International Journal of ASRO
Volume 12, Number 04, pp.41-50
Des 2021

STRATEGY FOR DEVELOPING THE MARINE OPERATIONS EDUCATION COMMAND (KODIKOPSLA) TO IMPROVE THE ROLE IN PREPARING EXCELLENT HUMAN RESOURCES FOR THE INDONESIAN NAVY

Rifki Najib[1], Ahmadi[2], Joko Purnomo[3]

[1,3]Indonesian Naval Technology College, Bumimoro-Morokrembangan,Surabaya 60187, Indonesia
[2]Industrial Engineering Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia
Email: rifki1234@gmail.com

ABSTRACT

The development of the strategic environment, especially in the fields of science and technology, requires the Indonesian Navy to prepare strategies to deal with these challenges. In addition to the readiness of the defense equipment, the human resources of the crew must also be superior and professional. The Marine Operations Education Command (Kodikopsla) is an educational institution for the Indonesian Navy which is the center for marine operations education. The purpose of this study was to determine an alternative Kodikopsla development strategy in order to increase its role in preparing superior Indonesian Navy human resources by using the integration of the SWOT, ANP and Balanced scorecard methods. The results of environmental identification in Kodikopsla contained 16 (sixteen) internal factors with 6 (six) strength factors and 10 (ten) weakness factors, and 15 (fifteen) external factors with 9 (nine) opportunity factors and 6 (six) threat factors. . By weighting the EFE and EFI metrics, the chosen strategy is the WO Strategy which means maximizing the improvement of weakness factors for exploiting opportunities. From the results of the weighting calculation using the ANP method, it is obtained that the WO1 priority strategy with a weight of 0.3851. Furthermore, 15 (fifteen) strategic targets were produced which were divided into 4 (four) BSC perspectives, namely financial, internal business, customer and learning and growth as well as determining the Key Performance Indicators (KPI) of each strategic target as the basis for strategy mapping

Keywords: *Kodikopsla, SWOT Method, ANP, Balanced Scorecard, Key Performance Indicator.*

1. INTRODUCTION

The development of the strategic environment is strongly influenced by various rapid and multi-dimensional changes, where every change is always interest-oriented and leads to competition between countries. One of them is the increasingly rapid progress in the field of science and technology, especially the world's defense equipment technology for the benefit of defense and security, which affects the military operations strategy needed for defense and security purposes.

To balance the various forms of threats and challenges to maritime security, the Indonesian Navy, which is an integral part of the TNI, has a role as the main component of the defense and security of the maritime nation, and must have and prepare a strategy to deal with these challenges. Observing the situation, the TNI/TNI AL is very necessary to carry out the development of its strengths and capabilities, both the superiority of the defense equipment and the superior and professional human resources of its crew.

The development of human resources in the context of mastering technology is absolutely essential to be developed, this cannot be separated from the vital role of educational institutions to produce superior and professional human resources. Current educational institutions, especially in the Navy, still need to be developed in accordance with technological developments and the strategic environment, to produce human resources who have expertise in special fields related to defense and security technology.

One way to improve the human resources of soldiers is to establish a modern and professional education system, so that it can become a place for soldiers, especially the marine dimension, to study and respond to forms of challenges and threats to national security that are the responsibility of the Indonesian Navy. . This research itself shows how in the context of the development and institutional transformation of the Indonesian Navy, which includes human resources and defense equipment, the role of educational institutions is very important.

The Marine Operations Education Command, abbreviated as Kodikopsla, is an educational institution for the Indonesian Navy as an educational implementing unit and an integral part of the Kodiklatal which is the only center for marine operations education in the Navy in supporting the implementation of the main tasks of the Navy, in terms of providing education, has an important role in prepare human resources to man the Navy organization which is the main component of the national maritime power. The

main activities carried out by Kodikopsla are providing formal education for the Navy which includes further officer education, marine science specialization development education, special brevet/command education (Kopaska, Divers, Pilots and Submarines), hydrographic-oceanographic education and maritime intelligence education. .

The success of achieving the goals and objectives of the education of Indonesian Navy soldiers is largely determined by the education system and implementation from the planning, preparation, implementation to termination stages as well as recording, reporting, monitoring and evaluating education correctly and objectively at every stage of education to ensure the output of the results. Optimal students are comprehensively faced with 10 (ten) components of education and the challenges and threats that are currently being faced thoroughly and continuously.

In achieving the implementation of the strategic vision and mission of Kodikopsla, several components that are correlated are needed, such as the commitment of instructors and students, financial management, development of methods and standards for the Binopslat program, revitalization of various training facilities and infrastructure as well as the existing conditions of the organization. The achievement of optimal professionalism of student personnel is expected to support every implementation of the main tasks of the Indonesian Navy in relation to the use of the capabilities of the modern Integrated Fleet Weapon System (SSAT). The professionalism of the Indonesian Navy personnel contributes to the implementation of maritime combat operations, law enforcement and sovereignty as well as diplomatic missions between countries.

