

Reengineering the Management Model of Defense to Overcome Separatism in Papua for National Interests

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Abstract

This research was made to determine the effect of defense management on national interests using the mixed methods approach. Qualitative data are analyzed using NVivo 12, while quantitative data uses SEM-PLS 4 software to *obtain robust and reliable findings*. The results showed that defense management reengineering had a significant effect on the realization of national interests in overcoming separatists in Papua. Cronbach's alpha and composite reliability values that show high internal consistency. Average Variance Extracted (AVE) of more than 0.50, confirming the convergence of good indicators. The evaluation of the structural model shows a significant relationship between the engineering management of defense and national interests (the path coefficient = 0.661, p-value = 0.000), with an R-square value of 0.437, which shows moderate influence. NVivo 12 analysis reveals a major factor in strengthening national interests, including logistical readiness, interoperability between units, and local communities in handling separatism. However, there are limitations such as budget constraints, multidimensional threat complexity, and lack of cross-sector coordination that hamper optimal implementation. Importance-Performance Map Analysis (IPMA) shows that although engineering management of defense has a significant effect on national interests, its performance still needs to be improved. This study contributes originality by integrating SEM-PLS and NVivo to provide a holistic perspective and emphasize the need for more adaptive defense reengineering management to increase the effectiveness of defense strategies in dealing with separatist threats.

Keywords: Defense, Management, Mixed Methods, Reengineering, State Administration.

INTRODUCTION

Reengineering the management model of defense to overcome separatism in Papua is a process carried out in a planned and sustainable manner for the presence of the rearrangement of handling patterns of the Papuan separatist group to optimize the national defense management system with a more strategic and humanist, adaptive, and contextual

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order to increase effectiveness for the Military (TNI) in the face of escalation of the threat of separatism in the Papua region, which has recently tended to increase (Ausseil et al., 2020). This optimization includes the formulation of the resignation or evaluation of the handling of separatists and patterns of coordination and collaboration with related agencies (TNI, Polri, regional government, and community) and decision-making mechanisms to produce patterns and international law for the interests of the state and increase the role of the government and regional government in improving public services. Reengineering is intended to create a more responsive, modern, and oriented defense management model or oriented towards the dynamics and geopolitical and socio-cultural conditions in dynamic Papua so as to be able to strengthen national stability and sustainable regional integration in Papua (Elshaer et al., 2023). Separatism in Papua is a threat to national defense because it includes military aspects and the quality of public services (Appiah-Otoo, 2023). Often, separatist groups take advantage of limitations in access to basic services such as education, health, and infrastructure to strengthen the story of injustice and strengthen their influence in the community. From a defense point of view, improving public services has become part of the soft power defense strategy, where welfare development is used as a stabilization tool to reduce the possibility of conflict (Anwar & Abbas, 2024). By providing fair and high-quality public services, the state can strengthen the legitimacy of government, increase people's loyalty to the Unitary State of the Republic of Indonesia (NKRI), and reduce the desire for the separatist movement (Gustafson & Hertting, 2017). Reengineering is a redesign. In the context of management and organization, reengineering refers to the process of redesigning fundamentally systems, processes, or organizational structures to improve efficiency, effectiveness, and service quality. This approach not only includes gradual changes but also comprehensive transformation that can eliminate irrelevant or inefficient work processes. Reengineering is often carried out through technology adoption, simplification of workflows, and organizational restructuring to be more adaptive to the challenges and dynamics of the external environment (Neill et al., 2017).

The urgency of this study is that separatism in Papua is a serious threat to national sovereignty and stability that is complex and multidimensional, including military, social, economic, and geopolitical aspects (Agnesica et al., 2023). Handling efforts that have been more oriented to the safety approach (hard power) have not been fully effective in overcoming the root of the problem of separatism. One factor that worsens the situation is the imbalance

of public services, which is often used by separatist groups to strengthen the narrative of injustice. Therefore, a defense reengineering management model is needed, which is an approach that integrates defense strategies with public service reform to improve the legitimacy of the country, strengthen the welfare of the community, and strategically reduce the separatist movement (Ryabinin, 2017). Reengineering management is a concept developed by Hammer and Champy (1993) that emphasizes the need for radical business processes to improve the efficiency and effectiveness of an organization. In the context of defense, this concept can be applied to restructure policies and strategies in dealing with the threat of separatism by optimizing resources and improving defense governance. In addition, the hybrid warfare theory put forward by Hoffman (2007) explains that modern conflicts not only rely on military power but also include political, economic, and information propaganda strategies (Rosenfeld & Wallace, 2024). This is relevant in the context of Papua, where separatist groups not only carry out armed resistance but also utilize international media and diplomacy to strengthen their influence. Furthermore, Rothstein (1998) emphasizes that the effectiveness of public services has a direct impact on social stability and national security (Citron et al., 2019).

Thus, improving public services must be part of a broader defense strategy in dealing with separatism in Papua. Public services are one of the key elements in effective governance. However, long bureaucracy, lack of coordination between institutions, and limitations in technology adoption are often obstacles to improving the efficiency of public services. Therefore, the concept of reengineering management becomes relevant to be applied in bureaucratic reform to create a more efficient, adaptive, and responsive public service system to the needs of the community (Masum et al., 2020). Reengineering management emphasizes fundamental changes in the design and implementation of administrative processes through digitalization, simplifying procedures, and increasing community involvement in public services. Some previous studies have discussed aspects of defense and public services in the context of Papua but have not integrated both in a comprehensive model (Djellal et al., 2015).

