

Best practices of Port Agency for Quality Ship Operation

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Abstract:

Many thousand vessels of various types are deployed in today's world and must be carefully maintained and managed. The work gets more difficult to handle as the scale and complexity of international maritime activities grow. There were only a few actions to ensure the maritime business ran smoothly before globalization and digitization.

This necessitates a well-organized ship management department. The responsibility of maintaining efficient ship operations falls to ship management. Ship management is handled by independent companies or owners in the marine industry. On behalf of the owner, the ship management firm oversees the ships. Ship Management is worried about the management of ships, as the name suggested. The vessels under management might be claimed by a ship management industry's sister office or independent vessel proprietors. A vessel proprietor shares armada management with a solitary or much ship management organization when their armada comprises a few vessels. These vessels are provided with hardware that requires legitimate support and extra parts. On account of a ship that doesn't get fitting upkeep, the hardware might separate in a journey adrift. A few management companies provide a team to the proprietors. The management business assumes control over the vessel when it leaves the shipyards (where it was fabricated) and gives specialized management to the proprietor. Most management organizations offer different types of assistance, for example, pre-buy reviews, development oversight, group management, and supply and ship lay-up arrangements.

Outsider ship management exercises are completed from various major sites. Limassol (Cyprus), Singapore, Hong Kong, and Malta are among them. A few administrators utilize marine programming, for example, a support plan framework, oceanic obtainment framework, or

wellbeing management framework, to smooth out strategies and guarantee productivity in managing these vessels.

Keywords:vessels, ship maintenance andmanagement, independentcompanies, shipyards.

1. Introduction

Managing the crew, creating dry-docking requirements, supervising dry docking, operational management, and preparing insurance claims are all part of ship operations. Ship operations must also be cost-conscious, adapting flexibly to the marine sector's always-changing needs, ensuring the ship has sufficient oil and fuel for the excursion, and keeping up with great binds with clients, ace mariners, and sailors.

According to the broad definition, a ship-owner is a natural or legal person who owns or hires a ship. The captain and crew are employed by the ship's owner, who is also concerned about the ship's maintenance. Consequently, the ship owner, supported by a hierarchical system of supervisors, controls all authority.

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1.1. Diversity of activities port agent

The shipping agency, sometimes known as the port agency, is responsible for various movements to meet vessel requirements for sailing, loading and collecting cargo, and other related husbandry duties. The work of ship husbandry is to solve any problem for the vessel to be suitable for sailing and the ship to call a port and vice versa.

Timetables for cargo hold ships for in and out ships, captains, and tugboats must be scheduled and matched with the port's routine.

1. Deals with crew immigration-related formalities and requirements such as signoff and sign-on.

2. Providing local border officials with information about the crew and any passengers.
3. All required ship certification documentation must be submitted.
4. Notifying Customs of the ship's arrival and reporting the goods on board.
5. Taking care of ship services such as fuel, repairs, and maintenance.

1.2. What is the main diversity of port agencies:

Concerning a shipping agency or shipping agent is the designated person or agency held responsible for handling shipments and cargo, and the general interests of its customers, at ports and harbors worldwide, on behalf of ship owners, managers, and charterers.

Shipping agents usually take care of a shipping company's routine tasks quickly and efficiently. They ensure that essential supplies, crew transfers, customs documentation, and waste declarations are arranged with the port authorities without delay.

1.3. Financial responsibility and undertaken

In a nutshell, the phrase "shipping specialist" alludes to the relationship between the head (for this situation, the shipping firm moving the freight) and it's representative. The guideline permits the specialist to work under his course and for his benefit, either obviously or secretly.

A freight representative's obligations are equivalent to those of a shipping organization. However, they may be unique. A freight merchant, for instance, will book outbound transfer and tell shippers which quay and when the materials should be introduced, as well as while stacking and dumping will start. He will make booking records because of approaching appointments and guarantee that the manifest division gets the fitting shipping documentation (shipping licenses, bills of filling) to begin stacking and dumping exercises.

1.4. Main husbandry job and responsibility

- Assuring that the approaching vessel has a berth
- Organizing the pilots and, if necessary, the tugs
- Obtaining the essential fresh water and provisions for the ship
- Putting together a specialist on the off chance that the group requires clinical consideration

- Conveying and getting orders from the ship's proprietor
- Arranging the items' inventory, transportation, and handling

1.5. The specific tasks of a cargo broker or port agent include:

- Giving applicable data on cargo rates and cruising records' arrival.
- Involving notification and cruising records to search for freight.
- The booking of cargo and the signing of agreements.
- Working with insurance companies to settle cargo disputes.

