

DETERMINATION OF STATE IN SOUTHEAST ASIA AS PREDICTORS OF THREATS TO INDONESIA, USING PROFILE MATCHING, DELPHI AND BORDA METHODS

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ABSTRACT

A condition free from anxiety and the ability to predict threats, is a situation desired by all citizens. Not yet optimal in countermeasures and predicting the direction of the threat. The need for innovation in the method of determination according to the current state. Research based on the Decision Support System (DSS) trying will provide a solution in determining the predictor of the threat state. Using the Profile Matching method researchers try to map the profiles of countries located in the region. Providing problem solving by modifying the Profile Matching method is to start with delphi method in obtaining the determining criteria of research and weighting it with Borda technique. The criteria and weighting as the constituent criteria of the threat predictor country's strength profile, followed by the role so that the names of the threat predictor countries in Southeast Asia are obtained. The determination of the predictor state will facilitate in countermeasures or deal with it as well as provide actual information of where the threat comes from and the disertor criteria where the country can be weakened by Indonesia.

Keywords: *Threat, Southeast Asia Region, Profile Matching, Delphi, Borda.*

1. INTRODUCTION

The Profile of the country is a power that a country has in displaying its power, which can support the survival of the nation. Indonesia as an island nation has waters that are directly adjacent to other countries. There are 10 neighboring countries whose waters are directly adjacent to the Archipelago. They are Malaysia, Singapore, Thailand, India, Philippines, Vietnam, Papua New Guine, Australia, the Republic of Palau and East Timor. As well as Indonesia's position as a link between the two Oceans namely the Pacific Ocean and the Indian Ocean. According to Stubbs, (1886) history shows that the danger of threatening a nation's independence is from the momentary domination of a neighboring country as well as its formidable military power, efficient economy, and ambitious to expand its borders and influence to another country, a danger directly proportional to the

level of strength, followed by the "inevitability" of ambition.

The growing regional cooperation in the Southeast Asia region brings a range of new issues that directly influence all the mechanisms that ASEAN must run. One of the issues that will be discussed in this paper is related to security issues, namely the prediction of threats from the perspective of the profile of countries in the Southeast Asian region against Indonesia. The obscurity of the borders of a country in a region, has an impact on a country's perception of the behavior of another country. Perceptions that are not always considered a positive value, it is not uncommon for perceptions to arise is a form of alertness, where the behavior of a country can threaten the existence of another country's existence. The rise of arms build-up in Southeast Asian countries, for whatever reason, will give birth to a security dilema for fellow Southeast Asian countries. This is natural given the shift in

posture and regional defense alliances of Southeast Asia at the beginning of the post-Cold War, the security community such as the ASEAN Regional Forum (ARF), this is a form of security uncertainty so that arms build-up by each country is seen as urgent. Asean countries' cooperation with countries outside ASEAN such as SEATO, FPDA will also have its own impact on relations between countries in southeast Asia. It does not close the possibility that foreign interference in the life of a nation is how the country will continue to strive to gain and assert influence, taking advantage of changing conditions in the international environment. According to Toynbee, (1934) "the balance of power refers to the actual state in which power is distributed between several countries with an estimate of equality" . Morgenthau, (1978)"when every country or bloc becomes, or threatens to become very powerful, other countries must recognize this as a threat to their security and respond by taking equal action, individually and together, to increase their power.

A threat can be interpreted as the potential to harm the asset owned, the asset can be information, a process, a system as well as an organization. Identifying and determining possible threats from a country's profile is a major challenge and is the subject of numerous studies. From several studies discussing threats, the discussion focuses on the analysis of weaknesses that a country has that is then associated with the strengths and advantages of other countries. In this study, researchers considered the need for anticipation of potential threats coming from the Southeast Asian region based on the profile of excellence. This will contribute in order to ensure the realization of the objectives of the Republic of Indonesia. One of them is the determination of countries that have the potential to be a threat to Indonesia. In support of the anticipation efforts, researchers tried to give thought to a study on the profile of countries in Southeast Asia that could potentially threaten Indonesia.

Indonesia's display of excellence profile will be a comparison to the profiles of the countries studied. From the excellence profile of these countries, a method of determination is required based on the competency profile of a country. The use of Profile Matching Method is considered capable of supporting this research. The study of the country profile criteria is also indispensable therefore researchers use delphi method in determining the criteria of the country profile builder and validating the weighting of the profile building criteria with the Borda method. Hopefully, what is done will provide a strong analysis in favor of a decision in determining the predictors of threat countries in the Southeast Asia region.

