



**CONTRIBUTION OF INNOVATION TOWARDS THE COMPETITIVE ADVANTAGE  
OF PRINTING SMEs WITHIN THE KAMPALA CENTRAL BUSINESS DISTRICT.**

**BY**

**RUTHIE WANDEGA**

**13/MBA/9/061**

**A DISSERTATION SUBMITTED TO THE SCHOOL OF MANAGEMENT SCIENCE  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A  
MASTERS DEGREE IN BUSINESS ADMINISTRATION OF  
UGANDA MANAGEMENT INSTITUTE**

**JANUARY, 2018**

**DECLARATION**

I, **Ruthie Wandega**, hereby declare to the best of my knowledge and understanding that the findings in this study is my original work and has never been submitted to any University, College or Institution of higher learning for any award. However, any sources of information are duly acknowledged.

Signature: .....

Date.....

## APPROVAL

This is to certify that this dissertation has been submitted for examination in partial fulfillment of the requirements for the award of Master's Degree in Business Administration (MBA) with our approval as Supervisors.

Signed.....

Date.....

Benedict Mugerwa

Signed.....

Date.....

Paddy Mugambe

## **DEDICATION**

This piece of work is dedicated to my beloved parents, Mr. Remmy Wandega and Ms. Clementina Nadunga. Thank you for the support, encouragement and prayers.

To my siblings Francesca, Emma, Poly, Maurice and Angel for being a great support team.

Special dedication to my dear friends Grinch, Emily, Sara, Eunice and Gladys. You have been with me throughout this journey and encouraged me all the time.

God Bless You All.

## **ACKNOWLEDGEMENT**

This Dissertation was made possible with the intellectual guidance of my dear Supervisors, Mr. Benedict Mugerwa and Mr. Paddy Mugambe. Thank you for the cordial environment I enjoyed throughout the supervision process.

Many thanks to all the Managers and staff of the printing SMEs within Kampala Central Business District for the assistance rendered to me in accessing all the relevant information needed for the success of this study. May God forever bless you my beloved.

Above all, I thank God, the Almighty for bringing me this far.

## TABLE OF CONTENTS

Declaration .....	i
Approval.....	ii
Dedication .....	iii
Acknowledgement.....	iv
Table of Contents .....	v
List of Tables.....	x
List of Figures .....	xi
List of Acronyms /Abbreviations .....	xii
Abstract .....	xiii
<b>CHAPTER ONE.....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.0 Introduction .....	1
1.1 Back ground to the Study .....	1
1.1.1 Historical background .....	1
1.1.2 Theoretical Background .....	3
1.1.3 Conceptual Background .....	4
1.1.4 Contextual Background.....	5
1.2 Statement of the Problem .....	7
1.3. Purpose of the Study .....	8
1.4. Objectives of the Study .....	8
1.5. Research Questions .....	8
1.6. Hypothesis of the Study .....	8
1.7. Conceptual Framework .....	9
1.8. Significance of the Study .....	11
1.9 Justification of the Study.....	11

1.10	Scope of the Study .....	12
1.10.1	Time Scope .....	12
1.10.2	Geographical Scope .....	12
1.10.3	Content Scope .....	12
1.11	Operational Definitions .....	13
<b>CHAPTER TWO.....</b>		<b>14</b>
<b>LITERATURE REVIEW .....</b>		<b>14</b>
2.0	Introduction .....	14
2.1	Theoretical Review .....	14
2.1.1	Theory of Economic Development (Innovation) .....	14
2.2	Conceptual Review .....	16
2.2.1	New Product Launches and Competitive Advantage .....	16
2.2.2	New Product Sales and Competitive Advantage .....	18
2.2.3	Increased Productivity and Competitive Advantage.....	19
2.2.4	Decrease in the Unit cost of Production and Competitive Advantage.....	20
2.2.5	New Markets Penetrated and Competitive Advantage .....	21
2.2.6	Market Positioning and Competitive Advantage .....	22
2.4	Summary of Literature Review .....	23
<b>CHAPTER THREE .....</b>		<b>25</b>
<b>METHODOLOGY .....</b>		<b>25</b>
3.0	Introduction .....	25
3.1	Research Design.....	25
3.2	Study Population .....	25
3.3	Sample Size and Selection .....	26
3.3.1.	Sampling Technique and Procedure.....	27
3.3.2	Probabilistic Sampling Technique .....	27

3.3.3	Non Probabilistic Sampling Technique.....	27
3.4	Data Collection Methods.....	28
3.4.1	Interview Method .....	28
3.4.2	Questionnaire Survey .....	28
3.4.3	Documentary Review Method .....	29
3.5	Data collection Instruments.....	29
3.5.1	Interview Guide.....	29
3.5.2	Questionnaires .....	30
3.5.3	Documentary Review Checklist.....	30
3.6.	Data Quality Control .....	30
3.6.1	Pretesting of Data Collection Instruments .....	31
3.6.2	Validity.....	31
3.6.2.1	Questionnaire .....	31
3.6.2.2	Interview Guide .....	32
3.6.3	Reliability Tests.....	32
3.7	Procedure of data collection.....	33
3.8	Data Analysis .....	33
3.8.1	Qualitative Data Analysis.....	34
3.8.2	Quantitative Data Analysis.....	34
3.9	Measurement of Variables .....	35
3.10	Ethical Considerations.....	35
	<b>CHAPTER FOUR.....</b>	<b>36</b>
	<b>PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA .....</b>	<b>36</b>
4.1	Introduction .....	36
4.2	Response Rate .....	36
4.3	Background of the Respondents.....	37

4.3.1	Age of the Respondents.....	37
4.3.2	Number of Years in the Printing Business .....	38
4.3.3	Stage of the Business.....	39
4.4	Product Innovation and Competitive Advantage .....	40
4.4.3.	Testing the first Hypothesis.....	43
4.5	Process Innovation and Competitive Advantage .....	45
4.5.1.	Process Innovation .....	45
4.5.2.	Testing the Second Hypothesis .....	48
4.6	Market Innovation and Competitive Advantage .....	49
4.6.1.	Market Innovation .....	49
4.6.2	Testing of the third Hypothesis .....	52
<b>CHAPTER FIVE.....</b>		<b>54</b>
<b>SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS .....</b>		<b>54</b>
5.0	Introduction .....	54
5.2	Summary of Findings .....	54
5.2.1	Product Innovation and Competitive Advantage .....	54
5.2.2	Process Innovation and Competitive Advantage .....	55
5.2.3	Market Innovation and Competitive Advantage .....	55
5.3	Discussion of Results .....	55
5.3.1	Product Innovation and Competitive Advantage .....	55
5.3.2	Process Innovation and Competitive Advantage .....	57
5.3.3	Market Innovation and Competitive Advantage .....	58
5.4	Conclusions .....	59
5.4.1	Product Innovation and Competitive Advantage .....	59
5.4.2	Process Innovation and Competitive Advantage .....	60
5.4.3	Market Innovation and Competitive Advantage .....	60

5.5 Recommendations .....	60
5.5.1 Product Innovation and Competitive Advantage .....	61
5.5.2 Process Innovation and Competitive Advantage .....	61
5.5.3 Market Innovation and Competitive Advantage .....	61
5.6 Limitations of the Study .....	61
5.7 Areas for further Studies .....	62
<b>REFERENCES .....</b>	<b>63</b>
APPENDICES.....	i
APPENDIX 1: Questionnaire.....	i
APPENDIX II: Interview Guide .....	i
APPENDIX III: Documentary Review Checklist .....	i
APPENDIX IV: Table for Population Sample Size – Krejcie & Morgan (1970).....	i
APPENDIX V: Introductory Letter.....	i
APPENDIX VI: Field Research Letter .....	i
APPENDIX VII: Anti-Plagiarism Report .....	i

## LIST OF TABLES

Table 3. 1: Sample size table.....	26
Table 3. 2: Showing reliability index.....	33
Table 4. 1: Response rate .....	36
Table 4. 2: Age group of Respondent .....	38
Table 4. 3: Number of Years in the Printing Business.....	38
Table 4. 4:Stage of the Business .....	39
Table 4. 5: Descriptive Statistics on Product Innovation .....	40
Table 4. 6: Descriptive Statistics on Competitive Advantage.....	42
Table 4. 7: Correlation between Product Innovation and Competitive Advantage .....	44
Table 4. 8: Descriptive Statistics on Process Innovation .....	46
Table 4. 9: Correlation between Process Innovation and Competitive Advantage.....	48
Table 4. 10: Descriptive Statistics on Market Innovation.....	50
Table 4. 11: Correlation between Market Innovation and Competitive Advantage .....	52

## LIST OF FIGURES

Figure 1. 1: Conceptual framework representing the relationship between innovation and competitive advantage.....	10
---	----

## ACRONYMS/ABBREVIATIONS

BOU	Bank of Uganda
CBD	Central Business District
CVI	Content Validity Index
DV	Dependent Variable
GEM	Global Entrepreneurship Monitor
IV	Independent Variable
OECD	Organization for Economic Corporation and Development
PPU	Privatization Program in Uganda
PSFU	Private sector Foundation Uganda
SME	Small and Medium Enterprises
SPSS	Statistical Program for Social Sciences
UIA	Uganda Investment Authority
UNDP	United Nations Development Programme

## **ABSTRACT**

This study assessed the contribution of innovation towards the competitive advantage of small and medium size printing enterprises in Kampala. The study covered the current period of 2017 because this is the time when Ugandan printing industry has greatly improved and become competitive. The study had the following specific objectives: i) To assess the contribution of product innovation on competitive advantage in printing SMEs in Kampala; ii) To assess the contribution of process innovation on competitive advantage in printing SMEs in Kampala; and iii) To assess the contribution of market innovation and competitiveness advantage in printing SMEs in Kampala.

A cross-sectional survey study design was adopted for this research. Data was obtained through questionnaire, interviews, and documentary review. A total of 52 participants took part in the study from a sample of 64 respondents who were selected. This represents 81.25% total response rate from both the questionnaires and interview guide which was significant for the study. The results showed that competitiveness among the printing SMEs within Kampala Central Business District has increased over the years due to Ugandan government support to local investment initiatives. The study showed that innovation significantly affects competitive advantage among printing SMEs within Kampala Central Business District with product innovation accounted for 18.7%, process innovation accounted for 23.0% and market innovation accounted for 37.8% of the variances in competitive advantage of the firms other factors constant. It was concluded that an effective and efficient innovation is crucial to achieving competitive advantage among printing SMEs within Kampala Central Business District.

It was recommended that staff be involved in developing innovation strategy so that its implementation is carried out with a true picture of what to be achieved by the SMEs within Kampala Central Business District. The study is expected to expand the body of knowledge in the area of innovation and competitive advantage. Suitable areas for further research were proposed not limited to “The impact of product innovation on competitive advantage of the firms”, and “The impact of innovation on the printing SMEs in other districts in Uganda”.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

This study investigated the contribution of innovation towards the competitive advantage of SME's in the printing industry within Kampala Central Business District (CBD). This chapter presents the background to the study, statement of the problem, purpose, objectives of the study, research questions, research hypotheses, conceptual framework, scope of the study, significance of the study, justification and operational definition of terms and concepts.

#### **1.1 Back ground to the Study**

This sub-section presents the background divided into four perspectives; the historical, theoretical, conceptual and contextual backgrounds.

##### **1.1.1 Historical background**

Business managers have been interested in innovation but especially for its contribution to economic growth however, the beginning of the idea of innovation is a mystery story. It is a story of myths and speculative confusions. From its very appearance in Ancient Greece, the idea of innovation had a political association. In the present day, the idea of innovation is fused to an economic doctrine that we easily forget that it has mainly been a political and contested idea for the last five hundred years (Benoit Godwin, 2015). The origin of innovation began as an expression related with science and industry in the 19th century heading toward the Industrial Revolution though the dialect of that era concentrated intensely on invention predominantly technical invention. A number of elements aided invention develop a reputable and constructive association containing the rise of purchaser culture, greater amount of patents, and strong government emphasis on construction of labs for research and evolution, (Godwin 2015). Over

time a new component got mixed up into the meaning of innovation transferring its usual understanding to "bringing to market a new technology". In Godin's view, it was tied to government sponsorship for development and research in foundations and laboratories. As early as the 1950s until the 1980s he said that innovation was recognized as a procedural activity. Theoretical research in labs presumed the inceptive base. Applications were formulated and developed into commercialized commodities.

Innovation was thought of as a foreseeable research product packaged according to government sponsorship for these kinds of ventures that had a close similarity to the rise of understanding of innovation (Godwin, 2015). The invention culture has grown and owes its presence to a number of factors. One of the factors is the "consumer revolution" (Berg and Clifford, 1999). Another or second factor is what came to be known as the "industrial revolution" and the usage of technologies in industrial processes (Hardy, 2006). Later, a third "revolution" transpired at the end of the nineteenth century at the start of the twentieth century. There were about 300 industrial research laboratories in the United States alone by 1920 and twenty five years later industrial research was considered to be more than two-thirds of national costs allocated to research and development (R&D) in various countries. This contribution has been widely interpreted through new processes and products but also new ways of organizing economic and business activity. Interest has largely focused upon the end result of creativity that is innovation (Ville, 2011). Lately, innovation is discussed in the technical and scientific literature, in social sciences like economics, management, history and sociology, and also in arts and humanities. Innovation is widely common in the world of products or goods certainly and additionally in the domain of words. Innovation is also a pivotal idea in the prevalent imaginary, public policy, media and is part of the general vocabulary. It has further been referred to as the organizational,

technological, financial, scientific and commercial activities vital to breed, administer and market new or refined products and processes (OECD report, 1997).

