

**RISK MANAGEMENT AND OPERATIONAL PERFORMANCE OF LOGISTICS
COMPANIES IN UGANDA. A CASE STUDY OF SPEDAG INTERFREIGHT UGANDA
LIMITED**

BY

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**A RESEARCH REPORT SUBMITTED TO THE COLLEGE OF ECONOMICS AND
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DECLARATION

I, Bayose Twagira Faustin, hereby truthfully declare to the best of my knowledge that this report is my original work and has never been published and/or submitted before for the award of a degree, diploma or for any equivalent academic title in any university or any other academic institution of higher learning.

Signature.....

Date.....*29th march 2019*

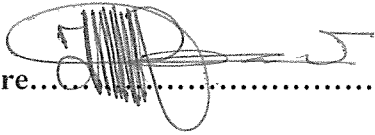
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APPROVAL

This is to certify that this research report has been submitted in partial fulfillment of the requirements for the award of a Bachelor's Degree in Supply and Procurement with my approval as the University supervisor.

Signature.....



Date.....

29th / 03 / 2019

Mr. AYASI ASADI

DEDICATION

I dedicate this research report to the Almighty God who always opens opportunities for me and my family. Further dedication is to my parents Bayose Senkoko and Uzamukunda Claudine without forgetting my step mother Nturanyenabo Marthe for their sacrifice in educating me and for teaching me the discipline and value of hard work when I least knew the world. I also dedicate this report to all my brothers and sisters: Georges, Innocent, Desire, Elizabeth, Emmanuel, Pascal, Aimee, Esther, Moise, Elicheva and all others who have always been on my success side.

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LIST OF ABBREVIATIONS AND ACRONYMS

BPM	:	Business Performance Management
BSC	:	Balanced Scorecard
CPM	:	Corporate Performance Management
ERM	:	Enterprise Risk Management
IT	:	Information Technology
PMS	:	Performance Management System
RM	:	Risk Management
SCM	;	Supply chain Management
SCP	:	Supply Chain Performance
SCPMS	:	Supply Chain Performance Measurement Systems
SPSS	:	Statistical Package for Social Sciences
SRS	:	Simple Random Sampling
TQM	:	Total Quality Management

ABSTRACT

The purpose of this study is to investigate the relationship between risk management and operational performance of logistics companies in Uganda. A case study of Spedag interfreight Uganda Limited. Also to identify the risks faced by logistics companies and to determine the impact of operational risk on performance. A sample of 70 respondents was selected from the total population and the questionnaire was distributed in order to collect data to be analyzed using Statistical Package for Social Sciences (SPSS) and regression analysis was carried out in order to establish the relationship between the variables and the finding revealed that there was a significant relationship between the variables of the current research. Regression analysis showed that risk management significantly predicted 69% of operational performance of logistics companies. Based on the findings the researcher concluded that Risk management has a positive effect on operational performance of logistics companies in Uganda. This effect was significant at 5% level, $\beta = 0.640$, $p = 0.001$. Logistics companies were recommended to enrich and embraces risk management practices in order to attain better performance in terms of profitability, dependability, flexibility and costs reduction.

CHAPTER ONE

INTRODUCTION

1.0. Introduction

This research aims at examining the impact of risk management on operational performance of logistics companies in Uganda with a case study of Spedag Inter freight Uganda Limited.

This chapter will present the background of the study, problem statement, purpose, objectives, research questions, scope, and significance of the study.

1.1 Background

Globally, risk management has been identified as the most important factor in enhancing the performance of companies. As it has been experienced in the past years, many companies have been facing supply chain risks which strongly impacted the performance of these companies. For example, the case of Ericsson well known on this scenario. After a fire at a Phillips Chips fabric in New Mexico, Ericsson's only supplier, the production was disrupted. This disruption led to a loss of \$400 million to Ericsson. The earthquake, tsunami, and the subsequent nuclear crisis that occurred in Japan in 2011 damaged Toyota's production and it led to a drop of 40,000 vehicles. The damages caused a loss of \$72 million in profits per day. (Bloomberg News, 2011).

In USA (United States of America), another example of how risk management has impacted company's performance is where the British petroleum company has lost more than 1.5 billion USD after the Texas City Refinery explosion in 2005 that was considered as the worst industrial disasters in recent US history which led company's loss and decreased the performance.

According to a survey in 2003, the daily cost of a supply chain disruption was estimated by US firms to amount to between US \$50 million and \$100 million (Rice and Caniato 2003). The current cost will be much greater. Indeed, the aggregate cost of Hurricane Sandy in the US in 2012 topped US \$70billion, and Thailand's floods in 2012 led to closure of more than 1,000 companies and US\$ 20 billion losses in total (World Economic Forum 2013). In this regard, the analysis of global supply chain risks is becoming more imperative to the firms which pursue effectiveness and values in supply chain operations. This is because risk management is the consequence of recognizing increasing risks and the need for responses to manage them (Christopher and Lee 2004). In the current business environment, risk management is regarded

as a critical contributor to successful business management (Ritchie and Brindley 2007). The consequences of these accidents are uncertainly for this reason, the risks management in the industries has emerged as an important topic in the global supply chain, indeed, and the risk is absolutely linked with the uncertainty. Risk is defined as possible events whose unfavorable consequences are difficult to accept or are even unacceptable.

Risk management on the global scale involves great challenges for individual firms because logistics operations at the global level entail economic, political, competitive, environmental, cultural, operational and infrastructural uncertainties (Flint 2004). It is evident that globalization provides firms with opportunities to exploit cheap labour and raw materials (Manuj, 2008). However, global supply networks are inseparable from complexities and uncertainties since they encompass diverse flows, nodes, entities, and transits between nodes, as well as potential long lead times (Craighead et al. 2007). The disruptions to material, information and financial flows of a firm's supply chain have become the norm, because globalization has inevitably generated complex and tightly coupled inter-organizational networks (Bode et al. 2011) where a disruption at one link of the chain diffuses across the entire supply chain.

Most companies have strived to improve their operational performance by taking initiatives to reduce costs such as single-sourcing, vendor-managed inventory, lean operations, reduced supply base and outsourcing. Many researchers, however, have warned that these powerful and effective initiatives, implemented during a period of a stable business environment, can suddenly turn into vulnerabilities by creating longer and more complex global supply chains (Chopra and Sodhi, 2004). In general, the sources of threat or disruption can be categorized in two fields, exogenous and endogenous. (Trkman, McCormack, 2009). The company cannot avoid exposing to uncertainty events either from exogenous or endogenous, and the level of losses of a risk will be relied on how to mitigate the risk prior to its occurrence.

In Uganda, empirical evidence suggests that risks are due to external (macro) and internal (micro) factors (William, 2005). Included in the internal factors are reckless delivery of goods, fraud and dishonest, management deficiencies, poor risk assessment methods, lending to the insiders and poor supervision capacity. External factors such as poor policies and procedures, lack of information among company customers, homogeneity of the Logistics business and

connections. This misunderstanding greatly results from the lack of agreement about the meaning of the word itself. People use the same word to address different terms. Ugandan Companies may seek to control contingencies from the various risk sources, rather than passively treat uncertainties as constraints within which they must operate. Mucingizi, (2002).

However, At Spedag interfreight Uganda Limited, The company has faced numerous supply chain related risks such as operational risk, financial risk, compliance risk, strategic risk, environmental risk, etc. these risks have affected the company's operational performance in the way that it experienced a decrease in the customer base dues to delays in delivery, decrease in profitability as well as the reputation of the company.

However, numerous risk management practices and strategies have been put in place to minimize the likelihood and the impact of risks hence enhancing the performance of the company.

Risk occurs because it is not possible to forecast exactly what is going to be the outcome of future events. Even if a company uses the best analyses approaches and software to predict what is going to happen, there is always uncertainty in the future and this brings the risks. Although the top management is aware of the existence of risk on the supply chain and its importance, Spedag inter freight Uganda limited has been using outside expertise in assessing the risks on its supply chain.

1.2 Problem Statement

For any logistic company to survive, risk management should be observed with maximum care, the ineffective risk management practices and poor performance in logistics companies continue to exist as evidenced by the persistent decline in profitability, increasing the level of delays, high operational cost and losing their reputation (EAC report, 2015). This could be compromising the performance of logistics companies. However, despite the huge impact of supply chain disruptions have on organization bottom line profits, many organizations still don't have a supply chain risk management program where they identify the potential risk within their supply chains and come up with contingency plans and mitigations for the supply chain risks that may affect the organization performance. There is need therefore for organization to clearly identify the risks involved in the supply chains and all the uncertainties in delivering value to the customers and supply chain managers should come up with robust mitigation strategies to increase supply chain efficiency and effectiveness. Kouvellis (2003). For some companies, risk management is easy to understand but very difficult to use and handle in real situations. In other cases, companies recommend the usage of these practices to their managers but they fail in providing the necessary training or tools. There are also many companies that do not provide incentives or reward for risk management, which might not stimulate the employee's responsibility for these activities (Dittmann, 2014). If this problem remains unchecked, then operational performance is likely to remain misery. As a result, many logistics companies have collapsed due to poor management of risks. Therefore this has raised the researcher's curiosity to investigate on risk management and operational performance of logistics companies.

