RSF Conference Proceeding Series: Engineering and Technology, Vol. 3 No. 1 (2023)
https://doi.org/10.31098/cset.v3i1.765

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Research Paper

Optimization of Ship Crew Placement in Accordance with Safe Manning at PT. Pertamina International Shipping (PIS)

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Received : September 15, 2023	Revised : October 5, 2023	Accepted : October 2, 2023	Online : October 5, 2023

Abstract

Placement of ship crew that is not in accordance with safe manning at PT. Pertamina International Shipping (PIS) is due to the limitations and availability of crew being the main cause of the uneven placement of crew, the lack of crew members who have essential skills or certifications for a particular division, so an even distribution of ships cannot be achieved. Sending ship crew to carry out tasks on board must be in accordance with existing provisions and procedures. Crew competency certificates (COC) and skills (COP) must have met the validity according to the 2010 STCW amendments. The purpose of this study was to describe the factors that cause the uneven placement of ship crew in each division of the manning fleet. And to find out the efforts made by PT. Pertamina International Shipping in overcoming the uneven placement and delivery of ship crew in each manning fleet. The research method used is the descriptive qualitative method. Sources of research data obtained from primary data and secondary data. Data collection techniques through observation, documentation, and interviews. As well as a SWOT analysis. The research results show that the internal and external factors that influence the placement and distribution of crew in each division of the manning fleet are condition, work experience, demand from the company and supply of prospective crew to be selected, incomplete certificates, and interest from prospective crew members. As well as the efforts made by PT. Pertamina International Shipping in handling the problem of placing and sending ship crew for each manning fleet, is the placement and sending of ship crew according to the needs of the ship, referring to shipping regulations as well as provisions and structural positions in the company.

Keywords: *Optimization; Ship Crew; Safe Manning*

INTRODUCTION

At PT. Pertamina International Shipping (PIS) Jakarta, there has been unevenness and delays in the process of placing ship crew according to safe manning. Although the office had given a memo to carry out this task during the leave, the crew members appeared to have ignored this order. They carried out the process of revalidating certificates and medical check-ups after the leave period ended, causing disruptions in the crew rotation process that had been planned. This process should be carried out during the leave period so that the delivery of crew members who have finished leave can replace the position of crew members whose contracts have expired.

The problem that occurred at PT. Pertamina International Shipping (PIS) Jakarta is not only limited to inequality and delays in the placement of ship crew. More broadly, the problem that arises is the irregularity in the overall crew rotation and dispatch management. The process of rotation and sending of crew must be better regulated, including schedules for revalidating certificates and medical check-ups, which should be carried out during the crew's leave. The disorganized management of crew rotation and dispatch can be an indication of a lack of discipline and responsibility on the part of crew members in carrying out their duties. The ship's crew should comply with orders from the office regarding the revalidation of certificates and medical check-ups during the leave period so that the rotation process can run smoothly and not hinder the smooth operation of the ship.

The problem of lack of discipline and disorganization in the management of crew rotation

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and dispatch can have a wider negative impact. Delays in sending crew members who have completed their leave period can disrupt the smooth operation of the ship, increase operational costs, and potentially hamper the company's economy. In addition, this can also affect the company's image and reputation in the maritime world.

LITERATURE REVIEW

Optimization is the result that is achieved as desired, so optimization is the achievement of the expected results effectively and efficiently, according to the Big Indonesian Dictionary (Depdikbud: 2020: 628). Optimization is an effort to maximize activities so as to realize the desired or desired profit. From this description, it is known that optimization can only be realized if it is implemented effectively and efficiently. In managing the organization, the goals are always directed to achieve results effectively and efficiently so that they are optimal.

Placement is the assignment or reassignment of an employee to a new job. Placement of workers is the process of assigning tasks and jobs to workers who have passed the selection to carry out according to a predetermined scope and are able to take responsibility for all risks and possibilities that occur with their duties and work, authority, and responsibilities (Sastrohadiwiryo: 2021). Factors that need to be considered in the placement are as follows:

1. Academic Achievement Factor
2. Experience Factor Experience
3. Physical and Mental Health Factors
4. Attitude Factor
5. Marital Status Factor
6. Age factor

Shipping defines the notion of crew members as people who work or are employed on a ship by the owner or operator of the ship to perform tasks on board in accordance with the position stated in the sijil book. According to the Government Regulation of the Republic of Indonesia Number 51 of 2002 concerning shipping, the definition of crew is a crew member other than the captain or ship leader (RI Law No. 17/2008 concerning shipping). According to maritime law, the definition of crew is all people who work on the ship, whose job is to operate, maintain, and look after the ship and its cargo, except for the captain.

RESEARCH METHOD

The research method used in this study is the qualitative descriptive method.