1.6. Board of Directors

It sits at the top of any ship-owning or running corporate entity, managed by a Chairperson or President and a Managing Director. They should define the company's overall business strategy and future direction. Internally or through outsourcing out to independent ship management businesses and services, the manner these separate operational responsibilities are handled, and especially how the various functions are bundled, must be supplied.

1.7. Ship Management

The owner selects how to run and maintain the ship after deciding its kind, size, and trade. The ship manager's job is to ensure that the ship can carry out the owner's instructions responsibly and financially.

In some cases, ship management is performed by the ship owner's organization, while an external organization is contracted in others.

1.8. Ship Management Entails:

Registering and documenting the ship as required by national and international authorities. Crewing, victualing, stores, spare parts, maintenance, and repairs.

1.9. ISM code and its implementation

Because there are so many different ships and companies, the code is written in broad terms. As a result, the code is confined to concepts and objectives.

- The corporation must define an environmental and safety protection policy, and the latter must ensure that it is maintained.

- It is necessary to specify responsibilities, forces, and interactions.
- It necessitates resources.

1.10. Fundamental of ship management

The shipping business has isolated itself into various hierarchical structures to achieve organizational and maritime transportation goals more efficiently and effectively.

1.11. Organizational behavior in Shipping

Aspects of organizational behavior that are vital in the delivery business, with a focus on those that are increasingly essential.

1.12. Commercial Operations management

Ship-owners put resources into high-esteem resources, mostly for recruiting the ships or space on the ships as their primary wellspring of acquiring and benefit. Consequently, shipping companies create and keep up with viable business and contracting tasks.

1.13. Crew Operations Management

Team management is a fundamental component of shipping activities. The point of this section is to give an extensive and intensive understanding of team management tasks. In this specific circumstance, a specific spotlight will be put on the different cycles from the underlying ID phase of supply of seagoing work while understanding economies of scale and legal necessities to help shipboard preparation and management and, at last, drivers of team execution management.

1.14. Technical Operations Management

Specialized management or full ship management is the oceanic help delivered to keep up with and work vessels, as dispatched by a ship proprietor or sanction. Instead of the ship proprietor, these obligations can be performed utilizing an outsider ship supervisor.

1.15. The Maritime Labor Convention, 2006, Legal Jurisdiction and Port State Control

This part examines how the Maritime Labor Convention, 2006 (MLC, 2006), addresses the legitimate locale of the State over unfamiliar ships entering its ports (port State) or lawful scene

as for sailors' freedoms. The MLC 2006 was embraced by the International Labor Organization (ILO) in 2006, following six years of serious and broad conferences and global gatherings of the ILO's three-sided constituents.

1.16. Managing Financial Resources in Shipping

A significant trademark and key element of the shipping business is that it is profoundly recurrent; this cyclicity is especially clear in the customary, less particular, and exceptionally divided dry mass and big hauler shipping areas. Cargo rates follow an unstable example because of changes in the business' hidden demand and supply forces. As can be seen in Fig. 1.16, the instability of cargo rates straightforwardly affects shipping resources whose worth follows a recurrent example like that of cargo rates. Another significant trademark and key component of the shipping business is that it is profoundly capital serious. The obtaining, ownership and management of shipping resources require the responsibility of extremely a lot of capital. The foundation of a significant presence (minimum amount) in Shipping will regularly include the development of an armada of no less than 7-10 vessels, and contingent upon the particular shipping area, this will require a critical speculation sum; e.g., the securing of a 5-year old Capsize vessel would expect in September 2016 the responsibility of about \$24 million.

