RISK MANAGEMENT AND SERVICE DELIVERY IN THE TRANSPORT INDUSTRY

A CASE STUDY OF KENFREIGHT UGANDA LTD

BY

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2011/U/HD/393/MBA

A RESEARCH REPORT SUBMITTED TO THE GRADUATE SCHOOL AS PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF MASTER OF BUSINESS ADMINISTRATION OF KYAMBOGO UNIVERSITY

SEPTEMBER, 2013

DECLARATION

I,**Tumusanyukira Gloria B,**do hereby declare that this research report is my original work and has not been submitted before to any institution of learning for any award.

Signature..... Date.01.02.14.....

TUMUSANYUKIRA GLORIA B.

APPROVAL

This research work has been under our supervision and the dissertation is hereby submitted to the Graduate school Kyambogo University with our approval.

Signed ..... Date 3/02/2014

Mr.Samuel Alfred Wuma

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Signed ..... Date 3/02/2014

Dr. Obanda Peter

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DEDICATION

I dedicate this research report to my beloved mother Ms Nakayima Erone, the family of Dr & Mrs Katumba and Mr Paul Erongot for their moral and financial support given to me during this course.

May the merciful and loving lord bless them exceedingly and abundantly and reward them more than they ever expected.

ACKNOWLEDGEMENT

I would like to take this opportunity to acknowledge the people that assisted me during the process of writing this thesis in one way or another.

First, I would like to thank and appreciate my supervisors Dr. Obanda Peter and Mr Samuel Alfred Wuma for the feedback and comments on the content of this research report. Their guidance, intelligence and experience have greatly contributed to the report and have made me a better person.

I need also to thank Kenfreight Uganda Limited for sparing time to answer the questionnaires that I distributed. Without your corporation, it would have been a lot harder to find useful information for my questionnaires.

I am also grateful towards my dear Friends Walusimbi Salome, Prosy Omara, Nabukeera Rose, Maria Musoke, Paul Erongot, Daniel Magada, Jimmy K who has helped with statistics and my Group members for their material and moral support. Finally, I would like to thank the Almighty God, for giving me the gift of life and wisdom. For without this, I wouldn't have been able to do this thesis.

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ABSTRACT

This study focused on assessing the impact of risk management on service delivery in the transport industry at Kenfreight (u) ltd. The study was guided by three main objectives which were to; identify the risks involved at Kenfreight (u) ltd, establish the means of mitigating the various risks at Kenfreight (u) ltd and analyse the influence of risk management on service delivery at Kenfreight (u) ltd

A descriptive research design was used. The study was qualitative and quantitative in nature. Questionnaire and interview guide were used to collect data and the sample size of 46 respondents was selected using purposive and simple random sampling techniques.

In line with the first objective of this study, the findings revealed that the transport industry in general and Kenfreight (u) ltd in particular faces the following risks/challenges: Complexity of today's supply chain networks; Due to more transported goods management of the cargo is risky; Risk of theft; Risk of damage or spoilage of goods; Unreliable exchange rate; Unreliable fuel prices is a risk; Lengthy procedures pose a risk and Customs delays also pose a risk. Concerning the second objective, the study revealed that risk management is a process which involves four general stages of: Risk Planning, Risk Assessment, Risk Handling and Risk Monitoring and Reporting or evaluation. The study also revealed different means of mitigating risks in the transport industry which included; use of technology-based continuous condition monitoring, identification of triggering events and vulnerabilities, implementation of operative risk management principles, use of financial hedging to reduce the risks associated with exchange rate fluctuation and improving monitoring and security checks. On the last objective, the study revealed that Risk management helps to overcome shortages of critical items which could result into halting the operations of an organisation, Supply risks management positively affects the operations of an organisation by improving the level of customer satisfaction due to eradication of fluctuations in the level of service delivery, and, Time to market is usually improved when risks are well managed beforehand which improves the competitiveness of an organisation.

The recommendations of the study are that in order to mitigate risks, Kenfreight (u) ltd should: use technology-based continuous condition monitoring, identification of triggering events and vulnerabilities, implementation of operative risk management principles, use financial hedging to reduce the risks associated with exchange rate fluctuation and improving monitoring and security checks.

In conclusion, it is clearly a big challenge for any organisation to be able to achieve effective service delivery in today's volatile business environment. For the transport industry, there are always risks of unpredictable international fuel prices which impact on the operation costs of transport companies. Such changes need to be given special consideration in the framework of risk management as a basis to implement a stable and effective service delivery platform.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

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

1.1 Background to the study

Risk is anything that threatens or limits the ability of an organisation to achieve its mission. Risk management is a process of thinking systematically about all possible risks, problems or disasters before they happen and setting up procedures that will avoid the risk, or minimise its impact, or cope with its impact (Chapman, and Ward, 1997). According to Christopher, and Towill, (2002), Risk Management is setting up a process where you can identify the risk and set up a strategy to control or deal with it.

The business world today is characterized by globalization, trade liberalization, rough competition, high and changing customer demands, and strict law obligations. In this environment, logistics services providers (LSP) need to fully integrate efficient and effective supply chains, and hence help to realize sustaining competitive advantages for their customers (Christopher &Towill, 2002). To be able to sustain the onslaught competition, effective service delivery in the transport sector is a major facilitating factor. According to Monczka et al (2005), competition takes place at the level of sourcing and distribution rather than at the level of production. Thus, commercial supply chains evolved into dynamic networks of interconnected firms and industries in recent years. The trend of increasing business process outsourcing (BPO) of transportation and logistics activities induced logistics companies to coordinate and accelerate physical goods and information flows on multiple

levels of the supply chains (Lysons, 2006). Logistics Service Providers play a key integrative role, linking different supply chain elements with the entire delivery process by the systematic management of information (Cooper et al., 1998). In order to keep better control of the sourcing and shipping along with achieving productivity and efficiency gains, companies also started to implement more or less collaborative strategies across their entire network (Barratt, 2004; Sahay, 2003; Horvarth, 2001).

Although companies can realize efficiency and productivity improvements with lean principles, the growth of globalization, supplier dependency and variability of demands has led simultaneously to an increasing vulnerability of supply chain networks to disruption (Wagner & Bode, 2007). Such disruptions are a risk to effective service delivery and can cost a company both financially and in goodwill terms. To handle the disruptions transport companies are exposed to, there is need to make a strategic risk management plan.

Risk management is a structured process for reducing uncertainty about risks of accidental loss. This process includes identifying and evaluating risks and developing methods to deal with it.

Done correctly, risk management process also includes implementing a system that measures performances and provides feedback (Bartarliene, 2007).

It is clearly a big challenge for any organisation to be able to achieve effective service delivery in today's volatile business environment. For the transport industry, there are always risks of unpredictable international fuel prices which impact on the operation costs of transport companies. Such changes need to be given special consideration in the framework of risk management as a basis to implement a stable and effective service delivery platform.

Kenfreight ltd as one of the leading logistics companies in Uganda faces various risks that are associated with the international and local economic changes. Unstable exchange rates cause

international logistics operations to be more unpredictable. Fuel prices are always changing and this affects operational plans of Kenfreightltd as it negatively affects the profitability of the company. In such unstable economic environment, Kenfreight ltd has to undertake risk management strategies that can enable the company to minimise the effect of those uncertain occurrences. This study sought to assess the impact of risk management on service delivery in the transport industry in general and at Kenfreight ltd in particular.

1.2 Statement of the Problem

The pursuit to offer reliable services by the transport sector in Uganda has increased in recent years and companies involved in this industry have to consistently strive to meet the ever increasing customer demands for timely and cost effective deliveries (Rudaheranwa, 2004). Kenfreight (u) ltd is one of the leading transport companies in Uganda and has been striving to improve its service delivery towards its customers. In order to improve efficiency in the supply chain, companies like Kenfreight (u) ltd are embracing practices like Just-In-Time (JIT), Kanban and Vendor Managed Inventory (VMI) (Viswanathan, & Littlefield, 2009). However, efforts to meet those customer demands by Kenfreight (u) ltdhave met different challenges as the geographic scope of business grows. Unpredictable changes in the global economy, volatile fuel prices, increases in cost of labour due to currency fluctuations, port operations and customs delays, service failures due to longer supply chain lines/lead times, natural disasters, and many others have all proved to be a risk to effective service delivery for Kenfreight (u) ltd in particular and Uganda's transport industry in general (Rudaheranwa 2004). For instance, in March 2013 a crane rammed a client's motor vehicle (jaguar) at the

gate of Kenfreight ICD. This led to a claim of UGX 80,000,000 for replacement of the damaged vehicle. This would not have happened if the crane drivers and turn man had followed the procedures or if the ICD staff had prevented the client's vehicle from moving when the crane was in operation. It caused a financial loss and also an unsatisfied customer (Kenfreight management minutes, June 2013).

This unpredictable economic environment has led to reduced levels of profitability for the company and hence low levels of customer satisfaction which is dependent on effective service delivery. It was on this basis that the researcher sought to establish the impact of risk management on service delivery at Kenfreight (u) ltd.

1.3 Purpose of the Study

The purpose of this study was to assess the influence of risk management on service delivery in Kenfreight (u)ltd because Kenfreight is one of the leading transport companies in Uganda and thus could give a good representation of the transport industry.

1.4 Specific Objectives

The study was guided by the following objectives:

i. To identify the risks encountered at Kenfreight(u)ltd
ii. To establish the strategies of mitigating the various risks at Kenfreight (U) ltd
iii. To analyse the influence of risk management on service delivery at Kenfreight (u)ltd

1.5 Research questions

The study addressed the following questions:

i. What risks are encountered at Kenfreight (u) ltd?
ii. How can the various risks at Kenfreight (u)ltd be mitigated?
iii. How does risk management influence service delivery at Kenfreight (u) ltd?

1.6 Scope of the study

1.6.1 Content Scope

This study broadly covered the concept of risk management in relation to service delivery. Specific attention was given to identifying the risks encountered at Kenfreight ltd, establishing the mechanisms used to mitigate the various risks at Kenfreight ltd and analysing the influence of risk management on service delivery at Kenfreight ltd.

1.6.2 Time scope

The study was carried out from March to September 2013 and data consideration was between 2005 -2012.The time scope of seven years for data consideration was considered to be sufficient in analysing the effect of risk management on service delivery.

1.6.3 Geographical Scope

This study was carried out at the head office of Kenfreight (U) Limited which is located on Plot No.1906, Jinja Road Bweyogerere.

1.7 Significance of the study

i. This study may contribute to the knowledge bank of Kyambogo University which could be useful for future students of the institution.

ii. This study may provide important information to future researchers who would want to explore more about the concept of risk management in relation to service delivery and related fields.

iii. This study may give important hints on risk management to the management of Kenfrieght and other transport companies which could help in improving service delivery.

iv. This study may suggest mechanisms to mitigate the various risks faced by other transport companies which could help in solving the consistent challenges if adopted by the transport company.

1.8 Definition of Key Terms

Risk Management

According to Trent &Kolchin (1999), Risk management is a process of thinking systematically about all possible risks, problems or disasters before they happen and setting procedures that will avoid the risk, or minimise its impact, or cope with its impact.

Transport Industry

This is a sector that includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation (Cooper et al, 1998).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter provides a review of literature which gives insight about the concept of risk management. Specific attention is given to identifying the risks involved in the transport industry, revealing the essentials of effective service delivery and mechanisms to mitigate the various risks in the transport industry, and explaining the impact of risk management on service delivery in the transport industry.

2.1. The concept of Risk Management

Risk is virtually anything that threatens or limits the ability of an organisation to achieve its mission. It can be unexpected and unpredictable events such as destruction of a building, the wiping of all your computer files, loss of funds through theft or an injury to a member or visitor who trips on a slippery floor and decides to sue. Any of these or a million other things can happen, and if they do, they have the potential to damage your organisation, cost you money, or in a worst case scenario, cause your organisation to close (Roy, 2003).

According to Trent &Kolchin (1999), Risk management is a process of thinking systematically about all possible risks, problems or disasters before they happen and setting up procedures that will avoid the risk, or minimise its impact, or cope with its impact. It is basically setting up a process where you can identify the risk and set up a strategy to control or deal with it. It is also about making a realistic evaluation of the true level of risk (Borrington & Stimpson, 2002).