Time and Place of Research

The study was conducted from August 1, 2021, to August 6, 2022, on the Divisi manning fleet 2. of PT. Pertamina International Shipping (PIS)

Research Data Source Samples

The sample data sources of this study are primary data and secondary data. Primary data were obtained from direct observations and interviews with manager crewing, PIC manning fleet, and assistant PIC manning fleet.

Data Collection Techniques

The methods used to collect data in this study are observation, interviews, documentation, and literature studies.

Research Instruments

In qualitative research, the data collection tool is the researcher himself; non-human tools (e.g., questionnaires, interview guidelines, instructions, observations, etc.) can also be used, but their function is limited to supporting research work.

Qualitative Data Analysis Techniques

The data analysis technique used in the preparation of this thesis is the SWOT method. SWOT method is. A technique used to identify strengths, weaknesses, opportunities, and threats for a particular business or even project.

Data Validity Testing

To check the validity of data in qualitative research, namely triangulation. With triangulation, certain information will be obtained using various data sources such as documents, archives, interview results, and observations.

FINDINGS AND DISCUSSION

Overview of Research Context

In this study, researchers used objects where researchers carried out research on identifying the cause of placement of ship crew in accordance with safe manning at PT. Pertamina international shipping.

Unequal placement of ship crew is one of the problems often faced by ship companies. Unjustified crew assignment refers to circumstances in which a company ship is unfairly dispersed. The minimum manning required to operate a ship safely is one of the safety requirements set to operate a ship safely. At the time of Prada at PT. Pertamina, it was found that the ship had a shortage of crew due to the impact of the uneven placement of crew. Crew limitations and availability are the main causes of uneven crew placement.

The lack of crew members who have essential skills or certification for a particular division so that an even distribution of ships cannot be achieved. Of course, if the crew is incomplete, then the ship will not be able to sail because there are safe manning rules. Lack of Skills and Qualifications In some crew divisions, a shortage of the necessary skills and qualifications may occur due to the unequal distribution of crew members. This can have a negative impact on the operational effectiveness of the division and decrease work productivity.

After being declared qualified, the prospective crew member is required to go to the crew to receive further instructions, and the crew will receive BJST or direction and review given by the assistant manager of the crew to the crew who will work on the ship. The BJST details the crew's performance while they are at sea, safety and security protocols, and updated shipping laws prior to participating in ship training (BJST) crew in the crewing division of PT. Pertamina International Shipping, which was conducted at the location mentioned above for both officer and rating positions. Prospective sailors go through a crucial phase known as Before Joining Ship Training (BJST) before starting a career at sea. The obstacles and obligations that people will experience while working on a ship are very well prepared by this training. BJST provides seafarers with the capabilities, information, and mindset necessary to ensure their safety, effectiveness, and efficiency in their assigned responsibilities. After carrying out the BJST, the ship's crew will sign and make an agreement with the existence of the PKL (Sea Work Agreement) in accordance with article 395 of the Criminal Code and article 1601 of the Civil Code. In the next stage, the crew will be given a service order, often referred to as a transfer, as proof that there is an order from the office to the captain that there is a crew change.

Other components associated with a tank hydrophore include goggles, pressure sensors,

safety valves, exhaust valves, and water intake/outlet valves. Of these components, it plays an important role in the operation of the hydrophore tank so that it can function properly. In this finding, the researcher found crew members who had passed the selection but did not immediately report to the crew, so the next process could not be continued if the crew had not reported. This resulted in delays in the placement of the crew. Even after reporting, there were still several more processes to get transfers from the company. If the crew has not arrived at the ship, but the ship has already set sail, the ship will not be able to depart.

Factors affecting the placement and distribution of crew in each crew management division

Table 1. Internal SWOT Elements

No	Strength	Debilitation
1	Requirements and regulations of the office	Inappropriate position
2	Required positions	Demand and supply
3	Work experience condite	Company results and tests
4	Qualifications and skills	Mutation from other vessels

Table 2. External SWOT Elements

No	Chance	Threat
1	Promotion	Lack in English
2	Relevant reputation	Interest from prospective crew members
3	Marine Diploma	Less or more age
4	Health from MCU results	Different wages

Each of the variables above is given a minimum weight of 1 to a maximum of 4, and the average result of the questionnaire respondents will be a rating multiplied by the weight given by the researcher. The following are the results of data processing using SWOT data analysis:

Table 3. Result Matriks IFAS

No	Strength	Weight	Rating	B x R
1	Requirements and regulations of the office	2	3,5	7
2	Required positions	1	3,4	3,4
3	Condite work experience	4	3,5	14
4	Qualifications and skills	3	3,6	10,8
		10		35,2
No	Debilitation	Weight	Rating	B xR
1	Inappropriate position	2	3,6	7,2
2	Demand and supply	4	3,4	13,6
3	Company results and tests	3	3,3	9,9
4	Mutation from other vessels	1	3,5	3,5
		10		34,2