Previous research by Effendy (2015) examines the counter-paradise strategies in Papua with a focus on the military approach but has not been attuned to aspects of social and economic development as part of defense strategies (Zheng and Namin 2019). Meanwhile, Wijaya (2018) highlighted the role of public services in building social stability in Papua but has

not examined its relations to national defense strategies. Ramadhan & Suryadi (2021) examined the effectiveness of hybrid warfare in the Papuan separatist movement but focused more on aspects of propaganda and international support without the possibility of reform in defense management. Therefore, this research will complement previous studies by offering a new approach through the reengineering management model, which integrates defense strategies and public services reforms as a holistic solution in dealing with separatism in Papua

Novelty in the field of defense studies by integrating the reengineering approach to the national defense management model in the context of handling separatism in Papua strategically, adaptively, and humanistically. The novelty lies in the use of mixed methods (mixed methods) through quantitative analysis with SEM PLS-4 and qualitative analysis using NVivo 12 to uncover complex relations between the effectiveness of defense management, cross-institutional coordination patterns (TNI, Polri, local governments, and the community), and the role of public services in reducing the escalation of separatism. This approach gives a new perspective in formulating a responsive defense management model of the geopolitical and socio-cultural dynamics of Papua, as well as offering an evaluative and implementative framework that can strengthen national integration and sustainable regional stability (Madutharanga et al., 2023).

This study aims to analyze how separatism in Papua developed as a hybrid warfare-based defense threat that not only relied on armed forces but also on political and propaganda strategies. In addition, this research will identify weaknesses in the current defense approach in handling separatism in Papua, including the lack of coordination between defense policies and socio-economic development. Furthermore, this study aims to formulate a defense reengineering management model that can integrate defense strategies and public service reforms to create a more effective approach in dealing with separatism. Finally, this research will provide policy recommendations for the government and defense institutions in increasing the effectiveness of counter-separatist strategies through a more comprehensive and sustainable approach (Stephenson et al., 2018).

RESEARCH METHODS

This research uses the mixed methods sequential explanatory approach (Nyamao, 2021). According to Sugiyono (2006, p. 400), "The two methods can be combined but are

used alternately; the first stage is the collection and analysis of quantitative data, and the second stage is the collection and analysis of qualitative data to strengthen the research results." According to Cresswell (2009), quantitative methods use SEM PLS-4 software. Data collection techniques by distributing the Likert Scale Questionnaire (1-5) to samples of 34 students of the Postgraduate Doctoral University of Indonesian Defense, Random Sampling (Akhter et al., 2024). The selection of samples of 34 postgraduate students of the Indonesian Defense University doctoral graduate was carried out in a random sampling by considering the direct relevance of the position of students who were generally student officers who certainly knew about defense management. Quantitative data analysis techniques using Partial Least Squares Structural Equation Modeling (SEM PLS-4) software. First, the research topic was made into 2 variables, namely variable x and variable y, and indicators of each variable were determined. The evaluation of SEM PLS-4 was carried out, namely, measurement models, structural models, and kindness and compatibility of the model. Evaluation of measurement models to test data validity, data reliability, and discriminant validity. The measurement model consists of the validity test using the recommended outer loading size of at least 0.70 and the reliability test using the size of Cronbach's alpha and composite reliability. The minimum Cronbach's alpha and composite reliability values are 0.70. Convergent validity, measured using the recommended Average Variance Extracted (AVE) and a minimum of 0.50, and discriminant validity, measured by the Fornell-Lacker Criterion and HTMT root value $AVE > \text{correlation between the variables}$ where the HTMT value received is below 0.90. Evaluation of structural models, which function for hypothesis testing ($p\text{-value} < 0.05$, hypothesis is accepted, or there is a significant influence); If the F-square value is 0.02, it is categorized as a low effect; the value of 0.15 is categorized as a moderate effect, and the value of 0.35 is categorized as a high effect. Then the third step: evaluate the goodness and compatibility of the model, which includes PLS Predic, IPMA, and R-square value. Indicator R-square value, 0.19, is categorized as a model used by low influence, a value of 0.33 is categorized as moderate influence, and a value of 0.66 is categorized as strong/high. In this study with the topic "Reengineering the Management Model of Defense to Overcome Separatism in Papua." Exogenous (independent) latent variables' reengineering the management model of defense and endogenous latent variables (Y) are overcoming separatism in Papua. The hypothesis is

"Reengineering the management model of defense significantly influences overcoming separatism in Papua" (Logis, 2025).

Qualitative method. According to Spradley, qualitative research does not use the terms population and sample as in quantitative research but uses the term "social situation," which includes places, actors, and activities, while according to Nasution (1988), qualitative research's main instrument is "the researcher itself" (Akhter et al., 2024). Data collection techniques using secondary data sources in the form of articles that are indexed by Sinta and Scopus, online media, and documents. Data analysis is carried out with NVivo 12 software, which includes stages. First, qualitative data is imported into NVivo 12 devices in the form of PDF files or Word files; Next, do codes (nodes), cases, and notes (memos), which are features of NVivo 12. Third, explore data with Project Map Text Search and Run Query. Fourth, visualization of data in the form of Word Cloud Nvivo, Tree Map, and Cluster Analysis. Furthermore, steps in analyzing by combining quantitative and qualitative data analysis (Dhakal, 2022).