1.3 Purpose of the Study

The purpose of the study is to investigate the relationship between risk management and operational performance of logistics companies in Uganda, the case study of Spedag Inter freight Uganda Limited.

1.4 Specific Objectives

- 1) To identify the different types of risks faced by Spedag Inter freight Uganda Limited.
- 2) To identify the effect of operational risk on performance of Spedag Inter freight Uganda Limited.
- 3) To determine the relationship between risk management and operational performance of Spedag Inter freight Uganda Limited

1.5 Research Questions

- 1) What are the different types of risks faced by Spedag Inter freight Uganda Limited?
- 2) What is the effect of operational risk on performance of Spedag Inter freight Uganda Limited?
- 3) What is the relationship between risk management and operational performance of Spedag Inter freight Uganda Limited?

1.6 Scope of the Study

1.6.1 Geographical Scope

This study was carried out at Spedag Inter freight Uganda Ltd located in Kampala, capital city of Uganda, on Nakawa-Jinja road, Plot Number M284 opposite Stanbic Bank (Nakawa branch), Nakawa Industrial area.

1.6.2 Subject Scope

The study was focused on the relationship between risk management and operational performance of logistics companies in Uganda as the general objective. The study also focused on the specific objectives which were: to identify the different types of risks faced by Spedag Inter freight Uganda Ltd, to identify the effect of operational risk on the performance of Spedag Inter freight Uganda Ltd and finally to determine the relationship between risk management and operational performance of Spedag Inter freight Uganda Limited.

1.6.3 Time Scope

The study was done within a period of 2 months. And it covered the period of 2010 to present.

1.7. Significance of the Study

The results and findings of this study will help various stakeholders to better understand risk management and in what ways companies can implement good risk management practice that aligns with company's performance. This study is will benefit the following parties:

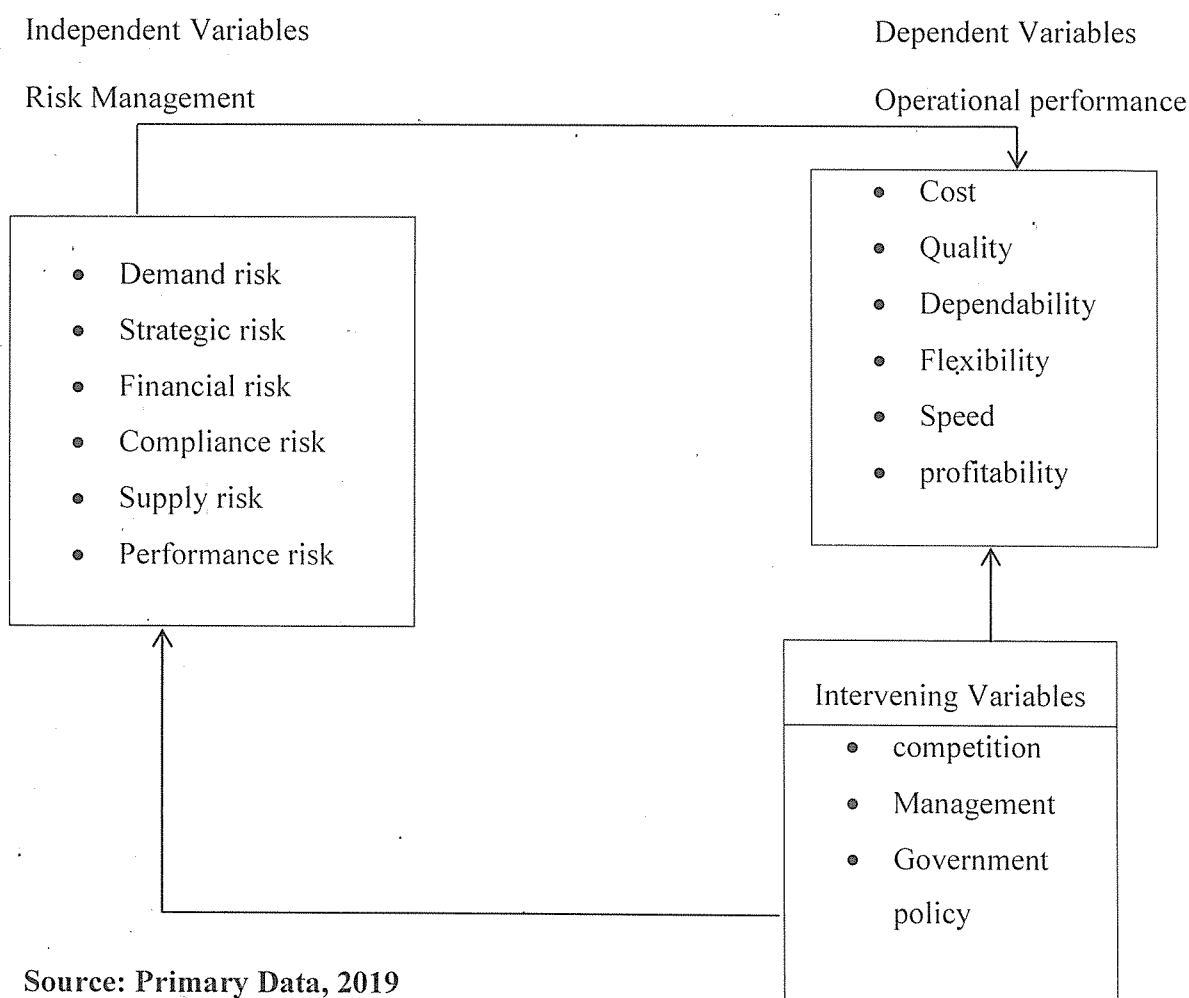
To logistics companies, findings of this research project will contribute to improving understanding about risk management practices of supply chain in Uganda, and in what ways the companies can enhance their performance.

To academicians, this study is expected to add to the body of knowledge on risk management and identify areas for further research, and it will be used as reference for future researchers of the same field.

To researchers, the researcher will find the study significant in the fulfillment of the requirement for the award of the bachelor's degree in supply and procurement.

To the policy makers, the empirical results will also provide general indicators of risk management useful for both regulator and business people in making policies and decisions as well as in rewarding or punishing companies that have great or little intention to improve their risk management.

1.8 Conception Framework



Source: Primary Data, 2019

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the literature on risk management in Logistics. It discusses issues on risk management from different perspectives and with the view of giving a theoretical foundation to the study. It starts with an exposition on risk management, followed by reviews of literature on the rationales and categories of risk management activities as well as the kinds of risk faced by logistics companies.

2.1 Definition of key terms.

2.1.1 Risk

According to Chopra and Soudhi (2004) risk in the concept of supply chains maybe associated with the production/ procurement process, the transportation/shipment of goods, and or the demand markets. In today's volatile era with businesses and, more specifically, supply chains becoming increasingly global, the industrial environment is heavily affected by uncertainty, which can potentially turn into unexpected disruptions.

Willet (as cited in Ale, 2009) defined risk as "the objectified uncertainty regarding the occurrence of an undesired event". Risk is inherent in any walk of life and can be associated with every human decision- making action of which the consequences are uncertain.

In the field of safety and health, risk is linked with possible hazards and dangers, while in supply chain it is a technical matter of unpredictability in expected outcomes, both negative and positive. In other businesses and political settings, risk is closely associated with the spirit of enterprise and value creation (Power, 2007, Ewald, 2001) states: "Nothing is a risk in itself; there is no risk in reality. But on the other hand anything can be a risk; it all depends on how one analyses the danger, consider the event". Over the last decades, risk analysis and corporate risk management activities have become very important elements for both financial as well as non-financial corporations.

Risk management

Risk Management (RM) is described as the performance of activities designed to minimize the negative impact (cost) of uncertainty (risk) regarding possible losses (Schmidt and Roth, 2000).

Redja (2008) also defines risk management as a systematic process for the identification, evaluation of pure loss exposure faced by an organization or an individual, and for the selection and implementation of the most appropriate techniques for treating such exposures. The process involves: identification, measurement, and management of the risks. Bessis (2010) also adds that in addition to it being a process, risk management also involves a set of tools and models for measuring and controlling risk.

These risks are interdependent and events affecting one area can have ramifications and penetrations for a range of other categories of risk. There is therefore, the need to understand the risks run by Logistics Companies and to ensure that the risks are properly confronted, effectively controlled and rightly managed. According to Pyle (2007), risk management is the process by which managers satisfy these needs by identifying key risks, obtaining consistent, understandable, operational risk measures, choosing which risks to reduce, which to increase and by what means, and establishing procedures to monitor resulting risk positions.

