

INTEGRATED FRAMEWORK TO MITIGATE RISKS IN GIAD GROUP'S
STRATEGY IMPLEMENTATION

OMER MOHAMMED OSMAN SAID AHMED

UNIVERSITI TEKNOLOGI MALAYSIA

INTEGRATED FRAMEWORK TO MITIGATE RISKS IN GIAD GROUP'S
STRATEGY IMPLEMENTATION

OMER MOHAMMED OSMAN SAID AHMED

A thesis submitted in fulfilment of the
requirements for the award of the degree of
Doctor of Philosophy

Razak Faculty of Technology and Informatics
Universiti Teknologi Malaysia

SEPTEMBER 2020

DEDICATION

This thesis is dedicated to my father, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done one step at a time.

ACKNOWLEDGEMENT

First I praise ALLAH, the greatest of all, on whom ultimately we depend for sustenance and guidance. I would like to thank Almighty Allah for giving me opportunity, determination and strength to do my research. His continuous grace and mercy were with me throughout my life and ever more during the journey of my study.

I am very thankful to my mother for her support, prayers and encouragement. I also thank my wife, my sons and my daughter who stood by my side to complete this work.

I thank, and express my deep and sincere gratitude to my supervisor Dr. Abdelgadir Mohamed Mahmood for his continuous support, guidance and encouragement. I appreciate all his contributions of time, support and ideas.

Special thanks to Universiti Teknologi Malaysia, through Razak Faculty of Technology and Informatics that gave me this opportunity to study in a perfect environment. I gratefully acknowledge Giad Group Business Units and their staff, who agreed to contribute to this research.

ABSTRACT

In today's competitive business environment, business entities are faced with greater uncertainties (threats and opportunities) as they strive to create value. In the wake of the current global economic crisis, businesses in a bid to stay competitive have taken several crucial measures. However, for companies to keep track of their strategies, achieve their strategic objectives and reduce the impact of uncertainties, appropriate decisions should be made with a solution that reduces the impact of risks. Technical reports from companies showed that there is deviation from their original strategic plan tracks, and they are unable to achieve their strategic objectives. A preliminary study was conducted to identify the factors that lead to inefficiencies during strategic plan implementation. The result of the preliminary study showed that there is lack of risk management, especially information and incentive alignment risks. This research aims to propose a framework that mitigates risks during strategy implementation, through how the key choices made in strategy will either increase or reduce two characteristic types of risk (information and incentive alignment risks). These two types of risk (which are not mentioned in depth in other or past types of risk management categories) are the key inefficiency creators in the strategic planning and decision making that arise because of decision patterns. The proposed framework considers how to question the key decisions and how to turn inefficiencies into opportunities and points of power to create value. The proposed framework also presents essential fundamental concepts and enablers for achieving sustainable performance such as developing organizational capability, creative thinking, innovation, agility, succeeding through people and sustained outstanding results. The framework presents a mechanism to identify and assess the information and incentive alignment risks in the key decisions. The developed framework helps to reinvent desired strategic performance which lies in changing how decisions are made. The developed framework was validated via Subject Matter Experts (Strategy and risk management experts from GIAD Group Business Units and academic institutions). The feedback from the experts showed that the proposed framework is capable of managing risks during strategy implementation and can be implemented successfully.

ABSTRAK

Dalam persekitaran perniagaan yang kompetitif hari ini, entiti perniagaan menghadapi ketidakpastian (ancaman dan peluang) yang lebih besar ketika mereka berusaha untuk menghasilkan nilai. Berikutan krisis ekonomi global semasa, perniagaan semasa dalam usaha untuk terus bersaing telah mengambil beberapa langkah penting. Walau bagaimanapun, untuk syarikat terus menjejaki strategi mereka, mencapai objektif strategik masing-masing dan mengurangkan kesan ketidakpastian, keputusan yang sepatutnya dibuat dengan penyelesaian yang mengurangkan kesan risiko. Laporan teknikal dari syarikat menunjukkan bahawa terdapat penyelewengan dari pelan strategi mereka, dan mereka tidak dapat mencapai objektif strategik masing-masing. Kajian awal dijalankan untuk mengenal pasti faktor-faktor yang menyebabkan ketidakcekapan dalam pelaksanaan pelan strategi. Hasil kajian awal menunjukkan terdapat kurangnya pengurusan risiko, terutama risiko penyelarasan maklumat dan insentif. Penyelidikan ini bertujuan untuk mencadangkan rangka kerja yang mengurangkan risiko semasa pelaksanaan strategi, dengan menunjukkan bagaimana pilihan utama yang dibuat dalam strategi sama ada akan meningkatkan atau mengurangkan dua jenis risiko (maklumat dan risiko penyelarasan penjawatan insentif). Kedua-dua jenis risiko (yang tidak dinyatakan secara teliti dalam sejarah kategori pengurusan risiko) adalah penyebab ketidakcekapan utama dalam perancangan strategik dan pembuatan keputusan yang timbul kerana corak membuat keputusan. Rangka kerja yang dicadangkan mempertimbangkan bagaimana untuk mempersoalkan keputusan utama dan bagaimana untuk menjadikan ketidakcekapan ini sebagai peluang dan titik kuasa untuk menghasilkan nilai. Rangka kerja yang dicadangkan ini juga membentangkan konsep dan pembolehubah asas yang penting untuk mencapai prestasi yang mampan seperti membangunkan kemampuan organisasi, pemikiran kreatif, inovasi, ketangkasan, kejayaan melalui orang dan keputusan yang berterusan. Rangka kerja ini membentangkan satu mekanisme untuk mengenal pasti dan menilai risiko penjawatan maklumat dan insentif dalam keputusan utama. Rangka kerja yang dibangunkan membantu untuk mencipta semula prestasi strategik yang dikehendaki yang terletak pada perubahan bagaimana keputusan dibuat. Rangka kerja yang dibangunkan telah disahkan melalui Pakar Matematik (Strategi dan pakar pengurusan risiko dari Unit Perniagaan Kumpulan GIAD dan institusi akademik). Maklum balas dari pakar menunjukkan bahawa rangka kerja yang dicadangkan mampu menguruskan risiko semasa pelaksanaan strategi dan boleh dilaksanakan dengan jayanya.

