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INVESTIGATION OF NETWORKED MINIMARKET DEVELOPMENT

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ABSTRACT

The growth of network minimarkets in Bali is growing very rapidly, including in Tabanan district. This needs to get the attention of the regional government and local village officials to reduce the negative impact of network minimarkets which are increasingly mushrooming. This research uses primary data in the form of interviews and questionnaires which will later be processed using SWOT analysis to obtain indicators regarding the strengths, weaknesses, opportunities and challenges of building a new minimarket in Samsam Village. Of course, validity and reliability tests are also carried out to ensure that the questionnaire form that has been prepared based on interviews is truly valid and reliable to be used as a tool for obtaining research data. This research took the study area in Samsam Village, Kerambitan District, Tabanan Regency, Bali . It is hoped that this research can provide meaningful input to the regional government and local village officials in making policies on granting permits to build networked minimarkets in Samsam Village. So that the existence of the Bali Land Transportation Polytechnic Campus in Samsam Village can provide positive color and benefits to Samsam Village, Tabanan Regency, Bali. The results of this research show that the SWOT Indicator Analysis of networked minimarket development in Samsam Village, Tabanan Regency, Bali has 4 strength factors (Strength).), 2 weakness factors (Weakness), 3 opportunity factors (Opportunities), and 3 threat factors (Threats). Where the results of the analysis are in quadrant 1, which means that building a new network minimarket in the Samsam Village area, Tabanan Regency, Bali is still feasible. Meanwhile, based on factor analysis and priority matrix, the results showed that the new networked minimarket construction location that received a positive response from local village officials and communities was in the Banjar Dinas Samsam 1 area (Jalan Cempaka Putih).

Keywords: factor analysis; location teory; networked minimarket; priority matrix; swot analysis

INTRODUCTION

Nowadays the number of chain minimarkets is starting to increase rapidly in Bali. Minimarkets are increasingly strengthening their existence by developing branches/networks in various places by offering prices that are relatively the same as the central minimarket. This is one of the main attractions that causes customers to continue to loyally shop at this minimarket. Minimarkets that already have big names in Indonesia include Indomaret, Alfamart and Circle K and have penetrated almost all corners of the country from cities to villages, including Samsam Village in Tabanan Regency, Bali. Based on data from the Tabanan Regency Industry and Trade Service, the number of networked minimarkets in Tabanan Regency is 196 recorded minimarkets, however of the 196 minimarkets only 97 have official permits, while 102 of them are suspected to not have permits (Suantra & Nurmawati, 2022). This research is important to carry out to identify the impact of the construction of a new networked minimarket on the economy of Samsam Village, analyze the feasibility of building a new minimarket, identify alternative locations for the establishment/construction of a new minimarket and try to provide information to the local government of Tabanan Regency and village officials and business actors in Samsam Village about the benefits and losses from the construction of a new minimarket in the Samsam Village area, Tabanan Regency, Bali. Based on this description, it is very important to carry out this research so that the economic balance and welfare of the people of Samsam Village, Tabanan Regency can be maintained in a sustainable manner.

Location Selection Theory

Location theory answers questions about where economic activity should be placed and why it should be placed there (Meyrawati, 2020). Science that investigates the spatial order of economic activities, or science that investigates the geographical allocation of potential sources, as well as their relationship with or influence on the existence of various other businesses/activities, both economic and social (Tarigan, 2006). In studying location of various activities, regional economists or geographers first make the assumption that the space being analyzed is flat and conditions are identical in all directions. One element of space is distance. Distance creates 'distraction' when humans travel from one place to another. The issue of distance is widely discussed in location theory to see its effect on the intensity of people traveling from one location to another. Location theory has changed its focus from rigid factors (costs) related to the proximity of markets and suppliers, to relatively soft factors such as the quality (perception) of institutions, the level of knowledge and the quality of the environment. Some ideas regarding location theory that are often used as references for improving location theory in the modern era are as follows:

Von Thunen's theory

This model was created before the industrialization era. In explaining his model, von Thunen uses agricultural land as an illustration. The model depicts a market (city) surrounded by agricultural areas, both of which are located on a physically homogeneous plain. So transportation costs are calculated only based on the distance and volume of goods sent. This theory pays attention to the distance traveled between production areas and markets, this pattern includes variables of durability, transportation load, and prices of various agricultural commodities. Differences in transportation costs for each agricultural commodity from the place of production to the nearest market influence the type of land use in an area. And the thing that most determines the rental (land) price is the transportation costs. All use of agricultural land is in order to maximize its productivity (rent), which in this case depends on its location from the market (City Center). The farmer's role is to maximize profits, which is the market price minus transportation and production costs. The most productive activities (gardening or dairy production) or activities with high transportation costs (firewood) are located near markets.

$$R = Y(p-c) - Yfm$$

R = rent per unit of land
Y = yield per unit of land
p = market price per unit of yield
c = average production cost per unit of yield
m = distance from the market (in kilometers or miles)
f = transport rate per unit of yield and unit of distance

Webber's theory

Transportation➔the most important cost, usually the best location is where the transportation costs for raw materials and finished products are lowest.

Labor➔high labor costs reduce profits, locations where there is a cheap supply of non-union labor can offset transportation costs.

Agglomeration and Degglomeration Factors (Secondary)

Agglomeration➔factors that cause the concentration of industry in certain locations, which can include banking and insurance facilities, hospitals, training centers, etc.

Deglomeration➔factors that cause factories/industries to leave certain locations, for example: increasing local taxes, reducing skilled labor, increasing operational costs, etc.

Christaller's theory

This theory tries to describe how settlement locations relate to each other, the number of market areas that can be controlled by a central place, and why some central places function as hamlets, villages, small towns, or large cities. The main purpose of a settlement or market town is to provide goods and services to the surrounding market area. Such cities are located in the center and can be called central places. Settlements that provide more goods and services than other places are called high-level centers. Lower-level centers have small market areas and provide goods and services that are purchased more frequently than higher-level goods and services. Places with higher levels are more widely distributed and fewer in number than places with lower levels. The Christaller model is a geometric system, where the number 3 applied arbitrarily has an important role and this model is called the K = 3 system. This model explains the hexagonal trading area model by using the range or market area of each commodity which is called range and threshold (Meyrawati , 2020).

Location selection considerations include the following factors:

1. Customer Location
2. Location of Suppliers and Raw Materials
3. Culture
4. Government Attitudes/Perceptions
5. Direct cost
6. Indirect Costs
7. Currency Exchange Rates
8. Social Attitudes/Perceptions
9. Organization
10. Operation

Location Planning

The location for operations greatly influences costs, both fixed costs and variable costs. Location greatly influences the company's overall risks and profits. Location strategy is intended to maximize the company's location advantages.

Location options include:

- Not moving, but expanding existing facilities.
- Maintain current location, while adding other facilities elsewhere.
- Close existing facilities and move to another location.

METHOD

SWOT has four components, namely strengths, weaknesses, opportunities and threats (Dergisi, 2017). Strengths and weaknesses are internal factors and organizational attributes, opportunities and threats are external factors and environmental attributes. SWOT analysis is usually drawn in a four-quadrant box which makes it possible to summarize the analysis of the four parts. The summary is organized according to four section headings. SWOT analysis combines SWOT elements into a matrix and then identifies each aspect. Strategies are formulated based on the four SWOT quadrants according to their respective aspects. The SWOT matrix consists of four types of strategies, namely:

a) SO strategy uses internal strengths to exploit opportunities.
b) WO strategy that improves internal weaknesses by exploiting external opportunities.
c) ST strategy utilizes internal strengths to suppress external threats.

d) WT strategy is a defensive tactic by minimizing internal weaknesses to overcome external threats.

Table 1.
SWOT Analysis Matrix

Internal External	Strengths (S)	Weaknesses (W)
Opportunities (O)	SO Strategy (Strength – Opportunity)	WO Strategy (Weakness – Opportunity)
Threats (T)	ST Strategy (Strength – Threat)	WT Strategy (Weakness – Threat)

An assessment matrix for each element (Strengths, Weaknesses, Opportunities and Threats) can be created based on the results of sorting several of the literature studies above. The targets for filling out this questionnaire/interview form are as follows: policy makers in the Tabanan district government, Kerambitan District officials, Samsam Village officials, Traditional Shop/Warung Entrepreneurs in Samsam Village and several communities who live in alternative location point for building a new networked minimarket.

Factor Analysis

Using the scoring method. Based on subjective decisions to determine the score for each location candidate.