Bessis (2010) indicates that the goal of risk management is to measure risks in order to monitor and control them, and also enable it to serve other important functions in a company in addition to its direct financial function.

These include assisting in the implementation of the company's ultimate strategy by providing it with a better view of the future and therefore defining appropriate business policy and assisting in developing competitive advantages through the calculation of appropriate pricing and the formulation of other differentiation strategies based on customers' risk profiles.

2.1.2 Operational performance

Voss et al., (2012) explains that operational performance refers to aspects of an organizations process which can be quantified. It includes variables such production reliability and defect rates, cycle time, on time delivery, cost of quality and scrap reduction, productivity, and inventory management. Srinivasan et al. (2011) explained the concept of supply chain performance as the extent of performance of the processes included within the firm's supply chain department.

Some of the measures specifically used to determine the supply chain performance of a firm include supplier performance, customer satisfaction, stock costs, and number of on-time deliveries, product availability performance and lead time.

Performance measurement is defined as the process of quantifying the efficiency and effectiveness of a given process or function. (Guna sekaran and Kobu, 2007). Effectiveness is the level that customer's requirements are met and efficiency monitors usage of a firm's resources when providing a pre-specified level of customer satisfaction (Sheperd and Gunter, 2006).

Hence, performance measurement is an important factor that improves supply chains' effectiveness and efficiency (Beamon, 2009). It is the responsibility of the decision-makers to develop metrics for evaluating performance. Since the meaning of risk varies with different situations and the human perception of those, a clear definition of the word risk has to be made. How can we discuss something then we have not defined what it is about? We proceed to give an overview of key definitions in chronological order.

Operational performance alludes to the procedures equipped towards coordination and upgrade of work exercises and results inside an association. Proficient and powerful operational execution is required to augment an organization's competitive edge through improvement of value, cost reduction quality, persistence, time to market, and item development, client lead times, stock levels, and conveyance time (Ngatia, 2013).

Indicators of effective operational performance include: enhanced financial performance, lead time performance, enhanced responsiveness, client unwaveringness, advancement, quality items, and decrease in abundance stock levels and upgrades in item/prepare outline (Johnson, 2003). Assessment of operational performance of associations ought to use both budgetary and non-monetary measures, albeit most associations have not made utilization of an adjusted system for money related and non-monetary indicators (Kaplan & Norton, 2003). Mark (2006) distinguished request lead time as the most vital operational measure.

Mark (2006) characterized request lead time as the time that breaches between the receipt of a request and shipment of the item to the client. Mark (2006) distinguished other performance measures as usefulness of request era, arranging, generation booking, inventory management and quality. Birech (2011) highlighted various performance metrics within operations area which include productivity measures, quality measures, inventory measures, lead-time measures, preventive maintenance measures, performance to schedule, and utilization; Specific measures which include cost of quality, variances, period expenses, safety measured on some common

scale such as number of hours without an accident, profit contribution, measured in dollars or some common currency. Elisa, et al., (2013) explained that organizations that have adopted the Total Quality Management (TQM) approach have depicted a positive relationship with the improvement of general performance, improved operation efficiency and with better financial results. He empirically tested various operational management practices and their effect on performance.

Benefits included economic performance derived from improved efficiency in operations; waste reduction and a vision for continuous improvement. Lean systems were found to have a positive effect on organization operational performance. It's therefore management to involve all the chain members in order to ensure that all activities and functions work together.

Firm's performance explains how it ranks against preset metrics of its performance. Performance is measured in terms of how a particular request is handled, performed and how it is executed successfully using the required standard of doing it. It is the outcome of all of the organization's operations and strategies. It is therefore a measure of how and organization or individual organizational units meets the planned targets.

Operational performance is the final achievement of a firm and contains; existence of certain targets to be achieved, has a period of time in achieving the targets and the realization of efficiency and effectiveness (Griffin, 2010). It can also be viewed as the ability of an enterprise to achieve such objectives as high profit, quality product, large market share, good financial results, and survival at pre-determined time using relevant strategy for action (Koontz and Donnell, 2003). Operational performance is used to gauge how an enterprise is doing in terms of level of profit, market share and product quality in relation to other enterprises in the same industry.

Holmberg (2015) attempted to find how problems are a result of inadequate use of systems methodology to further understand the dynamism. The data was collected from six firms in the home furnishing business in Sweden to analyze its supply chain. This was complemented with extensive review of both management, quality and logistics functions.

The study exhibited the presence of a weak relationship between strategy and actions; firms are still putting greater emphasis on financial measures ignoring other variables which cause opposition by some of its employees. Also it was extremely difficult to categorize firms within a supply chain on the basis of a systems thinking.

Performance in companies takes many forms depending on whom and what the measurement is meant for. Different stakeholders require different performance indicators to enable them make informed decisions (Manyuru, 2005). According to Richard et al. (2009) organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.) and (c) shareholder return, economic value added, etc.

Thompson et al, (2007), notes that using financial measures alone overlooks the fact that what enables a company to achieve or deliver better financial results from its operations is the achievement of strategic objectives that improve its competitiveness and market strength. Non-financial measures include innovativeness and market standing (Saunders and Wong, 2007, Hooley and Lynch,). Performance is therefore measured by both financial and non-financial measures.

Nayatullah et al, (2012) overall organizational performance can be divided in to three parts: financial performance, product performance, and operational performance. Financial of organization includes: market share, return on investment, profit margin, turnover rate, and productivity. Product performance includes: functionality, service, employee satisfaction. Operational performance includes: product/service quality, completion time, product development time. Utilization of resources, responsiveness to customer demand, and operational cost.

MacPherson et al (2004) Most companies view their performance in terms of "effectiveness" in achieving their mission, purpose or goals. Most NGOs, for example, would tend to link the larger notion of organizational performance to the results of their particular programs to improve the lives of a target group like the poor. At the same time, a majority of organizations also see their performance in terms of their "efficiency" in deploying resources. This relate to the optimal use of resources to obtain the results desired. In order for an organization to remain viable over time, it must be both financially viable" and "relevant" to its stakeholders and their changing needs. In the framework, these four aspects of performance are the key dimensions to organizational performance. In a study carried out by (MacPherson, 2004) she highlighted the three factors as the factors that affect organizational performance; External Environment, Internal Motivation and Capacity Performance.

2.2 Risks faced by logistics companies

Elmer Funke Kupper in his article on Risk Management defined Market Risk as the risk to earnings arising from changes in underlying economic factors such as exchange rates, or from fluctuations in equity or commodity prices. Companies are subject to market risk in both the management of their balance sheets and in their trading operations.

Market risk is generally considered as the risk that the value of a portfolio, either an investment portfolio or a trading portfolio, will decrease due to the change in value of the market risk factors. There are three common market risk factors to banks and these are liquidity, interest rates and foreign exchange rates. Market Risk Management provides a comprehensive management can be important in contracts which bind two sides without allowing diversification, such as large financing contract or close cooperation within a supply chain (Klimczak, 2007). Management can be important in contracts which bind two sides without allowing diversification, such as large financing contract or close cooperation within a supply chain (Klimczak, 2007).

The Basel Accord (2005) defines operational risk as the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. Malfunctions of the information systems, reporting systems, internal monitoring rules and internal procedures designed to take timely corrective actions, or the compliance with the internal risk policy rules result in operational risks (Bessis, 2010). Operational risks, therefore, appear at different levels, such as human errors, processes, and technical and information technology. Because operational risk is an event risk, in the absence of an efficient tracking and reporting of risks, some important risks will be ignored, there will be no trigger for corrective action and this can result in disastrous consequences. Developments in modern logistic environment, such as increased reliance on sophisticated technology, expanding retail operations, growing e-commerce, outsourcing of functions and activities, and greater use of structured finance (derivative) techniques that claim to reduce credit and market risk have contributed to higher levels of operational risk in companies (Greuning and Bratanovic, 2009).

According to Bessis, (2010) Operational risk or alternatively business risks relates to the uncertainty regarding the firm's investments and investment opportunities, and are influenced by the product markets in which a firm operates. In addition to operational risks, unexpected changes in e.g. interest rates, exchange rates, and oil prices create financial risks for individual companies. As opposed to operational risks, which influence a specific firm or industry, financial

risks are market-wide risks that can affect the performance of companies in the whole supply chain. Both kinds of risk exposure can have substantial impact on the value of a firm's performance. The recognition of the above-mentioned contributory factor in operational risk has led to an increased attention on the development of sound operational risk management systems by logistic companies. Moreover, the magnitude of potential losses from specific risk factors is often not easy to project.

