# A STUDY ON THE ISSUES AND CHALLENGES IN THE GLOBAL SHIP MANAGEMENT

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#### Abstract

The study attempts to explore the challenges for ship management who transport the goods worldwide by shipping. The study further examines the factors that are to be managed in best practice to mitigating it. International shipping industry is transporting around 90% of world trade. As per the increasing demand and supply for the modern world the shipping and ship management is playing very important roll to meet requirement for import and export of goods on the scale necessary. Almost all the goods are transported worldwide by shipping. Ship managers are under increasing pressure. Over capacities in the market are driving charter rates down, ship owners face higher costs to finance vessels ship managers are fight for cargo and drive down their main cost block, which is fuel, ship managers sit in the middle and have to look after more and more for the same management fees to gain owners management contracts. At the same time lie the requirements on availability of the vessels. Quality and Safety of operations. Meeting the increased rules and regulation, management and treatment of crew and Transparency of coasts spend are increasing. This study involving finding out the major challenges for the ship management and to improve their operation & consider a best practice in the industry.

Keywords: Shipping industry, world trade, demand and supply, challenges and Ship Management.

#### INTRODUCTION

The American management Association defines management as the process of getting work done through people. L.F.Urwick writes that knowledge about managing must be categorized into knowledge about work and knowledge about employees. He further states that knowledge about work breaks down into essentially knowledge about the tasks that individuals are asked to perform and knowledge about the relationships between the tasks that members of a group perform. Similarly, knowledge about people can be divided into knowledge about the behavior of individuals and knowledge about the behavior of individual persons as influenced by their membership of group of all kinds and the degree of impact of that membership on individuals. This categorization explains as to why management is both an art as well as a science. It is the art of making people more effective than they would have been without a manager. The science is in how a manager does this!

Shipping companies and ship management companies provide a highly skilled service to the shipping industry with the technical expertise of these organizations being well recognized. It is they, rather than the regulators, that allow the IMO to reach their goals of Safety of Life, Efficiency of Shipping and the Protection of the Marine Environment. Following the 2008 financial crash, there was fear in the industry that effective ship managers would suffer by being undercut. In fact, the companies that survived were not the cut-throat types, but, the more reliable ones. As all rates became similar, managers preferred to deal with other managers with good ethics and customer empathy.

The ship management comprises of functions like technical management, procurement, crewing as well as quality & safety management. The financial management aspect was added into this study which is less a service provided to a ship owner but relevant to the ship manager himself and functioning as an enabler to provide the services rendered in an efficient and transparent way. More than 1,500 companies are globally managing more than ten vessels each. Only 150 companies manage more than 40 vessels, which results in a long tail of mid-size entities. These ship managers in total manage approx 25,000 to 30,000 vessels, which leaves another 20,000 vessels managed by smaller entities.

The study will cover the problems faced from the various departments of the company to the current situations happening around the world. The problems that these companies face include operating costs of vessels, shortage of crew, poaching of crew, training of crew, piracy, tanker accidents that lead to criminalization, pollution, technical and safety problems. The research is done to identify the issues and challenges faced by the global ship management companies.

## LITERATURE REVIEW

In 2021, Shipping markets are likely to see more improvements in comparison to the last year. Eying the history of shipping shows that the industry is always involved in business cycles that are characterized by cyclical busts and booms. Currently shipping is enduring one of her longest business cycles that is estimated to persist for about 20 years. Some evidences indicate that in 2021, the industry is beginning to head out of her breath taking recession; although returning to

SJIF IMPACT FACTOR: 6.734 (2020)

**SJIF IMPACT FACTOR: 6.179 (2021)** 

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business peaks will certainly need some years. Yet, there also several trends that can compromise this growth. The interplay of these conflicting trends and factors blur the outlook of the shipping industry in the coming years which is demanding thorough recovery in the wake of serial crises within the past three years. This article provides an outlook of the shipping industry in 2021, by synthesis of the opinions of a number of scholars and senior executives and experts in the Iranian maritime organizations.

BIMCO projected that overall demand growth is expected to be lower than in 2019, but still high enough to improve the fundamental market balance, with demand expected to grow by 4%-4.5% against a fleet growth of 3.9% in 2023. As was recorded in BIMCO's Macroeconomic Outlook report, the International Monetary Fund's (IMF) January 2021 update of its World Economic Outlook significantly lifted its expected GDP growth in advanced economies for 2023 and 2024.