### **1.1.2 Theoretical Background**

This study was guided by the theory of economic development popularly referred to as “The Theory of Innovation”.

The Theory of Economic development / Innovation by Schumpeter (1911), acknowledged innovation as the analytical feature of economic dynamics. He argued that economic dynamics revolve around innovation, market power, and entrepreneurial ventures which seek to prove that innovation originated market supremacy could deliver better aftermath than the unseen hand and price competition. He argues that technological innovation often creates short term monopolies, allowing irregular profits that would be competed away by imitators and competitors. He said that these short term dominations were relevant to provide the motivation needed for firms to produce new processes and products.

Schumpeter (1911) regards innovation as the main cause of economic development. He described development through five types namely; launch of a new product or a new species of already known product, application of new methods of production or sales of a product, opening of a new market, acquiring of new sources of supply of raw material or semi-finished goods and new industry structure such as the creation or destruction of a monopoly position. He further explained the innovation process but not he does not explain how innovations do come about nor consider whether there could be over venture or a lot of devastation. He assumed that for anyone to seek profits, they must be creative and innovate. He further alleged that innovation was regarded as an indispensable stimulator of economic dynamics and competitiveness hence the theory.

The theory viewed competitive advantage as a point of surpassing performance which a firm can achieve through presenting no-frills products at minimal prices or offering distinguished products which clients are willing to pay an extra price. The underlying proposition is that the market or industry inflicts selective forces to which the companies must react. Companies that can effectively adapt to the market or industry needs will survive and develop, whilst those that fail to adapt are prone to failure hence a way out from the market.

Porter stated that a company can only be able to achieve positive results (have competitive advantage) than its rivals if it manages to develop a specific and long term differentiating factor and that innovative conduct being the main mean of developing this competitive advantage.

### **1.1.3 Conceptual Background**

The study focused on innovation as the independent variable and competitive advantage as the dependent variable. Innovation as a variable is measured by product, process and market innovations. These are conceptualized into the success rate of new product launches, number of new markets measured, and percentage of sales from new products, increases productivity and the decrease in the unit cost of production, delivery and marketing. Competitive advantage variables are measured by the superior customer satisfaction, expansive market share, outstanding quality, speed flexibility and increased profitability from the new products.

Competitive advantage springs from the a number of distinct activities a company performs in designing, marketing, producing, delivering, and supporting its product which are derived from the inputs, processes and outputs of a firm. Possibly, may be referred to the possibilities that accept a company shape its competitive advantage so specified and differentiate itself from its rivals (Abdul Kareem, 2013). According to Porter (1985), the degree of competitiveness at company level includes company's profitability, client satisfaction, market allocation and

quality. The element that goes unaddressed among the various definitions of competitive advantage is the specific definition of outperforming one's competitors. Higher profitability is only one of many possible measures of competitive advantage that includes market share, technology and customer loyalty (Grant, 2010).

#### **1.1.4 Contextual Background**

In Uganda, the private sector is majorly composed of micro, small, and medium enterprises (SMEs) and a number of these ventures are struggling in their infancy stage. Uganda continues to acknowledge SMEs as a major economic institution and an opportunity for increasing the rate of the country's sustainable economic growth (BOU Sector Report, 2009). In reference to the same report, SMEs contributed to economic growth through job creation, innovation, and the competitive markets.

The history of the private sector printing and publishing industry has not been researched or written about much but there traits of its existence since the economic liberalization of the 1990s. Uganda Printing and Publishing Corporation (UPPC), is a State Corporation formulated by the Uganda Printing and Publishing Corporation Act in 1902 as a printer for government works however entity handles both governmental and private sector printing as well as publishing. Other print and media houses that are widely known and have been in existence for a reasonable period of time include fountain publishers and graphic systems among others. There are over 100 SME printing companies in the country as according to the KPMG TOP 100 SMEs survey report produced in 2015. Nasser Road in Kampala is a well-known printing nest of companies providing all forms of printing services, including offset printing, digital printing, signage, typesetting, designing, color separation, sorting, numbering, binding, packaging and delivery

(Nexus Partnerships Limited, 2017). The Uganda Printers Association is the main representative body of the sector.

However, it had been analyzed that these SMEs struggle or do not manage to reach to their year one birth date and for about 35% of the SMEs businesses that face closure, over 37% re-start new businesses (Private sector foundation report, 2010). Due to the discoveries, Uganda was ranked as the second highest when it comes to business startups and also ranked as the country with the highest new venture failure rate in the entire world. Enterprise Uganda in collaboration with Uganda Investment Authority, supported by UNDP has facilitated training programs focusing on leasing competence development among SMEs managers and within a year, 3500 SMEs had benefited (Investment Authority, 2008 & 2010). SMEs are viewed to be a productive base in regard to innovation. The positives lay in the flexibility and little rigid organizational structures that on average promote a slightly greater speed of response. It is assumed that the investment of innovation in SMEs will create a competitive advantage for the organization which later leads to company growth and achievement through return on investments, customer value and market share value (Ocici, 2008).

A company's potential to develop innovative products and services can be hindered by a usual lack of financial strength as well as technical and managerial skills (Gray, 2006). Consequently, interventions need be checked in terms of technological innovations in order support new product and services offering, reasonable financial packages to foster the development of such innovations and managerial skills in order commercialize the innovations. Through the context of new technologies and globalization it is useful to investigate the role of innovation, how it contributes towards competitiveness of small and medium enterprises (SMEs) as innovation is essential to sustaining competitive advantage (Hamel, 2000).

## **1.2 Statement of the Problem**

One of the most significant aspects affecting demand for printing is the tendency in buyer spending, prompt increase in internet business and also a hasty decline in demand for professional printing services. These and many other factors affect demand in various ways as levels of disposable income and buyer spending has a direct effect on the amount of money companies invest in publicity. The further people are spending is the more firms devote on advertising for instance the rapid increase in electronic advertising has resulted to an increase in demand for digital /electronic printing.

Currently, people tend to spend less rapidly in printing due to the monotony in products flooding the market and this is expected to continue because a good number of people keep joining the suffocated market with expectations of high returns. There is also a major switch to document and print management programs by corporate organizations with hard and soft documents (Okumu, 2006) rendering some companies jobless and out of competition since most corporate companies are in a bid to cut their budgets opt for less expensive programmes to replace printing. Conversely, Uganda today has been noted to have a very high rate of private business failure valued at 80% failure before making three year life time in business which is inclusive of the printing industry. As a result of the uneven nature of the printing sector in the developing countries like Uganda in particular and also globally, the printing industry has been affected significantly by surplus capability. Excess capability has increased over the last few years despite continued retrenchment of employment, closures and failures among small, medium and large sized companies in Uganda. With all the earlier negative findings stated above, this study therefore examined the problems Printing SMEs in Uganda face in sustaining the business and

attempted to establish whether innovation contributes or could contribute towards developing a competitive advantage of SMEs to achieve sustainability and growth, (Sejjaka, 2003).

### **1.3. Purpose of the Study**

The study aimed at assessing the contribution of innovation towards the competitive advantage of printing small medium enterprises in Kampala.

### **1.4. Objectives of the Study**

1. To assess the contribution of product innovation on competitive advantage in printing SMEs within Kampala Central Business District.
2. To assess the contribution of process innovation on competitive advantage in printing SMEs within Kampala Central Business District.
3. To assess the contribution of market innovation and competitiveness advantage in printing SMEs within Kampala Central Business District.

### **1.5. Research Questions**

1. What is the contribution of product innovation on competitiveness within Kampala Central Business District?
2. How the firm's process innovation does contribute to the firm's competitiveness within Kampala Central Business District?
3. What is the contribution of market innovation on the competitive advantage of the firm within Kampala Central Business District?

### **1.6. Hypothesis of the Study**

Basing on topic under study the following hypothesis is formulated.

- i) Product innovation positively contributes to the firm's competitive advantage. Within  
Kampala Central Business District

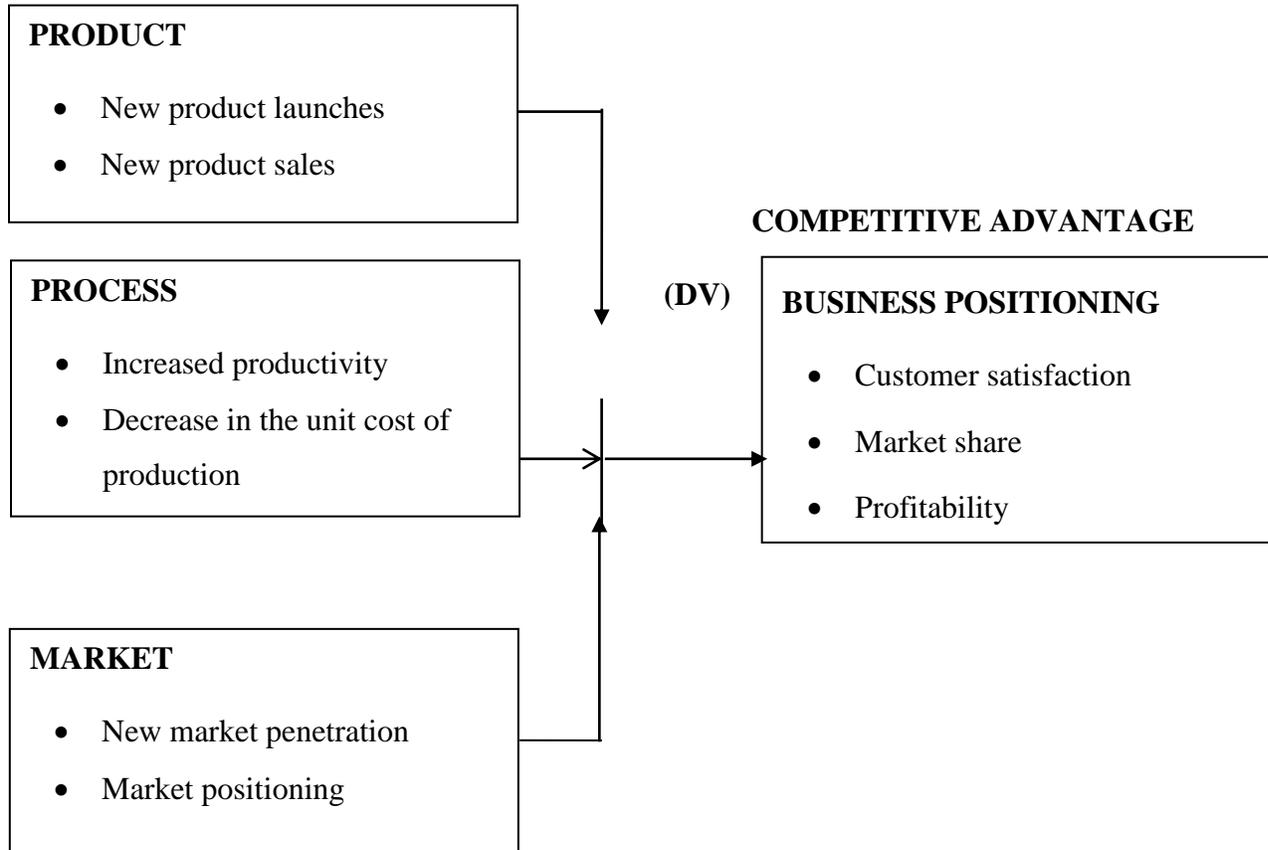
- ii) There is a positive relationship between a firms' process innovation capacity towards its competitive advantage within Kampala Central Business District.
- iii) There is a positive relationship between market innovation and the competitive advantage of the firm within Kampala Central Business District.

### **1.7. Conceptual Framework**

The framework illustrated the relationship between the dependent variable (competitive advantage), and the independent variables (innovation of; product, process, and market innovations). The dependent variable of competitive advantage was the variable of primary interest to this research. Competitive advantage in this context referred to as the ability of the SMEs within Kampala Central Business District to be in a favorable or superior business position to their competitors.

**Figure 1. 1: Conceptual framework representing the relationship between innovation and competitive advantage.**

**INNOVATION (IV)**



**Source:** Adapted from Schumpeter theory on innovation (1911) & Porter theory on competitive advantage (1985).

The conceptual framework above showed that innovation can take the dimensions of product, process, and market, which were the main themes for analysis. Themes were sub-categorized into sub-themes. Competitive advantage took the dimensions of business positioning, which were the domain of analysis. Independent variable, innovation was applied in an attempt to explain variances in business positioning. The framework thus depicted the following

relationships; the more innovations in product, process, and market were functional and effective, the better business positioning of the firm, and the reverse is true.

### **1.8. Significance of the Study**

The significance of the study aimed to contribute to the prevailing frame of knowledge on the subject. It also intended to help policy makers to address the issues of innovation and competitiveness amongst small businesses. In particular, this study aimed benefit entrepreneurs to realize the root of some the challenges they face in the industry and it also hoped that this study would make some recommendations to overcome those challenges. The study planned aid the efforts of other scholars and libraries. The finding of the study aimed to assist the private sector lobby for innovation and competitive strategy policies to make printing SMEs flourish in developing countries like Uganda. The study intended assist the proponents of SMEs to stimulate innovation and competitiveness in a way that will assist firms perform better hence minimizing the failure rate.

### **1.9 Justification of the Study**

Today more than before, the world and firms must utilize the innovative potential to improve new businesses if they are to positively confront the turbulent consequences of upcoming technologies, empowered clients, new market entrants, shorter product life cycles, geopolitical instability, and market globalization. Indeed the growth of innovative ability is the only means by which firms can maintain a competitive advantage.

