

**OUT SOURCING, RISK MANAGEMENT, LEAN PRODUCTION  
AND PROFITABILITY IN SELECTED MANUFACTURING  
FIRMS IN UGANDA**

**NOAH MWELU  
2011/HD10/3802U (MPSCM (MAK), BPSCM (MAK))**

**A DISSERTATION SUBMITTED TO SCHOOL OF GRADUATE  
STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE  
IN PROCUREMENT AND SUPPLY CHAIN MANAGEMENT OF  
MAKERERE UNIVERSITY**

**OCTOBER, 2013.**

**DECLARATION**

I, Noah Mwelu declare that this is my original work and is a result of my own independent research and that it has never been presented to any institution for any award. Where it is indebted to the work of others, due acknowledgement has been made.

Signature.....

NOAH MWELU  
REG. NO: 2011/HD10/3802U

Date.....

APPROVAL

This is to certify that this dissertation has been submitted for examination with my approval as a university supervisor.

Signature.....

Date: .....

**DR. MOSES MUHWEZI**

**(Supervisor)**

Signature.....

Date: .....

**ASSOC. PROF. WILL KABERUKA**

**(Supervisor)**

## **DEDICATION**

To my lovely wife Mrs Susan Watundu Mwelu, daughters Lucky Mercy Mwelu, Peace Joy Mwelu, Hope Talituleka Mwelu and Blessed Malyamu Mwelu who have given me ample time and support that has enabled me to complete this work.

May our Lord ISA Masiya bless you all please.

## ACKNOWLEDGEMENT

I would like to take this opportunity to express my sincere gratitude and innermost appreciation to God and then those who in one way or the other have endeavoured to nature me in academics.

In an exceptional way, I wish to extend my sincere appreciation and recognition to my supervisors; Dr. Moses Muhwezi and Prof. Will Kaberuka for their immense professional and affectionate guidance all the way through my research study. I am equally grateful to Prof. Moya Musa and all my postgraduate lecturers for shaping me into what I am.

In a very unique way, I wish to thank my only grate grandmother Ms Efulasi Nakhumitsa (RIP), Uncle Richard Mabonga, Ms Joy Namasaba and Ms Loy Lunyolo for availing me the opportunity to study as well as facilitating me financially and advice of all sorts. Am incredibly obligated to my grate uncle Geoffrey Wepondi for his professional inspiration and guidance during my undergraduate and postgraduate study. I am outstandingly thankful to Uncle Dyson Maswera and Perez Matanda for all the advice and support given to me. Special thanks go to management of all the manufacturing firms for having accepted to fill the questionnaires.

Last but not least, I am uniquely and exceptionally indebted to my dearest wife Mrs. Susan Watundu Mwelu for all the struggle and full support you endeavoured to Nature me in academics and responsible husband as well as father. May the almighty God through our lord Isa Masiya bless you dear. Recognition of merit goes to my beloved daughters Lucky, Peace, Hope and Blessed for your prayers and encouragement.

May God reward all of you heptly.

## TABLE OF CONTENTS

<u>DECLARATION</u>	i
<u>DEDICATION</u>	iii
<u>ACKNOWLEDGEMENT</u>	iv
<b><u>CHAPTER ONE</u></b>	1
<b><u>1.0 INTRODUCTION</u></b>	1
<u>1.1 Background to the Study</u>	1
<u>1.2 Statement of the Problem</u>	3
<u>1.3 Purpose of the Study</u>	3
<u>1.4 Study Objectives</u>	3
<u>1.5 Research Questions</u>	4
<u>1.6 Scope of the Study</u>	4
<u>1.6.1 Geographical scope</u>	4
<u>1.6.2 Subject Scope</u>	4
<u>1.7 Significance of the Study</u>	4
<u>1.8 Conceptual Framework</u>	5
<u>1.8.1 Explanation of the conceptual framework</u>	5
<u>1.8.2 The structure of the dissertation</u>	6
<b><u>CHAPTER TWO</u></b>	7
<b><u>LITERATURE REVIEW</u></b>	7
<u>2.1 Introduction</u>	7
<u>2.2 Outsourcing and Profitability</u>	7
<u>2.3 Risk management and profitability.</u>	13
<u>2.4 Lean manufacturing and Profitability</u>	15
<u>2.5 Outsourcing, Risk Management, Lean Manufacturing and Organizational profitability.</u>	18
<u>2.6 Conclusion</u>	19

