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Ship Management Joint Venture (SMJV), PT Pertamina International Shipping (PIS) with Nippon Yusen Kabushiki Kaisha (NYK)

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Abstract: The Ship Management Joint Venture (SMJV) between PT Pertamina International Shipping (PIS) and Nippon Yusen Kabushiki Kaisha (NYK) aims to enhance the efficiency and effectiveness of ship operations. This study seeks to explore the collaboration strategies of both companies in facing intense competition within the ship management industry, as well as sustainability challenges related to carbon emission reduction. The objective of this research is to analyze the impact of SMJV on PIS's operational and financial performance, as well as to evaluate the synergies created through this partnership. The methodology employed includes in-depth interviews with managers from PIS and NYK, along with the analysis of documents related to post-implementation performance of SMJV. The findings indicate that this collaboration successfully reduced operational costs and improved customer satisfaction, with a revenue growth of 15% over the next two years. Furthermore, organizational culture challenges were addressed through cross-cultural training programs, improving communication and operational efficiency. Recommendations for PIS and NYK include continuously evaluating and developing the SMJV strategy, as well as strengthening risk management related to market changes. This study provides important insights into how SMJV can serve as a strategic model for other companies in the increasingly competitive and sustainable shipping industry.

Keywords: ship management, joint venture, operational efficiency, owner, customer trust.

INTRODUCTION

The transportation industry is a key pillar of the global economy. Therefore, maritime transport contributes more than 80% of global trade (Wang et al., 2018), which plays a crucial role in supporting the global supply chain (Kawasaki and Lau, 2020). Shipping is the backbone of logistics and the global supply chain. Due to its complex nature, operating a shipping business requires expertise in various aspects of ship operations. The ship management industry is a well-established sector and an integral part of the maritime industry's value chain, having been in operation for about half a century. Currently, third-party Ship Management Companies (SMCs) dominate 35% of global shipping management, with SMCs such as V-ships, Columbia Ship Management, Barber International, ASP Ship Management, NYK, Synergy Ship

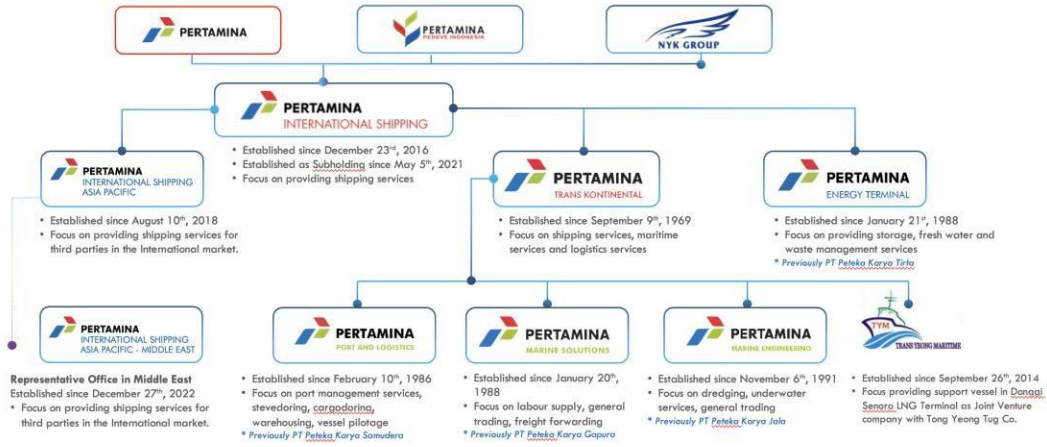
Management, and Orient Ship Management as some of the leaders (Cabang and Robarts, 2014).

Ship management, according to (Willingale, 1998), refers to management companies that provide one or more services separate from ship ownership, where they offer services to ship owners under a contract and for a management fee. (Panayides P., 2017) defines ship management as a service provider related to the operational and financial management of ships as a source of revenue. Ship management provides opportunities for companies or ship owners to focus on using available resources to maximize revenue, such as chartering ships or buying and selling vessels. Ship management controls costs and operations, and also ensures that managed ships comply with international rules and regulations, making sure that the ships operated are seaworthy and ready for operation.