TABLE OF CONTENTS

	TITLE	PAGE
	DECLARATION	iii
	DEDICATION	iv
	ACKNOWLEDGEMENT	v
	ABSTRACT	vi
	ABSTRAK	vii
	TABLE OF CONTENTS	viii
	LIST OF TABLES	xiv
	LIST OF FIGURES	xv
	LIST OF ABBREVIATIONS	xvi
	LIST OF APPENDICES	xvii
CHAPTER 1	INTRODUCTION	1
1.1	Introduction	1
1.1.1	Risk Management	2
1.1.2	Enterprise Risk Management	4
1.1.3	Strategy Risk	4
1.1.4	Giad Group- Sudan (The Case Study)	4
1.2	Problem Background	5
1.3	Problem Statement	6
1.4	Research Questions	7
1.5	Research Hypotheses	7
1.6	Research Objectives	8
1.7	Research Aim	8
1.7.1	Theoretical Basis of the Research	8
1.7.2	Conceptual Framework	10
1.7.2.1	Information Risk	10
1.7.2.2	Incentive Alignment Risk	11

1.8	Significance of the Study	12
1.9	Scope of the Study	12
1.10	Thesis Structure	13
CHAPTER 2	LITERATURE REVIEW	15
2.1	Risk Management	15
2.1.1	Risk Management Definition	15
2.1.2	Risk Identification	16
2.1.3	Risk Assessment	17
2.1.4	Risk Control and Mitigation	18
2.1.5	Risk Review	18
2.2	Enterprise Risk Management (ERM)	19
2.2.1	Enterprise Risk Management Definition	19
2.2.2	Outcomes and Attributes of Enterprise Risk Management	19
2.2.3	Enterprise Risk Management Implementation and Considerations	20
2.2.4	Risk Appetite	21
2.2.5	Risk Tolerances	22
2.2.6	Enterprise Risk Management Process	23
2.2.6.1	ERM Internal Environment Factors	23
2.2.6.2	Enterprise Risk Management Objective Setting	24
2.2.6.3	Event Identification	24
2.2.6.4	Risk Assessment	24
2.2.6.5	Risk Response	25
2.2.6.6	Control Activities	25
2.2.6.7	Information and Communication	25
2.2.6.8	Monitoring	26
2.2.6.9	Roles and Responsibilities	26
2.3	International Standard ISO 31000 (ERM Framework Sample)	26
2.3.1	Principles of ISO 31000	27

2.4	Risk Management in Giad Group	30
2.5	The Strategic Nature of Corporate Risk Management	31
2.5.1	Strategy Definition	31
2.5.2	Strategic planning	32
2.5.3	Strategy Plan Process	33
2.5.4	Organization Environment	34
2.5.5	The Internal Environment	34
2.5.6	The External Environment	35
2.5.7	Strategy Contingency Planning	37
2.5.8	Strategy Critical Successful Factors	37
2.5.9	Strategic Risk	40
2.5.9.1	Strategic Risk Definition	40
2.5.9.2	Strategic Risk Management	43
2.5.9.3	Risks in Decision Making	44
2.5.9.4	The Integrative Strategic Risk Management Process	44
2.5.9.5	Strategic Risk and Enterprise Risk Management	46
2.6	Limitations of Enterprise Risk Management Frameworks	48
2.6.1	Summary of Enterprise Risk Management Frameworks Limitations	53
2.7	Conceptual Framework	56
2.8	Conceptual Review	56
2.8.1	Information Risk	57
2.8.2	Incentive Alignment Risk	59
2.8.3	Information and Incentive Alignment Risks Symptoms	61
2.9	The Theoretical Framework	62
2.9.1	Creative Thinking and Innovation	63
2.9.2	Agility management	64
2.9.3	The Framework Development Processes	65
2.9.3.1	Establish Organizational Fundamental Concepts	66

	2.9.3.2	Strategic Performance Management	67
	2.9.3.3	Mitigating Information and Incentive Alignment Risks	68
2.10		Summary	70
CHAPTER 3		RESEARCH METHODOLOGY	73
3.1		Introduction	73
3.2		Research Flow Chart	73
3.3		Research Philosophy	75
3.4		Research Design	75
3.5		Population of the Study	77
3.6		Sampling Frame	78
3.7		Data Collection Instruments	78
	3.7.1	Interview (Semi - Structured)	79
	3.7.2	Questionnaire	80
	3.7.3	Subject Matter Experts' Interview (Group Discussions)	81
3.8		Pilot Survey	82
	3.8.1	Reliability Test	83
	3.8.2	Validity Tests	83
3.9		Data Analysis	85
	3.9.1	The Model	86
	3.9.2	Hypothesis Testing	87
3.10		Summary	88
CHAPTER 4		ANALYSIS AND RESULTS	91
4.1		Preliminary Study	91
	4.1.1	Introduction	91
	4.1.2	Qualitative Approach of the Study	91
	4.1.3	Studying of Strategy Successful Factors	92
	4.1.4	Semi-Structured Interview Outcomes	94
	4.1.5	Interview Summary	96
	4.1.6	Framework Validation	96
4.2		Quantitative Approach - Questionnaire	96

4.2.1	Introduction	96
4.2.2	Questionnaire Analysis	97
4.2.2.1	Data Reliability (Pilot Survey)	98
4.2.2.2	Respondents	98
4.2.2.3	Level of Agreeableness with the Risks Symptoms	101
4.2.2.4	Relationship between Information and Incentive Alignment Risk and Decision-Making during Strategy Implementation in Giad Group	103
4.3	Hypothesis Testing	104
CHAPTER 5	FRAMEWORK DEVELOPMENT	107
5.1	Introduction	107
5.2	The Framework	107
5.2.1	The Fundamental Concepts and Enablers	111
5.2.1.1	Developing Organizational Capability	111
5.2.1.2	Harnessing Creativity & Innovation	112
5.2.1.3	Managing with Agility	112
5.2.1.4	Succeeding through the People	113
5.2.1.5	Sustaining Outstanding Results	113
5.2.2	Strategic Performance Management	118
5.2.3	Managing Information and Incentive Alignment Risks	119
5.2.3.1	Risk Identification	120
5.2.3.2	Risk Assessment	121
5.2.3.3	Reinvent Decisions	121
5.2.3.4	Communication and consultation	125
5.2.3.5	Monitoring and Review	126
5.3	Framework Validation	127
CHAPTER 6	CONCLUSION AND RECOMMENDATIONS	129
6.1	Introduction	129

6.2	Conclusion	129
6.2.1	Objective One (Identify the Factors that Lead to Inefficiencies in Decision Making in Strategy Implementation in Giad Group)	130
6.2.2	Objective Two (Evaluate the Factors that Contribute to Inefficiencies in the Decision Making in Strategy Implementation in Giad Group Business Units)	131
6.2.3	Objective Three (Develop an Integrated Framework to Reduce the Impact of Inefficiencies in the Decision Making that Arising from Information and Incentive Alignment Risk during Strategy Implementation in Giad Group Business Units)	132
6.2.4	Objective Four (Validate the Developed Integrated Framework)	132
6.3	Recommendation	133
	REFERENCES	135
	LIST OF PUBLICATIONS	158

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 2.1	Strategic terms	32
Table 2.2	The costliest losses over the past decades	42
Table 2.3	Limitations of ERM frameworks	54
Table 3.1	Comparison of quantitative and qualitative techniques	76
Table 3.2	Population (sample) categories, titles and instruments used	78
Table 3.3	Reliability coefficient	83
Table 3.4	Research methodology stages	89
Table 4.1	Interviews results	94
Table 4.2	Reliability coefficient	98
Table 4.3	Respondents	98
Table 4.4	Information risk symptoms - Respondents cross tabulation	99
Table 4.5	Incentive alignment risk symptoms * Respondents cross tabulation	100
Table 4.6	Overall respondent measure for information and incentive alignment risk symptoms	100
Table 4.7	Level of Agreeableness with the risks symptoms	101
Table 4.8	The two types of risk occurrence comparing	103
Table 4.9	Evaluate factors that lead to inefficiencies in the decision making	103
Table 4.10	Model summary	105
Table 4.11	ANOVA results	105
Table 4.12	Results of regression coefficients	106
Table 4.13	Summary of the results for the hypothesis	106
Table 5.1	Organizational fundamental concepts and enablers contribution in risk mitigation	115
Table 5.2	Decision path matrix	125