There are several methods used in developing strategies to increase the ability or capability as well as the effectiveness of carrying out the main tasks of the Kodikopsla in facing the challenges of marine operations in the future, an innovation and strategic plan for the development of the Kodikopsla are needed to increase the role in preparing superior human resources of the Navy by using the method SWOT analysis is an analysis of strengths, weaknesses (Weaknesses), opportunities (Opportunities) and threats (Threats) to obtain a conceptual policy strategy, then the policy strategies are weighted using the ANP method to give weight to the predetermined strategy and get selected strategic priorities.

After that, identification of Key Performance Indicators (KPI) on priority strategies using the Balanced Scorecard method is carried out as well as compiling an implementation plan and mapping strategy where this approach in the strategic planning system is able to produce strategic plans that have comprehensive characteristics to describe the vision into targets. strategic, coherent, balanced and measurable.

The aims of this research are to:

a. Identifying internal and external factors that influence the formulation of the Kodikopsla development strategy to answer the challenges of technological developments that are will affect the pattern of operations of the Navy.

b. Formulate a strategy for developing the Marine Operations Education Command (Kodikopsla) in order to increase its role in preparing superior human resources for the Indonesian Navy.

c. Determine strategic priorities for the development of the Marine Operations Education Command (Kodikopsla) in order to increase the role in preparing superior human resources for the Indonesian Navy.

d. Determine Key Performance Indicators (KPI) and implementation plans as well as mapping of the selected Kodikopsla development strategy.

2. MATERIALS AND METHODS

2.1 Strategy Theory

Strategy comes from the Greek word stratego which means a plan to destroy the enemy by using resources effectively. The development strategy has a formulation function in considering external and internal factors in organizational conditions. Strategy formulation includes activities to develop the mission and vision of the development business, identify aspects of organizational opportunities and threats externally, determine aspects of organizational strengths and weaknesses internally, determine long-term organizational goals, design alternative organizational strategies, and formulate selected strategies for development.

2.2 Organizational Development

Organizational Development is a planned strategy in realizing organizational change. The change must have real goals and be based on a correct diagnosis of the problems faced by the organization. Organizational development must be able to change the values of humans as well as the organizational structure so that the organization is adaptive to its environment.

2.3 Naval Technology

Based on the study and review of several references and theories about maritime glory, it can be defined that Naval Technology is the overall tools, facilities and infrastructure to provide and support various weapons at sea, which are needed with the aim of maintaining, obtaining victory and mastery of the sea area. In the Indonesian navy, the Navy, naval technology is very influential and supports the concept of the SSAT (Integrated Fleet Weapon System) which consists of: Bases, KRI and Kal, Aircraft and Marines.

2.4 SWOT analysis

The SWOT method is the most common technique that can be used to analyze strategic cases. SWOT is a tool that is often used to analyze the internal and external environment to achieve a

systematic approach and support for decision situations. SWOT is an acronym for strengths (S), weaknesses (W), opportunities (O) and threats (T). The first two factors (strengths and weaknesses) relate to the internal factors of the organization, while opportunities and threats cover the wider context or environment in which the entity operates.

The previous qualitative SWOT data can be developed quantitatively through the calculation of the SWOT analysis proposed by Pearce and Robinson (1998) so that the real position of the organization is known.

The calculation is carried out through three stages, namely:

a. Calculate the score (a) and weight (b) of the factor points as well as the total number of multiplication scores and weights (c = a * b) on each SWOT factor.

b. Doing subtraction between the total number of factors S with W and factors O with T, so that the number (d = x) then becomes the value/point on the Y axis.

c. Look for the position of the organization indicated by the dot (x,y) in the SWOT quadrant.

2.5 Analytical Network Process (ANP)

ANP is a mathematical theory where this method allows a decision maker to deal with many interrelated factors (dependence) and feedback systematically. ANP is one of the decision-making methods based on multiple criteria or Multiple Criteria Decision Making (MCDM). ANP was developed by Thomas L. Saaty (1993) which is a new approach to the qualitative method, the development of the previous method, namely the Analytic Hierarchy Process (AHP).

