



ISSN: 2617-6548

URL: www.ijirss.com



Effect of process capital on competitive advantage through Heptahelix managerial performance In Indonesian national army navy in regency and city of Riau Islands province

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Abstract

This study uses an explanatory research approach that predicts the causal relationship of several variables, one of which is the Process Capital variable. This study aims to determine how the influence of Process Capital affects competitive advantage through Heptahelix managerial performance in the Indonesian National Army Navy in the districts and cities of Riau Islands province. The research methods used are descriptive and causal explanatory methods. The data were analyzed using Structural Equation Modeling (SEM). The research employs an explanatory research approach, which predicts causal relationships among several variables, while the paradigm used is positivism research based on quantitative research for measuring constructs that form conceptual models and analyzing the influence of one construct on another (Creswell, 2013). The results showed that Process Capital has a significant effect on Managerial Performance Heptahelix, and Process Capital has a significant effect on Competitive Advantage, where the Indonesian National Army Navy in the districts and cities of the province of Riau Islands always involves the main component of the analysis of the internal environment as an aid to the main tasks and functions, developing layered and authoritative defense to integrate all components and authorized forces in handling security disturbances in the Marine Area of the Republic of Indonesia so that counterattacks against the enemy can be carried out quickly and accurately. The implication of the concept of Heptahelix managerial performance is a form of state defense and also the novelty of this study as an effort to defend the state in a non-physical form based on Law No. 3 of 2002 article 9 paragraph (2).

Keywords: Competitive advantage, Heptahelix managerial performance, Process capital.

DOI: 10.53894/ijirss.v8i4.7786

Funding: This study received no specific financial support.

History: Received: 24 April 2025 / **Revised:** 27 May 2025 / **Accepted:** 29 May 2025 / **Published:** 12 June 2025

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Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Publisher: Innovative Research Publishing

1. Introduction

In the Indonesian defense policy, the Ministry of Defense of the Republic of Indonesia explained that the defense of the state is held to defend the sovereignty of the state, the territorial integrity of the Unitary State of the Republic of Indonesia, and the safety of the entire nation from threats and interference with the integrity of the nation and the state from all forms of threats. Efforts to organize a universal state defense are based on awareness of the rights and obligations of citizens and confidence in their own strength [1]. This defense system consists of four components, namely the main component, reserve component, supporting component, and State Defense Education [2].

This defense system also involves all national resources that are prepared early by the government and implemented in a total, integrated, directed, and sustainable manner to uphold state sovereignty, maintain territorial integrity, and ensure the safety of the entire nation from all forms of threats in the form of human resources, natural resources, and artificial resources [3]. Human resources cover all citizens of Indonesia. This is due to the very wide scope of Indonesian sovereignty. Therefore, the Indonesian National Army and police, as the main components in the defense of the country, are not able to protect the entire territory of the country.

In maintaining the defense of Indonesia's maritime territory by conducting synergy, synergy means joint activities or operations. Therefore, synergy in development means the integration of various elements of development that can produce better and greater outcomes. According to the theory of synergy [4] the best level of cooperation is synergistic, namely high cooperation, mutual trust, and integration, so as to produce a greater output than the sum of the outputs of each party. Synergistic cooperation in this research is different from the theory in other research, where in this research, synergy involves the combined involvement of the roles of the media, technology, universities, community, environment, industry, and government. This is referred to as Heptahelix managerial performance in the field of defense and naval security.

In an effort to integrate elements of national strength as a state defense action, this can be achieved through Heptahelix synergy, where the Pentahelix strategy includes Academic, Business, Community, Media, and Government (ABCMG). Combined with elements of Technology and the Environment, this approach plays an important role in maintaining the integrity of the Republic of Indonesia. This represents a novel strategy to address the global shifts occurring in various fields that increasingly rely on warfare with technological sophistication (cyber warfare) as a form of modern conflict today. Otley [5] said that performance refers to something related to the activity of doing work in which includes the results of work achieved. Managerial performance is defined as the systematic integration of effort, supervision, evaluation, finance, and employee performance within an explicit framework that relates to the objectives of the company [6]. The performance referred to in this study is the performance (performance) that is not the output of work that can be achieved by a person or group of people in an organization, in accordance with the authority and responsibility of each. However, the performance referred to in this study is the performance of individuals in managerial activities. Personal performance includes eight aspects, namely planning, investigation, coordination, evaluation, supervision, staff arrangement, and representation [1].