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
Figure 1.1	Conceptual framework	10
Figure 2.1	ISO 31000 risk management process	27
Figure 2.2	The risk management framework (ISO 31000)	30
Figure 3.1	Research flowchart	74
Figure 3.2	Giad Group organization chart	77
Figure 3.3	Qualitative data analysis (Content Analysis)	85
Figure 4.1	Percentage of respondents' levels	99
Figure 5.1	Framework for managing risks in decision during strategy implementation	110
Figure 5.2	Strategic performance management	119
Figure 5.3	The risk management process	127

LIST OF ABBREVIATIONS

BIA	-	Business Impact Analysis
BU	-	Business Unit
COSO	-	Sponsoring Organizations of the Trade Way Commission
CSF	-	Critical Successful Factors
ERM	-	Enterprise Risk Management
GRC	-	Governance, Risk, and Compliance
HR	-	Human Resources
IS	-	Information System
ISO	-	International Organization for Standardization
IT	-	Information Technology
KSF	-	Key Successful Factor
RM	-	Risk Management
SME	-	Subject Matter Expert
SMEs	-	Small, Medium Enterprises
SPM	-	Strategic Performance Management
SPSS	-	Statistical Package for Social Science
SWOT	-	Strength, Weakness, Opportunity And Threats
TQM	-	Total Quality Management
UTM	-	Universiti Teknologi Malaysia

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A	Questionnaire	147
Appendix B	Experts and practitioners Feedback regarding the developed framework	151
Appendix C	Semi-Structured Interview	156

CHAPTER 1

INTRODUCTION

1.1 Introduction

The roots of the term risk can be traced back as far as the late middle ages, the modern concept of risk appeared only gradually, with the transition from traditional to modern society. The modern understanding of risk presupposes subjects or institutions, accountable for their actions that make decisions under conditions of apparent uncertainty. Some apparent uncertainties, however, can be measured or quantified probabilistically and are, therefore, more precisely called risks. Situations of risk in human society can thus be “managed”. Relying on probability calculation, which emerged during the 17th and the 18th centuries but became truly prevalent only in the 20th century, risk became a theoretical focus designed to bolster a scientific, mathematically-based approach toward uncertainty (1).

Risk has different meanings to different people, and the concept of risk varies according to viewpoints, attitudes and experiences (2). Risk can be thought of as a cause-and-effect pair, where the threat is the cause and the resulting consequence is the effect. In this context, a threat is defined as a circumstance with the potential to produce loss, while a consequence is defined as the loss that will occur when a threat is realized (3).

The following business-focused definition of risk is provided by Yolande Smit (4): “Risk has been defined as internal and external uncertainties, events, or circumstances that the company must understand and manage effectively as it executes its strategies to achieve business objectives and create shareholder value”. From the above two definitions, the obvious analogy to be drawn is that the concept of uncertainty is embedded in risk, where the prevalence of risk impacts on the

achievement of business objectives. In fact, the details about risk and how it supports decision making depend upon the context in which it is applied (3).

1.1.1 Risk Management

Risk management is a continuous process that is accomplished throughout the life cycle of a system. It is an organized methodology for continuously identifying and measuring the unknowns; developing mitigation options; selecting, planning, and implementing appropriate risk mitigations; and tracking the implementation to ensure successful risk reduction. Effective risk management depends on risk management planning; early identification and analyses of risks; early implementation of corrective actions; continuous monitoring and reassessment; and communication, documentation, and coordination (5).

Risk management as a formal part of the decision-making processes within companies is traceable to the late 1940s and early 1950s. There were two earlier strands of risk management practice that have more recently been integrated under the broader concept of enterprise risk management. One of these strands relates to the management of insurance risks and financial risks. For many years, companies have been able to transfer certain types of risks to insurance companies. These transferred risks related to natural catastrophes, accidents, human error or fraud, but as the scope of insurance markets expanded, some types of commercial risks could be transferred, such as credit risks. The existence of these insurance markets forced managers to consider alternatives to the purchase of insurance. Some of these insurable risks could be prevented, or their impact reduced, through efficient loss-prevention and control systems, and some could be retained and financed within the company. This led to a broader approach to the management of insurable risks (6).

In the 1970s, companies began to look more closely at how they managed various financial risks, such as movements in exchange rates, commodity prices, interest rates and stock prices. Financial risk management began, as a formal system, at the same time as the development of financial derivative products, for example,

financial futures, options and swaps. This was no coincidence, since investment banks had developed these financial instruments and their associated markets in part to allow their corporate customers to hedge these financial risks. Hence, financial risk management emerged in much the same way as insurance risk management had previously. It was stimulated by the existence of these financial products, which caused management to consider how much of the risks should be retained within the company and how much should be offset through these external arrangements. The existence of financial derivatives also forced companies to consider more carefully the pricing of risks, how risks could be financed internally, and the value of the additional services supplied by investment banks. Companies also recognized that insurable risks and financial risks should be managed together, since the purchase of insurance and the purchase of derivatives to hedge financial risks performed essentially the same role. This recognition has led more recently to the development of new risk transfer products that combine both types of risk. One of the early examples of this more integrated approach was the decision taken by Honeywell in 1997 to take-out a multi-year contract that combined insurances to cover its property and liability risks and options to hedge the adverse effects of currency movements on the reported profits from its overseas operations.

The second strand in the development of a more holistic approach to risk management arose from more general management thinking. Contingency planning had been a part of corporate policy for many years, its purpose being to identify those activities that might be threatened by adverse events and to have systems in place to cope with these events. Business continuation management extended the practice of contingency planning by requiring more comprehensive internal systems. The corporate responses to the threat provide a recent example of business continuation management in action. Both contingency planning and business continuation management approaches, however, were limited, since they presupposed that strategic choices had already been made and their role was confined to the effective implementation of these strategies (7).

1.1.2 Enterprise Risk Management

Enterprise risk management (ERM) deals with risks and opportunities to create or preserve value. It is defined as: Enterprise risk management is a process, affected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives (8).

1.1.3 Strategy Risk

Strategy risk relates to risk at the corporate level, and it affects the development and implementation of an organization's strategy (9). Strategy risk is a function of the compatibility of an organization's strategic goals, the business strategies developed by management to achieve those goals, the resources deployed against these goals, and the quality of the implementation (10).

1.1.4 Giad Group- Sudan (The Case Study)

Giad Group is Governmental Linked Company in Sudan. It was established in 1993 in Khartoum. It is a small–medium enterprise consists of six business units: Giad Cars, Giad Trucks, Giad for Agriculture Equipment, Giad Press, Giad for cars Service and Giad for Furniture and Medical Equipment. GIAD Group vision is to be the biggest industrial group in Africa, and its mission is to lead the development in the industry and agriculture, supporting national economic through settlement of industry in Sudan. The advantage and attributes to achieve this mission is that: Giad Group is considered as strategic investment for Sudan government, also Giad Group consist of deferent types of industries and the financial resources are available, and it can be financed by the holding corporate as it is a governmental enterprise, add to that Giad Group as it is young grouped companies, based on good fundamental needs and technology of new industry. The layout of Giad Group business units added more

attributes and advantages for the availability of human resources, environment and logistics.

