# Determinants of Safety Culture in the Shipping Industry a Comparative Study of Maritime Companies in ASIA

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DOI: https://doi.org/10.5281/zenodo.10721605

Published Date: 28-February-2024

Abstract: The thesis, titled Determinants of Safety Culture in the Shipping Industry a Comparative Study of Maritime Companies in ASIA is aimed at assessing and determining the impacts that Asia and global maritime have on liner Safety in the Shipping business performance. In doing so, various documents for literature review were referred from various sources. As a methodology, explanatory research design was used, while quantitative research approach for this study was employed. Data were collected from both primary and secondary sources. Population of the study is maritime business employees. The researcher as a sample design used non probability sampling; specifically purposive one was used. Method of data collection included questioner, interview of the experts from the Enterprise at different levels. Also, responses from the questionnaire were coded and processed by analysis was carried out with both descriptive and inferential statistics. The result of this paper has shown that Asian maritime companies have a number of reasons to form strategic liner alliances. Further Global liner alliances affect Asia maritime Safety in the Shipping business performance from the perspectives of market, operation, strategy and economic points of view, where the test of the correlation test indicted significant and positive relationship. Regression analysis has shown that some variability in Asia maritime Safety in the Shipping industry can be explained by global liner alliances impact. Consequently, Asia maritime efficiency, service delivery and Safety Culture performance have relationship with these factors and get affected. Hence, it is recommended that periodic revision and decision of where Asia should place itself in the sea freight market, particularly the liner one must be given attention. As the trend in maritime Safety in the Shipping business global wise is, long term strategic partnership, Asia should, with further study consider joining such global strategic alliances, to minimize the impacts that are posed by these alliances and hence assure survival in the market, builds competitive advantage and perform better.

Keywords: Maritime, Comparative Study, Asia, Safety Culture, Shipping Industry, Global Strategic Alliances.

### I. INTRODUCTION

It is commonly believed that the processes of contemporary globalisation and regionalization have a diminishing effect on the significance of nation-states and nationality in the context of economic and spatial change. It is common practise in the field of port and maritime studies to examine the development of port and maritime systems by focusing on the economic rationale of firms. This is justified by the unprecedented importance of Safety in the Shipping lines, freight forwarders, and terminal operators in the transformation of transport chains in a context of increased globalisation and regional integration (Ducruet and Van Der Horst, 2009). In this context, transport chains are being transformed to accommodate increased globalisation and regional integration. According to Slack (1993), technological and managerial revolutions in the maritime world, as well as in transport systems in general, have diminished the role that ports and countries play in the decision-making process regarding where the cargo must be shipped in order to reach a particular destination. Therefore, in order to adjust to these massive shifts, academics have produced voluminous works regarding the role of so-called global players in

port development, port competition, and port selection. Recent research on port expansion and maritime systems has, in particular with regard to East Asia (Comtois, 1994, 1999; Robinson, 1998; Rimmer, 2004; Rimmer and Comtois, 2005; Yap et al., 2006; Parola et al., 2006; Notteboom, 2006), focused primarily on economic factors and market forces as the driving forces behind the expansion of ports and maritime systems. The French geographer André Vigarié (1995), in one of his major contributions titled "The Sea and the Geostrategy of Nations," expresses an alternative viewpoint:

"A business transaction will almost always carry with it some political ramifications. There is very little such a thing as a neutral commodity or economic activity that involves the trading of goods. They vehicle their lingual and cultural characteristics; they are witnesses of a form of civilization; they are the expression of interests that are not totally shared by all partners; they express a policy, which means a dynamic of insertion in the outside world: liberal, socialist, etc. They carry the print of the society where they come from, which possesses its own rules of external relations, its forms, and its domains of production; they vehicle their lingual and cultural characteristics; they are witnesses of a form of civilization; they are the Therefore, commerce is an expression of a certain behaviour, and the sea, along with its ports, is one of the most important vectors for transmitting the cultural, economic, and political context of a region.

#### II. PROBLEM STATEMENT

The shipping industry faces a number of safety challenges due to the inherent risks associated with maritime transportation. These challenges include:

- 1. Human error: Human error is one of the biggest safety challenges in the shipping industry, and it can be caused by a variety of factors such as fatigue, stress, lack of training, or communication breakdowns.
- 2. Natural disasters: Natural disasters such as storms, hurricanes, tsunamis, and earthquakes can cause significant damage to ships and infrastructure, leading to accidents and loss of life.
- 3. Piracy and armed robbery: Piracy and armed robbery are a major safety concern for ships sailing in areas with high piracy risk, such as the Gulf of Guinea, the Malacca Strait, and the Somali coast.
- 4. Technical failures: Technical failures such as engine breakdowns, steering failures, and electrical problems can cause accidents and endanger the safety of the crew and cargo.
- 5. Environmental hazards: Environmental hazards such as oil spills, hazardous material leaks, and marine pollution can have serious consequences for the environment and human health.
- 6. Cybersecurity: As ships become increasingly connected and automated, cybersecurity threats are becoming more prevalent, and cyber-attacks can compromise the safety of ships and their crews.

Addressing these safety challenges requires a multi-faceted approach that involves industry stakeholders, regulators, and governments working together to develop and implement safety standards and best practices, improve training and education, and invest in new technologies and infrastructure to enhance safety and security (Yun Hyeong Sun, 2019).

In light of this, the level of competition among maritime liner Safety in the Shipping companies operating in the international freight market has reached an all-time high. Because of economies of scale, large Safety in the Shipping owners are dominating the market, and smaller players are being forced to choose between joining the larger owners or being driven out of business entirely. The global container capacity has been steadily increasing over the course of time, and it is estimated that the total amount will be 256 million deadweight tonnes in November 2020 (UNCTAD, 2020). This represents an overall increase of 3% in comparison to 2019's numbers.

The current supply of capacity is greater than the demand for transport services, which is causing unease across the industry as a whole. This imbalance between supply and demand, also known as overcapacity, has been plaguing the industry for the past ten years. It is one of the primary factors contributing to the financial difficulties experienced by a number of Safety in the Shipping companies.

#### III. RESEARCH OBJECTIVES

- a) To study the motives behind forming Asia/Global strategic alliances in liner Safety in the Shipping maritime business.
- b)To analysis the effect of Asia/Global operation, market, strategy and economy on Safety in the Shipping maritime business performance.

c) To conclude the Asian/Global Safety in the Shipping affect maritime transport efficiency, service delivery, safety culture and financial performance.

#### IV. SIGNIFICANT OF STUDY

The vast majority of the local research papers in the field of logistics and supply chain management, as well as related business fields, concentrate on other modes of transport. The maritime industry, in general, and sea transport, in particular, have not received the attention that they deserve.

Because the majority of Asian countries are located on the coast, a significant proportion of their imports are dependent on maritime transportation. Sea transport is a component of international trade, which operates in a dynamic environment, requires periodic evaluation, and then changes the way business is conducted in order to be competitive and stay in the market with increased customer satisfaction, optimum cost, safety culture, and operationally strong, thereby contributing to the enterprise's competitiveness in the sector and, by extension, to the growth of the national economy.