Innovation coupled with good management skills has been found to be a good catalyst or foundation of a firm's competitive advantage regardless of their size. The research aimed to stimulate and increase the interest in innovative skills and knowledge of printing SME

entrepreneurs so as to ensure that viable firms continued to grow and sustain them. This research report intended provide an opportunity to bridge this gap.

## **1.10 Scope of the Study**

### **1.10.1 Time Scope**

The study was conducted for the period 2017. This period was chosen so as to enable knowledge be gained in relation to the more recent socio-economic trends relating to the creativity / innovation and the competitiveness of the printing small medium enterprises in Uganda. The study also looks at the huge entry of new small medium enterprises in the competitive market of printing within this period.

### **1.10.2 Geographical Scope**

The study was conducted within the Central Business district of Kampala District because over 100 printing companies are located within Kampala hence accessible. Central division in Kampala district was chosen because it hosted location to most of the printing SMEs in Uganda.

### **1.10.3 Content Scope**

The researcher investigated how the firms' innovation contributed to its competitive advantage within the printing industry where the firms' innovation was the independent variable and competitive advantage the dependent variable. The independent variable was categorized into the product, process and market innovation which is measured by the success rate of new product launches, new product sales, increased productivity, decrease in the unit cost of production, new market penetration and market positioning while the dependent variable competitive was measured by the customer satisfaction, market share, and increased profitability.

## **1.11 Operational Definitions**

### **Innovation**

Innovation is the act of having newly introducing something, such as a new procedure or invention. It can also be referred to as the action of creating a new method, idea or product which can lead to a breakthrough, transformation or alteration.

### **Competitive Advantage**

Competitive advantage refers to a state or situation that puts a firm in an approving or greater business position. Competitive advantage springs from the numerous separate activities a firm performs in designing, producing, marketing, delivering, and supporting its product.

### **Small medium enterprise**

SMEs are defined as organizations with less than 250 employees. Grouped as Micro, small and medium enterprises with a maximum number of employees at 1000. Micro enterprises total up to 10 employees while small between 10 to 50 and the medium range between 150 to 1000 employees.

### **Strategy**

Strategy is a high measure plan to attain one or a number of goals under conditions of uncertainty.

### **Performance**

The achievement of a specified endeavor measured up alongside earlier set standards of accuracy, completeness, cost, and speed. Centrally, performance is seen to be the fulfillment of an obligation in a way that releases the performer from all liabilities under the contract.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter reviewed the present literature on the concept of innovation and its contribution towards competitive advantage of printing SMEs in Uganda. From the review, broad categories were derived which helped identify the critical relationship between innovation and competitive advantage. Specifically, the chapter addressed the theoretical framework which reviewed the theories, conceptual view looking at the conceptual framework, actual literature review handling the objectives of the study and finally the summary.

#### **2.1 Theoretical Review**

##### **2.1.1 Theory of Economic Development (Innovation)**

The term “innovation” was for the first time used by Schumpeter at the epitome of the 20th century. Schumpeterian ideas and research have later on been improved by a great number of authors and researchers. Schumpeter defined innovation as process, product and organizational variances that don’t necessarily arise from new scientific findings but may develop from a mixture of existing technologies and their application in a newly birthed context (Zizlavsky, 2011). This study was guided by Schumpeter’s (1911) theory of economic development commonly referred to as the *Innovation theory*.

Schumpeter refers to innovation as a process of industrial modification that constantly transforms the economic structure from within destroying the old one and creating a new one. Schumpeter assumed that to seek profits, one must innovate and also related innovation as a vital catalyst of competitiveness and economic dynamics. He addressed evolution as an ancient process of systematic changes greatly driven by innovation which was divided into five types:

1. New product launch or new specie of an already known product;
2. Application of new procedures of production or sales of a product
3. Opening of a new market
4. Attaining of new sources of supply of raw material or semi-finished goods;
5. New industry assembly such as the creation or demolition of a domination position.

The model assumed for any business venture to make profits or attain its competitive advantage it must innovate. The whole process of Schumpeter's theory was ground on the innovator whom is regarded as a model person and that development economically is the result of the recurrent process. The theory therefore regarded innovation a main cause of economic development plus a driver to a company's competitive advantage. These assumptions therefore applied to the study with the view that new product launches or new species of a re-known product lead to re invention thus explaining how innovative profits from the new products will lead to the competitiveness of the company from the new product. Competitiveness and profits or economic development could also be realized from application of new procedures of production or sales of a product, new markets acquisition, and new sources of supply of raw materials and new industry formation or strategies. Innovation therefore does not only look at the technological aspect of the company but the creativity, re invention, new strategies and research within a firm aiming at profitability and competitiveness.

To further explain and contribute to the Schumpeterian theory of innovation, Edith Penrose (1959) theory of growth of the firm leaned on an approach of profits and innovation in the company that completely incorporates the concepts governing the growth of companies and the rate at which firms can flourish reliably. Penrose put great emphasis on the time proportions and protection of the ongoing advantage with continued attempts to innovate to renew economic

value. She incorporated the most important elements of Schumpeter's original theory of innovation and competitiveness. Penrose further aids us to connect together the two aspects and from that perspective to supplement upon Schumpeter's theory of innovation in relation to profits and growth for a current institutional setting.

Whereas the theory was criticized that Schumpeter assumed a ideally competitive economy which is in static equilibrium, there was no flawless competitive equilibrium. However according to Schumpeter, the practicability and activity of the entrepreneurs drawing upon the conclusions of scientists and inventors create entirely new avenues for growth, investment and employment. The theory however remained relevant to the purpose of the study as it reflected upon the independent and dependent variables of the study. The theory further examined the relationship between new products, market dynamics and process innovation as a tool to achieve a competitive advantage.

## **2.2 Conceptual Review**

### **2.2.1 New Product Launches and Competitive Advantage**

New product development was notably the ability of a firm to develop products which outperformed their rivals in the market place and proved to profit a firm in building its own competitive advantages (Kok, 2006). New product development is one of the riskiest, but most analytical strategies in any competitive industry (Cooper, 2001; Clark *et al* 2006). Business companies spent enormous amounts of money for new product development due to various vital reasons. The rationale for new product development is the habitually quoted by peak business executives for diversification, corporate growth and the quest for a competitive edge over the competitor's business firms (Sachs and Benson, 2001). As globalization paves the way to more extreme competition amongst production firms with increase in customer demands,

organizations opt to seek a competitive advantage by creating products with enhanced and valued features, such as quality, flexibility or reliable delivery (Baines and Langfield-Smith, 2003). Product innovation has widely and expansively been studied and categorized into four elements namely: product design, product quality, new product innovation, and unique product features. These elements are assumed to relate to sales growth and customer satisfaction of a firm which are competitive advantages. Product innovation looks at the improvement of product quality and re-inventing of already existing products which is applicable with printing SMEs. It is therefore necessary that SME printing firms understand the customer and improve the firm's products as a possible tool of producing and sustaining a competitive edge over other rivals in the industry. In relation to product innovation, Martín-de Castro et al. (2013) mention the importance of technological advances saying that creating fruitful technological innovations is vital for creating and maintaining an organizations' competitive advantage.

Additionally, the desire for precise product attributes could all of a sudden become so strong that a firm is properly advised to produce and introduce new products in order to utilize this new opportunity hence meet the strong customer demand (Hise, 2007). Product innovation expands to product differentiation which creates an advantage in terms of quality and differentiation from the other competitors in the industry. A firm can therefore be in a safe position relative to its rivals if it has a new or innovative product. Pleased customers are the main determinant of sustainable competitive advantage for an organization. To maintain clients and lure new ones a firm needs to concentrate on creating value to the customer in a manner that is more effectual than that of its competitors (Marius – Dan, 2011).

The failure rate of new products has been persistently high for the previous decades according to the reports by consumer federation of Kenya (2012). New products do not stay new for too long

because of new technologies. New products change a lot more frequently than they have in the past due to the absence of marketing tactics to push the products and the consumer level of income has hindered the success rate of the new products into the market. The study therefore intends to investigate on how SMEs can create a new product innovation as a sustainable competitive advantage.

### **2.2.2 New Product Sales and Competitive Advantage**

New product introduction (NPI) was one of the tools that firms used to achieve growth, boost profitability and increase or sustain current market share (Ganna, 2012). According to Tidd et al. (2006) innovation contributed to attaining a competitive advantage in a number of aspects. He clearly outlines that new products assist conserve market shares and enhance *profitability*. Profitability in innovation looked at the new percentage accrued from the sale of new products. Launching of new products and services in the market illustrates an important origin of increasing the magnitude of a business and the earnings of a firm however the accomplishment of presenting new product on the market is a serious issue of the current marketing programs (Mccole, 2005 and Hoffman, 2005). Most studies show fiscal performance indicators amount to a firm's total returns or profits attributable to freshly introduced products in either outright terms (Brenner, 1994) or comparative to total sales or profits (John and Snelson, 1998). While it appears as if financial performance methods are precise and easily computable, it must be stated that they are delicate to the time interval stuck between market introduction and performance measurement (Hauschildt, 1991). Bayus et al.(2003) shows that new product innovations certainly affect a firm's asset progress and profit rate but it has to go through the decline in sales, common and managerial expenses strength rather than the rise in unrefined operating return.

However, there may be trade-offs amongst financial limits (Hart, 1993). However, if price discounts increase product sales, records on sales and profits may tell altered stories.

Conclusively, it was wholesome that there are equally benefits and losses linked with new product innovations. Rendering to the producer theory, all companies are profit-maximizers (Ganna, 2012). It was therefore highly significant for a firm to make a precise decision of whether a new invention should be presented or not. If authentic sales remain beneath expectations, the firm may have financed in overcapacities. If the authentic sales are beyond expectations, the firm may error returns due to a scarcity of production and circulation capacity. Basing on the literature viewed, the studies aimed investigate on how printing SMEs could benefit positively from new product innovation to increase sales and profitability.

### **2.2.3 Increased Productivity and Competitive Advantage**

Productivity is a degree of the rate at which elements of output of goods and services are formed per unit of input for instance capital, labor and raw materials. According to the Australian treasury (2009), rises in productivity may possibly cause diminishing the use of inputs for a certain output or maximizing output for a known input. The two often used dimensions of productivity are labor and multi-factor productivity (MFP). Labor productivity measures the fraction of real output to labor input while MFP is a measure of output to a subjective blend of labor and capital inputs. Innovation when nurturing competitiveness, output and job creation is measured as a vital strength for starting and powering the engine of growth (Romer, 1986). Improvement in products and processes are critical for productivity enhancement. The innovating companies are not the solitary ones that profit from the innovations. When innovations are subtle, they subsidize to higher productivity and higher standards of living for an economy as a whole (Neely, 1998). Accumulative competition in the global market compelled that productivity ought not be reflected as an display of efficiency only it must measure

efficiency yet the discrepancy amongst the two is frequently overlooked (Marius – Dan, 2011). For instance a firm that yields according to process stipulations may be using its assets resourcefully but except if it is producing what its clients want it may not be using them efficiently. Pitra (2006) states that innovation is the outcome of employees' imagination in an organization and must be always directed at customers and convey added value to be profitable, a firm must judge productivity and value from the viewpoint of the customer.

Porter (1990) also argued that native competition reassures innovation by compelling firms to innovate or fail. In his view, for any specified set of industrial collections, competitive pressure boosts innovation and productivity. However, when estimating the effect of innovation on productivity, the measures of innovation that are typically used include amount spent on Research & Development, the number of patents the workplace applied for or more recently the percentage of sales coming from products less than five years old (Dostie, 2014). The literature therefore showed the relationship between productivity, process innovation and product development.

#### **2.2.4 Decrease in the Unit cost of Production and Competitive Advantage**

Cost of production is an economic pointer evaluating the economic presentation of production. Cost is well-defined as the value of a factor of production (input) engaged in the creation of final outputs (Cesaro *et al.* 2008). As explained by Hall (2011), innovation can increase effectiveness and expand the goods and services that a firm proposes hence aggregate demand and reduce the costs of production. In a competitive situation, a business must motivate a purchaser to buy its products rather than those of rivals at a price that is more than its cost of production. A coherent customer however would prefer to exploit value for his money. Therefore, a positive producer must improve the overall value of the products so that the price is suitable to the customer while

the costs are sufficient to allow room for profit. Das and Joshi (2007) observed that the processes of innovation can also lead to manufacture time shortening and speed up original product development in contrast to rivals however if an organization is not skillful of presenting innovations on an current basis, it threatens that it will delay and the initiative will be occupied over by other competitors. Attaining a higher effectiveness by means of innovations means creating less costly produces of enhanced quality compared to those manufactured by rivals (Hana, 2013). Decrease in the unit cost of production, delivery, marketing according to various scholars could be realized through cost optimization.

Cost optimization was acute to industrial SMEs because of its capital continuous and business capacity (Shahidul and Anwar, 2007). Cost optimization states to recognizing the non-value extra inputs and eliminate it from the production procedure in order to make complete products more competitive. Hence, there is a possibility to expand the general performance of SMEs therefore their production and processes cost optimization is vibrant for manufacturing SMEs in nourishing business domain by accomplishing quality product at an affordable cost (Roztock, et al., 2004). In order to address cost optimization problem, SMEs are advised to distribute the production process into numerous components such as labor, inventory, raw materials, energy, R&D and supply chain. Major areas considered in the literature were skilled labor, supply chain performance, application of ICT, capacity utilization, production processes and bench marking though emphasis is on production and operations management issues.