The combination of quantitative and qualitative data analysis in the mixed-method approach is a scientific strategy to answer the complexity of the problem holistically. Quantitative analysis functions to test hypotheses, measure the relationship between variables, and produce data that can be generalized through objective statistical techniques. Meanwhile, qualitative analysis explores the context, values, perceptions, and social dynamics that underlie quantitative findings (Mikalef et al., 2019).

RESULTS AND DISCUSSION

Quantitative Analysis Results

Measurement Model

In this study, the management of reengineering defense as an independent variable (X) played a role in overcoming separatism in Papua. This variable consists of five main factors, namely defense policy reform (X1), which aims to ensure more flexible and data-based defense policy; optimization of organizational structure (X2), which increases the effectiveness of command and control; security integration and development (X3), which connects the defense sector with economic and social development; improving public and economic services (X4); and counter-propaganda and strategic diplomacy (X5). Meanwhile, the

dependent variable (Y) of national security. The impact is measured through three main indicators, namely security stability (Y1), which reflects the reduction in conflict and increasing the security of the community; the reduction of separatism (Y2), which refers to reduced separatist activity and increasing loyalty to the state; and the effectiveness of defense operations (Y3), which shows the efficiency of inter-institutional coordination in handling separatist threats in a continuous manner. Based on the results of the analysis using PLS-4 (Partial Least Squares-Structural Equation Modeling), the outer loading value for each variable is above 0.70, which shows that each indicator has a strong contribution in measuring its construction. For example, X1 has a value of 0.828, which shows that defense policy reform has a significant influence on defense reengineering. Likewise with X2, which has a value of 0.840, emphasizing that the optimization of organizational structure is very instrumental in increasing the effectiveness of defense against separatism. In addition, the outer loading value for Y1 is 0.853, which shows that the implementation of this model has a significant impact on security stability in Papua. Likewise with Y2, which has a value of 0.819, indicates that the application of reengineering management of defense can significantly reduce separatism activity. Whereas Y3 has a value of 0.787, which means that efficiency in coordination and readiness of defense operations increases with this model. The path coefficient (path coefficient) between factors X and Y is 0.661, which shows a strong enough relationship between the application of defense reengineering management and the impact on national security stability. In addition, the value of R-Square (R^2) on variable Y is 0.437, which means that 43.7% of variability in national security stability can be explained by variables in defense reengineering management. This indicates that this model has a considerable contribution in forming security stability in Papua. Overall, this study proves that defense reengineering management has a strong influence on security stability and a decrease in separatism in Papua. The high outer loading value confirms that the variables in this study have a strong relationship with the measured concepts. Thus, a more flexible, adaptive, and integrated defense strategy with socio-economic aspects can be an effective solution in overcoming separatism in the long run. Defense Reengineering management has proven to be a significant factor in overcoming separatism in Papua (Febrianti et al., 2019).