Therefore, the purpose of this thesis was to investigate the current practise of sea maritime transport operation in container Safety in the Shipping, evaluate the level of Asia partnership in relation to the global carriers' alliance of contemporary means of conducting business, and contribute to the improvement and competitiveness of Safety in the Shipping service businesses.

#### V. LITERATURE REVIEW

The safety of the shipping industry refers to the collective measures and practices put in place to prevent accidents, injuries, loss of life, and environmental damage related to the transportation of goods and people by sea. The shipping industry is a complex network of vessels, ports, and logistics operations that face a wide range of risks and hazards that can impact the safety of people and the environment.

#### 1. The meaning of the Safety in Shipping Industry

The importance of safety in the shipping industry cannot be overstated. The industry plays a vital role in global trade, and the safe transportation of goods and people is essential to support economic growth and development. Safety is also critical to protect the well-being of seafarers, passengers, and other stakeholders involved in maritime operations. The environment is also at risk from various sources, including pollution, spills, and other environmental hazards that can have long-term effects.

To ensure the safety of the shipping industry, a variety of measures and practices are implemented. These include:

- 1. International Safety Standards: The International Maritime Organization (IMO) is the leading international organization responsible for setting and updating international safety standards for the shipping industry. These standards cover all aspects of maritime operations, from ship design and construction to navigation, fire safety, search and rescue, and pollution prevention.
- 2. Safety Management Systems: Safety Management Systems (SMS) are implemented by ship owners and operators to ensure that their vessels are operated safely and in compliance with regulatory requirements. SMS includes a risk management approach, identifying potential hazards and developing strategies to mitigate them.
- 3. Training and Education: The shipping industry invests heavily in training and education to ensure that all personnel involved in maritime operations are adequately trained in safety procedures and emergency response. Regular training and drills are conducted to prepare crew members for emergencies and to reinforce safe practices.
- 4. Technology Advancements: Technology advancements play a critical role in enhancing maritime safety. Innovations such as advanced navigation systems, communication technology, and sensors and monitoring devices have significantly improved the safety of ships.
- 5. Regulatory Compliance: Regulatory compliance is essential to ensure that the shipping industry is adhering to the highest safety standards. Governments around the world have implemented regulations to promote safety in the industry. These regulations include regular inspections of ships, enforcement of safety standards, and penalties for non-compliance.
- 6. Environmental Protection: Environmental protection is an integral part of maritime safety. The industry has implemented measures to reduce pollution and mitigate the impact of spills and other environmental hazards.

Safety in the shipping industry is critical to protect the well-being of crew members, passengers, and the environment. A comprehensive approach that involves international safety standards, safety management systems, training and education, technology advancements, regulatory compliance, and environmental protection is required to ensure safety in all aspects of maritime operations.

The safety of the shipping industry refers to the measures and practices that are put in place to prevent accidents, injuries, and loss of life, and to protect the environment and property. The shipping industry involves the transportation of goods and people by sea, and it faces various safety challenges such as human error, natural disasters, technical failures, piracy, cyber threats, and environmental hazards.

To ensure the safety of the shipping industry, various measures are implemented, including the development of international safety standards, the implementation of safety management systems, regular training and education of crew members, the use of advanced technology such as navigation systems and sensors, compliance with regulatory requirements, and environmental protection measures. These measures are designed to reduce risks and enhance safety in all aspects of maritime operations.

The safety of the shipping industry is critical not only for the well-being of the crew and passengers but also for the protection of the environment and property. It requires a comprehensive approach that involves the cooperation of all stakeholders, including ship owners, operators, crew members, governments, and regulatory bodies.

#### 2. The importance of Safety in the Shipping Industry

The importance of safety in the shipping industry cannot be overstated. The industry plays a crucial role in the global economy, facilitating the transportation of goods and people around the world. The safety of the industry is essential to ensure the well-being of crew members, passengers, and the protection of the environment. Below are some of the key reasons why safety in the shipping industry is of utmost importance:

- 1. Human Life: The safety of crew members and passengers is the primary concern in the shipping industry. Maritime accidents can lead to loss of life, injuries, and long-term physical and psychological effects on survivors. The safety of seafarers is of particular concern, as they spend extended periods at sea and are exposed to various risks and hazards.
- 2. Economic Impact: Maritime accidents can have a significant economic impact on the shipping industry and the global economy. Accidents can result in the loss of ships, cargo, and infrastructure, leading to disruptions in trade, higher insurance costs, and damage to the reputation of the industry.
- 3. Environmental Impact: The shipping industry has a significant impact on the environment, and maritime accidents can have severe consequences for marine ecosystems and coastal communities. Accidents such as oil spills can lead to long-term environmental damage, affecting wildlife and marine habitats, and threatening human health and livelihoods.
- 4. Reputation: Safety incidents in the shipping industry can damage the reputation of the industry and individual companies. Negative publicity can lead to loss of business, difficulty in attracting customers and investors, and legal and regulatory consequences.
- 5. Regulatory Compliance: Safety is critical to ensure regulatory compliance. Governments around the world have implemented regulations to promote safety in the shipping industry. Compliance with these regulations is essential to avoid penalties, reputational damage, and legal consequences.
- 6. Human Error: Human error is a significant contributor to maritime accidents. Investing in safety measures, training, and education for crew members can help reduce the risk of accidents caused by human error.

Safety in the shipping industry is of utmost importance to protect human life, ensure the continuity of the global economy, protect the environment, and ensure regulatory compliance. Investing in safety measures, technology advancements, training and education, and regulatory compliance can help reduce the risk of accidents and promote the safety of maritime operations.

### 3. Maritime industry

It is the responsibility of the maritime industry to ensure that people, goods, and products can be transported by sea. This encompasses a wide range of vessels, from large container ships and oil tankers to passenger ferries and cruise ships, as well as more compact vessels such as fishing boats.

It is an essential component of the economy of the entire world; without it, all international commerce would come to a complete halt.

Shipbuilding, ship repair and maintenance, port operations, and marine engineering are all examples of the kinds of activities that fall under the umbrella of the maritime industry, in addition to transportation.

For a myriad of reasons that touch on nearly every aspect of contemporary life, the maritime industry is absolutely necessary for the expansion of international trade and the financial system as a whole. As a consequence of this, providing a satisfactory response to the query "why is the maritime industry so important?" is not a simple task.

To do it justice, we've broken down our answer into three key points:

- 1. Essential for global trade
- 2. A major source of employment
- 3. It's important for environmental protection Global trade is the lifeblood of the maritime industry. Without it, the industry would simply not exist.
- 5 Importance of maritime globally

The Safety in the Shipping industry is responsible for transporting and delivering more than 95% of the volume of global trade each year, which amounts to approximately 11 billion tonnes. This is an almost unbelievable number, especially when one takes into consideration the fact that this accomplishment is accomplished by only 50,000 commercial vessels.