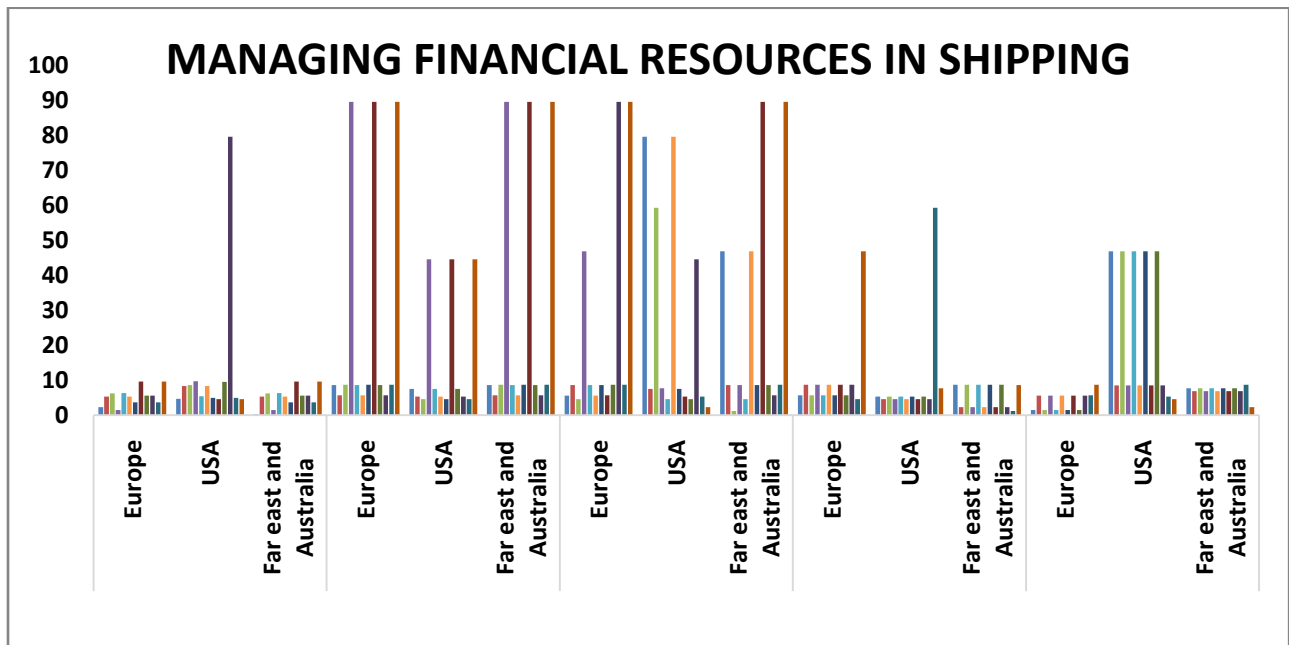


Fig. 1.16 Managing Financial Resources in Shipping

1.17. Maritime Energy Management

- The investigation of energy streams like stockpile, change, capacity, creation, and utilization in the tremendous sea space, which incorporates ships, ports, shipbuilding yards, and ship-breaking exercises, as well as the investigation of energy streams like stock, change, capacity, assembling, and use.
- How this power and its sources are streamlined to limit utilization and waste to relieve energy use's environmental and economic implications.

1.18. Safety and Security in Shipping Operations

The International Maritime Organization (IMO) has endeavored to lay out countless shows and guidelines that oversee the functional climate and go with preparing needs for oceanic experts on board ships and aground.

1.19. The Relationship between Nationality of Ships, "Genuine Link," and Marine Insurance

The number of dealerships venturing to the far corners of the planet in 2017 was 93.161. These ships are cruising the oceans, not for charitable purposes but to produce income for exclusive organizations, which are frequently the most important resources. In a world where seaborne trade accounts for 90% of global trade volume, the necessity to assess the hazards associated with ship carrying is more than clear. The intrinsic perils of Shipping (e.g., a harsh climate that could crash a campaign, an unstable cargo market, eccentrically fluctuating resource values, and so on) make the business benefits to seek after for benefit. Simultaneously, the gamble's emergence is impacted by various variables, including the ship's condition, upkeep, safe route, unfavorable weather patterns, the capability of sailors and inland workforce, and economic situations, which impact the ship's method of activity and double-dealing.

1.20. Best practices of port services include

1.20.1. Port and Cargo services

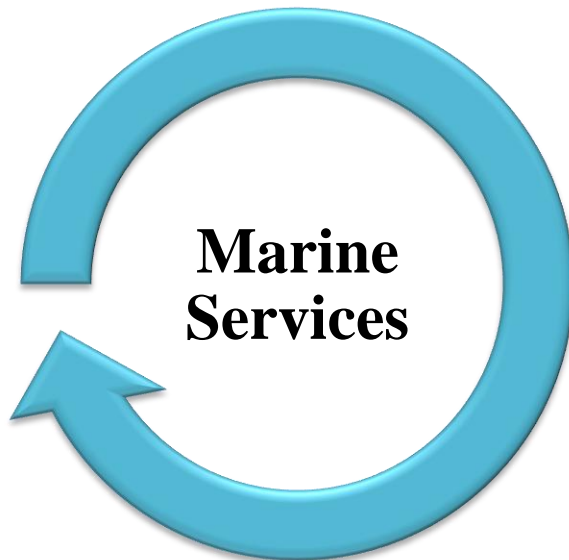
- Cargo Operations
- Bunker Delivery Coordination
- Logistics Coordination

- Stevedoring Coordination
- Protective Agent
- Immigration services.
- Crew matters

1.20.2. Husbandry services

Husbandry benefits are very much planned and followed through on time. Thome Ship Agency offers ship husbandry services to guarantee the safety and wellbeing of your boats. During your port visit, we may provide you with a range of facilities, including:

1.20.3. Marine Services



- Vessel service pre-planning
- Booked services coordination
- Cash to master
- Crew change assistance
- On/Off-hire survey coordination
- Meet and greet

1.20.4. Services include:

Help with baggage claims, hotel reservations, shore passes, transportation and offshore transfers, visas, permits, and medical help, among other things.