According to Goran (2003), risk Management is the process of identifying and evaluating the risks associated with activities and operations of an organization; developing a means to control, reduce or eliminate those risks, as well as finance them. These risks include natural

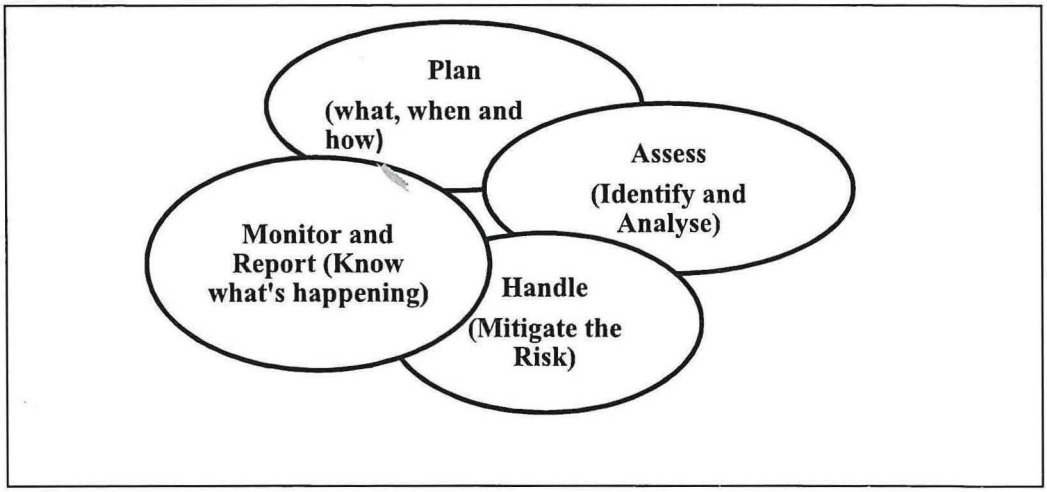
disasters, illness, injury, and loss of property resulting from unsafe practices or conditions as well as the financial cost of these losses.

Elements of Risk Management

Risk management is an organized method for identifying and measuring risk and for selecting, developing, and implementing options for the handling of risk (Chavez-Demoulin, et al 2006). It is a process, not a series of events. According to Duffie and Singleton (2003), risk management depends on risk management planning, early identification and analysis of risks, continuous risk tracking and reassessment, early implementation of corrective actions, communication, documentation and coordination.

Though there are many ways to structure risk management, this study structures it as having four parts: Planning, Assessment, Handling, and Monitoring. As depicted in Figure 2.1.1 all of the parts are interlocked to demonstrate that after initial planning, the parts begin to be dependent on each other. Illustrating this, Figure 2.1.1 shows the key control and feedback relationships in the process.

Figure 2.1.1Four Elements of Risk Management



Risk Planning

Risk Planning is the continuing process of developing an organized, comprehensive approach to risk management (Chavez-Demoulin, et al 2006). The initial planning includes establishing a strategy; establishing goals and objectives; planning assessment, handling, and monitoring activities; identifying resources, tasks, and responsibilities; organizing and training risk management members; establishing a method to track risk items; and establishing a method to document and disseminate information on a continuous basis.

Risk Assessment

According to Duffie and Singleton (2003), risk assessment consists of identifying and analysing the risks associated with the life cycle of the system.

Risk Identification Activities

Risk identification activities establish what risks are of concern. These activities include:

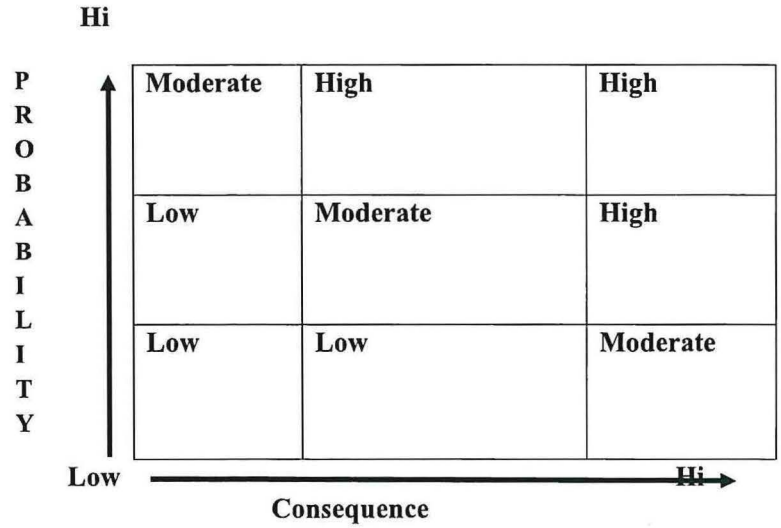
- Identifying risk/uncertainty sources and drivers,
- Transforming uncertainty into risk,
- Quantifying risk,
- Establishing probability, and
- Establishing the priority of risk items

The initial identification process starts with an identification of potential risk items in each of the four risk areas. Risks related to the system performance and supporting products are generally organized and initially determined by expert assessment of teams and individuals in the development enterprise.

These risks tend to be those that require follow-up quantitative assessment. Internal process and external influence risks are also determined by expert assessment within the enterprise, as well as through the use of risk area templates.

After identifying the risk items, the risk level should be established (Horvarth, 2001). One common method is through the use of a matrix such as shown in Figure 2.1.2. Each item is associated with a block in the matrix to establish relative risk among them. On such a graph risk increases on the diagonal and provides a method for assessing relative risk. Once the relative risk is known, a priority list can be established and risk analysis can begin.

Figure 2.1.2: Simple Risk Matrix



Risk identification efforts can also include activities that help define the probability or consequences of a risk item, such as:

• Testing and analysing uncertainty away,

• Testing to understand probability and consequences, and

• Activities that quantify risk where the qualitative nature of high, moderate and low estimates are insufficient for adequate understanding.

Risk Analysis Activities

Risk analysis activities continue the assessment process by refining the description of identified risk event through isolation of the cause of risk, determination of the full impact of risk, and the determination and choice of alternative courses of action (Horvarth, 2001). They

are used to determine what risk should be tracked, what data is used to track risk, and what methods are used to handle the risk.

According to Jüttner (2005), risk analysis explores the options, opportunities, and alternatives associated with the risk. It addresses the questions of how many legitimate ways the risk could be dealt with and the best way to do so. It examines sensitivity, and risk interrelationships by analysing impacts and sensitivity of related risks and performance variation. It further analyses the impact of potential and accomplished, external and internal changes.

According to Zsidisin et al (2000), risk analysis activities that help define the scope and sensitivity of the risk item include finding answers to the following questions:

- If something changes, will risk change faster, slower, or at the same pace?
- If a given risk item occurs, what collateral effects happen?
- How does it affect other risks?
- How does it affect the overall situation?
- Development of a watch list (prioritized list of risk items that demand constant attention by management) and a set of metrics to determine if risks are steady, increasing, or decreasing.
- Development of a feedback system to track metrics and other risk management data.
- Development of quantified risk assessment.

Quantified risk assessment is a formal quantification of probabilities of occurrence and consequences using a top-down structured process (Zsidisin et al 2000). For each element, risks are assessed through analysis, simulation and test to determine statistical probability and specific conditions caused by the occurrence of the consequence.

Risk Handling

Once the risks have been categorized and analysed, the process of handling those risks is initiated. The prime purpose of risk handling activities is to mitigate risk (Duffie and Singleton 2003). Methods for doing this are numerous, but all fall into four basic categories:

- Risk Avoidance,
- Risk Control,
- Risk Assumption, and
- Risk Transfer.

Avoidance

To avoid risk, remove requirements that represent uncertainty and high risk (probability or consequence.) Avoidance includes trading off risk for performance or other capability, and it is a key activity during requirements analysis (Jüttner, 2005). Avoidance requires understanding of priorities in requirements and constraints. Are they mission critical, mission enhancing, nice to have, or "bells and whistles?"

Control

Control is the deliberate use of the design process to lower the risk to acceptable levels. It requires the disciplined application of the systems engineering process and detailed knowledge of the technical area associated with the design. According to Zsidisin, et al. (2000), control techniques are plentiful and include:

- Multiple concurrent design to provide more than one design path to a solution,
- Alternative low-risk design to minimize the risk of a design solution by using the lowest-risk design option,
- Incremental development, such as pre-planned product improvement, to dissociate the design from high-risk components that can be developed separately,

• Technology maturation that allows high-risk components to be developed separately while the basic development uses a less risky and lower-performance temporary substitute,

• Test, analyse and fix that allows understanding to lead to lower risk design changes. (Test can be replaced by demonstration, inspection, early prototyping, reviews, metric tracking, experimentation, models and mock-ups, simulation, or any other input or set of inputs that gives a better understanding of the risk),

• Robust design that produces a design with substantial margin such that risk is reduced, and

• The open system approach that emphasizes use of generally accepted interface standards that provide proven solutions to component design problems.

Acceptance

Acceptance is the deliberate acceptance of the risk because it is low enough in probability and/or consequence to be reasonably assumed without impacting the development effort (Duffie and Singleton 2003). Key techniques for handling accepted risk are budget and schedule reserves for unplanned activities and continuous assessment (to assure accepted risks are maintained at acceptance level). The basic objective of risk management is to reduce all risk to an acceptable level.

Transfer

Transfer can be used to reduce risk by moving the risk from one area of design to another where a design solution is less risky. Examples of this include:

• Assignment to hardware (versus software) or vice versa; and

• Use of functional partitioning to allocate performance based on risk factors.

Transfer is most associated with the act of assigning, delegating, or paying someone to assume the risk. To some extent transfer always occurs when contracting or tasking another activity. The contract or tasking document sets up agreements that can transfer risk from the government to contractor, program office to agency, and vice versa. Typical methods include

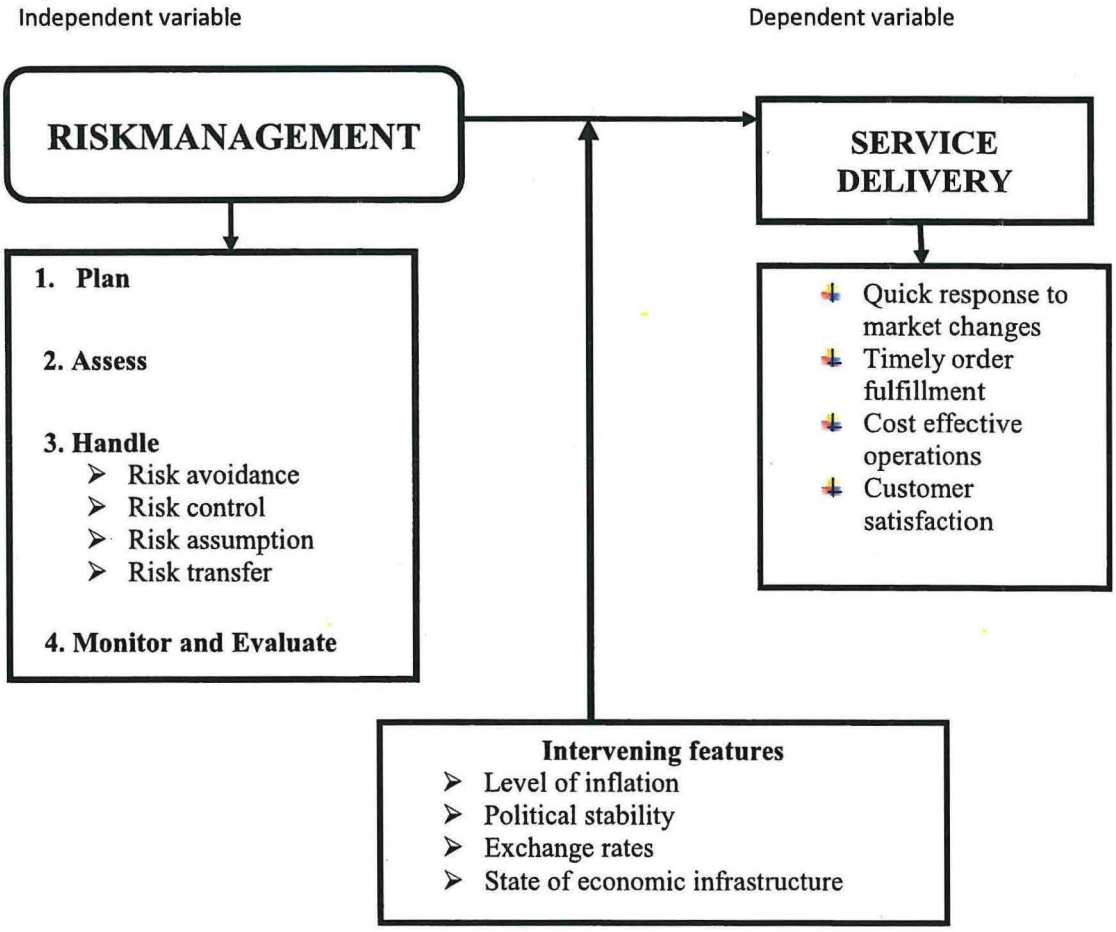
insurance, warranties, and incentive clauses. Risk is never truly transferred. If the risk isn't mitigated by the delegated activity it still affects your project or program.