Slywotzky and Drzik (2005), define strategic risk as the array of external events and trends that can devastate a company's growth trajectory and shareholder value. Whiles these two authors consider strategic risk as a sole consequence of external occurrences; other authors look at strategic risk as the current and prospective impact on earnings and/or capital arising from internal business activities such as adverse business decisions, improper implementation of decisions, or lack of responsiveness to industry changes. They therefore consider strategic risk as a function of the compatibility of an organization's strategic goals, the business strategies developed to achieve those goals, the resources deployed against these goals, and the quality of implementation. Emblemståg and Kjølstad (2002), also define strategic risk as risk which arises as a firm pursues its business objectives either by exploiting opportunities and/or reducing threats. Whichever way this is considered, strategic risk encompasses a variety of uncertainties which are not financial in nature, but rather credit or operational related caused by macro-economic factors, industry trends or lapses in a firm's strategic choices which affects the firm's earnings and shareholders' value adversely. Strategic risks often constitute some of a firm's biggest exposures and therefore can be a more serious cause of value destruction. Unfortunately, as strategic risks are often highly unpredictable and of different forms, managers have also not yet been able to systematically develop tools and techniques to address them (Slywotzky and Drzik, 2005).

According to Ghoshal (2002) Demand risk is the distribution of outcomes related to adverse events in the outbound flows that affect the likelihood of customers placing orders with the focal firm, and/or variance in the volume and assortment desired by the customer. Security risk is the distribution of outcomes related to adverse events that threaten human resources, operations integrity, and information systems; and may lead to outcomes such as freight breaches, stolen data or proprietary knowledge, vandalism, crime, and sabotage. It is the risk caused by any interruptions to the flow of product, whether raw material or parts, within the supply chain. This

risk relates to disturbances in the flow of product, information, and cash between the organization and the market/the high or low network downstream. The failure of the high or low side to accurately accommodate the level of demand leads to this type of risk. In speculation, decisions are made on anticipated customer demand. The resources in the supply chain need to be directed to those specific products and customers that provide the firm with a competitive advantage (Perry, 2006). By fixing the form of the finished goods at the earliest point, it is possible to gain economies of scale in production, procurement, and transportation, as well as lead to reduction in sorting costs. However, to ascertain the form of finished goods is more useful in low demand risk conditions. That is, speculation requires high-quality estimates of demand, which is possible under low demand uncertainty. An example of speculation is, in case of limited market research resources, to serve customers with similar demographics in culturally-similar countries rather than developing customized products for new markets.

Pyle, (2006). Stated that performance risk Encompasses losses resulting from failure to properly monitor employees or use appropriate methods. Performance risk should be evaluated through the evaluation of the supplier's past and present performance record to establish a level of confidence in the supplier's ability to perform the proposed effort. Such an evaluation is not limited to programmatic technical issues, but also includes assessment of critical supplier financial viability.

According to Nshimiye B., (2015). Reputational risk may arise by way of group contagion or from the company's own actions; in the latter case, reputational loss may well be the consequence of another risk event than a risk event in its own right. Either way, the potential impact needs to be taken into account in estimating potential overall unexpected loss. In quantifying the impact of a serious operational failure, for example, the cost of the resulting damage to the company's brand and franchise may far exceed the direct cost of the operational risk event itself. Quantification of potential reputational damage is difficult given the limited historical data available, but the risk is potentially too important to ignore. As with strategic risk, some combination of subjective stress testing with statistical techniques where sufficient data exist would seem to offer most promise. Safeguarding the company's reputation is of paramount importance to its continued operations and is the responsibility of every member of staff. Reputational risks can arise from social, ethical or environmental issues, or as a consequence of operational risk events. The company's strong reputation is dependent on the way it conducts its

business, but it can also be affected by the way in which its clients, to whom it provides logistical services, conduct themselves. Effective management of all operating activities is emphasized to establish a strong internal control framework to minimize the risk of operational and financial failure and to ensure that a full assessment of reputational implications is made before strategic decisions are taken.

According to compliance trends survey (2014). Compliance risk is the threat posed to an organization's financial, organizational, or reputational standing resulting from violations of laws, regulations, codes of conduct, or organizational standards of practice. As stakeholder expectations increase, organizations are exposed to a greater degree of compliance risk than ever before. To understand their risk exposure, many organizations may need to improve their risk assessment process to fully incorporate compliance risk exposure.

Organizations conduct assessments to identify different types of organizational risk. For example, they may conduct enterprise risk assessments to identify the strategic, operational, financial, and compliance risks to which the organization is exposed. In most cases, the enterprise risk assessment process is focused on the identification of risks that could impact the organization's ability to achieve its strategic objectives.

2.2.1 The risk management process

Operational risk management process sets out the overall procedures for operational risk management (PWC, 2001), Controls-definition of internal controls or selection of alternate mitigation strategy such as insurance, for identified risks.

Risk Identification and Analysis

Identification is a crucial stage in the operational risk management process. Risk analysis is the process of identifying the different risk involved, and determining the possible outcomes of actions and /or decisions. Chijoriga (2007), explained that management and other relevant personnel could identify key risks in business through workshops and interviews, brainstorming, use of questionnaires, and process mapping which involves identifying and mapping the core business processes/value chains (PWC, 2000) Risk identification is paramount for the subsequent development of viable operational risk monitoring and control.

Risk Assessment

Andrew (2005) points out that entity face variety of risk from external and internal sources that need to be assessed. A precondition to risk assessment is establishment of objectives, linked at different levels and internally consistent. He further defined risk assessment as the identification and analysis of relevant risk to achievement of the objectives, forming a basis for determining how risk should be managed.

Once risks have been identified, an assessment of possible impact and corresponding likelihood of occurrence have to be done. In the planning stage, management should agree on the most appropriate definition and number of categories to be used when assessing both likelihood and impact.

Risk Measurement

Once the source of risk have been identified and assessed, financial institutions must begin to measure the risks. As the foregoing list of risk indicates, this risk measurement process can be quite a challenge (Chijoriga 2007). According to financial theory, standard deviation is used as a good proxy measure of risk, and covariance of analysis is a more refined measure of risk.

Risk Monitoring

This part of the operational risk management process entails a comparison of the actual risk levels with the levels permissible under the company's operational risk management guidelines. Thus, the company's risk level would be continuously monitored to ensure that it remains within the acceptable range. In addition to market risks, the company would monitor other risk limits to ensure that their levels are consistent with established policies.

Controlling Risks

Control activities are the policies and procedures that help ensure management directives are carried out (Andrew, 2005). They help ensure that necessary actions are taken to address risks to the achievement of the company's objectives. Andrew (2005) asserts that control activities should occur throughout the organization, at all levels and in all functions.

A careful monitoring of the risk will provide management with red flags whenever the risk levels are beyond those permitted as specified in the operational risk management guidelines. In these instances, corrective measures should be undertaken to ensure that the risks are brought back in line with the guideline

2.2.2 Methods in Risk management

In recent times there has been an increased attention to risk management at the enterprise level and this can be linked to a number of policy decisions (Beasley et al, 2005). As mentioned earlier, regulators, board audit committees, rating agencies, and shareholders are all becoming interested in having an integrated corporate risk management approach to managing risk in order to account for all firms' risks, their interrelations with each other and their combined effect on firms. Standard and Poor's for instance has introduced

Enterprise Risk Management analysis

its global corporate credit rating process beginning with the third quarter of 2008 (Standard and Poor's, May 2008). It is in this light that Enterprise Risk Management (ERM) has subsequently emerged as an increasingly popular strategy that attempts to holistically evaluate and manage all of the risks faced by the firm.

ERM uses the firm's risk appetite to determine which risks should be accepted and which should be mitigated or avoided. DeLoach (2000) describes ERM as a structured and disciplined approach: it aligns strategy, process, people, technology and knowledge with the purpose of evaluating and managing the uncertainties the enterprise faces as it creates value.

It means just that: an elimination of functional, departmental or cultural barriers. It is a truly holistic, integrated, forward-looking and process oriented approach to managing all kinds of business risks and opportunities – not just financial ones – with the intent of maximizing shareholder value for the enterprise as a whole.

The Committee of Sponsoring Organizations of the Tread way Commission (COSO) report on enterprise risk management (ERM) in 2004 defines it as a process, effected 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. The report posits that the underlying premise of ERM is that every entity exists to provide value for its stakeholders.

Enterprise risk management enables management to effectively deal with uncertainty and associated risk and opportunity, enhancing the capacity to build value. ERM is able to do

this because it assists in aligning risk appetite and strategy, enhancing risk response decisions, reducing operational surprises and losses, identifying and managing multiple and cross enterprise risks, opportunities and improving deployment of capital.

These capabilities inherent in ERM help management achieve the entity's performance and profitability targets and prevent loss of resources. In sum, enterprise risk management helps an entity get to where it wants to go and avoid pitfalls and surprises along the way.

