Establishments in Kenya. They have given concrete data to show that many businesses are closing and discontinuing within 1-5 years after formation at an alarming rate. As much as many people are quitting employment to go do business and become their own boss, there is enough evidence to show that many of these start-ups are not realizing their goals because they close shop due to many challenges in their business Model Innovation (Clauss, 2017).

Perkins (2012) in her study also talked about the need for organizations to embrace Change and see it as innovation rather that a threat. She says that sustainability in businesses can only be realized if employees are given a chance to interact in
organizational forums and are encouraged to deliberate on development and hence become part of innovation and progress in workplaces.

Many studies that have been carried out have related business closure to financial constraints and external challenges that in many cases are natural and cannot be avoided. According to Fabian et.al., (2013) entrepreneurial orientation is a key driver of business growth. The authors were keen on the term “entrepreneurship” which in their context referred to, an individual’s opportunistic activity that creates value, bears risk, and is strongly associated with Innovation. Entrepreneurship at a firm level emanates from entrepreneurial venture's orientation towards identifying market opportunities that competitors’ have not yet recognized or that are underexploited. This forms the basis of the study intended in this research, that some of the solutions to the current business dilemma can be solved through assessing the Business Model Innovation with a keen look at Value proposition, Value creation and Value capture (Clauss, 2017). Today’s Investors are always eager hear new innovative ideas that are sustainable. If an organization can be able to work out sustainable and profitable values to its customers, then they may not have to worry about funding and scaling up because, they can pitch to investors who will do the business development and expansion.

1.3 General Objective

The General objective of this study is to analyze Business Model Innovation and Sustainability of Small and Medium Enterprises.

1.4 Specific Objectives

1.4.1 To determine the effect of value creation innovation on SME sustainability

1.4.2 To determine the effect of value proposition on SME sustainability

1.4.3 To determine the effect of value capture innovation on SME sustainability

1.5 Justification of the Study

1.5.1 To Scholars

The findings of this study enables researchers to establish whether business model innovation measures, that is value creation innovation, value proposition innovation and value capture innovation affect business sustainability. Many businesses are suffering from closure and discontinuation before they realize their purpose and potential. All this is due to lack of innovation in their business models in relation to value. This study will
enables researchers to know whether innovation in value creation, proposition and capture is necessary and critical in sustainability of SMEs and whether this can create firms competitive advantage in the long-run.

1.5.2 Practitioners

The study stands to benefit about 17million SMEs in Kenya. The findings of this study would benefit marketing professionals, consultants, managers and directors providing insight into innovation in business models. They can also distinguish relevant features of innovation and current market trends related to the sustainability of SMEs. The study findings enable entrepreneurs to have a better understanding of the features of an organizations competitive advantage and the constant adjustments they need to make in order to counter rivals and maintain their customer relations through value proposition that meets their needs.

1.5.3 Policymakers

Findings in this study acts as a reference point for policymakers seeking information regarding sustainability of SMEs which are the key drivers of the economy. The study provides policymakers with an in depth understanding of what drives entrepreneurs and businesses in Kenya to make products, and get involved in processes that are valid and in line with customer wants. They need to understand the changes happening in the world and adjust policies according to the new technology and advancement in manufacturing processes as well. Policymakers can also advocate for open markets abroad to help the business people interact globally and market their products and services across the borders. They can also draw policies on resources and sources of capital that favor the entrepreneurs’ access to funds in order to save cost and increase revenue. This will also expand businesses and create jobs for the citizens. This study provides information that can be used to facilitate the formulation of lenient and less bureaucratic policies to ease business facilitation in the country especially for micro business owners.

1.6 Scope of the Study

The study focused on the small and medium sized enterprises with 1-200 employees. The sample population was comprised of masters’ students over the ages of 18 found in United States International University and its environs. The students were engaged in entrepreneurship, or working in organizations in managerial or supervisory positions and hence had a good reflection of their organizations behavior and business models in
relation to the research objectives. The study occurred over a period of six months, with data being collected over a period of 4 days; between the 25th and 29th of May.

1.7 Definition of Terms

The definitions given below are given according to the context used in this study.

1.7.1 Business Model Innovation

According to the Harvard business review, it means delivering existing products that are produced by existing technologies to existing markets. And because it often involves changes invisible to the outside world, it can bring advantages that are hard to copy. It entails what the business offerings will be, when decisions are made, who makes them, and why. Hence BMI is successful changes along these dimensions that improve the company’s combination of revenue, costs, and risks (Pojasek, 2007).

1.7.2. Innovation

Suggests creating, improving, advancing or reaching of ultimate goals. It’s used in this contest to mean successful conversion of new concepts and knowledge into products and processes that deliver new customer value in the marketplace (Perkins, 2012).

1.7.3. Value Creation Innovation

Means creating better value for customers purchasing its products and services, as well as for shareholders in the business who wants to see their stake appreciate in value (Hvass, 2015).

1.7.4. Value Proposition Innovation

Is an analysis or statement of the combination of goods and services offered by a company to its customers in exchange for payment (World Bank, 2013).

1.7.5. Value Capture Innovation

Is the outcome of a bargaining process, through which several partners divide among themselves the value created. The different modes for capturing value revolve around five basic options: internal development, alliances and partnerships, license-out, sell-out and, finally, withdrawal (Duhamel, Reboud, & Sant, 2014).
1.7.6. Sustainability

It means the ability of a business to meet the needs of the organization and its stakeholders today while also protecting, sustaining, and enhancing the environmental, social, and economic resources needed for the future. The study looks at the sustainability to mean continuity (Pojasek, 2007).

1.7.7. Small and Medium Enterprises (SME)

The term SME covers a wide range of definitions and measures that vary from country to country and between the sources reporting SME statistics. Some of the commonly used criteria are the number of employees, total net assets, sales and investment level. However, the most common basis for definition is employment, and here again, there is variation in defining the upper and lower size limit of an SME. Despite this variance, a large number of sources define an SME to have a cut-off range of 0-250 employees. For a country to be classified under the SME250 Classification, the SME sector cutoff could range from 200-300 employees. There are few instances of this range occurring, with data for most other countries reported for an exact cut off of 250 employees. This is according to a World Bank research paper (World Bank, 2013).

1.7.8. Micro Small and Medium Enterprises (MSMEs)

According to KNBS (2016) MSMEs means Micro Small and medium Establishments and categorizes them according to number of employees. That is, Micro-establishment are enterprises with less than 10 employees, small establishment are those with 10-49 employees, while medium establishments have 50-249 Employees.
1.8 Chapter Summary

Despite there being many studies that have come up with many solutions to SMEs problems for sustainability of SMEs, the rate of business closure is still alarming. This chapter shows the need to work towards sustainability in businesses due to the raise in the number of business closure. SMEs are important because they contribute greatly to economic development. The study will consider suppliers and external partners as the primarily providers of values hence make up the Value creation dimension, and customers on the other hand as the primarily receivers of values as primarily belonging to the Value proposition dimension. In chapter two, the above three variables will be explored in depth: Value creation innovation will explore four unique sub-constructs including: New Capabilities, New Technologies/equipment, New Processes/Structures, and New Partnerships with reference to the different business model components in Kenya. The second objective will be on value proposition innovation variable with key components being New Offerings, New Customer Segments/markets, New Channels, and New Customer relationships. The third specific research objective will be on Value capture innovation variable in which the study will discuss new Revenue models and New Price and/or Cost structures. The study intends to emphasis on the need to innovate around the above variables in order to enhance Business Model innovation and sustainability of SMEs.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter explores literature that has been written by other scholars in depth about how the Value creation innovation, value proposition innovation and value capture innovation in the Business Model innovation affects SME sustainability. The variables mentioned above are the specific objectives that will be explored in order to study the effects they have on SMEs.

2.2 The Effect of Value Creation Innovation on SME Sustainability

Value creation innovation is a component of Business Model Innovation which in this contest refers to consideration of the business model instead of products or processes as the subject of innovation (Fuller & Haefliger, 2013). As such, it relates to the innovation of a system of products, services, technology, and information flows that goes beyond the firm. Independent of the degree of innovativeness, business model innovation requires that the three outlined dimensions are changed from time to time to enhance business continuity and sustainability.

2.2.1 Four Sub-constructs in Value Creation Innovation

In the value creation innovation subcontract, other four subcontracts exist and are recorded by many authors in relation to value creation innovation, together or two or three of each. They are the measuring scale in the business model innovation and link value creation to innovation and come out clearly from the study of 126 SMEs. They include: New capabilities, where employees constantly receive training in order to develop new competences which enables organizations to have new and up-to-date knowledge and capabilities as opposed to their direct competitors. Organizations keep analyzing new competencies need to be established in order to adapt to dynamic evolving market requirements. The second is New technology or equipment that involves keeping the technical resources of the company up-to-date, relative to those of the competitors as well as use of technical equipment that is very innovative. Third is New technology, which helps in utilization of new technical opportunities in order to extend the product and service portfolio. Fourth is New partnerships, which involves the constant search for new collaboration partners and integration which is used to develop new opportunities. Companies evaluate the potential benefits of outsourcing from time to time and hence
develop the business models. New processes, is the fifth measuring component, which is the ability of a company to improve its internal processes with the use of innovative procedures and processes during the manufacturing of their products (Clauss, 2017).

A study carried out by Tommi, Mika, Risto and Kristian (2014) was used to build their arguments on insights from 49 sustainability leaders in the U.S. they examined green innovation from the game perspective. The study explored how corporate sustainability can advance environmentally friendly innovations, and what managerial roles and activities are required to enable the transformation. The study showed that innovations are often systemic and demand novel combinations of partner resources, capabilities, and intellectual capital. In addition, sustainability leaders prefer to talk about green innovation games, rather than corporate sustainability transformation or processes. The authors say that, evolutionary innovation which introduces minor improvements to existing products or processes, whereas revolutionary innovation is new to the market and it implies greater costs in development and greater changes to the business, by incorporating risks that may result in failure in the market. Revolutionary innovations can also create significant customer value and open up new market opportunities.

The authors, Tommy et.al., (2014) concluded that revolutionary innovation reveals the untapped business potential by asking “what if” questions. It disentangles the current constraints in the system to spot new business opportunities. It also secures permission to step outside of disciplinary boundaries in order to unlearn, relearn, and become receptive to new influences and partnerships. Revolutionary innovation exposes the motivation to change the game by setting seemingly impossible targets, which encourage employees, managers, and partners to reach beyond familiar boundaries. A study that was done to enlighten managers of small and medium enterprises (SMEs) and other professionals on the need to connect innovation and value creation in their decision-making processes when dealing with new or existing products. The authors used a Design/methodology/approach that showed that Innovation and value creation are interconnected and one cannot have them separated. The study also affirmed that, to appreciate that interconnection, one needs to understand that value can take form of products, the tangible form and the intangible form too. This understanding helps explain how culture affects product value, as well as how innovation happens in the technological field and in the cultural field. The author also recorded Findings that; Value and innovation are intrinsically connected and this should not be ignored in any quest for new
solutions. SMEs should pay more attention when developing innovation activities to ensure that they have the most suitable organizational structures and resources. This study clearly demonstrated the relationship between innovation and value creation (Moleiro & Fernandes 2015). There is a clear relationship between value creation that is associated with newness of products, new processes, solutions and partnerships. This affirms the sub-contrasts by Thomas Clauss.

Memili, Fang, and Welsh (2015) also carried out a study to examine the generational differences among publicly traded family firms in regards to value creation and value appropriation in the innovation process. They studied knowledge-based view and family business literature with a focus on socio-emotional wealth perspective. They used a design/methodology/approach in which the authors tested the hypotheses via longitudinal regression analyses based on 285 yearly cross-firm S & P 500 firm observations. The result of their finding was that: one, family ownership with second or later generation’s majority exhibits lower levels of value creation capabilities compared to non-family firms. The authors realized that there is no difference between those of the firms with family ownership with a first generation’s majority and non-family firms. Second, the authors also found that family owned firms with a first generation’s majority have higher value appropriation abilities compared to nonfamily firms, while there is no significant difference in value appropriation between the later. Generation family firms and non-family firms. Their research however has limitations and implications indicating that the study help scholars, family business members, and investors to have better understanding of family involvement, and how it impacts firm performance through value creation and value appropriation in regards to innovation process. The study demonstrates originality by its contribution to the family business, innovation, and knowledge-based view literature in several ways. While previous family business studies are drawn upon resource-based view and Knowledge-based view, often focus on the value creation in family governance, the authors investigate both value creation and value appropriation phases of innovation process.