Monitoring and Reporting

Risk monitoring is the continuous process of tracking and evaluating the risk management process by metric reporting, enterprise feedback on watch list items, and regular enterprise input on potential developing risks. (The metrics, watch lists, and feedback system are developed and maintained as an assessment activity.) The output of this process is then distributed throughout the enterprise so that all those involved with the program are aware of the risks that affect their efforts and the system development as a whole.

2.2 Conceptual Framework

Figure 2.2: Conceptual Framework



The conceptual framework above shows a model presentation of the two variables i.e. Risk management which is the independent variable and Service delivery which is the dependent variable. It also gives the connection of intervening variables.

Under Risk Management, the conceptual framework presents a step-by-step process of risk management that is commonly used by organisations around the world and the transport industry in particular. This process starts with planning which is followed by assessment. When risks are assessed, then the organisation can move to the next step which is handling of risks. After risks are handled, there is need to monitor and evaluate the success of risk management which completes the process.

Service Delivery is expressed in the conceptual framework by the different attributes of service delivery which include: Quick response to market changes, Timely order fulfillment, Cost effective operations and Customer satisfaction.

The conceptual framework as well expresses the intervening factors in risk management which include: Level of inflation, Political stability, Exchange rates and State of economic infrastructure all of which are explained in details with the following subsections of literature.

2.2.1Risks involved in the transport industry

Transport companies have possibility to realize their business ideas, support their own competitiveness and obtain profitable position on the market. At the same time these companies that have a key role in economic activities, have to face new risk horizons and grapple with the changes brought about by a post-down economy (Viswanathan, & Littlefield, 2009).

According to Wagner and Bode, (2007) transport and logistics operations are vulnerable to many types of risks due to an increasing dynamic and structural complexity of today's supply chain networks. Global distributed sourcing and production leads to more transported goods in general but also to more high value cargoes being shipped around the world. In this environment, logistics services providers (LSP) need to fully integrate efficient and effective supply chains, and hence help to realize sustaining competitive advantages for their customers (Christopher and Towill, 2002). Today, competition takes place at the level of sourcing and distribution rather than at the level of production. Thus, commercial supply chains evolved into dynamic networks of interconnected firms and industries in recent years. The trend of increasing business process outsourcing (BPO) of transportation and logistics activities induced logistics companies to coordinate and accelerate physical goods and information flows on multiple levels of the supply chains. LSPs play a key integrative role, linking different supply chain elements with the entire delivery process by the systematic management of information (Cooper et al., 1998). In order to keep better control of the sourcing and shipping along with achieving productivity and efficiency gains, companies also started to implement more or less collaborative strategies across their entire network (Barratt, 2004; Sahay, 2003; Horvarth, 2001). Inventory is now pulled from one stage to the next, based on real-time demand to synchronize manufacturing execution and customer demand. All depends on more proficient and reliable transportation and communication systems (Viswanathan and Littlefield, 2009).

Sources of risk in these specific logistics processes are, for examples, theft, damage, or spoilage of goods as well as in-transit or customs delays (Peleg-Gillai et al, 2006). Risk itself is an elusive construct that has a variety of different meanings, measurements and interpretations depending on the academic research field.

Identifying and assessing likely risks and their possible impact on operations is a complex and difficult task for a single company. However, to properly assess vulnerabilities in a supply chain, firms must not only identify direct risks to their operations but also the risks to all other entities as well as those risks caused by the transportation linkages between organizations (Jüttner, 2005). The process of supply chain risk management, as discussed by Closs and McGarrell (2004), refers to: "the application of policies, procedures, and technologies to protect supply chain assets from theft, damage or terrorism, and to prevent the unauthorized introduction of contraband, people or weapons into the supply chain." Risk management related to the transportation and logistics chain includes processes which reduce the probability of occurrence and/or impact that detrimental supply chain events have on the specific company (Zsidisin and Ellram, 2003).

2.2.2Requirements for effective risk management and service delivery

Baily et al (2005), states that the operation of any organisation are made possible by the availability of adequate materials which can be used in the production process. Every operational process of manufacturing organisations start with the input of raw materials into the production process which is later worked on to produce finished products. Whether or not the operational process is efficient can be determined by the availability of adequate raw materials such that the customer needs can be met through adequate production rounds. Roy (2003) argues that effective service delivery is only achieved when the organisation is in position to manufacture sufficient products that can meet the quality and quantity demands of the customer. The foundation of meeting these quality and quantity demands of customers is in the ability of acquiring and possessing the right amount and quality of materials to be used in production.

Weele (2005), points out the use of Up-to-date machinery as one of the most important factors that can enable an organisation to achieve high levels of service delivery. In today's globalised business world, Technology is an aid to achieving superior customer service by obtaining higher levels of operation effectiveness. In manufacturing, machinery is important and market leaders are the ones how have embraced modern technology that eases on the production huddles that are faced when using old and obsolete technology. It is without doubt that modern technology is the way to go and companies that have embraced modern technology stand a bigger chance of achieving effective service delivery. As economic activities span the supply chain boundary, the effective use of technology as the medium for coordination (or integration) among and within organizations has received much attention. In the US manufacturing sector, IT usage is increasingly becoming a source of sustained competitiveness and an opportunity for improvement. And there is a growing demand to achieve conflicting performance objectives (revenue versus profitability versus effectiveness, for example).

Lysons (2000) states that good management throughout the entire supply chain is a must for a company to achieve effective service delivery. Lysons argues that the production process does not start with the physical transformation of the raw materials into a product, but rather starts at the point of origin of the raw material. For effective service delivery to be realized, efforts have to be taken at every stage of the supply chain which includes all the upstream members of the supply chain. This means that the immediate suppliers, 2nd tier suppliers and subsequent ones have to be involved in ensuring that the effective service delivery is achieved. It is also clear that the operation does not end with the finalization of manufacturing of the product but there should be channels through which the product has to pass to get to the customer. These channels have to be well coordinated in order to avoid

unnecessary delays when it comes to delivering the product to the target market. Effectiveness in operation is achieved only when the customer is able to obtain the product that is of the right quality, quantity, at the right price and at the time he/she needs it. Any delays that cause the product not to reach the customer on time is tantamount to failure and such occurrences do not facilitate the achievement of effective service delivery.

Watts (1999), points out the factor of having capable and qualified human resource as an important step in achieving effective service delivery. Availability of skilled human resource can stir an organisation to heights because all decision and implementations are effected by individuals who are determined and qualified to do so. Organisations with qualified human resources tend to do better than those with least qualified staff. It is therefore essential that in order to achieve effective service delivery, an organisation needs to have adequately qualified personnel to affect such level of effectiveness. Syson (1992) argues that all improvements in an organisational setting start with the ability of the human resource that is responsible for ensuring that there is change. Syson asserts that the human resource is the most valuable resource for any company and therefore, the quality of the most valuable resource impacts so much on the overall quality of operations for a company. No company can succeed when the management is poor and this is in direct connection with the issue of the nature of the human resources that the company employs in different departments. Lysons (2000), states that no procurement effectiveness can be achieved without having adequately qualified procurement personnel responsible for the function of procurement. This understates the fact of how important it is to have the right people in the right offices if an organisation is to obtain effective service delivery.

Cronje et al (2001), states that adequate financial resources are important if a company is to achieve effective service delivery. There is nothing a company can acquire if there is no solid financial base. Materials which are used in the production process are always purchased from outside sources and this requires financial resources to settle the bills for those materials. Money is needed for the acquisition of raw materials but also for the payment of employees and the acquisition of better technology which can also facilitate a smooth and efficient operation. Monczka (1993) states that in modern economy it all starts with the financial ability of a company to conquer and be at the top. This is rooted in the fact that all essential achievement are through sufficient investment of capital and none can move forward if the capital to facilitate the stability is not available. Companies with strong customer base are the ones that are financially stable and it should be noted that there is no gain without sacrifice and this means that companies have to sacrifice some reasonable amount of financial resources in order to achieve effective service delivery.

2.2.3Mechanisms to mitigate risks

According to Reyero, &Delisle (2008), technology-based continuous condition monitoring has become a common practice for the transportation of deep-frozen goods or pharmaceuticals. In the European Union this approach is even a statutory requirement. Specialized logistics companies have therefore implemented indicator or logger systems which either show a colour indicator (e.g., fade) or track the trend of temperature on physical memory. This helps to reveal rises in temperature or abusive storage conditions. The International Organization for Standardization (ISO) has recently launched the ISO 28000 series specifying the requirements for a security management system to ensure safety in the supply chain. This ISO framework gives all supply chain partners an increased ability to effectively implement mechanisms that address security vulnerabilities at strategic and

operational levels, as well as to establish preventive action plans. Besides, a variety of international security initiatives such as the Customs-Trade Partnership Against Terrorism (C-TPAT), the Container Security Initiative (CSI), and Europe's relatively new Authorized Economic Operator (AEO) require control at loading freight. The objective of these initiatives is to improve the movement of cross-border trade (i.e., through using "green lanes") by ensuring that members of the supply chain are confirmed as secure trades (Banomyong, 2005).

Addressing risks in the supply chain requires the identification of triggering events and vulnerabilities while risks are assessed mainly with support of risk management tools (Reyero, &Delisle, 2008). Operative risk management principles expand this traditional process chain regarding loss prevention consulting, promotion of risk controlling, and cooperation in the field of technology-supported early intervention avoiding or at least minimizing losses. Risk prevention should consequently be based on continuous monitoring of the transport and warehousing conditions aiming to confine claims amounts.

According to Standards Australia (1999), risk management process consists of the following seven steps: 1. Establish the context, 2. Identify risks, 3. Analyse risks, 4. Evaluate risks, 5. Treat risks, 6. Communicate and consult and 7. Monitor and review.

Establish the Context

It is first step in risk management process for risk management (Standards Australia, 1999). Before the risk identification process, it is necessary to know what actually the risk is, so in this phase, the aims, objectives, scope of risk management in relation to the organization are defined and criteria, resources and authorities for the treatment of risks are determined. It allows in-fact representing the status of project in several forms such as resource usage,

equipment requirements, budget availability, stakeholder involvement, contract deliverables, strategic goals and schedule (Ahmed et al, 2007).

Risk Identification

The identification of risk is one of the processes of risk management, which reveals and determines the possible risk facing up means of organization. It is considered to be the most important step for risk management because it provides a base for the right future work of the organization concerning the developing and the implementation of new programs for the risk control (Tchankova , L., 2002). The method chosen for the identification of the risk depends upon the culture and organization's practices, etc. There must be a risk list provided as deliverable of risk identification phase suggesting at least one response to the identified risks (Chapman, C., 1997).Cerevon, F. H., (2006) view risk identification as a team work which looks at project events with respect to various risk categories, and extracting those which could have a negative impact on the project. Due to vast changes in organizational environment, the risk identification process must be continuous.

Risk Analysis

After the identification of risks, analysis is done to determine their characteristics whether they are worth of further analysis (Ahmed et al., 2007). In this stage, each risk identified is assigned a significant rating. By doing so, it helps in better understanding the possible impact of a risk or the likelihood of it occurring. The purpose of risk analysis is to provide information to business owners to make decisions regarding priorities, treatment,etc (Standards Australia, 2004). Commonly two types of risk analysis are used (Kinch, J., et al, 2007).