- Cash to Master
- Spares clearance and delivery, storage and logistics
- Supplies of bunker fuels, lubricants, and chemicals

- Freshwater, stores, provisions, and chandlery.
- Liaison with local authorities and communications assistance

1.21. Port state control participation

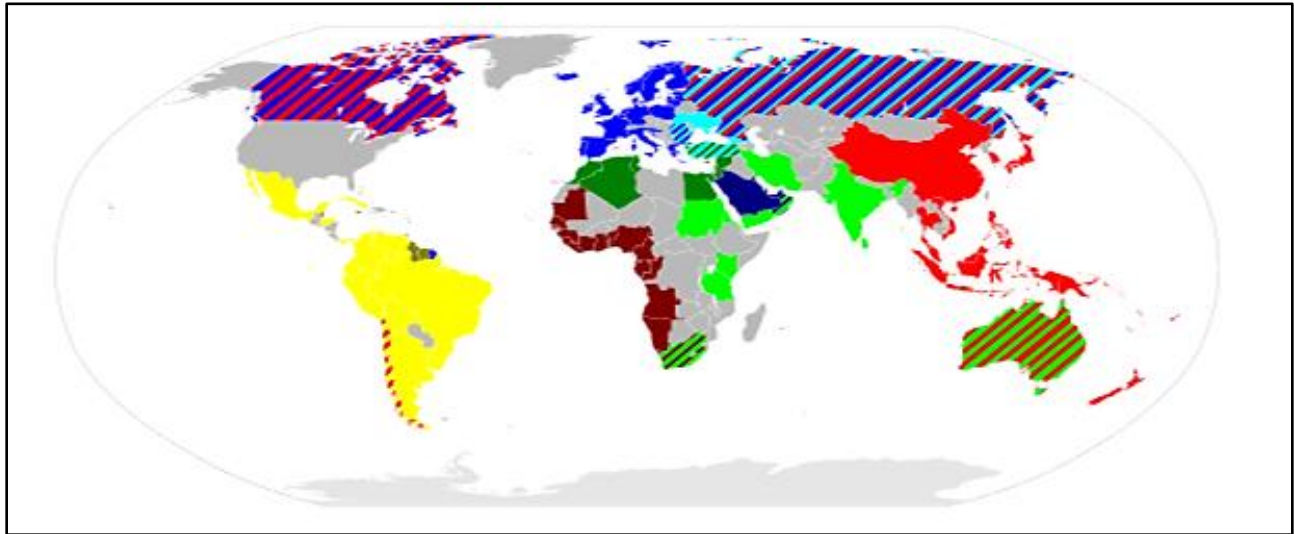


Fig. 1 Signatories to the Paris MOU (blue), Tokyo MOU (red), Indian Ocean MOU (green), Mediterranean MOU

(Dim green), Acuerdo de Viña del Mar (yellow), Caribbean MOU (olive), Abuja MOU (dim red), Black Sea MOU (cyan), and Riyadh MOU (naval force).

Signatories to the Paris MOU (blue), Tokyo MOU (red), Indian Ocean MOU (green), Mediterranean MOU (dim green), Acuerdo de Viña del Mar (yellow), Caribbean MOU (olive), Abuja MOU (dim red), Black Sea MOU (cyan) and Riyadh MOU (naval force).

Port State Control (PSC) is an examination conspire that permits legislatures to review unfamiliar enrolled ships in ports other than their own and take discipline against those that don't consent.

A port state control officer inspects ships as part of the port state control (PSC) (PSCO). When a PSCO discovers flaws aboard the vessel, the last action step is to detain the ship. In 2007, a sum of 74,713 issues was recorded during port state control examinations, bringing about 1,250 confinements, per the Paris MoU's yearly report.

Strategies a PSCO might force on a lack of ship with (arranged by rising gravity) are:

- Adequacies can be redressed in no less than 14 days for minor infractions.
- Under unambiguous circumstances, inadequacies can be redressed when the ship shows up at the following port.
 - Inadequacies should be amended before the ship can withdraw from the port.
 - Detainment of the ship happens.