1.2 Problem Background

Since the beginning of the industrial revolution in the late 18th century, the cause of many serious accidents has shifted from natural causes to human and technology-related causes. While natural disasters still account for a significant amount of human and material losses, man-made disasters are responsible for an increasingly large portion of the toll. In addition, the boundary between natural and man-made disasters becomes ever blurrier as humans increasingly tamper (intentionally or not) with their natural environment (11).

In the economic landscape of the 21st century, an organization's business model is challenged constantly by competitors and events that could give rise to substantial risks. An organization must strive to find creative ways to continuously reinvent its business model to sustain growth and create value for stakeholders (12). Value is maximized when management sets strategy and objectives to strike an optimal balance between growth and return goals and related risks, and efficiently and effectively deploys resources in pursuit of the entity's objectives (13).

In today's competitive business environment, business entities are faced with greater uncertainties (threats and opportunities) as they strive to create value. In the wake of the current global economic crisis, businesses in a bid to stay competitive have taken several crucial measures. For companies to keep track with its' strategy and achieve their strategic objectives and reduce the impact of uncertainties, appropriate decisions should be made with a solution that reduces the impact that lead to risks (14).

According to Giad Group business units' technical reports (strategy annual reports): business units most of the times deviate from strategy plan track, and unable to achieve their strategic objectives.

A preliminary study, semi structured interviews, with 6 managers of Giad Group Business Units were conducted to identify the factors that lead to inefficiencies in strategy implementation, the study investigated the performance of strategy successful factors in Giad Group business units.

The result of the preliminary study showed that there is lack in risk management during strategy implementation, especially information and incentive alignment risks. From literature review: Information and incentive alignment risks are the two key inefficiencies creator in decision making in strategy plans implementation.

1.3 Problem Statement

According to Giad Group business units' technical reports: business units always deviate from strategy plan track, and unable to achieve their strategic objectives. A preliminary study was conducted to identify the factors that lead to inefficiencies in strategy implementation, through studying the performance of strategy successful factors in Giad Group business units. One of the main important and critical factors identified during the preliminary study that there is lack in risk management led to inappropriate decisions. These inappropriate decisions affected of two types of risks which are:

1. Information risk which appears due to lack of information (incomplete or incorrect information) that many managers make decisions long before they have enough information to make them with confidence.
2. Incentive alignment risk which arise when the incentive imposed by a business model lead to actions that clash with the boarder interest of a value chain.

1.4 Research Questions

1. What are the factors that lead to inefficiencies in decision making during strategy implementation in Giad Group business units?
2. What is the impact of the inefficiencies in the decision-making process on the strategy implementation in Giad Group business units? How to evaluate the factors that contributed to inefficiencies in the decision making in strategy implementation in Giad Group business units.
3. How to reduce the inefficiencies in the decision-making process which arising from incentive alignment risk and information risk during strategy implementation in Giad Group Business Units?
4. What is the validity of the developed solution that reduce the impact of the inefficiencies in the decision-making process during strategy implementation in Giad Group Business Units?

1.5 Research Hypotheses

1. There are factors that lead to inefficiencies in decision making during strategy implementation in Giad Group business units.
2. Inefficiencies in the decision-making process has negative impact on the strategy implementation in Giad Group business units.
3. The impact of the inefficiencies in the decision-making process on the strategy implementation in Giad Group business unit can be reduced via an integrated framework.
4. Information risk has no significant influence on decision making during strategy implementation in Giad Group Business Units.
5. Incentive alignment risk has no significant influence on decision making during strategy implementation in Giad Group Business Units.
6. The developed integrated framework will enhance the decision-making process during strategy implementation in Giad Group Business Units.

1.6 Research Objectives

The objectives of this research are:

1. To identify the factors that lead to inefficiencies in the decision-making during strategy implementation in general, and in Giad Group business units specifically.
2. To evaluate the factors that contributed to inefficiencies in the decision making in strategy implementation in Giad Group business units.
3. To develop an integrated framework to reduce the impact of inefficiencies in the decision-making during strategy implementation in Giad Group business units.
4. To validate the developed integrated framework.

1.7 Research Aim

The aim of this study is to develop an integrated framework to mitigate the impact of inefficiencies in the decision making which arise from incentive alignment risk and information risk during strategy implementation in Giad Group Business Units. The previous models did not have mechanism to manage these two types of risks (incentive alignment risk and information risk).

1.7.1 Theoretical Basis of the Research

The result of the literature reviews, preliminary study and questionnaires analysis indicated that there are two main reasons, which are: incentive alignment risk and information risk (independent variables) that lead to inefficiencies in decision making during strategy implementation in GIAD Group Business Units (dependent variable). To solve the research problem there is a need to develop a framework that promote sustainable success, and provide guidance to keep the strategy plan in its track

through reducing the impact of inefficiencies in the decision making that arising from incentive alignment risk and information risk during strategy implementation. This is realized through a set of three integrated components which comprise the framework:

1. **The Fundamental Concepts and Enablers:** Principles which are the essential foundation of achieving sustainable and strategy alignment (124).
2. **Strategic Performance Management:** A dynamic assessment framework and powerful management tool and the backbone to support organizations, and guides the leadership in designing and revising a system of strategic performance (123).
3. **The Risk Mitigation Framework:** Helps organizations to reduce the impact of inefficiencies in the decision making that arising from incentive alignment risk and information risk, and reinvent decisions aligned with strategy track by converting the Fundamental Concepts and strategic performance management into practice through innovative and agile decision path (innovation and agility).
 - a) **Creative Thinking and Innovation:** Creativity is a function of knowledge, curiosity, imagination and evaluation. The greater your knowledge base and level of curiosity, the more ideas, patterns, and combinations you can achieve, which then correlates to creating new and innovative products and services. But merely having the knowledge does not guarantee the formation of new patterns. The bits and pieces must be shaken up and iterated in new ways. Then the ideas must be evaluated and developed into usable ideas. In other words, there really is a process (126).
 - b) **Agility Management:** Agility refers to complex decision-making with the objective of increasing value. In order to increase its agility, a company does not only need to flexibly adapt but is required to orchestrate a variety of options, reflect on them, and finally decide to act – or to maintain the status. More formally, we define agility as the ongoing development and maintenance of decision-making capability under changing circumstances. (128).

1.7.2 Conceptual Framework

Conceptual framework provides a snapshot of the objectives of this study. It considers the theoretical and conceptual issues surrounding research work and forms a coherent and consistent foundation that underpin the identification and development of existing variables (58). The conceptual framework attempts to bring into focus the following variables; the independent variables namely; information risk and incentive alignment risk. The dependent variable was the inefficiencies in decision making during strategy plan implementation in GIAD Group Business Units in Sudan (Figure 1.1).