The success of the organization in developing managerial performance depends on the treatment of attitudes towards Intellectual Capital [7]. Synergy cooperation in this study is different from the theory in other studies, where in this study, synergy exists between the combined involvement of the media, technology, universities, community, environment, industry and government, as a novelty in this study called Heptahelix managerial performance in the field of Defense and naval security. Stoner and Charles [4] said that a healthy company is a company that has intellectual capital and networks rather than an organizational hierarchy is a good organizational design. Intellectual capital is based on human-centered capital and is the driving force for relational and structural components [6, 8-10]. Recognize intellectual capital as a set of intangible assets such as resources, competencies and capabilities that enhance organizational performance and also generate value creation. The intellectual capital Model is also based on human capital, structural capital and social capital [3], customer capital, structural capital and spiritual capital [11].

In terms of managerial performance with the heptahelix model, the possession of qualified intellectual capital is very necessary. It is expected that the Indonesian National Army, especially the Indonesian National Navy, will excel in competing with other countries. According to Bataineh and Al Zoaby [12] Competitive advantage in the new economy is shifting from material and financial, which are tangible assets, to intangible and non-financial assets. Assets in question, in the form of natural resources, labor, and capital, have minimized the significance of conditions that exist in addition to the importance of intangible inputs, such as information, intellectual capital, knowledge, and the skills of people who make products. The marketing power of companies to sell products is a factor that affects competitive advantage [12].

Competitive advantage is achieved when an organization expands or acquires a set of attributes that allow it to perform better than its challengers Wang [13]. Day and Wensley [14] explained that the competitive advantage of a transnational organization lies largely in its ability to identify and transfer strategic knowledge between its geographically dispersed and diverse locations. In his research Yeh-Yun Lin & Edvinsson [15] it is said that Finland is one of the most developed information societies in the world, with an internet penetration rate of 67 percent (process Capital). The number of mobile phone subscribers and internet connections per capita in Finland is among the highest in the world (human capital and process capital). With the possession of qualified intellectual capital, it is expected that the Indonesian National Army, especially the Indonesian Navy, will excel in competing with other countries. According to Bataineh and Al Zoaby [12] Competitive advantage in the new economy has shifted from material and financial assets that are tangible to intangible and non-financial assets. Traditional factors of production, such as natural resources, labor, and capital, have minimized the existing significance of human resources. At the same time, the importance of intangible inputs, such as information, intellectual capital, and knowledge, is increasing. The real value lies in the knowledge and skills of the people who make the product, and the marketing power of the company to sell the product, which are the factors that influence competitive advantage [12]. The real wealth of an organization should be sought in its people, knowledge and skills, internal processes

and corporate reputation [12].

Competitive advantage is achieved when an organization expands or acquires a set of attributes that allow it to perform better than its challenger Wang [13]. Day and Wensley [14] explains that the competitive advantage of a transnational organization lies largely in its ability to identify and transfer strategic knowledge between its geographically dispersed and diverse locations. Thus, through this study, it is expected that the Navy can gain a competitive advantage by developing the five IC components used in this study, namely human capital, structural capital, relational capital, process capital, and renewal capital. In this case, Process Capital is understood as “intangible value associated with the organization of an entity, especially in terms of structure and processes” [16]. Process Capital is an “intangible asset” that provides a new perspective and is one of the most important assets of a company that must be built and managed. It is the main focus of strategy development and is important for strategy implementation. Process Capital Management (PCM) is a concept that, in addition to “classic” process management, also focuses on the development and preservation of intangible assets. Lin and Tseng [17] said Process capital consists of nonhuman sources of knowledge in a country. Embedded in a country's infrastructure, these sources facilitate the creation, accessibility, and dissemination of information. This type of capital is measured through the competitiveness of companies, government efficiency, protection of intellectual property rights, availability of capital, the number of computers per capita, the ease of setting up new companies, and the number of mobile phone subscribers. Wang and Chang [18] said the implementation of process Capital relies on employees, which belong to the human capital element. The quality of employees determines the quality of internal processes and the quality of services.