The shipping industry is facing an impending crisis: the BIMCO/ICS Manpower report predicts a potential Global shortage of almost 150,000 officers by 2025. And another study, this one by the Ocean Policy Research Foundation, predicts a shortage of 364,000 seafarers by 2050. There has been a lot of buzz about how we need to "promote careers at sea" but what are some real, concrete steps that organizations can take to make sure their hiring needs continue to be met into the next decade. Be Transparent During the Recruitment Process about Job Duties and Risks IMarEST, Sea Vision, Careers at Sea, Young Ship International, Marine Industries Leadership Council and the KNect365 Cadet Task Force (supported by Intermanager and facilitated by Capt. Kuba Szymanski) are a few of the organizations and programs out there working to increase public awareness of the maritime industry and support those who want to enter maritime careers.

Barling et al., 2020 specified that the understanding and awareness of cultures other than your own, or "cultural competence" is not a "nice to have" when it comes to the maritime industry, it's an absolute requirement in order to retain seafarers. The numbers say it all: "almost a quarter of younger officers who have given up a sea career have taken this decision after a bad experience as part of a multicultural crew." When "80% of the world merchant fleet (is) manned by multi-cultural and multilingual crews" losing young officers due to negative multi-cultural exchanges is something that merits industry-wide attention.

Kelloway et al., 2019 states that the captain's leadership is an important factor affecting seafarers' safety behaviors in dry bulk shipping. With respect to the type of leadership, transformation leadership was more strongly positively related to safety behavior. Seafarers perceptions of transformational leadership are predictive of safety behavior and can therefore be useful to reduce seafarer injuries. This finding is consistent with that demonstrated in the previous studies on work safety.

#### RESEARCH OBJECTIVES

The objectives of the study are as follows:

- To identify the factors which influence the challenges for ship management
- To study the main functions of the ship management
- To identify the factors which mitigating/over come from the challenges of ship management

## LEVEL OF MANAGEMENT AND MANAGEMENT FUNCTIONS:

Managers can be described by the functional area in which they perform and the level at which they perform. Although all managers perform the same basic functions, the extent to which they perform these universal activities varies with level in the management hierarchy.

- 1) Top management: The top management consisting of the chief executive officer and the vice-presidents is responsible for the overall management of the organization and directs its relations with the external environment. These managers need conceptual skills the most. Top managers spend most of their day (over 75 per cent) planning and leading.
- 2) Middle management: The middle management consists of all managers below vicepresidents but above supervisors. Middle managers are responsible for setting objectives that are in line with top management's goals and further translate them into plans for firstline managers to implement. These managers need a blend of all three skill sets.
- 3) First line management consists of supervisors, team leaders, team facilitators, supervisors and directs the actural work of the organization at the operating level. These managers need technical skills the most. Functional managers can also be identified by the areas or function of the organization for which they are responsible, such as marketing, finance, operations, and human resources.

Mangers have two main jobs one is running a business and building an organization. Mangers have different roles to perform and require a mix of conceptual skills, technical skills and human skills for different level positions. All managers perform the basic management functions such as Planning, Organizing, Leading, and Controlling.

## SHIP MANAGEMENT AND THEIR FUNCTIONS:

The ship management deals with the process of managing a ship. Ship Management is the shore-based and shipboard management of day-to-day operations of a ship. Ship management is done by independent companies which use ships of some other companies or independent owners. The ship management company manages ships for the owner and pays him the yearly amount which is settled between the owner and the ship management company.

Moreover, the owner of the ship signs a contract and leases the ship to the ship management company for a defined duration of time. The ship owner may continue with the same management company or can approach another company if the he is not satisfied with the performance of a

particular ship management company. It is to note that the owner can lease the ship completely or he can render some of the services provided by the ship management companies.

**Functions are included in Ship Management:** Ship management includes several functions which are to be carried out before, during and after the operation of the ship. The first and foremost thing that a ship management company needs to do is get the ship approved. There are many approvals that are to be taken from different classification societies. However, the company can operate different types of vessels or just concentrate on any one type. If a management company wants to enter into a new field by indulging itself in operating different types of vessels, but is operating the vessel type for the first time then approval for operation is given for six months and their performance is evaluated.

# The main functions of the ship management



The main functions of the ship management include:

- Crewing
- Technical management
- Commercial management
- Quality and safety management(Bunkering ,dry docking, and environment )
- Financial management

## **Outsourced Ship Management**

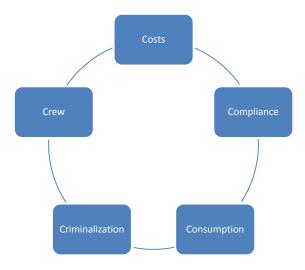
- ❖ Shifts responsibility for all the above to a third-party specialist
- Enables asset-owner to focus on core strategy

#### CHALLENGES IN THE SHIPPING INDUSTRY:

The shipping industry has dealt with its fair share of challenges throughout the years and is expected to face even more in the future.