Indonesia is an archipelagic country. The definition of an archipelagic state according to UNCLOS 1982 (Article 46) is: a group of islands, including parts of islands, the waters between them, and natural features closely related to each other. It forms a unified geographic, economic, and political entity, or historically, a unified territory (boundary circle).

The background of the strategic cooperation between PT Pertamina International Shipping (PIS) and Nippon Yusen Kabushiki Kaisha Group (NYK) in the form of a Ship Management Joint Venture (SMJV) reflects the commitment of both companies to optimize resources and improve operational efficiency in the shipping industry. PT Pertamina International Shipping (PIS) has a significant market share in the national ship management industry, especially in the management of tankers and maritime services for the oil and gas industry. Since its establishment as a separate entity focusing on shipping and logistics services, PIS has successfully strengthened its position by managing a large fleet of ships that meet international standards for safety and operational efficiency. Following the partnership through the joint venture, PIS successfully expanded its market reach and increased its competitiveness, both domestically and internationally. This strategic collaboration opens opportunities for PIS to access the latest technology, expand its international network, and improve service quality, thus driving greater market share growth in the ship management segment.

Currently, PT Pertamina International Shipping (“PIS”), a subsidiary of PT Pertamina (Persero), is the largest tanker owner and operator in Indonesia. Nippon Yusen Kabushiki Kaisha (“NYK”) is one of the world’s leading shipping companies with various assets, including container ships, bulk carriers, car carriers, LPG carriers, LNG carriers, and tankers. PIS and NYK plan to establish a Joint Venture in Ship Management, where in the initial stage, PIS will place several ship assets to be managed by the JV Ship Management



Picture 1. Subholding Integrated structure of Marine Logistics Company

Since 2021, after PIS underwent a transformation into the IML subholding and the completion of the restructuring process with the transfer of ship assets from Pertamina and

Pertamina Trans Kontinental (“PTK”) to PIS, PIS's business activities have focused on energy cargo transportation (shipping) and ship management.

To support the operational management of its ship assets, PIS has an in-house Fleet Management Directorate, led by the Fleet Director. Currently, PIS owns 101 ships, consisting of tankers and LPG carriers, of which 25 ships (25%) are managed by third-party ship management, while the remaining ships are managed by the in-house fleet management..

Table 1. Ship Management PIS

Ship Management	VLCC	LR	LR / FSO	MR	GP	VLGC	HANDY LPG	SMALL LPG	SMALL II	BL	SMALL I	SUEZMAX	TOTAL
Bernhard Schulte Ship Management (BSM)	1			5		1			1				8
Columbia Ship Management (CSM)						2							2
Goodwood Ship Management												1	1
NYK Ship Management (NYKSM)	2												2
Samudera Indonesia Ship Management (SISM)				1									1
Synergy Marine		3		3		2		2					10
Vship Offshore (Asia)			1										1
in house Ship Management (PIS)		4		14	15	2	2	7	16	2	14		76
Grand Total	3	7	1	23	15	7	2	9	17	2	14	1	101

Through the SMJV, PIS and NYK are not only able to share responsibilities in fleet management but also leverage each other’s expertise in technology and management. This is especially important given that NYK is known as one of the world’s leading shipping companies, while PIS has a deep understanding of both the domestic Indonesian and international markets.

This collaboration aligns with Indonesia’s national agenda to reduce carbon emissions and support Carbon Capture and Storage (CCS) initiatives. In recent years, carbon emissions from Indonesia's maritime sector have shown a concerning trend. In 2019, carbon emissions from the maritime sector in Indonesia reached approximately 50 million tons of CO_2, which has been increasing annually alongside the growth of logistics and shipping activities. By 2023, this figure is expected to approach 55 million tons of CO_2, highlighting the need for significant efforts in emission management.

In the context of the SMJV, both companies will focus on the transportation of clean petroleum products, liquefied natural gas (LNG), and liquefied petroleum gas (LPG), which is a strategic step to support emission reduction efforts. This agreement not only creates new opportunities within the shipping sector but also demonstrates that the SMJV can serve as a platform for innovation in sustainable ship management and transportation practices.

