

The Implementation Of *Pertamina Safety Approval (Psa)* And Training On Work Safety Mediated By Safety Culture On Board The Fleet Of Ships Owned By PT. XYZ Shipping

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Abstract

Pertamina Safety Approval (PSA) is a document that shows when a ship has met the standards and criteria of the vetting inspection results whereas safety departement prepare before vessel departed. The research aims to determine the effect of implementing Pertamina Safety Approval (PSA) and safety training on work mediated by safety culture on PT's fleet of ships. XYZ. The research method uses an explanatory quantitative approach. The total sample is 90 respondents who have a PSA and are on board in 2022. The analysis tools used are SPSS and SEMPLS. The research results show that there is a direct and indirect influence between the implementation of Pertamina Safety Approval (PSA) and safety training on work safety mediated by safety culture on company's fleet of ships. XYZ

Keywords: Safety Culture, Work Safety, Pertamina of Safety Approval (PSA), Safety Training.

INTRODUCTION

According to the Message of the Minister of SOEs of the Republic of Indonesia XYZ (PIS) has been formally transformed as an Integrated Marine Logistics Subholding. This illustrates the outcome of the approval of the restructuring of Subholding Shipping as Subholding Integrated Marine Logistics. In the beginning, the industry wanted to carry out reliable charter outs in accordance with the prevailing shipping applications. PIS, a

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leading national shipping industry, seized the opportunity to benefit from reliable shipping business management in line with Indonesian shipping practices. PIS can also benefit financially through tax incentives, which allow them to sell more competitive prices with good service commitments. As Indonesia is an archipelago, PIS are very helpful in meeting the power needs of many places in the country. Most notably with the Sea Toll made by the Indonesian government, PIS supports shipping objects more easily throughout Indonesia. This will certainly add to the balancing of logistics prices for all objects in all of Indonesia. Thus, PT PIS, as a subholding of Integrated Marine Logistics, manages 6 strategic bussiness. PIS has continued to grow since its establishment in 2016. This includes establishing an industrial subsidiary in Singapore, XYZ Pte Ltd. as well as industrial grandchildren in Singapore, PIS Polaris Pte Ltd. and PIS Paragon Pte Ltd. As an industrial subsidiary of Pertamina (PERSERO), XYZ (PIS) continues to be committed to improving the quality and service of Indonesian workers. To fulfill this commitment, PT XYZ has just held a coordination meeting on March 25, 2021. The purpose of this coordination meeting is to determine if all organs of PT XYZ are able to move forward in a coincident manner to achieve goals and confirm if the industrial business continues to run. In the Coordination Meeting of XYZ(PIS) Directorate of Surgery, all Pertamina officers are required to always be enthusiastic and confident when experiencing uncertain future challenges in the boat and sea business. This commitment is in line with XYZ's (PIS) vision to be the leading shipping industry in Asia and urging Indonesia's economic development. PIS also has a mission to serve as an agent of Indonesia's economic development. Empowering the domestic industry is the goal of increasing the utilization of domestic products in the Pertamina team. PT XYZ has a TKDN of 40.42% in 2020. This consists of twenty vessels formed in four domestic shipyards, exceeding the minimum value of 30%. Not only that, PT XYZ has recorded some work accidents on board its fleet of vessels, as well as the industry obtaining support from 539 owned vessels. 3 workers were killed in a work accident in September 2011 since unsafety condition while activities. A contractor died after falling from a tank in January 2013. Contractor errors can jeopardize the industry and cause disasters that affect OHS performance. Therefore, the contractor's surgery must be well managed to determine the safety of each job the contractor attempts in the industry. Convenient work method planning is needed to reduce and manage work accidents. Over the past 4 years, 2017-2020, while there were no incidents listed as notice of arrival at the end of December 2017, HSSE (Human safety source engineering) performance has shown that there were



