

# TOURIST VISIT DECISION MODEL BASED ON COMMUNITY-BASED TOURISM (CBT) AT TOURISM DESTINATIONS

**Husni Muharram Ritonga, Dewi Nurmasari Pane, Sienak Krismawati Hia**

Universitas Pembangunan Panca Budi

Email: [husnimuharram@dosen.pancabudi.ac.id](mailto:husnimuharram@dosen.pancabudi.ac.id)

Received : 20 September 2025

Revised : 01 October 2025

Accepted : 25 October 2025

Published : 09 December 2025

DOI : <https://doi.org/10.54443/ihert.v7i2.529>

LinkPublish : <https://proceeding.unefaconference.org/index.php/IHERT>

## Abstract

This study aims to analyze the influence of service quality, infrastructure, natural tourism attractions, and facilities on visitors' decisions to visit Serambi Deli Beach, Deli Serdang Regency, North Sumatra, with Community-Based Tourism (CBT) serving as a moderating variable. This research employs an associative quantitative approach with a total of 71 respondents. Data were analyzed using multiple linear regression and Moderated Regression Analysis (MRA). The results indicate that all four independent variables have a positive and significant effect on visit decisions, both partially and simultaneously. CBT strengthens the influence of service quality, infrastructure, tourism attractions, and facilities on visit decisions. The findings emphasize that enhancing local community participation is crucial for improving the quality of tourism at Serambi Deli Beach.

**Keywords:** *service quality, infrastructure, tourism attraction, facilities, visit decision, community-based tourism (CBT)*

## 1. Introduction

Indonesia is an archipelagic country with vast marine tourism potential. Deli Serdang Regency, North Sumatra, possesses natural beauty and promising coastal attractions. One of its most popular destinations is Serambi Deli Beach, known for its scenic coastal views, water play activities, sunbathing, and photography spots. Serambi Deli Beach offers various attractions such as sunsets, recreational facilities, seafood culinary experiences, family recreation areas, and natural photo spots. Its strategic location makes it a popular alternative destination for local tourists. However, the development of Serambi Deli Beach remains suboptimal. Based on preliminary observations, the following issues were identified:

- Inconsistent service quality among managers, vendors, and tourism service providers
- Inadequate infrastructure, particularly road access and lighting at night
- Limited tourism facilities such as toilets, parking areas, gazebos, and information centers
- Minimal implementation of Community-Based Tourism despite high community participation potential

Factors such as service quality, infrastructure, tourism attractions, and facilities are considered essential elements influencing tourists' visit decisions (Kotler, 2013; Mill & Morrison, 2012). Moreover, modern tourism literature highlights the importance of the 4A Framework in destination development:

1. Attraction
2. Accessibility
3. Amenity
4. Accommodation

The concept of Community-Based Tourism (CBT) is believed to encourage active community involvement in tourism development so that benefits can be directly experienced by local residents. CBT emphasizes community empowerment, cultural preservation, and strengthening interactions between tourists and local communities.

# TOURIST VISIT DECISION MODEL BASED ON COMMUNITY-BASED TOURISM (CBT) AT TOURISM DESTINATIONS

Husni Muharram Ritonga *et al*

Based on the above phenomena, this study was conducted to analyze the factors influencing tourists' decisions to visit Serambi Deli Beach and to examine the role of CBT as a moderating variable.

## 2. Literature Review

### 2.1 Tourist Visit Decision

The decision to visit is defined as a tourist's process of selecting a destination based on personal preferences, tourism attributes, accessibility, and supporting facilities (Kotler, 2013). According to Laksana (2014), the visit decision reflects a consumer's final choice after evaluating alternative destinations. The factors influencing visit decisions include internal factors (motivation, perception, experience) and external factors (attractions, accessibility, infrastructure, social influence). Mill & Morrison (2012) explain that a tourist's decision-making process consists of five stages: need recognition, information search, evaluation of alternatives, visit decision, and post-visit evaluation. In the context of Serambi Deli Beach, this process is shaped by destination attractiveness, service readiness, and the availability of community-based tourism elements.

### 2.2 Attraction

Tourist attractions refer to the uniqueness, beauty, and distinctive characteristics of a destination that can attract visitors. Attractions may include natural landscapes, cultural heritage, artificial attractions, flora and fauna, or scenic panoramas (Marpaung, 2017). According to Fanny (2017), strong tourist attractions significantly influence tourists' decisions to visit a destination. The more unique and appealing an attraction is, the stronger the motivation for tourists to travel. For coastal areas like Serambi Deli Beach, attractions include sea views, photography spots, seafood culinary areas, and family recreation zones.