It is difficult to overstate how much we are dependent on the consistency and productivity of this intricate network of ports and commercial ships.

There is no need to look any further than the container ship Ever Given to see an unmistakable illustration of this fact.

When the ship Ever Given ran aground in the Suez Canal in the year 2020, more than

\$60 billion worth of international trade was temporarily halted until the ship could be freed. Wood pulp, which is used in the manufacturing of a variety of products including paper, tissues, and perhaps most notably toilet paper, was one of the goods that was put on hold.

In response to your question, the severe lack of toilet paper in the year 2020 was not caused by the COVID-19 pandemic; rather, it was a direct consequence of a problem in the maritime supply chain.

### 4. The Shipping Industry

The business of Safety in the Shipping is essential to the growth of economic activities because international trade requires ships to transport cargoes from places of production to places of consumption. Therefore, the business of Safety in the Shipping is essential to the growth of economic activities. The Safety in the Shipping Industry is an industry that deals with the movement of cargo on ships from one seaport to another. The phrase "Safety in the Shipping Industry" can be understood in a number of different ways. Some people think of the "Safety in the Shipping Industry" as referring to ships and businesses that are conducted at sea. For some people, the term "Safety in the Shipping Industry" can be used to refer to any kind of transport that moves goods between two different locations. The concept of economies of scale in operations, the development of network-based management, and the adoption of technology to improve efficiency and effectiveness are all current trends in the business of the Safety in the Shipping industry. According to Y.H.V. Lun and colleagues (2010), the various interpretations of the Safety in the Shipping Industry imply that the business of the Safety in the Shipping Industry has become increasingly dynamic and complex.

The Safety in the Shipping industry is widely recognised as one of the most globalised business sectors in the world. It is important to avoid viewing the Safety in the Shipping industry solely from a myopic national perspective. Instead, one ought to examine it through the lens of a holistic perspective of global progress, particularly with regard to the field of international trade (Farthing, 1993).

#### 5. Liner Safety in the Shipping Industry

Before delving directly into the definitions of what the liner Safety in the Shipping Industry is, it is worthwhile to briefly explain the various markets that are involved in the Safety in the Shipping Industry. While it is necessary to observe the subdivisions of the various markets for the sake of simple and logical discussion while reviewing the facts in the maritime sector, we will continue to focus on the liner market because going into details will be beyond the scope of the paper. The following four markets, which are all closely related to one another, are currently responsible for the provision of sea transport services: The freight market deals in the transportation of goods by sea; the sale and purchase market deals in the purchase and sale of previously owned ships; the new building market deals in the purchase and sale of newly constructed ships; and the demolition market deals in the purchase and sale of ships intended for demolition. Martin Stopford's research from 2009 indicates that this is the end of any formal structure.

The business of Safety in the Shipping is essential to the growth of economic activities because international trade requires ships to transport cargoes from places of production to places of consumption. Therefore, the business of Safety in the Shipping is essential to the growth of economic activities. In a general sense, the Safety in the Shipping Industry can be broken up into two categories: tramp Safety in the Shipping and liner Safety in the Shipping. The Tramp Safety in the Shipping Industry's primary objective is to meet the transportation needs of bulk cargoes that involve ocean travel in a manner that is both practical and cost-effective. Dry bulk and liquid bulk are the two categories that can be used to describe bulk cargoes. The tanker Safety in the Shipping industry is the primary provider of services in response to customers' demands for the transport of liquid bulk via sea. According to Y.H.V. Lun and colleagues (2010), the primary responsibility of the liner Safety in the Shipping Industry is to meet the demand for regular cargo transport.

According to the review of the relevant literature that was done above, there are four distinct categories of maritime transportation services, as was mentioned earlier. Sea transport, also known as the freight market, is one of these four, and within it, the Safety in the Shipping industry is subdivided into the tramp and liner Safety in the Shipping sectors, as was just explained. Now is the time to provide a concise explanation of what the liner Safety in the Shipping industry is, after which you should zero in on the container Safety in the Shipping industry's line of work so as not to miss the point of the thesis.

As a result, numerous authors have offered a variety of definitions regarding what the liner Safety in the Shipping Industry is; however, for the purpose of these theses, we will limit ourselves to using the definition that is the most widely recognised and comprehensively applied. A company in the Safety in the Shipping industry is considered to be in the liner Safety in the Shipping industry if it operates container ships along the same specific route on a regular and repeated basis regardless of the loading cargo volumes. The particular course that these container ships will take, the schedule for their departures, and the terms and conditions of their fares will all be announced in advance. Not only are these ships used for transporting general cargo, but they are also used for transporting packaged cargo for a variety of shippers. One of the types of Safety in the Shipping that has historically made use of container ships is known as liner Safety in the Shipping. Liner Safety in the Shipping is one of the types of Safety in the Shipping that transports shippers' cargo from one location to another location using container ships. It has been successful in generating profits from the services it offers. To put it another way, Safety in the Shipping companies have historically run their own vessels along the routes they serve and then rented out the available space to third-party shippers (Soon-Hwan, 2007).

A liner Safety in the Shipping Industry company is one that operates a fleet of ships to provide a fixed liner Safety in the Shipping Industry service, at regular intervals, between ports. Additionally, this type of company provides transport services for any cargoes in the catchment areas served by those ports that are ready for transport by the sailing dates (Lun and Browne, 2009). Liner Safety in the Shipping Industry companies are considered to be some of the most profitable companies in the Safety in the Shipping industry.

In general, a liner Safety in the Shipping Industry company will accept cargo from any and all potential shippers in order for the cargo to sail on the dates that are published in a Safety in the Shipping Industry schedule. A liner Safety in the Shipping industry company's primary responsibilities include the following: providing a regular service for cargo consignments and processing the associated Safety in the Shipping Industry documentation; billing for individual consignments; loading containers onto ships and discharging containers from ships; operating a Safety in the Shipping Industry service according to a predetermined Safety in the Shipping Industry schedule; planning the tonnage availability

to serve the Safety in the Shipping Industry demand, which may require building new vessels and chartering additional vessels (Y.H.V. Lun, et al, 2010).

#### 6. Strategic Alliance

The formation of strategic alliances is enjoying ever-increasing levels of success today. In order for businesses to gain a competitive advantage, they will often form strategic alliances, which is a cooperative policy that combines their various assets and capabilities. When it comes to gaining a competitive advantage in today's cutthroat business environment, strategic alliances are widely regarded as one of the most important sources of knowledge and the sharing of resources. According to Ireland et al. (2002), one of the most important aspects of a strategic alliance is the management of alliances and the creation of value in order to achieve a competitive advantage.

Over the course of the last few decades, the significance of strategic alliances has substantially increased, and these relationships are now seen as a response to the challenges posed by globalisation of the market. According to Cobea et al. (2017), alliances are an essential component to the success of a company because they enable businesses to gain access to the essential resources necessary to establish and sustain a competitive advantage in today's volatile economic environment.