The stages of the ANP method approach consist of 4 steps (Yüksel and Dağdeviren, 2007), namely:

a. Step 1: Model construction as well as problem formulation: The form of the problem must be clearly defined and then arranged in a rational system that is shaped like a network.

b. Step 2: Pairwise comparisons and priority vectors: As with AHP, in ANP each pair of decision elements in each cluster is compared with its control criteria. In addition, the interrelated nature of the criteria from each cluster also needs to be treated in pairs; the effect of each element on other elements can be represented in eigenvectors. In this case the value of relative importance is determined by the scale of Saaty.

c. Step 3: Super-matrix formation: the super-matrix concept is similar to the Markov Chain process. In a system with interrelated effects, local priority vectors are entered into the appropriate column of a matrix to achieve global priority. Therefore, the super-matrix is actually a partitioned matrix, where each segment of the matrix represents the relationship between two clusters in a system.

d. Step 4: Synthesis of priority criteria and alternative options and selection of the best alternative: the priority weights of the criteria and alternatives can be determined from the normalized super-matrix.

Pairwise comparisons obtained from decision makers by assessing the level of importance of an element when compared to other elements. This comparison value is obtained from the quantitative scale presented by Saaty (1994). This scale starts from 1 to 9. The comparison is carried out until a total judgment is made of nx [(n-1)/2] pieces, where n is the number of elements being compared.

Table 1. Pairwise Comparison Scale

Level of Interest	Definition
1	Both elements are equally important
3	1 (one) element is slightly more important than the other elements.
5	1 (one) element is more important than the other elements.
7	1 (one) element is clearly more important than the other elements.
9	1 (one) element is absolutely more important than the other elements.
2,4,6,8	The middle value between two values that are side by side.

(Source: Saaty, 1993)

2.6 Balanced Scorecard Method

This method consists of a combination of two words, namely: balanced (balanced) and scorecard (score card). A score card is a card used to record a person's performance score. Scorecards can also be used to plan scores that will be achieved by personnel in the future. Through the scorecard, the score that the personnel intends to achieve in the future is compared with the actual performance results.

The balanced scorecard method provides a comprehensive framework for translating the vision into strategic objectives. The strategic goals can be formulated because the balanced scorecard method uses four perspectives: finance, customers, internal business processes, learning and growth. (Kaplan & Norton, 1996). A summary of the descriptions of the four perspectives is as follows:

a. *Financial Perspective*, provide financial targets to be achieved by the organization in order to realize its vision. In the military field, it is a financial budget that is needed for the success of the main task.

b. *Customer Perspective*, provides an overview of the intended users/customers along with the demands of the needs served by the organization.

c. *Internal and Business Process Perspective*, provides an overview of the processes that must be

built to serve customers and to achieve specific financial goals. In the military field, it is a description of the structural process and work system to achieve the successful implementation of the main tasks.

d. *Learning and Growth perspective*, is a driver in building competence rather than personnel.

3. RESULTS AND DISCUSSION

3.1 Criteria Identification

The research stage begins with data collection by conducting interviews with eight Expert personnel (E1; E2; E3; E4; E5; E6) in the development of Kodikopsla. Respondents in this primary data collection are experts and official officers who have competence in their fields and are equipped with official experience and have a strategic thinking orientation about the development of Kodikopsla with all the problems in it and it is hoped that the validity of the respondent's perception data can be fulfilled.

3.2. Strategy Formulation

Based on the analysis of internal factors, 16 (sixteen) internal factors were obtained with 6 (six) strength factors and 10 (ten) weakness factors and 15 (fifteen) external factors with 9 (nine) opportunity factors and 6 (six) threat factors. This section discusses the analysis of the results of the weighting of the criteria and the alternative Kodikopsla development strategy using EFI and EFE weighting through the use of questionnaires given to stakeholders in the Kodikopsla development strategy.

3.3. Internal Factor Evaluation (EFI) Matrix

From the results of interviews and questionnaires from several sources, the Evaluation of Internal Factors that influence the Kodikopsla development strategy can be summarized in the Internal Factor Evaluation (EFI) table which shows answers from experts.