2. Theoretical Review

2.1. Process Capital

Process Capital or process Capital is understood as “intangible value that relates to the organization of an entity, especially in terms of structure and processes” [16]. Process Capital is an “intangible asset” that provides a new perspective and is one of the most important assets of the company that must be built and managed. It is the main focus of the basis of strategy development and is important for strategy implementation.

2.2. Competitive advantage

Competitive advantage should be viewed as a dynamic process rather than an end result. It is also proposed as a process consisting of sources of excellence, positional excellence, and the achievement of final results and profit investment to maintain excellence [14].

2.3. Heptahelix Managerial Performance

Managerial performance is to show the ability of management in carrying out management functions, which are business activities that are certainly always pleasing with decision-making. The success of a business in achieving its goals and fulfilling its social responsibilities largely depends on the manager. If the manager is able to do his job well, the business will be able to achieve the desired goals and objectives [19]. Pentahelix is an innovative model of development derived from the Quadruple Helix model that connects academics, practitioners/businesses, communities, governments, and the media to create an ecosystem based on creativity and knowledge. What is expected from this concept is a solution for the development of creativity, innovation, and technology in creative industries.

3. Hypothesis Development

3.1. The Effect of Process Capital (PC) on Competitive Advantage.

Lin and Tseng [17] found that process Capital has no effect on competitive advantage. The 'Diamond Model' Porter [20] is a representative and influential theory that proposes a series of interrelated processes with an impact on the capabilities of a company. The role of the employer as a key step in the process that has the potential to generate competitive advantage [15]. HR processes are an important step in enabling resource types to be transformed into measurable sources of competitive advantage [21].

Razzaq et al. [22] in collaboration with others, examined the factors that invited foreign investment in Sweden and proposed a strategic plan for the development of human capital, market capital and process Capital, and became a future renewal of Sweden. Floyd and Lane [23] strategic renewal can be defined as “the evolutionary process associated with the promotion, accommodation, and utilization of new knowledge and innovative behaviors to bring about changes in an organization's core competencies and/or changes in its product market domain” [23]. The term strategic renewal derives from the evolutionary model of strategic change [23-26] who considered renewal as an iterative process that influences beliefs, actions, and learning to align organizational strategies with changing environmental circumstances [23].

In simple terms, strategic renewal theory recognizes the importance of maintaining adaptability, by means of leveraging new and existing competencies Floyd and Lane [23]. Yeh-Yun Lin & Edvinsson [15] said the fourth type of national capital, namely renewal capital, is defined as the intellectual property of a nation's future and the ability to innovate that sustains a nation's competitive advantage. Competency is the process by which managers are encouraged to explore new market capabilities and opportunities in order to be able to compete with formal business definitions and the way organizations compete [23].

3.2. Effect of Process Capital (PC) on Managerial Performance

Chen et al. [27] argued that companies should reduce operating cycle times and develop high-quality internal processes to improve their relationships with customers. A study by Wang and Chang [18] provides empirical evidence that process Capital has a positive effect on performance.

Kalkan et al. [28] said the structure and processes that affect the performance of the company. The main challenge for organizations is to first understand knowledge management and how to implement it in the form of an integrated knowledge management system. Second, organizational knowledge management is not limited to the identification of factors or processes that influence the implementation of knowledge management, and another question to consider is the measurable results of knowledge management, where the influence of knowledge management on organizational performance should be examined, as it remains unclear [22].

The relationship between knowledge management processes, knowledge management performance, and job performance considers knowledge management processes as consisting of seven constituents: knowledge introduction, knowledge creation, knowledge gathering, knowledge organization, knowledge storage, knowledge dissemination, and knowledge application Masa'deh et al. [24]. Hu et al. [29] specifically aimed to understand the effect of business process mediation on information Capital and corporate performance. Peng et al. [30] used current and former business school master's level students as subjects and proved that internal business process management and supply chain capabilities mediate the influence of information technology capabilities on company performance.

Several studies integrate the influence of information Capital and business processes on company performance in the factory [16] and supply chain management areas Flynn et al. [31]. Brenner et al. [32] said the high importance of the process to the success of the company has been known for a long time.