2.3 Effects of operational risk on performance of logistics companies

According to the Basel Accord (2007) operational risk is defined as the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. Malfunctions of the information systems, reporting systems, internal monitoring rules and internal procedures designed to take timely corrective actions, or the compliance with the internal risk policy rules result in operational risks (Bessis, 2010). Operational risks, therefore, appear at different levels, such as human errors, processes, and technical and information technology. Because operational risk is an event risk, in the absence of an efficient tracking and reporting of risks, some important risks will be ignored, there will be no trigger for corrective action and this can result in disastrous consequences. Developments in modern logistic environment, such as increased reliance on sophisticated technology, expanding retail operations, growing e-commerce, outsourcing of functions and activities, and greater use of structured finance (derivative) techniques that claim to reduce credit and market risk have contributed to higher levels of operational risk in companies (Greuning and Bratanovic, 2009). As opposed to operational risks, which influence a specific firm or industry, financial risks are market-wide risks that can affect the performance of companies in the whole supply chain. Both kinds of risk exposure can have substantial impact on the value of a firm's performance. The recognition of the above-mentioned contributory factor in operational risk has led to an increased attention on the development of sound operational risk management systems by logistic companies. Moreover, the magnitude of potential losses from specific risk factors is often not easy to project. Operational risk management plays a crucial role in the success of all logistics companies, including other institutions. According to a Gateways survey, 2015 results indicate the supply chain is making good progress, but many companies are intending to further enhance their approaches to operational risk management and measurement. Several recent events in the

broader supply chain have brought operational risk, and, in particular, conduct risk to the forefront of the regulatory agenda. These events have also shown that the impact of operational risk can be broader than direct financial losses, suggesting that practitioners and risk managers may wish to consider broadening the definition of operational risk identification, assessment, measurement and management to include indirect operational risk losses. According to Kersten et al., (2006) three basic strategies can be used, risk bearing, risk avoidance and risk transfer. By applying the strategy of risk bearing to the operational risk, companies try to reduce the potential damage caused by the occurrence of this risk. The minimization of the probability of occurrence is not the focus of this strategy, the occurrence of a risk is rather accepted.

2.4 Relationship between risk management and operational performance.

Studies on the relationship between risk management and operational performance of companies mostly have been conceptual in nature, often drawing the theoretical link between good risk management practices and improved company performance. Schroeck (2002); (Nocco & Stulz, 2006) stress the importance of good risks management practices to maximize firm's value. In particular, Nocco & Stulz (2006) suggests that effective enterprise risk management (ERM) have a long-run competitive advantage to the firm compared to those that manage and monitor risks individually. It is, therefore suggested that logistics companies manage risks strategically by viewing all the risks together within a coordinated manner. In relation to this, Stulz (2006) associates good risk management practices with the elimination of costly lower-tail outcomes by proposing "full-cover" risk management as compared to "selective" risk management. The study suggests that prudent risks management is important in reducing the bankruptcy costs.

Schmit and Kendall (2000) describe risk management as the performance of activities designed to minimize the negative possible losses. Dealing with risk has always been one of the areas that are looked at to ensure the success of any company and its underlying principle (scholtens et al, 2000). Logistics companies are in the risk business and risk management is cornerstone of supply business (Hussien et al, 2010). Various studies have stated that good risk management practices can generally improve efficiency leading to improved operational performance. Lascelles (2004) reveal that risk management as the biggest game where every company is interested in understanding and managing their risk according to their risk appetite and capacity. Several other studies draw the link between good risk management practices with improved operational performances (Schroeck, 2002). In particular, these studies propose that prudent risk management practices reduce the volatility in company's operational performance. Schroeck

(2002) proposes that ensuring best practices through prudent risk management result in increased in profitability.

Despite the voluminous studies on the link between risk management practices and companies performance, studies providing empirical evidence on the link between risk management practices and company's operational performance, to our knowledge, has been somewhat limited. Among these studies there is the study by Pagach & Warr (2007) examined factors that influence the firm level of enterprise risk management (ERM) and found that the more leveraged the firms were, the more volatile were their profitability. Using the hazard model to examine factors that influence firm's adoptions of the Enterprise Risk Management, the study documented firms that were more levered, more volatile profitability, and poorer stock performances, were more likely to adopt the ERM. A different dimension of analyzing the relationship between risk management and operational performance is offered by Angbazo (2007).

2.5 Related Literature

Nshimiye B. (2015) investigated the relationship between risk management and financial performance of commercial banks in Uganda where he concluded that there is a significant relationship between risk management and performance of commercial banks. The stability of commercial banks is very important for any economy. Risk management by commercial banks plays a vital role in ensuring commercial banks stability and the economic stability. Progress has been made in risk management by commercial banks as revealed by the study as most of the banks have risk management structures/policies/guidelines in place. This can partly be attributed by enhanced regulation and also realization of the firms on the importance of risk management. However there is need to have all the banks establish the necessary risk management structures. Improvement in terms of quality and compliance to global standards is necessary in order to remain competitive.

Chong, Chan, Ooi and Sim (2011) developed a management tool which identified the relationships between supply chain management practices, operational performance and innovation on the performance of 163 Malaysian Logistics and service firms. The results showed that SCM practices have a direct bearing on organizational performance among these firms when measured against a structured model of performance.

Charan et al. (2008) aimed to determine the key variables for an effective supply chain performance measurement system (SCPMS) which organizations should emphasize, so as to improve their supply chain. An important finding of this modeling approach was that awareness was that the existence of a performance measurement system (PMS) in supply chain which is a very critical factor (enabler) of performance.

Chia et al. (2009) tested the perception of senior supply chain managers on measurement using a balanced scorecard (BSC) model. The survey population for this study included organizations in logistics, manufacturing and retailing spread across Singapore, to determine the extent of 14 performance measurements as perceived and practiced by these different parties within the supply chain. The survey was designed from the parameters of BSC which include the following key drivers; financial, customer, internal business and innovation and learning.

These findings clearly indicate that despite the increased awareness of the need for a balanced approach as an alternative measure of performance, firms are still dependent on existing traditional financial tools.

Wangari (2016) examined the effect of risk management practices on the profitability of commercial banks in Kenya. The study sought to examine whether risk management practices would have an effect on profitability of commercial banks in Kenya. From the analysis, the overall outcome reveals that the practices on risk management should be enhanced since the influence positively the returns that banks make in any given period. The study demonstrates the importance of the liquidity risk management in influencing the income statement of the commercial banks in Kenya, thus it can be concluded that managers who ought to increase the earning of their company should keep an eye on the item that are likely to alter the liquidity of their firms. More importantly, the loan proportion given by banks need to be maintained at a manageable level so as to boost the profitability in cases of short falls.

2.6 Summary of literature review

Issues of risk management in supply chain have greater impact on logistics companies. When companies manage their risk better, they will get advantage to increase their performance. Better risk management indicates that companies operate their activities at lower relative risk. These advantages of implementing better risk management lead to better logistics company's performance. Better companies' performance increases their reputation and image from public or market point of view (Georges, 2015). In a recent study, Sodhi et al. (2012) claim that there are

three gaps in SCRM. Similar to the study presented by Tang and Musa (2011), they identified that there is no clear definition of SCRM, a lack in research on mitigating supply chain risk and a clear deficiency of empirical studies in this area.

The literature review confirms that there have been considerable research efforts in the area of risk management. Most of the studies are based on various tools and techniques of risk management used by different companies (Ngare 2008; Njiru 2003). These studies have not covered the other types of risk encountered by logistics companies and this presents a knowledge gap that this study intends to fill.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the research methodology that will be used to collect data. The chapter shows the research design, area and population of study, sampling techniques, procedure and sample size, data collection sources, methods, instruments, data processing and analysis, expected limitations to the study.

3.1 Research Design

Durrheim and Painter (2006) define research design as a "strategic framework, a plan that guides research activity to ensure that sound conclusions are reached. This involved plans for data collection, the instrument for gathering information, how information gathered was processed and analyzed to give meaning to the research findings. The study used descriptive and cross sectional research designs. This type of design enabled the researcher to investigate the risk management strategies and operational efficiency. Both quantitative and qualitative study approaches was applied. The quantitative approach involves the researcher collecting data from the respondents while qualitative approach included collecting data from key informants who were knowledgeable about the research topic. Qualitative method was used because it provides detailed - in depth information which will support quotations from the respondents.

3.2. Study Population

In the opinion of Donkor & Obeng (1999), population of a study refers to a complete set of individuals (subjects), objects or events having common observable characteristics in which the researcher is interested. The study population was constituted of 85 respondents including employees of Spedag interfreight Uganda limited. This population was selected from different departments which included 31 from procurement department, 23 from human resource department, 8 from IT department, 10 from Accounts and finance and 13 from marketing.

3.2.1 Sample Size

Sample size is the mathematical process of deciding how many subjects should be studied before a study begins (Miquel P, 2014). The sample size will be determined using Slovene's formula in determining the minimum sample size. According to this formula, the sample size was obtained using
$$n = \frac{N}{1+Ne^2}$$

The researcher Where, N is the target population, n is the sample size and e is the level of statistical significance and in this study is 0.05.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{85}{1 + 85(0.05)^2}$$

$$n = \frac{85}{1.21}$$

$$n = 70.2$$

Therefore, 70 respondents were selected for the study.