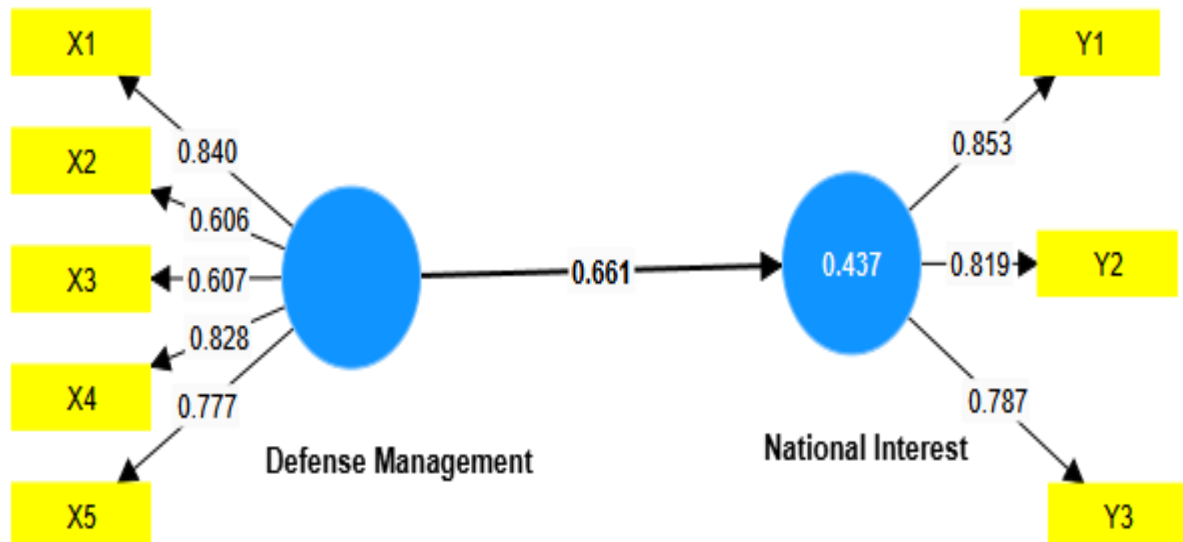


Figure 1. Outer loading SEM PLS-4

This is based on the results Figure 1 of quantitative analysis using PLS-4 (Partial Least Squares-Structural Equation Modeling), which shows that the reform of defense policy, optimization of organizational structure, security integration and development, and improvement of public and economic services, as well as strengthening intelligence and non-military operations, have a strong correlation with increasing security stability. Theoretically, the concept of defense reengineering is in line with the Whole-Office-Government Approach, where the defense strategy is not only based on military aspects but also integrates socio-economic policies to overcome the root of separatism problems. The results of this study indicate that defense policy reform (X1) has an outer loading value of 0.828, which means that defense policy flexibility contributes greatly to increasing the effectiveness of security strategies. In the context of Papua, a more adaptive policy on local dynamics can reduce horizontal conflicts and increase the sense of public trust in the government. Then, the optimization of the organizational structure (X2) with an outer loading value of 0.840 indicates that increasing the effectiveness of command and control in the defense system has a direct impact on security stability. In the case of Papua, a more efficient command system allows a faster response to the threat of separatism while reducing the risk of operational errors that can worsen conflict. This is in line with the principle of the Defense Reform Initiative, where the

reform of defense organizational structure aims to increase effectiveness without increasing the escalation of unnecessary conflict (Agnesica et al., 2023).

Furthermore, aspects of security and development integration (X3) with an outer loading value of 0.815 strengthen the argument that non-military approaches such as infrastructure, education, and economic development can reduce the potential of separatism. Previous studies show that areas with higher welfare levels tend to have a lower conflict rate. Therefore, this strategy is not only relevant in the context of Papua but has also been applied in various other conflict scenarios, such as in Mindanao (Philippines) and Aceh before the peace agreement. Empirically, the proposed model in this study was also proven to have a strong enough relationship with security stability, as shown by the path coefficient of 0.661. This means that any increase in the implementation of defense reengineering management will increase security stability by 66.1%. In addition, the R-Square (R^2) value of 0.437 shows that almost half of the variability in national security stability can be explained by the factors in this model. Based on this analysis, it can be concluded that the application of optimal defense reengineering management not only increases the effectiveness of defense operations but also creates a more conducive environment for national security stability (Alimi & Ouahada, 2020).

Table 1. Cronbach's alpha, Composite Reliability and Ave

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Defense Management	0.847	0.944	0.855	0.546
National Interest	0.769	0.814	0.860	0.673

Table 1 shows the value of Cronbach's Alpha, Composite Reliability (RHO_A and RHO_C), and Average Variance Extracted (AVE) for Defense Management and National Interest variables. Cronbach's Alpha measures the internal reliability of a construct, where a higher value shows good internal consistency. The Cronbach's Alpha value for defense management is 0.847, while for national interest it is 0.769. Both of these values are above the threshold of 0.7, which indicates that the indicators in each construct have good reliability (Kamis et al. 2020). Furthermore, Composite Reliability (CR) measured by RHO_A and RHO_C gives a more comprehensive picture of construct reliability than Cronbach's Alpha. For defense management, the RHO_A value is 0.944, and RHO_C of 0.855 shows very high reliability. Meanwhile, for National Interest, the RHO_A value is 0.814, and RHO_C of 0.860 also

shows strong reliability. Generally, the CR value above 0.7 is considered to show good reliability, so both of these constructs meet these requirements. Finally, the Average Variance Extracted (AVE) value measures convergent validity, which shows how much an indicator in a construct shares the same variance. AVE higher than 0.5 shows that more than 50% of the indicator variance can be explained by the construct. In the table, the AVE value for defense management is 0.546, and for national interest is 0.673. With an AVE value above 0.5, both constructs have good convergent validity, showing that the indicators used really reflect the measured concepts. Thus, both the reliability and validity of the Defense Management and National Interest constructs in this model can be said to meet good criteria for further analysis (Guenther et al., 2023).

Table 2. Discriminat Validity-Heterotrait Monotrait ratio (HTMT)-Matrix

	Defense Management	National Interest
Defense Management		
National Interest	0.557	

Table 2 shows the results of the discriminant validity test using the heterotrait-monotrait ratio (HTMT), where the HTMT value between Defense Management and National Interest is 0.557. The HTMT test is used to assess the extent of different constructs in the model completely different from each other. In general, the HTMT value that is smaller than 0.85 is considered to indicate a good discriminant validity, while some literature also sets a conservative limit at 0.90. In this case, the value of 0.557 is far below the recommended threshold, showing that both constructs have good discriminant validity and do not experience problems in distinguishing each other. Good discriminant validity is very important in research-based research because it ensures that each latent variable measures different concepts and does not overlap conceptually. The low HTMT value indicates that defense management and national interest are indeed different constructs, so that interpretation of relationships between variables in the model can be more reliable. With confirmed discriminant validity, this model can be used further for analysis of inter-variable relationships without concerns about the bias due to mixing the concept measured (Chan & Lay, 2018).

Structural Model Evaluation

Table 3. Direct Effect Hypothesis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Defense Management -> National Interest	0.661	0.710	0.155	4.265	0.000

The evaluation of the structural model based on Table 3 shows that defense management has a significant direct effect on national interest, with the path coefficient (original sample, O) of 0.661. This shows that each increase in defense management by one unit will increase the national interest by 0.661 units, assuming other variables remain constant. In addition, the sample mean (m) value of 0.710 is not much different from the original value, indicating the stability of the estimation in the resampling process (bootstrapping). The T-statistic value is 4.265, which is far above the significance limit of 1.96 for the two-sided test at a 95% confidence level, and a p-value of 0.000 smaller than 0.05 shows that this relationship is statistically significant. That is, the hypothesis that Defense Management has a direct effect on National Interest can be accepted. This strengthens the argument that effective defense management plays an important role in shaping and strengthening national interests, both in the context of security strategies and national defense policies (S et al., 2020).

