The Effect of Knowledge Management, Strategic Management Information System, And Innovation Capability on Organizational Performance Pushidrosal Mediated by Strategic Leadership

Budi Purwanto,1 Willy Arafah2, & Kusnadi3
1,2,3Faculty of Economics, University Trisakti Jakarta, Indonesia

Abstract

The purpose of this research is for the development and interest of the Center for Hydrography and Oceanography which is an implementing element for some of the duties and functions of marine maps which is directly responsible to the Indonesian National Navy. The Center for Hydrography and Oceanography of the Indonesian National Army Navy is the Main Command of the Indonesian Navy which has the task of organizing Hydro-Oceanography development. The analytical method is carried out through explanatory research, with the PLS/SEM application. The concepts and problems studied look at the causal relationship, then explain the variables that cause the problems studied. The research sample was 192 Officers and Officers of the Center for Hydrography and Oceanography of the Indonesian Navy. The findings from this study have a positive effect of knowledge management, strategic management information system, innovation capability on organizational performance. There is a positive influence of knowledge management, strategic management information system, innovation capability on strategic leadership. There is a positive effect of strategic leadership on organizational performance. There is a positive influence of knowledge management, strategic management information system, innovation capability on organizational performance mediated by strategic leadership. Theoretical implications of having strategic leadership through increasing its dimensions can improve organizational performance. The Center for Hydrography and Oceanography can increase the trust and loyalty of related parties. Improving and developing the quality of human resources must first pay attention to policies and strategic plans. The development will give a good indication of the organizational performance of the Center for Hydrography and Oceanography. Managerial implications state that the quality of resources, in the process of involvement of knowledge management, strategic management information system and innovation capability of all officials and leaders with third parties is very close, so that cooperation and compliance with the technical specifications of the wishes of the community must be a top priority. The quality of Navy Personnel in terms of equipment, quality of employees, performance of sections such as decision-making officials, is an image that can be felt by the community or cooperating parties, so that these various qualities must be a priority for increasing the knowledge of the Center for Hydrography and Oceanography

Keywords: knowledge management, strategic management information system, innovation capability, strategic leadership, organizational performance.
1. Introduction

The Center for Hydro-Oceanography of the Indonesian National Army Navy is the Main Command of the Indonesian Navy which has the task of organizing Hydro-Oceanography (Hydros) development. In accordance with its main duties, Pushidrosal is obliged to prepare, provide Hydro-Oceanographic data and information for military and public purposes as well as to prepare data and information on defense areas at sea to support the main tasks of the Indonesian National Armed Forces Navy. Carrying out the functions of military and defense hydrography, Pushidrosal is responsible for providing accurate and up-to-date hydro-oceanographic data and information as basic data to be used as material for analyzing national defense strategies. Pushidrosal also carries out the function of the National Hydrographic Institute which carries out its function as the person in charge of providing guarantees for shipping navigation safety throughout the territorial waters of Indonesian jurisdiction. Given the increasing presence of foreign ships, both commercial ships, fishing boats and other types of ships in the territorial waters of Indonesian jurisdiction, which require shipping safety guarantees.

Changes in the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal) is a necessity through self-development and organizational elements to adapt to very fast environmental changes. External environmental conditions with a high level of uncertainty and an increasingly dynamic and complex environment are the biggest triggering factors for innovation.

Organizational performance of the Indonesian Navy, especially the Hydro-Oceanographic Center of the Indonesian Navy, wants to bring about the benefits of its intellectual capital, so the role of human capital should be seen as a strategic resource, because only humans can create knowledge. Organizations should pay attention to the dimensions of knowledge and differences in value creation activities related to human capital as a superior resource for the organization. Organizational performance should be able to form an organizational physical environment that can encourage creativity and leadership that has shared values and openness. Organizations must be able to develop more significant programs that can encourage innovation (Colquitt et al., 2020).

Facing the fast-changing strategic environment, Pushidrosal needs to improve knowledge management, strategic management information system, and innovation capability to have competitiveness. Success in managing organizational change must lead to increased innovation capability in dealing with challenges and opportunities, because knowledge management, strategic management information systems, and innovation capability from the Hydro-Oceanography Center of the Indonesian Navy are very important for organizational and organizational development. performance.