### **2.2.5 New Markets Penetrated and Competitive Advantage**

Innovative capacity gave SMEs their competitive lead a main element in seizing market triumph and inter-firm competitiveness (Mole and Worrall, 2001). Innovation enabled SMEs to adventure into new products and markets through improving the cost base and pricing policies (Mole and

Worrall, 2001). Cummins et al., (2000) argued that while innovation can comprise new-product development, it integrates innovative developments in other features of marketing. Innovative new companies create new proficiencies grounded on existing and prospect market drifts and customer strains since they are driven by a profit seeking undertaking. Cooper and Kleinschmidt (2007), further pointed out that in order to elevate the performance of new product progress a company first collects associated market statistics, assesses the core and outward environment and resources then plan development approaches of new products that counterpart business objectives. Firms hence see marketing strategy synonymous with marketing innovation. The blend aids a company recognize new opportunities with clients and markets and how to take stake from players in existing markets hence penetration into new markets. However, numerous tactics are engaged by the company to make certain that the marketing strategy is efficiently delivered and new products are capable to navigate into the market. Consequently innovative marketing strategies visibly ensure the need of clients in the market and thus results to the success of a new product. The study intended to find out whether sales tactics and marketing determined the success of a new product into the market within the printing SMEs.

### **2.2.6 Market Positioning and Competitive Advantage**

In relation to market positioning and ranking, competitive advantage was historically believed of as a substance of position, where firms occupied a competitive space, built and protected market share (Evans and Shulman, 1992). The most central features of innovation included a resilient relationship amid market performance and new products as new products help uphold market shares and increase profitability. Zemplerova (2010), highlighted that the overheads on research, development and overview of innovations are the determining features for gaining a leading part of the market. This kind of research points at a firm understanding its market hence

applying tools that could guide them towards market innovation. Richey et al. (2005) observed the relationship between innovation and a firm's performance. In doing so, they specified that innovation should increase a firm's market and internal cost efficiency which are competitive advantages. They also indicated that innovations can lead to increased returns attributable to added services and upgraded customer satisfaction. A number of marketing concepts have been tried out however the distinctive one is market – orientation. Market-orientation is a rational, developmental, and a folk aspect of a firm's marketing conception that puts the customer at the epicenter of the business and its development. However, experimental studies on the outcome of market-orientation on greater performance discovered unpredictable results (Han et al., 1998). According to Pelham (1997), a market-oriented firm with excellent market facts gathering and processing abilities, is able to forecast the necessities and fluctuations in markets precisely and hastily, permitting them to respond rapidly and suitably hence boost their competitive advantage. Incidentally, it has been affirmed by scholars in the SME writings that market-orientation offers small firms with a possible competitive advantage over larger firms for SMEs are closer to consumers and able to exploit their needs and wants swiftly and flexibly. They would also be able to transfer customer acumen quickly with less corrosion due to their condensed organizational strata and establishment. This could help device the marketing strategy fast as it is less formal.

#### **2.4 Summary of Literature Review**

The influence of innovation on firm's general performance was validated by a considerable body of literatures. The literature showed emphasis on process, product and market innovation as major drivers towards attaining a competitive advantage by firms. However, all the strategies mentioned in the literature if implemented had resource implications that a firm needed to invest

in and these were slightly stated in the literature reviewed hence basic indicators of innovation were ignored due to assumptions. Some scholars like Sachs and Benson (2001), highlighted the need for huge or a reasonable cost of investments in financial, physical, human and technological resources for a firm practice productive innovation yet according to Lucia (2012), the firm's competitive advantage meant to reassure compact cost or to create a diverse product or service that is evidently diverse through its quality by the rivalry's offer. Schumpeter (1911), in the literature assumed a perfectly competitive equilibrium which was not realistic because there is no perfect economy. The literature reviewed further showed a close and positive relationship between innovation and a firm's competitiveness. However, the extent of the relationship was unfortunately not stated creating critical gaps that the study intended to investigate as most assumptions from scholars had been hypothetical. The literature collected related to different environments, periods, firms and economies hence the need for the study to test its applicability to printing SMEs within Kampala.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

This chapter introduced the rational framework that was followed in the process of conducting the study. It is divided into: research design, study population, sample size and selection, sampling techniques and procedure, data collection methods, data collection instruments, validity and reliability, procedure for data collection, data analysis and measurement of study variables.

#### **3.1 Research Design**

This study was subjected to a cross sectional research design to compare the different variables. The cross sectional survey research design was employed because the mixture of qualitative and quantitative approaches provided a comprehensive understanding of the research problem than one approach. The study involved the collection of both qualitative and quantitative data in response to the research questions and hypothesis. The design saved time and helped in collection of necessary information. Data was collected using largely interviews and questionnaires then analyzed using descriptive analysis. The data to be collected may be primary or secondary or both (Sekaran & Bougie, 2010).

#### **3.2 Study Population**

The study consisted of 70 respondents from five different printing companies with in the Kampala Central Business District. Five companies where easily accessible as the target population because it was impossible to study the entire population due to a lot of time, money and other resources involved. This made the population narrowly defined and manageable. The 5 printing firms chosen were Wave media, Inline printers, Sketchers design promoters, Clear media and Magic color . Printing SMEs had an estimate staff number of between 5 – 30

members. This was a very diverse group and this allowed the researcher to test the hypothesis which consisted of gathering information on a group of different entrepreneurs, managers and general staff. This diversity helped the study to investigate data to show the relationship between innovation and competitive advantage amongst the printing SMEs in Uganda.

### 3.3 Sample Size and Selection

The population size of interest in this study consisted of 5 printing SMEs with a target of about 10 general staff and 4 key informants per company. This summed up to 50 general respondents and 20 key informants were selected totaling up to the overall number of 70 respondents. The Managing Directors, General Managers and Heads of departments (finance and marketing) were targeted as the key informants whose data was collected through the interview guide because there was need for appropriate information. The sample size total of 64 respondents was derived from the initial population size of 70 respondents as summarized in the table below using Krejcie and Morgan (1970) tables.

**Table 3. 1: Sample size table**

Category of Respondents	Population Size	Sample Size	Sampling Technique
General staff members	50	44	Simple Random
Managing Directors	5	5	Purposive
General Managers	5	5	Purposive
Heads of Departments	10	10	Purposive
<b>Total</b>	<b>70</b>	<b>64</b>	

**Source:** sample size from Krejcie and Morgan (1970).

### **3.3.1. Sampling Technique and Procedure**

The study entailed the usage of both probabilistic and non-probabilistic sampling techniques. Simple random sampling for general staff and purposive sampling techniques for the key informants was considered. The choice of these two techniques was because every element of the population had a probability greater than being selected for the sample during probabilistic sampling. Each person in the population had equivalent opportunity for selection as a subject and the technique also increases sample's representativeness of the population while non – probabilistic sampling restricts generalization. The researcher used personal judgment to hand-pick subjects that are considered to be representative of the population thus handpicked distinctive subjects undergoing problem being studied.

### **3.3.2 Probabilistic Sampling Technique**

This technique allowed for the elimination of any possible cognizant or inherent bias in those conducting the study as the samples are selected at random. In relation to this study, simple random was used as firms were selected from a list of printing SMEs focusing on the features and behavior of the sample in relation to the larger group which helped generalize the overall behavior of a group. Probability sampling was therefore useful in this study where a relatively large representation of a group was desired.

### **3.3.3 Non Probabilistic Sampling Technique**

Non-probability sampling originates its mechanism from the judgment of the researcher. In non-probability sampling, cases were selected on bases of accessibility and examiner judgment. Purposive sampling is one of the non-probability methods of sampling which comprises the selection of a group from the population on the basis of accessible information. In this method, units are comprised in the sample on the foundation of the judgment that the units possess the

required characteristics to qualify as representatives of the population. In the study, an overall number of 20 respondents from the managerial level of the printing companies were handpicked in relation to their relevance to the research subject.

### **3.4 Data Collection Methods**

Data collection methods are essential ways through which the researcher collects data. The researcher used both quantitative and qualitative data collection methods.

#### **3.4.1 Interview Method**

Interviews were used as it allowed for detailed research, to achieve actual information and more involvement over a short period of time, (Kothari, 2008). Semi-structured interviews are widely used cross-examining formats for qualitative research, (Seidman, 2006). Face to face interviews had a distinctive advantage of assisting the researcher to establish a relationship with potential participants and hence gain their cooperation. Interviews provided detailed data which was not possible to get using a questionnaire. This allowed the researcher to simplify uncertain answers and when appropriate, seek follow-up information.

#### **3.4.2 Questionnaire Survey**

Questionnaire design and development was supported by a systematic, logical and structured approach that demonstrated the reliability and validity of the new and developing measure, (Rattray and Jones 2007). A close-ended structured questionnaire was prepared, pre-tested and standardized. The questionnaires were administered to the general members of staff. Questionnaires method was adopted because of the ease to manage as every item is trailed by alternate answers, economical to use in terms of time and money, and the open ended responses may give an insight into the respondents feelings, background, hidden motive, benefits and

decisions (Mugenda & Mugenda, 2003). These devices helped make simpler and measure people's behaviors and attitudes.

### **3.4.3 Documentary Review Method**

The documentary method was used in grouping and investigating physical sources, most commonly written documents both in the private or public domain (Payne and Payne 2004). The researcher reviewed documents in order to obtain recorded information. The documents the researcher used included: journals, reports, magazines, grey literature, and articles. The researcher also used information from primary, secondary and tertiary documents. Data from secondary sources was reinterpreted and reconfigured to harvest new insights into a particular social occurrence (Mogalakwe, 2006).

## **3.5 Data collection Instruments**

The instruments used included the interview guide, questionnaires and the documentary checklist.

### **3.5.1 Interview Guide**

According to Thomas L. Carson (2000), the schedule is nothing but a list of questions which is necessary to test the hypothesis. Face to face interviews had a diverse advantage of allowing the researcher to establish a relationship with probable participants and hence gain their cooperation. These interviews yielded utmost response rates in the research. An interview guide was used with the key informants/respondents who comprised of the general managers, heads of departments and managing directors. Interview guide permitted the researcher to simplify unclear answers and when appropriate, seek follow-up information. Open ended questions were used and through personal contact between the researcher and respondent, accurate information were collected.

### **3.5.2 Questionnaires**

A closed ended questionnaire was used with the general staff respondents. Closed ended questions were developed to help respondents make easier alternatives to choose from. The questionnaires were generated using questions from the objectives, research questions and hypothesis to generate responses and data for analysis of the relationship between the factors being investigated. In the open ended questions, respondents were free to provide any additional relevant information necessary to the study but not included in the questionnaire. The justification to use questionnaires as a data collection tool is that they were quick and an easy way to collect data. They are also convenient for the respondents because they are followed by alternative answers (Mugenda and Mugenda (2003).

### **3.5.3 Documentary Review Checklist**

Documentary review checklist was used to collect more in-depth data on the study. The checklist provided qualitative information which may not easily be collected with the closed ended questionnaire. Written materials and other documents from the different organizations archives, memos and correspondence, official journals and reports, letters, text books, photographs, and transcribed responses to open-ended surveys would be used.

### **3.6. Data Quality Control**

The diversity of data sources brought abundant data types and complex data structures and increased the difficulty of data integration; however, to control the quality of the data, reliability and validity checks were adopted. Quality control was an integral part of the research at all stages, starting from proposal design; data collection, entry, analysis; and reporting.

### **3.6.1 Pretesting of Data Collection Instruments**

The research instruments were pretested amongst the senior management team of other printing SMEs namely; Horizon lines, Brand Mark, Standard signs, MPK and Adventcity within Kampala Central Business District to ensure validity and reliability of the instruments before distribution to the actual respondents.

### **3.6.2 Validity**

Validity was concerned with how precisely the data attained from the study represented the variables of the study. “Validity of an instrument is when it measures what it is supposed to measure and ability to represent accurate information of a respondent’s opinion”. A coefficient validity of above 0.5 and less than 1 is regarded as acceptable, (Amin, 2005).

Questionnaire instruments validity was tested by giving it to supervisors. Items on the questionnaire were subjected for language clarity, as well as relevance and items comprehensiveness. The necessary adjustments were then made by the researcher depending on the test outcome. A coefficient of validity index (CVI) was computed using the formula below:

$$\text{CVI} = \frac{\text{Items rated relevant}}{\text{Total number of items in the questionnaire}} \times 100$$

#### **3.6.2.1 Questionnaire**

The questionnaire had a total of 57 questions including 6 from Background information. The questionnaire was given to three members of the senior management and below is the ratings;

1. The first ticked 42 out of 52 as relevant questions and ticked 10 as irrelevant ones.
2. The second ticked 40 questions out of 52 as relevant and 12 as irrelevant.
3. The third ticked 43 questions out of 52 as relevant and 9 as irrelevant.

Then, the CVI was calculated as follows;

$CVI = (42+40+43)/3 = 125/3 = 41.67$ , implying that  $41.67/52 = 0.801 \Rightarrow 80\%$ .

### **3.6.2.2 Interview Guide**

The interview guide had 24 questions and the results were as follows;

1. The first ticked 16 out of 20 as relevant questions and ticked 4 as irrelevant ones.
2. The second ticked 14 questions out of 20 as relevant and 6 as irrelevant.
3. The third ticked 17 questions out of 20 as relevant and 3 as irrelevant.

$CVI = (16+14+17)/3 = 47/3 = 15.67$ . Implying that  $15.67/20 = 0.783 \Rightarrow 78\%$ .