### 2.3 Accessibility

Accessibility is the level of ease with which tourists can reach a destination through various transportation modes. It includes road infrastructure, directional signage, public transportation availability, parking areas, and the quality of connected transportation networks (Ayu, 2019). According to Mill & Morrison (2012), accessibility is a major determinant of destination competitiveness. Poor accessibility reduces tourist satisfaction and discourages repeat visits. In the case of Serambi Deli Beach, accessibility issues include uneven road conditions, limited public transportation, and insufficient nighttime lighting.

### 2.4 Amenity

Amenities refer to the supporting facilities provided by a destination to ensure comfort, convenience, and satisfaction for tourists. These include restaurants, toilets, shelters, resting areas, souvenir stalls, information centers, and recreational infrastructure (Tjiptono, 2017). Research by Nelvi Sugenti (2020) indicates that higher-quality amenities directly increase tourist satisfaction and influence visit decisions. Amenities at Serambi Deli Beach need improvement to elevate visitors' comfort and destination competitiveness.

### 2.5 Accommodation

Accommodation is an essential element in tourism, providing lodging options such as hotels, homestays, villas, and guesthouses. According to Murphy (2013), accommodation availability and quality significantly affect tourist movement patterns and length of stay. A destination with diverse and high-quality accommodation options is more attractive to long-stay tourists. Although Serambi Deli Beach is located near several lodging facilities, there is still a need for accommodations oriented toward coastal tourism experience and community-based lodging.

### 2.6 Facilities

Facilities are physical resources provided by tourism managers to support visitors' comfort and experience. These include parking areas, rest areas, gazebos, playgrounds, public toilets, signage, and safety equipment (Tjiptono, 2015). Junensih & Ratnawili (2021) found that adequate facilities significantly influence visit decisions and visitor satisfaction. Limited or poorly maintained facilities can reduce the desire to revisit a destination.

### 2.7 Community-Based Tourism (CBT)

# TOURIST VISIT DECISION MODEL BASED ON COMMUNITY-BASED TOURISM (CBT) AT TOURISM DESTINATIONS

Husni Muharram Ritonga *et al*

Community-Based Tourism is a tourism development concept emphasizing active community participation, empowerment, and equitable distribution of benefits (Suansri, 2016). CBT allows local residents to manage tourism resources, provide services, and maintain cultural and environmental sustainability.

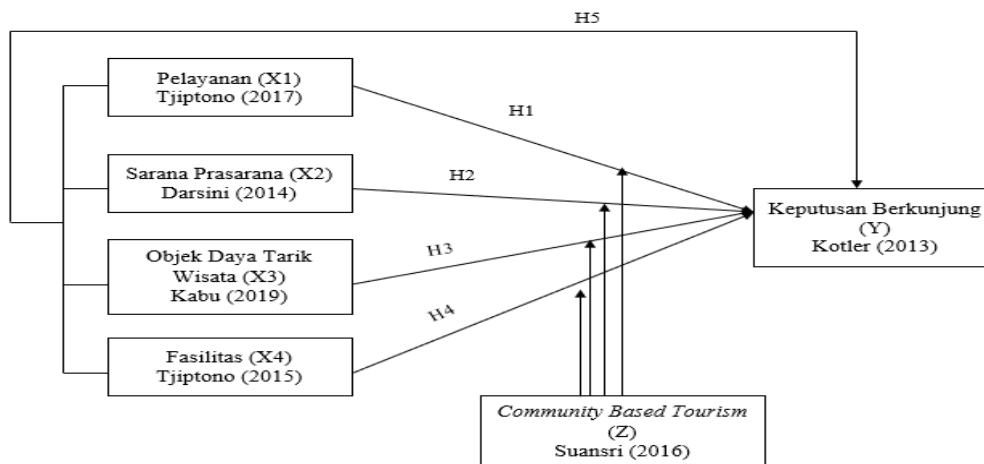
Yaman & Mohd (2014) outline five key CBT principles:

1. Community participation
2. Economic empowerment
3. Cultural preservation
4. Environmental conservation
5. Improved tourist–community interaction

According to Hermawan (2017), CBT strengthens destination quality by enhancing service quality, improving local infrastructure, and fostering a sense of ownership among the community. As a moderating variable, CBT can amplify the effect of service quality, infrastructure, attraction, and facilities on visit decisions.