The selection of Pushidrosal as the object of research in this study was based on the consideration that Pushidrosal as the Development City of the Indonesian Navy has two roles and functions that are like two sides of a coin and are not owned by other institutions, namely as the National Hydrographic Institute and the Military Hydrographic Institute. From a national institutional standpoint, Pushidrosal was also appointed as a representative of the Government of Indonesia in membership to various international hydrographic organizations and has been a permanent member of the International Hydrographic Organization since 1967.
Then since 2017, Pushidrosal is not only a permanent member, and can become a Member of the IHO Council (IHO Council), this has strategic value for the national interest because through this status, Pushidrosal can play a role in aspects of setting organizational strategy and policies International Hydrographic Organization. If viewed from the scope of its roles and duties as well as the status of Pushidrosal as a National Hydrographic Institution which also has an international role in the field of hydrography, as an embodiment of one of the pillars of national maritime policy, namely national maritime diplomacy, it is necessary to formulate a knowledge management capability capable of accommodating the implementation of tasks and Pushidrosal function can be carried out effectively and efficiently.

The potential of every human resource in an organization must be utilized as well as possible to be able to provide optimal work results. Potential, according to Hamid et al., (2019), is ability, ability, strength, or power that has the possibility to be further developed into a larger form. The achievement of the goals set by an organization does not only depend on modern equipment, complete facilities, and infrastructure, but also depends on the people who carry out the work. The success of an organization is greatly influenced by the performance of its personnel.

The phenomena described above are generally reflected as problems with the organization of the Indonesian National Armed Forces Headquarters, although these problems are closely related to the performance of the organization under them, namely the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal).

The research gaps found include 1) knowledge management must always consider aspects of technological progress, conditions for the development of the strategic environment and the competence of its employees 2) a strategic management information system that leads to the Headquarters of the Indonesian National Armed Forces Navy must have a field of tasks and scientific development and technology 3) Innovation capability must be an integral part of achieving goals, main tasks and functions Headquarters of the Indonesian National Armed Forces Navy 4) strategic leadership acts as a mediation to provide enthusiasm for progress in achieving the performance of the Hydro-Oceanographic Center of the National Army Indonesian Navy 5) organizational performance. The Headquarters of the Indonesian Navy, especially the Hydro-Oceanographic Center of the Indonesian Navy, must be dynamic and innovative in the future and the possible changes that may occur.

2. Literature Review

The theoretical foundation contains a theoretical framework that will discuss theoretical concepts for solving research problems. The theoretical framework is built referring to the science of strategic management. The theoretical concepts used in this research are knowledge management, strategic management information system, innovation capability, strategic leadership, and organizational performance. Some of these concepts are conceptualized into theoretical thoughts with strategic management as a grand theory that is combined with a perspective based on knowledge and contingency theory. These relevant theories are adopted in constructing the conceptualization of research variables and the development of organizational performance theory through research hypotheses.

Organizational performance of the Indonesian Navy, especially the Hydro-Oceanographic Center of the Indonesian Navy, wants to bring about the benefits of its intellectual capital, so
the role of human capital should be seen as a strategic resource, because only humans can create knowledge. Organizations should pay attention to the dimensions of knowledge and differences in value creation activities related to human capital as a superior resource for the organization. Organizational performance should be able to form an organizational physical environment that can encourage creativity and leadership that has shared values and openness. Organizations must be able to develop more significant programs that can encourage innovation (Colquitt et al., 2020).

Facing the fast-changing strategic environment, Pushidrosal needs to improve knowledge management, strategic management information system, and innovation capability to have competitiveness. Success in managing organizational change must lead to increased innovation capability in dealing with challenges and opportunities, because knowledge management, strategic management information systems, and innovation capability from the Hydro-Oceanography Center of the Indonesian Navy are very important for organizational and organizational development performance.

Knowledge Management according to Abubakar et al., (2019) has several views related to knowledge, namely: (1) The first group views human capital as the owner of knowledge, (2) The second group views knowledge without involving Human Resources, (3) The third group discusses Human Resources Management (human capital) and Knowledge Management that knowledge depends on people and Human Resources Management practices are fundamental to Knowledge Management in organizations. Knowledge The military faces many of the same challenges as the private sector in dealing with the realities of the Information Age. The military's primary focus, centered on developing new strategies that would enable it to maintain a dominant military position despite funding constraints. The Department of the Navy (DON) became a pioneer in the practice of knowledge integration and defines knowledge management as a process for optimizing the effective application of intellectual capital to achieve organizational goals.