### **3.6.3 Reliability Tests**

Reliability is the magnitude to which a test or method produced comparable results under continuous conditions on all occasions (Judith, 2005). Cornbrach's Coefficient Alpha was used to conduct reliability test basing on the following formula:

$Y = K/K-1(\Sigma SDi^2 / \Sigma SDt^2)$ : Where:  $Y = Reliability$ ;  $K = Number\ of\ items\ of\ the\ instrument$ ;  
 $\Sigma SDi^2 = Sum\ of\ variance\ of\ individual\ questions$ ; and  $\Sigma SDt^2 = Variance\ of\ instrument$

*Adopted from Amin (2005)*

Questionnaires was pre-tested on 10 people not participating in the study to determine if there is a proper flow of questions and relevance of responses as per study objectives. Time taken by each respondent to fill the questionnaires was estimated. It took about 1 hour to fill the questionnaires, and the researcher considered this sufficient time to ensure respondent's concentration was maintained.

**Table 3. 2: Showing reliability index.**

<b>Variable</b>	<b>CVI</b>	<b>No. of items</b>
Product Innovation	0.686	11
Market Innovation	0.844	10
Process Innovation	0.832	10
Competitive Advantage	0.821	9
<b>Overall reliability</b>	<b>0.796</b>	<b>40</b>

Cronbach's Alpha Coefficient was used to ration the reliability of the instruments with the resultant reliability coefficient was found to be 0.796. According to Amin (2005), Cronbach coefficient Alpha for variables that are greater that 0.7 is a recommended reliability. This shows that the questionnaire was valid for data collection.

### **3.7 Procedure of data collection**

Upon completion of the proposal defense stage, the researcher obtained a letter of introduction from Uganda Management Institute to enable her proceed to the field for data collection. The data collection instruments were pretested to ensure validity and reliability. A tentative period of 4 weeks was needed for accurate and timely data collection. Respondents were to be interviewed from their offices or any place of convenience as agreed. The researcher applied the use of research assistants due to the number of respondents intended to be interviewed. The assistants were availed with the questionnaires and a letter of committal indicating the purpose and relevance of the research. After completion of the data collection exercise, all data was sorted and organized for analysis.

### **3.8 Data Analysis**

This research used of a mixture of two approaches during the survey hence leading to qualitative and quantitative data analysis as elaborated.

### **3.8.1 Qualitative Data Analysis**

Qualitative data obtained from face to face sessions or a key informant interview was analyzed using content analysis. The qualitative information collected was grouped, sorted out and laid in form of themes and narrative statements. Only valuable information was used to supplement on the quantitative one that was used.

### **3.8.2 Quantitative Data Analysis**

For quantitative data analysis, Statistical Program for Social Scientists (SPSS) version 20 was used. The exercise involved designing data entry screens before entering raw data for analysis. The researcher used data quality checks during data collection and data entry to check for completeness, accuracy and consistency. Before data was analyzed, it was sorted, cleaned and edited to identify and correct missing, messy data. This ensured that all information on the key variables was collected. Both inferential and descriptive statistics were used to examine sample data with the aim of generalizing findings on the larger population as well as establish the level of relationship between the variables. Descriptively, data was presented in form of frequencies, percentages, means and standard deviations. These were presented in tabular forms. Inferential statistics were presented using both the Pearson's correlation coefficient (bi-variate) technique used to investigate relationships between two continuous variables by measuring the strength between the independent and dependent variables and regression (linear) to determine the percentage (variation) between the variables. All the data was then analyzed at a level of significance of 95% which is a coincidence level. This value was selected considering the sample size was embraced for figures calculated using the 0.05% confidence levels.

### **3.9 Measurement of Variables**

The variables in this research were measured at nominal scale. Responses were categorized according to context in this study and measured using a rating scale. Responses from the questionnaire were measured using a five - likert scale ranging from Strongly disagree (1), Disagree (2), Agree (3), Strongly agree (4) to not sure (5). The five - likert scale was used because it assesses the strength of the respondent's feelings and attitude towards the study. Conferring to Mugenda (2003) and Amin (2005), the Likert scale can measure attitudes, perceptions, values and behaviors of persons towards a given phenomenon.

### **3.10 Ethical Considerations**

The research involved permission, admittance and related moral issues, since it was based on data from people about people according to Punch (2000). The proposed study ensured that well-versed consent was attained from the participants. Permission was acquired from the different printing firms to carry out research on by making appointments with the managing directors in order to access the archived documents useful to the study. The participants were given full facts about the research including the reasons they had been chosen to participate. Participants' confidentiality and secrecy were assured. A highly close ended questionnaire was used in consideration of time and nature of interview which seemed sensitive to the respondent so as not to cause either bodily or sensitive harm to respondents. This was something as simple as being vigilant how the researcher would be word sensitive on challenging questions during the interviews.

## CHAPTER FOUR

### PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

#### 4.1 Introduction

This chapter focuses on the outcomes obtained from the relationship between innovation and competitive advantage of printing small and medium enterprises (SMEs) in Kampala. First, the respondents' background information is outlined followed by descriptive statistics on the study variables. Then explanations of product innovation, process innovation and records market innovation are given in comparison with the extent to which they contribute to the competitive advantage of the printing SMEs. The corresponding hypotheses tested in this study are explored using; tests of significance, spearman correlation coefficients and their meanings drawn in line with the research objectives.

#### 4.2 Response Rate

This discusses the number of people who responded to the survey compared with the total of people in the sample usually expressed in percentage form. In this study, the sample was 64 respondents and the study managed to get 52 of them (14 respondents for interviews as key informants from the managerial category 2, 3 and 4 while 38 respondents for questionnaires from the general staff sample size). The break down for each is shown in the table below.

**Table 4. 1: Response rate**

	Category of staff	Sample Size	Obtained Sample	Response Rate (%)
1	General staff	44	38	86.4%
2	Managing Directors	5	3	60.0%
3	General Managers	5	3	60.0%
4	Heads of Department	10	8	80.0%
	<b>Total</b>	<b>64</b>	<b>52</b>	<b>81.2%</b>

**Source:** Data from the field

Table 4.1 above shows that the response rate was 81.2%. According to Amin, (2005) the response rate should be a minimum of 50%. The above response rate was obtained because majority of the targeted respondents could be obtained from one place and the researcher frequently reminded them to respond to the questionnaires distributed as well as make appointments for interviews. A lot of explanation and encouragement was done to ensure maximum feedback. Therefore, the results were considered to be thoroughly representative of what would have been obtained from the population.

### **4.3 Background of the Respondents**

Data concerning the background information of the respondents was collected in this section. Details concerning their age, length of time in the printing business and the stage where the business is at was collected and is presented in the sections that follow. Analysis was based on the 38 participants who answered the questionnaires.

#### **4.3.1 Age of the Respondents**

The age of the respondent has over the years been identified with the efficiency with which a person executes their duties. Younger members of staff are known to be faster both in thinking and practice. While younger staff might be faster, they are likely to make more mistakes in the area of business because of their lack of experience. The information on age was gathered from the respondents to establish the status quo and how this impacts on the competitive advantage of their businesses. This was categorized as can be seen in table 4.3.1 below;

**Table 4. 2: Age group of Respondent**

	<b>Age</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1	Below 25 years	9	23.7%
2	Between 25 - 44 years	13	34.2%
3	Between 45 – 54 years	12	31.6%
4	Between 55 – 64 years	4	10.5%
5	Over 64 years	-	-
	<b>Total</b>	<b>38</b>	<b>100.0</b>

**Source:** Data from field

The results from the table above showed that most staff (34.2%) were from the age category 25-44 years followed by those in the age group 45-54 years and below 25 years 23.7% each. The results mean that those in charge of the printing businesses cut across different age groups. It's surprising however that 76.3% percent are above 25 years because most of the skills in this business come with age. This is likely to impact positively on overall competitive advantage of the businesses because most managers are of age to make sound business decisions.

#### **4.3.2 Number of Years in the Printing Business**

The number of years that one has spent in the business is sequential with accumulation of knowledge and experience. Therefore, the more experienced one is, the less likely they to face challenges fulfilling their given business goals and the results are shown in table 4.3.2 below.

**Table 4. 3: Number of Years in the Printing Business**

	<b>Number of Years</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1	Less than 1 year	6	15.8%
2	2-5 years	11	28.9%
3	Above 5 years	21	55.3%
	<b>Total</b>	<b>38</b>	<b>100.0%</b>

**Source:** Data from field

The results show majority (55.3%) of the participants had spent more than 5 years in the business while a considerable proportion (28.9%) had been in the printing business for a period between two to five years. This means that most participants had spent some relative time in the printing business to understand the dynamics of innovation in the business. This is because experienced business personnel are likely to be more articulate regarding business operations. This in the end might positively impact on their competitive advantage over the less experienced proprietors.

### 4.3.3 Stage of the Business

The stage of the business in the lifecycle of business operations is fundamental in ascertaining the number of stumbling blocks they have had to outgrow to reach the stage where they are at. It comes with a massive wealth of experience for those that are in the latter stages and otherwise.

Table 4.3.3 shows the results obtained from the study.

**Table 4. 4:Stage of the Business**

	<b>Stage</b>	<b>Frequency</b>	<b>Percentage (%)</b>
1	Start up	6	15.8%
2	Growth	23	60.5%
3	Maturity	6	15.8%
4	Diversification	3	7.9%
	<b>Total</b>	<b>38</b>	<b>100.0</b>

**Source:** Data from field

The study findings show that most of the businesses (60.5%) were in the growth stage while 15.8% were in their maturity stage. The number of startups was found to be at 15.8% which is an indicator that most of the businesses surveyed were in position to explain the ups and downs of the business. They are likely to have undertaken a number of innovations to reach the present stage. This experience is likely to lead to more keen understanding of the subject of competitive advantage in regard to the innovations done.

#### 4.4 Product Innovation and Competitive Advantage

This objective was set to establish contribution of product innovation on the competitive advantage of firms. To effectively analyze the relationship between the two variables, descriptive statistics were presented for each of the variables and then inferential statistics computed and interpreted.

**Table 4. 5: Descriptive Statistics on Product Innovation**

	<b>Product Innovation</b>	<b>SA</b>	<b>A</b>	<b>NS</b>	<b>D</b>	<b>SD</b>
1	The new products meet customer requirements	44.7%	44.7%	7.9%	2.6%	.0%
2	Customers are satisfied with the new product designs	36.8%	55.3%	3.8%	0.0%	2.6%
3	Newer products have better features that attract customers	36.8%	39.5%	5.3%	15.8%	2.6%
4	Newer products are unique on the market	47.4%	36.8%	10.5%	2.6%	2.6%
5	Increased productivity has led to higher profitability	18.4%	50.0%	26.3%	2.6%	2.6%
6	New products have been successful during the launches	28.9%	42.1%	23.7%	5.3%	.0%
7	The percentage of sales from new products leads to increased revenue from new products	31.9%	40.4%	2.7%	13.5%	11.5%
8	Customers are always searching for new products	26.3%	39.5%	21.1%	13.2%	.0%
9	Old products can be re-invented for customer satisfaction	26.3%	21.1%	26.3%	18.4%	7.9%
10	Newer products have improved quality	36.8%	39.5%	5.3%	15.8%	2.6%
11	Past product innovations have been successful	47.4%	36.8%	10.5%	2.6%	2.6%

**Key SA = Strongly Agree A= Agree NS = Not Sure D = Disagree SD = Strongly**

**Disagree**

The study findings show that most respondents (89.4%) believed that the new products met the customer requirements. Similarly, majority (92.1%) also noted that the customers were satisfied with the new customer designs. The findings further assert that these newer products had better features that attracted customers. Asked as to whether these new products were unique on the market, majority of the study participants approved this to be true while only 5.2% did not. The

study also asked to know whether these new products had been successful during launches, the greatest proportion (71.0%) affirmed to this while only 5.3% did not.

The study also sought as to whether customers were always searching for new products. This was found to be a true according to 65.8% of the study participants. They also noted that these new products were of improved quality (76.3%). The findings also show that majority (84.2%) pointed out that past product innovations had been successful. However, a slightly smaller majority (47.4%) indicated that old products could be re-invented for customer's satisfaction. This agrees with earlier findings that customers are always looking for new products. The study findings in principle show a high level of receptivity on the part of the customers regarding any new products. This is likely to positively impact on the firm's competitive advantage though it might otherwise not be automatic if the same products are available to most of the competing firms.

In relation to profitability, the findings of the study show that majority (68.4%) of the respondents believed that the innovations in the products had led to increases in the profitability of the firms. The percentage of sales from new products leads to increased revenue from new products according to 72.3% of the participants. These findings portray the fact that improved product innovations can to certain extent impact on the profitability of the firms. This may later on have an impact on the competitive advantage of the SMEs.

Data from interviews also to some level agrees that product innovation was important factor in attracting new customers and improving profitability. However, a number of the business managers interviewed pointed out that this does not come single handedly. It comes in liaison with good marketing strategies and competent customer handling. One respondent stressed that:

*The fact that we operate from the same area as most of our competitors, it hard to develop a totally unique product that those you are competing with will not know. Somehow they get to know in a short time. We find ourselves inviting other factors into play for us to obtain a slight competitive advantage.*

This means that product innovation alone will not bring outstanding competitive advantage over other firms unless coupled with other forms of innovation like marketing among others.

Descriptive statistics on competitive advantage are paramount in describing the positions of the firms. The table below presents the results followed by a detailed explanation of the results.