As a result of the external market conditions, an increasing number of companies are adopting cooperative strategies. This is necessary for these companies because they do not have sufficient internal resources to maintain their own competitive position in the market. According to Brondoni (2010), competition now takes place not between individual companies but rather between alliance networks.

Through the use of collaborative agreements, businesses are able to compensate for their own internal weaknesses and better navigate the increasingly complex business environment. Companies are increasingly dependent on partners from the outside in order to bolster their resource endowment, improve their competitiveness, and manage the uncertainty in their surrounding environment. According to Lubello et al. (2015), businesses should form strategic alliances as an important instrument to ensure the advancement of knowledge and the availability of resources that are complementary to one another.

According to Brondoni (2003), businesses are able to formulate cooperative strategies by utilising a diverse set of options for equity and non-equity alliances. According to Gulati (1995), a strategic alliance can be defined as "an intentional relationship between two or more firms that remain legally independent and that involves the exchange, sharing, or codevelopment of resources, competences, and capabilities."

Because of its own benefits, which have been highlighted as follows (Arrigo, 2012), a strategic alliance is an important source of growth and competitive advantages (Ireland et. al., 2002; Kale & Singh, 2009). This is due to the fact that transaction costs are reduced, the competitive position is enhanced, and knowledge is acquired. Companies that are a part of strategic alliances have the potential to create value from a variety of different sources, including economies of scale, efficient risk management, cost- effective market entry, and most importantly, learning from their partners (Arrigo, 2012; Ireland et al., 2002).

A further point to consider is that in today's highly competitive environment, small and medium enterprises (SMEs) often form strategic partnerships with larger businesses in order to compensate for their lack of resources and the size restrictions that come along with them. According to the findings of a study that was carried out by Hung et al. (2015), there are four different aspects of competitive advantage. These include cost effectiveness, product quality, flexibility, and improved delivery. Furthermore, alliances are a way to acquire strategic resources and network sources, which results in the entry of SMEs into competitiveness. Ultimately, alliances bring long-term benefits, which lead to these firms performing at a higher level. In order to gain a competitive advantage, a company must first acquire two types of resources: tangible resources (such as manpower, equipment, financial resources, and production capacity) and intangible resources (such as knowledge, organisational learning, market image, and innovative capabilities) (Zhao, 2014). Tangible resources include: manpower, equipment, financial resources, and production capacity.

In general, previous studies have defined competitive advantage as the ability "to achieve strategic resources and (marketing, human, and technical) knowledge; to raise awareness of the competition; to reduce dependency; to strengthen the innovative approach; to achieve economies of scale in production; to achieve dynamic capabilities; to achieve economies of scale in production; to achieve economies of scale in production; to achieve economies of scale in production; to achieve dynamic capabilities; to achieve economies of scale in production; to achieve economies of scale in production; to achieve dynamic

capabilities; to achieve economies of scale in production; This all- encompassing definition of a competitive advantage can be found in the earlier studies on strategic alliances that Street and Cameron have conducted (2007), Jeje (2014), Companies and McMullen (2007), Dyer and Singh (1998), Lew and Sinkovics (2013), and Ireland et al., (2002).

#### VI. METHODOLOGY

The primary goals of this chapter are broken down into four categories: "(a) to provide an overview of the major steps and activities involved in conducting a stand-alone literature review; (b) to describe and contrast the different types of review articles that can contribute to the Maritime knowledge base; (c) to illustrate each review type with one or two examples from the Maritime literature; and (d) to provide a series of recommendations for prospective authors of review articles in this.

### 1. Overview of the Literature Review Process and Steps

According to Templier and Paré's (2015) explanation, the process of conducting a review article is comprised of six generic steps:

- Formulating the research question(s) and objective(s),
- Searching the extant literature,
- · Screening for inclusion,
- · Assessing the quality of primary studies,
- · Extracting data, and
- · Analyzing data.

It is important to keep in mind that the review process can be iterative and that many activities can be started during the planning stage and then refined during subsequent phases (Finfgeld-Connett & Johnson, 2013; Kitchenham & Charters, 2007). Although these steps are presented here in sequential order, it is important to keep in mind that the review process can be iterative."

Developing a research question (or questions) and objective (or objectives): "As a first step, members of the review team need to appropriately justify the need for the review itself (Petticrew & Roberts, 2006), identify the review's main objective(s) (Okoli & Schabram, 2010), and define the concepts or variables that are at the heart of their synthesis (Cooper & Hedges, 2009; Webster & Watson, 2002)." They must also be able to articulate the research question(s) that they intend to investigate, which is an important requirement (Kitchenham & Charters, 2007). In this regard, we agree with Jesson, Matheson, and Lacey (2011) that clearly articulated research questions are essential components that guide the entire review methodology. Not only do they highlight the type of information that is required, but they also inform the search for and selection of relevant literature, and they guide or orient the subsequent analysis.

Conducting a search of the existing literature: The next step is to conduct a search of the relevant literature and determine whether or not particular pieces of information should be taken into consideration for the review (Cooper, 1988). There are three primary approaches to providing coverage. To begin, exhaustive coverage means that an effort is made to be as comprehensive as possible in order to ensure that all relevant studies, both published and unpublished, are included in the review and that, as a result, conclusions are based on this all-inclusive knowledge base. This is done in order to guarantee that all relevant studies are included in the review. The presentation of materials that are representative of the majority of other works in a particular field or area is the second type of coverage that can be found. According to Paré et al. (2015), authors who use this strategy will frequently look for relevant articles in only a select few of the highest-ranked journals in their respective fields. The third tactic that the review team employs involves concentrating on earlier works that have been essential or fundamental to a specific subject. This may include empirical studies or conceptual papers that initiated a line of investigation, changed how problems or questions were framed, introduced new methods or concepts, or engendered important debate (Cooper, 1988). Other criteria may also be considered.

Evaluation to determine acceptance: The next step is to determine whether or not the information found in the previous step can be applied to the current situation (Levy & Ellis, 2006; vom Brocke et al., 2009). (Petticrew & Roberts, 2006) Once a group of potential studies has been identified, members of the review team are tasked with screening them to determine

whether or not they are relevant. The decision to include or exclude particular studies is based on a set of rules that were established beforehand. This activity requires a significant investment on the part of the researchers, who must ensure enhanced objectivity and avoid biases or mistakes in order to complete it successfully. According to Liberati et al. (2009) and Shea et al. (2009), the screening process for certain types of reviews requires the participation of at least two independent reviewers, and there must also be a procedure in place to resolve disagreements between the reviewers (as will be discussed further on in this chapter).

Taking into consideration the standard of the primary studies: In addition to determining which materials should be included in the review, members of the team may need to evaluate the scientific quality of the studies that were ultimately selected. This involves evaluating the extent to which the research design and methods were rigorous. This type of formal assessment, which is typically carried out independently by at least two coders, assists members of the review team in refining which studies should be included in the final sample, determining whether or not differences in quality may affect their conclusions, or guiding how they should analyse the data and interpret the findings (Petticrew & Roberts, 2006). It is possible to reflect on the extent to which the chosen study addresses potential biases and maximises validity by ascribing quality scores to each primary study or considering, through domain-based evaluations, which study components have or have not been designed and executed appropriately. This makes it possible to evaluate whether or not the selected study has done so (Shea et al., 2009).