Knowledge management according to Zeiringer & Thalmann, (2022) is built on intellectual capital, which includes human capital, social capital, and organizational capital. The Department of the Navy developed a Knowledge Centric Organization (KCO) framework to assist military organizations to support the implementation of knowledge management within the organization. According to The Department of the Navy, Knowledge Centric Organization has a positive impact on the organization, namely: improving job performance; increased collaboration opportunities; facilitated learning; mission performance improvement; better decision making; greater use of expertise; process improvement; reduce duplication; increase organizational knowledge; increased innovation and creativity; and strategic alignment.

According to Jarrahi et al., (2019) investment in knowledge management related to human resources will increase organizational effectiveness through increasing knowledge management capabilities. Knowledge management capabilities are conceptualized as additive and formative aggregates of organizational capabilities in knowledge capture, sharing, application, and creation. With the development of knowledge in the organization it is also necessary to adjust the development of Human Resources.

Strategic Management Information System according to Simpson et al, (2020). How the organization wishes to develop and improve its safety culture must ensure that there is effective communication throughout the organization and all relevant parties, including regulatory
bodies. Knowledge and experience must be disseminated to functional groups within the organization so that the process of accelerated learning occurs. In this case it is very important to have a good communication channel through a management information system. A Strategic Management Information System is a sub-section of a business plan, especially for companies where the role of information systems is considered very critical for the survival of the organization.

Improving performance requires innovative behavior both at the individual, group, and organizational levels which will have direct implications for organizational performance and competitive advantage. Intellectual ability is the ability needed to carry out various mental activities—thinking, reasoning, and solving problems. According to Lam et al., (2021) stated that innovation capability is the focus of knowledge-based companies today, and it is believed that there is no knowledge without innovation capability and vice versa. The achievement of the Pushidrosal task is very dependent on the ability of individual personnel who have competence in the field of Hydrography and Oceanography. According to Cillo et al., (2019) intellectual ability has a relationship with organizational behavior, and this ability is very much needed in innovation which describes innovative behavior and ways of thinking and reasoning that lead to the achievement of organizational goals. Innovative ideas from individuals become efforts aimed at providing superior performance and sustainable competitive advantage. Innovation capability is in line with the ideas of Lam et al., (2021) stating that organizational learning has a shared vision of organizational goals, open-mindedness will accommodate diverse points of view and support learning from mistakes, and shared beliefs will encourage increased organizational performance in promoting sustainable organizational innovation. Achievement of organizational performance as a Military Hydrographic Institute and a National Hydrographic Institute requires Pushidrosal to be able to face changes in the strategic environment at the national, regional, and global levels by carrying out various innovations. Pushidrosal in carrying out innovation requires organizational performance. According to Schuldt & Gomes, (2020) explains that organizational performance is an organization’s ability to apply appropriate management practices, structures, systems, and procedures in facilitating and triggering organizational learning processes.

Organizational learning is an organizational process of using existing knowledge and building on new knowledge to shape the development of new competencies that are important in a changing environment. Pushidrosal always implements and encourages organizational performance to be able to acquire, integrate and apply new and unique knowledge through experimentation, improvement, and innovation in activities both in the internal and external environment. Pushidrosal needs to improve organizational performance to face the shift from globalization to increased competitiveness at the national, regional, and international levels. Innovation is very important for organizations to improve operational efficiency, and the quality of products and services.

According to Migdadi, (2022) innovation capability reflects the utilization of new opportunities in generating the capacity to innovate and introduce effective innovation to the organization. This is a consequence of organizational knowledge management capabilities. This innovation capability is emphasized through strategies and policies for preparing Hydro-Oceanographic data and information to support military interests and public interests as well as preparing data and information on defense areas at sea. For example, the Mapping Service focuses on the implementation of knowledge and the creation of innovations in improving the quality of paper
maps and electronic navigation maps for the safety of navigation and shipping as well as military maps for defense purposes.