The Ship Management Joint Venture (SMJV) between both parties needs to be established on a strong foundation, with considerations based on long-term partnership. Several companies have already formed Ship Management JVs, including:

1. Anglo Eastern with Admore Shipping, Teekay, and EXMAR.
2. Columbia Ship Management with Seatrans, Tsakos Navigation, Spectrum, and Premuda Spa.
3. Fleet Management with Shandong Shipping, Celcius Shipping, and Hansa Tankers.
4. V Group with COSCO Shipping Corporation Limited, Nordic Tankers, Clipper Group, and Grace Star International Co., Ltd.

A study by Drewry Maritime Advisors shows that JV Ship Management formed by third parties is typically set up for a limited period, covering a specific project or business. However, a JV Ship Management can become long-term if the foundation is strong and addresses ongoing needs rather than just short-term business or projects. Some competitor/benchmark data for

Ship Management companies.

Table 2. competitor / *Ship management comparator*

Ship-management company	Ship Owner	Established	Fleet Size	Location	Details
					Teekay vessels.
Anglo-Eastern	EXMAR Ship Management	2019	N/A	Singapore	The JV is known as AEXLNG Management. This JV could not take off due to pandemic and otherissues.
CSM	Seatrans	2021	N/A – Chemical tankers, roro, offshore vessels	Bergen	The JV is calledStodig *Ship management* AS. CSM will gain expertise in chemical trade.
CSM	Tsakos Navigation	2010	66 vessels –container, dry bulk and tankers	Athens	The JV is based in Greece and called Tsakos Columbia Shipmanagement.
CSM	Spectrum	2021	35 offshore vessels	Khobar	The JV is called Columbia Ship-management Saudi Arabia and based in Saudi Arabia.
CSM	Premuda Spa	2020	21 vessels –dry bulk and tankers	Genoa	The JV is called Columbia Shipmanagement Italy S.r.l
Bernhard Schulte Shipmanagement (BSM)	Rawabi Vallianz Offshore Services (RVOS)	2021	40 offshore vessels	Riyadh	Recently, in November 2021, a JV is launched by BSM and RVOS to enterSaudi offshore market.
Chemikalien Seetransport (CST)	Dr. Peters Group (DPG)	2021	N/A –LNG, chemical, tankers and bulkers	Hamburg	Currently, CSThas a fleet of currently 40 tankers and bulkers, with this alliance CST will further
Ship-management company	Ship Owner	Establi shed	Fleet Size	Location	Details expand its market position.

Fleet Management	Shandong Shipping	2018	12 bulk carriers	China	The JV is focussed on *Ship management*, ship building supervision and maritime consultancy
Fleet Management	Celsius Shipping	2018	4 LNG vessels and 2 product tankers	N/A	Aside from technical management, the JV also supervises 6 new-built LNG ships
Fleet Management	Hansa Tankers	2018	13 chemical tankers	Singapore	N/A
Synergy Marine	MOL Tankship Management	2014	N/A –LPG carriers, product and chemical tankers	N/A	The name of JV company is MOL Synergy Marine Pvt. Ltd
Synergy Marine	D/S Norden	2020	18 tankers	Copenhagen	The JV is 50/50 owned by both parties and it has total of 116 personnel.
Synergy Marine	Genco Shipping & Trading Limited	2021	40+ dry bulk vessels	Singapore	N/A
V Group	COSCO Shipping Corporation Limited	2005-2020	N/A – containerships	Hong Kong/ Shanghai	JV set-up with the goal of imparting V. Ships best practice.
V Group	Nordic Tankers	2017	N/A – tankers	Denmark	JV set-up with the goal of imparting V. Ships best practice.
V Group	Clipper Group	2005-2020	N/A –dry bulk vessels	Denmark	JV set-up to improve operational Performance and allow

PT Pertamina International Shipping (PIS) faces intense competition in the ship management industry, both in the domestic and international markets. The industry is populated by several large global ship management companies offering technical, operational, and safety services in fleet management, aimed at meeting industry standards while optimizing operational efficiency. PIS's global competitors, such as V Group, Fleet Management, and Synergy Marine, have established strategic partnerships with ship owners worldwide, with the main objective of improving operational performance, expanding service coverage, and adopting best practices in ship management technology.