Research Objectives are:

- a. Get a discription of the facts about the country that is a potential threat in southeast Asia to Indonesia.
- b. Shows the main criteria (Core Factor) and secondary factor criteria of the profile of a country capable of presenting as a potential threat.
- c. Showing the country's priorities that are a threat to Indonesia.

2. MATERIALS AND METHOD

2.1 Literatur Review

Researchers have conducted a review of previous studies conducted from either similar or different objects, subjects, and approach methods used. The research opportunities that can be done are to show the predictors of real threat countries not only in the maritime sector and not only military threats but also non-military using profile matching methods, as well as the use of profiles owned by an object can be a criterion in borda method research. The use of internet facilities in the retrieval of a remote consensus from experts or speakers still opens up opportunities in research that will be

supported by delphi method will be effective in determining criteria.

2.2 Profile Definition

The word profile is derived from the Italian name *profilo* and *profilare* which means outline. The meaning of the profile in the English dictionary is a side view of people's faces, paintings or drawings of people from the side, biographical sketches, cross-sections (land, mountains, and so on), graphics or overviews that provide facts about special things.

According to Victoria Neufeld (1996) profiles are graphs, diagrams, or writings describing a situation that refers to a person's data or something.

Various understandings of profiles and opinions from experts, can be taken understanding that the profile is an outline of where it looks. When viewed in terms of profile statistics is a set of data that describes something in the form of a table or graph.

2.3 Threat

According to The Research of Professor I. Pasha Mahmood of the National University of Singapore Business and Cocurating Transformation Map on ASEAN that the current threats that need to be observed are:

- a. Geopolitical stability and regional relations.
- b. Governance challenges for businesses.
- c. New business model.
- d. Changing demographics. Inclusive growth and sustainable development.
- e. Regional digital economy.
- f. Economic integration (MEA).

While according to John M. Collins, in evaluating the threat there are three influential considerations: by assessing its capabilities, intentions and vulnerabilities.

2.4 Threat Analysis Concept

Threat analysis is a formal process for identifying, documenting and reducing system security threats, which can be shared in three main phases: threat modeling, asset mapping, and building mitigation plans. The proposed methodology includes formalization of all these aspects with a new approach to system characterization.

2.5 OCTAVE (Operationally Critical Threat, Asset, and Vulnerability Evaluation) Concept

This OCTAVE Allegro method is an operational method of Critical Threat, Asset, and Vulnerability Evaluation, created to conduct information system security risk assessments in context with operational and strategic drivers they rely on to fulfill missions (Mikewati & Welly, 2012).

2.6 Prediction Concept

Prediction is a systematically estimating process of something that is most likely to happen in the future based on past and present information, so that the error (the difference between something that happens and the forecast result) can be minimized. Predictions do not have to give a definitive answer to the events that will occur, but rather try to find answers as close as possible that will occur (Herdianto, 2013).

2.7 Decision Support System (DSS)

The Decision Support System (DSS) is an interactive computer-based system, which helps decision makers to use data and various models to solve unstructured problems (Turban et al, 2005). According to Kusriani (2007) defining the decision support system is an interactive information system that provides information, modeling and data manipulation. The system is used to assist decision-making in semistructured situations and unstructured situations, where no one knows exactly how decisions should be made.

2.8 Profile Matching Method

Profile Matching is a decision-making mechanism assuming that there is an ideal variable predictor level that should be met by the subjects studied, instead of the minimum level that must be met or skipped (Kusrini, 2007)

In the Profile Matching process that becomes an outline is the process of comparison between the competency of the subject into the competency of the objective so that it can be known the difference of competency or called gap. The smaller the gap, the greater the weight that means having a greater chance of the Subject occupying the predictor's goal.

a. Weighting

At this stage starting with gap mapping by looking for differences in respondent's value with standard value will then be determined the weight of each value – each aspect of the criteria by using GAP weights

Table 1. GAP Weight

No	Difference (GAP)	Value Weight	Description
1.	0	5	No difference (Profile Index as needed)
2.	1	4,5	Country Profile Index excess 1 value
3.	-1	4	Country Profile Index lacks 1 value
4.	2	3,5	2-value surplus country profile index
5.	-2	3	Country Profile Index lacks 2 values
6.	3	2,5	Country Profile Index excess 3 values
7.	-3	2	Country Profile Index lacks 3 values
8.	4	1,5	Country Profile Index excess 4 values
9.	-4	1	Country Profile Index lacks 4 values

b. Core and Secondary Factor Grouping

After determining the weight of the gap value of the required criteria, the next step is that each criterion is grouped into two groups namely Core Factor and Secondary Factor.