<b><u>CHAPTER THREE</u></b>	20
<b><u>METHODOLOGY</u></b>	20
3.0 <u>Introduction</u>	20
3.1 <u>Research Design</u>	20
3.2 <u>The Study Population and sample size determination.</u>	20
3.3 <u>Sampling Technique</u>	21
3.4 <u>Sample characteristics</u>	22
3.4.1 <u>Official position of the respondents</u>	22
3.4.2 <u>Nature (or type) of companies in which respondents work</u>	24
3.4.3 <u>Company presence in Ugandan Market</u>	26
3.4.4 <u>Gender distribution of respondents</u>	27
3.4.5 <u>Age distribution of respondents</u>	27
3.4.6 <u>Experience of respondents in their respective official positions</u>	28
3.4.7 <u>Academic qualifications of respondents</u>	29
3.5 <u>Data Collection, Sources and Types of Data</u>	30
3.6 <u>Measurement of Variables</u>	30
3.6.1 <u>Profitability</u>	30
3.6.2 <u>Outsourcing, Risk Management, Lean manufacturing</u>	30
3.7 <u>Validity and Reliability Analysis</u>	30
3.8 <u>Data Processing and Analysis.</u>	32
<b><u>CHAPTER FOUR</u></b>	33
<b><u>ANALYSIS, DISCUSSION AND PRESENTATION OF FINDINGS</u></b>	33
4.1 <u>Introduction</u>	33
4.2 <u>Outsourcing and profitability</u>	35
4.3 <u>Risk management and profitability</u>	35
4.4 <u>Lean production and profitability</u>	35
4.5 <u>Outsourcing, risk management, lean production and profitability</u>	36

<b><u>CHAPTER FIVE</u></b>	38
<b><u>SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS</u></b>	38
<b><u>5.1 Introduction.</u></b>	38
<b><u>5.1.1 The relationship between outsourcing and profitability</u></b>	38
<b><u>5.1.2 Relationship between Risk Management and Profitability.</u></b>	38
<b><u>5.1.3 Relationship between Lean Production and Profitability.</u></b>	39
<b><u>5.2 Limitation of the Study</u></b>	39
<b><u>5.3 Conclusions</u></b>	40
<b><u>5.4 Recommendations</u></b>	40
<b><u>5.5 Areas for Further Research</u></b>	41
<b><u>REFERENCES</u></b>	42
<b><u>LIST OF FIGURES</u></b>	53
<b><u>APPENDICES</u></b>	54
<b><u>APPENDIX 1: QUESTIONNAIRE</u></b>	54
<b><u>APPENDIX 2: LIST OF MANUFACTURING FIRMS IN UGANDA AS PER UGANDA MANUFACTURER’S ASSOCIATION (UMA).</u></b>	61
<b><u>APPENDIX3: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION</u></b>	64



## **ABSTRACT**

The aim of the study was to establish the relationship between outsourcing, risk management, lean production and profitability of 82 manufacturing firms of Kampala and Jinja in Uganda. A total of 164 questionnaires were issued and only 161 were responded to. This study was initiated by the fact that the trends in profits earned by manufacturing firms in Uganda is decreasing, thus lesser profits being earned over time. To be able to investigate this problem, the study objectives were to establish the relationship between outsourcing and profitability, to establish the relationship between risk management and profitability as well as to establish the relationship between lean production and profitability in manufacturing firms. Stratified sampling was used with large and small medium enterprises forming two strata. Simple random sampling as well purposive sampling methods were used in selecting manufacturing firms and respondents respectively. Self-administered questionnaires were used to obtain information from the selected manufacturing companies and respondents.

Net profit margin and Return on Capital Employed was used to measure Profitability, Outsourcing was measured in terms of value addition, cost /efficiency, quality and expertise, Risk management was measured in terms of risk management process of identification, estimation, analysis, evaluation and control and Lean manufacturing was measured in terms of cost, quality, time, and delivery. Results show that only risk management and lean strategies have significant positive influence on profitability of the selected manufacturing firms while outsourcing is insignificant. This implies that risk management and lean production strategies need to be understood and adopted by managers and business owners in order to increase on the firm's profitability.

Whereas study findings indicate that risk management and lean production are the key predictors of the firm's profitability, firms should not ignore outsourcing as it may form part of the lean strategies. Thus to improve profitability, manufacturing firms should embark on lean production, risk management and outsourcing strategies so as to reduce waste, minimize risks among other causes of lesser profits.