Several large ship management companies such as Columbia Ship Management (CSM) and Bernhard Schulte Shipmanagement (BSM) also have a strong presence in the international market, forming joint ventures with ship owners to develop expertise in various types of vessels, including chemical tankers, LNG carriers, and offshore vessels. Joint ventures formed

by CSM with companies such as Seatrans and Spectrum, and BSM's collaboration with Rawabi Vallianz Offshore Services (RVOS) in Saudi Arabia, highlight the companies' strategies to tailor their services to meet specific customer needs and expand market share in certain sectors.

In Indonesia, PIS also faces challenges from local companies that are strengthening their ship management capabilities to efficiently manage domestic fleets. With government regulations supporting the involvement of domestic companies in the energy and logistics sector, local ship management companies are gaining stronger competitiveness in the national market. However, PIS still has an advantage with the support of Pertamina as Indonesia's largest energy company, which provides them with significant captive market access in tanker and LNG ship management.

To counter this competition, PIS is focusing on improving operational efficiency through the adoption of environmentally friendly technology, energy management, and international safety standards. Collaborative strategies through joint ventures, such as the one with international companies, allow PIS not only to expand its global network but also to enhance its technical capabilities to compete with global ship management companies. With this approach, PIS has the opportunity to differentiate itself in terms of services and commitment to sustainability, attracting customers seeking ship management solutions focused on carbon emission reduction and high safety standards.

One of the main objectives of this SMJV is to enhance the managerial and technical capacity of Indonesian seafarers. NYK is committed to providing the necessary training so that PIS's seafarers can compete at the global level. Thus, this SMJV not only serves as a vehicle for operational efficiency but also plays a role in developing human resources in the maritime sector. This is important for creating a competitive workforce that is ready to face the increasingly complex challenges of the industry.

On the other hand, through the SMJV, PIS can expand its presence in international markets. With the support of NYK, PIS can access global networks and advanced technologies needed to improve its services and operations. This demonstrates how the SMJV is not only beneficial to both companies but also contributes to the growth of Indonesia's maritime sector as a whole. By relying on this collaboration, PIS and NYK have the potential to set new standards in the shipping industry that are oriented towards sustainability and emission reduction.

Through this SMJV, PIS and NYK are committed to creating a business model that is not only financially profitable but also positively contributes to the environment. With a focus on carbon management and emission reduction initiatives, this partnership is expected to serve as an example for other companies in the shipping industry to follow the path of sustainable collaboration. This agreement shows that by working together, PIS and NYK can achieve their shared goals of improving operational efficiency and strengthening their positions in the global market. (https://www.pertamina.com, 2024)

The main issue underlying this research is the intense competition in the ship management industry, both domestically and internationally, which drives ship management companies in Indonesia, particularly PT Pertamina International Shipping (PIS), to continuously adapt and improve their operational capabilities. PIS faces challenges from large global ship management companies like V Group, Fleet Management, and Synergy Marine, which have collaborated with ship owners worldwide through strategic partnerships to improve operational performance and expand their service reach. This competition creates the need for PIS to strengthen its position and competitiveness through sustainable strategic approaches, both in terms of technology and managerial efficiency, in managing its fleet.

In addition, the growing focus on sustainability issues and carbon emission reduction in the shipping sector also presents a challenge for PIS in maintaining operational sustainability. The increasing trend of carbon emissions in Indonesia's maritime sector, which reached about 55 million tons of CO_2 in 2023, underscores the need for proactive measures in emission

management. By forming a joint venture (SMJV) with Nippon Yusen Kabushiki Kaisha (NYK), PIS hopes to improve operational efficiency and apply more environmentally friendly ship management technologies. This research aims to analyze PIS's collaboration strategies in responding to these challenges, as well as to evaluate how the SMJV partnership can strengthen PIS's competitiveness in the increasingly dynamic and sustainable ship management industry.

Literature Review

1. Ship Management Joint Venture (SMJV)

A Ship Management Joint Venture (SMJV) is a collaboration between two or more companies in managing a fleet of ships. This concept has become increasingly popular in the global shipping industry, especially with rising operational costs and regulatory complexity. According to Kiran and Pahlavan (2020), SMJV can help companies optimize resources and improve operational efficiency (Kiran & Pahlavan, 2020). In the context of PT Pertamina International Shipping (PIS) and Nippon Yusen Kaisha (NYK), this collaboration aims to strengthen their position in the international shipping market.