9 incidents with outstanding follow-up actions and 622 incidents have completed follow-up. Since September, one HSSE case remains an issue. As of December 31, 2019, there were no LTIR incidents, but there was a First Aid Case incident on the PIS Paragon. During 2020, there were no LTIR or NOA incidents, but a First Aid Case incident occurred on the PIS Polaris vessel in May 2020. According to the company's data and experience, occupational safety on board the fleet is a challenging issue to address. One of the factors affecting this issue is the implementation of Pertamina Safety Approval (PSA), safety training, and safety culture of PT XYZ (PIS). The first factor is the Pertamina Safety Approval (PSA). A PSA is a document issued when a vessel has met the inspection standards and criteria. Vessels offered in this procurement process must have a Pertamina Safety Approval (PSA) issued by Pertamina's Safety Assurance and Safety Function (or Pertamina Ship Inspection and Assurance Function) this document issue after safety checking done. This PSA indicates that Pertamina is capable of operating the vessel and is able to transport and unload cargo according to the technical specifications required by Pertamina, unless otherwise stated.

At the time of closing the bidding box, bidders must attach a photocopy of Pertamina's Security Clearance (PSA) to the bidding document as an administrative requirement, which is still valid at the latest until the closing date of the laycan. Therefore, it is necessary to create a standard of treatment that identifies and controls the risks that arise, the steps of controls. The following are the steps to check PT PIS.

Safety Training

Training is the process of teaching young people to perform tasks effectively. It involves using methods to teach young people to perform tasks, such as learning, teaching, and training. Coaching also involves teaching a young person to perform a task efficiently. It is a systematic process that involves teaching, training, and learning. It helps young people develop the skills and knowledge to carry out tasks effectively. training is important for organizations to achieve their goals and contribute to the overall success of the organization. Suwatno and Priansa (2016) discussed the use of internal and external training methods in their research. Internal training includes on-the-job training (OJT), seminars, workshops, in-company training, and computer-based training. Exterior training includes courses, seminars, and workshops. Mangkuegara (2016) is the purpose of compassionate training and ideology, work productivity, quality of work, human resource plans, ethical attitudes, professional decisions and work optimally. Training and

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development are individual differences, relationships with work analysis, motivation, positive participation, participant selection, training methods, and development. Training is a management business function in the process of organizational resource planning aimed at improving the improvement of opportunities and crew behavior and achieving the best results and the best results. Implementation of the SOLAS Convention is a minimum standard for the equipment, construction, and operation of ships compatible with their safety. One of the responsibilities of the American flag is to ensure that ships under their flag meet the requirements and receive a specified number of certificates.

Safety Culture

The concept of occupational safety is a complex interaction between organizational structures and systems of norms and norms. It involves a combination of knowledge, norms, skills, and social practices to ensure working conditions for employees, managers, and the community. Safety culture is part of the corporate or organizational culture. Management commitment; employee engagement; training and competence; communication; compliance with rules; and organizational relationships are the six components that make up a safety culture or safety culture. Broadly speaking, the six components can also be divided into four interconnected structural components of safety culture: safety values, safety leaders, safety attitudes and safety performance.