Evaluation of Model Goodness and Fit

Table 4. R-square

	R-square	R-square adjusted
National Interest	0.437	0.430

Evaluation of the Goodness of Fit Model based on Table 4 shows that the R-Square value for National Interest is 0.437, with R-Square Adjusted of 0.430. This value indicates that the independent variable, namely defense management, is able to explain 43.7% of variations in national interest. Meanwhile, the rest (56.3%) is influenced by other factors outside the model under study. The small difference between R-Square and R-Square adjusted shows that the number of predictors in the model is quite relevant and there is no overfitting. In the context

of this study, the R-Square value of 0.437 can be categorized as moderate, which means that defense management has a strong enough influence in explaining national interest variations, but there are still other factors that may play an important role. Therefore, in the development of further models, researchers can consider additional factors such as foreign policy, economic stability, or geopolitical dynamics that can increase the prediction of models of national interests (Husain & Parveen, 2021).

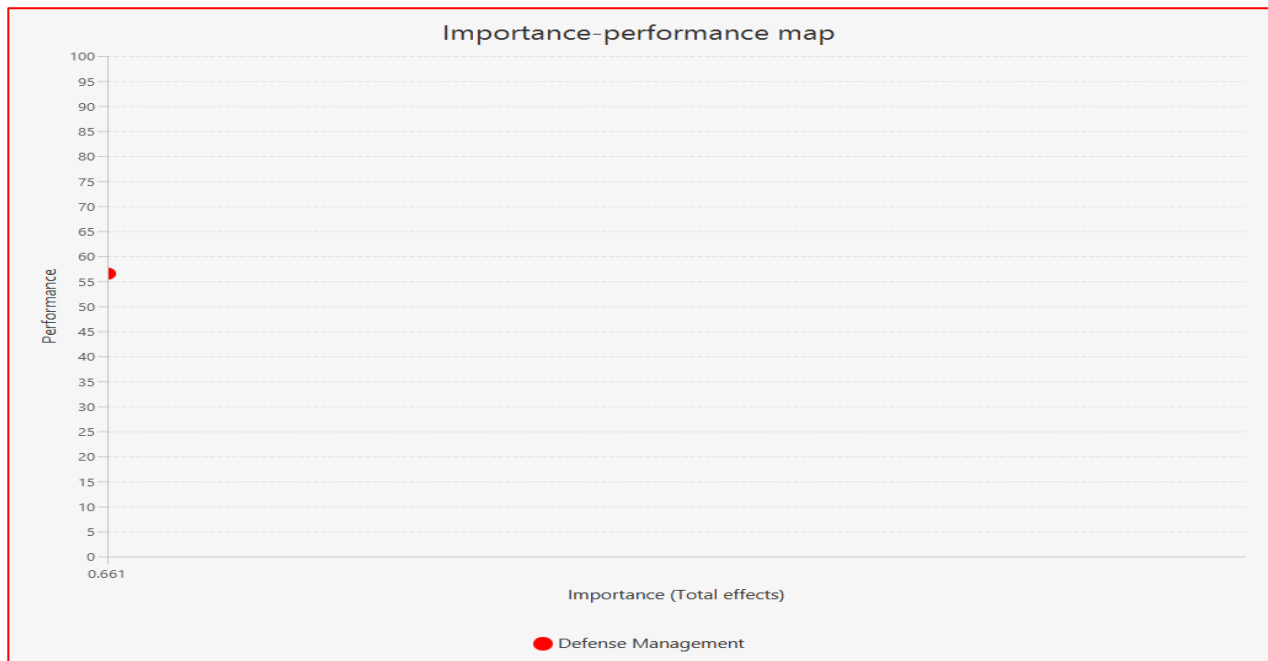


Figure 2. Importance-Performance Map Analysis (IPMA)

Figure 2 shows Importance-Performance Map Analysis (IPMA) for the defense management variable. The horizontal axis describes the level of importance (importance), where the total value of the effect of defense management on national interest is 0.661. Meanwhile, the vertical axis represents performance (performance), with a value of around 55. This indicates that although defense management has a high level of importance in influencing national interest, its performance is still at the middle level. Therefore, there is an opportunity to increase the effectiveness of defense management to optimize its impact on national interest. A more comprehensive strategy in defense policies, the efficiency of resource management, and increasing defense capabilities can be steps that need to be considered to improve performance in this context (Haverila et al., 2023).