Lindman, Pennanen, Rothenstein, Scozzi and Vincze (2016) did a study to investigate the firm’s role in the value creation process. They categorized the activities that firms carry out to facilitate the creation of value, and studied the “value space,” which is an actionable framework within which different dimensions of value creation are integrated.
They developed and discussed this framework. They used a Design/methodology/approach in which they build a framework on the process theory, an in-depth review of the literature and a multiple case study carried out on 65 European firms in the furniture industry. Their findings were that the value space is both a practical and theoretically based framework which contributes to the development of a more holistic and “actionable” view on the role of firm in the value creation process; also it provides managers with a tool to support the analysis, management and innovation of the value creation process. Their study showed originality in the systematic categorization of firms’ activities and their subsequent integration into a value creation framework, they discovered a missing piece in terms of understanding the value creation process carried out by firms. Also, by facilitating the analysis and innovation of the value creation process, the framework can be used to support both exploitative and explorative business process management.

Bocken, Short, Rana, and Evans (2013) carried out a study and realized a gap that, there are many business models have been established to deliver sustainability and have become increasingly popular in the literature, but few tools that assist in sustainable business models have been identified. Their study, investigated how businesses may create balanced social, environmental and economic value through integrating sustainability more fully into the core of their business. They thus developed a value mapping tool to help firms create value propositions better suited for sustainability. They used a case study design/methodology/approach and interviewed six sustainable companies to help them understand their approaches to business models. They Build on their literature and practice and developed a tool which was pilot tested in a workshop. The result was improved and the tool and process was subsequently refined through use in 13 workshops. Their research findings developed a novel value mapping tool to support sustainable business models, it introduced three forms of value: that is (value captured, missed/destroyed or wasted, and opportunity) and four major stakeholder groups (environment, society, customer, and network actors).

Their study implications were that this tool intended to support business modeling for sustainability by assisting firms in better understanding their overall value proposition, both positive and negative, for all relevant stakeholders in the value network. The study demonstrated originality in that the tool adopted a multiple stakeholder view of value, a network rather than firm centric perspective, and introduces a novel way of
conceptualizing value that specifically introduces value destroyed or wasted/missed, in addition to the current value proposition and new opportunities for value creation. Further studies indicate that in order to reap the benefits of innovation for sustainability, businesses need to adapt the type of innovation they aim for to their particular context. The authors in this study give three practices that are crucial to the innovation process. One is an integrated approach, two and very important is multiple partnerships and three is visionary leadership from the top. The authors give the three practices in attempt to address two of the main challenges companies face in innovating for sustainability, that is: actively engaging with the wider dynamic context in which they operate, and spanning boundaries they are not used to crossing. The article was developed to provide a viewpoint for the 10th Annual EABIS Colloquium on Strategic Innovation for Sustainability held at IMD in Lausanne, Switzerland on 3-4 July 2012 (Szekely & Strebel, 2013). The study used a design/methodology/approach where the authors presented a framework of three practices that must be applied to an ever-increasing degree along the spectrum of strategic innovation for sustainability.

The practical implications developed were that, it is possible to form a better idea of where on the spectrum a particular company may focus its efforts in order to have the greatest chances of success. This is by focusing on a particular business context being addressed. The authors demonstrated originality by differentiating themselves from many studies that distinguish between continuous versus discontinuous change as the two ends on a spectrum. Their intention was to include three major points that is from incremental to radical to game-changing systemic innovation for sustainability. The three critical practices must be applied to an ever-increasing degree along the spectrum. Clauss (2017) did an exclusive study on Business model innovation by conceptualizing it in detail. In his study, he did an extensive research on the definition and conceptualization of the concept of measuring business model innovation. He thus filled the gap in measuring the scales that existed by developing a systematic new scale for business model innovation. His study was rigorous and helped him development an approach that ensured validity and reliability. To come up with his findings, he collected two large-scale samples of 126 of 232 firms. A hierarchical three-level scale for measuring business model innovation. In the first level, he used 41 reflective items to measure ten sub-constructs of business model innovation. These can be used as formative measures of three dimensions of business model innovation at the second level, namely value creation innovation, value proposition
innovation and value capture innovation. At the third level, these three dimensions form the meta-construct of business model innovation.

Value creation innovation is one the specific objectives explored in this chapter. It is derived from an exclusive study carried out by Clauss (2017) among other scholars. According to Thomas, Value creation innovation refers to how and by what means firms create value along the value chain using the resources and capabilities of intra and inter-organizational processes. Below are scholars who have studied value creation innovation with an attempt to support its contribution to SME sustainability. He established that most of the previous studies showed that business model innovation was based on activity effects, technical changes and operating efficiencies, each measured using proxies from publicly available secondary data. He discovered a gap in that, no commonly agreed and validated measurement scale for this new concept exists. He therefore addressed this research gap by developing and testing a new scale to measure business model innovation. This study will seek to venture into many entrepreneurial fields other than the electrical industry he studied to validate further in his findings by giving four subcontracts of value creation innovation.

Value creation innovation is increasingly seen in the above literature. New forms of value are developed and realized as from the studies done by Bocken et.al., (2013). They include value missed, value destroyed or value wasted as well as opportunity. They are additions to the three known forms that include value creation, proposition and capture. The scholars emphasize that innovation that is new way of doing things from the norm is backed up by value creation which brings about firm competitiveness and in this case, the study is from many SMEs across the world Lindmanet et.al., (2016). A more radical approach to innovation through value creation is given by Szekely et.al., (2013) who say that innovation moves from incremental to radical to game-changing systems. These are some of the new concepts SMEs should adopt in order to effectively embrace new processes, new partnerships, new capabilities and new technologies and new equipment to cope with the dynamic and changing world if they are to remain relevant to their customers and stakeholders.

2.3 The Effect of Value Proposition Innovation on Sustainability of SMEs

According to the authors, Dickson and Chang (2015) Value proposition innovation can be defined as products and services that an enterprise or entrepreneur offers and for which
customers are willing to pay or buy. Their study showed that value proposition is one of the pillars of a business model and a key determining factor for achieving profits and business sustainability. Value proposition innovation is among 3 other pillars which include; customer relationships, business Infrastructure, and financial aspects of a business. The authors however indicate that the four pillars are not mutually exclusive. Value proposition innovation is an element that is essential because it involves ‘what’ a company makes and ‘for whom’ it makes it. They emphasized that continuously satisfying customer demands in terms of quality and delivery requirements is very important in sustaining a business venture.

2.3.1 Sub-Constructs of the Value Proposition Innovation

Many authors seem to agree on the unique sub-constructs that make up the pillars of the business model innovation. Clauss (2017) in his study described value proposition innovation as a component of the business model innovation and that it is comprised of sub-constructs that include: new offerings, new customer Segments markets, new channels, and new customer relationships. The subcontracts are all components of innovation or change that bring about competitive advantage in a business and hence sustainability.

A study done by Hvass (2015) also describes value proposition innovation and its sub-constructs in relation to SME sustainability. The study was grounded on an analytical framework of business models in the context of sustainability. The author just like many others have proposed varying definitions of a business model and have defined the term as vague without a clear and agreed understanding. He has also helped in getting the understanding of how a firm does business, for analyses, comparison, performance assessment, management, communication and firms’ innovation. Like other authors, she also supports the proposed four-pillar framework for clarifying business models, that is: product, customer interface, infrastructure management, financial aspects. These pillars are further broken down into nine building blocks also known as the Business Model Canvas which constitute the essential elements of a company’s value creation processes. The author affirms that research shows that innovation is a dominant topic in the literature on business models and is that it’s an important aspect of creating competitive advantage and renewal of organizations. She also recons that her study is limited due to lack of conceptual consensus hence does not go deeper into business model innovation literature but instead focused on how a reuse/resell strategy can facilitate business model adaptation.
for sustainability. Hvass agrees that the business model concept is highly relevant in addressing post-retail textile waste issues from a business perspective since the concept is centered on a holistic value proposition: that is ecological, social and economic value, value creation, that’s is seizing new business opportunities, markets and revenue streams and value capture which involves earning revenues from the provision of goods and services. These 3 variables are evident in almost all the studies that are bent on investigating SME sustainability with a look at the business models they are embedded in (Hvass, 2015).

This article is based on empirical data gathered from a single revelatory case study of the Scandinavian fashion brand. The author was faced with the problem of making generalizations based on a single case study but her intention of the article was to initiate a theoretical discussion of business model innovation for post-retail sustainability of fashion and to link it with lessons from an empirical case study. Her Twelve in-depth, semi-structured interviews were the primary source of data, which were conducted over the course of 11 months in 2012–2013. The interview participants were selected from all major areas of the company that is design, retail, merchandising, wholesale, logistics, finance and CSR, in order bring out the analysis of second hand retailing from all angles of the company’s operations. The interviews lasted one to two hours and were recorded, transcribed and coded using the NVivo software package. The method of analysis was thematic.

Another research carried out by Svensson, Høgevold, Petzer, Padin, Ferro, Klopper, Carlos, Varela and Wagner (2016) on four companies to examine their committed to economic, social and environmental efforts of business sustainability and how they implemented and managed their sustainable business models and their application of sustainable business practices in the marketplace and society. The authors introduced the triple bottom concept of evaluation business sustainability. This is commonly used by scholars to explain business sustainability as a whole and not the internal business model innovation/ business model canvas. These 3 dimensions include: economic, social and environmental factors. The author used the triple bottom line concept to explain a companies’ ability to implement and manage both its own and its business network’s impact on Earth’s life and ecosystems. The purpose of study paper was to describe constituents of business sustainability efforts within the economic, social and environmental categories. Another research was carried out to investigate the combined
roles via trust relationships of the two technology cores of the firms: information technology (IT) and (R&D) research and development and their impact on new product success. The authors relate innovation to new products in this study. They attribute business continuity to innovation hence cope with competitive advantage. They used a design approach where they tested a model of trust and integrated IT strategy account for a significant amount of the variance in a broad range of new product development (NPD) outcomes for a survey sample of 223 manufacturing firms. Respondents said design practices and quality methods like Six Sigma accounted for a total of over 25 percent of the reports of the most helpful approaches in promoting effective NPD. At the same time their biggest challenge they had was having a clear strategic direction within which to operate and resolving cost and resource issues which accounted for over a third (34 percent) of barriers to success.

They recorded their findings that a total of over 25 percent of the reports of the most helpful approaches in promoting effective included these quality methods. At the same time their biggest challenges were having a clear strategic direction within which to operate and resolving cost and resource issues which accounted for over a third (34 percent) of barriers to success. They realized that High-tech firms were less likely to report integrated IT strategies, but this tended to be counterbalanced by high levels of trust in the IT function and adoption of organizational innovations for execution of strategic intent. Implications for future research and practice are discussed. Their limitation was that survey methods produced broad results with low response rates in their study which involved R&D and NPD. They concluded that challenge of strategy alignment reported by many of those firms, made it seem clear that the top management team cannot afford to leave NPD challenges to engineering teams and NPD programs without guidance and general vision (Ettlie, Tucci, Peter & Gianiodis, 2017).

A research carried out recorded that identification and development of value propositions has recently been identified as a key research priority by the Marketing Science Institute. The purpose of the article written by Payne and Frow (2014) was to identify and develop a process for value proposition deconstruction that could help organizations transform their value propositions in order to gain an improvement in their competitive position. The design used to carry out this research was a case study approach where an exemplar organization in the health care sector was used to develop an approach for value proposition deconstruction. The authors used a business system concept as a theoretical
framework and they identified the key value-adding elements that comprise this organization's value proposition innovation. They also used a leading financial services firm to demonstrate how the learning approach could be successfully applied in developing a new and innovative value proposition. Their findings were that the use of business system framework, a structured process for deconstructing value propositions was developed. The framework was extended to explicitly acknowledge the value-in-use that leads to different encounters, to incorporate learning processes and to recognize its interactive nature. The authors went ahead to provide insight of how to formulate new or improved value propositions.

Researchers carried out a research with the intention of solving the problem of inappropriate business model in a modern business. They realized that maximizing transactions activity in order make a profit as much as possible is not the only way to solve business problems; they wanted to show to design an innovative business model that can help the business to survive and succeed. They agree with authors that say that a business model innovation can itself be a path-way to competitive advantage and that a business model should be sufficiently differentiated and hard to be replicated by incumbents and new entrants. The business model helps to understand the desires of consumers, and should also have characteristics that are difficult to be imitated by competitors. They also outline that creating a unique value proposition makes a great difference and influence how unique values are created to customers. They also stated that understanding customer profile in Value Proposition Design canvas can help businesses to design products and services based on customer’s job, gain, and pain and in time. They emphasized that businesses can be easy in good times, but surviving hard times requires one to go back to the basic fundamental principles of business, and thus the need and importance of an innovative business models (Wibawa, Baihaqi, Hakim, Kunaifi & Anityasari, 2016).