**Table 4. 6: Descriptive Statistics on Competitive Advantage**

	<b>Items on Competitive Advantage</b>	<b>SA</b>	<b>A</b>	<b>NS</b>	<b>D</b>	<b>SD</b>
1	Customer satisfaction has continued to improve over the years because of the newly introduced products	55.3%	26.3%	18.4%	.0%	.0%
2	The number of customers has grown as we introduce new products	5.3%	52.6%	34.2%	7.9%	.0%
3	The company's market share has grown over time because of the newly introduced products	31.6%	23.7%	31.6%	13.2%	.0%
4	The sales volumes have increased with increased new products on offer	34.2%	55.3%	7.9%	2.6%	.0%
5	The quality of our new products is superior compared to our competitors	31.1%	23.7%	42.6%	2.6.0 %	0.9%
6	We are flexible in producing new products to the taste of the customers	47.9%	26.3%	2.1%	15.8%	7.9%
7	The company registers higher profits on our new products	21.6%	27.0%	43.2%	5.4%	2.7%
8	Competitive advantage provides the company with a better sales position	5.3%	44.7%	34.2%	13.2%	2.6%
9	Our flexibility has improved because of new work processes and design	8.1%	48.6%	16.2%	21.6%	5.4%

**Key SA = Strongly Agree A= Agree NS = Not Sure D = Disagree SD = Strongly**

**Disagree**

A number of questions were asked seeking the views of the respondents on competitive advantage. This was aimed at understanding of the subject from their perspective in relation to their own businesses. First of all, they pointed out that customer satisfaction has improved over the years because of newly introduced products according to 86.5% of the respondents. It was also discovered that the number of customers had grown over the years because of introduction of new products. Majority of the participants (89.5%) cited increase in sales volumes as they increased the number of new products on offer. This means that as new products are introduced, the number desiring them increases which has a positive significant effect on the sales volumes.

It was however discovered that this didn't automatically lead to an improvement in the profitability of the firm. The study findings show that only 48.6% registered an improvement in the profitability of their firms as compared to the 89.5% which had increased sales volumes because of new products. This calls into other factors that may come into play. Further evidence also shows that only 54.8% indicated that the quality of their new products was superior compared to their competitors. Further evidence to assert this shows that only 53.6% were flexible in producing new products to the taste of the customers. It is most likely that most firms do share the same products across the board and only the mode delivery may make the difference. This means a firm's competitive advantage may come into play depending on the way they deliver the product rather than the product itself.

#### **4.4.3. Testing the first Hypothesis**

The first hypothesis stated that; *Product innovation positively contributes to the firm's competitive advantage*. Spearman's correlation coefficient (*rho*) was used to determine the strength of the relationship between the two variables. The coefficient of significance (*p*) was

used to test the findings by comparing p to the critical significance levels. This procedure was applied in testing the second and third hypotheses in sections 4.5.2 and 4.6.2

**Table 4. 7: Correlation between Product Innovation and Competitive Advantage**

			<b>Product Innovation</b>	<b>Competitive Advantage</b>
Spearman's rho	<b>Product Innovation</b>	Correlation Coefficient	1.000	.432**
		Sig. (2-tailed)	.	.007
		N	38	38
	<b>Competitive Advantage</b>	Correlation Coefficient	.432**	1.000
		Sig. (2-tailed)	.007	.
		N	38	38

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

Findings show a moderate correlation ( $\rho = 0.432$ ) exists between product innovation and competitive advantage. The coefficient of determination, which is a square of the correlation coefficient ( $\rho^2 = 0.187$ ) was computed and expressed as a percentage to determine the variance in the competitive advantage due to product innovation. These results imply that product innovation accounted for 18.7% variance in competitive advantage. The significance value of 0.007 which is less than the two sided critical significance value of 0.01 affirms that there is a significant variant relationship between the two variables. Therefore, the hypothesis *Product innovation positively contributes to the firm's competitive advantage* was accepted. The implication of these findings is that the proficiency in product innovations (other factors constant) would be responsible for a considerable 18.7% improvement in the competitive advantage among printing SMEs and otherwise. This mild contribution could be attributed to the fact that most innovations are not primarily limited to individual SMEs but innovation packages are available to those firms that can afford them creating a competitive advantage over those that

cannot. Therefore, it is worth concluding that, product innovation has a relative impact on the competitive advantage of printing SMEs.

The same conclusion would be drawn based on data from interviews that product innovation to some degree creates a competitive advantage for printing firms. However, the degree of impact was less for firms located in the same area as compared for those that were located in isolated places. One of the respondents narrated that:

*The business has been able to increase its customer base and make more money out of our products due to diversification and improvement in our products. Innovativeness in our products gave us a good positioning among our peers along Nasser road where there are many such firms.*

#### **4.5 Process Innovation and Competitive Advantage**

In order to ascertain how process innovation relates to the competitive advantage of SMEs, use of descriptive statistics was made to bring out the views of the respondents on the variable. Then inferential statistics were used to draw overall conclusions on the subject matter.

##### **4.5.1. Process Innovation**

The study sought to find out the different innovations in the processes carried out by printing SMEs in Kampala. This would be fundamental in establishing how this was reflected in overall competitive advantage of the SMEs. To understand the views of respondents on the variable, table 4.5.1 below presents percentages of responses to each of the items and meanings drawn thereafter.

**Table 4. 8: Descriptive Statistics on Process Innovation**

	<b>Process Innovation</b>	<b>SA</b>	<b>A</b>	<b>NS</b>	<b>D</b>	<b>SD</b>
1	Culture of risk taking has a positive impact on innovation and competitiveness	47.4%	39.5%	13.2%	.0%	.0%
2	A number of employees are highly innovative	15.8%	42.1%	31.6%	10.5%	.0%
3	The company culture is supportive of innovation	21.1%	44.7%	26.3%	5.3%	2.6%
4	Acquisition of new machinery leads to better quality of products	5.3%	18.4%	36.8%	23.7%	15.8%
5	Improved work processes have helped in customer appreciation and satisfaction	15.8%	60.5%	21.1%	2.6%	.0%
6	Employees need training to improve on flexibility	55.3%	42.1%	2.6%	.0%	.0%
7	Company generally does not wish to take any risk	57.9%	31.6%	7.9%	2.6%	.0%
8	The level of bureaucracy affects timely delivery of works and flexibility	23.7%	50.0%	18.4%	5.3%	2.6%
9	New designs have created superior customer satisfaction	13.2%	63.2%	18.4%	5.3%	.0%

**Key SA = Strongly Agree A= Agree NS = Not Sure D = Disagree SD = Strongly**

**Disagree**

An inquiry was made as to whether culture of risk taking has a positive impact on innovation and competitiveness. The study results revealed that majority (86.9%) believed that this was so while the rest (13.1%) chose to remain neutral. The study also pointed out that 57.9% of respondents believed that a number of staff were highly innovative. On the other hand, majority (65.8%) believed that most company cultures were highly supportive of innovation processes. This means that the respondents believed the companies created an atmosphere in which innovative processes would be greatly bread. This kind of atmosphere is likely to lead to an improvement in the overall competitive advantage especially over those where this kind of environment is not boosted.

There was a divided opinion over whether acquisition of new machinery led to better quality of products. A slight majority (39.5%) did not believe that this was true, 36.8% remained neutral

while 23.7% consented to the truth of the above statement. On the other hand, majority (76.3%) indicated that improved work processes helped in customer appreciation and satisfaction.

Majority of the respondents (97.4%) also indicted that the employees needed training to improve on their flexibility. A great proportion of them (89.5%) also highlighted that companies were not willing to take any risks. It's also fundamental to point out that bureaucratic practices were at the center of affecting the timely delivery of works and flexibility. This clearly points out that improved work processes, training of key staff and not new machinery were players in effective service delivery. This if handled well by particular firms will create a competitive advantage for those firms over those firms that don't.

Through the interviews, it was discovered that processes were a very fundamental part of the firms that were making profit in the printing business. Innovations in the way firms managed their customers through improved processes was identified as a key player in the business. One managing director pointed out that;

*The major reason we have had to make some money in this business is because we put the customer's preference at the forefront of our priorities or core values. We as a team do everything in our power to make sure our clients are treated well. We have had a number of referrals from those same clients and this has kept us going.*

Another business owner also stressed that;

*Staffs in this place know that customer's preferences are key to our survival, we make sure we are transparent to the best level that we can when handling our clients. We sometimes work beyond normal working hours in order to meet a certain deadline. This has ended up in our favour most of the time as customers are always delighted and end up bringing us more clients.*

This means that good business owners know the printing business have known the secret of process innovation towards creating a competitive advantage over other firms.

#### 4.5.2. Testing the Second Hypothesis

The second hypothesis stated that: *There is a significant relationship between a firm's process innovation capacity and its competitive advantage.* The table below shows spearman correlation values and the significance levels when relating the two indices (variables).

**Table 4. 9: Correlation between Process Innovation and Competitive Advantage**

			<b>Process Innovation</b>	<b>Competitive Advantage</b>
Spearman's rho	<b>Process Innovation</b>	Correlation Coefficient	1.000	.480**
		Sig. (2-tailed)	.	.002
		N	38	38
	<b>Competitive Advantage</b>	Correlation Coefficient	.480**	1.000
		Sig. (2-tailed)	.002	.
		N	38	38

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

The findings in the table above present a relatively strong correlation ( $rho = 0.480$ ) between process innovation and competitive advantage. The corresponding coefficient of determination ( $rho^2 = 0.23$ ) means that an improvement in process innovation accounts for 23.0% variance in the competitive advantage of the firm. These findings were subjected to a test of significance (P) and obtained a value of (P = 0.002) which was less than the critical significance value of 0.01. This means that the relationship between the two variables was thus significant. Therefore the hypothesis; *there is a significant relationship between a firm's process innovation capacity and its competitive advantage* was accepted. The high correlation shows the power of innovation processes on the performance of the firms thus giving them competitive advantages over those

that are not innovative process wise. The findings absolutely concur with those obtained from interviews. Evidence from the owners interviewed pointed out that the processes they went through in service delivery were some of the most fundamental factors why they were still in business today.

#### **4.6 Market Innovation and Competitive Advantage**

Market innovation being fundamental in any firm, the study also sought data on the variable in from the SMEs in Kampala. Like in the previous sections 4.4 and 4.5 above, the study first presented the descriptive statistics and then went on ahead to analyze the relationship between market innovation and competitive advantage among these SMEs in Kampala in order to draw inference.

##### **4.6.1. Market Innovation**

The responses of study participants on the questions assessing the level of market innovation in their firms are presented in the table below.

**Table 4. 10: Descriptive Statistics on Market Innovation**

	<b>Market Innovation</b>	<b>SA</b>	<b>A</b>	<b>NS</b>	<b>D</b>	<b>SD</b>
1	New marketing methods have lead the firm’s entrance to new markets	50.0%	34.2%	15.8%	.0%	.0%
2	Alliances with competitors have increased firm’s profitability	5.3%	52.6%	26.3%	10.5%	5.3%
3	Flexibility as a marketing strategy has increased the firm’s competitiveness	21.1%	42.1%	31.6%	5.3%	.0%
4	Marketing has improved the firm’s brand image	15.8%	23.7%	31.6%	26.3%	2.6%
5	Dominant market share is held by competitors with an outstanding advantage	10.5%	13.2%	47.4%	18.4%	10.5%
6	Marketing has led to company sales growth and profitability	42.1%	47.4%	7.9%	2.6%	.0%
7	Marketing strategies are time consuming and expensive for your organization	10.5%	34.2%	42.1%	13.2%	.0%
8	New ideas generated have given birth to customer satisfaction	18.4%	47.4%	31.6%	2.6%	.0%
9	New market innovations have given the firm better quality of services	31.6%	28.9%	18.4%	21.1%	.0%
10	New marketing ideas aim at the firm’s flexibility	5.3%	21.1%	34.2%	23.7%	15.8%

**Key SA = Strongly Agree A= Agree NS = Not Sure D = Disagree SD = Strongly Disagree**

The study findings show that new marketing methods led to firms to enter new markets according to 72.2% of the study participants. It was also discovered that marketing increased the sales or the firms as well as their profitability (89.5%). Regarding whether market innovations had given birth to better quality of services, majority (61.5%) believed that this was so, 18.4% remained neutral while 21.1% believed the contrary. It is also evident that alliances with competitors had increased 57.9% of the firms’ profitability. The study findings also show that majority (65.8%) believed that the new marketing strategies had increased the level of satisfaction among the customers they were handling. On the other hand, 61.5% of the firms

surveyed reported that the quality of services delivered had increased because of market innovations. Most of the participants (39.5%) reported that the marketing strategies had improved the brand images of their firms. On the contrary, most participants (31.5%) were undecided as to whether dominant market share was held by competitors with an outstanding advantage.

In principle, the findings show that marketing is such an important aspect in the growth and profitability of the firms in question. This means that firms have to be more aggressive and innovative to impact on their growth. This is properly done is likely have a significant impact in terms of better competitive advantage over those that are less innovative.

Interviews with key informants show no different result. A number of managing directors and general managers interviews showed that marketing innovation was a fundamental factor in the printing business in Kampala. One was quoted saying:

*With the prevailing growth in the number of businesses doing printing in this city, one has got to be a little more aggressive in marketing if they are to remain functional. This is because the margin between the one with a greater competitive advantage and the one with less will definitely be seen in their marketing strategies/innovations.*

Another also noted that;

*We as a company have had to be more creative in the area of marketing innovation to obtain the current customer base. It hasn't come by chance but was intentional even when the marketing strategies used by firms are similar.*

It is there imperative to conclude that marketing innovation is such a relevant force in creating more profitable firms with a cutting edge over others.