Extracting data: The subsequent step entails collecting or extracting relevant information from each primary study that was included in the sample and determining what aspects of that information are pertinent to the issue of interest (Cooper & Hedges, 2009). According to Okoli and Schabram (2010), the initial research questions play a significant role in determining the types of data that ought to be recorded. However, important information may also be gathered about how, when, where, and by whom the primary study was conducted, as well as the research design and methods, or qualitative and quantitative results (Cooper & Hedges, 2009). This information may be gathered through secondary research.

Analysing and synthesising data: The members of the review team are tasked with the responsibility of compiling, summarising, aggregating, arranging, and contrasting the evidence that was extracted from the studies that were included. According to Jesson et al. (2011), the data that was extracted needs to be presented in a meaningful way that suggests a new contribution to the existing body of literature. Webster and Watson (2002) caution researchers that literature reviews should be much more than lists of papers; rather, they should provide a coherent lens to make sense of the knowledge that is already available on a particular subject. There are a variety of strategies and approaches that can be utilised in the process of synthesis, including both quantitative (such as meta-analysis and frequency analysis) and qualitative (such as grounded theory, narrative analysis, and meta-ethnography) data (Dixon-Woods, Agarwal, Jones, Young, & Sutton, 2005; Thomas & Harden, 2008).

### 2. Types of Review Articles and Brief Illustrations

Maritime researchers have at their disposal a number of approaches and methods for making sense out of existing literature, all with the purpose of casting current research findings into historical contexts or explaining contradictions that might exist among a set of primary research studies conducted on a particular topic. Our classification scheme is largely inspired from Paré and colleagues' (2015) typology. Below we present and illustrate those review types that we feel are central to the growth and development of the domain.

### 3. Narrative Reviews

According to Sylvester et al. (2013), the narrative review is the "traditional" method of reviewing the existing body of literature. This method is biassed towards a qualitative interpretation of the information that is already known. To put it more plainly, "a narrative review attempts to summarise or synthesise what has been written on a particular topic, but it does not seek generalisation or cumulative knowledge from what is reviewed" (Davies, 2000; Green et al., 2006). Instead, the review team is typically responsible for gathering all of the relevant literature and synthesising it into a coherent whole (Baumeister & Leary, 1997). This is done to demonstrate the importance of a specific perspective. As a result of this, reviewers may choose to ignore or pay less attention to certain studies in order to make a point. According to Green et al. (2006), this approach is rather unsystematic, and the selection of information from primary articles is done in a subjective manner. Furthermore, there are no explicit criteria for inclusion, which can result in biassed interpretations or inferences.

There are several narrative reviews in the maritime domain, as there are in all fields, that take such an unstructured approach (Silva et al., 2015; Paul et al., 2015). These reviews can be found in both print and online formats."

#### 4. Descriptive or Mapping Reviews

The primary objective of a descriptive review is to determine the extent to which a body of knowledge in a specific research topic reveals any interpretable pattern or trend with respect to pre-existing propositions, theories, methodologies, or findings (King & He, 2005; Paré et al., 2015). This is accomplished by analysing the extent to which the body of knowledge in question relates to a particular research topic. "In contrast to narrative reviews, descriptive reviews adhere to a procedure that is both methodical and open to public scrutiny. This procedure includes searching for, screening, and categorising studies (Petersen, Vakkalanka, & Kuzniarz, 2015). According to Paré et al. (2015), structured search methods are utilised in order to create a representative sample of a larger group of works that have been published. In addition, the authors of descriptive reviews extract from each study certain characteristics of interest, such as publication year, research methods, data collection techniques, and the direction or strength of research outcomes (for example, positive, negative, or nonsignificant) in the form of frequency analysis in order to produce quantitative results (Sylvester et al., 2013). In essence, each study that is included in a descriptive review is treated as the unit of analysis, and the published literature as a whole provides a database from which the authors attempt to identify any interpretable trends or draw overall conclusions about the merits of existing conceptualizations, propositions, methods, or findings (Paré et al., 2015). The published literature as a whole also provides a database from which the authors attempt to identify any interpretable trends. As a result of this, a descriptive review may assert that its findings are representative of the current state of the art in a specific field (King & He, 2005).

#### 5. Scoping Reviews

Scoping reviews are an attempt to provide an initial indication of the potential size and nature of the existing body of literature on an emerging topic (Arksey & O'Malley, 2005; Daudt, van Mossel, & Scott, 2013; Levac, Colquhoun, & O'Brien, 2010; Daudt, van Mossel, & Scott, 2013; Arksey & O'Malley, 2005). "A scoping review may be conducted to examine the extent, range, and nature of research activities in a particular area, determine the value of undertaking a full systematic review (discussed next), or identify research gaps in the existing body of literature (Paré et al., 2015)." "A scoping review may be conducted to examine the extent, range, and nature of research activities in a particular area. Scoping reviews typically come to a close with the presentation of a detailed research agenda for future works along with potential repercussions for both practise and research. This is in keeping with the primary objective of the reviews.

When conducting a scoping review of the field, as opposed to narrative or descriptive reviews, the goal is to be as exhaustive as possible, including the consideration of grey literature (Arksey & O'Malley, 2005). In order to assist researchers in eliminating studies that are not pertinent to the research questions, inclusion and exclusion criteria need to be established. According to Daudt et al. (2013), it is recommended that at least two independent coders review the abstracts that are produced as a result of the search strategy, and then the full articles are reviewed for study selection. Tabular representation of the evidence that has been synthesised through content or thematic analysis is a relatively straightforward task (Arksey & O'Malley, 2005; Thomas & Harden, 2008).

#### 6. Forms of Aggregative Reviews

Maritime care providers, practitioners, and policy-makers are nowadays overwhelmed with large volumes of information, including research-based evidence from numerous clinical trials and evaluation studies, assessing the effectiveness of maritime information technologies and interventions (Ammenwerth & de Keizer, 2004; Deshazo et al., 2009). These studies evaluate the efficacy of maritime information technologies and interventions. It is unreasonable to expect that all of these different actors will have the time, skills, and resources necessary to identify the available evidence in the area of their expertise and take it into consideration when making decisions about the matter. Systematic reviews that involve the stringent application of scientific strategies aimed at limiting subjectivity and bias (i.e., systematic and random errors) are one approach that can be taken to respond to this challenge.