The time frame of the research was 3 months, March to June of 2015, at The Herbal Center, Genteng Candirejo, Surabaya, Indonesia and used the descriptive qualitative with case study approach. In the approach to descriptive qualitative research, formulation of the research problem followed by a discussion of latest issues in data collection and sampling. The tools used were data analysis for Business Model Canvas (BMC) and Value Proposition Design (VPD). The researchers provided interpretive qualitative research and managerial implications by collecting data from primary and secondary data.
sources. Primary data included information, opinions, and policy considerations derived from interviews to the respondents using questionnaire, which they then used as guidelines and references to formulate BMC, VPD, and development strategy for establishment of tourism village based on their research. They concluded that the Value propositions offered was “Herbal products manufacturer with no chemicals and no preservatives added”. Like any other dietary or pharmaceutical product, Herbal products also have shelf life, also called as expiration date. No chemicals and no preservatives added is good for health and may become unique value added for the products, but the impact is Herbal products only lasting for 2-3 weeks after the seal is broken and jar is opened. Moreover, the method of processing Herbal product is still traditional and relies on handmade manual processed, so it is not yet possible to increase production scale to reach new segment or market (Wibawa et.al., 2016).

A lot of literature on business model innovation for sustainability has considered a variety of management systems, processes, business resources, structures, beliefs and values, along with how they are integrated, organized, and leveraged through value chains to create strategies for delivering the value proposition (Dickson & Chang, 2015). The authors indicated that new systems and tools may be created to analyze and report to stakeholders about sustainability work. Their study was carried out in 2009 and 2010; they interviewed 18 CSR executives of large and well-known brands and retailers based in the United States and Europe. They also studied consulting and auditing businesses that work globally with apparel manufacturers on improving social sustainability by holding in-depth interviews by telephone and Skype, The Interviews ranged from 40 to 100 minutes and were audio recorded and created transcripts. They analyzed qualitative data using the constant comparative method to inductively generate themes reflecting world class CSR practices and characteristics. They interpreted their findings on sustainability strategies in which they pursued and their extent on business model innovation. Their results were based on coding categories that reflected practices carried out by the businesses. They concluded that having management systems provided consistency to business practices.

Value proposition innovation is an important aspect of SME sustainability. It is driven by innovation and needs to be reviewed from time to time to hence relevance in the business models. You cannot talk about value proposition innovation and not touch on value creation and value capture. The subcontracts are very common variables that influence
business model innovation and thus play a major role in the continuity of businesses even in the turbulent business environment. The three variables enhance competitive advantage as has come out from the empirical review, researchers clearly shows the effects of value proposition innovation on SME sustainability in regards to the Businesses model innovation (Wibawa et. al., 2016).

2.4 The Effect of Value Capture Proposition Innovation on SME Sustainability

Chung, Chun, and Woo (2015) wrote their research findings with the purpose of examining which value capture strategies are efficient in the invention stage and commercialization stage for small and medium enterprises (SMEs). Their methodology was designed according to the characteristic of four primary value capture strategies, the authors categorized the formal-oriented strategy (patent), informal-oriented strategies (secrecy, lead-time), mix strategies (both formal and informal strategies), and whether to invest in complementary assets.

2.4.1 The Subcontracts of Value Capture Innovation

According to Clauss (2017) the subcontracts related to value capture innovation include, new revenue opportunities, increased offer integrated services like contract maintenance. Replacing one time revenue models with long term recurring revenue models. Utilization of Price quantity strategies. Manufacturing costs saving opportunities, amendment of market prices and price differentiation opportunity utilization. In order to assess Research and Development R&D productivity based on value capture strategy, they applied the two-stage data development analysis for data collected from Korea Innovation Survey 2010. The sample was made up of 640 SMEs in manufacturing industry. The study’s findings were that, that informal strategy (secrecy, lead-time) is efficient in the invention stage. Furthermore, mixed use of formal (patent) and informal strategies results in higher productivity in the commercialization stage. Lastly, the results suggest that productivity may vary depending on the investment in complementary assets. Whereas the investment in complementary assets may reduce R & D productivity at the invention stage, it may increase the productivity at the subsequent commercialization stage. The study however did not consider external conditions such as institutional environment, industry characteristics and complexity of technology, as some of the possible factors affecting firm performance, they thus recommended further studies. They concluded that
companies should be good at combining value capture strategies in order to capture financial performance from the invention.

Two authors, Nenonen and Storbacka (2014) wrote on value capture with a purpose of creating a conceptual framework for managing customer assets for improved value capture in a business market context, and to illustrate the use of the framework empirically. They used an approach with conceptual development and a longitudinal case illustration from a globally operating forestry product firm. The findings of their study indicate that Business to Business, B2B firms can increase their value capture by dividing their customer base into customer portfolios, which can be managed with differentiated customer management concepts targeted to increase the economic profit contribution of each customer portfolio. The authors cited practical implications as that, business practitioners in B2B contexts are likely to find the proposed customer portfolio approach of managing the customer assets more approachable than the prevailing customer lifetime models. In order to gain maximum value capture benefits from portfolio-specific customer management concepts, they recommended the functionally approach instead of limiting them to the domains of marketing and sales. The study demonstrated originality and value since it contributes to literature on value capture and customer asset management by providing a framework for managing customer assets for increased value capture that is applicable to business markets and basis the majority of challenges associated with the customer lifetime value models.

Hong Kong and Singapore are characterized by a rapid economic development and a high population density of about, 6,250 and 6,055 per km2 land respectively. Their major source of revenue is Land revenue. The income they get is used to finance their public infrastructure and social services. A study was carried out to investigate their design and collection of taxes on land, their value capture instruments and their allocation of revenue for public works. The article found that there are some similarities between the two cities in capturing land value, such as the collection of annual rates and stamp duty on property. The differences include the adoption of property tax and the development charge. In fact, each mechanism has its pros and cons. The method and the extent of each mechanism depend on the goals of the government in respect of the social and economic conditions (Hui, Ho & Kim Hin Ho, 2004).

Chatain (2012) in his article on Value creation and value capture with frictions, explained that people use a formal value-based model to study how frictions and incomplete
linkages in the industry value chain that keep some parties from meeting and transacting, they affect value creation and value capture. Frictions arise from search and switching costs, moderating the intensity of industry rivalry and the efficiency of the market. The author finds that firms with a competitive advantage prefer industries with less, but not zero, frictions. Their article was to show that rivalry interacts nontrivially with other competitive forces to affect industry attractiveness. He also found that Firm heterogeneity emerges naturally when organizations introduce resource development. Heterogeneity falls with frictions, but the sustainability of competitive advantage increases. Overall, the article shows that introducing frictions makes value-based models very effective at integrating analyses at the industry, firm, and resource levels.

Garicano and Kaplan (2002) wrote and investigated a framework to analyze the potential changes in transaction costs due to the introduction of e-commerce on transactions between businesses. They also illustrate and apply the framework using internal data from an Internet-based firm to measure process improvements, marketplace benefits, and motivation costs. Their findings were that, process improvements and marketplace benefits are potentially large, while little evidence exists of increases in motivation costs. They also used their framework to help discuss why valuations of Internet companies were so high at the end of 1999 and why they have declined so precipitously since then.

Manoj (2015) wrote a paper with the aim of addressing the broad question of how organizations capture value from foresight is exercised. Through a comparative case analysis, Manoj looked at what firms do to make the information usable and create value. His article explores factors that cause different firms to respond differently to the same trends. It analyzes the passenger car segment of the automobile industry and the response of six major firms to fossil fuel and changing environmental regulations through an analysis of their policies and strategic activities, such as new product development. It finds foresight to be an important link between firm capabilities and environmental changes. He used a design approach which adopted the case approach to capture the linkage between the issue and the context. The article uses multiple cases to explore the variables by comparing and contrasting the cases on key aspects. As the paper ’ s objective is to understand the similarities and differences between dominant firms in the sector, it chooses through theoretical sampling, six firms that have a presence in all the major regions of the world, each from the USA, Europe and Japan: Ford, General Motors, Volkswagen, Renault, Toyota and Honda. This sample represents the firms and regions
traditionally strong in the passenger car industry. Manoj in his findings recorded that the relationship that was posited in the conceptual model between the goal of the firms, the vision of the future and the nature of products and approach to technology/competence development demonstrated validity. The paper however, perceives that some additional linkages that link between foresight and the goals and vision of the future seem to be influenced by the extent of uncertainty. In addition, the decisions regarding portfolio of products and approaches to technology and competence development seem to be also influenced by the perception of existing competencies and the external competitive context. The paper faced implications because it was based on multiple cases created out of secondary information, hence the constructs used are those which are perceived and stated. It also recommended that firms understand decisions related to technology choices in field involving high levels of uncertainty and competition. Future research is influenced by Manojs work since it has explored the linkages between what firms perceive and state, and what is reflected in their actions. It has looked at this linkage from the perspective of foresight, and the strategic perspective of the firm. It has come up with additional issues and questions that influence this relationship.

Jackson and Kenneth (2015) analyzed the discovery of giant magneto resistance (GMR) and its development and commercialization by the global disk drive industry to answer the question of ‘Who captures the benefits from innovation in a global innovation system?’. They assessed the returns to the scientists, firms, and countries associated with GMR. Their findings were that the French and German scientists that discovered GMR and their labs benefited by receiving the Nobel Prize and small licensing fees. The firm that first commercialized the technology, IBM, captured profits from selling hard disk drives and magnetic heads using GMR. Other hard disk drive and head manufacturers based in the U.S. and Japan was able to quickly assimilate the technology and catch up with IBM. France and Germany reaped limited returns due to the lack of domestic firms with the absorptive capacity to commercialize GMR. The U.S. and Japan benefited from the success of their firms in commercializing GMR, as did other countries which were part of the global value chains of those companies. Consumers and firms that incorporated hard drives in their products ultimately benefited from cheaper hard drives with greater capacity. Their findings illustrate the importance of absorptive capacity at the firm and national level in capturing benefits from innovation. They also show that the benefits to first mover firms can be short-lived in a competitive industry with open
transfer of knowledge and limited regimes. Finally, they show that the location of jobs and wages associated with innovative products depends on the structure of the global value chains of leading firms.

According to a study carried out, over the past 25 years, the technology strategy literature has examined how four primary mechanisms—patents, secrecy, lead time, and complementary assets—influence to what extent firms capture value generated by their innovations. Although this literature has had a profound impact on our understanding of how firms capture value from innovation, we have yet to develop a robust theory that allows us to explain the characteristics of institutions, industries, firms, and individual technologies that affect the selection of particular value capture mechanisms. The purpose of this article was to provide a foundation for addressing the gaps that exist in the literature. The authors identify and assess relevant scholarly work regarding value capture mechanisms published in top-tier peer-reviewed management journals between 1980 and 2011. They then reviewed the assumptions, insights, and causal mechanisms for the antecedents and consequences of the value capture mechanisms highlighted in which they highlighted in their article. Their ultimate objective was to identify research opportunities that help to better understand the conditions under which the value capture mechanisms are most likely to help innovating firms achieve persistent superior performance (Sharon, Leiblein & Shaohua, 2013).

The authors finding was that the extent of patenting innovation is possible but depends on part on how the legal system defends and enforces the product rights. In some cultures, innovations are seen less as a private good than a social one. This can be a problem because if rival firms can copy your innovation without any legal barriers, they can do so without any barriers. Coca Cola and Pepsi had a diet version of their products on the market within a few weeks of Cola’s introduction of the first diet beverage. Even if legal protection existed, the company has and can enjoy little time to capture value if competitors can invent around the patent. For example, Bowmar launched the first pocket calculator, but it could not survive the competitive pressures from HP and Texas Instruments. Both rivals circumvented Bowmar’s patents legally, culminating in the eventual sale of Bowmar and its exit from the industry. Unless an entrepreneur has Intellectual Property that can be tightly protected like a chemical formula in the pharmacy industry, one is an easy prey for imitators, just like much like Xerox, which lost all of its initial advantage to Apple.
2.5 Chapter Summary

In order to capture value, one must a good bargaining position with regard to the owners of the complementary assets needed to leverage the innovation. An entrepreneur needs to have market power over critical resources required to make an innovation cash-generative. Supplier relationships, production capacity, sales networks, maintenance facilities and advertising teams are all examples of such resources. There are other resources that one requires to be ahead of or in control the value chain. There is need for new capabilities in an ever changing environment through innovation. This is the only way sustainability can be reached by SMEs and enhance continuity. Innovation is important though it’s prone to imitators and competitors who may interfere with the value earning and capture of an organization in a short period time. The business model innovation pillars have unique subcontracts which are evident in almost all the scholarly writings reviewed in this chapter. The pillars, value creation innovation, value proposition innovation and value capture innovations have been used by many authors to investigate the sustainability of SMEs through innovation. Value proposition innovation as a component of the business model innovation can be described in terms of the subcontracts that include: new offerings, new customer Segments markets, new channels, and new customer relationships. Value creation innovation comprises of value new capabilities, new technology and equipment, new processes and structures and new partnerships and value capture innovation subcontracts include new revenue models, new prices and cost structures. The next chapter will explain the research methodology to be used to collect data that be used to deduce information that can investigate business model innovation , value capture innovation, value proposition innovation and value capture innovation and its effect on sustainability of SME.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter seeks to explain the procedure of the methodology, approach and design that will be used to conduct research and collect data and hence come up with observations that will thus help in drawing the conclusion. The methodology will seek to investigate the effect of the business model innovation that is value creation innovation, value proposition innovation and value capture innovation on the sustainability of SMEs. It also explains the sample population to be used, the research procedure, data analysis method.