- Quantitative
- Qualitative.

Risk Evaluation

Risk analysis provides a basis for risk evaluation in which it is decided which risk is to be treated or accepted which action plan is better to implement. The evaluation stage usually depends on the number of risks. However, when there are only few risks then the evaluation stage might be lightweight, but, when there are many risks and the situations are complex, then the evaluation becomes difficult (Standards Australia, 2004). Moreover, in the evaluation stage risks should be examined individually as well as their combined impact on the project (Elkington P. et al, 2002). In risk evaluation, different mitigation options are determined keeping in view the risk events and then most suitable option is incorporated into the risk mitigation plan (Ahmed et al, 2007).

Risk Treatment

The important result of the risk management process is the risk treatment. Risks are determined which have worth of further investigation due to either of their relative importance or because of their high chance for occurring again. Risks can be treated either through proactive approach or through reactive approach. Reactive approach refers to the actions initiated after the eventuation of the risks events while proactive approach refers to actions initiated based on chance of the occurrence of certain risks (Ahmed et al., 2007).

Standards Australia (2004) identifies the following options for the treatment of risks;

- Reduce the likelihood
- Reduce the consequences
- Transfer the risk
- Accept the risk
- Avoid the risk

Risk Monitor and Review

This is an essential step in risk management process where risks are properly monitored and the effectiveness of risk treatment plan is reviewed. Risks are needed to be monitored to ensure changing circumstances do not alter the risk priorities. Very few risks will remain static; therefore the risk management process needs to be regularly repeated, so that new risks are captured in the process and effectively managed (Standards Australia, 2004).

Communicate and Consult

The whole process of risk management requires healthy contributions from all the participants within the organization (Ahmed et al, 2007). Consultation and communication are key components of the risk management process involving all the stakeholders with a role to play in achieving a successful outcome of the project or any business activity (Standards Australia, 2004). In future, the face of risk communication will be two folded: First, organizations have to expand their internal communication, Secondly, the demands of external stakeholders will likely to be increasing (Lee B. Ryan et al., 2005). Organizations must establish a proper communication strategy to support effective communication and consultation. Moreover, focus should be on consultation so it is important that stakeholders must be communicated throughout the risk management process and after that their perceptions must be recorded which would be helpful in decision-making.

According to Monczka et al (2005), there are five general steps in formulating a risk strategy and implementation plan:

1. Understand the Risk Environment: Review the management model and understand the current business strategy. Review related documentation (operations, contracts). Review compliance documentation (OSHA, HIPAA, ISO, etc.). Review risk-related metrics (accidents, auditor reports, insurance claims, contract claims, disasters, demand spikes).

2. Identify and Assess Current Risk: Evaluate current process, and external factors, highlighting specific threats and assess risk maturity. Evaluate current processes. Validate and improve existing metrics. Identify opportunities for risk management improvement. Identify specific external influences on the process (identify trigger, resolution, and point of contact). Identify key drivers of current risk maturity (Monczka et al, 2005).

3. Quantify and Prioritize Risk: Measure the likelihood or impact and ease of detection. Weigh risk according to risk factors and financial implications. Estimate costs and investments.

4. Develop Risk Mitigation Strategy and Business Case: Develop improvement recommendations and risk mitigation plans for the enterprise and extended supply chain. Develop cost/benefit analysis.

5. Develop Implementation Roadmap: Select a course of action. Develop tentative list of implementation partners. Generate initial timeline.

2.2.4Impact of risk management on service delivery

According to Jüttner (2005), effective risk management can minimize a lot of unforeseen future events that can put a company into problems with its customers when left unplanned for. Zsidisin, et al (2000) suggests that risk management is a weapon that off-sets eventualities that come any time. In such conditions, organisations are always on guard to handle any changes in either demand or supply without compromising the service quality to customers. If customer service delivery is to be improved, risk management strategies must be in place and well-coordinated (Wagner, & Bode, 2007). The following are some of the areas in which risk management impacts on service delivery.

Elimination of Shortages for critical items

Unmanaged risks can lead to shortages of critical items which can result into halting the operations of an organisation (Lysons, 2006). The major goal of an organisation is to have the required inputs at the right time, in the right quantity and quality (Sahay, 2003). Availability of inputs and consumables is one of the key aspects that make it possible for an organisation to maintain a stable flow of activities which are important for the daily operations of an organisation (Borrington & Stimpson, 2002). In situations where the supply of inputs is not guaranteed due to supply risks, organisations find it difficult to maintain a standard level of service to its customers (Peleg-Gillai et al, 2006).

Reducing the level of customer satisfaction

Supply risks negatively affect the operations of an organisation by reducing the level of customer satisfaction due to fluctuations in the supply of outputs (Borrington & Stimpson, 2002). Customers require the availability of their product of choice to be constant (Oakland, 1993). Organisations that face supply uncertainties fail to provide effective services on time which negatively impact on the perception and satisfaction of the customers. It is therefore important to note that risk management enables an organisation to handle and sail through challenging times without compromising service delivery.

Improving Time to market

Time to market is usually negatively affected by supply risks which reduce the competitiveness of an organisation (Weele, 2005). A competitive business environment requires an organisation to effectively respond to the requirements of customers (Lysons, 2006). Unforeseen events make it difficult to maintain a stable service delivery timetable which results into customer dissatisfaction. Risk management enables the organisation to overcome this challenge.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents how the study was conducted. It explains the research design used, study area, sampling method and criteria, tools used, the procedure of collecting data, and, how data was analysed.

3.1 Research Design

A Case Study/descriptive research design was used in this study. This involved intensive study geared towards a thorough understanding of the given unit (Cooper, and Schindler 2001) which was Kenfreight for the sake of this study. Qualitative and quantitative methods were used in data collection. The qualitative methodology was used when conducting interviews which allowed respondents freedom to give their views about the impact of risk management on service delivery. Quantitative approach was used when administering the questionnaires and this enabled the researcher to get specific information about the study objectives in relation to the case study (Onwe, 1998).

3.2 Study Area

The study was carried out at the head office of Kenfreight (U) Limited which is located on Plot No.1906, Jinja Road, Bweyogerere. This was chosen because Kenfreight (U) Limited is one of the leading transport companies in Uganda and the researcher had reliable access to necessary information.

3.3 Target Population

This study useda target population of 50 employees of Kenfreight (U) Limited which is one of the leading transport and logistics companies in Uganda. The study population included respondents from Top Management, Middle Management, Logistics Department and Other departments.

3.4 Sample size and composition.

Using the Krejcie, & Morgan, (1970) Table for Determining Sample Size from a given Population, this study was targeting a minimum sample size of 45 respondents. The researcher managed to get responses from 46 respondents which improved the comprehensiveness of the study.

Table 3.I: ***Composition of the sample***

Category	population	Sample size	Data collection instrument
Top management	5	5	Interview
Middle management	13	10	Questionnaires
Logistics department	6	5	Questionnaires/interview
Others departments	28	26	Questionnaires
TOTAL	52	46	

3.5 Sampling technique

3.5.1 Sampling technique

The researcher used both simple random and purposive sampling techniques.

3.5.1.1 Simple random sampling

Simple random sampling is effective in choosing respondents from a homogeneous population (Nachimias, and Nachimias, 1976). Simple random sampling technique was applied when selecting respondents from the different departments. This was done by randomly distributing the questionnaire to respondents from the different departments on a first-come first-serve basis.

3.5.1.2 Purposive sampling

Purposive sampling works well when dealing with specific sections of the target population that have professional knowledge about the topic of study (Mbabazi 2008). Purposive sampling was used when selecting respondents from the logistic department and the criteria for selection was based on the level of knowledge and experience in handling issues of risk management.

3.5.2 Sampling procedure

The researcher randomly distributed questionnaires to respondents from different departments that constituted the target population and the procedure was based on first come first serve (Cooper, and Schindler, 2001). Specific attention was given to respondents from the Logistics department and the researcher sought an interview with the head of the logistics department.

3.6 Sources of Data

3.6.1 Primary sources.

Primary sources of information are those that provide first-hand accounts of the events, practices, or conditions you are researching (Cooper, and Schindler, 2001).The data in this primary source was collected through first-hand information from answered questionnaires and responses obtained during interviews with the head of Logistics department, and 5 respondents from top management.

3.6.2. Secondary sources

Secondary sources of information are those created by someone who does not have first-hand experience of the events or conditions in the case study (Hussey and Hussey, 1997).Secondary data was obtained from authorities such as text books and journals which handled the concept of risk management in relation to service delivery.

3.7 Data Collection Tools

3.7.1 Questionnaires

A questionnaire as a research tool can be defined as a form or blank to be filled by research respondents (Mbabazi, 2008). Questions were formulated in a questionnaire which was supplied to respondents from the different departments of Kenfreight Ltd. The questions were derived from the objectives of the study. This method was chosen because it is effective in obtaining specific data about the topic.

3.7.2 Interviews

An interview is a dialogue between interviewers and interviewee for the purpose of gathering data about the study variables (Cooper and Schindler, 2001). The researcher held interviews with particular individuals who had professional knowledge about risk management. The interviews were appropriate for situations where detailed information was required.

3.8 Validity and Reliability of Data Collection Tools

3.8.1 Validity of Tools

Validity is used to determine whether a research instrument measures what it intended to measure (Hussey and Hussey, 1997).To ensure validity of the questionnaires and interview guide, experts on the topic were consulted about the content of the questionnaire to establish relevance of the questions. Thereafter, the questions were subjected to a content validity test which was computed using the following formula;

$$CVI = \frac{K}{N}$$

Where, CVI = Content Validity Index, K= Total Number of Items rated as relevant, N= Total Number of Items in the questionnaire.

The total number of items rated relevant was 25 and the number of items in the questionnaire was 27. Using the above formula, the content validity index for the questionnaire was calculated as follows;

$$CVI = \frac{25}{27} = 0.93$$

Therefore the items in the questionnaire were taken to be valid since the content validity index of 0.93 was within the accepted range of >0.5<1.

3.8.2 Reliability of Tools

Reliability of the questionnaire was ensured by using Cronbach's alpha. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. A standardized Cronbach's alpha formula given below was used.

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

Where, N is equal to the number of items, c-bar is the average inter-item covariance among the items and v-bar equals the average variance.

Case Processing Summary

		N	%
Cases	Valid	9	34.6
	Excluded[a]	17	65.4
	Total	26	100.0

a. List wise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.725	.814	25

The Cronbach's Alpha coefficient for the 25 items was .725, suggesting that the items had relatively high internal consistency. (Note that a reliability coefficient of .70or higher is considered "acceptable" in most research situations).

3.9 Procedure of Data collection

The researcher designed the research tools which included the questionnaire and the interview guide. The tools were examined by the research supervisor and then tested to ensure their effectiveness before being applied on the respondents. The researcher then got an introduction letter from the university authorizing and recommending the conducting of research. The introduction letter was taken to the respondents' organisation to obtain approval for conducting the study with their help. After the data was collected, the researcher recorded, analysed and compiled the findings in this report.

3.10 Data processing, Analysis, and presentation

Coding of the data was done by the researcher. The data was then put into a tabular form to be checked, edited and analysed to ensure consistency and relevance. Figures such as graphs and pie charts were used to present the data collected for easy interpretation of the findings. Computer programs such as SPSS and Excel were used to aid the statistical analysis.