3.2.2 Target population

The following samples were selected using simple random sampling and purposive sampling techniques: samples were selected from different departments which included 28 respondents selected from procurement department using simple random sampling, 19 respondents selected from human resource department using simple random sampling, 6 selected from IT department using purposive sampling, 8 respondents selected from Accounts and finance using purposive sampling and 9 respondents selected from marketing department using simple random sampling.

Table 1: Showing the distribution of the population according to their categories

Category		Population	Sample	Sampling design
Procurement		31	28	simple random samp
Human resource		23	19	simple random samp
IT		8	6	purposive sampling
Accounting and finance		10	8	purposive sampling
Marketing		13	9	simple random samp
Total		85	70	

Source: Primary data, 2019

3.2.3 Sampling procedure

According to Cooper and Schindler (2006), sampling technique is the procedure of choosing a particular sample from a population. The study will apply both probability and non-probability sampling techniques i.e. Simple random sampling and purposive sampling techniques will be used to select respondents.

Simple random sampling (SRS) is when every eligible individual in the population has the same chance of being selected. This usually means the availability of a list of all eligible individuals and, using a random selection scheme, a sample of individuals was selected to be surveyed. Simple random sampling was used to choose respondents from the population as broken down into different categories. This guaranteed the desired distribution among the selected categories of the population. After having the right strata, the categories were arranged accordingly where simple random sampling was used to arrive at the final respondents. This will help to reduce bias on the selection of the respondents. Respondents selected under this sampling will be people from procurement department, human resource department, IT department, Accounts and finance department and marketing department.

Purposive sampling is a sampling technique in which researcher relies on his or her judgment when choosing members of population to participate in the study. Here, the researcher will use personal judgment to choose respondents from different categories of population that will help to answer research questions to achieve the research objectives. These will include people with first information and these will be procurement personnel.

3.3 Data Sources

According to Saunders, Lewis and Thornhill (2009), the two most commonly used primary data collection methods were the questionnaire and the interview. All research was generally concerned with obtaining answers to questions.

3.3.1 Primary data

Primary data was collected by use of questionnaires. Questionnaires were designed in five likert scales such that respondents do not take long to fill the questionnaire. Primary data was also obtained through face-to-face interview. It is considered because it is relatively cheap due to the population targeted and easy for respondents to fill because they are given time to understand the questions before responding.

3.3.2 Secondary data

This is the use of the already collected data that is not specifically gathered for the research question at hand (Kothari, 2004). This data could be government or non-governmental / private statistics. Secondary data was obtained from reports, journals, magazines, books, articles and other literatures written by different knowledgeable scholars who are related to the study objectives.

Secondary data was gathered from secondary sources, internal or external. Secondary data sources are “books and articles in which other researchers report the results of their research based on (their) primary data or sources”. This data was collected from existing literature of authors that have written about the variables. Secondary data for this study was from abstracts and journals of various scholars and archived reports.

3.4 Data collection instruments

The questionnaires and structured interview instruments were structured in line with the research objectives and questions which were made up of both open and close-ended questions. Questionnaire and interview with data collection instruments that will enable the researcher to pose questions to subjects in his/her search for answers to the research questions. Both questionnaires and interviews with distinct features bore on the correct and appropriate use of each for specific data collection purposes.

3.4.1 Interview guide

An interview is a conversation between two or more people i.e. the interviewer and the interviewee, where interviewees are questioned by the interviewer to obtain information. This method suited the research most appropriately and the researcher was able to collect data through in-depth semi structured interviews consisting of few open ended questions which allowed a two-way communication between the interviewer and interviewee and the interviewee gave unbiased opinions which proved to be a useful pool of resources for the researcher to analyze the situation and provide the researcher with deeper understanding of the subject and enabled accurate understanding.

3.4.2 Questionnaires

The study used the questionnaire method of data collection because of its numerous advantages and its ability to yield the most satisfactory range of reliable data. The questionnaire comprised of closed ended questions that gave the respondent a variety of choices to select the most suitable answer. Questions were organized according to the objectives of study and responses were rearranged based on Likert scale of 1 - 5 where; 1 - Strongly Agree (SA), 2 - Agree (A), 3 - Not sure (NS), 4 - Disagree (D) and 5 - Strongly Disagree (SD) with assertion. This was meant to establish the extent to which respondents agreed with the statements.

3.5 Quality data control

Quality control of data is an integral part of all research and takes place at various stages, during data entry or digitization, and data checking. It was vital to develop suitable procedures before data gathering starts. The data collected was valid, accurate and consistent with the study.

3.5.1 Validity

Validity of an instrument is how accurate the instrument is in obtaining the data it intends to collect (Mugenda&Mugenda 2003). Validity indicated the degree to which the instrument measured what it was supposed to measure (Kothari, 2004). To ensure precision, relevance and content validity of the instrument, the questionnaire were subjected to critical evaluation by the researcher and the supervisor.

To measure the consistency of the scores obtained, and how consistent it was for each individual from one administration of an instrument to another and from one set of items to another, the study used Cronbach's alpha (a measure of the internal consistency of the questionnaire items) using data from all the respondents.

3.6.2 Reliability

Reliability means the extent to which results are consistent over time. If the results of a study can be reproduced under a similar methodology, then the research instrument is considered reliable (Joppe, 2000). The strategies used to obtain reliability were prolonged engagement and audit trails for qualitative data. Data will systematically be checked, focus maintained and there will be identification and correcting of errors (Tashakkori & Teddlie, 2010). This was to ensure accuracy of data collected. A separate reliability test for each of the variables was computed. The key statistics in interpreting the reliability of the scale was the alpha listed under the reliability co-efficient section at the end of the output.

The value of coefficient alpha ranged from zero (no internal consistency) to one (complete internal consistency). The study used multiple items in all construction and so the internal consistency method was applied in the study.

3.6 Data Processing

Sarantakos (2000) described data analysis as data that was statistically analyzed in order to determine whether the generated hypotheses had support. The structured questionnaires were coded for all questions in respect to each research objective so as to ensure that processing of data was easily done before fieldwork. The data collected was analyzed using quantitative method and analysis was done using descriptive statistics. According to Cooper and Schindler (2006), descriptive analysis involved the process of transforming raw data into charts, tables with frequency distribution percentages to enable full interpretation of data. A computer package known as excel was used to analyze the data. The study employed the use of statistical frequencies like percentages to analyze the various differences in population demographics.

Qualitative data analysis included analyzing data during and after collection and this involved identifying the themes of the study. All responses were coded according to each theme and analyzed accordingly.

3.7 Data analysis

Data was compiled, sorted, classified and entered into the computer analysis using statistical package for social sciences (SPSS) program version 16. Descriptive statistics such as tables were used in the presentation of data and the data collected was analyzed and presented using frequency tables. A Regression analysis was used to determine variance in the dependent variable that is explained by the independent variable.

3.8 Ethical consideration

The researcher complied with ethical procedures to protect the rights of the research participants, involving the principle of voluntary participation which required that participants did not need to be coerced into participating in this research. The following ethical measures were adhered to (sekaran, 2003)

Right of the participant: In this study, no attempt was made to harm participants deliberately and who could experience any form of harm be it through victimization, emotional or otherwise, would be informed in advance of their right to withdraw from participating in the study.

Confidentiality and anonymity: Confidentiality meant that information from participants was not going to be divulged to the public nor made available to colleagues, subordinates or superiors. In this information about participants' was treated with confidentiality and the participants were anonymous (Saunders, et al., 2003). A covering letter also assured respondents that all responses were treated with utmost confidentiality and anonymity.

3.9. Limitations of the study

Various challenges were encountered during this study. The first challenge was lack of resources to carry out more detailed research. Detailed research also requires ample time which was not available as I was preparing for tests and final exams in order to avoid retaking some course units. Availability of time and resources may have led to improved conclusion.

Some of the target respondents did not provide answers to all the questions asked due to fear of revealing information to competitors even though the research was purely for academic purpose this limited the response rate. Some questions in the questionnaire were not answered denying the study required data. The weakness associated with the use of questionnaires cannot be ruled out. Respondents might have had difficulty in understanding certain questions and either left them blank or filled irrelevantly.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.0. Introduction

This chapter analyzes and presents the findings of the study. The findings are presented in tables and are guided by the objectives of the study. However, in order to obtain information needed, the questionnaires were distributed to the staff and clients of Spedag interfreight Uganda limited.

4.1. Sample characteristics of the respondents

This section presents the characteristics of respondents such as their gender, marital status, age bracket, number of years worked within the organization and highest level of education attained. The results are the results are presented in tables with generated respective frequencies.

4.1.1. Gender of the respondents

Table 2: Gender of the respondents

Gender	Frequency	Percentage (%)
Male	39	55.7
Female	31	44.3
TOTAL	70	100

Source: Primary Data, 2019

The results in the above table (table 2) show that most of the respondents were males with a percentage of 55.7%. The study also indicated that the female respondents were few with a percentage of 44.3%.