3.2 Research Design

This study will be a descriptive study that seeks to investigate the effect of business model innovation variables that include: value creation innovation, value proposition innovation and value capture innovation and their effect on SME sustainability. The study will be descriptive since it will ascertain and describe the characteristics of the variables mentioned above and their effect on SME sustainability. The study will use individual entrepreneurs or business managers of SMEs as the unit of study. The type of investigation will be correlation study which will inquire the important variables associated with the problem of sustainability of SME in regards to Business model innovation. The study with have minimal interference since it’s a correlation study, and the time intended to complete the study will be about one or two months. The data will be collected at one point in time hence cross sectional studies. The study setting will be contrived, under natural environment setting. The method used to collect data will be questionnaires. Time taken to fill the questionnaires could also limit the number of respondents that could answer the questions in a day. The study is influenced by Lüttgens and Diener (2016) who used a unit of analysis which they chose experts from the field of business administration (research associates, post docs and external partners from R&D projects of the TIM Group at RWTH Aachen University). They selected the field because the experts were familiar with the way in which a business works; they were therefore familiar with Porter’s five forces.
3.3 Population and Sampling Design

3.3.1 Target Population

The research will focus on Kenyan SMEs, in Nairobi and Kiambu counties. The SMEs are intended to answer the questions relating to the variables, value creation innovation, value proposition innovation and value capture innovation and their effects on sustainability of their businesses. The study will therefore benefit the 17million SMEs (KNBS, 2016). The study will involve SME owners or managers. Saunders (2016) defines a target population as a complete set of cases from which the sample is taken and which the researcher wants to generalize results from. Zikmund et. al., (2013) defined a target population as all elements or individuals that a researcher is interested in studying. A target population can therefore be described as the complete set of people, events or objects that have similar characteristics that the researcher wants to draw generalizations from (Cooper & Schindler, 2014). The population of study comprised of all students of United States International University-Africa located in Nairobi area. According to USIU-Africa registrar’s office (USIU-Africa, 2018) the student population as of January 2018 stood at approximately 6,508, ranging from undergraduate to doctoral level. Below is a breakdown of the population:

<table>
<thead>
<tr>
<th>Year/level of study</th>
<th>Student count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year students</td>
<td>1,439</td>
</tr>
<tr>
<td>2nd year students</td>
<td>1,304</td>
</tr>
<tr>
<td>3rd year students</td>
<td>1,125</td>
</tr>
<tr>
<td>4th year students</td>
<td>1,209</td>
</tr>
<tr>
<td>Masters students</td>
<td>1,313</td>
</tr>
<tr>
<td>Doctorate students</td>
<td>118</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,508</strong></td>
</tr>
</tbody>
</table>

3.4 Sampling Design

Sampling design is the method used to find a sample from a specific population and as such it is the procedure that a researcher uses while selecting items for the study’s sample (Cooper & Schindler, 2014). The sampling design comprises of the sampling frame, sampling technique and sample size.
3.4.1 Sampling Frame

A sampling frame is defined as a comprehensive list of individuals, units or entities in the population, from which a sample is drawn and to which study findings are to be generalized (Saunders et. al., 2016). This study focused on the entire student population of USIU-Africa. The sampling frame was obtained from the USIU registrar’s office (USIU-Africa, 2018).

3.4.2 Sampling Technique

The technique used will be probability sampling, specifically simple random sampling where each element in the population has a known and equal probability of selection. In the study, each possible sample of a given size (n) has a known and equal probability of being the sample actually selected. Every element is selected independently of every other element. The reason it’s used is because the nature of research is conclusive, the sampling errors are predicted to be larger, and the population has a relatively high heterogeneity. The statistical considerations are favorable and operational considerations are unfavorable. Therefore, Pearson product-moment correlation coefficients were computed to detect significant linear associations, where present, among the five external pressures and three strategies. These bi variate correlations signaled whether or not SME owner/managers were inclined to take a contingency approach to strategy selection. All tests were two-tailed and done at 0.05 level of significance to minimize the risk of rejecting a true null hypothesis, type 1 error (Global Entrepreneurship monitor, 2009, 2010).

3.4.3 Sampling Size

The formula used to derive the sample size is n=N

\[ n = \frac{N}{1+N(e^2)} \]

The sample size of a study is a subset of the population or the number of elements selected from the population to constitute a sample (Creswell, 2014). Sample size is a primary concern for researchers as it aims to eliminate bias in selection of a sample (Kumar, 2011). Saunders (2016) argues that the larger a samples size, the lower the likelihood of error when generalizing findings to the population. The study population was based on the student’s year and level of study. The target population is 6,508. The study will adapt the formula developed by Cochran (2014) to determine the sample size;
‘e’ will be the desired level of precision (i.e. the margin of error), p is the (estimated) proportion of the population which has the attribute in question, and q is 1 − p. With the assumption of 90% of the population have SMEs or work in one, so p = 0.9. 95% confidence, (gives us Z values of 1.96) and at least 5 percent—plus or minus—precision. The q value is 1−0.9=0.1

\[
((1.96)^2 \times (0.9) \times (0.1)) / (0.05)^2 = 200.
\]

Total sample size = 200

<table>
<thead>
<tr>
<th>Year/level of study</th>
<th>Student count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year students</td>
<td>41</td>
</tr>
<tr>
<td>2nd year students</td>
<td>38</td>
</tr>
<tr>
<td>3rd year students</td>
<td>34</td>
</tr>
<tr>
<td>4th year students</td>
<td>36</td>
</tr>
<tr>
<td>Masters students</td>
<td>47</td>
</tr>
<tr>
<td>Doctorate students</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

### 3.5 Data Collection Method

This study will use questionnaire data collection method; this is because the sample size is large and largely distributed in Nairobi. A research done collected demographic data collected on business activity, age, location, number of employees and respondent gender. This stage will do the same (Global Entrepreneurship Monitor 2009, 2010).

### 3.6 Research Procedure

This study is structured as follows; first, there is an outline of the theoretical background underpinning business model innovation and sustainability of SMEs. Next, the paper
presents the research questions, problem statement and three objectives. It explains the
data collection process, analysis method to be used. The findings will be presented from
the empirical fieldwork along with extracts, and then it will be summarized in the
discussion section. The study concludes with recommendations for future research and
with final remarks (Balan-Vnuk & Balan, 2015). Permission to conduct this research will
be granted in stages: initially by the research supervisors and then the Dean, Chandaria
School of Business (Appendix A). In compliance the school Business school and the
supervisor in accordance to the procedure to the guidelines followed.

A pilot study was defined by Zikmund et.al.,(2013) as a small-scale research project that
collects data from respondents similar to those that will be used in the full study. The
purpose of piloting is especially to test the questionnaire and any weaknesses that may
exist in it. Bryman (2012) also said that pilot studies are self-complete questionnaires
since the interviewer will not be present to clear up any confusion. He also reconed that,
inappropriate questions and instructions can be identified and corrected. He also
recommended that the pilot should not be carried out on people who might be members of
the sample used in the full study as it may affect representatitiveness of any subsequent
sample. Instead, the researcher should find a small set of respondents who are
comparable to members of the population from which the samples are taken.

According to Saunders et.al., (2016), the pilot sample size should be sufficient to include
any major variations in the population that are likely to affect responses, and recommend
a minimum number of 10 respondents. Once data for pilot testing is collected, it will be
coded and entered in SPSS to test for reliability and validity of the research instrument.
Reliability seeks to determine if scores to items on a research instrument are internally
consistent and stable. It also tests whether the test administration and scoring was
consistent (Creswell, 2014). Pre-testing the research instruments reduces biasness that
may be caused by measurement errors (Zikmund et. al., 2013). Reliability can be defined
into two forms, external and internal reliability. In the external reliability, focus is on the
replication of the study. The internal reliability conversely constitutes the consistency in
collection, analysis and interpretation of the data and it can be found when an
independent researcher comes to similar findings as the original researcher after re-
analyzing the information (Zikmund et.al., 2013).

Research validity refers to the correctness or truthfulness of an inference that is made
from a research study among participants drawn from the population (Cooper &
Schindler, 2014). According to Christensen et.al., (2014), there are three types of validity: Construct validity which is the extent to which a construct is adequately represented by the measures used; Internal validity, which is the correctness of inferences made about cause and effect in connection with independent and dependent variables; and external validity, which is the degree to which results can be generalized to other people, settings, and time. According to Creswell (2013) the validity of a research instrument is improved by use of a pilot study.

This study has used self-administered questionnaires. According to Bryman and Bell (2011) with a self-administered questionnaire (SAQ), respondents answer questions by completing the questionnaire themselves. There is no interviewer in the administration of the self-completion questionnaire, the research instrument needs to be easy to follow and its questions have to be particularly easy to answer (Saunders et al., 2016).

There are several advantages to using self-administered questionnaires over structured interviews: One is that, they are faster to administer; two, there is absence of interviewer effects; three, there is no interviewer variability; and four, it is convenient for respondents. Self-administered questionnaires however have some shortcomings as well and these include: No one present to prompt if needed; there is no much consultation or probe; one has to ensure questions are salient to respondents; difficulties of asking questions in a different way; respondents can read all the questions before they start answering and this means they are not independent of each other; cannot ask a lot of questions; there is a risk of missing data and also poor response rates (Bryman & Bell, 2011; Cooper & Schindler, 2014).

Ethics in research deal with the appropriateness of the researcher’s behavior in relation to the rights of those who becomes the subject of a research project, or who are affected by it. According to Christensen et.al., (2014) research ethics are a set of guidelines to assist the researcher in conducting ethical research and are comprised of three areas: relationship between society and science; professional issues; and treatment of research participants. The main concerns are in business research are professional ethics and misconduct. Research misconduct includes ‘fabrication, falsification or plagiarism in proposing, performing or reviewing research (Christensen et.al., 2014).
3.7 Data Analysis Methods

Just like Clauss (2017) the study will follow a rigorous scale development approach to ensure validity and reliability. Thomas Clauss, collected two large-scale samples of 126 and 232 firms to specify and assess the scale. As a result, he provided a hierarchical three-level scale for measuring business model innovation. The feel of the data, goodness of data will be assessed on the basis of validity and reliability of the data will be assessed to ensure that the variables used are appropriate and are accurate. The data collected was prepared by checking for errors, inconsistencies, incompleteness, misclassification and gaps in the information obtained from the respondents (Kumar, 2011). A common problem with questionnaires is missing data. It can come in several forms: that is either, Invalid data, that is data with entry errors; Incomplete data, which is data that is missing and is needed to make a decision; Inconsistent data could result from mistakes of aligning databases; while Incorrect data occurs when data is falsified (Cooper & Schindler, 2014).

Descriptive statistics was also used, these are measurements that describe the center, spread, and shape of distributions and are helpful as preliminary tools for data description. They help in describing the basic features data, organize and summarize data in a simple way (Cooper & Schindler, 2014). Descriptive statistics helps to discern patterns that are not clearly evident in the raw data through use of graphs, pie charts, and tables for ease of visual explanation. Descriptive statistics include measurement of central tendency and dispersion (Saunders et al., 2016). There are various measures of central tendency and the choice of which to use is based on certain criteria. Arend (2013) describes a measure of central tendency as good or satisfactory if it possesses the following characteristics: It should be based on all observations; it should not be affected by extreme values; it should be close to the maximum number of observed values as possible; it should have a definite value; it should be subjected to complicated calculations; it should be capable of further algebraic formulation; and it should be stable with regard to sampling.

Inferential statistics are statistical methods used to make inferences or to project from a sample to an entire population. Statistical analysis can be uni-variate when testing objective involving only one variable, bi-variate when involving two variables, or multi-variate when testing objectives and models involving three or more variables (Zikmund et al., 2013). There are several inferential tests that include; Factor Analysis, Correlation, Analysis of Variance and Regression.
3.8 Chapter Summary

The study intends to spend minimal cost on the research. The study will focus on areas within Nairobi and neighboring Kiambu County. The amount intended for use of collecting data, transport, printing and miscellaneous cost is between ksh.10,000 and ksh.30,000. This study had no intention of using any form of funding, either from an agency in the public, commercial, or not-for-profit sectors. This chapter will guide the data collection, analysis and evaluation for chapter 4 and thus provide information for the summary of the study with findings and conclusions for chapter 5.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the data analysis results, interpretation, and presentation. The chapter presents perceptions of the respondents on the Business model innovation and sustainability of small and medium sized enterprises. SPSS version 25 and SPSS Amos were used to analyze and the results compiled below.