Here are a few of the biggest challenges today's shipping industry is expected to experience.

# **Shipping Industry Challenges...Five Cs**



- CREW shortages
- **❖** COSTS of Inflationary
- ❖ COMPLIANCE of changing rules and Regulations
- ❖ CONSUMPTION of Fuel and it quality to meet the requirements
- **❖** CRIMINALIZATION of seafarer

Managing problems depends upon the manager's ability to make decisions. Decision making is the cognitive process of selecting a course of action from among multiple alternatives. There are two basic types of decisions. Programmed and non-programmed. Systematic and structured decision making requires recognition and analysis of important components of decisions: context, objectives, options and criteria.

## Effective and good decision making involves seven vital steps:

- 1) Identify, diagnose, and precisely define the problem:
- 2) Work out alternative solutions,
- 3) Evaluate each alternative solution,
- 4) Choose the best alternative,
- 5) Implement the decision,
- 6) Evaluate the decision,
- 7) Review and learn the lessons for futures.

## Mitigating the Five C's of ship management:

## **Crew Shortages**

Crewing to be done form well educated training institute to meet the current needs through global manpower supply office network in key crewing countries. Strategic sourcing can be done from directly from the best marine colleges from the different part of the world. Provide well working cultures, benefits and Career development to increase job satisfaction of seafarers which will improve the profits for the shipping company and improves retention of existing staff. Provide motivational and job related training whenever necessary. Invest in culture and team work to work as a team on board the ship and on shore based management.

Take feedback and do corrective action and give required support to them.

## **Inflationary Costs**

Rising Costs, The rising costs of necessary materials could negatively affect industry competitiveness. The increasing prices may lead to higher costs of operation. Higher prices of fuel and parts as well as poor market conditions could cause serious issues in many global shipping companies. Management of commercial transactions: Commercial transactions management -that is, the organizational function of commercial transactions needs to secure revenues to the shipping company usually through revenues generated by a specific ship; organization and management of various costs of ship management and voyage. Sales function of the shipping company is of extreme importance, given that this particular function enables the shipping company to conduct its core business, the sale of shipping capacities, that is, transport. Commercial transactions include the chartering department and operational department. Chartering department mainly deals with the sale of shipping capacity and that by: chartering their own shipping capacity worldwide; taking on additional capacities and chartering for its own account; monitoring chartering competition on the global market; the research of the global chartering market, and consequently creating conditions for the development of new projects working closely with the development function of the shipping company.

Due to increase completion in the shipping marker the profits has come down and operating cost has increased compared to earlier. New Plans to meet for changing shipping business. Wage spiral due to shortage of seafarers and ship operator at shore. Cost of compliance. Inherent scale economies because of our size, MARCAS contracting power, Easier access to leading specialty service providers and Sea Squad. The best practice to integrate operational functions like purchasing closely with accounting and financial management this ensures that for example any order placed by the purchasing department will immediately appear as a commitment in the liquidity forecast, giving the company's treasurers a much more reliable basis for liquidity panning.

# **Regulatory Compliance:**

New Stricter environmental emissions regulations help to deliver great benefits in the long run, but these could cost a series of short-term challenges for the shipping industry. Regulations

increasing in number and complexity, Requires ongoing training and re-qualification, Penalties for non-compliance severe—not limited to crew, We promote / invest in a compliance culture ashore and at sea, Aim to exceed what is required by law, Major investment in compliance training. Due to continuous growth of shipping, and despite being the most energy efficient mode of mass transport, shipping impacts climate change as a result of its scale and its reliance for propulsion on bunkers, a heavy fuel oil that is a residual by-product of refineries. However, something which is underestimated and that captures little attention, is the impact of climate on shipping, especially ports: "While mitigation action in international shipping is crucial to curb carbon emissions, building the resilience of the maritime transport systems and strengthening their ability to cope with climatic factors are equally important" (source UNTCAD).

The cost for change to low sulphur fuel (0.1%) is estimated to be US\$200 billion. Much of these costs will result from the switch to low sulphur distillate fuel, assuming that a 0.5% global sulphur cap comes into effect in 2020, in addition to the 0.1% sulphur requirements that are expected to be enforced in Emission Control Areas in North West Europe and North America from 2015. This change to more expensive, low sulphur distillate fuel is a very serious concern and is compounded by issues such as supply of same and dangers of modal shift.