#### 4.6.2 Testing of the third Hypothesis

The third hypothesis stated that: *There is a significant relationship between market innovation and the competitive advantage of a firm.* A cross tabulation of market innovation and competitive advantage variables was run. Using spearman correlation coefficients and the associated level of significance for the two variables, the relationship was tested and the results are presented in table 4.6.2 below.

**Table 4. 11: Correlation between Market Innovation and Competitive Advantage**

			<b>Market Innovation</b>	<b>Competitive Advantage</b>
<b>Spearman's rho</b>	<b>Market Innovation</b>	Correlation Coefficient	1.000	.615**
		Sig. (2-tailed)	.	.000
		N	38	38
	<b>Competitive Advantage</b>	Correlation Coefficient	.615**	1.000
		Sig. (2-tailed)	.000	.
		N	38	38

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

*Source: Data from the Field*

The findings present a high positive correlation ( $\rho = 0.615$ ) between market innovation and competitive advantage of a firm. The corresponding coefficient of determination ( $\rho^2 = 0.378$ ) implies that market innovation alone accounted for 37.8% variance in the competitive advantage of firm, other factors constant. The obtained significance value (p) of 0.000 implies that the relationship between the two variables is very significant since it is less than the two sided critical value of 0.01. Therefore the hypothesis, *There is a significant relationship between market innovation and the competitive advantage of a firm* was accepted. The strong correlation implies that market innovation is such a relevant force if a firm is to have a competitive advantage over others.

Data from interviews also points in the same direction with many of the interviews citing the necessity of marketing innovation in the printing business if the business is to be sustainable.

One of MD of the firms that have been existing for some time pointed out that;

*We have targets on a daily, weekly and monthly basis and these have got to be met by our marketing and sales team. They've had to put with high levels of aggression most of the time to get us to this level where we are.*

It therefore necessary to conclude according to the interviews that marketing is very fundamental if a firm is to hold a competitive advantage over others,

## CHAPTER FIVE

### SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents summary of the study, discussion of the findings, conclusions and recommendations made. It also presents proposed areas of further research. The discussion, conclusions and recommendations are presented according to the objectives of the study.

#### 5.2 Summary of Findings

The purpose of the study was to assess the contribution of innovation towards the competitive advantage of printing small medium enterprises in Kampala. The researcher collected data from different stakeholders who work in printing SMEs within Kampala Central Business District, using structured self-administered questionnaires and interviews guide. The data collected was analyzed using SPSS. The research findings were both qualitative and quantitative (descriptive and inferential statistics).

##### 5.2.1 Product Innovation and Competitive Advantage

Findings show a moderate correlation ( $\rho = 0.432$ ) exists between product innovation and competitive advantage. The coefficient of determination, which is a square of the correlation coefficient ( $\rho^2 = 0.187$ ) was computed and expressed as a percentage to determine the variance in the competitive advantage due to product innovation. These results imply that product innovation accounted for 18.7% variance in competitive advantage. The significance value of 0.007 which is less than the two sided critical significance value of 0.01 affirms that there is a significant variant relationship between the two variables. Therefore, the hypothesis *Product innovation positively contributes to the firm's competitive advantage* was accepted.

### **5.2.2 Process Innovation and Competitive Advantage**

The findings in the table above present a relatively strong correlation ( $\rho = 0.480$ ) between process innovation and competitive advantage. The corresponding coefficient of determination ( $\rho^2 = 0.23$ ) means that an improvement in process innovation accounts for 23.0% variance in the competitive advantage of the firm. These findings were subjected to a test of significance (P) and obtained a value of (P = 0.002) which was less than the critical significance value of 0.01. This means there is a relationship between the two variables thus significant. Therefore the hypothesis; *there is a significant relationship between a firm's process innovation capacity and its competitive advantage* was accepted.

### **5.2.3 Market Innovation and Competitive Advantage**

The findings present a high positive correlation ( $\rho = 0.615$ ) between market innovation and competitive advantage of a firm. The corresponding coefficient of determination ( $\rho^2 = 0.378$ ) implies that market innovation alone accounted for 37.8% variance in the competitive advantage of firm, other factors constant. The obtained significance value (p) of 0.000 implies that the relationship between the two variables is very significant since it is less than the two sided critical value of 0.01. Therefore the hypothesis, *There is a significant relationship between market innovation and the competitive advantage of a firm* was accepted. The strong correlation implies that market innovation is such a relevant force if a firm is to have a competitive advantage over others.

## **5.3 Discussion of Results**

### **5.3.1 Product Innovation and Competitive Advantage**

Findings revealed a positive though a moderate correlation between product innovation and the competitive advantage of the printing SMEs. The considerable 18.7% improvement in the

competitive advantage among printing SMEs is brought about by the proficiency in product innovations (other factors constant). This mild contribution could be attributed to the fact that most innovations are not primarily limited to individual SMEs but innovation packages are available to those firms that can afford them creating a competitive advantage over those that cannot.

Majority of the respondents agreed that regular new product launches enabled them to become more competitive, and this helped them to set targets to improve work performance. Senior members of management interviewed who said, *“Here we are able to make some money out of our products because we located a bit far from Nasser road where there are many such firms. If we were there, we definitely would make as much profit as we do now”*. The findings comply with earlier findings by Marius, (2011), who argues that growing competition in the global market demands that productivity should not be measured as an indicator of productivity only it must also measure effectiveness yet the discrepancy between the two is often overlooked.

In contrast, Tidd et al. (2006), asserted that innovation adds to realizing a competitive advantage in several traits. He clearly outlines that new products help uphold market shares and increase *profitability*. A number of studies show financial performance pointers measure a firm’s aggregate revenues or profits attributable to newly presented products in either absolute terms (Brenner, 1994).

The researcher believes that the insignificant results about the influence of product innovation to competitive advantage of the firm may not necessarily be as a result of weaker system that cannot support competitive advantage, but it may largely be due to other conditions such as political economic and market forces. As argued by Ganna, (2012), that it is highly significant

for a firm to make a right decision of whether a new product should be introduced or not. If actual sales endure below potentials, the firm may have invested in overcapacities.

### **5.3.2 Process Innovation and Competitive Advantage**

Basing on the study results about the effects of process innovation on competitive advantage, the data shows that there was a relatively strong correlation ( $\rho = 0.480$ ) between process innovation and competitive advantage. The data agrees with the idea that process innovation is a factor that can positively contribute to competitive advantage. The results show that majority of respondents upheld the view that process innovation, apart from decrease in the unit cost of production, positively affected the competitive advantage of the printing SMEs within Kampala Central Business District. This result is in line with the literature about contribution of process innovation on competitive advantage as advanced by (Romer, 1986) that labor productivity measures the ratio of real output to labor input while MFP is a degree of output to a weighted grouping of labor and capital inputs. Innovation when nurturing competitiveness, productivity and job creation is measured as a vital force for starting and fuelling the engine of growth. The results were further supported by observation made by Neely, 1998, that innovating firms are not the only ones that benefit from their innovations. When innovations are dispersed, they add to higher productivity and higher standards of living for an economy wholly.

Similar view is being held by Porter (1990), argues that native competition reassures innovation by compelling firms to innovate or fail. In his view, for any given set of industrial bunches, competitive pressure enhances innovation and productivity. However, when estimating the impact of innovation on productivity, the measures of innovation that are typically used include amount spent on Research & Development, the number of patents the workplace applied for or more recently the percentage of sales coming from products less than five years old.

The researcher believes that the strong and positive relationship on process innovation as indicated by the study can help the printing SMEs within Kampala Central Business District develop their capacity in achieving a competitive advantage within the printing industry.

### **5.3.3 Market Innovation and Competitive Advantage**

The study findings about the effects of market innovation on competitive advantage indicated that there is a significant relationship between market innovation and the competitive advantage of a firm. The findings present a high positive correlation ( $\rho = 0.615$ ) between market innovation and competitive advantage of a firm. The corresponding coefficient of determination ( $\rho^2 = 0.378$ ) implies that market innovation alone accounted for 37.8% variance in the competitive advantage of firm, other factors constant. Data from interviews indicates that many of those interviewed cited the necessity of marketing innovation in the printing business if the business is to be sustainable. As commented by one of MDs of a firm pointed out that; *“We have targets on a daily, weekly and monthly basis and these have got to be met by our marketing and sales team. They’ve had to out with high levels of aggression most of the time to get us to this level where we are”*.

The data agrees with the idea that market innovation is a factor that can bring about the competitive advantage of a firm. This outcome is in line with literature about contribution of market innovation on competitive advantage as advanced by Cummins et al., (2000) argue that though innovation can comprise new-product development, it integrates innovative growths in other aspects of marketing. Innovative new businesses create new competencies based on current and future market trends and customer demands since they are driven by a profit seeking mission. This argument is being supported by Cooper and Kleinschmidt (2007), who also

pointed out that in order to elevate the performance of new product development a firm first gathers correlated market information, assesses the internal and external situation and resources and plan development policies of new products that match business goals.

The significant results in the relationship between market innovation and competitive advantage may mean that the combination marketing strategies of “new market penetration” and “market positioning” helps a company recognize new opportunities with clients and markets and how to take segment from competitors in current markets hence increasing the share into new markets. The researcher believes that innovative marketing tactics can guide the firm in ensuring that the needs of customers are appropriately met.

## **5.4 Conclusions**

In view of the findings of this study, and in regard to literature reviewed earlier, the researcher made the following conclusions.

### **5.4.1 Product Innovation and Competitive Advantage**

In most business entities, product innovation is one of the essential strategies for improving the competitive advantage. Based on data from the interviews that were conducted, product innovation to some degree creates a competitive advantage for printing firms. However, the degree of impact was less for firms located in the same area as compared for those that were located in isolated places. Firms that are involved with new product launches, and new product sales approach should focus on identifying core competencies that are needed to fulfill these tasks. It is therefore fair to conclude that product innovation influences the competitive advantage of a firm in a positive direction.

#### **5.4.2 Process Innovation and Competitive Advantage**

The finding of this study that indicated there is high correlation between processes innovation competitive advantage of the firms shows that those firms that are innovative can achieve competitive advantage over their rival firms. A combination of increased productivity, and decrease in the unit cost of production are key components in the competitive advantage of the firm. It was therefore concluded that all the three components of process innovation; increased productivity, and decrease in the unit cost of production, are essential and should be effectively managed if the competitive advantage of the printing SMEs within Kampala Central Business District are to be continuously maintained.

#### **5.4.3 Market Innovation and Competitive Advantage**

Findings of the study show a high positive correlation between market innovation and competitive advantage of a firm. The study result is in line with most of the previous study that market-orientation is a intellectual, interactive, and cultural aspect of a firm's marketing idea that puts the customer at the epicenter of the organization and its development. The firms therefore need to know where they are going and where the manager is trying to take the business. Management has got to find all possible means of making sure customers embrace the vision. It therefore necessary to conclude according to the interviews that marketing is very fundamental if a firm is to hold a competitive advantage over others. It the stakeholders to the business need to have a shared value and common understanding of direction if they are to build more sustainable competitive advantage.

#### **5.5 Recommendations**

The recommendations for this study took into account all the views and opinions of the respondents in the study that are summed up in the findings of the study.

### **5.5.1 Product Innovation and Competitive Advantage**

The major recommendation from this study is for the printing SMEs within Kampala Central Business District to give utmost attention to incorporating the lessons learned from new product launches, and new product sales experiences into actual practice. This is because the competitive advantage achieved has got to be continuously examined in order to be in tune with the ever-changing business environment.

### **5.5.2 Process Innovation and Competitive Advantage**

To achieve maximum competitive advantage, it was recommended that regular assessment of the processes be carried out to determine if the products or services are according to the required standards. This will improve on the quality of product and service delivery. To achieve this, the firms should have effective policies. This would be fundamental in establishing how processes are reflected in overall competitive advantage of the SMEs.

### **5.5.3 Market Innovation and Competitive Advantage**

Market innovation applied to this study was meant to provide the printing SMEs within Kampala Central Business District with a visualization strategy in order to gain competitiveness advantage within the industry. The firms should constantly research for better means not only to sell their products in the market but also for future survival. Different firms may require different approaches in gaining market share.

## **5.6 Limitations of the Study**

The following major constraints were encountered that affected the researcher during the study:

First of all, it was a little hard to get respondents from the different assignments because of the work demands. Some of the respondents were ever busy on order; therefore for those who accepted to complete the questionnaires, they took long to return them.

Secondly, securing oral interviews with executive members and other senior management team was difficult. This was also coupled with the fact that some senior management were conscious of the fact that the information could be leaked to their rivals and this means equipping the rivals with vital information.

### **5.7 Areas for further Studies**

The following are some of the observations and areas of further research studies that have been identified by the researcher.

1. The impact of product innovation on competitive advantage of the firms needs to be fully investigated. This will help discover factors that are necessary in support innovation.
2. The impact of innovation on the printing SMEs in other districts has not been fully exploited. Looking at it from the perspective of competitive advantage, there have been few studies to support the development of printing industry in Uganda.