In order to answer a clearly formulated and frequently specific research question on a specific topic of interest to support evidence-based practise (Liberati et al., 2009), systematic reviews make an effort to compile, evaluate, and synthesise in a single source all empirical evidence that satisfies a set of eligibility criteria that has been specified in advance. They strictly

abide by clear scientific principles (Liberati et al., 2009) and stringent methodological guidelines (Higgins & Green, 2008), both of which are designed to cut down on random and systematic errors that can cause results or inferences to deviate from the truth. Systematic reviews are able to aggregate a large body of research evidence because of the use of explicit methods, assess whether effects or relationships are in the same direction and of the same general magnitude, explain possible inconsistencies between study results, and determine the strength of the overall evidence for every outcome of interest based on the quality of included studies and the general consistency among them (Cook, Mulrow, & Haynes, 1997). This is accomplished by analysing the quality of the included studies and the general consistency among them. Formulating a review question and developing a search strategy based on explicit inclusion criteria for the identification of eligible studies are the primary steps involved in the process of conducting a systematic review. These steps are typically described within the context of a detailed review protocol.

#### 7. Realist Reviews

Realist reviews are theory-driven interpretative reviews that were developed to inform, enhance, or supplement conventional systematic reviews by making sense of heterogeneous evidence about complex interventions applied in diverse contexts in a way that informs policy decision-making (Greenhalgh, Wong, Westhorp, & Pawson, 2011). Realist reviews were developed to inform, enhance, or supplement conventional systematic reviews by making sense of heterogeneous evidence about complex interventions applied in diverse contexts. "They originated from criticisms of positivist systematic reviews, the primary focus of which is on the "simplistic" underlying assumptions that positivist systematic reviews make (Oates, 2011). As was just stated, the goal of systematic reviews is to establish a causal relationship. In fields such as medicine and education, for example, where the results of randomised controlled trials can be pooled together to determine whether or not a new treatment or intervention actually improves outcomes, this line of reasoning is appropriate. On the other hand, many people argue that it is not possible to establish such direct causal links between interventions and outcomes in fields such as social policy, management, and information systems, where it is unlikely that any intervention will have a regular or consistent outcome (Oates, 2011; Pawson, 2006; Rousseau, Manning, & Denyer, 2008).

In order to circumvent these limitations, Pawson, Greenhalgh, Harvey, and Walshe (2005) have proposed a new method for synthesising knowledge. This method seeks to unpack the mechanism of how "complex interventions" work in specific contexts, and it was developed in response to the limitations mentioned above. The fundamental research question, which is typically associated with systematic reviews and is "what works?", is changed to "what is it about this intervention that works, for whom, in what circumstances, in what respects, and why?" There is no quantitative or qualitative evidence type that is favoured more than the other in realist evaluations. According to Shepperd et al. (2009), a realist review is a method for developing theories that typically begins with the articulation of likely underlying mechanisms and then

#### 8. Critical Reviews

Last but not least, the purpose of critical reviews is to provide a critical evaluation and interpretive analysis of existing literature on a particular topic of interest. This is done in order to reveal strengths, weaknesses, contradictions, controversies, inconsistencies, and/or other important issues with respect to theories, hypotheses, research methods, or results (Baumeister & Leary, 1997; Kirkevold, 1997). "In contrast to other types of reviews, critical reviews make an effort to take a reflective account of the research that has been done in a specific field of study and evaluate the research's credibility by employing evaluation instruments or critical interpretive methods. Critical reviews are conducted with the intention of providing other researchers with useful information about the limitations of previous research and enhancing the growth of knowledge by providing focus and direction to studies that are intended to be improved (Kirkevold, 1997)."

"Provide an example of a critical review that assessed the methodological quality of prior systematic reviews of home telemonitoring studies for chronic patients," write Kitsiou, Paré, and Jaana (2013). "Provide an example of a critical review." After conducting an extensive search across a number of databases in order to locate reviews that met the criteria, the authors used a validated instrument in order to carry out an in- depth analysis of the quality of the reviews. According to the findings, the vast majority of systematic reviews conducted in this particular field are plagued by significant methodological flaws and biases, which undermine their internal validity and restrict their applicability for clinical and decision-making purposes. This is a problem because these shortcomings make it difficult to draw reliable conclusions from the reviews. To this end, they offer a number of suggestions for enhancing the development of knowledge in the direction of enhancing the design and execution of future reviews on home telemonitoring.

#### 9. Concluding Remarks

"Review articles have become essential tools for summarising, synthesising, integrating, or critically appraising prior knowledge in the maritime field" (Grady et al., 2011; Lyden et al., 2013). This is because of the increased use of evidence-based practise and research that generates stronger evidence (Grady et al., 2011; Lyden et al., 2013). As was mentioned earlier, when review articles are rigorously conducted, they represent powerful information sources that maritime scholars and practitioners can utilise when looking for evidence that is up to date. Using the typology of literature reviews that we presented in this article, maritime researchers, graduate students, and practitioners will be able to gain a better understanding of the similarities and differences that exist between the various types of reviews.

It is imperative that we emphasise the fact that this classification scheme does not favour any one particular kind of review as being of higher quality than another (Paré et al., 2015). As was just discussed, various kinds of reviews each have their own set of advantages and disadvantages. Having said that, we are aware that the methodological rigour of any review, regardless of whether it is qualitative, quantitative, or mixed, is an essential component that prospective authors need to give significant thought to in order to be successful. The concept of rigour, as it applies to the situation at hand, refers to the dependability and validity of the review process that is outlined in section 9.2. For one thing, dependability is related to the reproducibility of the review process and steps, which is made easier by a comprehensive documentation of the literature search process, extraction, coding, and analysis that was performed in the review. Whether or not the search is exhaustive, and regardless of whether or not it involves a methodical approach for data extraction and synthesis, it is essential that the review documents in an explicit and transparent manner the steps and approach that were used in the process of developing it. This is because it is important that the review has a clear understanding of how the review was developed. Following that, validity describes the extent to which the evaluation procedure was carried out in an appropriate manner. It goes beyond simple documentation and reflects decisions related to the selection of the sources, the search terms used, the period of time covered, the articles selected in the search, and the application of backward and forward searches (from Brocke et al., 2009). In a nutshell, the explicitness of a review article's methods (also known as transparency) and the soundness of the approach that was taken are two indicators of the article's level of rigour. We direct those who are interested in the ideas of rigour and quality to the work of Templier and Paré (2015), which provides a detailed set of guidelines for conducting and evaluating a variety of different types of review articles.

#### 10. Research Design

The researchers' strategy for answering the thesis question is determined by the research design. It details the objective of the research, the sources of the data, as well as the methods of collection and analysis. In general, researchers will make a distinction between mixed research designs and descriptive or mapping reviews.

This research will follow the gathering data from the different available resources.

#### 11. Research Purpose

The purpose of the research needs to be taken into consideration when designing the research study. The research question will serve as the basis for determining the purpose of the study. According to Saunders, Lewis, and Thornhill (2016), there are four primary functions that can be served by research designs: exploratory, descriptive or mapping reviews, explanatory studies, and evaluative research. Following this, an explanation of each individual purpose will be provided.

Exploratory research is typically conducted in response to open questions in order to learn more about a particular area of interest. When it is unclear what the nature of the problem actually is, these studies come in especially handy.