Research Bataineh and Al Zoaby [12] showed that the direct influence of intellectual capital on organizational performance is not very strong, but this variable affects the performance of Melli Banks through the mediating variable "organizational learning process." The influence of intellectual capital on the learning process of the organization is confirmed. In addition, research findings show that organizational learning processes have a direct and positive influence on the performance of Melli Banks. The existence of a well-defined and (ideally) documented process structure alone is not sufficient to ensure the success and 'sustainability' of a company or whether process capital retains its value over time. Rather, the important goal here lies in shaping the processes to match the targets to be achieved in terms of cost, time, and quality. This is known as Process Performance Management. Process performance has a direct impact on key performance indicators of turnover and cost [2].

Process Capital is seen as a very important success factor – based on its contribution to a company's success – compared to other categories of intangible assets, however, another study by Cheng et al. [33] showed that process Capital has a negative impact on performance.

Wang and Chang [18] according to the results, it was shown that elements of intellectual capital directly affect business performance, except for human capital. Human capital indirectly affects performance through three other elements: Innovation Capital, Process Capital, and Customer Capital. Knowledge management processes affect organizational performance directly and indirectly through innovation and intellectual capital [34].

Social capital and organizational performance, Ozgun et al. [35] said the activities and efforts made during the implementation process can indirectly affect organizational performance by positively influencing intellectual capital. The positive impact of knowledge management on organizational performance considers knowledge management rooted in seven factors, namely leadership and direct support, organizational culture, organizational strategy, processes and activities, Information Technology, training, and incentives; it also considers performance variables based on four factors, namely learning and growth, internal processes, customers, and financial perspectives [36].

4. Research Methods

The objects in the study are Process Capital and Heptahelix managerial performance and competitive advantage. Research methods used descriptive and causal explanatory methods. The data were analyzed using Structural Equation Modeling (SEM). The research employs an explanatory research approach, which is a research approach predicting causal relationships among several variables, while the paradigm used is positivist research based on quantitative research for measuring constructs that form conceptual models and analyzing the influence of one construct on another [27]. This study examines the effect of Process Capital and Renewal Capital on Competitive Advantage, mediated by Heptahelix managerial performance, by conducting a survey on the National Army Navy in districts and cities in the province of Riau Islands. The difference with the previous study is that this study combines the concept of managerial performance with the concept of Heptahelix, which integrates Pentahelix with technology and the environment, one of which is with capital process variables. Thus, the concept of managerial performance, Heptahelix is a form of state defense and also the novelty of this study as an effort to defend the state in a non-physical form based on Law No. 3 of 2002, Article 9, Paragraph (2).

The population used in this study is the entire apparatus at the level of Middle Management in 5 (five) bases of the Indonesian National Army Navy Riau Islands province, totaling 1,540 people, consisting of LANTAMAL with 500 people, all LANAL with 400 people, and Navy posts with 640 people. Based on the formula of Ismail [11] the number of samples that can be taken from the population with a significance level of 5% is as many as 195 people. Of the 195 questionnaires distributed, but the questionnaires returned only 125 people and questionnaires that can be processed only 98 people out of 125 people. The most ideal sample size is 30 to 500 respondents [6]. Sampling method by purposive random sampling method or purposive random sampling is a sample taken randomly based on certain criteria in this case is in the Middle Management in the Indonesian National Army Navy districts and cities in the province of Riau Islands.

The type of data used is primary data. Primary data is obtained directly from data sources collected specifically and directly related to the problem under study. Primary data is obtained by using a list of questions that have been structured with the aim of collecting information from respondents.

Data collection techniques used in this study are surveys and questionnaires. The survey was conducted to observe the Indonesian National Army Navy, with the level of position being in Middle Management, in charge of better understanding the problems and shortcomings that exist when ATHG (threats, challenges, obstacles, and disturbances) arise. In addition, it also contacts the role of External in terms of clarification of the problems, shortcomings, and involvement of the Indonesian National Army Navy with the Local Government, Industry, Academia, society, and related officials. Questionnaires were given to respondents directly (contact person) with a variety of questions containing matters relating to the purpose of the study. The questionnaires distributed to respondents are the main instrument derived from the results of theoretical and empirical studies. The questionnaire will first be tested to determine its validity and reliability, to the Indonesian National Army soldiers who are at the middle management level.