Table 2. Internal Factor Weighting

No	Faktor	Penilaian	Bobot (B)	Rating (R)	Nilai (B x R)
Kekuatan (Strength)					
1.	Dukungan visi misi Kodikopsla terhadap pencapaian visi misi Kodiklatal/TNI AL.	22	0.102	1.906	**0.194**
2.	Program kerja Kodikopsla dalam mendukung pengembangan organisasi.	23	0.106	1.414	**0.151**
3.	Sistem kinerja dan manajerial organisasi dalam pengembangan organisasi.	21	0.097	1.122	**0.109**
4.	Semangat kerja yang dimiliki personel Kodikopsla.	20	0.093	1.122	**0.104**
5.	Keberadaan pelatihan terhadap peningkatan kualitas personel melalui pendidikan non formal dan LDD.	20	0.093	1.782	**0.165**
6.	Kemampuan siswa dalam berinteraksi dengan IT/teknologi informasi.	19	0.088	1.414	**0.124**
Jumlah Kekuatan		125	0.579	8.762	**0.847**
Kelemahan (Weakness)					
1.	Kesesuaian nilai indeks beban kerja organisasi dan personel Kodikopsla dengan pengembangan organisasi.	9	0.042	3.634	**0.151**
2.	Keberadaan pusdik dan sekolah saat ini dalam menjawab tantangan kemajuan teknologi pertahanan.	8	0.037	3.634	**0.135**
3.	Kompetensi personel Kodikopsla dalam mendukung proses belajar mengajar.	11	0.051	3.464	**0.176**
4.	Kecukupan jumlah personel Kodikopsla dalam pengembangan organisasi.	8	0.037	3.813	**0.141**
5.	Kesiapan sarana dan prasarana dalam mendukung pengembangan organisasi.	9	0.042	3.634	**0.151**
6.	Dukungan fasilitas jaringan internet yang bisa diakses oleh siswa dan gadik dalam proses belajar mengajar.	9	0.042	3.813	**0.159**
7.	Kesiapan metode pengajaran yang berbasis e-learning.	8	0.037	3.634	**0.135**
8.	Kesesuaian paket instruksi dihadapkan dengan perkembangan alutisista.	10	0.046	3.634	**0.168**
9.	Dukungan alins alongins terutama simulator terkini dalam proses belajar mengajar.	9	0.042	3.634	**0.151**
10.	Kesesuaian kurikulum lokal dengan materi perkembangan alutsista dan opsmil.	10	0.046	3.464	**0.160**
Jumlah Kelemahan		91	0.421	36.359	**1.529**
TOTAL		**216**	**1**	**45.121**	**2.376**

Weighting is done to find out how much influence or impact these factors have on the strategy itself. Assessment of sub-criteria strength factor (S) no. 1 is obtained from the total assessment of respondents' answers, namely 22. The total assessment of each strength and weakness factor is 216 (125+91). While the weight of the sub-criteria strength no.1 is obtained from the value in column 1 divided by the total number of assessments, namely (weight = 22/216 = 0.102).

3.4. External Factor Evaluation (EFE) Matrix

After knowing the opportunities and threats from external factors in the development of Kodikopsla, then the weighting is carried out as in the following table:

Table 3. External Factor Weighting

No	Faktor	Penilaian	Bobot (B)	Rating (R)	Nilai (B x R)
Peluang (Opportunity)					
1.	Program pemerintah yaitu poros maritim dunia memicu kesiapan alutsista pertahanan beserta SDM pengawaknya.	23	0.097	2.804	**0.273**
2.	Perkembangan situasi dan kondisi di luar yang sangat dinamis terhadap pengembangan organisasi.	21	0.089	2.621	**0.233**
3.	Validasi Organisasi TNI AL khususnya Kodiklatal terhadap pengembangan organisasi.	21	0.089	3.302	**0.294**
4.	Respon/kepuasan pengguna terhadap kompetensi lulusan Kodikopsla.	19	0.081	3.464	**0.279**
5.	Hubungan interaksi/kerjasama dengan institusi pendidikan militer baik di dalam maupun luar negeri dalam pengembangan organisasi.	20	0.085	3.302	**0.280**
6.	Penyiapan SDM pada program kemandirian industri strategis nasional proses transfer of technology (ToT) pada pengadaan alutsista.	20	0.085	3.302	**0.280**
7.	Perkembangan dunia internet yang semakin pesat dalam meningkatkan pengetahuan peserta didik.	19	0.081	2.804	**0.226**
8.	Penambahan dan modernisasi alutsista yang memerlukan kesiapan pengawak.	22	0.093	3.634	**0.339**
9.	Komposisi kekuatan postur SSAT saat ini terhadap pengembangan organisasi.	20	0.085	3.147	**0.267**
	Jumlah Peluang	185	0.784	28.380	**2.470**
Ancaman (Threat)					
1.	Kemampuan anggaran pemerintah di bidang pertahanan khususnya untuk pendidikan.	8	0.034	3.634	**0.565**
2.	Rotasi penugasan Gadik dan Gapendik terhadap pengembangan organisasi.	8	0.034	3.464	**0.539**
3.	Kebutuhan Gadik expert dari luar Kodikopsla dalam pengembangan organisasi.	11	0.047	3.464	**0.617**
4.	Pengaruh media sosial dalam memicu pelanggaran disiplin peserta didik.	9	0.038	3.302	**0.490**
5.	Serangan siber dan peretasan data oleh pihak luar.	7	0.030	3.464	**0.480**
6.	Kemampuan intelijen yang didasari oleh kemampuan sistem informasi dalam pengembangan organisasi	8	0.034	3.634	**0.565**
	Jumlah Ancaman	51	0.216	20.963	**0.754**
	TOTAL	**236**	**1**	**49.343**	**3.224**

Weighting is done to find out how much influence or impact these factors have on the strategy itself. Assessment of the opportunity factor sub-criteria (O) no. 1 is obtained from the total number of respondents' answers, namely 23. The total assessment of each opportunity and threat factor is 236 (185+51). While the weight of the sub-criteria opportunity no.1 is obtained from the value in column 1 divided by the total number of assessments, namely (weight = 23/236 = 0.097).