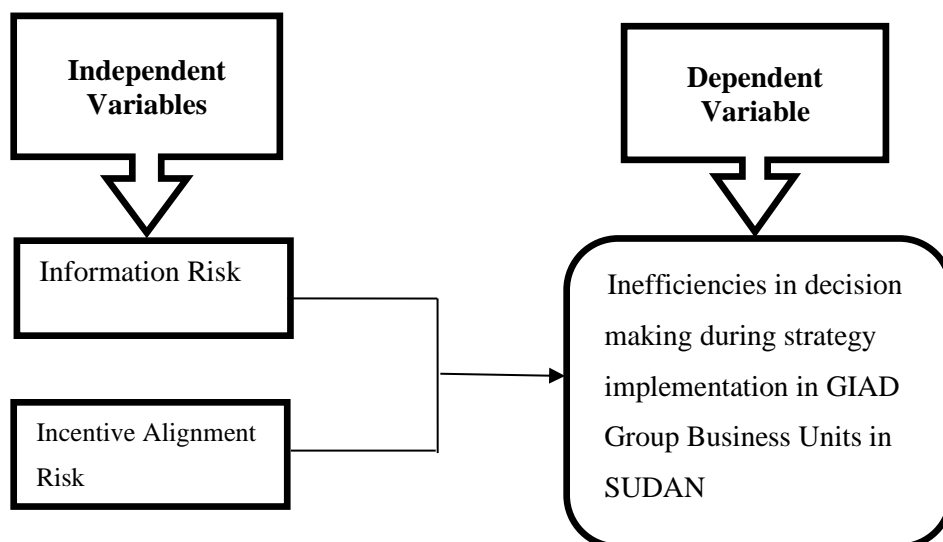


Figure 1.1 Conceptual framework

1.7.2.1 Information Risk

Information risk is a consequence of uncertainty, many managers base business decisions on incomplete or incorrect information (26). That's because managers often make decisions long before they have the information to make them with confidence. Information risk is always present to some extent in every business. Reducing it is most urgent where the inefficiencies it causes are most intense. Getting an assessment of the extent of information inefficiency involves understanding three key properties of the decision (26) that is made with insufficient information:

- a. The consequent of the decision; if the decision involves high amount of investment, any information inefficiency associated with this decision will evidently be more damaging than the one with an insignificant decision.
- b. The degree of reversibility or finality of the decision.
- c. Decisions that cannot be easily overturned (like building a billion-dollar oil rig in the absence of oil) are associated with the highest inefficiency.

The most important is a measure of the know unknowns associated with the decisions. Decisions for which you realize there is lot that you don't know are likely to be prime hot spots of information inefficiencies. Often, the degree of known unknowns is closely related to the time between when you make a decision and when information relevant to the decision will be available.

1.7.2.2 Incentive Alignment Risk

Incentive alignment risk arise when the incentive imposed by a business model lead to actions that clash with the boarder interest of a value chain. Incentive alignment risk drives conflict between parties that must collaborate to create value. Business models incorporate incentives that can clash and impede the achievement of common goals. That is because businesses and their employees often make decisions on basis of self-interest rather than what best serves the goals of an entire value chain (26). Misaligned incentives commonly occur in the absence of proper rules that control the rewards or penalties for participants. The underlying principle is that unless the rules incentivize them to do otherwise, people tend to act in their own self-interest. Two common types of misaligned incentives are those in which (1) an individual's interests are traded off against the group's interests and (2) long-term interests are traded off against short-term interests (38). If some stakeholder goals conflict with program goals, then either contractor self-interest (such as making more money) or Program Management Office (PMO) self-interest (such as making the program last longer) may drive decision-making. Neither situation is in the best overall interest of the program. This type of risk is therefore context dependent: incentives that motivate excellent

performance within the context for which they were designed often cause problems when multiple differing motivations converge (38).

1.8 Significance of the Study

The Significance of this research is to develop an integrated framework that helps companies to avoid deviation from their strategy objectives by supporting decision making through identifying inefficiency creators and reduce two characteristic types of risk (information risk and incentive alignment risk). These two types of risks (which are not mentioned deeply in other or past types of risk management categories) are the two key inefficiency creators in strategic planning and decision making and arising because of decision patterns (the key decision and context which they are made). Information risk and incentive alignment risk both are responsible for most, if not all, problems which existing in strategic performance.

1.9 Scope of the Study

This research studies the risks during the implementation of strategy plan, and is focusing on two types of risk, information and incentive alignment risks. These two types of risks are the two key inefficiency creators in strategic planning and decision making which lead to deviation from strategy plan track. Though, the study aims to develop an integrated framework that mitigate risks during strategy implementation in Giad Group in Sudan.

This research is focused on Giad Group Business Units in Sudan. Giad Group consists of 6 business units which are:

1. Giad Automotive Company.
2. Giad Trucks Company.
3. Agriculture Equipment Company.

4. Giad for Metal Press Company.
5. Giad Automotive Service Company.
6. Giad Furniture Company.

1.10 Thesis Structure

The Structure of this thesis consists of six chapters:

1. Chapter One gives an introduction of the research, the problem statement and the importance of the research. It also discusses the research objectives, research questions, research aim, the research scope and the thesis structure.
2. Chapter Two presents the literature review of the previous studies that related to this research topic.
3. Chapter Three is the research methodology. It explains the methods that will be adopted to achieve the objectives of the study and it explains the research instrument.
4. Chapter Four presents the data collection and analysis.
5. Chapter five explains the framework development and its validation.
6. Chapter six presents the conclusion of the study and recommendations.

REFERENCES

1. Karin Zach Mann. History of Technology. *Munich Center for Technology in Society*. Technische University, München, Deutsches Museum. 80306 Munich, Germany, 2014.
2. Zhao Xianbo. *Enterprise Risk Management In Chinese Construction Firms Operating Overseas*. Southeast University. China, 2012.
3. Christopher J. Alberts and Audrey J. Dorofee. *Risk Management Framework*. Technical Report CMU/SEI-2010-TR-017 ESC-TR. 2010-017. August 2010.
4. Yoland É Smit. *A Structured Approach To Risk Management For South African Smes*. Cape Town. March 2012.
5. C. Crouhy. *The essentials of risk management*. Second edition. US, 2014.
6. Saylor. *The Nature of Risk: Losses and Opportunities*. vol. 1.0. Publisher: Saylor Academy, Published 2012
7. Gerry Dickinson. *Enterprise Risk Management: Its Origins and Conceptual Foundation*. The Geneva Papers on Risk and Insurance Vol. 26 No. 3, July 2001.
8. Robert R. Moeller. *Understanding The New Integrated ERM Framework*. Published by John Wiley & Sons. Inc. Hoboken. New Jersey. 2007.
9. Alexander Roberts. Dr William Wallace. Mr Neil McClure. *Strategic Risk Management-* Edinburgh Business School Heriot. Watt University Edinburgh. EH14 4AS. United Kingdom. 2012.
10. Joanne Curtis Taylor. *Concepts of strategic risk and managing strategic risk*. January 2012.
11. Nicolas Dulac. *A Framework for Dynamic Safety and Risk Management Modeling in Complex Engineering Systems*. 2007.
12. Institute of Management Accountants (IMA). *Enterprise Risk Management: Tools And Techniques For Effective Implementation*. imanet.org. 2007.
13. The Committee of Sponsoring Organizations of the Treadway Commission(COSO), *Enterprise Risk Management. Integrated Framework*. 2004.