Table 5. Q²predict

	Q ² predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE
Y1	0.382	0.266	0.127	0.178	0.065
Y2	0.228	0.252	0.126	0.282	0.142
Y3	-0.003	0.302	0.160	0.322	0.159

Table 5 shows the values of Q²predict, Root Mean Square Error (RMSE), and Mean Absolute Error (MAE) from the PLS-SEM and Linear Model (LM) models for the dependent variable (Y1, Y2, and Y3). The positive Q²predict value for Y1 (0.382) and Y2 (0.228) shows that the model has a good predictive ability for these variables, while Y3 with negative values (-0.003) indicates that the model does not have better predictive power compared to the naïve benchmark. In addition, the lower PLS-SEM_RMSE and PLS_Mae values compared to linear models on Y1 and Y2 show that the PLS-SEM approach is more optimal in predicting these variables. However, for Y3, the value of prediction errors is higher, so further evaluation is needed for the construction of the model, including the possibility of adjusting indicators or latent variables that contribute to the inaccuracy of predictions.

Qualitative Analysis Results

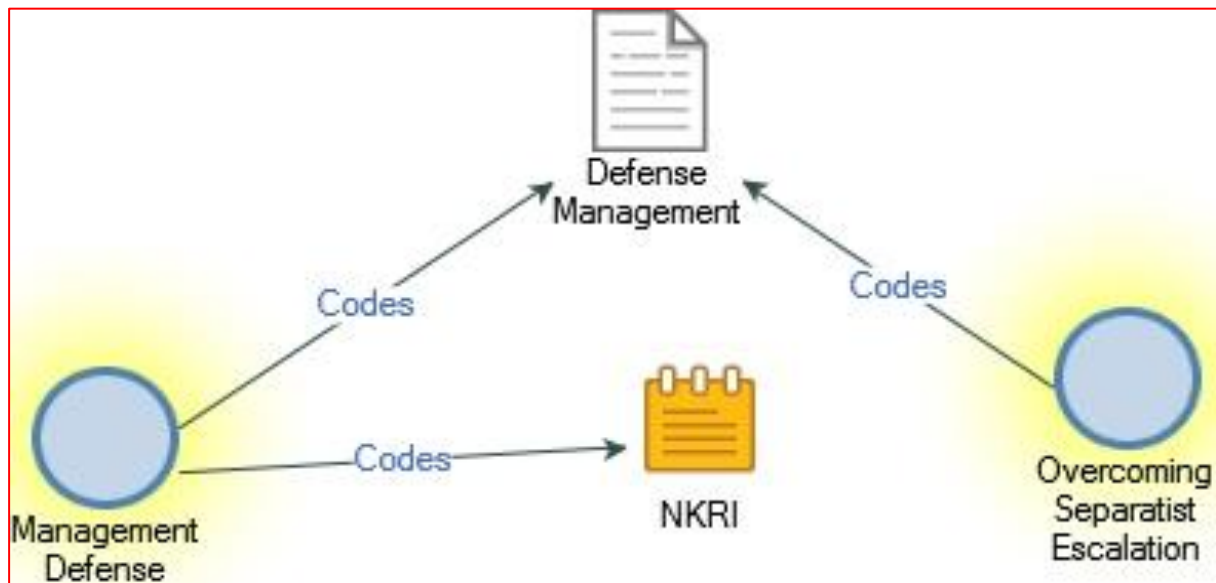


Figure 3. Comparison Nvivo 12

Figure 3 illustrates the interconnection between defense management, overcoming separatist escalation, and the strengthening of the unitary state of the Republic of Indonesia (NKRI), analyzed through a qualitative coding approach. Conceptually, this visualization

highlights the strategic contribution of restructuring defense management in enhancing the effectiveness of efforts to address separatist movements, particularly in Papua. This restructuring involves improvements in planning, organizing, implementation, and oversight of defense-related policies and operations. The relationship between defense management and separatist conflict response is reciprocal, indicating that strengthening one aspect positively reinforces the effectiveness of the other in maintaining national stability (Halkis, 2020).

Within the framework of the topic *“Reengineering the Management Model of Defense to Overcome Separatism in Papua for National Interests,”* restructuring defense management becomes a critical element in establishing an adaptive and responsive defense system to address domestic security threats. Strengthening integrated defense governance not only enhances the state's capacity to respond to separatist escalation but also reinforces its commitment to national interests and territorial integrity. Therefore, defense management reform must aim to foster cross-sectoral synergy, optimize resource utilization, and incorporate localized approaches to ensure sustainable conflict resolution (Water & Report, 2023).

