


Strategic Management of Indonesian Navy Regional Comand III Patrol Ship Unit In Supporting Maritime Security Operations

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Article Info	ABSTRACT
<p>Keywords: management strategy, ship units, Regional Patrol III, Maritime Security Operations</p>	<p>This study aims to identify the actual condition of the management of Satrol Kodaeral III in supporting Maritime Security Operations, identify the factors that are the strengths, weaknesses, opportunities, and threats in the management strategy of Satrol Kodaeral III, and determine the appropriate policies, strategies and efforts in the management of Satrol Kodaeral III in order to increase the effectiveness of maritime security operations. This study uses a mixed method, which combines qualitative and quantitative methods. The unit of analysis used is the individual personnel of the Indonesian Navy within Satrol Kodaeral III. The research instruments used are interviews, questionnaires, and observations. The results of the study found that the management of Satrol Kodaeral III currently still faces various challenges related to limited resources, both in terms of personnel, defense equipment, budget, and existing management systems. However, there are great opportunities to improve operational effectiveness and efficiency through the application of modern technology and integrated strategies. This study contributes theoretically in enriching strategic management studies, especially in the management of the Indonesian Navy organization, by applying SWOT analysis at the operational unit level. This research contributes practically in providing alternative strategies that can be directly implemented in the management of Satrol Kodaeral III to increase the effectiveness of maritime security operations as well as input for the Indonesian Navy leadership in improving the systems, procedures, and management patterns of defense equipment, personnel, and logistics, so that the unit's performance in carrying out its main tasks is more optimal.</p>
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INTRODUCTION

Maritime security is a crucial pillar of the defense and sovereignty of an archipelagic nation like Indonesia. The Patrol Boat Unit (Satrol) Kodaeral III plays a strategic role in securing Indonesia's western waters, including the Indonesian Archipelagic Sea Lane (ALKI) I and the Sunda Strait (Marsetio, 2017). However, various operational challenges hamper the effective implementation of this unit's primary duties (TNI AL, 2025).

Based on initial observations, Satrol Kodaeral III faces complex issues, including aging defense equipment that is over three decades old, limited personnel with only 72% of the personnel roster fulfilled, and a lack of synchronization between maintenance and operational

schedules (Satrol Readiness Report, 2025). The vast scope of work coupled with the complexity of modern maritime threats such as smuggling, Illegal, Unreported, and Unregulated Fishing (IUUF), and human trafficking demands a comprehensive management strategy (Sajidin et al., 2023). This study aims to identify internal and external factors in the management of Satrol Kodaeral III and to formulate effective strategies to support maritime security operations using the ends-ways-means concept approach.

Literature Review

Previous Research on Patrol Boat Management

Hendriyanto's (2024) study on Bakamla's patrol boat management strategy using a SWOT approach resulted in strategic recommendations based on an analysis of internal and external factors. However, this research was limited to the macro-policy level without addressing the technical operational aspects of patrol units. Ahmadi et al.'s (2020) study on maritime component empowerment in the Lombok Strait using the AHP-SWOT methodology successfully formulated six defensive strategies, but focused on maritime community empowerment rather than patrol element management.

Malau et al.'s (2022) research on optimizing Lantamal I Belawan using a mixed-method approach provided an important contribution to understanding the Indonesian Navy's organizational structure, but did not integrate modern technology analysis into patrol element management. Meanwhile, Nugroho (2024) examined Bakamla's implementation as a joint patrol coordinator using NVivo analysis, but limited it to coordination aspects without addressing internal resource management.

Research Gaps

Based on the literature review, there is a research gap at the operational unit level of Satrol Kodaeral III, the organization that directly manages its elements. Previous research has tended to focus on macro-level policies or specific aspects without a comprehensive approach that integrates in-depth qualitative analysis with strategic quantitative analysis. This research fills this gap by focusing directly on Satrol Kodaeral III using an integrated mixed-methods approach.

Supporting Theories

The strategic management theory of Wheelen & Hunger (2015) and the ends-ways-means concept serve as the primary foundations of this research. The modern maritime security theory of Bueger (2015) and the Maritime Domain Awareness concept of Marsetio (2017) provide an analytical framework for understanding the complexity of maritime security operations. Meanwhile, the classical organizational theory of Gulick & Urwick (1937) and the resource-based view of Barney (1991) are used to analyze resource management efficiency.

Theoretical Framework

Strategic Management Theory

This research is based on the strategic management theory proposed by Wheelen & Hunger (2015), which defines strategic management as a series of managerial decisions and actions that determine a company's long-term performance. In a military context, strategic management encompasses the formulation, implementation, and evaluation of strategies to achieve organizational goals (Yoeti, 1996).

The ends-ways-means concept is an important foundation in formulating defense strategies. Ends refer to strategic objectives, namely national maritime security, ways refer to the method of maritime security operations, and means refer to the means, namely defense equipment, personnel, and logistical support (Hidayat, 2022). This framework is relevant for analyzing the management of Regional Command III (Satrol Kodaeral III) in supporting maritime security operations.