3.11 Limitations and delimitations of the study

i. Limited funds for undertaking the study. To overcome this, the researcher made a budget and sought for contribution from family members.

ii. Some respondents were not cooperative due to fear of releasing sensitive information about the company's business strategies. This was addressed by assuring them that information obtained was strictly to be used for academic purposes and would be treated with utmost confidentiality.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF THE FINDINGS

4.0 Introduction

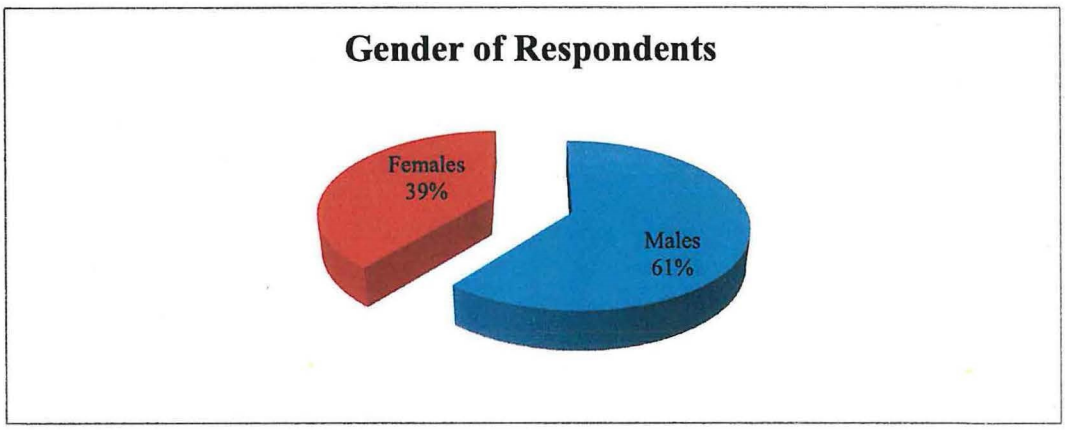
This chapter presents the data, gives the analysis and interpretation of the major findings. The findings are explained and presented in line with the research objectives.

4.1 General information on respondents

This section gives bio data of the respondents who participated in this study. The study targeted a population of 50 respondents and needed a minimum sample size of 44 respondents basing on the Krejcie, & Morgan, (1970) Table for Determining Sample Size. The researcher managed to get response from 46 respondents and their bio data is presented in the following sub-sections.

4.1.1 Gender of Respondents

Figure 4.1.I: Gender Composition of Respondents

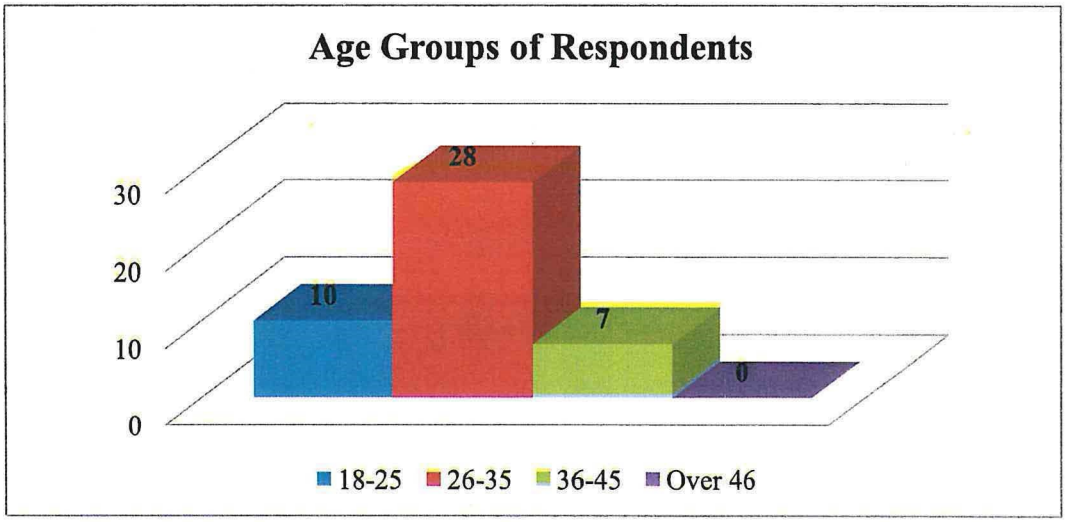


Source: Primary data

As indicated by Figure 4.1.I above, the study involved 39% (18) females and 61% (28) males. This indicates that there is a good mixture of gender at Kenfreight (U) ltd. However, findings from one industry player may not give a general picture about gender balance in the entire transport industry.

4.1.2 Age Group

Figure 4.1.II: Age grouping of respondents

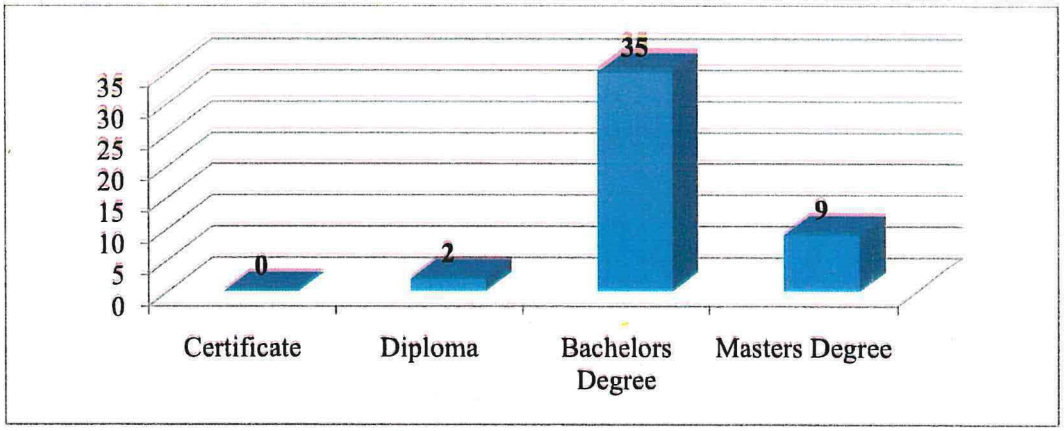


Source: Primary data

Majority of the respondents 28 (61%) were aged between 26 and 35 years, 10 (22%) were aged between 18 and 25 years. Only 7 (15%) were above 36 years and none was beyond 46 years.

4.1.3 Level of Education

Figure 4.1.III: Education of Respondents

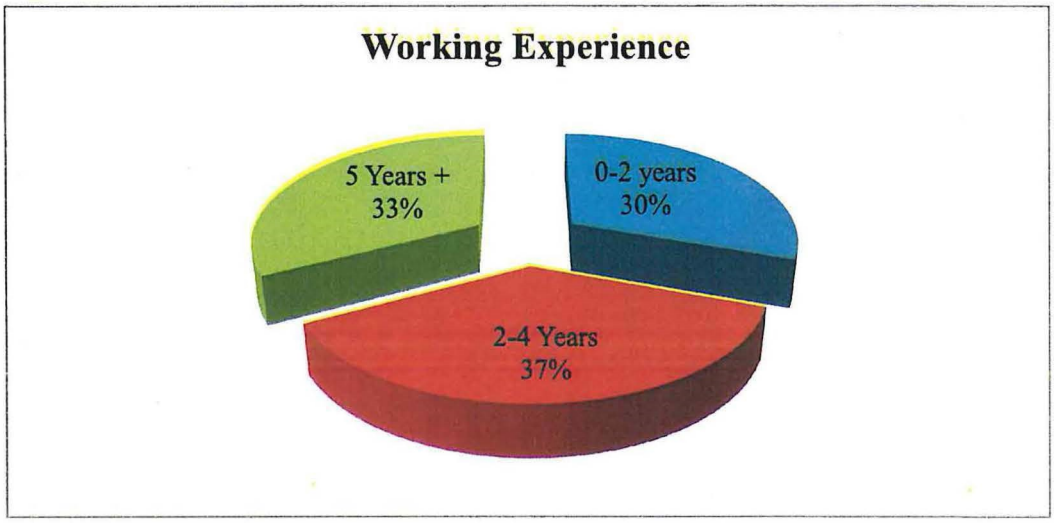


Source: Primary data

All respondents had attained education from High institutions of learning whereby 35 (76%) were graduates with Bachelor's Degrees, 9 (20%) had Master's Degree and only 2 (4%) had Diplomas. This indicates that all respondents were well educated and had a good knowledge of the study variables.

4.1.4 Work Experience of Respondents

Figure 4.1.IV: Working Experience



Source: Primary data

Respondents had varied working experience. Only 33% of the respondents had been working for more than 5 years. This is so because of the young workforce at Kenfreight (U) Limited.

4.2 Risks Involved at Kenfreight (U) Limited

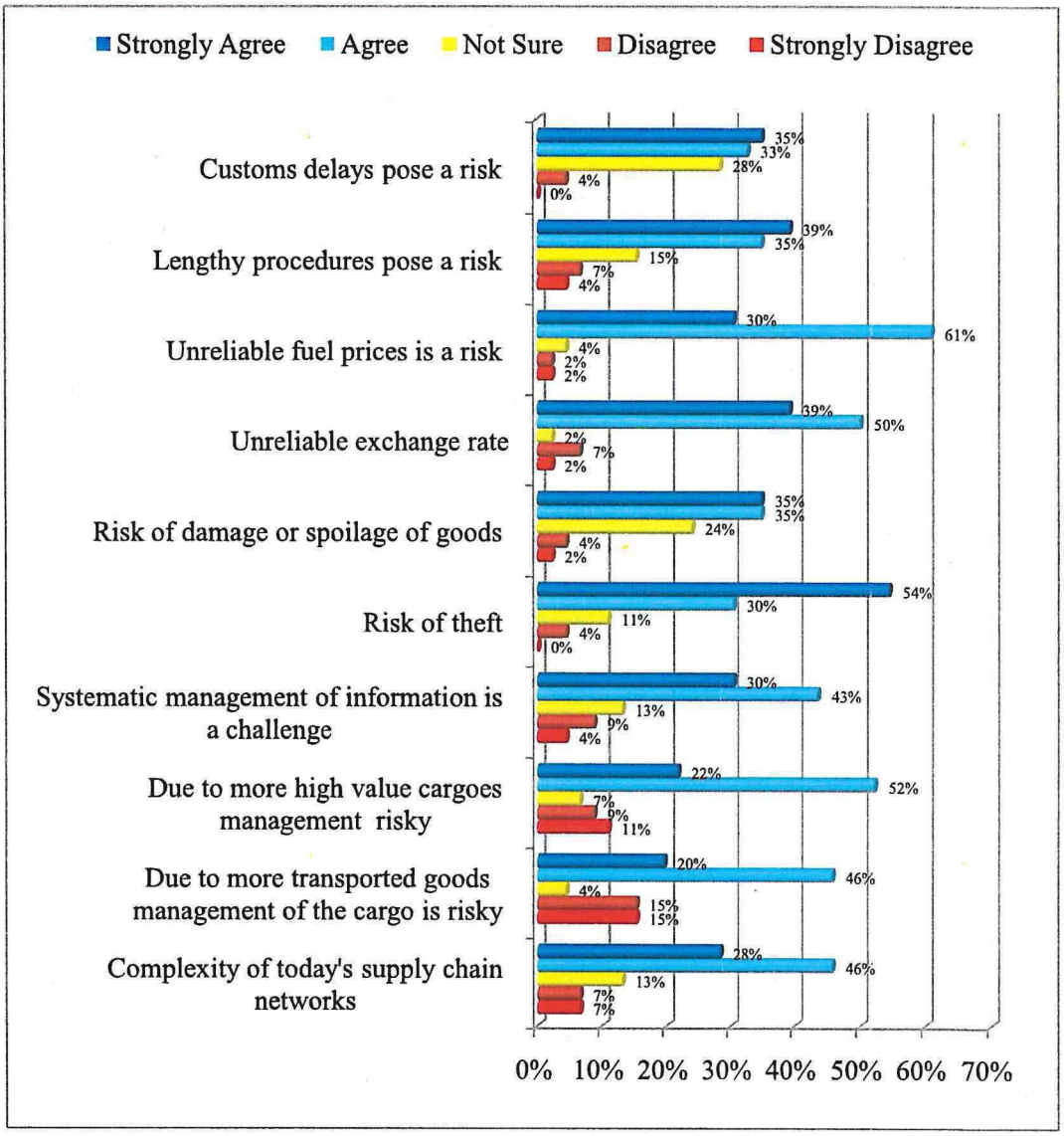
The study revealed many risks which are involved in the transport sector and Kenfreight in particular. In a range of 1-5, respondents gave varying levels of agreement to different factors as shown in Table 4.I which presents the frequency response in relation to the suggested factors and Figure 4.2.I which gives a percentage presentation of those responses.