14. Ezeosa Dafikpaku. *The Strategic Implications of Enterprise Risk Management A Framework*. MBA. Eng(Hons); 2011.
15. Arben Mullai. *Risk Management System. Risk Assessment Frameworks and Techniques*. Dagob publication. 2006.
16. George L. *Head-Risk Management Why and How-*, International Risk Management Institute, 2009.
17. Gregory M Carroll. *Mastering 21st Century Enterprise Risk Management*. Fast Track. Aust, PTY Ltd. 2013.
18. Torben Juul Andersen and Peter Winther Schroder- *Strategic Risk Management Practice-2010*.
19. International Standard ISO/FDIS- 31000. *Risk management — Principles and guidelines*. Reference number ISO/FDIS 31000:2009(E). 2009.
20. The Orange Book. *Management of Risk. Principles and Concepts-* HM Treasury. 2004.
21. *Risk Management Handbook*. The University of Adelaide. division of services and resources. SA 5005 Australia. 2014.
22. *Playbook: Enterprise Risk Management for the U.S. Federal Government*, 2016
23. Brian W. Nocco. *Enterprise Risk Management: Theory and Practice-Nationwide Insurance*, and René M. Stulz. Ohio State University-*Journal of Applied Corporate Finance*. Volume 18 Number 4-2006.
24. Committee of Sponsoring Organizations(COSO), *Enterprise Risk Management – Integrated Framework*, Application Techniques, September 2004.
25. Roberta L. Carroll. *Enterprise Risk Management: A Framework for Success*. American Society for Healthcare Risk Management. 2014.
26. Karan Girotra And Serguel Netessine. *The Risk Driven*. Harvard Business Review Press. Boston. 2014.
27. Joanne Curtis Taylor. *Concepts of strategic risk and managing strategic risk*. January 2012.
28. Michel Crouhy, Dan Galai and Robert Mark.*The Essentials of Risk Management*. Second Edition. by McGraw-Hill Education. 2014.

29. Walid Ben-Amar. *The Relationship between Corporate Strategy and Enterprise Risk Management*. Telfer School of Management. University of Ottawa. Ottawa, Canada. 2014.
30. Torben Juul Andersen and Peter Winther Schroder. *Strategic Risk Management Practice*. Cambridge University Press. Cambridge, 2010.
31. John Fraser and Betty J. Simkins, *Enterprise Risk Management: An Introduction and Overview*, Print ISBN: 9780470499085 DEC 2011.
32. Maria Stoyanova Todorova. *Management Information Systems: Information As A Strategic Resource Impact On Company's Strategy*. 3 Nov 2017.
33. ThomasPeschken, *The role of information alignment and entrepreneurial traits on SME internationalization A conceptual framework*, GCU London, Glasgow Caledonian University, London, UK, 24November2015.
34. Alexander Osterwalder (PhD candidate) University of Lausanne, *Towards Business and Information Systems Fit through a Business Model Ontology*,2005.
35. Paul C. van Fenema and Claudia Loebbecke, *Organizing For Inter-Organizational Cooperation: A Knowledge-Based Perspective*, Academia, 2008.
36. Joe Peppard and Karin Breu Cranfield. *Beyond Alignment: A Coevolutionary View Of The Information Systems Strategy Process*, Loughborough University Loughborough. Leicestershire UK and School of Management Cranfield, Bedfordshire UK, ,2003.
37. Heather Jones. *Risking Knowledge Management An Information Audit of Risk Management Activities*. Hobart City Council, Hobart, Australia,2005.
38. Alisa G. Brink, Eric Gooden and Meha Kohli Mishra. *The Impact of Rule Precision, Information Ambiguity, and Conflicting Incentives on Aggressive Reporting*, 2014.
39. Christopher M. Scherpereel, *Alignment: the duality of decision problems*, Northern Arizona University, College of Business Administration, Flagstaff, Arizona, USA,2006.
40. K. Hugh Macdonald, *Organisational Transformation and Alignment. Information Management & Computer Security*. Vol. 2 No. 4, 1994, pp. 16-29 MCBUniversity Press Limited, 0968-5227,2009.

41. Christopher M. Scherpereel, *Alignment: the duality of decision problems*, Northern Arizona University, College of Business Administration, Flagstaff, Arizona, USA, 2006.
42. Playbook: *Enterprise Risk Management for the U.S. Federal Government*- July 29, 2016.
43. Broderick Martinez, *ERM Framework, What-the-limitations-of-ERM-as-it-related-to-mitigating-risks*. Coursehero. 2015.
44. Vernon L. Grose, *Five Weaknesses Of Enterprise Risk Management*. Omegainc. 2015.
45. Eli Noy and Shmuel Ellis, *Risk: A Neglected Component of Strategy Formulation*, Tel Aviv University, Tel Aviv, Israel 2003.
46. Hasan Akpolat and Thitima Pitinanondha. *A Framework for Systematic Management of Operational Risks*. Faculty of Engineering and IT. University of Technology Sydney. Australia, 2009.
47. Protiviti Inc. *Guide to Enterprise Risk Management*. Protiviti. January, 2006.
48. Bagdonavicius V, Kruopis, J and Nikulin, M. S. *Nonparametric Tests for Complete Data*: John Wiley & Sons. 2013.
49. Baker, T. L. *Doing Social Research*. RM Press Limited, 0858-7407, April 1994.
50. Candès E. J and Wakin, M. B. *An Introduction to Compressive Sampling*. IEEE signal processing magazine, 25(2), 21-30, 2008
51. Creswell, J. W. *Research design: Qualitative, quantitative, and mixed methods approaches*: Sage publications. 2013.
52. Denzin, N. K., and Lincoln, Y. S. *Collecting and interpreting qualitative materials* (Vol. 3): Sage. 2008.
53. Easterby-Smith, M., Thorpe, R., and Jackson, P. R. *Management research*: Sage. 2012.
54. Fellows, R. F., and Liu, A. M. *Research methods for construction*: John Wiley & Sons. 2015.
55. Flick, U. *An introduction to qualitative research*: Sage. (2014).
56. Hair, J., and Jnr, B. BJ, & Anderson, RE, *Multivariate data analysis: A global perspective*: Upper Saddle River: Pearson Education. 2010.