1) Core Factor is the aspect (country profile) that stands out or is most needed. To calculate Core Factor used formulas:

$$NCF = \frac{\sum NC}{\sum IC} \dots\dots\dots(1)$$

Description:

NCF = Core Factor average
NC = Total number of Core Factor values
IC = Number of Core Factor items

2) Secondary Factor (Supporting Factor) is items other than aspects that are included in the Core Factor. To calculate Secondary Factor used formula:

$$NSF = \frac{\sum NS}{\sum IC} \dots\dots\dots(2)$$

Description:

NSF = Secondary Factor average
NS = Total number of Secondary Factor values
IC = Number of Secondary Factor items

c. Calculation of Total Value

From the calculation of Core Factor and Secondary Factor of each aspect (country profile), then calculated the total value of each aspect (country profile) that is estimated to affect each Profile Index – each country. To calculate the total value of each aspect of the criteria, a formula is used:

$$N = (X) \%NCF + (X) \%NSF \dots\dots\dots (3)$$

Description:

N = Total Value of each Criterion
NCF = Core Factor average
NSF = Secondary Factor average
(x)% = Percentage value inputted by Borda method

d. Rangking

The final result of the Profile Matching process is a ranking that refers to the calculation result indicated by the formula:

$$\text{Ranking} = 70\% \text{NCF} + 30\% \text{NSF} \dots \dots \dots (4)$$

Description:

NCF = Core Factor Value

NSF = Secondary Factor Value

2.9 Delphi Method

Delphi's approach has three different groups: decision makers, staff, and respondents. The decision-maker will be responsible for the results of the Delphi study. A working group of five to nine members consisting of staff and decision makers, tasked with developing and analyzing all questionnaires, data collection evaluations and revisions of questionnaires required. The staff group is led by coordinators who must have experience in design and understand Delphi's methods as well as get to know the problem area. The job of the coordinating staff is to control the staff in mailing questionnaires, divide and process results as well as scheduling meetings. Respondents are experts in the problem and anyone who agrees to answer the questionnaire.

2.10 Borda Method

The Borda method used by its inventor Jean Charles de Borda in the 18th century was one of the methods used to determine the best alternatives of the chosen few alternatives. Each alternative decision-making option will be judged by its weight based on its ranking. The greatest weight is the best alternative to decision-makers. Borda is a voting method used in group decision making for single winner or multiple winner selection. Borda determines the winner by awarding a certain number of points to each candidate. The winner will then be

determined by the number of points the candidate collects (Cheng and Deek, 2009).

2.11 Research Procedure

At this stage all data will be managed using Delphi and Borda methods hope to obtain empirical results from the criteria that are material in advanced analysis. The activities that will be interconnected in this stage are

- a. Literature studies are conducted to gather information by reading books or in digital form intended to study the theories related to the method to be used namely profile matching method. In addition to studying profile matching methods, literature studies are also conducted to study the issues that will be raised in this study from interviews or observations directly.
- b. Determining criteria, data sources and samples at this stage began to determine what criteria are required based on data and samples sourced from the results of interviews and observations directly.
- c. Creation, Filling and Examination of Questionnaires From research data obtained from the results of interviews with speakers. The next step is to start making the questionnaire and then check the questionnaire and the questionnaire is filled out by the respondent. This activity researchers will use delphi and borda methods.
- d. In this stage the results of questionnaires that have been filled out by panelists or respondents will be analyzed, data analysis is done using profile matching method to determine the selected predictor. Once the analysis phase is complete, a conclusion will be generated containing the role that will be further insetized.

3. RESULT AND DISCUSSION

3.1 Criteria Determination

The criteria and sub criteria to be examined are as follows:

Table 2. Criteria and Sub criteria for building a Country Profile

Criteria	Sub Criteria
Economic Resources	Size
	International Lverage
	Technology
	Connectivity
Military Capability	Defence spending
	Armed Forces
	Weapon and Platform
	Signature Capabilities
	Asian Military Posture
Resilience	Institutional Stability
	Resource Security
	Geoeconomic Security
	Geopolitical Security
	Nuclear Deterrence
Resilience Future Resources	Economic Resources 2030
	Defence Resources 2030
	Broad Resources 2030