Table 4.I: Frequency Table on Risks involve at Kenfreight (U) Limited

Kenfreight (U) Limited faces the following risks/challenges:	SD Freq	D Freq	N Freq	A Freq	SA Freq	Total Freq
1. The increasing dynamic and structural complexity of today's supply chain networks pose a risk to Kenfreight and affect service delivery.	3	3	6	21	13	**46**
2. Due to more transported goods in general management of the cargo is increasingly becoming risky at Kenfreight.	7	7	2	21	9	**46**
3. Due to more high value cargoes being shipped around the world, management of the cargo is increasingly becoming risky at Kenfreight.	5	4	3	24	10	**46**
4. Linking different supply chain elements with the entire delivery process by the systematic management of information is a challenge and poses a risk to effective service delivery.	2	4	6	20	14	**46**
5. The risk of theft is always a challenge to the transport sector in general and Kenfreight in particular.	0	2	5	14	25	**46**
6. The risk of damage or spoilage of goods while in transit	1	2	11	16	16	**46**
7. Unreliable exchange rate instability is a risk to the profitability of international transport companies like Kenfreight and it negatively impacts on service delivery.	1	3	1	23	18	**46**
8. Unreliable fuel prices is a risk to the profitability of Kenfreight and it negatively impacts on service delivery	1	1	2	28	14	**46**
9. Lengthy procedures pose a risk to effective service delivery in at Kenfreight.	2	3	7	16	18	**46**
10. Customs delays pose a risk to effective service delivery at Kenfreight.	0	2	13	15	16	**46**

Source: Primary data

Figure 4.2.I: Percentage responses on Risks involve at Kenfreight (U) Limited



Source: Primary data

As presented in Figure 4.2.I above, there was an overwhelming level of agreement with most of the factors presented to respondents in our research questionnaire. The factors were categorised into ten and they are listed in the following subsections in relation to their respective field findings.

4.2.1 Complexity of today's supply chain networks

The supply chain is ever becoming complex and logistics providers in the transport sector are finding it challenging and it is increasingly posing a risk to the attainment of effective service delivery in the transport industry. In response to the point of supply chain complexity, 46% of the respondents agreed and 28% strongly agreed that the increasing dynamic and structural complexity of today's supply chain networks pose a risk to Kenfreight and affect service delivery. However, 7% of the respondents strongly disagreed and also 7% disagreed while 13% were not sure.

4.2.2 Due to more transported goods management of the cargo is risky

This study revealed that the more the amount or number of goods transported, the higher the risks a transport company faces. This was confirmed by 46% of the respondents who agreed and 20% who strongly agreed. However, an overall 30% disagreed while 4% were not sure. The majority in this case agreed that due to more transported goods in general, management of the cargo is increasingly becoming risky at Kenfreight and this implies that with increased cargo, transport companies should improve their risk management strategies to enhance efficiency.

4.2.3 Due to more high value cargoes management is risky

High value cargo is risky to transport because of commercial and non-commercial risks which target high value cargo. The transport companies require a lot more attention on high value cargo than ordinary cargo. Respondents were largely in affirmation of this point as indicated by52% who agreed and 22% who strongly agreed. However, an overall 20% disagreed while 7% were not sure. This finding confirms the importance of giving special

attention to high value cargoes if a transport or logistics company is to avoid some specific risks associated with high value cargo.

4.2.4 Systematic management of information is a challenge

Information management is very important for the effective management of an organization. It can however be challenging when the level of activities is high and a company lacks an advanced information management system. The findings show that majority of the respondents agreed with this factor whereby 43% agreed and 30% strongly agreed that linking different supply chain elements with the entire delivery process by the systematic management of information is a challenge and poses a risk to effective service delivery. An overall I3% disagreed and another 13% were not sure.

4.2.5 Risk of theft

Theft is one of the commonest risks faced by organizations. Transport companies and the transport industry at large are not immune to this problem of theft. 30% of the respondents agreed and 54% strongly agreed that the risk of theft is always a challenge to the transport sector in general and Kenfreight in particular. Only 4% disagreed and 11% were not sure. This finding implies that transport companies must devise means to protect their clients' cargo from being stolen.

4.2.6 Risk of damage or spoilage of goods

Safety of cargo and items in transit is usually a major concern for transport companies around the world. This can prove to be a challenging task some times more especially when there are unforeseen delays in transit. Kenfreight is no exception to this risk as an overall 70% of the respondents agreed that the risk of damage or spoilage of goods while in transit is a concern to Kenfreight. Only a combined 6% of the respondents disagreed and 24% were not sure.

4.2.7 Unreliable exchange rate

Business dealings on the international stage are usually affected by the exchange rates of major international currencies. International transport companies like Kenfrieght testify to this risk as indicated by the findings whereby 50% of the respondents agreed and 39% strongly agreed that unreliable exchange rate is a risk to the profitability of international transport companies like Kenfreight and it negatively impacts on service delivery. Only 2% strongly disagreed and 7% disagreed as 2% were not sure.

4.2.8 Unreliable fuel prices is a risk

Fuel is a key driver of the transport sector and anything that relates to fuel affects the operations of transport companies. Kenfreight like many transport companies is at risk of the ever increasing fuel costs as revealed by this study where 61% of the respondents agreed and 30% strongly agreed that unreliable fuel prices is a risk to the profitability of Kenfreight and it negatively impacts on service delivery. Only 2% strongly disagreed and also 2% disagreed while 4% were not sure. This finding implies that changing fuel prices pose a serious risk to transport companies in Uganda.

4.2.9 Lengthy procedures pose a risk

Procedures involved in international movement of cargo are challenging to transport companies like Kenfreight. The longer the procedures the more expenses transport companies face and also effective service delivery is delayed. As revealed by this study, 35% of the respondents agreed and 39% strongly agreed that lengthy procedures pose a risk to effective service delivery in at Kenfreight. However 4% of the respondents strongly disagreed, 7% just disagreed while 15% were not sure.

4.2.10 Customs delays pose a risk

International transportation involves customs clearance which is a time consuming exercise in the East African region. This presents financial risks to transport companies as the longer the clearance take the more the money is wasted. As revealed by this study, 33% of the

respondents agreed and 35% strongly agreed that customs delays pose a risk to effective service delivery at Kenfreight. Only 4% disagreed with this risk factor while 28% were not sure.

4.3 Risks Mitigation Measures at Kenfreight

Risk management is a deliberate action that organisation must undertake to ensure minimisation and elimination of various risks common to a particular business environment. Before adequately coming up with risk mitigation measures, organisations must formulate a risk management plan which can be used as a blueprint in their risk management efforts. This section presents findings on the process of risk management and the different means of mitigating risks in the transport industry and particularly Kenfreight (U) Limited.

4.3.1 Process of risk management at Kenfreight (U) Limited

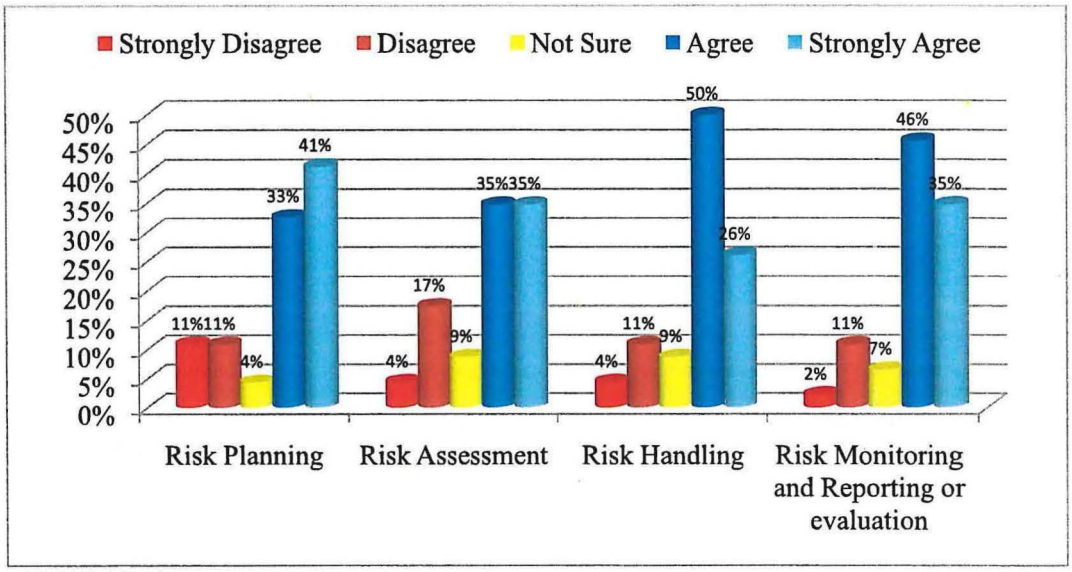
The findings revealed that the process of risk management generally has four stages as presented in Table 4.II below.

Table 4.II: Frequency response on Process of risk management at Kenfreight (U) Limited

	SD	D	N	A	SA	Total
	Freq	Freq	Freq	Freq	Freq	Freq
1. The initial stage in risk management is risk Planning	5	5	2	15	19	**46**
2. After risk planning, Kenfreight (U) Limited does Risk Assessment	2	8	4	16	16	**46**
3. When risk assessment is done, Kenfreight (U) Limited then undertakes Risk Handling	2	5	4	23	12	**46**
4. The last stage of risk management at Kenfreight (U) Limited is Risk Monitoring and Reporting or evaluation	1	5	3	21	16	**46**

Source: Primary data

Figure 4.3.I: Percentage response on Process of risk management at Kenfreight (U) Limited



Source: Primary data

4.3.1.1 Risk Planning

Planning is very important in effective strategy formulation and implementation. Risk management also requires planning. In regard to planning in risk management, 33% of the respondents agreed and 41% strongly agreed that the initial stage in risk management is risk Planning. An overall 22% disagreed while 4% were not sure. This implies that an overall 74% agreed that risk planning is important in a risk management process.

4.3.1.2 Risk Assessment

For any risk to be well addressed, it must be correctly assessed. Risk assessment is therefore important in risk management because it gives a clear picture of the extent or magnitude of the challenge to be addressed. Majority of the respondents at Kenfreight confirmed this as an overall 70% agreed that after risk planning, Kenfreight (U) Limited does risk assessment. 4% strongly disagree and 17% disagreed while 9% were not sure.

4.3.1.3 Risk Handling

As much as planning and assessment are important, the actual handling of risk is what determines whether the company survives the impact of risky challenges or it crumbles. This is the most important stage in a risk management process and majority of the respondents affirmed it as 50% of the respondents agreed and 26% strongly agreed that when risk assessment is done, Kenfreight (U) Limited then undertakes risk handling. However, an overall 15% disagreed and 9% were not sure.

4.3.1.4 Risk Monitoring and Reporting or evaluation

Risk management is a continuous process in an organisation because different seasons present different risks. When one risk is handled, there is still need to monitor and evaluate the future situations that can pose risks to the transport industry and re-start the process by planning on how to mitigate that particular set of risks. The findings from Kenfreight provided high levels of affirmation to this stage in risk management as 46% of the respondents agreed and 35% strongly agreed that the last stage of risk management at Kenfreight (U) Limited is Risk Monitoring and Reporting or evaluation. A small percentage of 13% disagreed while 7% were not sure.