3.5. Recapitulation of the calculation results of the EFE / EFI matrix

Based on the results of calculations that have been carried out through a SWOT matrix analysis, the final value is obtained from external factors, namely opportunities and threats and internal factors, namely strengths and weaknesses, as shown in the table below.

Table 4. EFE / EFI Matrix Calculation Results

No	Faktor	Nilai
1	**Faktor Internal**	
	Kekuatan	0.847
	Kelemahan	1.529
2	**Faktor Eksternal**	
	Peluang	2.470
	Ancaman	0.754

Then arranged in a cross strategy between factors or a SWOT matrix to determine the chosen strategy to be used in problem solving. Through the strategy quadrant, the selected alternative strategy is obtained from the difference between each factor as shown in the following table.

Table 5. Analysis of the intersection of the lines of the SWOT matrix

SWOT				Sumbu X	Sumbu Y
S	W	O	T	(S – W)	(O – T)
0.847	1.529	2.470	0.754	-0.681	1.716

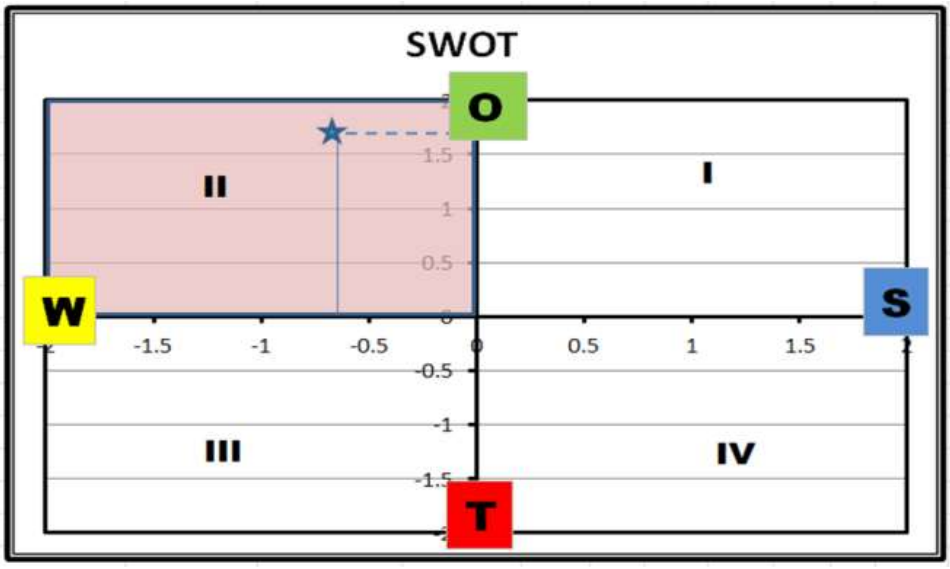

Figure 1. SWOT Quadrant Matrix
(Source: Processed Data)

From the picture above, it can be seen that the development strategy of the Marine Operations Education Command (Kodikopsla) in order to increase its role in preparing superior Indonesian Navy human resources is in quadrant II. The intersection position in quadrant II identified conditions that support the use of the Stability strategy. Stability strategy is a strategy by maximizing the improvement of weakness factors to take advantage of opportunities.

From the results of the drafting of the WO strategy, interviews were carried out with experts to validate the WO strategy that had been conceptualized. From the results of interviews with experts, 5 WO strategies were selected, namely WO 1, WO 2, WO 3, WO 4 and WO 5 strategies.

Table 6. Strategy Formulation
(Weakness – Opportunity)