	Demographic Resources 2030
Diplomatic Influence	Diplomatic Network
	Multirateral Power
	Foreign Policy
Economic Relationships	Regional Trade Relations
	Regional Investment Ties
	Economic Diplomacy
Defence Networks	Regional Alliance Network
	Regional Non allied Partners
	Global Arms Tranfers
Cultural Influence	Cultural Projection
	Information Flows
	People Exchanges

Source: Asia Power Index,Lowy Institute 2019

Table 3.Southeast Asian State Ranking Index

Criteria	Sub Criteria	Alternatives state / State Rank								
		N1	N2	N3	N4	N5	N6	N7	N8	N9
Economic Resources	Size	12	16	9	13	25	17	15	22	21
	International Lverage	11	5	10	13	15	23	14	25	19
	Technology	10	6	13	14	12	24	16	23	25
	Connectivity	10	4	9	14	22	19	12	23	21
Military Capability	Defence spending	14	10	12	17	22	15	13	25	23
	Armed Forces	19	11	16	18	25	13	10	23	22
	Weapon and Platform	14	9	16	22	20	17	12	25	23
	Signature Capabilities	15	4	16	21	18	17	12	24	23
	Asian Military Posture	13	9	11	20	23	16	8	25	23
Resilience	Institutional Stability	9	1	11	22	4	24	13	16	19
	Resource Security	3	24	13	19	9	14	17	5	15
	Geoeconomic Security	10	18	7	14	21	19	15	22	20
	Geopolitical Security	22	14	17	13	20	15	24	18	19
	Nuclear Deterrence	7	7	7	7	7	7	7	7	7
Resilience Future Resources	Economic Resources 2030	10	12	11	13	20	17	15	22	21
	Defence Resources 2030	15	14	13	16	23	12	10	25	21
	Broad Resources 2030	13	7	15	21	23	17	10	22	24
	Demographic Resources 2030	8	24	14	6	25	12	10	20	17
Diplomatic Influence	Diplomatic Network	9	15	11	13	21	16	10	19	20
	Multirateral Power	11	14	5	15	12	22	10	16	17
	Foreign Policy	10	2	15	16	23	21	13	24	20
Economic Relationships	Regional Trade Relations	9	7	4	14	23	18	10	21	19
	Regional Investment Ties	9	7	8	14	23	17	12	21	18
	Economic Diplomacy	5	3	10	13	12	15	9	15	15
Defence Networks	Regional Alliance Network	11	11	8	7	11	11	11	11	11

	Regional Non allied Partners	3	1	12	13	19	22	14	23	17
	Global Arms Tranfers	15	8	13	19	16	20	17	22	22
Cultural Influence	Cultural Projection	8	7	9	15	16	23	14	25	20
	Information Flows	7	12	11	15	23	19	8	24	22
	People Exchanges	3	8	4	10	23	15	9	19	17

Source: Asia Power Index,Lowy Institute 2019

Determination of Criteria using Delphi method with results

Table 4. Country Profile Building Criteria Determination Results

Criteria
Military Capabilities
Economic Resources
Resilience
Defense Network
Diplomatic Influence
Economic Relations
Resilience Future Resources
Cultural Influences

Source: Processed Data Researchers

Criteria	Core Factor (CF)	Secondary Factor (SF)
Military Capabilities	CF	
Economic Resources	CF	
Resilience	CF	
Defense Network		SF
Diplomatic Influence		SF
Economic Relations		SF
Resilience Future Resources	CF	
Cultural Influences		SF

Source: Processed Data Researchers

3.2 Criteria Weighting

Weighting Criteria of the process on the

Borda method

Determination of Core Factors and Secondary Factors

Table 5. Core Factor and secondary Factor Grouping Results

Table 6. Criteria Role Results

Alternatives/Criteria	Ranking Selection by Responden							
	A	B	C	D	E	F	G	H
Military Capabilities	1	2	1	2	1	3	2	1
Economic Resources	2	1	2	1	2	2	1	2
Resilience	4	5	3	4	3	4	5	3
Resilience Future Resources	3	3	4	5	4	5	3	6
Defense Network	6	4	6	7	5	1	4	5
Diplomatic Influence	7	7	7	6	6	7	8	8
Economic Relations	5	6	5	3	7	8	6	4
Cultural Influences	8	8	8	8	8	6	7	7
Amount	36	36	36	36	36	36	36	36

Source: Processed Data Researchers

Table 7. Core Factors Criteria Weighting Results

Core Factors	Percentage
Military Capabilities	13%
Economic Resources	13%
Resilience	31%
Resilience Future Resources	44%