4.3.2 Means of mitigating risks at Kenfreight (U) Limited

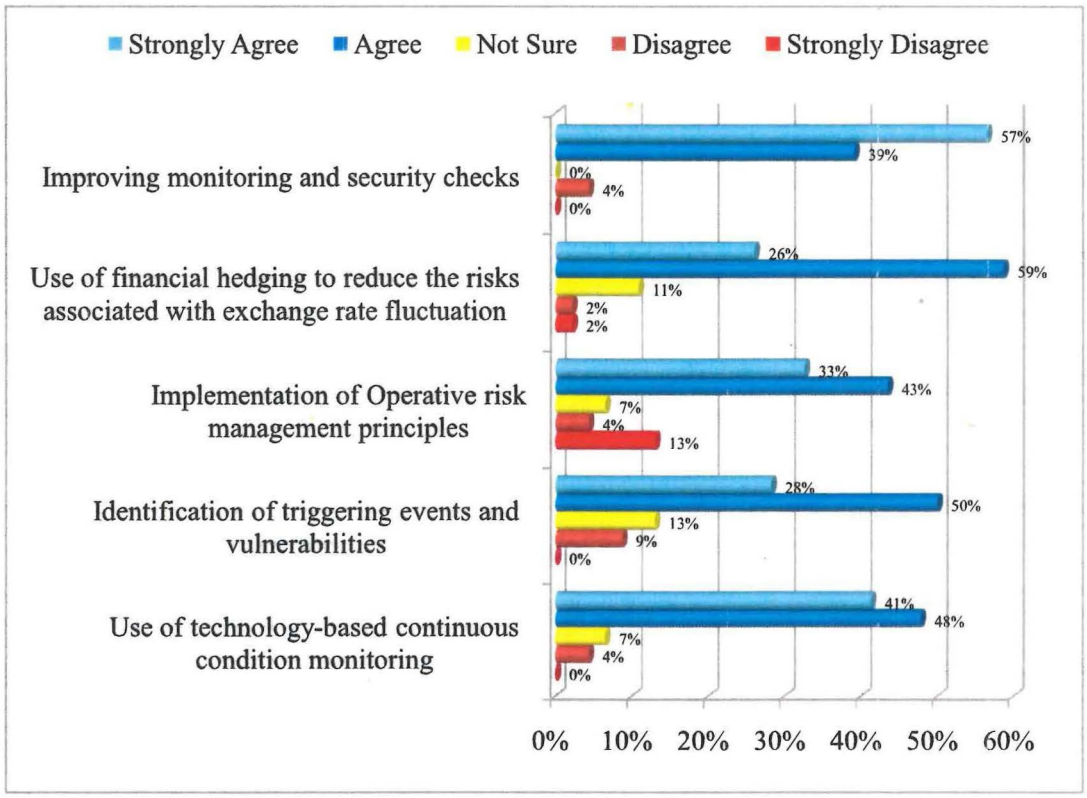
As risks emerge, organisations are forced to find ways of addressing the various challenges that result from the different risks. This subsection presents the findings on the different means of mitigating risks in the transport industry and Kenfreight in particular. The study identified different risk management strategies that can be adopted on the transport industry as presented by Table 4.III and Figure 4.3.II on the next page.

Table 4.III: Frequency response to Means of mitigating risks at Kenfreight (U) Limited

	SD	D	N	A	SA	Total
	Freq	Freq	Freq	Freq	Freq	Freq
1. Use of technology-based continuous condition monitoring has become a common practice for the transportation of deep-frozen goods or pharmaceuticals at Kenfreight (U) Limited.	0	2	3	22	19	**46**
2. Identification of triggering events and vulnerabilities while risks are assessed mainly with support of risk management tools	0	4	6	23	13	**46**
3. Implementation of Operative risk management principles in the process chain	6	2	3	20	15	**46**
4. Use of financial hedging to reduce the risks associated with exchange rate fluctuation	1	1	5	27	12	**46**
5. Improving monitoring and security checks to reduce risks associated to theft, damage, or spoilage of goods while in transit.	0	2	0	18	26	**46**

Source: Primary data

Figure 4.3.II: Percentage response to Means of mitigating risks at Kenfreight (U) Limited



Source: Primary data

4.3.2.1 Use of technology-based continuous condition monitoring

Technology has become a major incentive in performance improvement for different industries. The transportation industry can benefit from technological innovations that are specifically designed to forecast and measure risk aspects. Respondents showed great support for this strategy as 48% agreed and 41% strongly agreed that use of technology-based continuous condition monitoring has become a common practice for the transportation of deep-frozen goods or pharmaceuticals at Kenfreight (U) Limited. Only 4% disagreed and 7% were not sure. This finding further confirms the importance of technology use in the transport industry.

4.3.2.2 Identification of triggering events and vulnerabilities

It is difficult or even impossible to handle something you are not aware of. Risks unseen can cause devastating consequences to any organization. Identification of triggering events and vulnerabilities of the company can move a long way to enable a company mitigate various risk threats. Findings in relation to this risk management strategy were affirmative as 50% agreed and 28% strongly agreed that identification of triggering events and vulnerabilities while risks are assessed mainly with support of risk management tools can help to control risks. Only 9% disagreed with this measure and 13% were not sure.

4.3.2.3 Implementation of Operative risk management principles

Making plans is important but if the plans are not implemented, they become useless. Risk management plans should be strictly followed in order to effectively handle all the risks forecasted. In support of this measure, 43% of the respondents agreed and 33% strongly agreed that implementation of Operative risk management principles in the process chain regarding loss prevention, promotion of risk controlling, and cooperation in the field of technology-supported early intervention can help in avoiding or at least minimizing risks. An overall 17% disagreed and 7% were not sure.

4.3.2.4 Use of financial hedging to reduce the risks associated with exchange rate fluctuation

Putting in place plans to tackle the problem of exchange rate fluctuations can eliminate risks associated with exchange rate uncertainties. Findings were largely in support of this measure as 59% of the respondents agreed and 26% strongly agreed that use of financial hedging to reduce the risks associated with exchange rate fluctuation is one effective way of mitigating risks in the transport industry. Only 4% disagreed while 11% were not sure.

4.3.2.5 Improving monitoring and security checks

Some of the risks are internally generated and transport companies like Kenfreight have to put in place security measures that are capable of eliminating internally generated risks such as theft and other related challenges. The findings in relation to this measure were in great support as 39% of the respondents agreed and 57% strongly agreed that one of the measures in risk management within the transport industry is improving monitoring and security checks to reduce risks associated to theft, damage, or spoilage of goods while in transit. Only 4% disagreed to this measure.

4.4 Influence of Risk Management on Service Delivery at Kenfreight (U) Limited

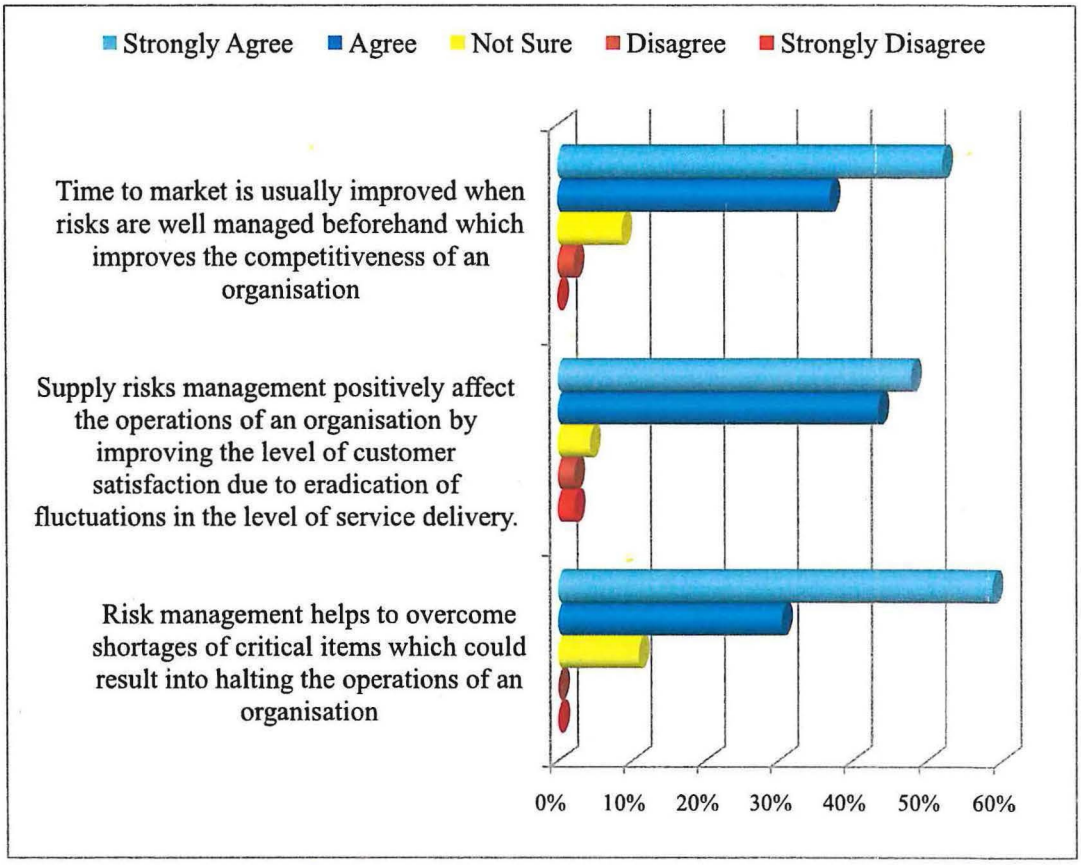
Risk management can have a big impact on the performance of an organisation. Service delivery is generally affected by risks and when risks are well controlled, there is a high chance that service delivery can be better.

Table 4.IV: Frequency Response on Influence of Risk Management on Service Delivery

	SD	D	N	A	SA	Total
	Freq	Freq	Freq	Freq	Freq	Freq
1. Risk management helps to overcome shortages of critical items which could result into halting the operations of an organisation	0	0	5	14	27	**46**
2. Supply risks management positively affect the operations of an organisation by improving the level of customer satisfaction due to eradication of fluctuations in the level of service delivery.	1	1	2	20	22	**46**
3. Time to market is usually improved when risks are well managed beforehand which improves the competitiveness of an organisation	0	1	4	17	24	**46**

Source: Primary data

Figure 4.4.I: Percentage response to influence of Risk Management on Service Delivery



Source: Primary data

4.4.1 Overcoming shortages of critical items

Effective risk management prevents a company from experiencing shortages which could have been a result of unfavourable occurrences. Majority of the respondents were in conformity to this point where 30% of the respondents agreed and 59% strongly agreed that risk management helps to overcome shortages of critical items which could result into halting the operations of an organisation. None disagreed and only 11% were not sure.

4.4.2 Improving customer satisfaction

Unhandled risks can diminish a company's ability to meet the demands of its customers which can negatively affect the level of customer satisfaction. Effective risk management eliminates this challenge thus improving customer satisfaction. The findings in relation to this

point are in support as 43% of the respondents agreed and 48% strongly agreed that Supply risks management positively affects the operations of an organisation by improving the level of customer satisfaction due to eradication of fluctuations in the level of service delivery. Only 4% disagreed and 4% were not sure.

4.4.3 Improved time to market

Transportation risks such as customs delays result into delayed delivery of goods to the market which negatively affects the level of service delivery. Most of the respondents were in agreement as 37% agreed and 52% strongly agreed that time to market is usually improved when risks are well managed beforehand and this improves the competitiveness of an organisation. Only 2% disagreed while 9% were not sure.

4.5 Findings from interviews

Risks encountered by Kenfreight

In an interview with the Logistics manager, external and internal risks were identified. He said "Kenfright faces the risks posed by pirates in the Indian Ocean. In fact, this is a major concern in the transport and logistics industry across the globe". The logistics manager also pointed out the increase in security costs for cargo in transit as a big obstacle to improving the profitability of Kenfreight. "As security concerns over piracy increased, our company had to increase the security expenditure to ensure safety of our clients' cargo" said the Logistic Manager.

In response to risks encountered by the company, the General Manager (GM) said, "the nature and magnitude of risk is dependent on the cargo being transported. High value cargos are major targets for wrong elements dealing in piracy. So, the company treats high value cargos as high risk and also spends accordingly on security to safe guard them". The GM also talked about the volatile fuel prices as a big concern for the transport industry. He said "the

transport business relies heavily on the cost of fuel and the ever changing prices of oil on the international and local markets make effective budgeting very difficult for the company. We are usually forced to revise our annual projections due to the volatile market price of oil products which are of major importance in this line of business. Generally, they identified risks which included: theft and piracy on sea and ocean routes when transporting cargo; poor transport infrastructure in the region and the ever changing fuel prices on both local and international market.

How the various risks in the transport industry are mitigated at Kenfreight ltd

In response to risk mitigation, the General Manager identified two major ways Kenfreight ltd uses to mitigate the risks associated with the transport industry. He said "the company has adopted the use of improved risk management processes such as hiring security agents to avert some uncertainties related to the safety of cargo and also the use of advanced technology to improve efficiencies in risk measurement and monitoring".The GM also stressed that internal measures are in place to reduce the risks of exchange rate fluctuations and volatile fuel prices. He said "as a company, we are working with fuel companies to secure a stable charge for the fuel we use by allowing our bank to use the dollar instead of the local currency through hedging. This enables us to have a stable exchange rate throughout a financial year".