KODE	STRATEGI
WO 1	Validasi Organisasi dan Prosedur (Orgaspros) dan pembentukan sekolah/pusdik baru Kodikopsla dengan mengembangkan struktur organisasi menjadi lebih besar agar beban kerja organisasi dan personel tidak berlebih sehingga mampu mencetak SDM unggul sesuai dengan perkembangan teknologi dengan memanfaatkan program pemerintah poros maritim dunia, serta validasi TNI AL/Kodiklatal.
WO 2	Mengembangkan paket instruksi yang sesuai dengan adanya penambahan dan perkembangan unsur KRI dan alutsista serta sekaligus mengadakan evaluasi kurikulum dengan memperhatikan kebutuhan stakeholder dan TNI AL, sehingga dapat meningkatkan kualitas hasil lulusan yang berkompeten sesuai dengan tuntutan penugasan.
WO 3	Menyelenggarakan kegiatan pelatihan Gadik maupun Gapendik untuk meningkatkan kompetensi serta memberikan kesempatan melanjutkan pendidikan yang lebih tinggi dengan memanfaatkan kerjasama dengan institusi pendidikan militer dalam maupun luar negeri. Sekaligus melaksanakan penetapan dan pemenuhan DSP sesuai dengan kualifikasi yang dibutuhkan Kodikopsla seiring dengan tuntutan validasi organisasi dalam meningkatkan kualitas Serdik yang siap pakai.
WO 4	Pemantapan kondisi teknis meningkatkan kemampuan sarana dan prasarana sesuai standard yang dibutuhkan dan upgrade alins alongins serta pembenahan teknologi sistem belajar khususnya simulator yang digunakan dalam meningkatkan kualitas serdik sesuai dengan kemajuan teknologi dengan memanfaatkan hubungan kerjasama dengan instansi luar.
WO 5	Meningkatkan dukungan fasilitas jaringan internet dan sistem pembelajaran e-learning/sistem informasi pengetahuan dalam proses belajar mengajar yang mudah diakses sehingga Serdik mampu menggali ilmu pengetahuan secara luas dan mudah dengan memanfaatkan perkembangan dunia internet yang semakin pesat.

3.6. Strategic Priority Determination

Prioritization of the WO strategy is used to determine which of the five existing WO strategies will be the priority to be implemented sequentially based on the results of the prioritization of the strategy.

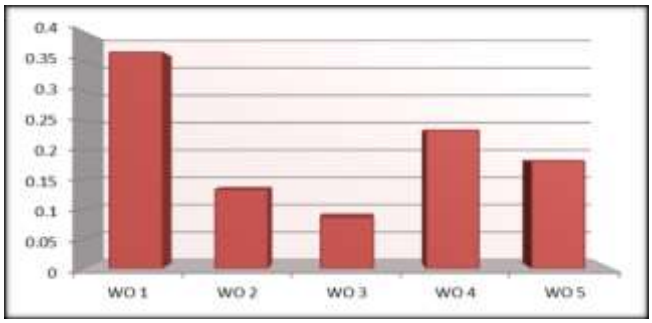

Figure 2. Priority Strategy Ranking Weight
(Source: Processed Data)

3.7. Balanced Scorecard (BSC) Perspective

After identifying the development strategy using SWOT analysis where the priority strategy, namely WO1, will be identified/mapped strategic targets. The purpose of strategic target mapping is to visually describe the strategy, thus facilitating communication in strategic planning based on the perspective of the Balanced Scorecard (BSC).

Table 7. Strategic Goals based on BSC Perspective

PERSPEKTIF BSC	SASARAN STRATEGIS
KEUANGAN (FINANCIAL)	❖ Penambahan dukungan anggaran dalam rangka validasi organisasi Kodikopsla. ❖ Penambahan dukungan anggaran untuk peningkatan kemampuan sarpras dan alins alongins. ❖ Penambahan dukungan anggaran untuk penambahan sekolah maupun pusdik di Kodikopsla.
BISNIS INTERNAL (INTERNAL BUSINESS)	• Pengajuan program dan penyusunan validasi organisasi Kodikopsla. • Penetapan wewenang, tugas pokok dan tanggung jawab fungsi untuk menyelenggarakan kegiatan pendidikan. • Penambahan jumlah personel pengawak Kodikopsla sesuai dengan kompetensi yang dibutuhkan. • Pengajuan pembentukan pusdik/ sekolah baru antara lain sekolah siber, sekolah ranjau, sekolah polmar (komsos dan tahwil). • Meningkatkan pelayanan pendidikan. • Terwujudnya lembaga pendidikan yang professional.
PENGGUNA LULUSAN (CUSTOMER)	❖ Terwujudnya hasil lulusan yang berkompeten dalam bidangnya. ❖ Peningkatan prestasi dari peserta didik.
PEMBELAJARAN DAN PERTUMBUHAN (LEARNING AND GROWTH)	• Peningkatan dalam menyelenggarakan kegiatan pembekalan dan pendidikan khusus tentang teknologi alutsista terkini. • Peningkatan kualitas dan kemampuan SDM serta sarana dan prasarana untuk menghadapi dan mengembangkan aspek Naval Technology. • Terpenuhinyan standar kurikulum pendidikan dengan memperhatikan kebutuhan stakeholder/TNI AL, serta menyesuaikan dengan perkembangan alutsista baru dan perkembangan Iptek. • Terwujudnya Sumber Daya Manusia yang kompeten, professional dan berintegritas.