No	Strength	Weight	Rating	B x R
1	Promotion	3	3,6	10,8
2	Relevant reputation	1	3,4	3,4
3	Marine Diploma	2	3,3	6,6
4	Health from MCU results	4	3,5	14
		10		35,8
No	Debilitation	Weight	Rating	B xR

No	Strength	Weight	Rating	B x R
1	Lack in English	3	3,6	10,8
2	Interest from prospective crew members	4	3,4	13,6
3	Less or more age	1	3,4	3,4
4	Different wages	2	3,2	6,4
		10		34,2

Based on the results of data analysis using SWOT, which has been listed in the IFAS and EFAS tables, it can be described as follows. After calculating the weights and scoring on internal and external factor indicators, the coordinates (X, Y) are calculated where X = total value S - W = (35.2 - 34.2) = 1.0, and Y coordinates through the calculation of the SWOT matrix coordinates include the total value of O + T = (35.8 - 34.2) = 1.6 while the coordinates are (X= 1.0; Y = 1.6).

1. IFAS table Based on the table above, the strength (strenght) of PT Pertamina International Shipping has a score of 35.2, which can be concluded that from a comparison of strengths and weaknesses, PT Pertamina International Shipping is superior in terms of strength compared to weaknesses which only get a score of 34.2. So, the difference from the IFAS matrix is 1.0. The difference is obtained by reducing the strengths and weaknesses.
2. EFAS table Based on the table above, the opportunities for PT Pertamina International Shipping have a score of 35.8, which can be concluded that from a comparison of strengths and weaknesses, PT Pertamina International Shipping is superior in terms of strengths compared to threats (threats) which only get a score of 34.2. So, the difference from the IFAS matrix is 1.6. The difference is obtained by subtracting the opportunities and threats.

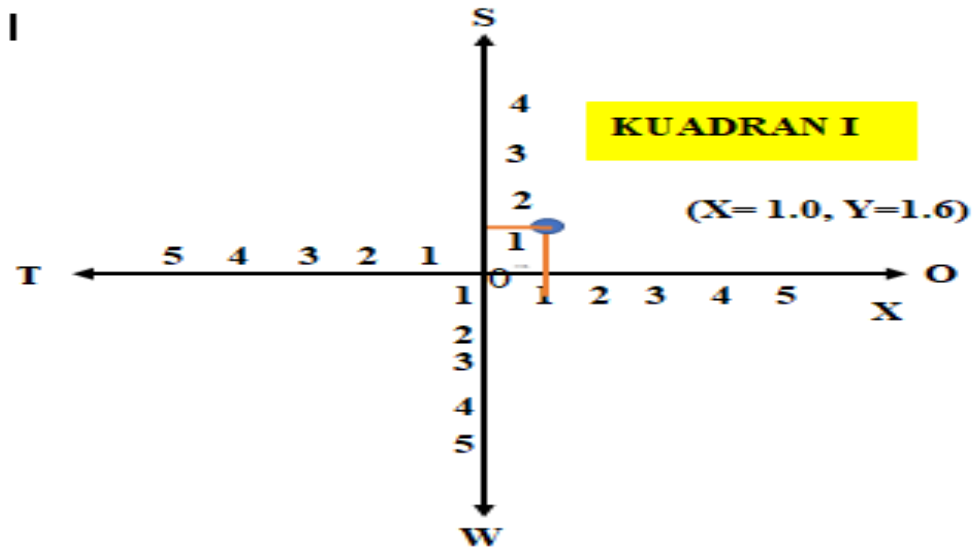

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Figure 1. SWOT Matrix Diagram

From the results of the SWOT matrix diagram, it can be concluded that the results are in quadrant I with the SO strategy. The SO strategy is a very profitable strategy, where companies can take existing opportunities by leveraging the strengths of the company. To optimize the placement of crews safely, they can take advantage of opportunities by maximizing and utilizing strengths.

In addition to the results of the SWOT calculations, there are also interview results from informants. These results will be used as supporting data in research.

CONCLUSIONS

Internal and external factors that affect the placement and distribution of crew in each division of the manning fleet are conditions, work experience, requests from the company and supply of prospective crew to be selected, incomplete certificates, and interest from prospective ship crew.

Efforts were made to place the crew evenly in each division of the crew management fleet at PT. Pertamina International Shipping for each division of its fleet is divided into 5, namely, fleet 1, fleet 2, fleet 3, fleet 4, and fleet 5, with the results following the quadrant results in the SWOT matrix diagram. For example, the graph in quadrant 1 illustrates the SO (Strengths - opportunities) strategy, which states that companies can measure opportunities by leveraging their internal strengths. The following is a strategy or effort that will be carried out by taking advantage of opportunities by exploiting strengths.

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