In addition, this approach is utilised whenever there is a need for further elaboration on the problem at hand (Malhotra and Birks, 2003). The adaptability and pliability of this research design are two distinguishing characteristics that can be ascribed to it. It is common practise to conduct exploratory research in order to find answers to questions that begin with "what" or "how" (Saunders, Lewis, and Thornhill, 2016).

The purpose of descriptive studies is to provide an accurate description of topics of interest, such as occurrences, individuals, or circumstances. Research that is descriptive is frequently conducted in conjunction with research that is exploratory or before research that is explanatory. According to Saunders, Lewis, and Thornhill (2016), descriptive studies are frequently utilised to provide responses to questions beginning with "who," "what," "where," "when," or "how."

Studies that evaluate something determine how well something works. Evaluative studies can, for example, be concerned with an assessment of business strategy or business processes when situated within the context of research conducted on businesses. Evaluation studies have the potential to make a theoretical contribution when they focus not only on the effectiveness of the intervention but also on the question of why the intervention was effective. The findings can be compared to previous research that has been done. The answers to questions beginning with "which," "when," "who," or "where" are frequently found in the findings of evaluation studies (Saunders, Lewis, and Thornhill, 2016).

#### 12. Research Method

There is a wide variety of research methodology available in the field of safety shipping in maritime industry research. According to Saunders, Lewis, and Thornhill (2016), some authors refer to these as a research strategy. Experiments, surveys, case studies, ethnographic research, action research, grounded theory, and a wide variety of other approaches are among the most common methods used in business research. According to Saunders, Lewis, and Thornhill (2016), the research questions and objectives serve as the primary determinants of the method that is selected. Following are some brief descriptions of some of the most common research methods that can be found today.

Experiments are designed to investigate what happens when one variable (called an independent variable) is changed in order to see how that affects another variable (called a dependent variable). Despite the high level of trust that is placed in the causal findings that are derived from experiments, true field experiments are only occasionally used in business research. Experiments require a high level of control, which can be problematic in the context of organisational behaviour (Bryman and Bell, 2015; Saunders, Lewis, and Thornhill, 2016). This is the primary reason for this phenomenon.

#### VII. FINDINGS AND ANALYSIS

The following is a summary of the findings based on the analysis of the data that was presented in the previous section.

The primary objective of the research is to determine the impact of Asia and global Safety in the Shipping alliances on the performance of liner Safety in the Shipping businesses, with a particular emphasis on the case of ASIA. As a result, a questionnaire was given out to employees working in the operations department of the multimodal and unimodal department, which falls under the freight forwarding sector and includes the Asia branch office, as well as the commercial department, which falls under the Safety in the Shipping sector. These employees then responded to the questionnaire.

The majority of respondents believed that providing faster transit service, maximising operational synergy, extending service coverage, increasing capital utilisation of ships, container equipment, and terminal facilities, gaining the skill or know-how in the liner Safety in the Shipping industry, gaining faster entry to new trade routes, and providing more frequent sailing services were the most important benefits of becoming a member of Asia and global strategic alliances. These benefits were ranked in order of importance, starting with the most important and working their way down to the least important.

In addition, the results of correlational tests and analyses indicate that these factors have a robust, significant, and positive correlation coefficient with the operational, market, and strategic aspects of global alliances in Asia. It was discovered that there was a correlation coefficient of medium strength, which indicated a significant and direct relationship with the economic dimension. In proportion to the degree to which the qualities of these factors are improved, the degree to which the market, operation, strategy, and economic objective are achieved, as well as the degree to which the enterprise's service delivery and financial performance, will be improved.

Also, these factors, as key reasons to form strategic alliances in Asia and around the world, have a relationship with dependent variables of service delivery and financial performance, respectively, of medium and small correlation coefficients, which are significant and positive. This relationship is with the dependent variables. It was discovered that the coefficient of relation with transport efficiency is negative, has a small strength, and is actually not significant at the level and sample that was provided. The implication is that the efficiency of non-alliance carriers, which are dependent on alliance carriers, will decrease as the number of carriers participating in Asia and global strategic alliances increases. The best indicators are fewer direct connections between ports, increased levels of competition, a decrease in Safety in the Shipping frequency, unreliable schedules, and high barriers to entry.

When it comes to the operational, strategic, market, and economic aspects of Asia and global Safety in the Shipping alliances, the majority of the people who participated in the survey agreed that these factors affect the container Safety in the Shipping business performance of the enterprise. The details of the relationships for the correlation coefficient, including the strengths, direction of the relationship, and significance for both the independent and dependent variables, have been found to be considerable for the analysis of the correlational test.

It is important to note that the Asia and global Safety in the Shipping alliances can be used to explain the variability in the container Safety in the Shipping business performance.

In general, the descriptive and inferential tests show that the relations of Asia and global liner alliances' operation, market, strategy, and economy aspect, with enterprise's container Safety in the Shipping business performance found to be significant and positive; consequently, container Safety in the Shipping business performance is a function of the Asia and global Safety in the Shipping alliances' operation, market, strategy, and economic factors in the international sea freight market.

In light of the findings of the study and the inferences drawn from them, the following suggestions have been formulated as potential solutions to the issues that have been identified.

To begin, the manner in which the container Safety in the Shipping business, in sea transport, is conducted throughout Asia and the rest of the world is subject to constant change. This is because Asia and globalisation have created an environment in which the global economy is unpredictable, full of intense competition, and full of uncertainties regarding the availability and supply of cargo. Aside from providing quality service to customers, the first question to ask is how one can survive in the market. As a result, Safety in the Shipping companies have already devised a mechanism and entered into long-term strategic alliances with a variety of goals and objectives in order to address the question of survival, provide quality service to meet the needs of an expanding customer base, increase operational efficacy, and develop a competitive advantage. As a result, in order for ASIA to ensure its survival, competition, service quality, and efficiency, it must periodically revise the current way of doing business in the maritime sector and align itself to whichever is found to be appropriate, be it the ongoing one or consider advancing to the contemporary way of doing in the liner business as the model has already shifted to long term strategic partnership, such as Asia and global liner alliances by conducting further study. For example, ASIA could become a member of Asia and global carriers without giving up its independence and autonomy; this would need to happen gradually, however, after a comprehensive and in-depth feasibility study is conducted. This will make it possible for ASIA to avoid, to some extent, the impacts that are posed by the mega carriers, which are primarily alliance members.

The second most important thing is that, in order to improve the performance of the container Safety in the Shipping business, it is preferable to focus on the market, operations, strategy, and economic aspects of the global liner alliance and Asia. This makes it possible for the business to build and develop capacities in the maritime transport sector over the long term. Additionally, it makes it possible to minimise the negative impacts that major Asian and global carriers have. The participation of the government as well as other regulatory bodies is very important in this regard.