## REFERENCES

- Albaladejo, R. H. 2004. *Determinants of innovation capability in small UK firms*  
<http://www.qeh.ox.ac.uk> [Accessed 10 Aug. 2012]
- Allocca, M.A. & Kessler, E. H. 2006. Innovation Speed in the Small and Medium Sized Enterprise (SME). *Creativity and Innovation Management* 15 (3): 279-295.
- Amin, M.E. (2005). *Social Science Research: Conception, Methodology and Analysis*. Kampala Makerere University Press.
- Babbie, E. (1979) *the practice of social research*, 3rd ed. Wadsworth, California. Baker, T. L. (1990), *Doing social research*, McGraw Hill, USA.
- Baker, K.A. (2002): Chapter 14, Innovation, [www.maxwell.af.mil/au/awc/awcgate/doe/benchmark/ch14.pdf](http://www.maxwell.af.mil/au/awc/awcgate/doe/benchmark/ch14.pdf) [Accessed 18 September 2012]
- Baumgartner, J.P. 2009. *The Innovation process*. <http://www.innovationprocess.htm> [Accessed 18 September 2012]
- Beaver, G. & Prince, C. 2002, "Innovation, entrepreneurship and competitive advantage in the entrepreneurial venture", *Journal of Small Business and Enterprise Development* 9(1):28-37.
- Beck, T., Demirgüç-Kunt, A. & Levine, R. (2005). *SMEs, Growth, and Poverty: Cross-country Evidence*. World Bank mimeo.
- Birchall, D., Chanaron, J. & Soderquist, K. 1996. Managing innovation in SMEs, *International Journal of Technology Management* 12 (3): 291-305.
- Blumentritt, T. 2004. "Does small and mature have to mean dull? Defying the ho-hum at SMEs." *The Journal of Business Strategy* 25(1): 27-33.
- Bos-Brouwers, H. 2010. *Innovation processes within Small and Medium-sized enterprises*: <http://www.dare2.uvu.vu.nl/bitstream/handle/1871/16050/dissertation.pdf>. [Accessed 19 September 2012]
- Buysse, K. & Verbeke, A. 2003. Proactive environmental strategies: A stakeholder management perspective. *Strategy Management Journal* 24(5):453-470.
- Creswell, J. (2008). Research design: *Qualitative, Quantitative, and mixed methods approaches*. 2<sup>nd</sup> ed. Thousand Oaks, CA: Sage Publications.
- Creswell, J. (2014). Research design: *Qualitative, Quantitative, and mixed methods approaches*. Fourth edition. International student edition; Sage Publications

- Cummings, B. S. 1998. Innovation Overview and Future Challenges. *European Journal of Innovation Management* 1(1): 21-29.
- Chandler, G.N., Keller, C. & Lyon, D.W. 2000. "Unravelling the determinants and consequences of an innovation-supportive organizational culture", *Entrepreneurship Theory and Practice* 25 (1): 59-76.
- Damanpour, F.1991. Organizational innovation, *Academy of Management Journal* 34:555–590.  
 Damanpour F. 1992. Organizational size and innovation. *Organization Studies* 13(3): 375–402.
- Ebrahim, N.A., Ahmed, S. and Taha, Z. (2008). Virtual Environments Innovation and R&D Activities, University of Technology Malaysia, Malaysia.
- Ettlie, J.E. & Rubenstein, A.H. 1987, "Firm size and product innovation", *Journal of Product Innovation* 4: 89-108.
- Fowler, Floyd.J. (2009). Survey research methods: *Applied social research method series*. Fourth Edition; Sage Publications
- Grbich, (2007). *Qualitative Data Analysis: An Introduction*. Thousand Oaks, CA: SAGE Publications Limited.
- Gupta, A.K. & Govindrajana, V. (1991). Knowledge flows and the structure of control within multinational corporations. *Acad. Manage. Rev* 16(4):768-792.
- H. Salavou, G. Baltas, S. Lioukas, (2004) Organisational innovation in SMEs: *The importance of strategic orientation and competitive structure*, European Journal of Marketing, Vol. 38 Iss: 9/10, pp.1091 - 1112
- Hamel, Gary. 1996. Strategy as Revolution. *Harvard Business Review* (July-August):69-82.  
 Hamel, Gary. 2000. Leading the Revolution, Harvard Business School Press, Boston
- H. Salavou, G. Baltas, S. Lioukas, (2004) "Organisational innovation in SMEs: The importance of strategic orientation and competitive structure", European Journal of Marketing, Vol. 38 Iss: 9/10, pp.1091 – 1112
- Henderson, R.M. & Clark, K.B. 1990. Architectural innovation, *Administrative Science Quarterly* 35(1): 9–31
- Heunks, F.J. 1998, "Innovation, creativity and success", *Small Business Economics*, 10(3): 263-72.  
 Jordan G.B., Hage, J.T., Mote J.E. 2004. Constructing R&D
- Kemp, R.G.M., Folkeringa, M., De Jong, J.P.J. and Wubben, E.F.M. (2003). Innovation and Firm Performance. Zoetermeer, Scales.

- Kim Ch. W, Mauborgne R (2005), *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*, Harvard Business School Press, Massachusetts.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (Second Rev). New Delhi.
- Kumar, R., (1996): *Research methodology: A step by step guide for beginners*, Addison Wesley Longmann publishers, Melbourne
- Leseure, M.J. 2000, "Manufacturing strategies in the hand tool industry", *International Journal of Operations & Production Management*, 20(12): 1475-87.
- Lin,C.Y. &Ho, Y.H. (2011), Determinants of green practice adoption for logistics companies in China. *J. Bus. Ethics* 98(1): 67-83.
- Li, H. & Atuahene-Gima, K. 2002. The adoption of agency business activity, product innovation, and performance in Chinese technology ventures. *Strategy Management* 23(6):469-490.
- Machipisa,L.1998. Developing the focused entrepreneur: <http://www.ipsnews.net/domainlogin> [Accessed 12 August 2012].
- Massa, S. &Testa, S. 2004, "Innovation or imitation? Benchmarking, *International Journal*, 11(6): 610-20.
- Moreno, R. (2014): Innovation, Adoption and Productivity Growth; *Evidence for Europe*
- Mugenda, O. & Mugenda, A. (2003). *Research Methods: Qualitative and Quantitative approaches*. Revised Edition
- Neuman, W. L. (2003). *Social research methods: Qualitative and quantitative approaches*. Fifth<sup>th</sup> Ed.
- Neuman, W. L. (2006). *Social research methods: Qualitative and quantitative approaches*. Sixth<sup>th</sup> Ed.
- Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches*. Seventh<sup>th</sup> Ed.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods (3<sup>rd</sup> ED)*. Thousand Oaks, CA: Sage.
- Punch, K. (2000) *Developing Effective Research Proposals*, London, California, New Delhi: Sage.

- Rattray, J., & Jones, M. C. (2007). Essential elements of questionnaire design and development. *Journal of Clinical Nursing*
- Robbins, D. (2009). *Understanding Research Methods; A Guide for the Public and Nonprofit Manager*: CRC Press.
- Sarantakos, S. (2013). *Social Research*. Fourth Edition.
- Seidman, I. (2006). *Interviewing as Qualitative Research* (3rd ed.). New York: Teachers College Press
- Sekaran, U. (2000). *Research methods for Business: A SKILLS Building Approach*. 4<sup>th</sup> Edition, USA. John Wiley & Sons.
- Schumpeter, Joseph A. (1954) *History of Economic Analysis* New York: Oxford University Press.
- Uganda Micro, Small and Medium Enterprise (MSME) Policy (2015), *Sustainable MSMEs for Wealth Creation and Socio-Economic Transformation*.

## APPENDICES

### APPENDIX 1: QUESTIONNAIRE ON INNOVATION AND COMPETITIVE ADVANTAGE

Dear Respondent,

The relevance of this study is to investigate the contribution of innovation towards the competitive advantage of printing small and medium companies within the Kampala CBD.

The research is for academic purposes as fulfillment a Master's degree in Business Administration from Uganda Management Institute. Please note that your responses will be kept confidential. Kindly take time to answer the questionnaire accordingly.

Thank you for your positive response and cooperation.

#### SECTION A: RESPONDENT AND COMPANY INFORMATION

1. Please state your age group. *Please tick where applicable.*

1	Below 25		2	Between 25 and 34	
3	Between 35 and 44		4	Between 45 and 54	
5	Between 55 and 64		6	Over 64	

2. How many full time working staff does the company have? *Please tick where applicable.*

1	1 -10 employees	
2	10 – 50 employees	
3	50 – 150 employees	
4	150+ employees	

3. How long have you been working in the printing business? *Please tick where applicable.*

(a) Less than 1 year (b) 2 – 5 years (c) Over 5 years

4. Which of the following statements best describes the stage of the life cycle the firm is currently occupied or in? (*Please tick where applicable*)

Start-up (i.e. the firm has a simple structure, relatively centralized and with an informal organization)

Growth (i.e. the firm has a functional structure, a degree of centralization and a formal organization)

Maturity (i.e. the firm has a functional structure, limited centralization and a highly formalized organization)

Diversification (i.e. the firm is structured in divisions, high levels of decentralization, and a formal bureaucratic organization)

Decline (i.e. the firm has either a functional or division-based structure, and is excessively bureaucratic and centralized.

## SECTION B: INNOVATION

### (A) PRODUCT INNOVATION

This section comprises of questions on product innovation and is based on the five likert scale. (1 = Strongly Disagree (**SD**), 2 = Disagree (**D**), 3 = Not sure (**NS**), 4 = Agree (**A**) and 5 = Strongly Agree (**SA**). *Please tick where applicable.*

	<b>SD 1</b>	<b>D 2</b>	<b>NS 3</b>	<b>A 4</b>	<b>SA 5</b>
The new products meet customer requirements					
Customers are satisfied with the new product designs					
Newer products have better features that attract customers					
Newer products are unique on the market					
Increased productivity has led to higher profitability					
New products have been successful during the launches					
The percentage of sales from new products leads to increased revenue from new products					
Customers are always searching for new products					
Old products can be re-invented for customer satisfaction					
Newer products have improved quality					
Past product innovations have been unsuccessful					

## MARKET INNOVATION

	<b>SD</b> <b>1</b>	<b>D</b> <b>2</b>	<b>NS</b> <b>3</b>	<b>A</b> <b>4</b>	<b>SA</b> <b>5</b>
New marketing methods have lead the firm's entrance to new markets					
Alliances with competitors have increased firm's profitability					
Flexibility as a marketing strategy has increased the firm's competitiveness					
Marketing has improved the firm's brand image					
Dominant market share is held by competitors with an outstanding advantage					
Marketing has led to company sales growth and profitability					
Marketing strategies are time consuming and expensive for your organization					
New ideas generated have given birth to customer satisfaction					
New market innovations have given the firm better quality of services					
New marketing ideas aim at the firm's flexibility					

## (B) PROCESS INNOVATION

	<b>SD</b> <b>1</b>	<b>D</b> <b>2</b>	<b>NS</b> <b>3</b>	<b>A</b> <b>4</b>	<b>SA</b> <b>5</b>
Culture of risk taking has a positive impact on innovation and competitiveness					
A number of employees are highly innovative					
The company culture is supportive of innovation					
Acquisition of new machinery leads to better quality of products					
Improved work processes have helped in customer appreciation and satisfaction					
Employees need training to improve on flexibility					
Company generally does not wish to take any risk					

The level of bureaucracy affects timely delivery of works and flexibility					
New designs have created superior customer satisfaction					
Decrease in the unit cost of production leads to higher profitability					

### SECTION C: COMPETITIVE ADVANTAGE

	<b>SD 1</b>	<b>D 2</b>	<b>NS 3</b>	<b>A 4</b>	<b>SA 5</b>
Customer satisfaction has continued to improve over the years because of the newly introduced products					
The number of customers has grown as we introduce new products					
The company's market share has grown over time because of the newly introduced products					
The sales volumes have increased with increased new products on offer					
The quality of our new products is superior compared to our competitors					
We are flexible in producing new products to the taste of the customers					
The company registers higher profits on our new products					
Competitive advantage provides the company with a better sales position					
Our flexibility has improved because of new work processes and design					

## **APPENDIX II**

### **INTERVIEW GUIDE FOR INNOVATION AND COMPETITIVE ADVANTAGE**

1. What is your perception of innovation?
2. Tell me about your innovation successes in your current role.
3. What's the greatest innovation as a company?
4. What's the biggest innovation that's happened in the last year?
5. What is your company competitive advantage?
6. Who is the dominate player in your industry and what is their competitive advantage?
7. How do you market your company competitive advantage?
8. Does innovation contribute towards your competitiveness as a company?
9. What are the future plans to sustain your competitiveness in the industry?
10. What are the challenges being faced as an SME in the printing Industry
11. What would you recommend to be done in order improve innovation in Printing companies within Kampala.
12. During the period 2014 and 2015 did you launch onto the market any product(s) or service(s) that, from the firm's standpoint, were new or significantly improved?
13. If yes, how many products or services did you launch into the market?
14. Who developed these products/services?
15. During the period 2014 and 2015 did the firm adopt any production process (es) that, from the firm's standpoint, was/were new or significantly improved?

## **APPENDIX III**

### **DOCUMENTARY REVIEW CHECKLIST ON INNOVATION AND COMPETITIVE**

#### **ADVANTAGE**

- Enterprise Uganda – performance of small business reports
- Uganda Investment Authority – Sustainable businesses in Uganda
- KMPG – Company performance reports and turnover reports
- Registrar of Company reports in regards to number of printing SMEs registered
- Company policies of the chosen SME printing companies
- Private sector foundation Uganda reports on SMEs

**APPENDIX IV**

**TABLE FOR POPULATION SAMPLE SIZE – KREJCIE & MORGAN (1970)**

Table 3.1									
<i>Table for Determining Sample Size of a Known Population</i>									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

*Note: N is Population Size; S is Sample Size* *Source: Krejcie & Morgan, 1970*

## **APPENDIX V: Introductory Letter**

## **APPENDIX VI: Field Research Letter**

## **APPENDIX VII: Anti-Plagiarism Report**