57. Johnson, R. B., Onwuegbuzie, A. J., and Turner, L. A. *Toward a definition of mixed methods research*. *Journal of mixed methods research*. 1(2), 112-133. 2007
58. Kothari, C. R. *Research methodology: Methods and techniques: New Age International*. 2004.
59. Levesque, R. *SPSS programming and data management: A guide for SPSS and SAS users: Spss*. 2005.
60. Love, P. E., Holt, G. D., and Li, H. *Triangulation in construction management research*. *Engineering Construction and Architectural Management*. 9(4), 294-303. 2002.
61. Maxwell, J. A. *Qualitative research design: An interactive approach* (Vol. 41): Sage publications. 2012.
62. Muijs, D. *Doing quantitative research in education with SPSS: Sage*. 2010.
63. Neuman, L. W. *Social research methods: Qualitative and quantitative approaches*. 2002.
64. Patton, M. Q. *Qualitative evaluation methods*. Beverly Hills: cA: Sage. 1980.
65. Polit, D., and Hungler, B. *Essentials of nursing research: Methods, appraisal, asid utilization*. 1994.
66. Rubin, A., and Babbie, E. R.. *Empowerment series: Research methods for social work: Cengage Learning*. 2016.
67. Sekaran, U., and Bougie, R. *Research methods for business: A skill building approach: John Wiley & Sons*. 2016.
68. Shareef, M. A., Kumar, U., Kumar, V., and Dwivedi, Y. K.. *Identifying critical factors for adoption of e-government*. *Electronic Government, an International Journal*, 6(1), 70-96.2009.
69. Stainback, S., and Stainback, W. *Understanding & Conducting Qualitative Research: ERIC*. 1988.
70. Wasserman, L.. *All of nonparametric statistics*, chapter 2. Springer, New YorkWintle BA et al Fauna habitat modelling and mapping: a review and case study in the lower hunter central coast region of NSW. *Australian Ecologist*, 30, 719738Wood. 2005.
71. Zikmund, W. G., Babin, B. J., Carr, J. C., and Griffin, M. *Business research. methods: Cengage Learning*. 2013.

72. Amaratunge, S. and Shiratake, Y. *The role of small scale tea industries as a method of rural development: A field study in Kalutara district in Sri Lanka*. Review of Agricultural Economics. Japan. 2002.
73. Blandford, A. *Semi-structured qualitative studies*. In: *Interaction Design Foundation*. 2013.
74. Fowler Jr, F. J. *Survey research methods*: Sage publications. 2013.
75. Merriam, S. B. *Case study research in education: A qualitative approach*: Jossey-Bass. 1988.
76. Clark, L. A., and Watson, D.. *Constructing validity: Basic issues in objective scale development*. Psychological assessment, 7(3), 309. 1995.
77. Bryman, A. *Social research methods*: Oxford university press. 2015.
78. Petrić, B., and Czár, B. *Validating a writing strategy questionnaire System*. 31(2), 187-215. 2003.
79. Mcconnel, F., Logemann, J. A., Rademaker, A. W., Pauloski, B. R., Baker, S. R., Lewin, J., et al.. *Surgical variables affecting postoperative swallowing efficiency in oral cancer patients: a pilot study*. The Laryngoscope. 104(1), 87-90. 1994.
80. Adcock, R. *Measurement validity: A shared standard for qualitative and quantitative research*. American political science review. 95(3), 529-546. 2001.
81. Blechinger, P.. *Regional and structural differences of barriers to implement renewable energies: Implications for less or least developed countries*. Paper presented at the Proceedings of the International Conference Micro Perspectives for Decentralised Energy Supply. 56-59. 2013.
82. Painuly, J. P. *Barriers to renewable energy penetration; a framework for analysis*. Renewable energy. 24(1), 73-89. 2001.
83. Linda Parker Gates, *Strategic Planning with Critical Success Factors and Future Scenarios: An Integrated Strategic Planning Framework*, technical report, November 2010.
84. Yang Li, Sun Guohui and Martin J. Eppler, *Making Strategy Work: A Literature Review on the Factors influencing Strategy Implementation*, Business School, Central University of Finance and Economics. Beijing, China, 2008.

85. J. Coyle-Shapiro and K. Hoque. I. Kessle. *Human resource management. academics at the London School of Economics and Political Science.* (LSE), MN3075. 2013.
86. Marsen Sky. *Communication Studies.* Basingstoke: Palgrave Macmillan. 2014.
87. Manoj Kumar Sharma and Shilpa Jain. *Leadership Management: Principles, Models and Theories.* S.P.U. (P.G.) College, Falna Dist. Pali, Rajasthan, *Global Journal of Management and Business Studies*, ISSN 2248-9878 Volume 3. Number 3,2013.
88. Richard Heeks and Alemayehu Molla. *Definitional Concepts of Information Technology*, IDPM. University of Manchester. 2004.
89. Blandford A. *Semi-structured qualitative studies. In: Interaction Design Foundation.* 2013.
90. Denzin N. K. and Lincoln. Y. S. *Collecting and interpreting qualitative materials.* Vol. 3: Sage, .2008.
91. Creswell, J. W. *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications. 2013.
92. Mathers, N. J., Fox, N. J., and Hunn, A. *Using interviews in a research project: NHS Executive.* Trent. 1998.
93. Meuser, M., and Nagel, U. *ExpertInneninterviews—vielfach erprobt, wenig bedacht. In Qualitativ-empirische sozialforschung* (pp. 441-471): Springer. 1991.
94. McClimans, L. M. *The art of asking questions.* *International Journal of Philosophical Studies.* 19(4), 521-538. 2011.
95. Maccoby, E. E., and Maccoby, N. *Das Interview: Bailey, K. Methods of social research: Simon and Schuster, Ein Werkzeug der Sozialforschung. Praktische Sozialforschung. Köln: Kiepenheuer & Witsch, 37-85, 1972.* 2008
96. Marshall, C., and Rossman, G. B. *Designing qualitative research:* Sage publications, 2014.
97. Bryman, A. *Social research methods:* Oxford university press, 2015.
98. Emerson Wagner Mainardes and João J. Ferreira, Mário L. Raposo. *Strategy and strategic management concepts: are they recognised by management*

- students, Business Administration and Management*. DOI: 10.15240/tul/001/2014-1-004, 2014.
99. John F. Dix and H. Lee, *The Process of Strategic Planning* , “Buck” Mathews Business Development Index, Ltd. and The Ohio State University Columbus, Ohio. August 2002.
 100. Richard A. Mittenenthal, *Ten Keys to Successful Strategic Planning for Nonprofit and Foundation Leaders*, tcc group. Laura Colin Klein. New York,USA. 2002.
 101. Robert Jonas. *Strategic Planning: the real meaning of strategy*, Handbook of Business Strategy, Vol. 1 Issue: 1, pp.141-143. 2015.
 102. Kit Fai Pun. *A conceptual synergy model of strategy formulation for manufacturing*, International Journal of Operations & Production Management. Vol. 24 Issue: 9, pp.903-928. 2004.
 103. Sara Khodaveysi. *An overview of Critical success factors*. Department of Management . College of Humanities. Hamedan Science and Research Branch, Islamic Azad University. Hamedan. Iran. 2016.
 104. Roy Wernham. *Obstacles to strategy implementation in a nationalized industry*. DOI: 10.1111/j.1467-6486.1985.tb00015.x. 1985.
 105. John F. Rockart. Chief executives define their own data needs, *Harvard business review*. issued march. 1979.
 106. Jumadi and Samsul Bakri. *Strategic resources for sustainable competitive advantage*. Faculty of Widya Mataram Yogyakarta University. 2017.
 107. Leitch, Matthew. ISO 31000:2009—*The New International Standard on Risk Management*. Risk Analysis. Vol. 30, No. 6. 887 - 892. 2010
 108. Aon Global. *Enterprise Risk Management Survey 2010*. Chicago: AON Corporation. 2010.
 109. Purdy Grant, ISO 31000:2009—*Setting a New Standard for Risk Management*. Risk Analysis. Vol. 30, Issue 6. 881 – 886. 2010.
 110. Aleksu Liuksiala. *The Use of The Risk Management Standard ISO 31000 In Finnish Organizations*. University of Tampere. School of Management. December 2012.
 111. Faraj, S. and Xiao, Y. *Coordination in fast-response organizations*. Management Science. 52, (8),1155,1169. 2006.