4.2 Response Rate

Table 4.1 indicates that out of 200 questionnaires administered, only 150 were returned. This gave a response rate of 75% which was sufficient enough to proceed with data analysis. The response rate helps to produce accurate useful results that represent the target population.

Table 4.1 Response Rate

<table>
<thead>
<tr>
<th>Questionnaires</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded</td>
<td>150</td>
<td>75</td>
</tr>
<tr>
<td>Did not respond</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3 Demographic Characteristics

This section discourses the results of the general information about the respondents including the gender, age bracket, level of education, marital status, number of children and the length of time in business.

4.3.1 Gender

The respondents were asked to indicate their gender. Figure 4.1 indicates the gender of the respondents, 42% of the respondents were males and 58% were female. The above finding reveals that majority of the respondents in business were females.
4.3.2 Age Bracket

The respondents were asked to indicate their age bracket. Figure 4.2 indicate that majority of the respondents 76% were between the ages of 25-34 years, 18% were in the age bracket of 35-44 years, 4% were in the age bracket of 45-54 years and 2% were below 50 years.

4.3.3 Level of Education

The respondents were asked to indicate their highest level of education attained. Figure 4.3 shows that majority 79% of the respondents had university degrees. 16% had acquired college certificates, 5% had attained secondary certificates and 1% of the respondents had primary qualifications.
4.3.4 Marital Status

The respondents were asked to indicate their marital status and the findings presented in figure 4.4. The findings reveal that 53% of the respondents were single, 46% were married and only 1% had divorced.

4.3.5 Children

The respondents were asked to indicate whether they had children. Figure 4.5 indicate the findings from the respondents. 51% of the respondents had children while 49% had no children.
4.3.6 Number of Children

The respondents who had children were asked to indicate the number of children they had. Figure 4.6 indicates that majority had between one to three children.

Figure 4.6 Number of Children

4.3.7 Number of Years in Business

The respondents were asked to indicate the length of time they were in business. Figure 4.7 indicates that majority of the respondents 59% had been in the business for a period between the 2-3 years, 30% were in business between 4-8 years, 8% were in business for a period between 9-14 years and 4% were bin business for over 15 years.
4.4 Descriptive Analysis of Study Variables

4.4.1 Value Creation Innovation

The study sought to find out the responses on opinions of items measuring Value creation innovation. The respondents’ opinions are as indicated in table 4.2. 76% agreed that their employees constantly receive training in order to develop new competences. 71% agreed that their employees have very up-to-date knowledge and capabilities, relative to their direct competitors. 73% agreed that they constantly reflected on new competencies needed to be established in order to adapt to changing market requirements. 69% agreed that they kept the technical resources of their company up-to-date. 66% agreed that their technical equipment is very innovative compared to their competitors. 71% agreed that they regularly utilize new technical opportunities in order to extend their product and service portfolio. 44% of the respondents were of the opinion that they constantly search for new collaboration partners. 56% agreed that they regularly utilize opportunities that arise from integration of new partners into their processes. 61% agreed that they regularly evaluate the potential benefits of outsourcing. 51% agreed that new collaboration partners regularly help them to further develop their business model. 59% agreed that they were recently able to significantly improve their internal processes. 64% agreed that they utilize innovative procedures and processes during the manufacturing of their products and 62% agreed that existing processes are regularly assessed and significantly changed if needed.
Table 4.2 Value Creation Innovation

<table>
<thead>
<tr>
<th>Code</th>
<th>Value creation innovation</th>
<th>SA (%)</th>
<th>A (%)</th>
<th>UN (%)</th>
<th>D (%)</th>
<th>SD (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC1</td>
<td>Our employees constantly receive training in order to develop new competences.</td>
<td>38</td>
<td>38</td>
<td>10</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>VC2</td>
<td>Relative to our direct competitors, our employees have very up-to-date knowledge and capabilities.</td>
<td>27</td>
<td>45</td>
<td>18</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>VC3</td>
<td>We constantly reflect on which new competencies need to be established in order to adapt to changing market requirements.</td>
<td>36</td>
<td>37</td>
<td>15</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>VC4</td>
<td>We keep the technical resources of our company up-to-date.</td>
<td>33</td>
<td>36</td>
<td>24</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>VC5</td>
<td>Relative to our competitors our technical equipment is very innovative.</td>
<td>31</td>
<td>35</td>
<td>19</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>VC6</td>
<td>We regularly utilize new technical opportunities in order to extend our product and service portfolio.</td>
<td>30</td>
<td>42</td>
<td>20</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>VC7</td>
<td>We are constantly searching for new collaboration partners.</td>
<td>14</td>
<td>30</td>
<td>34</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>VC8</td>
<td>We regularly utilize opportunities that arise from integration of new partners into our processes.</td>
<td>15</td>
<td>40</td>
<td>27</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>VC9</td>
<td>We regularly evaluate the potential benefits of outsourcing.</td>
<td>13</td>
<td>49</td>
<td>21</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>VC10</td>
<td>New collaboration partners regularly help us to further develop our business model.</td>
<td>16</td>
<td>35</td>
<td>29</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>VC11</td>
<td>We were recently able to significantly improve our internal processes.</td>
<td>14</td>
<td>44</td>
<td>30</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>VC12</td>
<td>We utilize innovative procedures and processes during the manufacturing of our products.</td>
<td>22</td>
<td>42</td>
<td>22</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>VC13</td>
<td>Existing processes are regularly assessed and significantly changed if needed.</td>
<td>14</td>
<td>48</td>
<td>26</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

KEY: SA-Strongly Agree; A-Agree; UN-Undecided; D-Disagree; SD- Strongly Disagree

4.4.2 Value Proposition Innovation

Table 4.3 indicate the respondent’s opinion on items measuring value proposition innovation. The findings revealed that majority 78% of the respondents agreed that they regularly address new, unmet customer needs. 72% agreed that their products or services are very innovative in relation to their competitors. 72% agreed that their products or services regularly solve customer needs, which were not solved by competitors. 72%
agreed that they regularly take opportunities that arise in new or growing markets. 60% were of the opinion that they regularly address new, unserved market segments. 73% were of the view that they constantly seek new customer segments and markets for their products and services. 62% agreed that they regularly utilize new distribution channels for their products and services. 62% agreed that constant changes of their channels have led to improved efficiency of their channel functions. 48% were of the view that they consistently change their portfolio of distribution channels. 66% agreed that they try to increase customer retention by new service offerings. 71% agreed that they emphasize innovative/modern actions to increase customer retention and 69% were of the opinion that they recently took many actions in order to strengthen customer relationships.

Table 4.3 Value Proposition Innovation

<table>
<thead>
<tr>
<th>Code</th>
<th>Value proposition innovation</th>
<th>SA (%)</th>
<th>A (%)</th>
<th>UN (%)</th>
<th>D (%)</th>
<th>SD (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP1</td>
<td>We regularly address new, unmet customer needs.</td>
<td>36</td>
<td>41</td>
<td>10</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>VP2</td>
<td>Our products or services are very innovative in relation to our competitors.</td>
<td>28</td>
<td>43</td>
<td>17</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>VP3</td>
<td>Our products or services regularly solve customer needs, which were not solved by competitors.</td>
<td>29</td>
<td>43</td>
<td>18</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>VP4</td>
<td>We regularly take opportunities that arise in new or growing markets.</td>
<td>30</td>
<td>41</td>
<td>19</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>VP5</td>
<td>We regularly address new, unserved market segments.</td>
<td>26</td>
<td>34</td>
<td>22</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>VP6</td>
<td>We are constantly seeking new customer segments and markets for our products and services.</td>
<td>29</td>
<td>44</td>
<td>16</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>VP7</td>
<td>We regularly utilize new distribution channels for our products and services.</td>
<td>22</td>
<td>40</td>
<td>22</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>VP8</td>
<td>Constant changes of our channels have led to improved efficiency of our channel functions.</td>
<td>19</td>
<td>42</td>
<td>27</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>VP9</td>
<td>We consistently change our portfolio of distribution channels.</td>
<td>14</td>
<td>34</td>
<td>32</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>VP10</td>
<td>We try to increase customer retention by new service offerings.</td>
<td>30</td>
<td>36</td>
<td>20</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>VP11</td>
<td>We emphasize innovative/modern actions to increase customer retention</td>
<td>29</td>
<td>42</td>
<td>21</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>VP12</td>
<td>We recently took many actions in order to strengthen customer relationships.</td>
<td>29</td>
<td>41</td>
<td>22</td>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

KEY: SA-Strongly Agree; A-Agree; UN-Undecided; D-Disagree; SD- Strongly Disagree
4.4.3 Value Capture Innovation

The study sought to find out opinions of the respondents on value capture innovation. The findings are as indicated in table 4.4. From the findings 61% were in agreement that they recently developed new revenue opportunities. 49% agreed that they increasingly offered integrated services in order to realize long-term financial returns. 34% were of the outlook that they recently complemented or replaced one-time transaction revenues with long-term recurring revenue models. 37% agreed that they do not rely on the durability of our existing revenue sources. 66% agreed that they regularly reflect on our price-quantity strategy. 58% agreed that they actively seek opportunities to save manufacturing costs. 61% approved that their production costs are constantly examined and if necessary amended according to market prices. 63% were in agreement that they regularly utilize opportunities which arise through price differentiation.

Table 4.4 Value Capture Innovation

<table>
<thead>
<tr>
<th>Code</th>
<th>Value capture innovation</th>
<th>SA (%)</th>
<th>A (%)</th>
<th>UN (%)</th>
<th>D (%)</th>
<th>SD (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCP1</td>
<td>We recently developed new revenue opportunities (e.g. additional sales, cross-selling).</td>
<td>22</td>
<td>38</td>
<td>26</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>VCP2</td>
<td>We increasingly offer integrated services (e.g. maintenance contracts) in order to realize long-term financial returns.</td>
<td>13</td>
<td>36</td>
<td>29</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>VCP3</td>
<td>We recently complemented or replaced one-time transaction revenues with long-term recurring revenue models (e.g. leasing).</td>
<td>8</td>
<td>25</td>
<td>34</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>VCP4</td>
<td>We do not rely on the durability of our existing revenue sources.</td>
<td>8</td>
<td>29</td>
<td>32</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>VCP5</td>
<td>We regularly reflect on our price-quantity strategy.</td>
<td>18</td>
<td>47</td>
<td>17</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>VCP6</td>
<td>We actively seek opportunities to save manufacturing costs.</td>
<td>19</td>
<td>39</td>
<td>21</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>VCP7</td>
<td>Our production costs are constantly examined and if necessary amended according to market prices.</td>
<td>24</td>
<td>37</td>
<td>18</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>VCP8</td>
<td>We regularly utilize opportunities which arise through price differentiation.</td>
<td>19</td>
<td>44</td>
<td>21</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

KEY: SA-Strongly Agree; A-Agree; UN-Undecided; D-Disagree; SD- Strongly Disagree
4.4.4 Organizational Competitive Advantage

The study sought to find out the respondents opinion on Organizational competitive advantage and the findings indicated in table 4.5. The findings revealed that 53% were felt that competition /rivalry with other companies was of importance in influencing their business. 57% were of the understanding that the particular location their company/business is of important influence to their company’s products. 59% agreed that their interaction with their suppliers, their location and their relationship with them was of importance. 64% were of the understanding that interaction with their customers, their location, and relationship to them was of great importance. 64% agreed that marketing plays an important role in their organization. 67% felt that the local consumption of their product from their respective market and its influences on their business strategy was of great importance.

Table 4.5 Organizational Competitive Advantage

<table>
<thead>
<tr>
<th>Code</th>
<th>Organizational competitive advantage</th>
<th>NI (%)</th>
<th>SNI (%)</th>
<th>NIUI (%)</th>
<th>SI (%)</th>
<th>VI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA1</td>
<td>Competition /rivalry with other companies influence on your business is</td>
<td>14</td>
<td>22</td>
<td>11</td>
<td>20</td>
<td>32</td>
</tr>
<tr>
<td>CA2</td>
<td>The particular location of your company/business is of important influence to your company’s products</td>
<td>11</td>
<td>19</td>
<td>13</td>
<td>14</td>
<td>43</td>
</tr>
<tr>
<td>CA3</td>
<td>Your interaction with your suppliers, their location and your relationship with them is</td>
<td>10</td>
<td>17</td>
<td>15</td>
<td>15</td>
<td>44</td>
</tr>
<tr>
<td>CA4</td>
<td>Interaction with your customers, their location, and your relationship to them can be described as</td>
<td>9</td>
<td>14</td>
<td>13</td>
<td>20</td>
<td>44</td>
</tr>
<tr>
<td>CA5</td>
<td>The role marketing plays in your organization can be described as</td>
<td>7</td>
<td>12</td>
<td>18</td>
<td>16</td>
<td>48</td>
</tr>
<tr>
<td>CA6</td>
<td>The local consumption of your product from your respective market and its influences on your business strategy can be described as</td>
<td>5</td>
<td>12</td>
<td>16</td>
<td>18</td>
<td>49</td>
</tr>
</tbody>
</table>

KEY: NI=Not important at all; SNI=somewhat not important NIUI=neither important nor unimportant, SI=somewhat important; VI=very important.