2. Objectives:

- Port agents operate for commercial enterprises headquartered in or near ports. The general goal of the employment is to represent vessel operators/owners to ensure that their vessels arrive, work, and depart in a port professionally.
- The term agent, according to with dictionary, refers to someone who acts on behalf of another person or business entity. Regarding port agents and the port agencies they represent, the former plays a critical role in the shipping and nautical company as part of shipping services.
- Ships and captains visit a port agency to ensure that the ship's correct mooring sites are assigned and that all necessary documentation is in order. Additionally, port agencies detail all minor and important parts of customs costs and any other government procedures that the captain of the ship must complete.
- Several companies provide proprietary port agency services. When the ship shows up in a specific port, the port specialists are truly present to guarantee that all of the previously mentioned strategies are followed. This guarantees that the two players can rely upon one another.
- The presence of port specialists guarantees that the commitment is handled by the company providing the shipping services and that the ship and its crew are not engaged in any unlawful activity.

3. Literature Review

Chaturvedi et al. 2006 have fundamentally assessed the water financial plan for a common ship-breaking yard and the qualities of wastewater from a ship-breaking yard in Alang, India. In this examination, it has been featured that regular waste treatment frameworks have now been arising as a substitute and proper, and the utilization of similar has been proposed as the best

practice in squander water treatment for ship reusing yards in India. This paper has made sense of the insights about the prerequisite of new water and wastewater removal. The paper has depicted two significant strategies utilized in squander water treatment.

Mahindrakar et al. 2006 present the major ecological issues faced by Indian ship reusing businesses as to the removal of destructive and hostile fouling paints in reusing yards and in steel moving factories. The major dangers to the climate from weighty metals and gums have been examined by breaking down a ship of normal size. A more serious impact of handling of sand impact paint blend has been introduced independently.

Kinigalakis et al. 2006 in their paper have managed the need for planning risk examination techniques valuable for different ship reusing processes. The paper has investigated the impact of specialized exchange abilities of the workforce, the intricacy of ship structures, destroying methodology, and other specialized factors on the wellbeing of destroying activities. The accentuation has been given for individual ship reusing processes led in a particular area.

Watkinson 2006 has illuminated new advancements in the issue of management of marine climate, started by IMO, to standardize the ship reusing activities in different nations. The paper has done an itemized banter on the job of Environmentally Sound Management (ESM) set forward by IMO. Key necessities for the supportable advancement of ship reusing offices, adjusting to the standards and practice of reusing have been examined.

Grumman, 2006 has given an outline on the foundation of information management and advancement of a suitable apparatus consolidating the necessities and prerequisites connected with the new legitimately restricting instrument on ship reusing, which is now being worked on at IMO. The paper has well extended the need for a high figuring data set framework permitting various methodologies by forming specialized and consistent information relations.

Koumanakos et al. 2006 have considered different elements engaged with ship reusing and propose a data support system that upholds decision-making for destroying outdated vessels. Structure introduced in this paper features focuses, for example, support direction concerning the plan and execution of the destroying system of a vessel, the reasonableness of a destroying yard for a particular vessel, the reusing of the vessel's materials, the financial practicality of a destroying yard to embrace a destroying cycle. The proposed structure has coordinated a unique

reproduction device with a choice of help elements and functionalities to address the various partners' singular necessities.

IMO 2009 has called attention to the requirement for getting ready to ship reusing plan by the concerned ship recycler playing out the delegated tasks. The essential issue of Green Passport reached out over the existence cycle stages by the ship proprietors. IMO has referenced the significance of carrying out prescribed procedures for the ship reusing process without precedent for this show. Additionally, the show report reasserted the dynamic cooperative endeavors by the significant United Nations offices and showed managing ship reusing.

Watkinson 2006 has illuminated new advancements in the issue of management of marine climate, started by IMO, to standardize the ship reusing tasks in different nations. The paper has done a point-by-point banter on the job of Environmentally Sound Management (ESM) set forward by IMO.

4. Research Methodology

The researchers used an explanatory research design. Explanation research establishes the hypothesized relationship between variables. The descriptive survey research design was also utilized to collect information for quantitative research, culminating in data used in the investigation. The survey technique gave the researcher better control over the search process. The mix of persons or instances with a particular characteristic the researcher collects data is referred to as a population.

A research population is a group of instances that all lead to the same analysis method. The participants in the present study were fleet management managers in Developing countries, especially in the Sub-county city. Transportation inspectors and any other members of the government of fleet management help compensate this leadership.