# **Fuel Consumption**

Rising costs of the fuel oil, low sulphur fuel oil to be used in special area so cost of the fuel is quiet high to meet with Environmental regulations. Economic Bunker supply scale to be followed, UMC's mini-pamper hull cleaner enhances performance, saves fuel. V.Delta's cold ironing feasibility study expanded knowledge base for eventual implementations. In order to help improve operational efficiency technical managers can help owners achieve environmentally sound voyage management, track and record voyage-related events including fuel and lube oil consumption, switching fuel oil grades, cargo information and ballast activities. This can be accomplished through facilitating the collection of key environmental data in real-time, which allows for tracking, trending and reporting of information for operational cost compliance. With regards to hull and design, the aim is to lower hull resistance and correct the application of additional devices to minimize fuel consumption. For vessel design we recommend due diligence in the selection of vessel design to match its trading requirements. The hull condition is also important with a good surface preparation during docking and application of the most cost effective hull coating. We also look to optimise performance through propeller modification, analyzing engine data and deciding if the propeller is running in torque rich condition. Propeller edge modification can result in fuel savings of between 2-4%. Propeller efficiency can be improved by installation of Mewis duct or propeller boss cap fin, fuel savings of between 3-4% could be achieved by using of these devices. Fuel savings of between 2%-7% can also be achieved through bulbous bow modification.

#### **Seafarer Criminalization**

Growing and troubling trend in some areas: A key reason for crew shortages, Factual-based lobbying, Hebei Spirit, Today's most prominent example also presents unique opportunity, Master and chief officer being unfairly detained and tried, owner mounting major campaign to gain public

support, Also signals the crew worldwide that we support them. Security risks have always been a challenge for the shipping industry, but today, they're providing more issues to overcome. For example, pirates pose a bigger threat for shipping, especially since the number maritime piracy and armed robberies on ships in Southeast Asia and West Africa has increased.

## **CONCLUSION**

The result of managerial actions as reflected in the organizational performance is the outcome of synchronization of internal systems to respond effectively to the external environment. Organizations in today's fast changing environment face intense competition, economic fluctuations, changing profile of developing and developed economies, technological breakthroughs and developments, changing social values, demographic profiles, legal system, regulatory mechanisms, government policies, cultural profiles etc. Organizations have to keep adjusting, adopting, and adapting by developing inbuilt response mechanisms. The test of success of managerial decisions lies in achieving customer satisfaction by developing competitive edge in providing organizational products and services that meets customer needs and requirement at the right time and the right place. Successful organizations not only focus their efforts on satisfaction of customers and other stakeholders but also on society in general. They attempt to contribute for the well-being of the society in and around their operations. The real challenge for the organizations in the present context is to achieve results by being sensitive to the social environment on one hand and having ethical approach to management on the other. The long term sustainable growth necessarily requires ethical and value based approach to achieve organizational goals on a continuing basis.

Just as there is no management without managers, there is also no successful management without Creative, capable and talented managers. Only those managers who have expressed individuality and innovation capabilities can rise to the challenges of the environment awaiting, not only today, but even to a larger extent in the future. One of the most important tasks of a modern manager is to motivate its co-workers, that is, to inspire other people, and this often depends on his/her charisma and personal characteristics. Modern managers need to primarily know how to motivate, coordinate and interconnect these different individuals, whether they are part of production or services. This means that a modern manager, after winning a battle in the external environment, has to "return" to his/her company and focus on harmonizing the relations between employees, that is remove weaknesses of internal environment with the goal of survival, growth and development of the company. Modern manager varies from the classical also by the fact that he/she does not focus on the search for an ideal company organizational structure, but rather on the management in accordance with a changing environment and conditions set by the competition.

#### REFERENCE

- BIMCO/ISF (2021) BIMCO/ISF manpower update: the worldwide demand for and supply of seafarers. Dalian Maritime University and Institute for Employment Research, University of Warwick
- BIMCO's Market Outlook for container shipping has shown strong fleet growth (2020)

- Chin-ShanLu, Chen-NingHsu, Chen-HanLee (2020), The Impact of Seafarers' Perceptions of National Culture and Leadership on Safety Attitude and Safety Behavior in Dry Bulk Shipping, International Journal of e-Navigation and Maritime Economy.
- Dr.A. Moradi, Dr.J. Sajadi, M. Pourhaji, M.Rastegary, A.Fazeli (2018) Outlook of Shipping Industry in 2019-EN.
- Fraunhofer CML (2018) Best practice ship management suty, GL maritime software Gmbhhamburg, Germany.
- kyriakiMitroussi (2018) ship management; contemporary developments and implications. The asian journal of shipping and logistics.
- Roberto Giorgi, President, V.Ships (2018) Challenges in ship management, international shipping conference, New york.

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