Several studies indicate that joint ventures in ship management can reduce financial and technical risks. According to Li and Wang (2019), such collaborations allow companies to share costs and risks, as well as leverage each other's expertise in technology and management (Li & Wang, 2019). This is crucial in facing challenges such as fuel price volatility and changing environmental regulations..

Ship management is a complex process that includes operational, technical, and administrative management of ships. In this context, Panayides (1998) emphasized that professional ship management is vital for maintaining relationships with clients, which, in turn, can improve customer satisfaction and loyalty in the shipping industry. This process not only involves the physical management of ships but also the development of effective marketing strategies to attract and retain clients.

Meanwhile, a joint venture (JV) is defined as a collaboration between two or more companies to run a specific project and share risks and resources. Muñoz de Prat et al. (2020) state that JV can function as a strategy for entering international markets and supporting sustainable development. This shows how company collaboration can help achieve larger goals, especially in the increasingly competitive shipping industry.

Ren et al. (2009) highlight that the performance of international joint ventures (IJV) is greatly influenced by managerial factors that can improve collaboration effectiveness. They developed a comprehensive model linking performance drivers with IJV performance metrics, which can help understand how a good relationship between partners can enhance JV success. Therefore, efficient management in the context of JV becomes increasingly important to achieve desired outcomes.

In the context of ship management, Mudjiono et al. (2023) evaluated the effectiveness of ship management using the balanced scorecard method. They concluded that effective ship management could optimize organizational performance in the era of Industry 5.0, focusing on customer perspectives, internal business processes, and learning and growth. This shows that ship management is not just about operating the ship but also about broader strategies to improve organizational performance.

Karahalios (2014) underscores the importance of risk management in ship management, especially in reducing financial losses due to incidents like ship collisions. This study proposes the application of a performance management system using Fuzzy Sets and the Analytic Hierarchy Process (AHP) to assess the costs and benefits of risk management, emphasizing the importance of risk management as an integral part of ship management.

On the other hand, research by Goulielmos (2017) shows that shipping companies need to implement effective business management strategies to remain competitive in the global market. He notes that shipping managers often rely on cost-saving tactics and survival

strategies and calls for further research into the development of better shipping business strategies. This indicates the close relationship between ship management and the business strategies adopted by companies.

The *Asian Journal of Shipping and Logistics* (2013) discusses recent developments in ship management and their implications for the shipping industry. Although no specific definition is given, the article highlights contemporary issues faced by ship management in the global context, showing that ship management must continuously adapt to changes in the industry to remain relevant and efficient. Finally, Nippa et al. (2007) examine the success factors in managing international joint ventures, focusing on the managerial challenges faced. This research produces a theoretical framework that can be used to understand how good management in the context of JV can contribute to project success. This shows that effectively managing relationships in a JV is crucial not only for project success but also for contributing to sustainability development in the industry.

PIS and NYK have leveraged their respective expertise to create a mutually beneficial synergy. PIS, as a national shipping company, has in-depth knowledge of the domestic Indonesian market, while NYK, with its extensive experience in the international market, brings a global perspective. This is further strengthened by a study by Huang (2021) emphasizing the importance of combining local and international expertise in a joint venture (Huang, 2021).

Other literature reviews also highlight the importance of risk management in SMJV. According to Chen and Liu (2022), identifying and mitigating risks is a key factor for the success of joint ventures in the shipping industry (Chen & Liu, 2022). PIS and NYK have developed a risk management framework to ensure smooth operations and minimize potential issues. Furthermore, the success of SMJV also depends on organizational culture alignment. According to Smith (2020), cultural differences between companies can pose challenges in a joint venture, making it important to establish mutual understanding and cooperation (Smith, 2020). PIS and NYK have implemented cross-cultural training programs to strengthen this collaboration.

Considering the va`ntial for enhancing competitiveness in the international shipping market. This collaboration is not just about sharing resources but also about developing innovations and best practices that will bring long-term benefits.