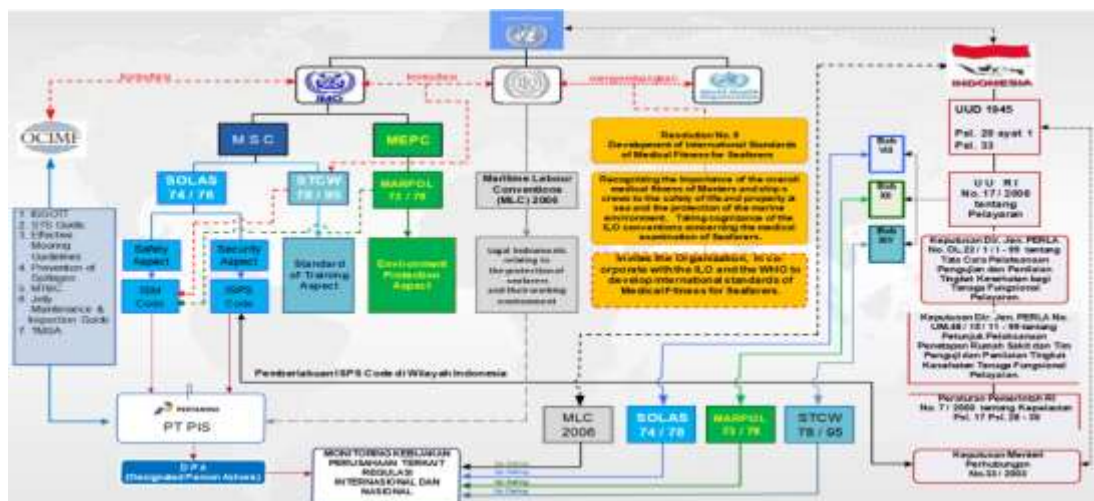


Figure 1. Vetting Inspection at PT XYZ (PIS)

Source: PT XYZ (2023)

According to the picture above, inspection checks are conducted to improve safety, security, and environmental pollution. Basically, inspection checks ensure that shipowners maintain and care for their vessels. The inspection process refers to the SIRE regulations, which are also issued by OCIMF (Oil Company International Marine Forum), conducted by personnel who meet OCIMF's qualifications and requirements. OCIMF publishes the VIQ system tool to help inspectors ascertain the key (essential) aspects of a vessel inspection. In accordance with the vessel vetting policy and the issuance of PSA granted by PT Pertamina (Persero) through Director of Logistics & Infrastructure Letter at April 19, 2021, PIS is committed to ensuring that all vessels used to carry out maritime and logistics integration business processes meet the safety requirements specified in the maritime convention standards and have gone through the vetting process, which is described in the figure below:

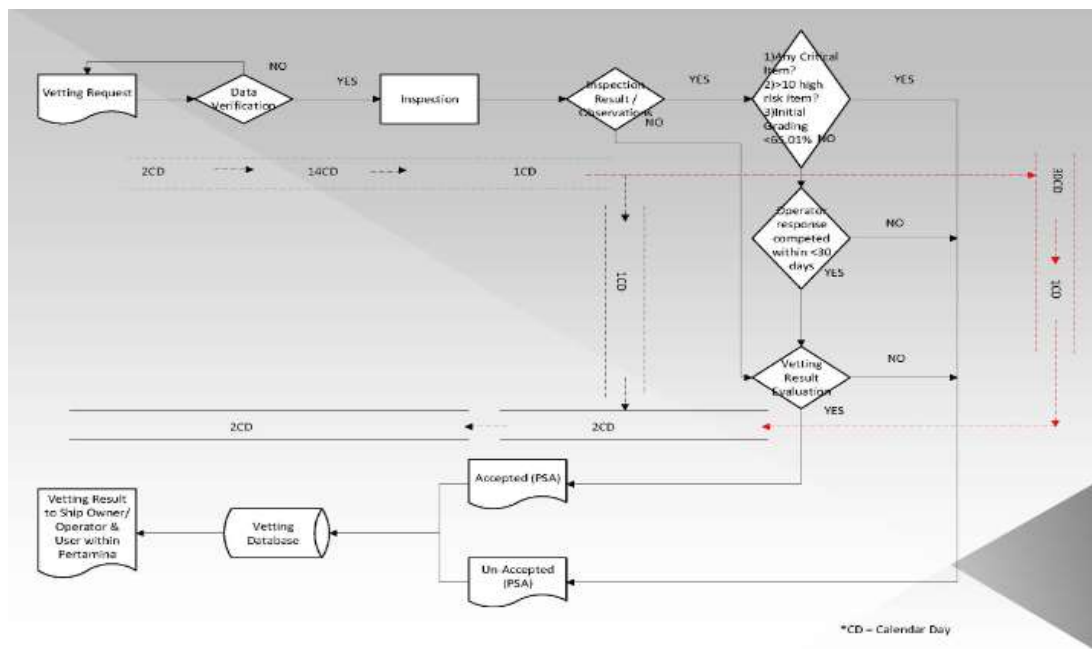


Figure 2.Vetting Inspection Steps at PT XYZ (PIS)

Source: PT XYZ (2023)