112. Dornberger Kerstin¹, Oberlehner Simone² and Zadrazil Nicole³. *Challenges in implementing enterprise risk management Controlling, Accounting and Finance at University of Applied Science, Upper Austria*, ACRN Journal of Finance and Risk Perspectives Vol. 3, Issue 3, November 2014.
113. Jasmin Harvey and Technical Information Service Enterprise Risk Management, *The Chartered Institute. of Management Accountants*. London SW1P 4NP United Kingdom. Series No. 49 ,July 2008.
114. Nsikan Ekwere, *Framework Of Effective Risk Management in Small and Medium Enterprises (SMES): a literature review* Universitas Katolik Parahyangan, Bandung, Volume 20 Nomor 1, 2016.
115. Reid, G. C. and Smith, J. B. *The impact of contingencies on managerial accounting systems development*. Management Accounting Research. 11(4), 427-450. 2000.
116. Bahareh Hossein, *the role of enterprise risk management design in linking perceived environmental uncertainty and strategy with organizational performance*, Faculty of Management, Universiti Teknologi Malaysia, 2015.
117. Gregory M Carroll. *Mastering 21st Century Enterprise Risk Management*, Fast Track, Aust, PTY Ltd 2013.
118. James Lam. *Strategic Risk Management: Optimizing the Risk-Return Profile*, Institute of Management Accountants, march 2016.
119. Shahin Pournasir. *Key success factors of strategic management implementation in SMEs in Iran*. Journal of International Studies. Vol. 6, No 2, 2013, pp. 65-78. DOI: 10.14254/2071-8330.2013/6-2/6. 2013.
120. Job Kipkemboi Kiptoo and Fred Mugambi Mwirigi. *Factors that influence effective strategic planning process in organizations 1,2*, Jomo Kenyatta University of Agriculture and Technology, 2014.
121. Benjamin Maseko. *Identifying key success factors of strategic planning in retail branches of a South African bank*, North-West University South African, 2012.
122. Suzanne McGilloway. *Introduction of a performance management and development system*, National College of Ireland. July 2005.

123. Sam Redding and Allison Layland. *Strategic Performance Management*, Building State Capacity and Productivity Center. 2015.
124. The EFQM Excellence Model 2013, *EFQM. Organization. Brussels, Belgium*; 2013
125. Paul Roberts. *Paradigms of forensic science and legal process: a critical diagnosis*, Philos Trans R Soc Lond B Biol Sci. 5; 370(1674): 20140256. 2015.
126. Daniel Burrus. *Creativity and Innovation: Your Keys to A Successful Organisation*. Burrus research associates Inc. June 2018.
127. Paul Sloane. *The Difference between Creativity and Innovation*. CanInnovate, Canada, April 2018.
128. Martin Luckmann. Andreas Mueller and Christiane Prange. *Agility Management*. By Agile Brains. Berlin, Germany , 2015.
129. Quinn, J.B. *Strategic change: logical incrementalism*. Sloan Management Review, 20(1), pp. 7-21. 1997.
130. Georgios Germanos. *The process of strategy formulation in small and medium enterprises in Greece and the role of accounting information*, Business School Department of Accounting and Finance University of Birmingham. August 2011.
131. Linda Parker Gates. *Strategic Planning with Critical Success Factors and Future Scenarios: An Integrated Strategic Planning Framework*, Carnegie Mellon University, 11, 2010.
132. Uvah, I. I. *Problems, challenges and prospects of strategic planning in universities*. Stuni. August 20, 2011.
133. Adeleke, *Business policy and strategy*. Lagos: Concept, A, Ogundele, O. J. K. and Oyenuga, (2ndEd), Publications Limited, 2008.
134. Barringer and Bluedorn, *The Relationship Between Corporate Entrepreneurship and Strategic Management*, Strategic Management Journal, vol. 20, pp. 421–444, 1999.
135. Barringer. *The role of quality in determining export success*, Quality Management Journal, vol. 6, no. 4, pp. 55–70, 2005.
136. Bluedorn. *The interface and convergence of the strategic management and organizational environment domains*, Journal of Management, vol. 20, pp. 201–262, 2012.

137. Clark, *Strategic management tools usage: a comparative study Strategic Change*, vol. 6, pp. 417–427. 2007.
138. Galloway. *Strategic management in public sector research organizations: a critical review*, International Journal of Public Sector Management, vol. 3, no. 1, pp. 5–24, ID 2000.
139. Ghosh. *Strategic Planning: A Contingency Approach*, vol. 16, no. 4, pp. 93–103, AYC, 2.13.
140. Hambrick. *Environmental Scanning and Organizational Strategy*, Strategic Management Journal, vol. 3, no. 2, pp. 159–174, 2011.
141. Nee. *The performance prism in practice*, Business Excellence, vol. 5, no. 2, pp. 6–11 p, 2014.
142. Wheelen and Hunger. *Strategic Management*. Addison-Wesley. Reading, Mass. JD 2015.
143. Drucker. *The Practice of Management*. H& R, New York, P 2001.
144. Gunn, and Williams. *Strategic tools: An empirical investigation into strategy in practice in the UK*, Strategic Change, vol. 16, no. 5, pp. 201–216, W 2007.
145. Elbanna. *Strategic planning in the United Arab Emirates* “ International Journal of Commerce and Management”, vol. 20, no. 1, pp. 26–40, S 2010.
146. Anchor. *Strategic planning tools and techniques in Jordan: awareness and use*, Strategic Change, vol. 17, pp. 281-93, J 2008.
147. M.Gokhan. *Contingency approach to strategic management*, kent University Baglike. Ankara, Turkey. 2011.
148. Margaret Rouse. *Disaster prevention and mitigation strategies: Strike early and often*. Tech target. 2015.
149. Marcia W. Blenko, Michael C. Mankins and Paul Rogers. *The Decision-Driven Organization*. Harvard Business School. 2010.
150. Bagozzi & Richard. *Principles of marketing research*. Cambridge, MA: Blackwell. P. (ed.) 1994.
151. Patton, M. Q. *Qualitative evaluation and research methods (3rd ed.)*. Thousand Oaks. (2002).
152. Shamoo, A. E, & Resnik, D.B. *Responsible Conduct of Research*. Oxford, UK: Oxford University Press. (2003).

153. Saunders, M., Lewis, P., & Thornhill, A. *Research Methods for Business Students*. (4th Ed.). Harlow: FT/Prentice Hall. (2009).

LIST OF PUBLICATIONS

1. Omer M. Osman, Dr. Abdelgadir M. Mahmoud, Managing Risk during Strategy Implementation. *International Journal of Innovative Research in Engineering & Multidisciplinary Physical Sciences (IJIRMPS)*, E-ISSN: 2349-7300. Volume 6, Issue No 6, November 2018.