4.1.2. Age bracket of the respondents

Table 3: Table 3: Age bracket of the respondents

Category	Frequency	Percentage (%)
20 – 25	12	17.1
26 – 30	32	45.7
31 – 35	8	11.4
36 – 45	5	7.1
46 – 50	9	12.8
50 and above	4	5.9
Total	70	100

Source: Primary Data, 2019

The result in table 3 show that most of the respondents were in the 26 – 30 years age bracket with the rate of 45.7% while those found in the range of 20 – 25 years represented 17.1%, those found within the range of 46-50 years represented 12.8% of the sample population. Other age groups represented only 24.4% as shown in the above table i.e. only 11.4% were in the 31 – 35 age bracket, 7.1% represented those in 36 – 45 age bracket and those who were above 50 years represented 5.9% of the sample population.

4.1.3. Marital status of the respondents

Table 4: Marital status of the respondents

Marital status	Frequency	Percentage (%)
Single	42	60
Married	24	34.3
Divorced	3	4.3
Widow (er)	1	1.4
Total	70	100

Source: Primary Data, 2019

The results in table 4 show that most of the respondents were single (60%) while only 34.3% were married and respondents who were widows represented only 1.4%. the study also indicated that the respondents who were divorced comprised 4.3% of the sample population.

4.1.4. Number of years worked in the company

Table 5: Number of years worked in the company

Years worked in the company	Frequency	Percentage (%)
0 – 3 years	29	41.4
4 – 5 years	21	30
5 – 6 years	13	18.6
6 and above	7	10
Total	70	100

Source: Primary Data, 2019

The results in table 5 show that most of the respondents had worked between 0 – 3 years representing 41.4%, 30% of the respondents worked between 4 – 5 years and those who worked between 5 – 6 years represented 18.6% while only 10% has worked for 6 years and above.

4.1.5. Highest level of education attained

Table 6:: Highest level of education attained

Level	Frequency	Percentage (%)
Certificate	10	14.3
Diploma	12	17.1
Bachelor	34	48.5
Masters	5	7.1
Postgraduate	9	12.9
Others	0	0
Total	70	100

Source: Primary Data, 2019

The results in table 6 show that most of the respondents were degree holders with a rate of 48.5%, 17.1% represented Diploma holders while 14.3% of the sample population represented the certificate holders. The holders of Master's degree represented 7.1% and those who completed post graduate represented 12.9% of the sample population.

4.2. Descriptive statistics

4.2.1. Different types of Risks faced by Spedag interfreight Uganda limited

(1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree)

Table 7: Different types of Risks faced by Spedag interfreight Uganda limited

Statements	1	2		3	4	5
The company experiences risks in its operations	19(27.1%)	32(45.7%)		11(15.7%)	5(7.2%)	3(4)
Demand uncertainties influence the company forecasts	18(25.8%)	42(60%)		4(5.7%)	5(7.1%)	1(1)
Financial risks influence the company's bottom-line	20(28.5%)	46(65.7%)		3(4.2%)	1(1.4%)	0
Performance risk affects the company's dependability	24(34.2%)	34(48.5%)		2(2.8%)	6(8.5%)	4(5)
Reputational risk influences the company's profitability	13(18.5%)	41(58.5%)		9(12.8%)	7 (10%)	0
Supply uncertainties influence the company's sales growth	25(35.7%)	33(47.1%)		6(8.5%)	4(5.7%)	2(2)

Source: primary data, 2019

Based on the findings, the majority 72.8% (51/70) agreed that the company experiences different types of risks in its operations while 11.5% (8/70) disagreed and 7.3% (11/70) were neutral to the statement.

85.8% (60/70) agreed that demand uncertainties influence the company's forecasts whereas only 8.5% (6/70) disagreed and 5.7% (4/70) were neutral to the statement. Further, 94.2% (66/70) agreed that financial risks influence the company's profitability while only 1.4% (1/70) disagreed and 4.2% of the respondents were neutral to the statement. Besides that 82.7% (58/70) agreed that performance risk affects the company's dependability while 14.2% (10/70) disagreed and 2.8 % (2/70) were neutral to the statement. 77% (54/70) agreed that reputational risk influences the company's profitability whereas, 10% of the respondents disagreed and 13% were neutral to the statement. The finding further showed that 82.8% (58/70) agreed that supply uncertainties affect the company's sales growth while 8.5% disagreed and 8.5% were neutral to the statement.

4.2.2. Relationship between risk management and operational performance of Spedag interfreight Uganda limited.

Table 8: Relationship between risk management and operational performance of Spedag interfreight Uganda limited.

Statement	1	2	3	4	5
Effective management of risks improves operational flexibility	23(32.9%)	31(44.4%)	6(8.7%)	6(8.7%)	4(5.3%)
Increased cost escalation lowers the company's profitability	23(32.9%)	29(41.5%)	10(14.2%)	7(10%)	1(1.4%)
Increased in logistical costs reduces the company's speed in delivering goods/services	13(18.6%)	41(58.6%)	9(12.8%)	5(7.1%)	2(2.9%)
Establishing an effective supplier-buyer relationship structure enhances the company's efficiency	24(34.2%)	34(48.5%)	6(8.7%)	5(7.1%)	1(1.4%)
Effective management of risks improves company's visibility and responsiveness	17(24.3%)	42(60%)	5(7.1%)	3(4.3%)	3(4.3%)
Good risk management practices enhances the firm's ability to maximize value created for its stakeholders	16(22.8%)	35(50%)	10(14.3%)	9(12.9%)	0

Source: primary Data, 2019

According to the findings, the majority 77.3% of the respondents agreed that effective management of risks improves operational flexibility while 14% disagreed and 8.7% were neutral to the statement. Further, 77.4% agreed that an increase in cost escalation lowers the company's profitability while 11.4% of the respondents disagreed and 14.2% were neutral to the statement.

Besides that 77.2% of the respondents agreed that an increase in logistical costs reduces the company's speed in terms of delivering goods and services while 10% disagreed and 12.8% were neutral to the statement. Similarly, 82.7% agreed that establishing an effective supplier-buyer relationship structure enhances the company's efficiency while 8.5% of the respondents disagreed and 8.7% were neutral to the statement. Further, 84.3% of the respondents agreed that effective management of risks improves the company's visibility and responsiveness while 8.6% disagreed and 7.1% were neutral to the statement. Lastly, 72.8% of the respondents agreed that good risk management practices enhance the firm's ability to maximize value created for its stakeholders while 12.9% disagreed and 14.3% of the respondents were neutral to the statement.

4.2.3. The effect of operational risk on performance of Spedag interfreight Limited

Table 9: The effect of operational risk on performance of Spedag interfreight Limited

Statements	1	2	3	4	5
Having dependable suppliers reduces the amount of supply failure	17(24.3%)	40(57.2%)	6(8.6%)	5(7.1%)	2(2.8%)
Effectively managing costs lowers material prices	22(31.5%)	34(48.5%)	4(5.7%)	6(8.6%)	4(5.7%)
Having effective operational performance measures enhances the company's reputation	19(27.1%)	30(42.8%)	8(11.6%)	10(14.2%)	3(4.3%)
Flexibility in operations reduces supply mismatches in the delivery of materials	13(18.6%)	41(58.6%)	9(12.8%)	5(7.1%)	2(2.9%)
Having good quality measures in place lowers the supply returns or cancellations	18(25.8%)	32(45.7%)	7(10%)	8(11.4%)	5(7.1%)

Source: Primary Data, 2019

The results in the table above show that 9.9% of the respondents disagreed while the majority 81.5% agreed that dependable suppliers reduces the amount of supply failure but 8.6% of the respondents were neutral to the statement. Similarly, 80% agreed that managing effectively costs lowers material costs while 14.3% disagreed and 5.7% of the respondents were neutral to the statement. Further, 69.9% agreed that effective operational performance measures enhance the company's reputation while 18.5% disagreed and 11.6% of the respondents were neutral to the statement. 77.2% agreed that flexibility in operations reduces supply mismatches in the delivery of materials while 10% of the respondents disagreed and 12.8% were neutral to the statement. Lastly, 18.5% of the respondents disagreed while the majority 71.5% agreed that good quality measures in place lowers the supply returns or cancellations but 10% of the respondents were neutral to this statement.

4.3. Regressions Analysis

To establish the extent to which risk management impact the performance of logistics companies, a prediction model was developed using multiple regression analysis as shown in table 10 and 11 below.

4.3.1. Model summary

Table 10:: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.735a	.690	.612	.40644
a. Predictors: (Constant), Risk Management variables				

Source: Primary Data, 2019

From the regression results on the relationship between risk management and operational performance of logistics companies in Uganda, it is evident that the R square value is 0.690. this implies that the independent variables of risk management explain 69% of the variance in the operational performance of logistics companies in Uganda explained 69% which the greatest percentage of the variance in risk management and operational performance in Uganda while 31% of the variations are explained by other factors. This indicates that risk management variables positively affect the operational performance of logistics companies in Uganda and the relationship is significant.