Pertamina Safety Agreement (PSA) is an important factor in ensuring the safety of marine transportation. Its basis is the provisions of the International Convention on the Training, Competence and Watchkeeping of Seafarers (STCW). The Maritime Safety

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Committee (MSC) is responsible for the implementation of STCW, which focuses on safety training, crew safety and maritime safety. The team is responsible for maritime safety training as it is an important part of the industry. Security in the maritime field is influenced by several factors such as: Discipline, crew safety and human factors. Corporate culture research has been conducted in Indonesia and abroad. There has been no research on work safety culture especially in Indonesia, this is evidenced by the lack of research. The work safety program in the area prohibited by PT XYZ shows functionality (not freedom of movement). Mairing et al. (2021) 49.02% of respondents showed good safety behavior. At higher education levels, the proportion of Safety behavior is higher, while the variables of age, gender, work experience and safety culture do not have a significant relationship with safety behavior. Winriyani and Frinaldi said that the work culture of the Padang City Fire Department had a positive impact on occupational health and safety.

Problem Identification

Taking into account the above background of the problem, the following problems can be identified:

1. Decreased number of inspections and PSA issuance,
2. Number of crew members who did not participate in safety training,
3. Lack of safety training, some still violate company regulations,
4. Lack of safety culture on board,

The objectives of this study are:

1. To study and analyze the impact of Pertamina Safety Approval (PSA) on work safety on board PT XYZ's fleet of vessels.
2. To study and analyze the impact of safety training on work safety on board PT XYZ's fleet of vessels.
3. To study and analyze the impact of safety culture on work safety on board PT XYZ's fleet of vessels.
4. To study and analyze the impact of PSA Pertamina Safety Approval

Overview of Theory

Mangkunegara (2016) defines job security as a good or bad condition for learning, teaching or working. Safety hazards are aspects of the work environment that can cause



fires, fear of electric shock, cuts, bruises, sprains, fractures, loss of body equipment, vision and hearing. Sucipto (2014) defines work safety as a task that requires care and training. According to Wilson (2012), protection against occupational safety experienced by workers in the workplace. Pearl (2012) includes the protection of workers against work accidents, while health refers to the freedom of workers from physical and mental illness. Occupational safety refers to a workplace where people are safe or protected from suffering, harm, or loss. In providing services, PT XYZ (PIS) always prioritizes competitive and reliable QHSSE aspects to customers, safe vessel operation, and environmental protection to ensure no injury, death, occupational disease, environmental pollution, or property damage and is committed to: 1). Fully support the QHSSE policy of PT Pertamina (Persero). 2) Prioritize active management, establish clear objectives, roles and responsibilities related to QHSSE. 3). Ensure all business and shipping operations comply with applicable laws and regulations and industry best practices. 4). Make improvements, enhance kinetics and increase customer satisfaction continuously with the active participation of every employee. 5). Prevent work accidents and occupational diseases and ensure a healthy and safe workplace. 6). Avoid environmental pollution and use resources wisely and in a controlled manner. 7). Identify and minimize risks by implementing risk management and providing protection against any hazardous activities. 8). Develop and implement an effective and efficient management system that provides resources and training to support safe vessel operation and environmental protection. 9). Build credible organizational capabilities with a strong HSSE culture and corporate values.

Implementation is a decision or action taken from a plan that is made quickly and effectively. based on activities, attitudes, or mechanisms in a system, and is an activity-focused system. Pertamina Safety Approval (PSA) is a document that ensures that the vessel meets the standards and criteria of the vetting inspection. Pertamina function (SSAP), certifying that a vessel can operate between vessels to ensure compliance with certain technical standards. Tankers, Self-Propelled Oil Barges, Oil Barges and Tugboats are popular modes of transportation used by major global oil, gas and oil companies. PSA refers to all ship-to-ship (STS) vessels to ensure the safety of large vessels, operating, or exploiting within the scope of PSA. The processing of hazardous materials such as liquids and gases pose a risk during the shipping process. Vetting inspection is a standard procedure to identify and eliminate these risks. The acceptance of a vessel is determined by its Safety Approval (PSA) and risk rating. The first step in the vetting is the Ship