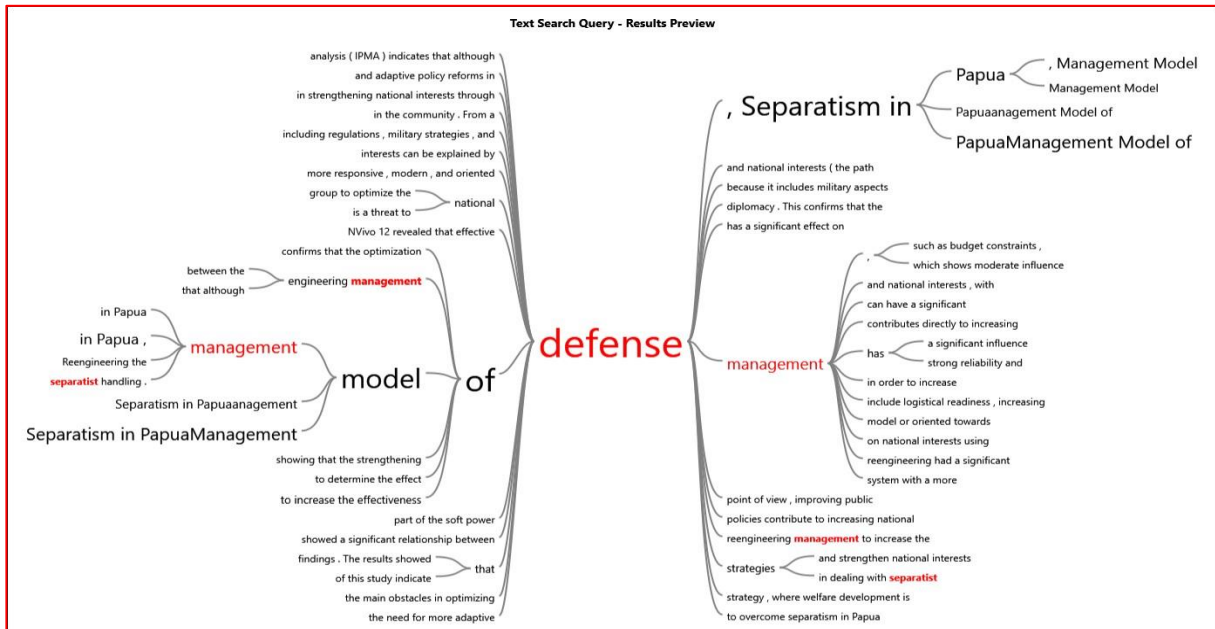


Figure 4. Texts Search Query Result Riview Nvivo 12

Figure 4 is a visualization of a text search query using qualitative data analysis software, highlighting the interconnection between the defense management model, separatism in Papua, and national interests. Key terms such as *defense*, *model*, *management*, and *separatism*

in Papua appear at the core of the map, with various conceptual branches showing logical and semantic relationships. This concept map illustrates that the issue of separatism cannot be separated from a systemic context that involves responsive and adaptive defense governance aligned with the social, political, and security dynamics in Papua.

Scientifically, this visualization reinforces the argument that restructuring the defense management model is crucial in responding to the complexity of separatism. It reveals that strategies integrating diplomacy, logistical readiness, and welfare-based approaches are essential components in designing an effective defense policy. Terms such as *engineering management*, *adaptive policy reforms*, and *logistical readiness* indicate that resolving separatist conflicts requires not only military approaches but also strategic planning and intersectoral coordination that balances hard and soft power mechanisms. Furthermore, the

concept map emphasizes the importance of aligning national interests with defense strategies in addressing separatism in Papua. Keywords such as *national interest*, *reliability*, and *effectiveness* underscore that strengthening the Unitary State of the Republic of Indonesia (NKRI) through a well-structured defense model is not merely about safeguarding sovereignty but also about sustainable development and rebuilding trust within local communities. Therefore, research on reengineering the defense management model is not only academically relevant but also essential in shaping public policy and ensuring national stability (Arévalo, 2024).



Figure 5. Word Cloud Nvivo 12

Figure 5 is a word cloud that highlights the words that most often appear in a text related to the issue of separatists in Papua. The words "separatists" and "Papua" are the most dominant, reflecting the main focus on the separatist movements that developed in the Papua region. In addition, there are words such as "Economy," "Social," "Population," "Juris," and "Province," which indicate other factors that are closely related to the dynamics of separatism, including economic and social aspects. Separatism in Papua is not only a problem of security but also a structural issue that involves the economy, social, and governance. The conflict that occurs is not only based on military power but is also a form of hybrid warfare, where separatist groups use a combination of physical strategies (armed resistance), international diplomacy, media propaganda, and exploitation of economic issues and social inequality. Therefore, the defense approach cannot rely solely on military power but must include a more adaptive defense system reengineering by integrating economic and social development as part of defense strategies. From the word cloud above, it appears that economic and social aspects have a close relationship with separatism. This is in line with the argument that economic inequality and weak public services are often the main triggers for dissatisfaction that is used by separatist groups to attract the support of local communities. The defense reengineering management model aims to reform the defense system by focusing on improving public services, including access to education, health, and better infrastructure for the people of Papua. Thus, the state not only acts as a repressive force but also as an entity that provides concrete benefits for Papuans, thereby reducing the attractiveness of separatist movements. In the context of Papua, the defense system reengineering must be carried out with an integrative approach, which is to combine security strategies with more inclusive development policies. This can be done by strengthening the presence of the country through better public service improvement and ensuring that the distribution of economic resources is more equitable. In addition, there needs to be a collaboration between defense agencies, related ministries, and local governments to ensure that counter-separatism strategies are not only oriented to military aspects but also improve the socio-economic conditions that are the root of the problem (Li & Zheng, 2023).

The existence of words such as "BPS," "Ranking," and "Percentage" shows that statistical data is very important in understanding the dynamics of separatism in Papua. This confirms that the defense approach must be based on evidence-based policy, where the government

uses accurate data to design more effective policies. For example, poverty data, the human development index, and the level of social inequality in Papua can be used to map the areas most vulnerable to the influence of separatism so that the development program can be focused on the area. Based on Word Cloud analysis and its relevance to this research, it can be concluded that solving the problem of separatism in Papua requires a more innovative and comprehensive defense strategy. The defense reengineering management model provides solutions by integrating security policies with public service reforms, improving the welfare of the community, and the use of data in strategic decision-making. Thus, the defense strategy is not only reactive to the threat of separatism but also proactive in creating long-term stability and welfare for Papua as an integral part of the Unitary State of the Republic of Indonesia (Desrochers, 2024).