Factor Analysis Steps

a. Make a list of related factors (called key success factors (CSF).
b. Create a weighting for each factor determined in step 1, the size of which depends on its significance for the company (0-1).
c. Create a rating scale for each factor (for example 1-10, or 1-100).
d. Determine several alternative nominated locations.
e. Rate each alternative location on each factor using the rating scale in step 3.
f. Analyze each factor by multiplying the weight for each factor by the rating, and adding up the results.
g. Provide recommendations based on the maximum point value according to the results obtained in step 6.

Table 2.
CSF Value

CSF	Weight	Location Score			Score x Weight		
		A	B	C	A	B	C
Transportation Access							
Wages							
Tax							
The land price							
Supplier Proximity							
Utility Availability							
AMOUNT							

Priority Matrix

a) Used to consider the relative importance of each assessment criterion, by making pairwise comparisons.
b) Elements are compared in pairs against a specified criterion.
c) The weights used to compare the relative importance of each pair of criteria generally use a comparison scale.

Priority Matrix Steps

a. Compare criteria in pairs.

b. For example, comparing criteria A and B. From the results of the comparison, A is more important than B, and vice versa, B is less important than A.
c. Compare alternative locations in pairs
d. Apart from carrying out pairwise comparisons for the criteria, pairwise comparisons were also carried out for each alternative location for each criterion.
e. The results of pairwise comparisons for criteria and alternative locations calculated facility rankings for all criteria.

Comparison scale used:
1 = Both elements are equally important
5 = One element is more important than the others
10 = One element is more important than the others
1/5 = One element is less important than the others
1/10 = One element is very less important than the other.

Table 3.
Priority Matrix Example

Criteria	Labor Wages	Tax	The land price
Labor Wages	1		
Tax		1	
The land price			1

SWOT analysis

Table 4.
Survey Results for Determining and Weighting Internal Factors

No	Statement	Weight (a)	Rating (b)	Value (axb)
Strength Element Assessment Matrix (Strengths)				
1	The variety of products/goods sold is very large	0.2	3	0.6
2	The prices are the same/uniform in almost all outlets	0.15	3	0.45
3	Often provide promos and discounts so prices are cheaper than HET	0.25	4	1
4	The price of the product/goods is not too far from the HET (the profits taken are slim)	0.15	4	0.6
	SUB TOTAL Strengths	*0.75*		*2.65*
Weaknesses Element Assessment Matrix				
1	Store operational costs are more expensive (electricity, cleaning, taxes, etc.)	0.15	4	0.6
2	Employee Salary Costs	0.1	3	0.3
	SUB TOTAL Weaknesses	*0.25*		*0.9*

Table 5.
Survey Results for Determining and Weighting External Factors

No	Statement	Weight (a)	Rating (b)	Value (axb)
Opportunity Element Assessment Matrix (Opportunities)				
1	The number of networked minimarkets is still small	0.25	4	1
2	Good company image	0.2	3	0.6
3	New product (expiry date far away)	0.15	2	0.3
	SUB TOTAL Opportunities	0.6		1.9
Threat Element Assessment Matrix (Threats)				
1	The initial capital/investment required is large	0.05	4	0.2
2	Distribution of stock supply of goods/products	0.2	4	0.8
3	Number of traditional shops/stalls in Samsam Village	0.15	3	0.45
	SUB TOTAL Threats	0.4		1.45
	TOTAL	*1.6*		

Based on the table 4, it can be seen that the internal factors (Strength) that influence the construction of a new networked minimarket in Samsam Village are only 4 main factors with weights attached. Meanwhile, only 2 factors influence internal factors (Weaknesses). Based on the table 5, it can be seen that the external factors (Opportunities) that influence the construction of a new networked minimarket in Samsam Village are only 3 main factors with weights attached. Meanwhile, there are also 3 external factors (Threats) that influence it. Based on the data from the field survey, the research team analyzed the data using SWOT analysis as follows:

The Internal Factor Table (IFAS) (SW) interprets the X axis and the External Factor Table (EFAS) (OT) interprets the Y axis.
Calculation formula:
X-axis: (Total Strength – Total Weakness) / 2
: (2.65 – 0.9) / 2 = 0.90
Y axis: (Total Opportunity – Total Treath) / 2
: (1.9 – 1.45 / 2 = 0.30