4.3.2. Regression Coefficients

Table 11: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.640	.111		3.058	.003
Risk Management	.742	.049	.603	17.294	.001
a. Risk Management variables b. operational performance					

Source: Primary Data, 2019

As shown in Table 11, risk management had a positive effect on operational performance of logistics companies in Uganda because it has a positive coefficient. This effect was significant at 5% level, $\beta = 0.640$, $p = 0.001$. This confirms that risk management variables directly affect or influences the operational performance of logistics companies.

Further, the results from table 10 above show that risk management causes 69% in the variations of operational performance of logistics companies, implying that other than risk management, there are other factors that affect operational performance of logistics companies. However, information risk management is the significant predictor of operational performance of logistics companies. This means that an improvement in the risk management practices leads to 0.603 (60.3%) positive changes in performance of logistics companies. The model indicated that risk management had the highest prediction potential of operational performance of logistics companies.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS



5.0. Introduction

This chapter covers the summary of the study, conclusions and recommendations. It further highlights the limitations faced during the study and indicates possible areas for further research.

5.1. Summary of the Findings

The general objective of this study was to determine the relationship between risk management and operational performance of Logistics Companies in Uganda. This study also sought to identify the risks faced by Logistics Companies in Uganda, to determine the effect of operational risk on performance of logistics companies; to investigate the relationship between Risk management and operational performance of logistics companies. Questionnaires were administered to different individuals through a drop and pick approach. Data was analyzed using SPSS and presented in Tables.

5.1.1. Different types of Risks faced by Spedag Interfreight Uganda Limited

Respondents were asked whether their company experiences risks in its operations, the majority of the respondents agreed with the statement at a rate of 72.8%. Further, 85.8% agreed that demand uncertainties influence the company's forecasts. Besides that 94.2% of the respondent agreed that financial risks influence the company's profitability. The finding further showed that 82.7% agreed that performance risk affects the company's dependability. 77% agreed that reputational risk influences the company's profitability. Lastly, almost all the respondents 82.8% agreed that supply uncertainties affect the company's sales growth.

5.1.2. Effect of operational risk on performance of Spedag Interfreight Uganda limited

The findings also indicate that the majority 81.5% agreed that having dependable suppliers reduces the amount of supply failure. Similarly, 80% agreed that managing effectively costs lowers material costs. Further, 69.9% of the respondents agreed that effective operational performance measures enhance the company's reputation. Also 77.2% agreed that flexibility in operations reduces supply mismatches in the delivery of materials. Lastly, 71.5% of the respondents agreed that good quality measures in place lower the supply returns or cancellations.

5.1.3. Relationship between Risk Management and Operational Performance of Spedag

Interfreight Uganda limited

According to the findings, the majority 77.3% of the respondents agreed that effective management of risks improves operational flexibility. Further, 77.4% agreed that an increase in cost escalation lowers the company's profitability. Besides that 77.2% of the respondents agreed that an increase in logistical costs reduces the company's speed in terms of delivering goods and services. 82.7% of the respondents agreed that establishing an effective supplier-buyer relationship structure enhances the company's efficiency. Further, 84.3% of the respondents agreed that effective management of risks improves the company's visibility and responsiveness. Lastly, 72.8% of the respondents agreed that good risk management practices enhance the firm's ability to maximize value created for its stakeholders.

The researcher used Regressions Analysis. The regression results on the relationship between Risk management and operational performance of logistics companies in Uganda, it is evident that the R square value is 0.690. This implies that the independent variables of risk management explain 69% of the variance in the operational performance of logistics companies in Uganda explained 69% which is the greatest percentage of the variance in risk management and operational performance in Uganda while 31% of the variations are explained by other factors. This indicates that risk management variables positively affect the operational performance of logistics companies in Uganda and the relationship is significant. Further, risk management had a positive effect on operational performance of logistics companies in Uganda because it has a positive coefficient. This effect was significant at 5% level, $\beta = 0.640$, $p = 0.001$. This confirms that risk management variables directly affect or influence the operational performance of logistics companies. However, information risk management is the significant predictor of operational performance of logistics companies. This means that an improvement in the risk management practices leads to 0.603 (60.3%) positive changes in performance of logistics companies. The model indicated that risk management had the highest prediction potential of operational performance of logistics companies.

5.2. Conclusion

In line with the results of this study, it can be concluded that there is a significant relationship between risk management and operational performance of logistics companies. Risk management in logistics companies plays a vital role in ensuring companies' stability. Progress has been made in risk management by logistics companies as revealed by the study as most of the companies have risk management structures/policies/guidelines in place. This can partly be attributed by enhanced regulation and also realization of companies on the importance of risk management. However there is need to have all the companies establish the necessary risk management structures. Improvement in terms of quality and compliance to global standards is necessary in order to remain competitive. However, logistics companies need to be encouraged to invest in risk management in terms of establishing the necessary systems, staff training and research so as to be up to date on this area.

5.3. Recommendations

Depending on the findings of this study logistics companies should identify and assess different types of risks more accurately because once a risk is identified on a high level, further internal data can be analyzed to figure out where the source of the risk is. Finally appropriate measures can be chosen in accordance with the specific needs of the company and this can be considered as the first step to mitigate risks.

The researcher also recommends that Logistics companies should prioritize operational risk as it is very critical to the performance of companies. As seen from the findings of this study, operational risk affects negatively the performance of logistics companies. Companies should put in place a risk management system that enables them to identify this type of risks in early stages and as well as reducing on its impact on performance of companies.

Since there was a positive and significant relationship between Risk management and Operational performance of logistics companies, companies should enrich and empower their risk management committee, and audit function since these are very instrumental in the supply chain. This will in turn bring about better performance in terms of better profitability, flexibility, speed and dependability.

5.4. Areas of Further Research

This research was a survey on risk management and operational performance of logistics companies in Uganda. There is need for further detailed studies in the following: Relationship between risk management and performance of logistics companies in Uganda, the effect of supply risk on performance of logistics companies. The first study can be done to establish the relationship between risk management, performance of logistics companies in Uganda and the second to determine the impact of supply risk on performance. This is a wide scope research but is important to establish the nature of relationship between the three variables. Risk management study need to be widened to other sectors such as procurement, insurance and contracting companies.

Risk management predicted only 69% of the variance in the performance of logistics companies in Uganda. Therefore, further studies should be carried out to determine other factors that predict the 31% in the operational performance of logistics companies.

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APPENDICES

Appendix 1: Questionnaire

Dear Respondent,

I, BAYOSE TWAGIRA Faustin, a student of Kampala International University pursuing a Bachelor's Degree in Supply and procurement conducting a research on **Risk Management and Operational Performance of Logistic Companies in Uganda**. You are kindly requested to carefully and honestly give your opinion without reservation. The researcher will hold confidential any information given and under no circumstance will any one's name appear as an individual. I kindly therefore request that you fill in the questions as instructed respectively and the information will be used only for academic purposes.

Tick the appropriate box according to you where applicable. Fill in the information in the space provided.

SECTION A: Respondent's particulars.

1. Gender:

Male ☐

Female ☐

2. Age bracket

20-25 ☐

26-30 ☐

31-35 ☐

36-45 ☐

46-50 ☐

50 and above ☐

3. Marital status

Single ☐

Married ☐

Divorced ☐

Widow (er) ☐

4. For how long have you worked for this company?

0-3 years ☐

4-5 years ☐

5-6 years ☐

6 and above ☐

5. What is your highest level of education?

Certificate ☐

Diploma ☐

Bachelor ☐

Masters ☐

PhD ☐

Others ☐

SECTION B: Risks faced by logistics companies.

Please tick the appropriate number below depending on your level of agreement.

1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree

Statements	1	2	3	4	5
The company experiences risks in its operations					
Demand uncertainties influence the company forecasts					
Financial risks influence the company's bottom-line					
Performance risk affects the company's dependability					
Reputational risk influences the company's profitability					
Supply uncertainties influence the company's sales growth					

SECTION C: Relationship between risk management and operational performance of logistics companies.

Please tick the appropriate number below depending on your level of agreement.

1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree

Statement	1	2	3	4	5
Effective management of risks improves operational flexibility					
Increased cost escalation lowers the company's profitability					
Increased in logistical costs reduces the company's speed in delivering goods/services					
Establishing an effective supplier-buyer relationship structure enhances the company's efficiency					
Effective management of risks improves company's visibility and responsiveness					
Good risk management practices enhances the firm's ability to maximize value created for its stakeholders					

SECTION D: OPERATIONAL PERFORMANCE

Please tick the appropriate number below depending on your level of agreement.

1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree

Statements	1	2	3	4	5
Having dependable suppliers reduces the amount of supply failure					
Effectively managing costs lowers material prices					
Having effective operational performance measures enhances the company's reputation					
Flexibility in operations reduces supply mismatches in the delivery of materials					
Having good quality measures in place lowers the supply returns or cancellations					

Thank you for your time and cooperation.

May God bless you