3.8. Mapping strategy

To visually describe the strategy through a number of strategic targets that have been strung together, thus facilitating communication in strategic planning based on the BSC perspective and the predetermined KPIs, it can be seen in the following strategy mapping image:

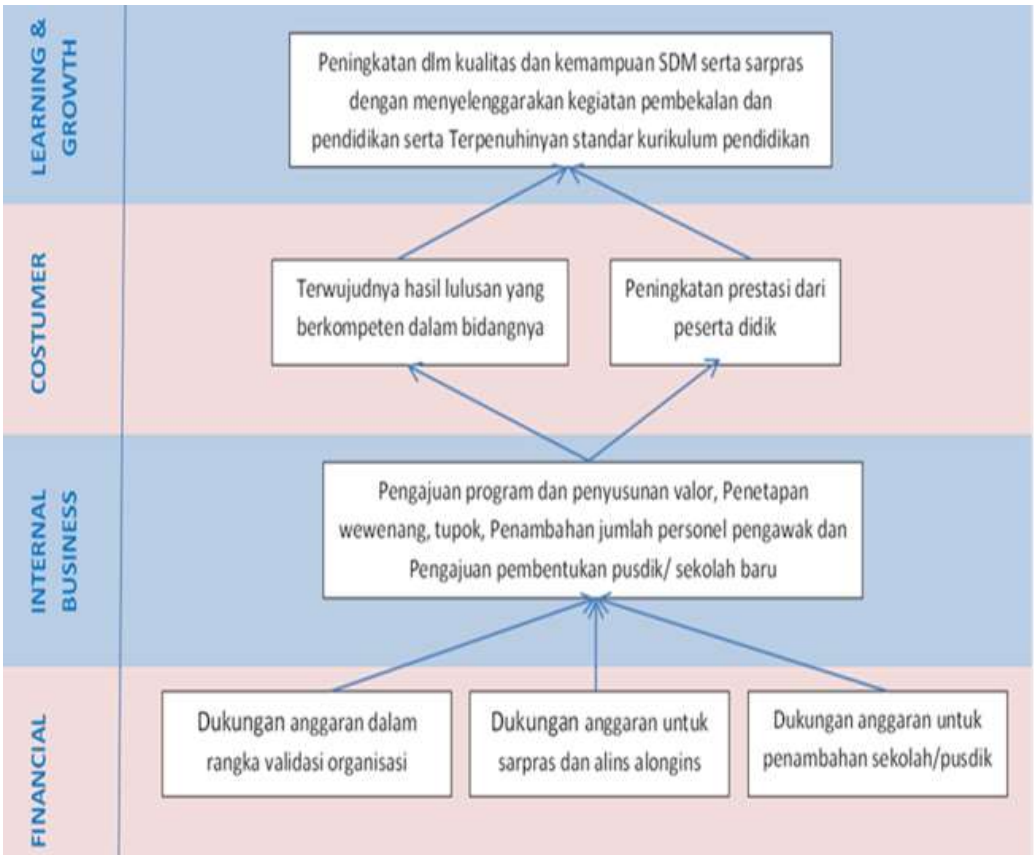

Figure 3. Mapping Strategy
(Source: Data processed)

3.9. Implementation Stage

Several plans for the development of the Marine Operations Education Command (Kodikopsla) to increase the role in preparing superior Indonesian Navy human resources are generally carried out in a strategic plan (renstra) which is divided into five-year programs.

SASARAN STRATEGIS	MULAI	SELESAI	BULAN										
			0	6	12	18	24	30	36	42	48	54	60
1	0	12	■	■	■								
2	12	48			■	■	■	■	■	■	■		
3	12	48			■	■	■	■	■	■	■		
4	12	24			■	■	■						
5	12	24			■	■	■						
6	24	48					■	■	■	■	■		
7	12	36			■	■	■	■	■				
8	12	48			■	■	■	■	■	■	■		
9	36	60							■	■	■	■	■
10	36	60							■	■	■	■	■
11	24	48					■	■	■	■	■		
12	36	60							■	■	■	■	■
13	48	60									■	■	■
14	48	60									■	■	■
15	24	48					■	■	■	■	■		

Figure 4. Model Implementation Stage Plan Chart
(Source: processed data)

4. CONCLUSIONS

Based on the results of the research that has been done, conclusions can be drawn including:

a. The factors that can be identified in the SWOT analysis in formulating the Kodikopsla development strategy are 16 (sixteen) internal factors with 6 (six) strength factors and 10 (ten) weaknesses and 15 (six) factors.fifteen) external factors with 9 (nine) opportunity factors and 6 (six) threat factors, which will be used as a reference for formulating priority strategies.

b. Based on the results of the formulation of the Kodikopsla development strategy using SWOT analysis, the points of intersection of internal factors and external factors in the Matrix Space quadrant are points (-0.681 and 1.716) located in quadrant II. Quadrant II is identical as an active stability strategy quadrant, namely an active strategy to take advantage of opportunities by minimizing weaknesses, in order to improve weaknesses into strengths. The strategy concept in quadrant II used is the WO (Weakness-Opportunity) strategy with five alternative priority strategies.