Source: Processed Data Researchers

Table 8. Secondary Factors Criteria Weighting Results

Secondary Factors	Percentage
Defense Network	18%

Diplomatic Influence	20%
Economic Relations	30%
Cultural Influences	32%

Source: Processed Data Researchers

In the early stages of calculating Profile Matching, all of the initial data of table 3.2 that is ranking must be converted with values that later make it easier to compare with the standard values of the results of the panelist

3.3 Profile Matching Calculation

Table 9. Conversion Value Results

Criteria	Sub Criteria	Alternatives state / Conversion Value								
		N1	N2	N3	N4	N5	N6	N7	N8	N9
Economic Resources	Size	4	4	5	4	3	4	4	3	3
	International Lverage	4	5	5	4	4	3	4	3	4
	Technology	5	5	4	4	4	3	4	3	3
	Connectivity	5	5	5	4	3	4	4	3	3
Military Capability	Defence spending	4	5	4	4	3	4	4	3	3
	Armed Forces	4	4	4	4	3	4	5	3	3
	Weapon and Platform	4	5	4	3	4	4	4	3	3
	Signature Capabilities	4	5	4	3	4	4	4	3	3
	Asian Military Posture	4	5	4	4	3	4	5	3	3
Resilience	Institutional Stability	5	5	4	3	5	3	4	4	4
	Resource Security	5	3	4	4	5	4	4	5	4
	Geoeconomic Security	5	4	5	4	3	4	4	3	4
	Geopolitical Security	3	4	4	4	4	4	3	4	4
	Nuclear Deterrence	5	5	5	5	5	5	5	5	5
Resilience Future Resources	Economic Resources 2030	5	4	4	4	4	4	4	3	3
	Defence Resources 2030	4	4	4	4	3	4	5	3	3
	Broad Resources 2030	4	5	4	3	3	4	5	3	3
	Demographic Resources 2030	5	3	4	5	3	4	5	4	4
Diplomatic Influence	Diplomatic Network	5	4	4	4	3	4	5	4	4
	Multilateral Power	4	4	5	4	4	3	5	4	4
	Foreign Policy	5	5	4	4	3	3	4	3	4
Economic Relationships	Regional Trade Relations	5	5	5	4	3	4	5	3	4
	Regional Investment Ties	5	5	5	4	3	4	4	3	4
	Economic Diplomacy	5	5	5	4	4	4	5	4	4
Defence Networks	Regional Alliance Network	4	4	5	5	4	4	4	4	4
	Regional Non allied Partners	5	5	4	4	4	3	4	3	4
	Global Arms Tranfers	4	5	4	4	4	4	4	3	3
Cultural Influence	Cultural Projection	5	5	5	4	4	3	4	3	4
	Information Flows	5	4	4	4	3	4	5	3	3
	People Exchanges	5	5	5	5	3	4	5	4	4

Source: Processed Data Researchers

a. Weighting

This stage is to calculate the gap difference which is **GAP** = Converted Profile - Profile Standard Value, so that the data is obtained as follows:

Table 10. Results of Calculating Difference in Values (GAP)

Criteria	Sub Criteria	Standard Value	Alternatives state / GAP Value								
			N1	N2	N3	N4	N5	N6	N7	N8	N9
Economic Resources	Size	5	-1	0	-1	-2	-1	-1	-2	-2	-5
	International Lverage	4	1	1	0	0	-1	0	-1	0	-4

Resilience Future Resources	Economic Resources 2030	5	4	4	4	4	4	4	3	3
	Defence Resources 2030	4	4	4	4	3	4	5	3	3
	Broad Resources 2030	4,5	3,5	4,5	5	5	4,5	3,5	5	5
	Demographic Resources 2030	4,5	4	5	4,5	4	5	4,5	5	5
Diplomatic Influence	Diplomatic Network	4,5	5	5	5	4	5	4,5	5	5
	Multilateral Power	5	5	4,5	5	5	4	4,5	5	5
	Foreign Policy	4,5	4,5	5	5	4	4	5	4	5
Economic Relationships	Regional Trade Relations	4,5	4,5	4,5	5	4	5	4,5	4	5
	Regional Investment Ties	4,5	4,5	4,5	5	4	5	5	4	5
	Economic Diplomacy	5	5	5	4	4	4	5	4	4
Defence Networks	Regional Alliance Network	5	5	4,5	4,5	5	5	5	5	5
	Regional Non allied Partners	4,5	4,5	5	5	5	4	5	4	5
	Global Arms Tranfers	5	4,5	5	5	5	5	5	4	4
Cultural Influence	Cultural Projection	4,5	4,5	4,5	5	5	4	5	4	5
	Information Flows	5	4	4	4	3	4	5	3	3
	People Exchanges	4,5	4,5	4,5	4,5	4	5	4,5	5	5

Source: Processed Data Researchers

b. Calculation of Core Factors and Secondary Factors

In table 5 there is already a grouping of criteias into Core Factors and Secondary Factors, the next step is to calculate the value according to

the criteria and the Country Alternatives to be selected using formulas (1) and (2).