4.5 Inferential Statistics

The inferential statistics were done in two phases, the first stage was the assessment of the measurement model that involved factor analysis which encompassed exploratory and
confirmatory factor analysis. The second phase contained the estimation of the structural model.

4.5.1 Exploratory Factor Analysis

Exploratory factor analysis (EFA) through Principal components analysis (PCA) extraction method was conducted to measure the essential dimension associated with 39 items. Kaiser–Mayer–Olkin (KMO) measure of the sampling adequacy of individual variables and Bartlett’s test of Sphericity were used to measure constructs validity. Table 4.6 revealed that both KMO and Bartlett’s test of Sphericity are significant and suitable for the factor analysis. KMO value attained 0.843 that was above the threshold 0.7 and the value of Bartlett's test of Sphericity pointed out sufficient correlation between the variables ($\chi^2 = 1567.151$, df=231, p = .000). The cumulative variance explained is 61.491% which exceeds the acceptable limit of 60%.

Table 4.5 Exploratory Factor Analysis

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMO and Bartlett's Test</td>
<td></td>
</tr>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>0.843</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity Approx. Chi-Square df Sig.</td>
<td>1567.151 231 0.00</td>
</tr>
<tr>
<td>Total variance extracted</td>
<td></td>
</tr>
<tr>
<td>Components</td>
<td></td>
</tr>
<tr>
<td>Eigen value</td>
<td>6.181</td>
</tr>
<tr>
<td>% variance</td>
<td>28.096</td>
</tr>
<tr>
<td>Organizational advantage</td>
<td>3.820</td>
</tr>
<tr>
<td>Value creation innovation</td>
<td>2.038</td>
</tr>
<tr>
<td>Value proposition innovation</td>
<td>1.488</td>
</tr>
<tr>
<td>Value capture innovation</td>
<td>54.726</td>
</tr>
<tr>
<td></td>
<td>61.491</td>
</tr>
</tbody>
</table>

4.5.2 Construct Reliability

The factor loading of all items of each scale were above 0.6 which exceeded the threshold 0.5 indicating the evidence of convergent validity. Reliability for the constructs was tested using composite reliability and Cronbach's Alpha. Table 4.7 shows that the composite reliability values for the constructs ranged from 0.811 to 0.881 exceeding the threshold 0.6, in addition the Cronbach's Alpha test values for the scales varied from 0.806 to 0.876 which exceeded the threshold point of 0.7 thus indicated good scale of reliability of the four factors.
4.5.3 Construct Validity

Construct Validity was assessed by convergent and discriminant validity. Average variance extracted (AVE) was used to measure both convergent and discriminant validity. Adequate levels of convergent validity were achieved as AVE’s for the specific constructs was above the threshold 0.5. Discriminant validity was realised as the values of maximum shared variance (MSV) were less than the values of AVE as shown in table 4.7.

**Table 4.6 Factor Loadings, Reliability and Validity of the Constructs**

<table>
<thead>
<tr>
<th>scale</th>
<th>Items</th>
<th>Factor loading</th>
<th>Cronbach's Alpha</th>
<th>AVE (Average variance extracted)</th>
<th>CR (Composite reliability)</th>
<th>MSV (Maximum Shared variance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational competitive advantage</td>
<td>CA5</td>
<td>0.856</td>
<td>0.876</td>
<td>0.557</td>
<td>0.881</td>
<td>0.035</td>
</tr>
<tr>
<td></td>
<td>CA4</td>
<td>0.838</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CA6</td>
<td>0.823</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CA3</td>
<td>0.781</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CA2</td>
<td>0.778</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CA1</td>
<td>0.651</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value creation innovation</td>
<td>VC1</td>
<td>0.805</td>
<td>0.850</td>
<td>0.509</td>
<td>0.850</td>
<td>0.359</td>
</tr>
<tr>
<td></td>
<td>VC3</td>
<td>0.782</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VC6</td>
<td>0.765</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VC2</td>
<td>0.760</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VC4</td>
<td>0.710</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VC5</td>
<td>0.621</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value proposition innovation</td>
<td>VP7</td>
<td>0.849</td>
<td>0.841</td>
<td>0.518</td>
<td>0.842</td>
<td>0.379</td>
</tr>
<tr>
<td></td>
<td>VP6</td>
<td>0.830</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VP12</td>
<td>0.786</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VP4</td>
<td>0.679</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VP5</td>
<td>0.648</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value capture innovation</td>
<td>VCP8</td>
<td>0.771</td>
<td>0.806</td>
<td>0.517</td>
<td>0.811</td>
<td>0.379</td>
</tr>
<tr>
<td></td>
<td>VCP7</td>
<td>0.770</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VCP4</td>
<td>0.727</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VCP6</td>
<td>0.702</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VCP5</td>
<td>0.661</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.5.4 Confirmatory Measurement Model

The confirmatory factor analysis (CFA) was used to validate the data pattern obtained in the exploratory factor analysis. The procedure was used to determine the goodness of fit for the model for the constructs. The model’s fit indices of $\chi^2=315.519; \text{df}=203; \chi^2/\text{df}=1.554; \text{CFI}=.961; \text{GFI}=.948; \text{RMSEA}=0.051$ and PCLOSE=0.087 were adequate suggesting a reasonable good – fitting model as indicate in figure 4.8.

$\chi^2=315.519; \text{df}=203; \chi^2/\text{df}=1.554; \text{CFI}=.961; \text{GFI}=.948; \text{RMSEA}=0.051$ and PCLOSE=0.087 Figure 4.8 Measurement model for the hypothesized model
4.5.5 Correlations

Figure 4.8 indicates the correlation coefficients. Value Capture Innovation was found to be positive and significantly related to Organisations Competitive Advantage ($r=0.270$, p-value<0.05). Value Proposition Innovation was found to be positive and significantly related to Organisations Competitive Advantage ($r=0.390$, p-value<0.05). Value Creation Innovation was found to be positive and significantly related to Organisations Competitive Advantage ($r=0.310$, p-value<0.05).

4.5.6 Normality Test

Skewness and kurtosis statistics were computed to assess the normality of the study variables. The results of the normality test of the study variables indicated skewness and kurtosis in the range of -1 and +1 as shown in table 4.8. This implies that the assumption of normality was satisfied.

Table 4.7 Normality Test for the Study Variables

<table>
<thead>
<tr>
<th>Composite Construct</th>
<th>N</th>
<th>Skewness Statistic</th>
<th>Skewness Std. Error</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis Std. Error</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Capture Innovation</td>
<td>150</td>
<td>0.610</td>
<td>0.198</td>
<td>-0.001</td>
<td>0.394</td>
<td>Normal</td>
</tr>
<tr>
<td>Value Proposition Innovation</td>
<td>150</td>
<td>0.710</td>
<td>0.198</td>
<td>0.093</td>
<td>0.394</td>
<td>Normal</td>
</tr>
<tr>
<td>Value Creation Innovation</td>
<td>150</td>
<td>0.936</td>
<td>0.198</td>
<td>0.824</td>
<td>0.394</td>
<td>Normal</td>
</tr>
<tr>
<td>Organisations Competitive Advantage</td>
<td>150</td>
<td>-0.836</td>
<td>0.198</td>
<td>-0.380</td>
<td>0.394</td>
<td>Normal</td>
</tr>
</tbody>
</table>

4.5.7 Structural Estimation Model.

The structural model was estimated to find the estimates of the relationships between study variables. Figure 4.9 show that the model’s fit indices of $\chi^2=335.921$; df=207; $\chi^2/df=1.623$; CFI=.940; GFI=.927; RMSEA=0.067 and PCLOSE=0.064 were adequate suggesting a reasonable good –fitting model. The quality of the structural model was explained by the value of $r$ square on the endogenous latent variable. The predictive power of the model was 40%.
Table 4.9 indicates that the regression weight for Value Capture Innovation was positive and significant ($\beta= 0.423$, $t= 5.924$, $p < .05$). This indicates that a unit increase in Value Capture Innovation would result in 42.3% increase in Organizations Competitive Advantage. The regression weight for Value Proposition Innovation was positive and significant ($\beta= 0.304$, $t= 3.452$, $p < .05$). This indicates that a unit increase in Value Proposition Innovation would result in 30.4% increase in Organizations Competitive Advantage. The regression weight for Value Capture Innovation was positive and significant ($\beta= 0.197$, $t= 2.234$, $p < .05$). This indicates that a unit increase in Value Capture Innovation would result in 19.7% increase in Organizations Competitive Advantage. The beta values indicate the predictive importance of the indicators, Value Creation Innovation was the most important predictor (Beta=0.423) followed by Value Proposition Innovation (Beta=0.304) and the least important was Value Capture Innovation (Beta=0.197).

$\chi^2=335.921; \text{ df}=207; \chi^2/df=1.623; \text{ CFI}=.940; \text{ GFI}=.927; \text{ RMSEA}=0.067$ and PCLOSE=0.064

Figure 4.9: Structural Model for the Hypothesized Relationships.
Table 4.8 Regression Weights.

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>Beta</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisations Competitive Advantage &lt;-- Value Creation Innovation</td>
<td>0.70</td>
<td>0.42</td>
<td>0.11</td>
<td>5.92</td>
<td>0.00</td>
</tr>
<tr>
<td>Organisations Competitive Advantage &lt;-- Value Proposition Innovation</td>
<td>0.50</td>
<td>0.30</td>
<td>0.14</td>
<td>3.45</td>
<td>0.00</td>
</tr>
<tr>
<td>Organisations Competitive Advantage &lt;-- Value Capture Innovation</td>
<td>0.30</td>
<td>0.19</td>
<td>0.17</td>
<td>2.23</td>
<td>0.00</td>
</tr>
</tbody>
</table>

4.6 Chapter Summary

This chapter is a reflection of the data collection and analysis of the research done on the respondents. The results obtained from the research in chapter four gave a broad perspective of people’s responses to the general and specific objectives of this study which sort to find the effects of business model innovation and sustainability of SMEs. The chapter gives response retrieved from the three objectives which were value creation innovation, value proposition innovation and value capture innovation. Business Model Innovation was measured by the above mentioned objectives while organizations competitive advantage was used to measure sustainability of businesses. The sustainability of SMEs was determined by testing the elements of an organizations competitive advantage as the independent variable while the three objectives, value creation innovation, value proposition innovation and value capture innovation were used to test the business model innovation as the dependent variables. Assessing the independent variable and the dependent variable helped to bring out the relationship that helped draw the conclusions and recommendations discussed in the next chapter 5. The next chapter summarizes, discusses, concludes and gives recommendation for the study.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter contains the summary, discussion, conclusion and recommendation for this study. The findings represent the results gathered from the research done across entrepreneurs in different areas of businesses, companies and industries in chapter 4. The findings reflect the three objectives as the dependent the variables measuring business model innovation and their relationship to organizations competitive advantage as the independent variable which helps in drawing the conclusion on sustainability of SMEs.

5.2 Summary of the Study

The results obtained from the research carried out in chapter four gave us a broad perspective of people’s responses to the general and specific objectives of this study. That is, business model innovation and sustainability of SMEs. Where value creation innovation, value proposition innovation and value capture innovation were the dimensions used to measure BMI while organizations competitive advantage was used to measure sustainability of businesses. The objectives were used to determine their effects on sustainability of SMEs with competitive advantage as the independent variable that measured sustainability and brought out this relationship.

The three dimensions mentioned above had sub-contracts that were used to measure them. They included, new capabilities, new technologies, new processes, and new partnerships that measured value creation innovation, Value proposition innovation was measured by new offerings, new customer and markets, new channels and new customer relations while the third dimension, value capture innovation was measured by, new revenue models and new cost structures. All which were demonstrated and proved to be positive measures of value creation, proposition and capture innovation variables. In relation to value creation innovation, the study revealed that 76% of respondents agreed that their employees constantly receive training in order to develop new competences. 71% agreed that their employees have very up-to-date knowledge and capabilities, relative to their direct competitors. 73% agreed that they constantly reflected on new competencies needed to be established in order to adapt to changing market requirements. 69% agreed that they kept the technical resources of their company up-to-date. 66% agreed that their technical equipment is very innovative compared to their competitors.
71% agreed that they regularly utilize new technical opportunities in order to extend their product and service portfolio. 44% of the respondents were of the opinion that they constantly search for new collaboration partners. 56% agreed that they regularly utilize opportunities that arise from integration of new partners into their processes. 61% agreed that they regularly evaluate the potential benefits of outsourcing. 51% agreed that new collaboration partners regularly help them to further develop their business model. 59% agreed that they were recently able to significantly improve their internal processes. 64% agreed that they utilize innovative procedures and processes during the manufacturing of their products and 62% agreed that existing processes are regularly assessed and significantly changed if needed.