c. In determining the priority of the WO strategy, based on the results of the weighting of the best alternative strategies using the ANP method, WO1 was selected with a weight of 0.3851 then the second priority is the WO 4 strategy with a weighted value of 0.2336, the third priority is the WO 5 strategy with a weight value of 0.1814, the fourth priority is the WO 2 strategy with a weighted value of 0.1335, and the last priority is the WO 3 strategy with a weighted value of 0.0866.

d. Identification of Key Performance Indicators using the Balance Scorecard method resulted in 15 (fifteen) strategic targets divided into 4 (four) perspectives, namely financial, internal business, customer and learning and growth and 19 (nineteen) Key Performance Indicators (KPI). of these strategic goals. Then it is used to develop a strategy map and ends with the preparation of strategy implementation in the form of a roadmap which is divided into programsfive years to facilitate the implementation of the development of Kodikopsla educational institutions.

ACKNOWLEDGEMENT

The Kodikopsla development strategy is a form of response to the validation of the Kodiklatal organizational development. This research is expected to be one of the considerations and inputs in the decision-making process. The subject of the research study is expressed in variables that represent the organization with the aim of not causing negative perceptions. Thank you to the institutions that have provided support and opportunities for researchers to provide input for their thoughts and to honorable officials and supervisors so that this paper can be compiled.

REFERENCES

Ahmadi, Zain, D., & Santoso, B. (2011). Determination of Naval Based Locations: Strategy to Maximize Performance Monitoring of defense and Security System in the Sea (Study on Maritime Security and Defense Systems in Indonesia. Journal of Management Applications, 9, 254-263.

Arini, & Utomo, MN (2017). Study of Micro, Small and Medium Enterprises (MSME) Development Strategies in Tarakan City. Journal of Organization and Management, 13(2), 99-118.

Creswell, JW (1992). Research Design : Qualitative, Quantitative and Mixed Methods Approaches. Chicago: University of Chicago Press.

GMTT. (2015). Global Marine Technology Trend 2030. Southampton: Lloyd's Register; QinetiQ; University of Southampton.

Gretzky, W., 2010. Strategic Planning and SWOT Analysis. Chicago: Health Administration Press, pp. 91-97.

Held, D. (2001). Globalization, Cosmopolitanism, and Democracy: An Interview. Catalonia: IDEES of the Center d'Estudis de Temes Contemporanis.

Hill, T. (1997). SWOT Planning (30 ed.).

Kaplan & Norton, (1996). The Balanced Scorecard. Boston: Harvard Business School.

Ministry of Defense. (2014). State Defense Posture. Jakarta: Ministry of Defense of the Republic of Indonesia.

Ministry of Defense, D. (2015). National Defense White Paper. Jakarta: Directorate General of Stratahan.

TNI AL Headquarters. (2020). Regulation of the Chief of Naval Staff Number 22 of 2020, dated April 8, 2020 concerning Organizational Arrangements for the Doctrine, Education and Training Command of the Indonesian Navy.

Nazara, ZS, 2019. Strategy for the Development of the Miangas Island Marine Defense Area Empowerment Using the SWOT and Borda Methods. Surabaya: STTAL.

Oreski, D. (2012). Strategy development by using SWOT-AHP. Tem Journal, 1(4), 283-291.

zleblebici, Z., Pinto, C., & Antonio, N. (2015). Variations in Strategy Perception among Business and Military. International Journal of Research in Business and Social Science, 4(1), 17-31.

Presidential Decree Number 10 of 2010 dated January 28, 2010 concerning the Organizational Structure of the TNI.

Prasad, SK (2018). Integration of SWOT analysis with hybrid modified TOPSIS for the lean strategy evaluation. Journal of Engineering Manufacturing, 371–378.

Rangkuti., F. (2012). SWOT Balanced Scorecard. Jakarta: PT Gramedia. Rangkuti, F. (2018). SWOT analysis. Jakarta: PT Gramedia Pustaka Utama.

Rizal, O. (2015). The strategic feasibility of relocating the TNI AL base in support of the main tasks of elemental operations. Surabaya: STTAL Thesis.

Saaty, T, L., (1993). Decision Making for Leaders (Translation), PT. Binaman Pressindo Library, Jakarta.

Wang, XP, Zhang, J., & Yang, T. (2014). Hybrid SWOT Approach for Strategic Planning and Formulation in China Worldwide Express Mail Service. Journal of Applied Research and Technology, 12, 230-238.

Yogi, P., Rizal, O., Ahmadi, & Suharyo, OS (2017). Feasibility Analysis of Naval Base Relocation Using SWOT and AHP Method to Support Main Duties Operation. Journal of Defense Management, 7(1), 1-8.