Table 12. Core Factor (NCF) Value Calculation Results

PROFILE FACTORS	No	Criteria	Sub Criteria	Alternatives state / GAP Weight Value									
				N1	N2	N3	N4	N5	N6	N7	N8	N9	
CORE FACTORS	1.	Economic Resources	Size	4	4	5	4	3	4	4	3	3	
			International Lverage	5	4,5	4,5	5	5	4	5	4	5	
			Technology	5	5	4	4	4	3	4	3	3	
			Connectivity	4,5	4,5	4,5	5	4	5	5	4	4	
		Item (IC)	4	NCF	4,6	4,5	4,5	4,5	4,0	4,0	4,5	3,5	3,8
	2.	Military Capability	Defence spending	4	5	4	4	3	4	4	3	3	
			Armed Forces	4	4	4	4	3	4	5	3	3	
			Weapon and Platform	4	5	4	3	4	4	4	3	3	
			Signature Capabilities	4	5	4	3	4	4	4	3	3	
			Asian Military Posture	4	5	4	4	3	4	5	3	3	

	Item (IC)	5	NCF	4,0	4,8	4,0	3,6	3,4	4,0	4,4	3,0	3,0
3.	Resilience		Institutional Stability	4,5	4,5	5	4	4,5	4	5	5	5
			Resource Security	5	3	4	4	5	4	4	5	4
			Geoeconomic Security	5	4	5	4	3	4	4	3	4
			Geopolitical Security	3	4	4	4	4	4	3	4	4
			Nuclear Deterrence	3,5	3,5	3,5	3,5	3,5	3,5	3,5	3,5	3,5
Item (IC)	5	NCF	4,2	3,8	4,3	3,9	4,0	3,9	3,9	4,1	4,1	
4.	Resilience Future Resources		Economic Resources 2030	5	4	4	4	4	4	4	3	3
			Defence Resources 2030	4	4	4	4	3	4	5	3	3
			Broad Resources 2030	4,5	3,5	4,5	5	5	4,5	3,5	5	5
			Demographic Resources 2030	4,5	4	5	4,5	4	5	4,5	5	5
Item (IC)	4	NCF	4,5	3,9	4,4	4,4	4,0	4,4	4,3	4,0	4,0	

Source: Processed Data Researchers

Table 13. Secondary Factors (NSF) Calculation Results

PROFILE FACTOR S	No	Criteria	Sub Criteria	Alternatives state / GAP Weight Value									
				N1	N2	N3	N4	N5	N6	N7	N8	N9	
SECONDARY FACTORS	1.	Diplomatic Influence	Diplomatic Network	4,5	5	5	5	4	5	4,5	5	5	
			Multilateral Power	5	5	4,5	5	5	4	4,5	5	5	
			Foreign Policy	4,5	4,5	5	5	4	4	5	4	5	
		Item (IC)	3	NSF	4,7	4,8	4,8	5,0	4,3	4,3	4,7	4,7	5,0
	2.	Economic Relationships	Regional Trade Relations	4,5	4,5	4,5	5	4	5	4,5	4	5	
			Regional Investment Ties	4,5	4,5	4,5	5	4	5	5	4	5	
			Economic Diplomacy	5	5	5	4	4	4	5	4	4	
			Item (IC)	3	NSF	4,7	4,7	4,7	4,7	4,0	4,7	4,8	4,0
	3.	Defence Networks	Regional Alliance Network	5	5	4,5	4,5	5	5	5	5	5	
			Regional Non allied Partners	4,5	4,5	5	5	5	4	5	4	5	
			Global Arms Transfers	5	4,5	5	5	5	5	5	4	4	
			Item (IC)	3	NSF	4,8	4,7	4,8	4,8	5,0	4,7	5,0	4,3
4.	Cultural Influence	Cultural Projection	4,5	4,5	4,5	5	5	4	5	4	5		
		Information Flows	5	4	4	4	3	4	5	3	3		
		People Exchanges	4,5	4,5	4,5	4,5	4	5	4,5	5	5		
		Item (IC)	3	NSF	4,7	4,3	4,3	4,5	4,0	4,3	4,8	4,0	4,3

Source: Processed Data Researchers

c. Calculation of Total Value

From the calculation of Core Factor and Secondary Factor of each aspect (country profile),

then calculated the total value of each aspect that is estimated to affect each Country 's Profile Index.

