



DOI: <https://doi.org/10.38035/dijdbm.v6i2>
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Soldier Competency Improvement and Development Strategy Indonesian Navy in Manning the New Generation of Defense Equipment

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Abstract: The Indonesian Navy is a state defense tool that secures the sovereignty of the territorial waters of the Republic of Indonesia, equipped with various types and sizes of warship defense equipment. In supporting its main tasks, KRI is equipped with sophisticated and modern equipment that aims to facilitate monitoring, taking action and implementing war strategies. In the Presidential Decree concerning the Fulfillment of Defense and Security Needs of the Ministry of Defense and the TNI in 2020-2024, so that the fulfillment of defense equipment will begin to be implemented for the next 25 years. To support the government's vision and mission, the Indonesian Navy requires a Human Resource development strategy based on Competency based on qualifications. This is important to implement because HR has a very strong influence and role in the operation and maintenance of KRI. The purpose of this study is to determine the strategies and efforts that have been, will be and need to be carried out by the Indonesian Navy in recruiting, creating and developing professional Indonesian Navy soldiers with qualified competencies according to qualifications. The results of this study are that in the implementation of recruitment, currently there are still problems related to interest and understanding in the world of Education. Basic branch education that has not implemented updated applied technology and its development. In specialization development education, the curriculum tends to be a review of standard equipment installed without conducting a review of new and future technology. In addition, the teaching staff are considered to have not followed the development of the current warship technology situation. In order to fulfill the government's demands in realizing the independence of the Indonesian Navy, a Corporate University strategy is needed which truly plays a role in leading to Collaboration, Change, and Complexity.

Keywords: Competence, Recruitment, Defense Equipment, Technology

INTRODUCTION

The industrial revolution was a major change in technology that caused changes in other fields. The industrial revolution began in 1750 and is commonly called the industrial revolution 1.0 when the steam engine was discovered, characterized by the mechanization of

production. The industrial revolution 2.0 began when there was a shift from the use of steam engines to machines that used electricity, marked by the standardization of quality that accompanied mass production. The industrial revolution 3.0 began when the production process used machines that could move and be controlled, starting with the use of simple robots, to the use of computers (Ridwan, 2021). Then the industrial revolution 4.0, in this era the system was directed to a digital form assisted by a network (Rahayu, 2021).

This research is based on the idea of how the Indonesian Navy positions itself and takes on a role in the era of the industrial revolution 4.0 by adapting vocational education applied in the provision of human resources (Fajar & Hartanto, 2019). Thus, the Indonesian Navy is expected to be able to make a real contribution in producing superior human resources (HR). Soldiers with superior HR are the ones who will later man the latest Alutsista and ultimately be able to bring the Indonesian Navy actively in maintaining the sovereignty of the Republic of Indonesia or become a high bargaining value for violators of the sovereignty of the Republic of Indonesia's waters. This research needs to be conducted to assess the extent of the Indonesian Navy's readiness in carry out recruitment, education and development of soldiers to produce soldiers who have adequate competence and qualifications to man defense equipment

The Indonesian Navy is a national defense tool with the main task of maintaining sovereignty in the jurisdiction of the waters of the Republic of Indonesia. To support its main task, the Indonesian Navy is equipped with the Republic of Indonesia Warship (KRI) Defense Equipment. The existence of KRI in the waters of the Republic of Indonesia is very important, so the readiness and reliability of KRI in carrying out operations are very important. Indonesian Navy soldiers as KRI crew members have a very important and strategic role in maintaining the readiness and reliability of equipment and the KRI crew itself. Most of the KRI owned by the Indonesian Navy are defense equipment whose readiness and reliability are maintained even though they have passed their optimal service life. The difficulty faced by KRI crew soldiers is the availability of spare parts for equipment that has entered MTBF (Maintain Before Failure). So that the government implements a policy through the Presidential Decree on the Fulfillment of the Needs of the Ministry of Defense and the TNI Alpahankam in 2020-2024 to carry out the rejuvenation of the TNI AL's defense equipment.