Influence of risk management on service delivery at Kenfreight ltd

There was consensus among respondents that when risks are not well managed, the company fails to effectively meet the required service standards which negatively influence the profitability of the company. As put by the GM who said "service delivery requires a timely transportation of our clients' cargo and when that is not achieved, service delivery is judged by our clients to be poor".

CHAPTER FIVE

DISCUSSION, SUMMARY OF FINDINGS, CONCLUSSION AND RECOMMENDATIONS

5.0 Introduction

This chapter gives a discussion of the findings of the study, a summary of the findings, conclusion and recommendations which are in line with the objectives of the study as well as suggestions for future research.

5.1 Discussion of findings

5.1.1 Risks Involved at Kenfreight Limited

The findings revealed various risks which Kenfreight ltd is faced with. Among the risks included Complexity of today's supply chain networks where 74% of the respondents said Kenfrieght ltd faces this risk. This is in line with literature by Jüttner, (2005); Zsidisin, et al. (2000); and Duffieand Singleton (2003) who pointed out that the widening of the supply chains have increased the scope of risks which logistics providers have to overcome.

The study also revealed that 65% of the respondents agreed with the notion that due to more transported goods, management of the cargo is risky. This confirms literature by Viswanathan, & Littlefield, (2009); Wagner and Bode, (2007) and Christopher and Towill, (2002) which generally points out the increased risks with much cargo being transported.

Authors like Barratt, (2004); Sahay, (2003); Horvarth, (2001); Peleg-Gillai et al. (2006); and Closs and McGarrell (2004) pointed out a number of risks faced by transport companies including managing high value cargoes; Systematic management of information; Risk of theft; Risk of damage or spoilage of goods; Unreliable exchange rate; Unreliable fuel prices; and Lengthy procedures or Customs delays. There was a unanimous agreement regarding prevalence of those factors at Kenfreight ltd which proves that literature has a lot of relevance to the actual situations of risks associated with transport companies in Uganda.

5.1.2 Risks Mitigation Measures at Kenfreight ltd

Literature identified different risk mitigation measures which included: use of technology-based continuous condition monitoring, identification of triggering events and vulnerabilities, implementation of operative risk management principles, use of financial hedging to reduce the risks associated with exchange rate fluctuation and improving monitoring and security checks. Findings from the field were most in agreement with suggestions by different authors. For example, 89% of our respondents agreed that use of technology-based continuous condition monitoring can eliminate risks associated with spoilage of cargo in transit. This is in total agreement with Baily et al (2005); Cronje et al (2001); Reyero, &Delisle, (2008); and Ahmed et al(2007) who stated the importance of using technology to avoid risks of spoilage for the cargo in transit. 78% were in support of effective identification of vulnerabilities in the company's operations as one of the means to mitigate risks. This conforms to Tchankova (2002) and Cerevon (2006) who stressed that proper understanding of the nature of risks an organisation is likely to face is one sure step on the road to eliminate such risks. Another big percentage of respondents (96%) agreed that improving monitoring and security checks can eliminate risks of theft and pilferage. This is in agreement with Lee B. Ryan et al., (2005) and Monczka et al (2005) who argued that risks posed by theft and pilferage can easily be overcome by improving general vigilance and monitoring. In general, findings were more in unison to literature review as pointed out in chapter two.

5.1.3 Influence of Risk Management on Service Delivery at Kenfreight Limited

The findings of this study showed that risk management influences service delivery because Risk management helps to overcome shortages of critical items which could result into halting the operations of an organisation. This is in line with Jüttner (2005); Lysons (2006) and Sahay, (2003) who identified the relationship between risks and shortages of critical inputs. In agreement with Borrington & Stimpson (2002), 91% of the respondents agreed that

Supply risks management positively affects the operations of an organisation by improving the level of customer satisfaction due to eradication of fluctuations in the level of service delivery. Weele (2005); Lysons (2006) and Monczka et al (2005) pointed out that Time to market is usually improved when risks are well managed beforehand which improves the competitiveness of an organisation. This was confirmed by 89% of the respondents who agreed that time to market is improved when risks are well managed in time.

5.2 Summary of the findings

In line with the first objective of this study, the findings revealed that the transport industry in general and Kenfreight Limited in particular faces the following risks/challenges: Complexity of today's supply chain networks; more transported goods, management of the cargo is risky; more high value cargoes, management is risky; Systematic management of information is a challenge; Risk of theft; Risk of damage or spoilage of goods; Unreliable exchange rate; Unreliable fuel prices is a risk; Lengthy procedures pose a risk and Customs delays also pose a risk.

Concerning the second objective, the study revealed that risk management is a process which involves four general stages of: Risk Planning, Risk Assessment, Risk Handling and Risk Monitoring and Reporting or evaluation. The study also revealed different means of mitigating risks in the transport industry which included; use of technology-based continuous condition monitoring, identification of triggering events and vulnerabilities, implementation of operative risk management principles, use of financial hedging to reduce the risks associated with exchange rate fluctuation and improving monitoring and security checks.

On the last objective, the study revealed that Risk management helps to overcome shortages of critical items which could result into halting the operations of an organisation, Supply risks

management positively affects the operations of an organisation by improving the level of customer satisfaction due to eradication of fluctuations in the level of service delivery, and, Time to market is usually improved when risks are well managed beforehand which improves the competitiveness of an organisation.

5.3 Conclusion

It is clearly a big challenge for any organisation to be able to achieve effective service delivery in today's volatile business environment. For the transport industry, there are always risks of unpredictable international fuel prices which impact on the operation costs of transport companies. Such changes need to be given special consideration in the framework of risk management as a basis to implement a stable and effective service delivery platform. Kenfreight as one of the leading logistics companies in Uganda faces various risks that are associated with the international and local economic changes. Unstable exchange rates cause international logistics operations to be more unpredictable. Fuel prices are always changing and this affects operational plans of Kenfreight as it negatively affects the profitability of the company. In such unstable economic environment, Kenfreight has to undertake risk management strategies such as use of technology-based continuous condition monitoring, identification of triggering events and vulnerabilities, implementation of operative risk management principles, use of financial hedging to reduce the risks associated with exchange rate fluctuation and improving monitoring and security checkswhich can enable the company to minimise the effect of those uncertain occurrences.

5.4 Recommendations

i. Transport companies and Kenfreight ltd in particular should always consider use of technology-based continuous condition monitoring for the transportation of deep-frozen goods or pharmaceuticals.

ii. Specific efforts should be directed to identification of triggering events and vulnerabilities while risks are assessed mainly with support of risk management tools.

iii. Companies in the transport industry should stick to the implementation of operative risk management principles in the process chain regarding loss prevention consulting, promotion of risk controlling, and cooperation in the field of technology-supported early intervention to avoid or at least minimize losses.

iv. Transport companies involved in international movement of cargo should consider the use of financial hedging to reduce the risks associated with exchange rate fluctuation.

v. Companies in the transport industry should concentrate on improving monitoring and security checks to reduce risks associated withtheft, damage, or spoilage of goods while in transit.

5.5 Areas for future research

More research may be done to assess the relationship between risk management and the profitability of firms in the transport industry because even though this study revealed the effects of risk management on service delivery it is not clear how risk management influences the profitability of an enterprise.

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APPENDIX I: RESEARCH QUESTIONNAIRE

Dear Respondent,

My name is **Tumusanyukira Gloria**, a student of Kyambogo University conducting research on the impact of risk management on service delivery at Kenfreight in particular and the transport industry in general. I kindly request you to take some time and give your honest opinion and response to the questionnaire below in order to support my research and build a body of knowledge in the area of study. Any relevant information provided will be treated with utmost confidentiality as it is only going to be used for academic purposes. Your cooperation is highly appreciated.

SECTION A: GENERAL INFORMATION OF RESPONDENTS

SECTION A: BACKGROUND INFORMATION

1. Gender

Male ☐ Female ☐

2. Age group

18-25 ☐ 26-35 ☐ 36-45 ☐ Over 46 ☐

3. Marital status

Single ☐ Married ☐ Divorced ☐

4. Level of Education

Certificate ☐

Diploma ☐

Bachelor's Degree ☐

Master's Degree ☐

Others (specify).....

5. Working Experience

0-2 years ☐

2-4 years ☐

5 years+ ☐

In the following sections, please show your level of agreement in reference to the statement provided in the tables.

SD = Strongly Disagree: D = Disagree: N= Neutral: A = Agree: SA= Strongly Agree

SECTION B: RISKS INVOLVED AT KENFREIGHT (U) LIMITED

This section seeks to identify risk faced by the transport sector. There are general challenges that face the transport sector world over, please show your level of agreement to the different risks in relation to Kenfreight (U) Limited.

Kenfreight (U) Limited faces the following risks/challenges:		**SD**	**D**	**N**	**A**	**SA**
i.	The increasing dynamic and structural complexity of today's supply chain networks pose a risk to Kenfreight and affect service delivery.					
ii.	Due to more transported goods in general management of the cargo is increasingly becoming risky at Kenfreight.					
iii.	Due to more high value cargoes being shipped around the world, management of the cargo is increasingly becoming risky at Kenfreight.					
iv.	Linking different supply chain elements with the entire delivery process by the systematic management of information is a challenge and poses a risk to effective service delivery.					
v.	The risk of theft is always a challenge to the transport sector in general and Kenfreight in particular.					
vi.	The risk of damage or spoilage of goods while in transit					
vii.	Unreliable exchange rate instability is a risk to the profitability of international transport companies like Kenfreight and it negatively impacts on service delivery.					
viii.	Unreliable fuel prices is a risk to the profitability of Kenfreight and it negatively impacts on service delivery					
ix.	Lengthy procedures pose a risk to effective service delivery in at Kenfreight.					
x.	Customs delays pose a risk to effective service delivery at Kenfreight.					

Please state any other

.....

.....

.....

SECTION C: RISKS MITIGATION MEASURES AT KENFREIGHT

In consideration of the various risks faced in the transport sector, this section seeks to establish the process and means Kenfreight (U) Limited has adopted to mitigate those risks.

a) Process of risk management at Kenfreight (U) Limited

		SD	D	N	A	SA
i.	The initial stage in risk management is risk Planning					
ii.	After risk planning, Kenfreight (U) Limited does Risk Assessment					
iii.	When risk assessment is done, Kenfreight (U) Limited then undertakes Risk Handling					
iv.	The last stage of risk management at Kenfreight (U) Limited is Risk Monitoring and Reporting or evaluation					

If different, Please state any other

.....
.....
.....

b) Ways/means of mitigating risks at Kenfreight (U) Limited

		SD	D	N	A	SA
i.	Use of technology-based continuous condition monitoring has become a common practice for the transportation of deep-frozen goods or pharmaceuticals at Kenfreight (U) Limited.					
ii.	Identification of triggering events and vulnerabilities while risks are assessed mainly with support of risk management tools					
iii.	Implementation of Operative risk management principles in the process chain regarding loss prevention consulting, promotion of risk controlling, and cooperation in the field of technology-supported early intervention avoiding or at least minimizing losses.					
iv.	Use of financial hedging to reduce the risks associated with exchange rate fluctuation					
v.	Improving monitoring and security checks to reduce risks associated to theft, damage, or spoilage of goods while in transit.					

Please state any other

.....
.....
.....

SECTION E: INFLUENCE OF RISK MANAGEMENT ON SERVICE DELIVERY AT KENFREIGHT (U) LIMITED

		SD	D	N	A	SA
i.	Risk management helps to overcome shortages of critical items which could result into halting the operations of an organisation					
ii.	Supply risks management positively affect the operations of an organisation by improving the level of customer satisfaction due to eradication of fluctuations in the level of service delivery.					
iii.	Time to market is usually improved when risks are well managed beforehand which improves the competitiveness of an organisation					

Others: Please specify

.....
.....
.....

Thank you for your cooperation.

APPENDIX II: INTERVIEW GUIDE

i. How long have you worked for this company?

ii. What position do you hold in this company?

iii. What risks have you faced as a company in the transport industry?

iv. How have you managed to mitigate the various risks faced by your company?

v. Do you think risk management influences service delivery in the transport industry?

vi. How do you undertake risk management at Kenfright (U) Limited?

APPENDIX III: Krejcie, & Morgan, Table for Determining Sample Size

Table for Determining Sample Size for a Given Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size.

Source: Krejcie & Morgan, 1970