2. Principles and Rules of Ship Management Joint Venture (SMJV)

According to data from the Indonesian Ministry of Foreign Affairs (2022), Indonesia is part of the multilateral cooperation within the International Maritime Organization (IMO). IMO is a specialized agency of the United Nations responsible for maintaining ship safety and health (OSH) in maritime operations. Based on IMO (2021), ship management is defined as the planning, direction, control, and coordination of all resources and operational activities on board a ship to meet safety standards (safety) and environmental protection standards.

IMO (2021) also states that ship management applied by shipping companies worldwide follows specific principles and rules that can significantly impact a company's performance in maintaining maritime conditions and ensuring ship safety. These principles and rules include:

a. Ensuring the safety of crew members and the people and cargo transported.
b. Preventing or minimizing pollution and environmental damage caused by ship operations.
c. Ensuring efficient and economical ship operations.
d. Complying with all national and international maritime authority regulations and requirements.
e. Implementing good governance and accountability in ship operations by the shipping company.
f. Ensuring crew members receive proper working conditions and welfare.

g. Conducting risk assessments and adequate risk management planning.
h. Developing a safety culture and awareness of environmental sustainability on board.

Overall, the essence of good ship management is prioritizing safety and environmental sustainability. Ship management is a service management process in the shipping industry aimed at operating ships safely and efficiently. This process is not just about keeping the ships running but also responding to various environmental forces impacting critical aspects of the shipping industry, including economic, institutional, commercial, and social factors. This demonstrates how complex the challenges faced by ship managers are and the importance of a holistic approach to ship management (Mitroussi, 2013).

In this context, shipping companies play a key role in providing services that meet market needs. Ship management encompasses various services offered to provide solutions to the problems faced by all segments of ships, wherever and whenever these services are needed. These services are crucial in ensuring that ships can operate optimally amid existing challenges.

One of the key issues often faced in ship management is when a ship passes through a navigation channel with specific obstacles or challenges, such as a bottleneck. This situation requires careful attention and strategy to ensure smooth and safe operations while minimizing potential risks (Wang & Li, 2022). Therefore, good planning and management are vital in overcoming these challenges.

Additionally, ship management focuses on the design of optimal propulsion systems for ships. This aspect is critical as it affects operational efficiency and environmental impact. The implementation of efficient Energy Management Strategies (EMS) also becomes an integral part of ship management performance, contributing to achieving high operational effectiveness in ship operations (Fan et al., 2023). With the right strategies, ships can operate well and contribute to environmental sustainability efforts.

Core issues in ship management are often related to safety and cost control. In the highly competitive shipping industry, these two aspects become primary concerns for all parties involved, including ship owners and operators (Mitroussi, 2013). Ensuring the safety of ships and crews is a top priority, while effective cost control will help companies remain competitive in the market.

From the ship owner's perspective, the best ship management not only involves good ship maintenance but also meeting the needs of ship customers or users. This creates added value and improves the company's reputation in the eyes of customers (Özkaynak & İçemer, 2024). Effective ship management will contribute to increased customer satisfaction, as customers feel safe and comfortable using ships that are well managed and meet established standards (Kwak et al., 2016).

Conversely, poor ship management can result in off-hire ships and high costs, which can harm both the ship owners and operators. Uncertainty in ship operations can lead to significant financial losses and damage relationships with customers. Therefore, it is important for shipping companies to pay careful attention to all management aspects to avoid negative consequences (Wang & Li, 2022).

Furthermore, ship management is also responsible for all equipment, both on board and within the ship. This responsibility includes the maintenance and management of equipment to ensure smooth and safe operations. With good management, all operational aspects of the ship can be maintained, thus supporting the success of larger shipping missions (Z. Wang et al., 2023).