Maritime Security Theory

Modern maritime security theory integrates a holistic approach encompassing aspects of military defense, law enforcement, marine resource protection, and maintaining regional stability (Bueger, 2015). The Maritime Domain Awareness (MDA) concept developed by Marsetio (2017) emphasizes the importance of understanding, detecting, and responding to maritime activities that could threaten national security.

In the Indonesian context, maritime security is not only traditional but also faces non-traditional threats such as IUU fishing, smuggling, and maritime terrorism (Sajidin et al., 2023). This theory serves as the basis for analyzing the role of Satrol Kodaeral III in addressing the complexity of these threats.

Organizational Theory and Resource Management

The classical organizational theory proposed by Gulick & Urwick (1937) through the POSDCORB concept (Planning, Organizing, Staffing, Directing, Coordinating, Reporting, Budgeting) is relevant to analyzing the structure and function of Satrol Kodaeral III. Furthermore, Wardoyo's (2011) 5M resource management theory (Man, Money, Materials, Machines, Methods) is used to evaluate organizational resource management.

The resource-based view concept (Barney, 1991) was also applied to analyze the ability of Satrol Kodaeral III to utilize its resources to create a competitive advantage in maritime security operations.

SWOT Strategic Analysis Theory

The SWOT analysis, developed by Learned et al. (1965) and popularized by Rangkuti (2016), serves as the primary analytical framework in this research. This theory allows for the systematic identification of an organization's internal factors (strengths-weaknesses) and external factors (opportunities-threats).

Developing the SWOT analysis into the IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) matrices provides a more objective quantitative approach to strategy formulation (David, 2011). Integration with a mixed-methods approach strengthens the validity and reliability of the research findings.

METHODS

Research Design

This study used a mixed-methods approach with a sequential explanatory design. Data were collected from January to August 2025 within the Jakarta Regional Command III Patrol Unit.

Population and Sample

The research population consisted of seven experts selected through purposive sampling, including Patrol Commanders, Staff Officers, and KRI/KAL Commanders. The unit

of analysis was individual Indonesian Navy personnel within the Regional Command III Patrol Unit.

Research Instruments

The research instruments included in-depth interview guidelines, observation sheets, and closed-ended questionnaires. Instrument validity was tested through expert judgment.

NVivo Data Validity Test

The validity of qualitative data in NVivo was tested through source triangulation by comparing data from various informants, method triangulation by combining interviews, observations, and documentation, and member checking by confirming data interpretations with respondents. A peer debriefing process was conducted through discussions with experts to ensure the accuracy of the analysis. A documentation audit trail was conducted to ensure the transparency and reliability of the data analysis process.

Qualitative Data Analysis

Qualitative data were analyzed using NVivo 15 software through data transcription, coding, categorization, and visualization. Analysis techniques included open coding to identify initial themes, axial coding to group themes, and selective coding to select the main themes.

Quantitative Data Analysis

Quantitative data were analyzed using a SWOT analysis, weighting internal and external factors using a Likert scale of 1-4. Internal Factor Analysis Summary (IFAS) and External Factor Analysis Summary (EFAS) matrices were calculated to determine strategic positioning.

Research Procedure

The research procedure followed these stages: (1) primary and secondary data collection, (2) qualitative analysis using NVivo, (3) quantitative SWOT analysis, (4) integration of results, and (5) strategy formulation. Ethical aspects of the research were maintained through confidentiality of respondents' identities and consent to participate.

RESULTS AND DISCUSSION

Internal Factor Analysis

Table 1. Internal Strength Factors of Regional III Control

No	Strengths	Weighted	Score
1	Experienced personnel	3,14	0,12
2	Regular training programs	3,14	0,12
3	Defense equipment readiness	3,14	0,12
4	Strong intelligence network	3,00	0,12

Table 2. Internal Weakness Factors of Regional III Regional Police Unit

No	Weaknesses	Weighted	Score
1	Age of defense equipment	3,14	0,12
2	Budget constraints	3,29	0,13
3	Personnel shortages	3,57	0,14

4	Unsynchronized maintenance	3,43	0,13
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Tables 1 and 2: Internal factor analysis shows that Satrol Kodaeral III's primary strength lies in its experienced personnel, with a score of 3.14 and a weighting of 0.12, reflecting the quality of its human resources capable of conducting maritime security operations. However, its most significant weaknesses lie in personnel shortages and mismatched positions, with the highest score of 3.57 and a weighting of 0.14, indicating structural issues in human resource management that are a major obstacle to operational effectiveness. The readiness of defense equipment and training programs demonstrated quite good performance, although the aging of the equipment was a serious concern, with a score of 3.14. Misalignment between maintenance and operations was also a critical issue, with a score of 3.43, impacting overall element readiness.