Items measuring value proposition innovation gave findings that revealed that 78% of the respondents agreed that they regularly address new, unmet customer needs. 72% agreed that their products or services are very innovative in relation to their competitors. 72% agreed that their products or services regularly solve customer needs, which were not solved by competitors. 72% agreed that they regularly take opportunities that arise in new or growing markets. 60% were of the opinion that they regularly address new, unserved market segments. 73% were of the view that they constantly seek new customer segments and markets for their products and services. 62% agreed that they regularly utilize new distribution channels for their products and services. 62% agreed that constant changes of their channels have led to improved efficiency of their channel functions. 48% were of the view that they consistently change their portfolio of distribution channels. 66% agreed that they try to increase customer retention by new service offerings. 71% agreed that they emphasize innovative/modern actions to increase customer retention and 69% were of the opinion that they recently took many actions in order to strengthen customer relationships.

The study indicated that opinions of the respondents on value capture innovation showed that 61% of the respondents were in agreement that they recently developed new revenue opportunities. 49% agreed that they increasingly offered integrated services in order to realize long-term financial returns. 34% were of the outlook that they recently complemented or replaced one-time transaction revenues with long-term recurring revenue models. 37% agreed that they do not rely on the durability of our existing revenue sources. 66% agreed that they regularly reflect on our price-quantity strategy. 58% agreed that they actively seek opportunities to save manufacturing
costs. 61% approved that their production costs are constantly examined and if necessary amended according to market prices. 63% were in agreement that they regularly utilize opportunities which arise through price differentiation.

The study demonstrated that in relation to Organizational competitive advantage, 53% of the respondents felt that competition /rivalry with other companies was of importance in influencing their business. 57% were of the understanding that the particular location their company/business is of important influence to their company’s products. 59% agreed that their interaction with their suppliers, their location and their relationship with them was of importance. 64% were of the understanding that interaction with their customers, their location, and relationship to them was of great importance. 64% agreed that marketing plays an important role in their organization. 67% felt that the local consumption of their product from their respective market and its influences on their business strategy was of great importance. This clearly indicates that the objectives of the study were validly met.

5.3 Discussion

5.3.1 Value Creation Innovation

In regards to value creation innovation, the study drew responses on opinions of items measuring Value creation innovation. More than 60% of the respondents’ agreed that their employees constantly receive training in order to develop new competences. They also agreed that employees have very up-to-date knowledge and capabilities, relative to their direct competitors, which resonates with a study in the review that showed that innovations are often systemic and demand novel combinations of partner resources, capabilities, and intellectual capital (Tommi, Mika, Risto & Kristian, 2014).

Most respondents’ agreed that they reflect on new competencies that needed to be established in order to adapt to changing market requirements. Respondents agreed that the technical resources of their company were up-to-date. They also agreed that their technical equipments are innovative compared to their competitors and they regularly utilize new technical opportunities in order to extend their product and service portfolio. This resonates with the study that was carried out in the literature review that showed that firms that renew their resource base in line with the dynamic capabilities, can generate and sustain a competitive advantage and thus improve firm performance (Breznik & Lahovk, 2014).
Fewer respondents however, about 44% were of the opinion that they constantly search for new collaboration partners. This was because some of the businesses don’t require a lot of collaboration due to differentiation of the products and business models. Some respondents also seemed to compete rather than to collaborate. The respondents agreed that they regularly utilize opportunities that arise from integration of new partners into their processes and that they regularly evaluate the potential benefits of outsourcing.

The findings show that, having new collaboration partners’ help respondents further develop their business models which intern help in improving their internal processes and hence utilize innovative procedures and processes during the manufacturing of their products. This agrees with the view of Perkins (2012) that Innovation continues to come out clearly and evidently as a key component in business sustainability. Authors associate innovation with change and renewal that helps businesses adapt to current trends and needs of the consumer. Change, however is viewed differently by employees, when employees hear that their companies are planning to make changes, they are very likely to feel threatened and distressed, Kathleen Perkins however says that in an ideal world, people should like the idea of initiating organizational change and welcomes the idea of change with eagerness and excitement rather than distress or resistance. In this study as well, respondents agreed that existing processes are regularly assessed and significantly changed if needed.

There is a lot of entrepreneurial encouragement, funding and forums that have emerged and are currently encouraging people to do business. This has nevertheless not been able to bring about sustainability of business enterprises from startups to SMEs to large firms and corporations. Many businesses continue to closed down, and discontinue before the owners have realized their initial goals. Many reasons have been attributed to this unfortunate cases but this study shows that there is a connection between business sustainability that can be attributed to Business Model innovation with a key focus on value creation as one of the dimensions of business model canvas.

This study was a basic research with a sample of about 200 SMEs, where value creation was explored. Value creation innovation has come out clearly as an important aspect of sustainability of SMEs. New capabilities, new competences, new knowledge, new technological resources, innovative methods and processes, new partners are essential and this research response is evident. This study proves that the study on key barriers to SME growth commissioned by Invest In Africa (IIA) and Strathmore Business School carried
out recently was true. The study showed that SMEs are faced with inability to scale up which is one of the major business barriers that has seen 70 percent failure rate of SME’s within the first three years of existence. The study further explains that this has led to a gap between SMEs and large enterprises (www.capitalbusiness.co.ke).

5.3.2 Value Proposition Innovation

This research shows that the respondent’s opinion on items measuring value proposition innovation reflect their businesses significantly. The findings revealed that majority of the respondents agreed that they regularly address new, unmet customer needs. They also attested to having products or services that are very innovative in relation to their competitors. The products and services produced or sold by the respondents showed that they regularly solve customer needs which were not solved by competitors. Most respondents agreed that they regularly take opportunities that arise in new or growing markets. As well as regularly addressing new, unserved market segments. These findings agree with Fabian et.al, (2013) who said that entrepreneurial orientation, is a key driver of business growth. They recognized that over the past decade, there is increased attention paid to the concept of “entrepreneurship” which in their context refers to, an individual opportunistic activity that creates value, bears risk, and is strongly associated with Innovation. Entrepreneurship at a firm level, emanates from entrepreneurial venture's orientation towards identifying market opportunities that competitors’ have not yet recognized or that are under-exploited.

Most respondents in this study were of the view that they constantly seek new customer segments and markets for their products and services. Most of the respondents agreed that they regularly utilize new distribution channels for their products and services as well as constantly changing their channels which intern have led to improved efficiency of their channel functions. The study reveals that about 48% were of the view that they consistently change their portfolio of distribution channels, while 66% agreed that they try to increase customer retention by new service offerings. 71% of the respondents’ agreed that they emphasize innovative and modern actions to increase customer retention and 69% were of the opinion that they recently took many actions in order to strengthen customer relationships. All this is in line with Clauss (2017) research and findings in the literature review.
According to the Kenya National Bureau of Statistics (KNBS), there are more than 17 million SMEs registered in Kenya, with 98 percent of the enterprises contributing to 25 percent of the country’s GDP and employing up to 50 percent of the workforce. The study will therefore benefit the 17 million SMEs by trying to show that besides financing, businesses have other key variables to look at, and if well-articulated, their business models will attract investors who will want to engage and finance them. The variables this case includes: value proposition innovation whose response clearly indicates the need to address new emerging customer unmet needs (KNBS, 2016).

The study resonated the one used by Lawrence (2012) in his research which adopted one sample, cross-sectional survey research design. The methodology used in this research supported the research designs, with procedures in quantitative research in which investigators carry out a research to describe the attitudes, opinions, behaviors or characteristics of the population. Lawrence’s sample involved 262 SME owner/managers while this research involved 200 SMEs who participated in filling the questionnaire. The sample was from a sampling frame of 458 SMEs listed as active members with the Small Business Association of Jamaica in 2009. The focus in this research was on companies that have been in existence for One year and above with a steady growth and progressive success record. It also placed key attention to businesses that have existed for one year but are struggling with an aim to investigate their reasons for the struggle and contrast those that pay attention to value proposition and their outcomes. The study also focused on businesses of different nature and kind. The study brought out the fact that value proposition in an important aspect of business model innovation and intern business sustainability. The response rate was positive and depicted that the organizations pay attention to value proposition innovation.

The study expounded on business enterprises/SME in Nairobi, Kenya with a sample of about 150 companies with between 1-100 employees. It also followed Lawrence’s methodology where he used, Demographic data collected on business activity, age, location, number of employees and respondent gender. The research captured views of the SME owner/managers on the importance of paying key attention to Value proposition, in their Business model in order to enhance SME sustainability (Lawrence, 2012). The five-point numeric scale used ranged from a score of 1 (unimportant) to 5 (very important) and 1 (strongly agree) to 5 (strongly disagree). SME age (AGE), years (Duration) involved in the business and number of employees (SIZE) was used as control
variables, others will include: the Level of Innovation in the sector, Education qualifications and Training, Persons engaged in the SME Sector, comparison of SME to National v SMEs Expenditure structure, Constraints faced by MSMEs, Prevalence for Closure of Businesses, Reasons for Business Closures, Business Closure value addition and Financing of MSME operations (KNBS, 2016). The study compared all this aspects of the respondents to the value proposition innovation and its effects on business sustainability.

Just like Lawrence (2012) the study coded data and inspected it for means, standard deviation, skewness and kurtosis. The study used statistical measures to compare independence of means. The research methodology correlated the variables to learn about the populations under study as well as use, Pearson product-moment correlation coefficients to compute and detect significant linear associations, present, among the 3 variables on Value creation innovation, value proposition innovation and value capture innovation under the Business Model Innovation and linked them to competitive advantage to bring out sustainability. Bi-variate correlations was used to signal out and test the level of value proposition, creation and capture innovation effect on SME sustainability. The tests followed the two-tailed approach at 0.05 level of significance to minimize the risk of rejecting a true null hypothesis, type 1 error.

### 5.3.3 Value Capture Innovation

This study revealed that most of the respondents’ opinions were in line with the dimensions relating to value capture innovation. The findings showed that, most respondents were in agreement that they recently developed new revenue opportunities and agreed that they increasingly offered integrated services in order to realize long-term financial returns. Fewer respondents, about 34% were of the view that they recently complemented or replaced one-time transaction revenues with long-term recurring revenue models. 37% agreed that they do not rely on the durability of their existing revenue sources meaning they had to keep adjusting and innovating sources of revenue especially due to competition. Like most authors wrote, most businesses, regularly reflect on their price-quantity strategy and actively seek opportunities to save manufacturing costs just like this study depicts. The findings proved that most respondents have their production costs constantly examined and if necessary amended according to market prices and also utilize opportunities which arise through price differentiation.
These findings are in line with the research according to the Global Entrepreneurship Monitor Lawrence (2012) that concluded that besides price, managers need to look for alternative methods of competition to achieve competitive advantage.

Just like the study on key barriers to SME growth commissioned by Invest in Africa (IIA) and Strathmore Business School. The study carried out in this research pointed out that the cost and revenues resources are essential and crucial in business sustainability. The study spelt out that financing one of the largest challenges identified, followed by access to financial markets. According to the report, money from family members and personal savings are the most popular sources of capital and finance (www.capitalbusiness.co.ke).

This study proved that businesses are constantly looking for new revenue sources, opportunities and offer long term integrated services to realize long term financial returns. The study points out that revenue needs new revenue models that encourage long term recurring revenue other than one time transactional revenue. Most industries are also seeking ways to minimize manufacturing costs.

5.3.4 Competitive Advantage

The research used competitive advantage as the independent variable with its elements tested to measure sustainability in relation to the business model innovation objectives. The study found out that the respondents opinion on Organizational competitive advantage were quite significant just like Hvass (2015) describes a sustainable business model as “a business model that creates competitive advantage through superior customer value and contributes to a sustainable development of the company and society”. In addition, innovating business models is increasingly recognized as a key to delivering greater social and environmental sustainability in the industrial system. Traditional business model research mainly concentrates on the generation and delivery of economic value and value for the customer, on the other hand, sustainability oriented business model literature suggests that, value should be understood broader terms and value generation needs to be seen through value for the company, its customers and the wider public .