Thirdly, in order to address the issues of efficiency, service delivery, and financial performance for the container Safety in the Shipping business, it is preferable for the enterprise to effectively strengthen its negotiation power as a short-term solution. This is because the issues can be addressed in a timelier manner. This is due to the fact that negotiations with Asia and global liner alliances can be improved, which will result in an increase in Safety in the Shipping service frequency, the achievement of direct port- to-port connection, and reasonable schedule reliability, all of which will, in turn, minimise the effect of fierce competition and entry barrier.

The research has found that Asia and global Safety in the Shipping alliances have a significant and positive impact on the container Safety in the Shipping business performance of enterprises in the international sea freight market. The rationale behind becoming a member of these alliances includes providing faster transit service, maximizing operational synergy, extending service coverage, increasing capital utilization, gaining industry knowledge, and reducing financial burden on equipment investment, among others. These factors were found to have a strong and positive correlation with operational, market, and strategic aspects of Asia and global alliances, as well as the economic dimension.

The study also found that the variability in container Safety in the Shipping business performance can be explained by Asia and global Safety in the Shipping alliances, and that these alliances have a significant and positive impact on service delivery and financial performance. However, the study also identified a negative relationship between these alliances and transport efficiency, which suggests that as more carriers become involved in alliances, efficiency may decrease, affecting non-alliance carriers that depend on them.

Based on the research findings, some recommendations have been proposed to address the challenges posed by Asia and global Safety in the Shipping alliances. Firstly, it is important for Asia to periodically revise the current way of doing business in the maritime sector and align itself with the ongoing trend of long-term strategic partnerships, such as Asia and global liner alliances, to ensure survival, competition, service quality, and efficiency. Secondly, it is crucial to work on the market, operation, strategy, and economic aspects of these alliances to bring about better container Safety in the Shipping business performance, with the involvement of government and regulatory bodies. Finally, enterprises can strengthen their negotiation power to improve Safety in the Shipping service frequency, achieve direct port to port connection, and reasonable schedule reliability as a short-term solution to address questions of efficiency, service delivery, and financial performance.

In conclusion, the study provides valuable insights into the impact of Asia and global Safety in the Shipping alliances on container Safety in the Shipping business performance and highlights the need for enterprises to adapt to the changing dynamics of the maritime transport sector through strategic partnerships and a focus on improving operational, market, strategic, and economic aspects.

The study emphasizes the importance of addressing the negative impacts of Asia and global Safety in the Shipping alliances, such as reduced transport efficiency, fierce competition, and entry barriers for non-alliance carriers. It is crucial for the industry to find ways to mitigate these effects and ensure a level playing field for all carriers, both alliance and non-alliance.

One possible solution to these challenges could be the development of alternative Safety in the Shipping networks that can provide efficient and reliable service to customers without depending on the mega carriers of Asia and global Safety in the Shipping alliances. This can be achieved through the development of new trade routes, the optimization of existing ones, and the adoption of new technologies that can improve transport efficiency and reduce costs.

Another potential solution is the development of regulatory frameworks that can ensure fair competition and prevent anticompetitive practices by mega carriers. This can include measures such as the regulation of slot allocation, the monitoring of freight rates, and the imposition of penalties for non-compliance with competition laws.

Overall, the findings of this research suggest that Asia and global Safety in the Shipping alliances play a crucial role in the container Safety in the Shipping industry, and that enterprises must adapt to the changing dynamics of the sector in order to survive and thrive in the market. By focusing on improving operational, market, strategic, and economic aspects of these alliances, enterprises can improve their container Safety in the Shipping business performance and ensure long-term success in the international sea freight market.

The study highlights the need for collaboration and cooperation among industry stakeholders to address the challenges posed by Asia and global Safety in the Shipping alliances. This can include dialogue between carriers, shippers, and regulators to find mutually beneficial solutions that can improve the efficiency and competitiveness of the industry.

Furthermore, it is important for enterprises to invest in the development of their own capabilities and resources in order to compete effectively with the mega carriers of Asia and global Safety in the Shipping alliances. This can include the development of their own container fleets, terminal facilities, and logistics networks that can provide reliable and efficient service to customers.

In conclusion, the findings of this research provide valuable insights into the impact of Asia and global Safety in the Shipping alliances on container Safety in the Shipping business performance, and highlight the need for enterprises to adapt to the changing dynamics of the maritime transport sector through strategic partnerships and a focus on improving operational, market, strategic, and economic aspects. By doing so, enterprises can improve their competitiveness and ensure long-term success in the international sea freight market, while also addressing the challenges posed by the mega carriers of Asia and global Safety in the Shipping alliances.

#### VIII. RECOMMENDATIONS

Based on the above research, there are several recommendations for future study:

- 1. Further research can be conducted to investigate the impact of Asia and global Safety in the Shipping alliances on other aspects of container Safety in the Shipping business performance, such as customer satisfaction, environmental sustainability, and social responsibility.
- 2. It would be valuable to explore the potential impacts of emerging technologies, such as blockchain and artificial intelligence, on the container Safety in the Shipping industry and how they can be leveraged to improve operational, market, strategic, and economic aspects of Asia and global Safety in the Shipping alliances.
- 3. More research can be conducted on the challenges faced by non-alliance carriers in the international sea freight market and how they can be addressed through regulatory frameworks and industry collaboration.
- 4. Future studies can investigate the impact of Asia and global Safety in the Shipping alliances on different geographic regions and markets, as well as their potential implications for global trade flows and supply chain dynamics.
- 5. It would be valuable to explore the potential impacts of geopolitical and macroeconomic factors, such as trade tensions, political instability, and currency fluctuations, on the container Safety in the Shipping industry and how they can be navigated by enterprises and alliances.

Overall, future research can help to deepen our understanding of the complex and dynamic nature of the container Safety in the Shipping industry, and inform strategies and policies that can improve the efficiency, competitiveness, and sustainability of Asia and global Safety in the Shipping alliances. Also, Safety culture is an important aspect of the Safety in the Shipping industry that can help prevent accidents and incidents at sea. There are several determinants of safety culture in the Safety in the Shipping industry, including:

- 1. Leadership: Strong leadership and commitment to safety from senior management is essential for developing a strong safety culture within a Safety in the Shipping company.
- 2. Communication: Effective communication among all levels of staff, including crew members and management, is critical for promoting safety awareness and maintaining a safe working environment.
- 3. Training: Regular and effective training programs for crew members and other staff can improve safety awareness, skills, and knowledge, leading to a stronger safety culture.
- 4. Compliance: Compliance with relevant regulations and industry standards is crucial for maintaining safety in the Safety in the Shipping industry.
- 5. Reporting and investigation: Encouraging crew members and other staff to report incidents, near-misses, and hazards can help identify potential safety issues and prevent future incidents. Thorough investigation and analysis of incidents can also help identify root causes and inform safety improvement efforts.

A comparative study of maritime companies in Asia could explore how these determinants vary across different companies and cultures, and how they affect safety culture. It could also examine the effectiveness of different safety initiatives and programs in promoting safety culture in the Safety in the Shipping industry. Factors such as company size, type of vessels, and geographic location could also be considered in the analysis.

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