Due to a lack of resources or time constraints, studying a full or entire population may not be viable at times. A sample from such a population will suffice to conduct a particular study. Two hundred people were picked from the population to form the study's sample. When the features of the respondents are homogeneous, the sample size chosen can be recognized as adequate support, as indicated in the literature, which suggests a sample size of 30 for statistical data. As a result, the study will only require 200 volunteers. Purposive sampling techniques were used to

choose the sample. The researchers purposefully identified and contacted important transportation managers and officials managing fleets of cars with extensive knowledge of their operations.

5. Result of the Study

Cronbach Alpha Test for Variable Reliability Running a reliability test for the variables included in the study is a crucial part of this research study. The internal reliability of the indicators used to analyze the independent and dependent variables is referred to as parameter dependability. As a result, the degree to which the variables were utilized to measure the constructs. Research scientists have used various measuring methods for conducting reliability analysis in several empirical investigations. Cronbach alpha, a generally used technique for analyzing the internal consistency of components in a survey to offer the research a reliability coefficient, was utilized in this analysis. Split-half, appropriate instrument, Simultaneous, and Cronbach alpha are some of the instruments accessible.

As shown in figure1, the principles must be pursued to make the highest performance while utilizing Cronbach alpha. Cronbach's alpha ought to be larger than 0.6. Cronbach alpha values greater than 0.6 are satisfactory, and observations higher than 0.8 are preferred. This study's operation and maintenance, management system, fleet maintenance, and operational efficiency all had Reliability coefficient alphas of 0.533, 0.547, 0.536, 0.512, and 0.580. This demonstrated excellent measurement of changing dependability. Table 4.1 shows the Cronbach alpha reliability coefficient:

Table 1 Reliability of Variables using Cronbachalpha:

Variables	Alpha	Number of Items
Repair and Management	0.533	6
Fuel Management	0.547	7
Driver Management and Training	0.536	3

Competitive Advantage	0.512	5
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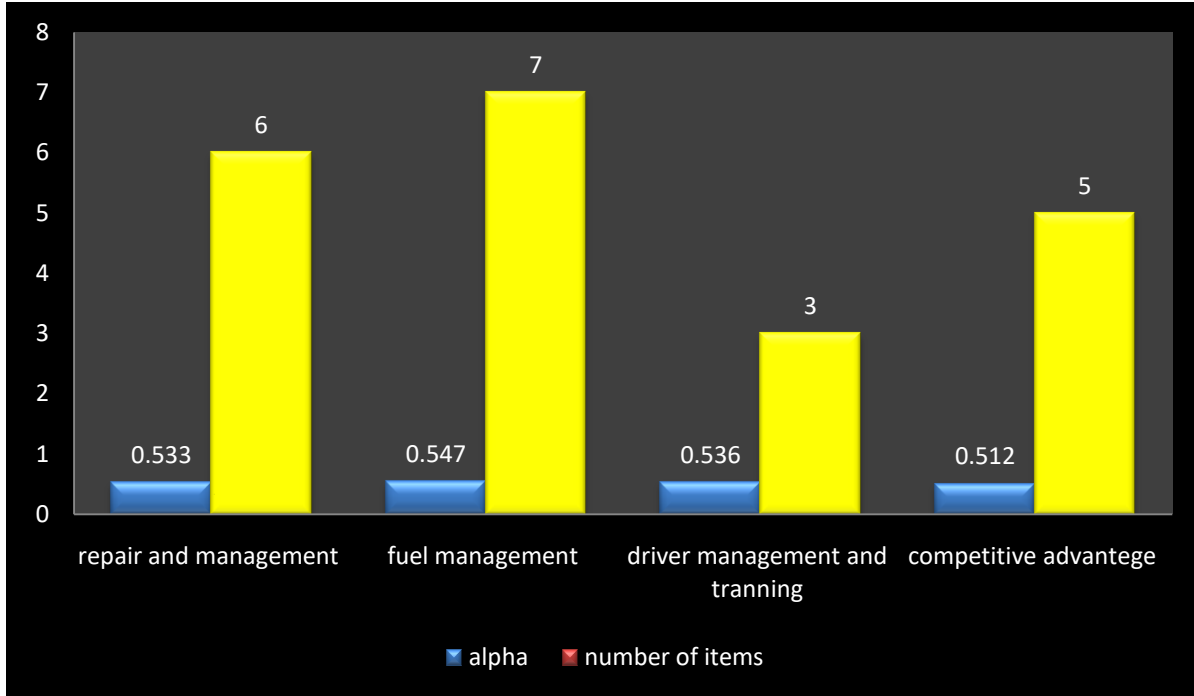


Figure: 1 Reliability of Variables using Cronbach alpha

6. Correlation Matrix

Multicollinearity must also be checked to determine that the variables are significantly correlated and that some variables or variables must be dropped to provide robustness. As a result, Pearson correlation statistics were utilized to estimate the factors. The interaction results are shown in Table 2.