5. Analysis and Discussion

5.1. Evaluation of the Structural Model (Inner Model)

Assessment of the structural model through the value of R-Square (R²) to endogenous variables and Stone-Geisser (Q²) for predictive relevance.

5.1.1. Coefficient of Determinant (R²)

The value of R-Square for endogenous variables of Data Processing From Smart PLS in this study can be seen in Table 1 as follows:

Table 1.
R-Square Value.

No.	Variable	R Square	R Square Adjusted	Strength
1	MPH	0.748	0.734	Strong
2	CA	0.645	0.622	Moderate

Based on Table 1 can provide information about the value of R-Square (R²) for the variable Managerial Performance Heptahelix (MPH) of 0.748. This means that the exogenous variable, namely Process Capital (PC) contributes to the Heptahelix Managerial Performance variable by 74.8% and the rest is explained by other variables that are not studied in this study, so that it can be a suggestion for further research and the value of R-Square (R²) for the endogenous Competitive Advantage (CA) variable by 0.622. This means that the variables exogenous Human Capital (HC), Structural Capital (SC), Relational Capital (REC), Process Capital (PC) and Renewal Capital (RC) contribute to the variable Competitive Advantage (CA) of 62.20% and the rest is explained by other variables that are not studied in this study so that it can be a suggestion for further research.

5.1.2. Predictive Relevance (Q²)

The Q² value of structural testing results using WarpPLS aims to validate the model by showing the value of predictive relevance. The value of Q² can be taken from two approaches, namely cross-validated communality and cross-validated redundancy, in assessing how good the observations produced by the model are and the estimation of its parameters. The value of cross-validated communality is obtained through the estimation of data points using the values of latent variables, while the value of cross-validated redundancy is obtained by estimating the block under study using latent variables as predictions [19].

Based on Table 4.22 below, which uses a cross-validated redundancy approach, it can be seen that the value of Q² in endogenous variables such as Managerial Performance Heptahelix (MPH) is 0.718, and Competitive Advantage (CA) has a value of 0.521. All Q² values in the calculation through blindfolding show a value greater than 0 (zero); therefore, the validity of the predictive relevance of fit from these variables can be included in the strong category. Thus, it can be said that based on the results of blindfolding with the cross-validated redundancy approach, the model formed has predictive relevance, and the structural model is fit.

Table 2.
Construct Cross-Validated Redundancy Test Results.

No.	Latent Variable	RMSE	MAE	Q ² _predict
1	MPH	0.565	0.391	0.700
2	CA	0.731	0.562	0.486

5.1.3. Model Fit Test

As mentioned in the previous chapter that the validity and reliability of questionnaires that have been tested indicate that all indicators used are valid and reliable (reliable). Furthermore, tests were conducted to prove the hypothesis that aims to determine the magnitude of the influence of process Capital (PC) variables on Competitive Advantage (CA) through Managerial Performance Heptahelix. Furthermore, structural equation model analysis will be said to be good if it meets the

Goodness of Fit test Model with SRMR value less than 0.10 or less than 0.08 [29]. As for this study, the test results of the fit model can be seen in Table 3. as follows:

Table 3.
Model Fit Test Results

No.	Model Fit	Saturated Model	Estimated Model
1	SRMR	0.090	0.090
2	d_ ULS	7.682	7.682
3	d_ G	8.447	8.447
4	Chi-Square	2942.015	2942.015
5	NFI	0.544	0.544

In Table 3. it can be seen that the output shows the criteria of goodness of fit model is met with a value of 0.090 below 0.10.

6. Discussion

6.1. Process Capital has a significant effect on Heptahelix Managerial Performance

The test results showed that the magnitude of the effect or the estimated value of the coefficient of the Process Capital path on the Managerial Performance Heptahelix was 0.411, with a p-value of 0.000, which means it is smaller than the significance level of p-value 0.05. The t count is $6.598 \geq 1.96$, providing sufficient evidence to state that Process Capital has a significant effect on the Managerial Performance Heptahelix.