By using Formula (3) generated The total criteria value of each country, namely as follow

Table 14. Core Factors Total Value (NCF) Calculation Results from Alternatives

Alternatives State	Criteria Core Factors Values (NCF)
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	Economic Resources (13%)	Military Capability (13%)	Resilience (31%)	Resilience Future Resources (44%)	Total Value (NCF)
N1	4,63	4,0	4,2	4,5	4,360
N2	4,50	4,8	3,8	3,9	4,051
N3	4,50	4,0	4,3	4,4	4,320
N4	4,50	3,6	3,9	4,4	4,146
N5	4,00	3,4	4,0	4,0	3,923
N6	4,00	4,0	3,9	4,4	4,133
N7	4,50	4,4	3,9	4,3	4,194
N8	3,50	3,0	4,1	4,0	3,838
N9	3,75	3,0	4,1	4,0	3,870

Source: Processed Data Researchers

Table 15. Secondary Factors Total Value (NSF) Calculation Results from Alternatives

Alternatives State	Criteria				Total Value (NSF)
	Secondary Factors Values (NSF)				
	Diplomatic Influence (18%)	Economic Relationships (20%)	Defence Networks (30%)	Cultural Influence (32%)	
N1	4,7	4,7	4,8	4,7	4,717
N2	4,8	4,7	4,7	4,3	4,589
N3	4,8	4,7	4,8	4,3	4,639
N4	5,0	4,7	4,8	4,5	4,722
N5	4,3	4,0	5,0	4,0	4,358
N6	4,3	4,7	4,7	4,3	4,501
N7	4,7	4,8	5,0	4,8	4,854
N8	4,7	4,0	4,3	4,0	4,217
N9	5,0	4,7	4,7	4,3	4,619

Source: Processed Data Researchers

d. Ranking

The last stage is the role of all countries based on Core Factors and Secondary Factors, using the formula (4).

Table 16. Result of Total Value

Alternatives State	Profile Matching Total Value	Ranking
N1	4,4667	1
N2	4,2128	6
N3	4,4156	2
N4	4,3185	4
N5	4,0534	8
N6	4,2431	5
N7	4,3920	3
N8	3,9516	9

N9	4,0944	7
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Source: Processed Data Researchers

Table 17. Result of Profile Matching

PROFILE MATCHING RESULT	
Predictor Rank	Predictor State
1	N1
2	N3
3	N7
4	N4
5	N6
6	N2
7	N9
8	N5

Source: Processed Data Researchers

3.3 Discussion

In this study, researchers applied the Delphi method as the first step in the search for criteria up to the determination of criteria. The results of delphi method application using questionnaire on Google Form are set out in Table 3 where the preliminary criteria of the 2019 Asia Power Index source issued by the Lowy Institute. In the table there are 9 countries as alternatives that will be in the value. Consensus on delphi method produces criteria that correspond to the opinions of panelists or resource persons, through 2 rounds. From the opinions of these panelists in accordance with the concept of threat discussed in the previous chapter by Professor I. Pasha Mahmood. Furthermore, still with delphi method the criteria are grouped into factors that make up the country's strength profile namely Core Factor and Secondary Factor. The panelists' consensus result is found in Table 4 where there are 8 criteria and with each sub criterion of the participants. The process in this criteria implements one of the steps in OCTAVE which is the preparation of profile assets. From the composed asset profile is expected to provide an overview of the threat posed by the predictor countries, so as to provide a definitive picture of what sectors could potentially be a threat and how to deal with it.

While the process on the Borda method is to determine the weight of the criterias of the core factor and secondary factor constituents who are the builders of the State Power Profile. Results from borda questionnaire on Google form and data processing by investigators generated table 5. This process will support the processing of Profile Matching at the Core factor and Secondary Factor value calculation stage. Core Factor has 4 criteria – each weight is 13%, 13%, 31% , 41% while in Secondary Factor also has 4 criteria of 18%, 20%, 30%, 32%. This weight calculation becomes input as

a criterion that needs to be considered, because this weight is the constituent of the integrity of 100% a State Strength Profile. From the threat analysis it becomes an opportunity for Indonesia to anticipate the phenomenon that will emerge.