Tabel 1 List of Indonesian Navy Defense Equipment

NO	TYPE OF WARSHIP	QTY	STATUS
1	Submarine	4 Unit	Active
2	Fregate	7 Unit	Active
3	Corvet	25 Unit	Active
4	KCR	18 Unit	Active
5	OPV	2 Unit	Active
6	PC	198 Unit	Active
7	BR	10 Unit	Active
8	BRS	3 Unit	Active
9	LPD	5 Unit	Active
10	AT	24 Unit	Active
11	Kapal Latih	8 Unit	Active

The government's commitment to rejuvenating the TNI AL's defense equipment has been implemented since 2014 by involving the domestic defense industry. This aims to increase Indonesia's independence in the defense industry. In this rejuvenation process, the development of technology applied in the defense equipment is an important concern because in maintaining the reliability of the defense equipment, soldiers with the right human resources are needed to carry out maintenance and manning. The achievement of the TNI

AL's Minimum Essential Force (MEF) until 2022 is 59.9% (Fajarta, 2022), so the government through the Minister of Defense is preparing a master plan for the fulfillment of defense equipment for the next 25 years.

Tabel 2 Procurement of Indonesian Navy Defense Equipment 2014-2024 and Crew Personnel

NO	TYPE OF WARSHIP	QTY	CREW
1	Corvet	2 unit	100 Orang
2	Bantu Rumah Sakit	2 unit	326 Orang
3	Bantu Curah Minyak	2 unit	83 Orang
4	Landing Platform Dock	1 unit	118 orang
5	Angkut Tank	6 unit	468 Orang
6	Kapal Cepat Rudal 60 M	5 unit	160 Orang
7	Patrol Craft 60 M	6 unit	300 Orang
8	Patrol Craft 40 M	14 unit	476 Orang
9	Harbor Tug Boat	4 unit	40 Orang
10	Kal 28	2 unit	30 Orang
11	Kal Special Boat	3 unit	24 Orang
12	Kal Latih	2 unit	46 Orang
TOTAL		49 unit	2.171 Orang

Efforts to fulfill the defense equipment are also inseparable from the development of military technology embedded in the defense equipment. The application of the latest military technology must also be balanced with the ability of Indonesian Navy soldiers to operate and implement the Planned Maintenance System (SPT). The challenges of technological development must be able to be answered by the Indonesian Navy as a user of defense equipment by improving the skills possessed by soldiers so that the Transfer of Technology (ToT) process can run quickly and smoothly.

Currently, the Indonesian Navy is implementing the arrangement of human resource readiness in terms of quantity and quality. This process begins when recruiting soldiers who prioritize basic competencies possessed by every Indonesian citizen. With the implementation of the policy of purchasing new KRI with the latest military technology, the regeneration process needs to be started from the beginning. This is because the knowledge gap possessed by the crew of the old equipment cannot be fully applied in new equipment.

From the description above, it can be concluded that the HR needs in question are related to basic competencies in accordance with soldier qualifications. TNI AL soldiers are individual crew members of KRI in an organized and interrelated manner. Therefore, with the change in the use of technology embedded in KRI, the TNI AL is required to carry out structured and continuous training based on competency and qualifications for all soldiers in order to achieve the goal of carrying out the main tasks properly. So that the existence of professional soldiers with linear competencies and qualifications is a key factor in determining the success of the TNI AL.

Based on the background above, a strategy is needed to create professional Indonesian Navy soldiers so that they can man the KRI and can carry out knowledge regeneration through direct training and literacy studies at educational institutions.

METHOD

Research is a process or steps that are carried out in a planned and systematic manner. systematically used to obtain a solution to a problem and an answer to it questions (Afifudin, 2009). In this study, the researcher chose to use a descriptive research type qualitative. In this

case, the researcher wants to collect data in the field in a concrete manner so that it can be used to describe strategies for improving Indonesian Navy soldiers of every rank. In addition, qualitative research has a generalization characteristic called transferability, which means that the data results from this study can be used in other places if the place has characteristics that are not much different (Afifudin, 2009). . The research method used aims to obtain data on the Indonesian Navy's strategy in creating professional and competent soldiers.