The Indonesian National Army (TNI) Naval districts and cities in the Riau Islands province are involved with the government in its work, but both are engaged in activities that are not supported by the industry [9]. The government can provide funding for universities to promote research and purchase products in the event of a market failure. The government also has a limited regulatory role in social and economic mechanisms and sales functions. Companies are expected to compete with each other in many areas, including R&D and product development [8].

The study found that there is a relationship between the university and the government, where the university acts as the main provider of skilled and trained graduates, and the government acts as the main regulator of social and economic mechanisms. Universities and governments are also considered additional supporting structures of industry [22].

This study also found that there is a relationship between the Indonesian National Army (TNI) Navy districts and cities in the Riau Islands province with parties outside the external industrial companies in the procurement of alutista. The Indonesian National Army (TNI) Naval districts and cities in the province of Riau Islands, in maintaining Indonesian marine areas, still require cooperation with the Army or Military Academies of other countries, both in terms of training, the use of technological tools, interdisciplinary research, business and Technology Incubators, industrial liaison offices, university-industry research consortia, including the need for cooperation and involvement of the role of government in the use of public funds (from the government) and industry or companies (in public venture capital) to conduct research and innovation and build government research laboratories [2, 27]. This is done to create an innovative environment for the development of a knowledge-based economy [37].

In addition, the Indonesian National Army (TNI) Navy districts and cities in the Riau Islands province also cooperate with industry through the establishment of R&D facilities to innovate in training its workers. Companies share knowledge and form lateral ties through joint ventures and strategic alliances [37] with fishing communities under the supervision of the Navy. In addition, this study found that in the process of working, the Indonesian National Army (TNI) Navy districts and cities in the Riau Islands province also collaborate with the public community, where the Navy considers the role of the public to be very important in achieving policy and strategy knowledge and innovation successfully. The public is influenced by the media, culture, and values, so that the Indonesian National Army (TNI) Naval districts and cities in the Riau Islands province can set goals and conduct innovation policies that must be presented to the public through the media to seek legitimacy and justification. For example, the media plays a key role as a means through PR (public relations) strategies of companies/institutions that build their policies along R&D (research and development), S&T (science and technology), and innovation. It is expected that by successfully implementing innovation policies and strategies, the level of public awareness, culture, and values will change through the development and evolution of a culture of innovation that leads to the creation of a knowledge society [33]. Triple helix model and Turkish rotary wing technology center (Master's thesis, Middle East Technical University).

In addition, the study found that the Indonesian Armed Forces (TNI) naval districts and cities in the Riau Islands province can measure the performance of their personnel by establishing and implementing appropriate policy frameworks and good governance policies [15]. This is because it is very difficult to create a single governance structure and set of suggestions that apply to all government agencies, regardless of whether there is an elected or appointed supervisory body or whether the rules are the same [29]. One of the main challenges facing the Indonesian Armed Forces (TNI) Naval districts and cities in Riau Islands province is the lack of a viable policy framework and its implementation. Although the higher command has made some provisions and commitments at higher levels to ensure proper policies and their performance in service management has been good, the service is still lagging compared to other marine armies internationally. Good governance, human resource management framework, training and development (outside of work and in the workplace of the Indonesian National Army (TNI) Naval districts and cities in the province of Riau Islands), deployment/conscription, and the

appointment of a supervisory body that oversees the implementation of the TNI work process are considered to be unable to ensure the armed forces can operate properly [15].

Conclusion: The ability of the Indonesian National Army (TNI) Navy districts and cities in the province of Riau Islands to collaborate with the community of professionalism (the professionalism community in question here includes the University, Government, Industry, Media Massa, , BAKAMLA related to water police dam technology concerning the environment) is still focused on output only and not directed towards the impact of activities carried out together with the community of professionalism. This can be seen from one of the activities conducted by the Navy, namely importing alutista specifically for marine areas in Indonesia.

6.2. Process Capital has a Significant Effect on Competitive Advantage

The test results show that the magnitude of the effect or the estimated value of the coefficient of Process Capital's path to Competitive Advantage is 0.188, with a p-value of 0.007, which means it is smaller than the significance level of p-value 0.05. The t count is $2.708 \geq 1.96$, so it is proven that Process Capital has a significant effect on Competitive Advantage. This finding shows that the proposed hypothesis that Process Capital has a significant effect on Competitive Advantage is acceptable.