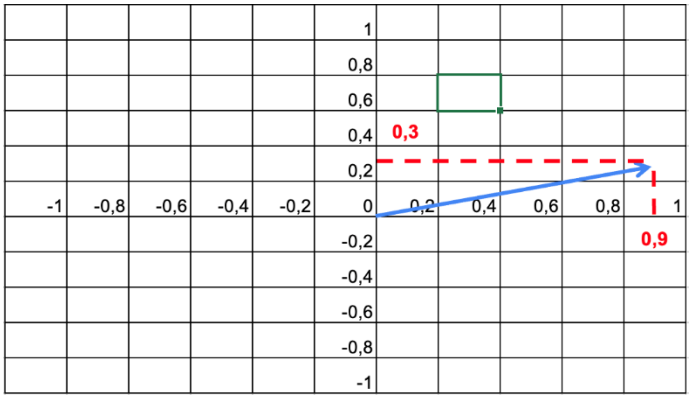

Figure 1. Plotting IFAS and EFAS

It can be seen based on the Cartesian diagram above that the feasibility of building a networked minimarket in Samsam Village, Tabanan, Bali is in quadrant 1, which means that development is still feasible.

Location Factor Analysis Results
The alternative location is in accordance with regional regulation number 14 of 2018 concerning changes to regional regulation number 1 of 2016 concerning the arrangement of supermarkets in Tabanan Regency (Detailed Questionnaire Appendix 5).
Alternative Network Minimarket Development Locations that were compared included;
A= Banjar Dinas Kutuh Kelod (Jalan Raya Kutuh)
B= Banjar Dinas Samsam 1 (Jalan Raya Cempaka Putih)
C= Banjar Dinas Kutuh Kaja (Kutuh Highway)

Factors used as a comparison between the three alternative locations for building networked minimarkets in the Samsam Village area of Tabanan, Bali.
P= Transportation Access
Q= Land Price
R= Distance to Supplier
S= Distance to Consumer
T= Distance to other shops/stalls
U= Security & Comfort

Based on the results of this analysis, it was found that the location score that got the highest points was location B, namely in the Banjar Dinas Samsam 1 area (Jalan Raya Cempaka Putih).

Table 5.
Results of Data Analysis for Determining Locations using the Factor Analysis Method

Criteria	Weight	Location Score			Score x Weight		
		A	B	C	A	B	C
P	0.25	75	75	70	18.75	18.75	17.5
Q	0.1	80	80	85	8	8	8.5
R	0.05	80	80	70	4	4	3.5
S	0.2	80	85	80	16	17	16
Q	0.15	75	85	75	11.25	12.75	11.25
U	0.25	80	80	80	20	20	20
Amount					78	80.5	76.75

Priority Matrix Analysis Results

Table 6.
Results of Location Determination Data Analysis using the Priority Matrix Method

Criteria	P	Q	R	S	Q	U	Total
A	0.13368984	0.04793028	0.00617284	0.07262164	0.0136107	0.04829339	0.3223187
B	0.13368984	0.04793028	0.01095181	0.12884485	0.10694122	0.04829339	0.4766514
C	0.02673797	0.04793028	0.00139387	0.01639844	0.06027596	0.04829339	0.20102991

Based on the factor analysis method and priority matrix, it can be seen that the same results show that the location for the construction of the new networked minimarket in Samsam Village, Tabanan, Bali, is at Banjar Dinas Samsam 1 (Jalan Cempaka Putih).

CONCLUSION

Based on the results of the analysis and discussion of the research that has been carried out, the research team can draw several conclusions as follows SWOT Indicators Analysis of networked minimarket development in Samsam Village, Tabanan Regency, Bali, has 4 strength factors (Strength), 2 weakness factors (Weakness), 3 opportunity factors (Opportunities), and 3 threat factors (Threats). The results of the analysis of all SWOT indicators state that the feasibility of building a new networked minimarket in the Samsam Village area, Tabanan Regency, Bali, is still feasible, this can be seen from the results of the SWOT Analysis which is in quadrant 1 (IFAS/SW value 0.9 and EFAS/OT value 0.3). The location for the construction of a new networked minimarket in the Samsam Village area that received the most positive response from both village officials and the village community was in the Banjar Dinas Samsam 1 area (Jalan Cempaka Putih) with a factor analysis score of 80.5 and a priority matrix comparison score of 0.476. Where this score is the highest score when compared with the other 2 alternative locations.

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