Table 2 Correlation between Variables

Column1	RM	FM	VT	DMT	CM
RM	1	2.6	4.3	5.6	1.2
FM	4.3	5.6	7.3	1.8	4.6

VT	7.3	1.8	0.3	4.6	0.5
DMT	0.3	4.6	2.9	7.3	7.3
CM	2.9	7.3	4.6	4.9	7.9

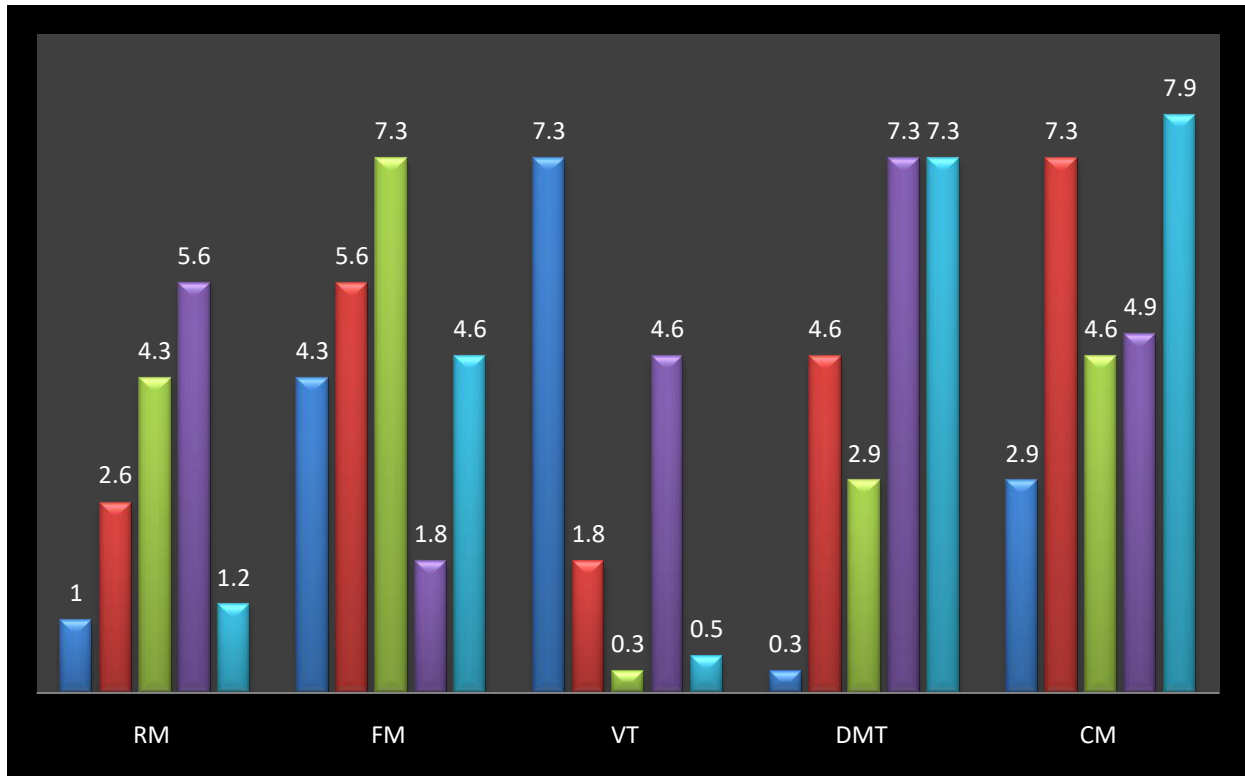


Figure: 2Correlations between Variables

At the 0.01 level, the correlation is significant (2-tailed). RM is for maintenance and upkeep, FM stands for fuel management, VT stands for vehicle tracking, CA stands for competitive advantage, and DMT represents operator management and implementation.

The concept of correlations is one of the techniques frequently employed in the quantitative approach to investigate whether there is a partnership between dependent variable and independent variables. Quantitative researchers have created and used statistical tools to conduct statistical studies of variable relationships. As a result, to see how much another variable accounts for a variable. A multicollinearity test was performed utilizing connection insights to

check whether the strength of the relationship between the factors would influence the future factual investigation. The correlation statistics should not surpass 0.7 for the approach to be robust (Hair. et al., 2014; Pallant, 2007). As a result, multicollinearity does not pose a hazard to this analysis. The variables utilized have a substantial relationship as well. Table 2 shows that all variables are within the parameters established in the research.