This study found that the process of activities carried out in the internal environment of the Indonesian National Army (TNI) Naval districts and cities in the Riau Islands province reflects the potential for internal competitive advantage. This is because almost completely the process of activity of the Indonesian National Army (TNI) Naval districts and cities in the province of the Riau Islands is controlled by the management of the organization; that is, the management has all the necessary conditions for controlling related factors [10]. The main components of the internal environment analysis are preparing the universe defense by increasing the number of troops, the existence of an independent Reserve Command (KOMCAD) (called when the Indonesian National Army (TNI) Naval districts and cities in Riau Islands province need reinforcements), preparing active defensive measures, and developing layered defenses. To develop a layered defense, the title of military defense is synergized with the title of non-military defense to counter and face military threats, deal with non-military threats, conduct defense cooperation, and implement world peace. In addition, in the TNI, the military defense degree is organized in an integrated manner across land, sea, and air dimensions and is arranged in a balanced and proportional manner according to Indonesia's geographical conditions [6].

The Indonesian National Army (TNI) Navy districts and cities in the province of Riau Islands also provide adequate facilities and infrastructure to support the defense of the country. It plays an important role in supporting the implementation of activities at sea, both at the level of the Navy, Army, and Air Force, as well as supporting the economic, social, and cultural activities of the community indirectly. TNI military operations on land, sea, and air will be aided by the national infrastructure. Therefore, during a safe situation, national infrastructure needs to be organized and prepared so that it can be used for defense purposes when needed by Indonesia. The results of this study are in accordance with the findings (Revolution in military affairs) [22].

In the event of a war or emergency over maritime security, at the command of the president as head of state and head of government, the Indonesian National Army (TNI) Naval districts and cities in Riau Islands province have the authority to integrate all authorized components and forces in handling security disturbances in the South China Sea. This is because the law mandates a state defense system that is universal, involves all citizens, regions, and other national resources, and is prepared early by the government, implemented in a total, integrated, directed, and continuous manner to uphold state sovereignty, territorial integrity, and the safety of all nations from all threats, through efforts to build state defense strength and capabilities. The state defense system is universal, which combines military defense systems and non-military defense systems. To deal with military threats, the Indonesian National Army (TNI) Navy districts and cities in Riau Islands province are placed as the main component with the support of reserve components and supporting components, while to deal with non-military threats, government agencies outside the field of defense are placed as the main element, in accordance with the form and nature of the threat faced, with the support of other elements of the nation's strength. So that the Navy in the South China Sea and buffer areas are supported by the construction of defense facilities and infrastructure. The concept of the title of troops of the Indonesian National Army (TNI) Naval districts and cities in the province of Riau Islands is a strategic thing, both for the benefit of long-term defense. The results of these findings are in accordance with those found by Razzaq et al. [22].

In addition, the TNI AL strengthens the placement of the TNI in the outermost and leading points of the Unitary State of the Republic of Indonesia, which is also a potential area as a driving center for national economic growth. Therefore, it should not only be centered in Java but must be centered in Indonesia, as the vast territory of the country cannot be guarded solely from Java. There is a need for strengthening the region, including the South China Sea region. With these conditions, the TNI will be better prepared to face the future of warfare in the context of the geographical conditions of the country as an archipelago [22].

The Indonesian National Army (TNI) Navy regencies and cities in the Riau Islands province also always make changes to their policies and organizational governance if necessary. This aims to integrate theory and practice through problem diagnosis, active intervention, and reflective learning by following perspectives from Western countries about what has happened and/or what must be done strategically in order to remain superior in global conditions [9]. The Indonesian National Army (TNI) naval districts and cities in the Riau Islands province already have the ability to formulate strategies to build sustainable national competitiveness, in addition to clarifying the status of national intellectual capital through the maritime boundaries of the exclusive economic zone that belongs to Indonesia, which is strengthened through UNCLOS in the Djuanda Declaration. This is in accordance with the opinion of Yeh-Yun Lin & Edvinsson [15] said that the general perception of

Nordic countries has a high level of national intellectual capital in the form of human capital, renewal capital and process capital. Their research findings clarify the status of the Nordic countries' national intellectual capital, thus providing valuable information for stakeholders and policymakers to formulate effective strategies to build sustainable national competitiveness.