In collecting data, researchers use the triangulation method to combine several existing techniques such as observation, interviews, and surveys. (Sugiyono, 2021) states that in data collection techniques there are technical triangulation and source triangulation, in this case the researcher uses technical triangulation, namely using different techniques in taking data from the same source. The aspects used are observation, interviews and surveys. In this study, researchers used field data analysis based on qualitative data analysis models. Meanwhile, activities in data analysis include interviews, documentation and narrative data analysis.

RESULTS AND DISCUSSION

Indonesian Navy Soldier Recruitment Pattern

Procurement of TNI personnel is carried out through recruitment from Indonesian citizens, become volunteer soldier candidates, as well as the mobilization of Indonesian citizens to become mandatory soldiers and the reappointment of former soldiers by paying attention to the applicable requirements (Mabes TNI, 2008). The recruitment process is the process of sourcing and attracting prospective employees who are able to apply as employees (Sitanggang, 2021). The procurement of human resources to fill the TNI organization, plays a role in obtaining professional TNI personnel who are able to meet the demands of the task, so the procurement of TNI personnel is carried out through acceptance and deployment with screening test activities to be accepted as TNI soldiers based on the requirements that have been set.

The development of the Indonesian Navy organization requires the availability of large human resources, but to support government policies, special recruitment is carried out to recruit Indonesian citizens who meet the requirements to be trained as Indonesian Navy soldiers. The recruitment pattern implemented is to socialize the special competency non-commissioned officer program. This program provides an opportunity for Indonesian citizens who have the competencies according to the needs of the Indonesian Navy to join and serve the Republic of Indonesia. The advantage of this program is that after being appointed as Second Sergeant and serving for one year, they can carry out Officer Formation Education for class transfers.

Based on TNI Regulation Number Perpang/45/VII/2008 in implementing The implementation of TNI personnel procurement is determined by policies including lain (Mabes TNI, 2008):

1. Procurement of TNI personnel is carried out according to the needs of employees in the organization.
2. Procurement of TNI personnel prioritizing quality over quantity of TNI personnel.
3. The composition of TNI personnel procurement is arranged based on organizational needs and the task environment.
4. Procurement of TNI personnel is carried out through a selection process with taking into account regional and residential factors.

Basic Competency Development for Soldiers

According to (Adi Suryanto, 2021) there are three important components in the framework Current policies for developing civil servant competencies in Indonesia are:

1. *Learning Management System*. The first point can be associated with the massive use of information technology, especially during the Covid-19 pandemic which limits the movement of the entire community. Learning Management System (LMS) is a web-based technology or software application used to plan, implement, and assess the learning process. The presence of LMS in the training learning process is a sign that there is great attention to information technology solutions in developing soldier competencies (Adi Suryanto, 2021).
2. Development of integrated communication assistance, development of widyaiswara competencies. The second point regarding the development of integrated communication assistance certainly leads to changes in the trend of public sector communication assistance in Indonesia which is starting to compete to build corporate universities (Nguyen & Fan, 2022).
3. Accreditation policy to support training organizations. The third point regarding the implementation of training accreditation is related to the application of quality culture in human resource development organizations. Accreditation is a form of assessment of the eligibility and quality of a study program or higher education institution whose assessment is carried out by an independent organization or body outside the institution (Karbila, 2025).

(Irawati & Suwarno, 2020) stated that one of the important elements in improving the quality of the implementation of competency development is leadership in the implementation of training, including internal coordination and communication with stakeholders and establishing a vision and values in the organization. The competence of a Leadership is seen directly through the management of results, decision making, behavior in the organization, self-management in setting goals, visions, and identifying values in the organization.