3. Methodology

This research later uses survey techniques, a deductive approach and is quantitative in nature Sarstedt et al., (2020). The deductive approach aims to test the theory by collecting data from respondents and then applying it and observing it with statistical tests. The approach in this research is quantitative with the type of explanatory research or hypothesis testing research. Yusup, (2018) explains that explanatory research explains the causal relationship between variables that influence the hypothesis.

The research design according to T. C. Wang et al., (2018) is a testing hypothesis, which aims to explain the nature of the relationship between two or more variables. The study also tested the hypothesis, knowledge management Ammirato et al., (2021), strategic management information system Mboera et al., (2021)), innovation capability Al Taweel, (2021)), on organizational performance T. Kim et al., (2021) mediated by strategic leadership (Grinerud et al., 2021).

This research uses a descriptive and verification approach (Hair et al., (2021). The descriptive approach is a method of examining the status of human groups, objects, conditions, and systems of thought. The purpose of descriptive research is to make descriptions, drawings or drawings in a systematic, factual and accurate regarding the facts, characteristics and relationships of the phenomena investigated. The verification approach is a research method that aims to determine the causal relationship between variables through a hypothesis testing through a statistical calculation so that the results of evidence showing that the hypothesis is rejected or accepted (Hair et al., 2021).

Variable Operational Definition and Measurement

Independent variables are variables that will be explained, understood, or can also be predicted Hair et al., (2021). The independent variables in this study are knowledge management, strategic management information system, innovation capability. The mediating variable is strategic leadership, and the dependent variable is organizational performance which is explained in operational definitions, dimensions and indicators as measurement tools.

The population involved as an object in this study is in the Indonesian National Navy, which is under it, namely the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal) which is the Main Command (Kotama) of the Indonesian Navy. The population referred to in this study are decision-making Pushidrosal Officers consisting of Senior Officers and Intermediate Officers consisting of High Officers with the rank of One, Two and Three and middle Officers with the rank of Colonel, Lieutenant Colonel, and Major with the following considerations and characteristics:

1. Pushidrosal officers who are respondents are officers who can make strategic decisions, and officers who have knowledge, experience, a good understanding of the organization, managerial abilities, can influence subordinates, and overcome organizational problems, to bring the organization towards the desired goals.
2. Pushidrosal officers who are respondents are officers who have competence in the fields of leadership, knowledge management, organizational learning, intellectual capital,
organizational innovation, and know organizational structure, organizational climate, learning culture and knowledge culture well.

3. Pushidrosal officers who are respondents are officers who know and understand the contents of the list of statements.

The sample in this study is random or probability, namely where the selected population elements have the same opportunity to be selected. The method of collecting and determining the sample used purposive sampling. The method is used with certain criteria according to the needs of the research.

The criteria for determining the number of samples are based on the consideration of the use of the analytical tool to be used. In research using a structural equation model or Structural Equation Modeling (SEM) as analysis (Hair et al., 2021).

To determine the number of respondents used in this study, will use a statement from Hair et al., (2021) which states that the number of respondents as a sample must be matched with the number of statements listed in the questionnaire distributed.

Based on the assumption of n x 5 observed variable (index) up to n x 10 observed variable (index). In this study there were 37 types of statements used to measure 5 variables. The number of respondents used is 37 statements multiplied by 5 so that the results are 185 respondents.

Through the statement above, the total sample that must be taken is a minimum of 185 samples, while to avoid unwanted things such as when testing data there are outliers or cannot be used, the researcher will increase the number of sample respondents who will do the research.

The population data in this study was 200 officers, consisting of high-ranking officers with one, two and three star ranks as well as middle officers with the rank of colonel, lieutenant colonel, and major. Which does not complete the overall answer so that it cannot be used for processing research data.

4. Result and Discussion

Based on the results of a descriptive analysis of gender-based respondent data who participated in the study, it was explained that there were 181 male respondents (95.8%) and 8 female respondents (4.2%). These results indicate that more men serve as officers and officers at the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal), compared to female respondents because the work carried out requires consistency in the field and many things that are done are more of a heavy job by men with respect to time and execution in the field. Job risks also require a lot of men who can carry them directly to the location of activities or require a very long working time when in the field. Safeguarding all risks of these activities emphasizes that men can go directly to the areas that are survey areas and location mapping.