The Indonesian National Army (TNI) Naval districts and municipalities in Riau Islands province also undertake process renewal, streamlining, Keeping Up With the latest technological innovations, risk reduction, ranking among successful companies, uncontrolled functioning, resource transfer, resource allocation, reduction of investment expenditure, utilization of financial resources, becoming a dominant player in the market, and resistance to change [34].

This study does not agree with the findings of Lin and Tseng [17] found that process Capital has no effect on competitive advantage. The Porter [20] is a representative and influential theory that proposes a series of interrelated processes with an impact on the capabilities of a company. However, the findings of this study are in line with the findings [15] who said the role of the employer as a key step in the process that has the potential to generate a competitive advantage [15]. HR processes are an important step in enabling resource types to be transformed into measurable sources of competitive advantage [21].

This research is not in line with Roos and Roos [6] statement that the proposed strategic plans are carried out by foreign partners or suppliers in the development of human capital, market capital, and process capital, and become a Swedish update in the future. The Indonesian National Army (TNI) Navy regencies and cities in Riau Islands Province always carry out evolutionary processes in their organizations, including those related to the promotion, accommodation, and utilization of new knowledge and innovative behavior to bring about changes in the organization's core competencies and/or strategic changes in the procurement of alutista product market domains with foreign and local partners or companies [23].

7. Conclusions

7.1. Conclusion

Based on the results and discussion of research that has been described in the previous chapter, it can be stated some of the conclusions of this study are as follows:

Process Capital has a significant effect on Heptahelix Managerial Performance. The ability of the Navy, especially the Indonesian National Army (TNI) Navy districts and cities in the province of Riau Islands, to conduct activities that collaborate with the professional community (the professional community referred to here includes the University, Government, Industry, Mass Media, BAKAMLA related to technology, and water police related to the environment) is still directed towards output only, not towards the impact of activities carried out together with the community of professionals. This can be seen from one of the activities conducted by the Navy, particularly the Indonesian National Army (TNI) Navy districts and cities in Riau Islands province, namely importing alutista specifically for marine areas in Indonesia.

Process capital has a significant effect on competitive advantage. This study found that the process of activities carried out in the internal environment of the Indonesian National Army (TNI) Naval districts and cities in the Riau Islands province reflects the potential for internal competitive advantage. This is because almost completely the process of activity of the Indonesian National Army (TNI) Naval districts and cities in the province of Riau Islands is controlled by the management of the organization; that is, the management has all the necessary conditions for controlling related factors [26]. The main components of the internal environment analysis are preparing the universe defense by increasing the number of troops, the existence of an independent Reserve Command (KOMCAD) (called when the Navy, especially the Indonesian National Army (TNI) Naval districts and cities in Riau Islands province need reinforcements), preparing active defensive measures, and developing layered defenses. In the event of a war or an emergency over marine security, at the command of the president as head of state and head of government, the Navy, especially the Indonesian National Army (TNI) Naval districts and cities in Riau Islands province, has the authority to integrate all authorized components and forces in handling security disturbances in the South China Sea. This is because the law mandates a state defense system that is universal, involves all citizens, regions, and other national resources, and is prepared early by the government, implemented in a total, integrated, directed, and continuous manner to uphold state sovereignty, territorial integrity, and the safety of all nations from all threats, through efforts to build state defense strength and capabilities. The state defense system is universal, which combines military defense systems and non-military defense systems. To deal with military threats, the Navy, especially the Indonesian National Army (TNI) Navy districts and cities in Riau Islands province, are placed as the main component with the support of reserve components and supporting components, while to deal with non-military threats, government agencies outside the field of defense are placed as the main element, in accordance with the shape and nature of the threat faced, with the support of other elements of the nation's strength.

Based on the results and the existing discussion, the researcher can then add one (1) new dimension element to the concept of Managerial Performance Heptahelix and include other independent variables from the dimension of Intellectual Capital that were not utilized in this study. The results of this study contribute to Indonesia's preparation for making changes to reduce the risk of environmental damage on land (green economy) and at sea in particular (blue economy).

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