Leadership factors determine the success of an organization in achieving its goals. The goal is because leadership leads to power that has the power to create an effective and efficient organization, achieve organizational performance targets and also drive the organization to realize its vision and mission (Mahirun et al., 2021).

In implementing soldier competency development, theoretically there are two approaches in competency development, namely competency from zero, and competency development from existing models. In this study, both approaches have different subjects. Competency development from zero is carried out for soldiers who are graduates of General High Schools where there is no special expertise. So that the direction of competency development is based on interests and the results of basic competency direction testing. In developing existing competencies, the Indonesian Navy conducts training for soldiers with a basis in special expertise competencies as well as experienced soldiers. Both approaches are carried out with the aim of producing more soldiers who have special competencies according to their interests and expertise.

The development of soldier potential cannot be separated from the initial objective of forming TNI AL soldiers who are ready to man the Defense Equipment System. With the plan to use defense equipment that adapts the use of the latest technology, the implementation of the Basic Education curriculum and competent teaching staff make the Education process able to produce TNI AL soldiers who are reliable in manning the Defense Equipment System.

Strategy for Improving Soldier Competence and Qualifications

In order to create professional and competent Indonesian Navy soldiers, the reward and reward pattern Punishment can be given as a form of positive appreciation (compensation)

from the Indonesian Navy to its soldiers who are willing to carry out capacity building, either programmed in their duties or independently.

Individual capability enhancement is evaluated every 6 months. If soldiers do not carry out capability enhancement for 6 consecutive assessment periods, then the opportunity to participate in Education, job transfers and special assignments can be suspended. Capability enhancement through service programs includes:

1. In-Service Training (LDD)
2. Courses organized by the Indonesian Navy or outside the Indonesian Navy that support the improvement of competence and qualifications.
3. Training and certification with Indonesian Navy, Indonesian National and International standards.

Improving the quality of the teaching curriculum is an important demand to be realized, this aims to provide proper understanding to new soldiers to be prepared to man the latest generation of defense equipment. In addition, the qualifications of teaching staff are very important to consider so that the synergy of knowledge, curriculum and teaching experience can create an understanding of new soldiers in the regeneration of defense equipment manning. All service program activities have shortcomings, namely the limited quota of participants. This is because the operational funds for training and courses are borne by the state. While independent activities use personal funds to carry out courses, training and certification.

Strategies that can be implemented to support soldier education are:

1. Understanding the learning objectives, namely manning defense equipment with the latest technology and understanding basic concepts as a general process.
2. Identification of technology gaps between generations installed in several types of defense equipment.
3. Carrying out training for teaching staff by implementing ToT (Transfer of Technology) and ToK (Transfer of Knowledge) in the procurement process for defense equipment and new equipment.
4. Selecting and realizing the ideal Alins (Instruction Tools).
5. Carrying out direct learning with crew members in the process of increasing motivation and understanding.
6. Collaborative teaching with crew members and soldiers who have carried out the training direct training in the procurement process of equipment and defense equipment.

CONCLUSION

Human resources are an important component in an organization, even a country. The development of TNI AL human resources needs to implement a paradigm shift, as a response to changes in the generation's perspective and demands to keep up with technological developments. The paradigm of competency development requires a change in perspective. Three things that are important in the framework of competency development policies at this time are learning technology, integrated competency development, and accreditation policies to support training institutions. The massive use of information technology in the learning process of HR competency development requires innovative technological leadership. Integrated competency development reflects the implementation of Corporate University which actually plays a role in leading to Collaboration, Change, and Complexity.

Implementation of soldier capability development requires adaptive leadership, collaborative leadership and innovative technology leadership. Furthermore, the accreditation policy of training institutions and training programs becomes a benchmark for quality control of training implementation in a training organization. Implementation of training

accreditation policies requires leadership that encourages a culture of quality in the organization. Overall, leadership in public sector human resource development requires a clear vision and planning, openness and accountability, stakeholder collaboration, building a culture of innovation, building a culture of quality, encouraging the application of information technology, integration of all organizational resources, and adaptive ability to change.

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