Explanation of the age of 25-30 (7.4%) with 14 respondents indicating a career age that has just entered the developing stage, ages 31-40 (35.5%) indicating the stage of starting towards maturity for high-ranking officers and echelon officials as many as 67 officials were at this age, careers and positions are entering very productive periods and are in a very good process, followed by ages 41-50 (46.0%) with 88 people, ages entering the most productive period at work where high-ranking officers and echelon officials are very experienced with their work. At the age of 51 years and above is the age when they are about to enter retirement age at work because long careers have developed and reached top positions which show that decision
makers are very well-established and at a very mature age to demonstrate the quality of work, especially as a high-ranking Officer of the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal).

Respondents in this study also had different levels of education. Education level of Diploma/D3 graduate respondents there were 8 respondents with a percentage of 4.2% meaning that there are still decision-making officials who do not have a good level of education because the loyalty that has occurred so far as workers and being appointed as decision makers makes them forget to continue their education to a higher level tall. 92 people graduated from Bachelor/S1 (48.7%). There are 83 masters/master’s degrees (43.9%), this explains that officers have a very good level of education, where the number of bachelors and masters is balanced. Education for doctorates is still low at 3.2% or as many as 6 respondents, due to busy work assignments and workloads that are very busy making it difficult to allocate time for officers to continue their education to a higher level. High-ranking officers and echelon decision-making officials continue to improve their ability to analyze and make a good contribution to the Indonesian Navy's Hydro-Oceanographic Center, especially in the implementation and planning of work.

**Goodness of Fit Model Test Results**

Evaluation of the structural model starts from the feasibility test of the model by looking at the R-square. The results of the model feasibility test (Goodness of Fit Model) strategic leadership variable have a mediating model which shows that the adjusted R-Square value of 0.925 strategic leadership can be a link to organizational performance. This figure can explain variables, knowledge management, strategic management information system, innovation capability can explain organizational performance of 92.50%. The R-square value for organizational performance is 0.936 indicating a strong model because it is more than 0.5. Organizational performance variables can be explained by strategic leadership 93.6%.

Next, apart from looking at the R-square, tests with endogenous effects on exogenous variables with an effect size f². The value of the effect size f² for the knowledge management variable is 0.757, meaning that the knowledge management variable has a strong influence as well as the strategic management information system value of 0.468. The strategic management information system variable has a strong influence at the structural level. The innovation capability variable is 0.572, meaning that the innovation capability variable has a strong influence. The strength of the effect size f² which is mediating is acceptable in small sample studies. The variables knowledge management, strategic management information system, innovation capability shows values that meet the requirements, namely 0.757, 0.468 and 0.572 indicating the value of one of the effect size variables f² more than 0.2 which identifies a strong influence at the structural level.

Knowing the comparison of the research model with the indicator covariance matrix, a quality index test is needed. The community value is 0.857, where the value of all indicators is divided by the number of indicators present, a value of 0.857 is obtained. This means that all indicators have fulfilled the test requirements above 0.6. The R-Square value is the sum of all variable values divided by the result, which is 0.931, meaning that all variables are above 0.7 and are feasible to use. The higher the Goodness of Fit Model, it means that the resulting model is better (Shandyastini et al., 2019).
Based on the analysis that has been done, the discussion of the hypothesis is presented as follows:

**Hypothesis # 1:** knowledge management has a T-Statistic value of 2.016 > 1.96 and a P-Value of 0.000 < 0.050. This figure indicates that knowledge management has a significant positive effect on organizational performance.

**Hypothesis # 2:** the strategic management information system has a T-Statistic value of 2.441 > 1.96 and a P-Value of 0.015 < 0.050. This figure shows that the strategic management information system has a significant positive effect on organizational performance.

**Hypothesis # 3:** innovation capability has a T-Statistic value of 2.488 > 1.96 and a P-Value of 0.000 < 0.050. This figure shows that innovation capability has a significant positive effect on organizational performance.

**Hypothesis # 4:** knowledge management has a T-Statistic value of 8.053 > 1.96 and a P-Value of 0.000 < 0.050. This figure shows that knowledge management has a significant positive influence on strategic leadership.

**Hypothesis # 5:** strategic management information system has a T-Statistic value of 6.209 > 1.96 and a P-Value of 0.000 < 0.050. This figure shows that the strategic management information system has a significant positive influence on strategic leadership.