External Factor Analysis

Table 3. External Opportunity Factors

No	Opportunity Factors	Weighted	Score
1	Agency Collaboration	3,14	0,13
2	Technological Development	3,71	0,15
3	Budget Increase	3,14	0,13
4	Private Partnership	3,57	0,15

Table 4. External Threat Factors

No	Threat Factors	Weighted	Score
1	Illegal smuggling	3,57	0,15
2	Heavy maritime traffic	2,57	0,11
3	Natural resource smuggling	2,43	0,10
4	Weather variations	2,00	0,08

Tables 3 and 4: External factor analysis reveals that technological development represents the greatest opportunity with a score of 3.71 and a weighting of 0.15, opening up the potential for increased surveillance and operational effectiveness through the adoption of modern technology. Collaboration with the private sector also represents a significant opportunity with a score of 3.57, offering alternative solutions for the maintenance and procurement of defense equipment. Regarding threats, illegal smuggling is the most significant challenge with a score of 3.57 and a weighting of 0.15, reflecting the high intensity of cross-border crime in the operational area of Regional Command III Patrol Unit. The threat of heavy maritime traffic and natural resource smuggling is at a moderate level, while weather variability, despite having the lowest score of 2.00, remains a significant operational consideration.

Strategic Position and SWOT Matrix

Based on the coordinates (-0.27, 0.24), Regional Command III Patrol Unit's strategic position is in the WO (Weakness-Opportunity) quadrant. This position requires strategic improvement by capitalizing on external opportunities.

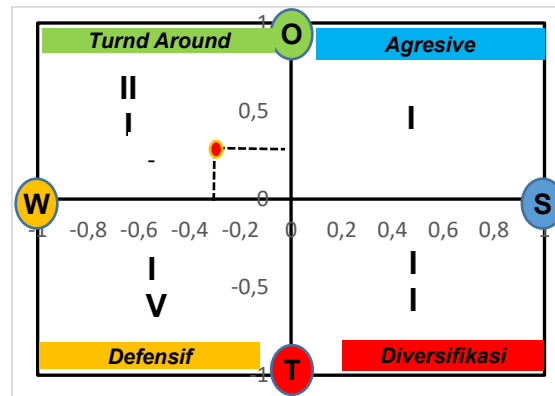


Figure 1. SWOT Quadrant Matrix for Regional Patrol III

Integrative Discussion

The findings of this study are consistent with Wheelen & Hunger's (2015) strategic management theory, which emphasizes the importance of alignment between ends, ways, and means in strategy formulation. The WO quadrant position aligns with the strategic turnaround concept, where organizations need to capitalize on external opportunities to address internal weaknesses.

From the perspective of Bueger's (2015) maritime security theory, the resulting strategy reflects a comprehensive maritime security approach that integrates technological aspects, multi-stakeholder collaboration, and institutional capacity. The implementation of Maritime Domain Awareness (Marsetio, 2017) through the use of technology is key to overcoming personnel and defense equipment limitations.

The findings regarding the dominance of internal weaknesses align with Hendriyanto's (2024) research, which also identified similar issues in patrol vessel management, albeit in a different organizational context. The uniqueness of this study lies in the integration of in-depth qualitative analysis with a strategic quantitative approach, which provides a strong empirical basis for strategy formulation.

CONCLUSION

Based on a comprehensive analysis using a mixed-methods approach, it was concluded that Regional Patrol Unit III is strategically positioned in the WO (Weakness-Opportunity) quadrant with coordinates (-0.27, 0.24). Based on the TOWS matrix, four main strategies were formulated, described within the ends-ways-means framework, as follows: Strategy 1: Optimizing Maritime Surveillance Technology. Utilizing technological advancements (O2) by implementing Unmanned Surface Vehicles (USVs), surveillance drones, and advanced coastal radar systems to address personnel shortages (W3). This strategy aims to increase the effectiveness of maritime surveillance with broader coverage and faster response times, despite personnel limitations, through personnel training in unmanned system operations and the development of an integrated command center infrastructure. Strategy 2: Strengthening Cross-Agency Cooperation. Utilizing opportunities for collaboration with other agencies (O1) through the establishment of a Joint Operations Center and sharing intelligence resources to address budget constraints (W2). Creating effective operational synergy through the

integration of resources and information with relevant agencies. Implemented through operational cooperation protocols, an integrated communication system, and routine coordination mechanisms with Bakamla, Polairud, and the Ministry of Maritime Affairs and Fisheries. Strategy 3: Strategic Partnerships with the Private Sector. Capitalizing on collaboration opportunities with the private sector (O4) through Public-Private Partnership (PPP) schemes. Accelerating the rejuvenation of defense equipment and improving maintenance quality through innovative partnership schemes. (PPP) for the maintenance and rejuvenation of aging defense equipment (W1). Performance contracts with private shipyards, leaseback schemes, and corporate social responsibility programs for the maritime sector. Strategy 4: Implementation of an Integrated Operations Management System. Leveraging technological advancements (O2) by implementing a military-specific Enterprise Resource Planning (ERP) system to address maintenance and operations asymmetry (W4). Achieving optimal synchronization between operations and maintenance schedules to maximize element readiness. Operations management software, personnel training in digital systems, and supporting IT infrastructure. These four strategies are interconnected and form a comprehensive management ecosystem. The implementation of these strategies is expected to increase the effectiveness of the maritime security operations of Regional Command III Patrol Unit with success indicators in the form of increased patrol coverage, reduced response time, and increased detection of maritime threats.

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