Inspection Report (SIRE) and Ship Inspection Questionnaire (VIQ), which are used by OCIMF to evaluate the safety of the ship. Quality, Health, Safety and Environmental Protection (HSEQ) System Manual which is INTEGRATED with: 1). ISM Code 2018 edition. 2) ISO 9001:2015 - Quality Management System 3). OHSAS 18001:2007 or ISO 45001:2018. 4).ISO 14001:2015 - Environmental Management System 5). TMSA. 6) MLC 2006. 7) Other standards (depending on the needs of the Company itself)

The shipowner must fulfill the Pertamina Safety Approval (PSA) requirements at the latest before the delivery of the vessel. At the time of closing the bidding box, the shipowner must make and attach a signed declaration containing the necessary information to guarantee that they will fulfill the Pertamina Safety Approval (PSA) requirements prior to the delivery of the vessel.

Previous Research

In conducting a study, the author will compare several previous studies to determine the extent of truth, clarity, accuracy of a study.

The results of research by Maliota, Lasse, Setyawati (2020), show that marine inspector capabilities have a positive and very significant direct effect on shipping safety performance, ship governance has a positive and very significant direct effect on shipping safety performance, marine inspector capabilities have a positive and very significant direct effect on ship governance, and marine inspector capabilities have a positive and very significant indirect effect on shipping safety performance with mediation of ship governance.

Benny J Mairing, Wirawan & Deswandri (2021) the results of their research stated that there was a proportion of respondents with good K3 behavior of 49.02%. A higher level of education has a significantly higher proportion of OSH behavior ($p = 0.023$), while the variables of age, gender, length of service and safety culture are not significantly related to OSH behavior ($p > 0.05$).

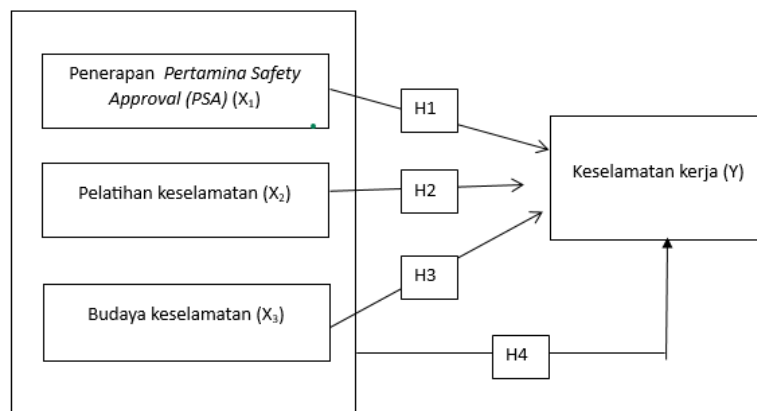
Widyanty (2019). Concluded that work culture has a positive effect on occupational health and safety in the Padang City Fire Department tested.

Supriadi, Novrikasari, Hamzah Hasyim, Pitri Noviadi (2022) concluded that the implementation of work safety culture and program effectiveness partially or simultaneously has an influence on the achievement of work safety and health management system performance.



Research by D. Lasse & Fatimah (2016) on Safety Training for crew, the results show that there is a positive and significant relationship between safety training on board MV. Hilir Mas with the operational performance of the crew at PT Tempuran Emas.

Framework Hipotesis



METHODOLOGY RESEARCH

This research uses a quantitative explanatory approach. According to Sugiyono (2017: 13), the purpose of this research is to determine the effect of Pertamina Safety Approval (PSA) Implementation (X₁), safety training (X₂) and safety culture (X₃) on work safety on board ship fleets (Y).

The primary data used in this study are the opinions, opinions, and experiences of the crew of PT XYZ. The main source of this research is a questionnaire instrument distributed to the crew of PT XYZ.

The data collection technique used in this study is called a query. the query is used to collect information about respondents' responses to questions. the query is based on variables and indicators, allowing for a more accurate understanding of the phenomenon. the query was conducted online to collect data and information about the Safety Authorization process (PSA), safety training, and workplace safety. a Likert scale was used for the analysis of the data collected.