The Profile Matching method used in this study has resulted in a measured decision of the criteria - the criteria of the building of the country's Power Profile to select the country predictor of the threat to indonesia. Where the measured result is to designate n1 countries as a priority of threat that should be of full concern to Indonesia. As for the factors detailed in the criteria and sub-criteria, it can make a key point in weakening or becoming a development strategy facing the countries - the predictor of the threat.

4. CONCLUSION

The results of this study have provided an overview of countries that have the potential as a threat to Indonesia. This is seen from the role table used as the data source to be processed. From this study can be concluded that the criteria presented in this study are able to be the constituent factors of a country's Strength Profile. This is demonstrated in the process of selection of Criteria and grouping of Main Factors (Core factor) and Secondary Factor (Secondary Factor) using delphi method. Then the weighting which is a form of validation of one of the processes in the Profile Matching Method is able to provide appropriate support

The State that are the priority of the threat are shown from the processing results in the Profile Matching method, namely country N1. With indicators calculated so that the country ranks the main country in southeast Asia as a predictor of threat to Indonesia. From the calculation using profile matching method, Delphi and Borda are recognized as able to map state in Southeast Asia in accordance with the purpose of this research namely the determination of state in Southeast Asia as predictors of threats to Indonesia.

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REFERENCE

- Antonietta Stango, Neil R. Prasad, Dimitry M. Kyriazanos. (2009). *A threat Analysis Methodology for Security Evaluation and Enhancement Planning*. researchgate.net.
- Bley, H. L. (2019). *Lowy Institute Asia Power Index 2019*. Sydney: Lowy Institute.
- CSIS. (2019). *Perception And Readiness of Indonesia towards The Belt and Road Initiative*. Jakarta: CSIS Indonesia.
- Dalkey, N. (1967). *Delphi*. Santa Monica, CA: The RAND Corporation.
- Dalkey, N. H. (1962). *An Experimental Application of Delphi Method to the Use of Experts*. Santa Monica, CA: The RAND Corporation.
- Davis, F. D. (1986). "Technology Acceptance Model for Empirically Testing New End-User Information System Theory and Results."
- Drs. Suharso, Dra. Ana Retnoningsih. (2011). *English-Indonesian Dictionary, Lux Edition*. Semarang: Widya Karya.
- Efraim Turban, Jay E. Aroson, Ting Peng Liang. (@005). *Decisioan Suport System and Intelligent System*. Pearson Education.
- George Kassimeris and John Buckley . (2010). *The Ashgate research companion to modern warfare*. Surrey, England : Ashgate Publishing Limited.
- Harold A. Listone, Murraru Turoff, Olaf Helmer. (2002). *The Delphi Method, Techniques and Applications*.
- Heryaman, O. (2001). *Military Posture of Asian Countries. How to Supremacy and Posture of Indonesia's Defense Force*.
- I Nengah P.A., Abdul Hakim. (2016). *Analysis of Indonesia's Maritime Security Opportunities and Threats as a Strategic Environmental Development Impact*. ASRO Journal STTAL.
- Irfan, Surbakti. (2002). *Decision Support System*. Surabaya.
- ITU. (2019). *Global Cybersecurity Index 2019*. ITU Publisher.
- Kusrini. (2007). *Concept and Application of Decision Support System*. Yogyakarta: Andi Offset. Yogyakarta.
- Listone, H. a. (2002). *The Delphi Method Techniques and Application*.
- Portner, C. d. (2006). *Using The Technology Acceptance Model to Explain How Attitudes Determine Internet Usage: The Role of Perceived Access, Barriers and Demographics*. *Journal of Business Research* , Vol. 59, p.999-1007 .
- Prasetyono, E. (1994, November - December). *Increased Military Strength of Pasisic Asian Countries and Their Implications for Regional Security*". CSIS Analysis No. 6 Years XXIII .
- Rahmat, A. N. (2013). *Five Power Defence Arrangements In View of Constructivism*. *Journal of Interdependence Th1*, Vol 1.
- Schwab, P.-N. (2018). *4 stages of competitor analysis to carry out successful market research*.
- Ullman, D. G. (2001). *Robust Decision Making For Engineering Design*.
- Yousuf, M. (2007). *The Delphi Technique, Essay in Education*.