Respondents in this research felt that competition and rivalry with other companies was of importance influence to their businesses. Most of the respondents agreed that the particular location their company or business is of important influence to their company’s products especially those in retail and needed to be close to their customers and suppliers.
due to transport logistics. Interaction with their suppliers, their location and their relationship with them was of great importance. The respondents agree with the article according to Thompson (2014) that talks about customers, competitors, location, marketing and products as factors affecting business competitive advantage and hence can be used as measures of competitive advantage. They agreed that marketing plays a very important role in their organization and they felt that the local consumption of their product in their respective market and its influences on their business strategy was of great importance. This study reveals that the duration businesses have existed has an effect on innovation and value which dictates its competitiveness and sustainability in the market. The study focused on different entrepreneurial firms and sectors like the study carried out by Clauss (2017). Clauss’ research was based on engineering and electronics firms only; hence there was a need for this study to focus on a generalized view. The research carried out also focused on different groups of people with differentiated cultures.

The KNBS survey established that there were about 1.56 million licensed MSMEs and 5.85 million unlicensed businesses. Of these, 46% of businesses are closed within one year, 15% in 2 years, 10% in 3 years, 5% in 4year, 11% in 6-10years, 4% in 11-15 years and 5% in over 15years. There was a clear need to investigate business sustainability to solve the high rate of closure since SMEs have a high contribution and fundamental role played towards economic growth and development. This study showed the elements of a business that make it competitive and thus more efforts therefore need to be put in place to support and build the capacity of SMEs to be in a position to sustainably absorb more employees (KNBS, 2016).

5.4 Conclusions

5.4.1 Value Creation Innovation

According to the findings of this research, Value creation in an important aspect of business model innovation and it has a significant effect on the sustainability of a business. Businesses needed to constantly change and innovate on creating unique value to help satisfy their market. The management of the organization needs to have a research and development section or department that is actively involved in studying the different customer needs over a period of time and keep changing with time in order to remain relevant. They require to put emphasis on the subcontracts measured in this research in
order to remain relevant and sustainable by developing new competencies over time, updating employee knowledge and capabilities through training, adapt to market changes, update technical resources, use innovative technical resources and keep updating it. They also need to extend their product and service portfolio, search and collaborate with new partners, evaluate potential benefits of outsourcing, develop new business models, improve internal processes and use innovative manufacturing processes. After value creation innovation, they need to assess and change processes when need be.

5.4.2 Value Proposition Innovation

Value proposition has come out clearly as a significant aspect of business model innovation that needs to be incorporated and evaluated from time to time in order to attain competitive advantage and hence enable business sustainability. This research clearly shows that the aspects of value proposition tested are relevant, valid and reliable. Businesses need to address customer unmet needs, innovate products and services to help deal with competitors, taking opportunities that arise in new growing markets, address unserved markets segments, utilize new flexible and reliable distribution channels, retaining customers by offering new innovative and modern service offerings and also by strengthening customers relations.

5.4.3 Value Capture Innovation

Doing business is one thing, earning and staying in it another. If a company is able to draw revenue and profits from the organization, the sustainability of the firm is guaranteed. According to the respondents in this research, it is evident that revenue resource and management is necessary. The finance department needs to collaborate with the research and development department to keep reviewing the sources of revenue, spending habits, budgeting, saving and resource allocation. Pricing and market differentiation is an important aspect of the business that requires a lot of scrutiny and concentration. The aspects of value capture innovation that requires keenness include development of new revenue models, i.e. additional sales and cross-selling, maintenance of contracts in order to retain long term financial returns, adopt long term recurring revenue models, like leasing instead of one time transaction models. Reflect of price quantity strategies, seek opportunities to save manufacturing costs, amend costs according to market prices, and regularly exploit price differentiation opportunities.
5.4.4 Competitive Advantage

The research respondents put emphasizes on the elements of competitive advantage sited in this study as a measure of sustainability. For a business to remain sustainable and relevant, it needs to be competitive by integrating the following aspects; being keen on competitors and business rivals, strategically allocating the business in the best location. Have the best relationship and interaction practices with the customers and suppliers. They also need to incorporate innovative and modern marketing strategies to the businesses organizations and have great influence on their products local consumption.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Effects of Value Creation Innovation on SME Sustainability

This study highly recommends innovative creation of value in the business models across all businesses. The world is evolving very fast and there is need to adopt new competencies, train employees constantly, adopt new knowledge and capabilities, update technical resources and equipment to enhance faster and more efficient production of goods and services, search and collaborate with new partners. Many companies tend to shy away from collaboration for fear of being faced out or exposing their business secrets to competitors, but this notion should be viewed differently since collaboration has more gains than losses. Ideas become diversified and resources are pooled together hence ease business dealings and increase productivity. Businesses also need to consider outsourcing in order to focus on their core business offerings and reduce the burden of having to deal with other components that could be taxing and expensive, e.g. human resource management, transport logistics, auditing, research and consultancy. This intern will enhance sustainability of businesses.

5.5.1.2 Effects of Value Proposition Innovation on SME Sustainability

This study recommends that businesses constantly evaluate the offering the give to customers in terms of value proposition. They need to evaluate the unmet customer needs and address new wants. The need to be very innovative in the products and services they offer in relation as opposed to their competitors and thus remain relevant and competitive. Businesses need to take advantage of emerging opportunities and growing markets locally and abroad. They need to evaluate and consider new effective and efficient distribution channels in order to retain their customers.
5.5.1.3 Effects of Value Capture Innovation on SME Sustainability

This study emphasizes on the need to incorporate better, innovative and explore new revenue opportunities, this study recommends cross selling that helps retain customers for longer periods and give more product offerings and with new revenue streams. Businesses need to learn the art of retaining long-term contracts which they can gain for longer periods of time by renewal and revenue adjustments for example consider leasing recurring revenue models instead of one time selling. Price strategies are very important to innovate and incorporate. This study recommends price differentiation and price quantity strategies that adapt to changing market needs that help counter competition. These strategies will enhance business growth and sustainability.

5.5.1.4 Elements of Organizations Competitive Advantage on SME Sustainability

This study recommends that businesses take into consideration rivals and competitors in order to remain relevant. They need to be able to locate their businesses in strategic locations near suppliers, raw materials and in areas where transport is readily available, good road networks and distribution channels. Businesses also need to consider building good customer relationships that last as well as good name with suppliers by paying them in time. Businesses are encouraged to adjust and have marketing strategies that are innovative and that enhance competitive advantage.

5.5.2 Recommendations for Further Research

This study recommends further detailed research in areas of energy saving companies, medical related areas, technology and online marketing in order to evaluate the business models innovations that work. This is because the world is changing very fast and adopting technology in most aspects of businesses especially online marketing, more advanced modern technology in production of goods and services as opposed to the older models used. This study focuses on the business models that are running today but the is need for specific study on the areas above so as to draw more advanced conclusions in new developments in the entrepreneurship world.
REFERENCES


Website: www.capitalbusiness.co.ke


APPENDICES

Appendix A: Cover Letter

Grace HiukoMuugi

United States International University - Africa,
P.O. Box 14634, 00800,
Nairobi. Kenya. 8th June, 2018

Dear Respondent,

RE: GRADUATE RESEARCH QUESTIONNAIRE.

I am a Graduate student at United States International University-Africa. As partial fulfillment of my MBA degree, I am conducting a research on “Business model innovation and sustainability of small medium sized enterprises”. The study relates to Value creation innovation, Value proposition innovation and value capture innovation and their effects on competitive advantage hence business sustainability.

You have been selected as one of the respondents for this study. It is estimated that it will take between ten to twenty minutes to complete the questionnaire. Please respond as objectively and candid as possible. Your participation will be highly appreciated and is essential for the accomplishment of this study.

I guarantee that the information provided will be handled with utmost confidentiality and will be used only for academic purposes where confidentiality is strictly emphasized. Kindly spare some time to complete the questionnaire attached.

Thank you.

Yours faithfully,

Grace HiukoMuugi
Appendix B: Questionnaire

As partial fulfillment of my MBA degree, I am conducting a research on “Business model innovation and sustainability of small medium sized enterprises”. The study relates to Value creation innovation, Value proposition innovation and value capture innovation and the effects they have on competitive advantage hence sustainability.

Your participation will be highly appreciated and is essential for the accomplishment of this study. All responses will be kept strictly confidential. Thank you for your assistance.

SECTION ONE: PERSONAL DATA

1. Gender: Male ( ) Female ( )
2. Age: 25-34yrs ( ) 35-44yrs ( ) 45-54yrs ( ) Above 50yrs ( )
3. Level of education reached
   Primary ( ) Secondary ( ) University ( ) Other ( )
4. Marital status: Single ( ) Married ( ) Divorced ( ) Widow ( )
5. Do you have children?………………(Yes, No)
6. If yes, how many 1-3 ( ) 4-6 ( ) 7-9 ( ) Above 10 ( )
7. Business activity involved in?
   ………………………………………………………………………………………………………………………
8. How many year have you been involved in the business
   2- 3 years ( ) 4-8 years ( ) 9-14 years ( ) over 15 years ( )
SECTION TWO: VALUE CREATION INNOVATION

9. Read the following statement and circle the answer that appropriately reflects your organization. Where 1 = Strongly Agree 2 = Agree 3 = Undecided 4 = Disagree 5 = Strongly Disagree.

<table>
<thead>
<tr>
<th>VALUE CREATION INNOVATION</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VC1</td>
<td>Our employees constantly receive training in order to develop new competences.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC2</td>
<td>Relative to our direct competitors, our employees have very up-to-date knowledge and capabilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC3</td>
<td>We constantly reflect on which new competencies need to be established in order to adapt to changing market requirements.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC3</td>
<td>We keep the technical resources of our company up-to-date.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC4</td>
<td>Relative to our competitors our technical equipment is very innovative.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC5</td>
<td>We regularly utilize new technical opportunities in order to extend our product and service portfolio.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC6</td>
<td>We are constantly searching for new collaboration partners.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC7</td>
<td>We regularly utilize opportunities that arise from integration of new partners into our processes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC8</td>
<td>We regularly evaluate the potential benefits of outsourcing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC9</td>
<td>New collaboration partners regularly help us to further develop our business model.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC10</td>
<td>We were recently able to significantly improve our internal processes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC11</td>
<td>We utilize innovative procedures and processes during the manufacturing of our products.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>VC12</td>
<td>Existing processes are regularly assessed and significantly changed if needed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
**SECTION THREE: VALUE PROPOSITION INNOVATION.**

10. Read the following statement and circle the appropriate number that reflects your organization. Where (1= Strongly Agree 2= Agree 3= Undecided 4= Disagree 5=Strongly Disagree).

<table>
<thead>
<tr>
<th>VALUE PROPOSITION INNOVATION</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>VP1 We regularly address new, unmet customer needs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP2 Our products or services are very innovative in relation to our competitors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP3 Our products or services regularly solve customer needs, which were not solved by competitors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP4 We regularly take opportunities that arise in new or growing markets.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP5 We regularly address new, unserved market segments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP6 We are constantly seeking new customer segments and markets for our products and services.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP7 We regularly utilize new distribution channels for our products and services.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP8 Constant changes of our channels have led to improved efficiency of our channel functions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP9 We consistently change our portfolio of distribution channels.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP10 We try to increase customer retention by new service offerings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP11 We emphasize innovative/modern actions to increase customer retention</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VP12 We recently took many actions in order to strengthen customer relationships.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
SECTION FOUR: VALUE CAPTURE INNOVATION.

Read the following statement and circle the answer that appropriately reflects your organization.  
*Where 1 = Strongly Agree  2 = Agree  3 = Undecided  4 = Disagree  5 = Strongly Disagree*

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VCP1</td>
<td>We recently developed new revenue opportunities (e.g. additional sales, cross-selling).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VCP2</td>
<td>We increasingly offer integrated services (e.g. maintenance contracts) in order to realize long-term financial returns.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VCP3</td>
<td>We recently complemented or replaced one-time transaction revenues with long-term recurring revenue models (e.g. leasing).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VCP4</td>
<td>We do not rely on the durability of our existing revenue sources.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VCP5</td>
<td>We regularly reflect on our price-quantity strategy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VCP6</td>
<td>We actively seek opportunities to save manufacturing costs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VCP7</td>
<td>Our production costs are constantly examined and if necessary amended according to market prices.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>VCP8</td>
<td>We regularly utilize opportunities which arise through price differentiation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
## SECTION FIVE: ORGANIZATIONS COMPETITIVE ADVANTAGE

Read the following statement and circle the answer that appropriately reflects your organization. Where 1= Not important at all; 2=Somewhat not important 3=Neither important nor unimportant, 4=Somewhat important; 5=very important.

<table>
<thead>
<tr>
<th>ORGANISATIONS COMPETITIVE ADVANTAGE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA1 Competition /rivalry with other companies influence on your business is</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA2 The particular location of your company/business is of important influence to your company’s products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA3 Your interaction with your suppliers, their location and your relationship with them is</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA4 Interaction with your customers, their location, and your relationship to them can be described as</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>CA5 The role marketing plays in your organization can be described as</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA6 The local consumption of your product from your respective market and its influences on your business strategy can be described as?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>