RISK MANAGEMENT FACTORS IN MARINE SUPPLY CHAIN AND LOGISTICS TO DEVELOP A HOLISTIC FRAMEWORK IN MARITIME SECTOR

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ABSTRACT

Risk management is of great importance because balancing the risk leads to effective management of any organization in this challenging world. Effective and professional risk management can bring managers to increase their organization's assets efficiency and to maximize their profit value. In the context of global trade and economic development, the maritime industry has always been playing a crucial role as the enabler and facilitator of prosperity. This study aims to explore the difficulty in risk management factors in marine supply chain and logistics in shipping industry to develop a holistic framework to manage uncertainty and risk and disruptions and thereby suggest a suitable method for classifying maritime supply chain risks.

Keyword: *Risk, Risk Management, Maritime Industry.*

1. INTRODUCTION

Risk management has been the concern for many stakeholders ranging from industry practitioners to the people who are affected by the maritime business throughout the world. The maritime industry should look into risk management in the maritime logistics and supply chain context instead of dealing with risk in isolation. Therefore, to effectively manage the earnings volatility and return the firms to the track of growth through economic sustainability, there is the need to encourage the firms to adopt an efficient risk management model that will mitigate inherent risk in the environment [Verschuur, 2020]. Thus, the purpose of this study is to introduce and discuss risk management, risk management factors in shipping industry, in addition to challenges, and implementation practices concerning it.

1.1 Research Objectives

RO1: To explore the literature of relationship between supply chain risks and supply chain performance,
RO1: To identify the factors of supply chain risks and supply chain risk management,
RO1: To study the factors of supply chain risk management and supply chain performance.
RO1: To study the effect of supply chain risk management on supply chain risks and supply chain performance.

1.2 Research Hypothesis

Present global supply chain remains increasingly complex, making a data-driven approach to supply chain management mandatory. Data-driven gives visibility from end to end for monitoring the information flow, services and goods from procurement to manufacturing and delivery to the end-users [Wei, 2020]. However, Data isn't the only casual agent of effective supply chain management; other aspects like good vendor and supplier relationships, effective cost control, securing the right logistics partners and adopting various innovative technologies in the chain make a huge significance [Lam, 2017].

Therefore, the study findings would help institutions to achieve the above mentioned benefits hence promote quality of services in terms of skills and knowledge hence decrease the mismatch in the knowledge and skills required in job market in the country and globe.

The findings of the study would help shipping industry to obtain better collaboration among the institutions hence improved risks factors and supply chain.

2. LITERATURE REVIEW

The study of risk and risk management has a long history. Topics about individual risks such as organizational risk and financial risk have been researched and understood to a large extent. Supply Chain Risk Management (SCRM) is a growing research area. The recent years have seen a substantial surge in SCRM studies, in both academia and industry [John et al., 2010]. However, a holistic view of risk management in the context of a supply chain is not prevailing. SCRM is still in its infancy [John et al., 2010] with many areas still unexplored, and thus, plenty of research opportunities exist. Also, not many studies have been undertaken to address maritime supply chains which is an area of growing importance [Lam, 2017].

Nevertheless, there exist several models in the conceptual and theoretical framework of supply chain management such as the SCOR Model-Supply chain and operational reference model. The model works to address, improve and communicate the supply chain decisions in the network of the institution efficiency.

3. METHODOLOGY

The study utilizes qualitative approach involving compilation, summary, comparison, classification and analysis of the data, information and opinion. In general, qualitative research is most appropriate in the early stages of research on a topic. It is ideal for exploring a study area [Wei, 2020]. An exploratory case study research has been selected as a method for analysis in relation to the initial research issues regarding if risks can be eliminated or reduced in supply chain at maritime firms. A constructivist approach has been adopted as constructivists tend not to start with a theory and work outwards from that; rather they tend to rely upon the "participants' views of the situation being studied", recognizing the impact on the research of their own background and experiences.

4. DATA ANALYSIS

The collected data will be subjected to further analysis and interpretation using methods and tools such as risk matrix and absolute risk graphs, which arrange the risk events in combinations of consequence of failure and probability, in addition to descriptive analysis such as bar chart, pie chart and line charts and using available commercial risk analysis software. The collected data will also be relating it to the research question, assessing the limitations of the study, and propose recommendations.

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