Mixed Methods Analysis Results

Table 6. Quantitative and Qualitative Data Relationship between variables

Connection Between variables	Data Quantitative (Correlation)	Data Qualitative (relationship)	Information
Defense Management - > National Interest	The T-statistic value is 4.265, which is far above the significance limit of 1.96 for the two-sided test at a 95% confidence level, and a p-value of 0.000, smaller than 0.05, shows that this relationship is statistically significant. That is, the hypothesis that defense management has a direct effect on national interest	Qualitative analysis reveals a strong connection between defense management, separatism in Papua, and national interests within the context of adaptive strategic policy	Strengthening and deepening data to expand quantitative data
Factors that Defense Management - > National Interest	Limited defense budget, multidimensional threats (military, social, economic), and the lack of cross-sector coordination (TNI, Polri, local government)	Military management and logistics, multi - stakeholder coordination, culture, national interests, diplomacy, and welfare	Strengthening and deepening data to expand quantitative data

Table 6 show The analysis of the relationship between defense management and national interests reveals a strong statistical significance, as evidenced by the quantitative results. The T-statistic value of 4.265, well above the significance threshold of 1.96, alongside a p-value of 0.000, supports the hypothesis that defense management directly influences national interests. This suggests that an efficient and adaptive defense management model is essential for safeguarding the sovereignty and territorial integrity of Indonesia, particularly in

regions like Papua, where separatism remains a persistent threat. These quantitative results underscore the importance of a well-structured and strategic defense framework in achieving national security objectives (Abu Azam, 2024). Qualitative analysis further strengthens this conclusion by highlighting the interconnection between defense management, separatism, and national interests within the context of adaptive strategic policy. It emphasizes that the defense management model must be flexible, responsive to the evolving security landscape, and aligned with the broader socio-political and economic conditions in Papua. This adaptive approach not only focuses on military readiness but also integrates diplomatic efforts, welfare development, and local cultural engagement, making it a more holistic solution to the separatism issue in Papua. These qualitative findings emphasize the necessity of a defense system that is both robust and adaptable, capable of addressing multi-dimensional threats effectively (Tornero-Aguilera et al., 2024).

Factors such as a limited defense budget, multidimensional threats (military, social, and economic), and the lack of cross-sector coordination pose significant challenges to strengthening defense management and advancing national interests. The defense budget constraints hinder the capacity to respond effectively to the growing separatist threat in Papua, while the complex and evolving nature of the threats necessitates a coordinated response from all relevant stakeholders, including the military, police, and local government. Moreover, the absence of efficient inter-sectoral collaboration exacerbates the situation, preventing a unified and strategic approach to overcoming separatism (Solar, 2020).

On the other hand, military management, logistics, multi-stakeholder coordination, culture, national interests, diplomacy, and welfare emerge as critical factors in shaping the effectiveness of defense management. Properly addressing these factors requires comprehensive and sustained efforts to strengthen defense logistics, improve coordination between various security and governance agencies, and incorporate cultural understanding into defense strategies. Diplomacy and welfare-focused initiatives are also vital in ensuring that local communities in Papua are engaged in the peace-building process, helping to reduce the appeal of separatism through socio-economic development and inclusive governance (Lele, 2023). In conclusion, the findings from both quantitative and qualitative data underscore the need for a reengineered defense management model that incorporates adaptive, strategic, and collaborative approaches to effectively address separatism in Papua. By recognizing the

intricate relationship between defense management and national interests, the model aims not only to secure the territorial integrity of Indonesia but also to foster sustainable development and integration in Papua. This requires a shift towards a defense system that balances military capabilities with diplomacy, socio-economic development, and cultural sensitivity, ultimately strengthening national unity and long-term stability (GROSU, 2024).

CONCLUSION

Defense management has been proven to have strong reliability and validity in influencing national interests. The results of quantitative analysis show that high Cronbach's Alpha and composite reliability values reflect good internal consistency, while AVE values above 0.50 indicate strong indicator convergence. The discriminant test using the HTMT ratio of 0.557 which is below the threshold of 0.85 indicates adequate construct differentiation and no multicollinearity problems. Structural model analysis also shows a significant relationship between defense management and national interests, with a path coefficient of 0.661 and a P value of 0.000. The R-Square value of 0.437 indicates that around 43.7% of the variability in national interests can be explained by defense management, reflecting a moderate influence in the PLS-SEM model. The results of qualitative analysis through NVivo 12 also support this finding, by identifying important factors such as logistics readiness, increasing interoperability between units, and involving local communities in handling separatism.

This study contributes to the development of an adaptive and strategic defense management model to address the threat of separatism in Papua, as well as to strengthen Indonesia's national interests. The mixed quantitative and qualitative approach used is able to explain the dynamics of the relationship between defense management, the threat of separatism, and national interests in the socio-political and security context in Papua. This study emphasizes the importance of cross-sector coordination between the TNI, Polri, local governments, and the community in responding to the threat of separatism. In addition, the limited defense budget, logistics efficiency, and welfare and diplomacy approaches are important elements in strengthening national resilience. Therefore, more flexible and adaptive policy reforms are recommended to increase the effectiveness of defense strategies and support regional integration and national stability within the framework of the Unitary State of the Republic of Indonesia (NKRI).

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