3. Regulations of Ship Management Joint Venture (SMJV)

SMJV regulations are generally governed by several national and international regulations, such as the following:

a. **National Regulations on Ship Ownership and Operation**

In Indonesia, ship management must comply with national regulations, such as the Maritime Law No. 17 of 2008. In SMJV, foreign companies wishing to invest in ship management in Indonesia are required to cooperate with local partners according to ownership requirements in this law.

b. **International Maritime Organization (IMO) Regulations**
IMO has regulations governing operational and safety standards in ship management, including in SMJV. Regulations such as the ISM Code (International Safety Management) and ISPS Code (International Ship and Port Facility Security Code) require effective safety management and strict security measures to avoid operational risks.

c. **Anti-Trust and Competition Policies**
Some countries implement anti-trust policies and competition regulations on joint ventures, including SMJV, to prevent monopolistic practices and cartels. Regulators ensure that SMJV does not negatively impact healthy competition in the international shipping market.

d. **Maritime Environmental Regulations.**
At the international level, SMJV is also regulated in terms of environmental impact. Regulations like MARPOL 73/78 (International Convention for the Prevention of Pollution from Ships) require any company involved in SMJV to ensure that their ship operations do not cause marine pollution or harmful emissions to the environment.

4. **Fuel Oil**

Fuel Oil is a type of oil used in ship engines and power generation systems in various industries. According to the American Society for Testing and Materials (ASTM), Fuel Oil is defined as oil used for heating purposes or combustion in internal combustion engines, covering various types of oil from light oils like diesel to heavier oils such as refined petroleum residues.

The International Maritime Organization (IMO) defines Fuel Oil as liquid hydrocarbons used in ships that must meet certain standards, including low sulfur emission limits, to reduce environmental impact. Fuel Oil is categorized according to its quality and viscosity, which are adjusted to meet the operational needs of ships.

According to the British Standards Institution (BSI), Fuel Oil is a mixture of hydrocarbons produced from crude oil refining processes, which has high energy content and is used in various applications, including driving ship engines and industrial turbines.

The American Petroleum Institute (API) defines Fuel Oil as a fraction of petroleum produced through distillation and residues, primarily used in heating systems and industrial power generation, and classified based on sulfur content, flash point, and viscosity.

METHOD

This study adopts a qualitative approach with a case study method to explore the implementation of the Ship Management Joint Venture (SMJV) between PT Pertamina International Shipping (PIS) and Nippon Yusen Kabushiki Kaisha (NYK). Through this approach, the researcher aims to gain a deep understanding of the dynamics and challenges faced by both companies in this collaboration. Data is collected through in-depth interviews with key managers and the Managing Director (MD) from both PIS and NYK, as well as the analysis of relevant documents such as annual reports and official publications.

Interviews are conducted using a semi-structured guide, providing flexibility for respondents to share their detailed views and experiences related to SMJV. This guide ensures that all critical aspects are discussed while allowing respondents to present their unique perspectives. The data from these interviews are then analyzed using thematic analysis techniques to identify recurring patterns and key themes.

In addition to interviews, document analysis is carried out to provide further context regarding shipping policies and the joint venture. The analyzed documents include the annual reports of PT PIS and NYK, as well as publications discussing corporate policies. From this document analysis, the researcher gains a deeper understanding of the internal policies of both companies and the expected outcomes of SMJV.

The research also includes a survey of stakeholders in the shipping industry to gain a broader perspective on the effectiveness of the collaboration between PIS and NYK. This survey includes questions regarding their perception of SMJV and its impact on the shipping industry in Indonesia. By combining interviews, document analysis, and surveys, this study aims to provide a comprehensive insight into the implementation of SMJV and its contribution to management practices and policies in the shipping sector.

RESULTS AND DISCUSSION

This study focuses on the challenges faced by PT Pertamina International Shipping (PIS) in the highly competitive ship management industry. PIS operates in an increasingly complex environment, where large global ship management companies, such as V Group and Fleet Management, put pressure on PIS's operational performance and marketing strategies. Empirical data shows that to remain competitive, PIS needs to adopt technological innovations and improve managerial efficiency, especially in managing its fleet.

A key factor identified is strategic collaboration through the formation of the Ship Management Joint Venture (SMJV) with Nippon Yusen Kabushiki Kaisha (NYK). Through SMJV, PIS aims to strengthen its market position and respond to challenges from global competitors. Data shows that PIS and NYK can share resources and technology, which is expected to improve operational efficiency and reduce costs. By leveraging each company's strengths, SMJV is expected to increase the competitiveness of both companies in the face of growing competition.

Sustainability issues also remain a key concern for PIS. Data reveals that the shipping sector in Indonesia has seen a significant increase in carbon emissions, reaching around 55 million tons of CO_2 in 2023. In the face of global pressure to reduce emissions, PIS sees SMJV as an opportunity to implement more environmentally friendly technologies and meet sustainability standards expected by the industry and society.