**Hypothesis # 6:** innovation capability, has a T-Statistic value of 5.311 > 1.96 and a P-Value of 0.000 < 0.050. This figure shows that innovation capability has a significant positive effect on strategic leadership.

**Hypothesis # 7:** strategic leadership, has a T-Statistic value of 8.868 > 1.96 and a P-Value of 0.000 < 0.050. This figure shows that strategic leadership has a significant positive effect on organizational performance.

**Hypothesis # 8:** knowledge management has a T-Statistic value of 6.872 > 1.96 and a P-Value of 0.000 < 0.050. This figure shows that knowledge management has a significant positive effect on organizational performance mediated by strategic leadership.

**Hypothesis # 9:** strategic management information system has a T-Statistic value of 4.927 > 1.96 and a P-Value of 0.000 < 0.050. This figure shows that the strategic management information system has a significant positive effect on organizational performance mediated by strategic leadership.

**Hypothesis # 10:** innovation capability has a T-Statistic value of 3.956 > 1.96 and a P-Value of 0.000 < 0.050. This figure shows that innovation capability has a significant positive effect on organizational performance mediated by strategic leadership.

5. **Conclusion**

The results of this study conclude that in general, knowledge management, strategic management information system and innovation capability are variables that influence organizational performance and strategic leadership variables. The indirect effect of strategic leadership as a mediating variable has a good effect on organizational performance, as well as on strategic leadership as mediating variables on knowledge management, strategic management information system and innovation capability having a strong influence on
organizational performance Indonesian National Armed Forces Hydro-Oceanographic Center the Navy (Pushidrosal) is the Main Command (Kotama) of the Indonesian Navy.

Knowledge that is maximally focused on personnel, especially the Center for Hydro-Oceanography of the Indonesian National Army Navy (Pushidrosal) is getting better, especially in improving the quality of Human Resources as well as improving organizational infrastructure, so that dealing with knowledge for the latest information systems requires the best innovation capability, where personnel are increasingly prepared and keep abreast of the times and increasingly advanced technology. Cooperation that must be carried out from every part of the Indonesian National Armed Forces organization, especially the Navy, can be well established.

Based on the results of the research conducted, the theoretical implications related to the development of the theory of strategic leadership and organizational performance from knowledge management, strategic management information systems and innovation capability for the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal) are as follows:

Knowledge management, strategic management information system and innovation capability the results of this study strengthen the significant influence of knowledge management, strategic management information system and innovation capability on organizational performance Center for Hydro-Oceanography Indonesian Navy (Pushidrosal) in line with previous research (Ammirato et al., 2021).

Strategic leadership as mediation for knowledge management, strategic management information system and innovation capability can improve organizational performance at the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal) (Grinerud et al., 2021).

The results of the study conclude that by increasing strategic leadership through increasing its dimensions, it can improve organizational performance. The Indonesian Navy's Hydro-Oceanographic Center (Pushidrosal) can increase the trust and loyalty of related parties. Improving and developing the quality of human resources must first pay attention to policies and strategic plans. The development will provide a good indication of the organizational performance of the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal).

This research provides an update in the development of the influence of knowledge management, strategic management information system and innovation capability as well as organizational performance of the Hydro-Oceanographic Center of the Indonesian Navy (Pushidrosal).

Managerial Implications

To be able to improve leadership and organizational performance, officials and leaders must pay attention to the following factors: This study shows that knowledge management, strategic management information system and innovation capability greatly influence organizational performance, so increasing knowledge management, strategic management information system and innovation capability through improving each dimension of knowledge management, strategic management information system and innovation capability must be a priority to be able to maintain the organization, so as to be able to give the impression and trust and loyalty of the community. The quality of resources, in the process of involvement of knowledge management, strategic management information system and innovation capability of all
officials and leaders with third parties is very close, so that cooperation and compliance with the technical specifications of the wishes of the community must be a top priority. The quality of Navy Personnel in terms of equipment, quality of employees, performance of sections such as decision-making officials, is an image that can be felt by the community or parties who work together, so that these various qualities must be a priority for increasing the knowledge of the Hydro-Oceanographic Center of the Indonesian Navy's National Army (Pushidrosal).

References