A population is a group of people who participate in a research project. This study focuses on the population of PT XYZ, with 174 million passengers on board by 2022. Sample data collected from a population of 90 respondents using the Slovin formula

Time and Place of Research

The research time was conducted from March 2023 to August 2023. In conducting this research, the author took the object of research of the PIS crew who had PSA

Results and Discussion

Effect of Pertamina Safety Approval (PSA) Implementation on work safety

The XYZ company has been conducting various occupational safety activities since September 2011, with a total of 10 employees. The contracting company has been conducting OHS activities since January 2013. The contracting company must ensure safety in every third party work activity in the company. During the 2017-2020 period, there were no NOA and LTIR ratings, with PIS Paragon and PIS Polaris having First Aid Cases. The safety of workers at ship activities is determined by factors such as the Safety Approval (PSA) process, safety training, and the PT XYZ (PIS) program. The PSA process involves standards and criteria from vetting inspections. improve safety, maintain safety and protect the environment from pollution. Basically the purpose of Vetting Inspection is to further ensure that the vessel is in good condition and has been maintained by the vessel owner. Vetting Inspection refers to the SIRE (Ship Inspection Report) regulations, also issued by OCIMF and is conducted by personnel with OCIMF qualifications and requirements. OCIMF (Oil Company International Marine Forum) is an organization of several oil companies around the world. Under the SIRE Regulations, OCIMF publishes the VIQ (Vessel Inspection Questionnaire), a tool to help inspectors ensure that the most important aspects of the vessel have been inspected.

The effect of safety training on work safety on board PT XYZ's fleet of vessels.

Safety training on board is very important because the crew's indifference to comply with safety regulations on board is the beginning of indiscipline, except for equipment safety, including the care and maintenance of these tools and variables that cannot be controlled by humans, such as bad weather, narrow routes, short-distance routes, which shorten the safety training time. Internal audits are conducted quarterly, and external audits are conducted by inspectors appointed by the competent authority to ensure that all relevant stakeholders and institutions involved in offshore oil drilling have complied with the regulations. . In response to this, it is very necessary to develop human resource competencies in the field of marine transportation that have knowledge, abilities and skills of international standards. The current phenomenon where based on a

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preliminary survey conducted by researchers through interviews with training participants, information was obtained that there was dissatisfaction with the quality of service when attending training at training institutions, resulting in the results obtained were not optimal and satisfactory. Safety culture is a concept that encompasses attitudes, beliefs, and norms within the organization. It is essential for maintaining a safe working environment and promoting safety among employees. Workplace safety management research has been conducted in Indonesia and other countries, but there are gaps in research in Indonesia. Widana et al's (2020) study found that safety leadership and safety culture were positively correlated with jobsite safety performance. Mairing et al (2021) found that the proportion of safety performance at the worksite is positively related to its security performance. This is because companies have a strong commitment to ensuring the safety of their employees. The study also highlights the importance of a workplace safety culture, as it helps maintain a safe work environment and promotes a positive work environment. The findings suggest that organizations

CONCLUSION

PT XYZ (PIS) has transformed into an Integrated Marine Logistics Subholding, focusing on professional chartering and international operations. PIS aims to provide competitive energy and financial support to Indonesia, making a positive contribution to the logistics sector in the country. Vetting Inspection is used to improve vessel inspection and compliance with regulations, such as Ship Inspection Report (SIRE) and VIQ. OCIMF, an international maritime forum, oversees national and international regulations for ship safety, asset management, and environmental protection. The (two-tailed) t-values of 1.65 (10% significance level), 1.96 (5% significance level), and 2.58 were used in this t-statistic test. the amount of endogenous variables that can be explained by exogenous variables. An R² value of 0.67 indicates strong model strength, 0.33 indicates moderate strength, and 0.19 indicates weak strength. The strength of the structural model is not considered to exist if it is less than 0.19. The F test statistic is also called fit. It indicates how well the survey sample data aligns with the regression model proposed in the survey. The F test is used at the 5% significance level ($\alpha = 0.05$) to test the authenticity of the Hypothesis



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