Analysis of interviews with key managers in both companies reveals that the implementation of SMJV has allowed PIS to adopt best practices in ship management. Respondents noted that this collaboration has not only improved operational efficiency but also strengthened trust from shipowners and third parties in the services provided. This aligns with previous research findings, which show that collaboration is critical in enhancing service quality in the shipping industry.

From a financial perspective, PT PIS’s annual report shows positive revenue growth after the establishment of SMJV. Over the past two years, PIS has recorded a 15% increase in revenue, largely driven by reduced operational costs through collaboration with NYK. These results suggest that the collaboration strategy adopted by PIS can yield positive financial outcomes.

However, this study also identifies challenges in the implementation of SMJV. Organizational culture differences between PIS and NYK sometimes lead to misunderstandings in communication and decision-making. Despite these challenges, both companies have taken steps to address them through cross-cultural training programs designed to improve mutual understanding.

The importance of risk management in the context of SMJV is also revealed in this study. By sharing information and technology, PIS and NYK can better identify and address potential risks that may arise during shipping operations. The analysis shows that this collaboration strengthens both companies' ability to manage risks and enhance operational sustainability.

Survey data from stakeholders in the shipping industry also supports SMJV as a strategic step for PIS. The majority of respondents believe that the collaboration between PIS and NYK can increase competitiveness in the global market and contribute to reducing carbon emissions in the shipping sector.

Overall, this study concludes that SMJV between PIS and NYK not only provides financial benefits but also contributes to improving operational capabilities and risk management. Although challenges related to organizational culture and external factors remain, the positive results of this SMJV indicate that strategic collaboration is key to strengthening PIS's position in the increasingly dynamic and sustainable ship management industry.

CONCLUSION

The formation of the Ship Management Joint Venture (SMJV) between PT Pertamina International Shipping (PIS) and Nippon Yusen Kabushiki Kaisha (NYK) has proven to be an effective strategic move in the face of intense competition in the ship management industry. This collaboration has successfully reduced operational costs, improved efficiency, and strengthened the market position of both companies in the global shipping market. Although organizational culture differences remain a challenge that needs careful management, cross-cultural training programs have helped improve communication and understanding between both companies.

The success of SMJV has also contributed to increased revenue and customer satisfaction. Data from the annual reports show a 15% revenue growth in the last two years, as indicated by positive feedback from clients about faster and better services. This collaboration proves that strategic partnerships allow both companies to quickly adapt to market changes and meet the ever-evolving needs of customers.

Implementation

The implementation of SMJV between PT Pertamina International Shipping and NYK involves a series of strategic steps to ensure the success of this collaboration, including the establishment of shared goals, the formation of a clear organizational structure, the development of an effective communication system, and employee training. Regular evaluation and performance monitoring are also crucial to ensuring the sustainability and effectiveness of this collaboration.

Limitations and Future Research

This study has several limitations. First, the qualitative approach used may not represent the entire population of the shipping industry. The data collected from interviews with a number of key managers and stakeholders may not be generalizable to all shipping companies in Indonesia.

Second, this study focuses primarily on the operational and managerial aspects of SMJV. Other aspects, such as the social and environmental impact of this collaboration, may not be fully addressed. Therefore, further research is needed to explore these dimensions.

Third, the information obtained from documents and interviews may contain bias. Interviews are dependent on individual perspectives, which could affect how the information is presented. Although efforts were made to gather diverse views, some bias may remain.

Fourth, the rapidly changing dynamics of the shipping industry could influence the findings of this study. External factors such as fuel price fluctuations, regulatory changes, and global economic conditions may impact the performance of SMJV. This research needs to be reevaluated as changes occur in the industry.

Lastly, while this study provides valuable insights into the implementation of SMJV, further research using a quantitative approach could provide a more comprehensive

understanding of SMJV's performance. Using numerical and statistical data may help in conducting a more detailed analysis of SMJV's performance.

Therefore, while this study makes a significant contribution to understanding SMJV in the shipping industry, there is still room for further exploration and research to expand knowledge in this field.

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