7. Conclusion

Fleet operations and management organizations must maintain various government rules, policies, and regulations. Shipping agents play an important part in the transportation system. Thus, they must produce quality services with increased production, maintainability, and, most importantly, a focus on customer needs. The establishment of the State Company dealing exclusively with Shipment Agencies had the goal of bringing common ownership and control of industry, while at the same time ignoring the potential for problems to develop, Editorial in trade barriers. Every country attempting to realize economic development must enhance Shipping and its supporting logistics. Inefficient transportation management can restrict a government's participation in international trade.

The improvements would enable shipping operators to manage international challenges that influence the marine agencies' and some other facilitators' accessibility and overall operations. Traditional agents face an additional challenge from the fast-growing field of information and technology (IT), especially the Internet. The performance of clients to book shipments, pay cargo, and visualize vessel schedules on a computer screen, among other things, limitations the responsibilities of shipping agents. Even in these critical situations, we must maintain our basic aspiration and abilities: to meet the needs of our clients and the vessel. We're here to share our expertise to improve the transportation industry. The tasks and pressures on board have also evolved, and captains now require support more than ever. As a result, we should provide them with alternatives and make their lives as simple as possible. Something that agencies can use with their consumers.

Policy Implication and Future Research Direction

The research has contributed both theoretical and managerial contributions. In terms of technical skills, this investigation created and evaluated a model that looks at the impact of fleet

management on comparative strategy. The findings show that fleet management techniques have a significant impact on the growth of any business. In practice, the research presents managers and policymakers with recommendations for specific fleet management methods or a combination of activities that create a competitive advantage.

8. References

1. Beamon, B. M. & Balcik, B. (2009) *Performance measures in humanitarian relief chains. Journal of Public Sector Management, 21 (1) 4-25*
2. Besiou, M., Martinez, A. J.P. & Van Wassenhove, L. N. (2012). *The effect of earmarked funding on fleet management for relief & development. INSEAD, Working Paper.*
3. Botan, C., Frey, L.R., & Kreps, G. (2000). *Investigating communication: An introduction to research methods: Boston: Allyn & Bacon.*
4. Collins, A., Henchion, M. & O'Reilly, P. (2009). *Logistics customer service: performance of Irish food exporters. International Journal of Retail & Distribution Management, Vol. 29 (1), 6-15.*
5. Collins, D. J. & Montgomery, C. (1995) *competing on resources: strategy in the 1990s. Harvard Business Review, 73, 118–128.*
6. Evans, J. R. & Barry B. (2007). *Marketing, (7th ed.), Upper Saddle River, NJ: Prentice-Hall.* Gitahi, M. P. & Ogollah, K (2014).
7. *Influence of Fleet Management Practices on Service Delivery to Refugees in United Nations High Commissioner for Refugees Kenya Programme. European Journal of Business Management, 2 (1), 336-341.*
8. Hesketh, I., Cooper, C. & Ivy, J. (2015), "Well-being, austerity & policing: is it worth investing in resilience training?" *The Police Journal: Theory, Practice & Principles, Personal communications, Vol. 88 No. 3, pp. 220-230.*
9. Koutsoyiannis, A. (1979). *Modern Micro Economics, MacMillan, London.* Locklin, D.P. (1954). *Economics of Transportation. IV edition.*
10. Richard D. Irwin, INC, Homewood, Illinois. Madhoo Pavarkar (1978).
11. *Transport, Popular Prakashan, Bombay.* Mahajan, V.S. (1991).
12. *Transport Planning, Policy and Development, Deep and Deep Publication, New Delhi.* Manchanda and Varghese. (1979).

13. Road Transport Management: Systems and Procedures. Himalaya Publishing House, Bombay. Manoharlal (1989). Rural Roads and Economic Development. Amar Prakashan, New Delhi.
14. Nash, C.A. (1976). Public Versus Private Transport. MacMillan Press Ltd., London. Nayar, K.G. (1986).
15. Regional Disparities in India, Agro Publishing Academy, New Delhi. Owen and Wilfred. (1968).
16. Distance and Development-Transport and Communication in India. The Brookings Institution, Washington D.C. Owen, Wilfred. (1964).
17. Transport Technology and Economic Development. The Brookings Institution, Washington D.C. Pant, D. (1950).
18. Transport Problems of India. Hind Kitab Limited Publishers, Bombay. Patankar, P.G. (1985). Road Passenger Transport in India, CIRT Publication, Pune.