## 3. Research Framework

Based on the literature review, the research examines four independent variables—service quality, infrastructure, attraction, and facilities—and one moderating variable, Community-Based Tourism. The framework proposes that CBT strengthens the relationship between destination attributes and tourist visit decisions.



### 3.1 Research Design

This study employs an associative quantitative research design aimed at examining the influence of service quality, infrastructure, tourism attraction, and facilities on tourists' visit decisions, with Community-Based Tourism (CBT) serving as a moderating variable. The quantitative approach was chosen to measure the relationships among variables numerically and statistically through regression and moderation analysis.

### 3.2 Population and Sample

The population of this study consists of all tourists visiting Serambi Deli Beach in Deli Serdang Regency. As the exact number of visitors is unknown, the sample size was determined using the Slovin formula, which is appropriate for populations with unknown proportions. Based on the formula, the minimum required sample was 71 respondents, which was achieved through accidental sampling—where researchers select respondents who are easily accessible and meet the criteria as active visitors at the time of data collection.

# TOURIST VISIT DECISION MODEL BASED ON COMMUNITY-BASED TOURISM (CBT) AT TOURISM DESTINATIONS

Husni Muharram Ritonga et al

## 4. Research Results and Discussion

### 4.1 Respondent Characteristics

Respondents were predominantly female, aged 20–30 years, the majority had high school and university education, and came from various types of jobs.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-laki	35	49.3	49.3	49.3
	Perempuan	36	50.7	50.7	100.0
	Total	71	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 20 Tahun	23	32.4	32.4	29.6
	21- 25 Tahun	16	22.5	22.5	52.1
	26 – 30 Tahun	21	29.6	29.6	84.5
	> 30 Tahun	11	15.5	15.5	100.0
	Total	71	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SMA	26	36.6	36.6	36.6
	D3	6	8.5	8.5	45.1
	S1	33	46.5	46.5	91.5
	S2	6	8.5	8.5	100.0
	Total	71	100.0	100.0	

### 4.2 Data Quality Test

The validity test showed that all indicators were valid. A Corrected Item-Total Correlation result of  $>0.3$  indicates that all variables are valid.

Uji Validitas Pelayanan (X<sub>1</sub>)  
Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X1.1	28.7887	7.969	.535	.877
X1.2	28.6901	7.874	.851	.839
X1.3	28.7465	8.992	.366	.889
X1.4	28.7606	8.613	.611	.863
X1.5	28.7606	7.785	.744	.848
X1.6	28.6197	8.696	.554	.868
X1.7	28.7324	8.313	.738	.852
X1.8	28.7183	7.834	.802	.842

Sumber: Hasil Pengelolan SPSS 16.0

Uji Validitas Sarana Prasarana (X<sub>2</sub>)  
Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X2.1	37.1268	14.827	.781	.918
X2.2	37.1268	15.827	.734	.921
X2.3	37.0986	14.804	.676	.925
X2.4	37.1127	14.616	.700	.924
X2.5	37.0704	15.352	.793	.917
X2.6	37.1549	16.104	.697	.922
X2.7	37.0986	15.662	.743	.920
X2.8	37.1408	16.123	.724	.921
X2.9	37.0704	15.352	.793	.917
X2.10	37.1549	16.104	.697	.922

Sumber: Hasil Pengelolan SPSS 16.0

# TOURIST VISIT DECISION MODEL BASED ON COMMUNITY-BASED TOURISM (CBT) AT TOURISM DESTINATIONS

Husni Muharram Ritonga et al

Uji Validitas Objek Daya Tarik Wisata (X<sub>3</sub>)

## Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Y1.1	29.0704	7.352	.585	.836
Y1.2	29.0141	7.443	.568	.838
Y1.3	28.9718	7.342	.653	.829
Y1.4	29.0423	6.927	.718	.820
Y1.5	29.0000	7.114	.426	.867
Y1.6	28.9437	7.482	.568	.838
Y1.7	29.0000	7.257	.626	.831
Y1.8	29.0423	7.270	.726	.822

Sumber: Hasil Pengelolaan SPSS 16.0

Uji Validitas Fasilitas (X<sub>4</sub>)

## Item-Total Statistics

Uji Validitas Community Based Tourism (Z)

## Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Z1.1	20.6901	6.045	.454	.860
Z1.2	20.5493	5.937	.703	.816
Z1.3	20.6056	6.214	.555	.839
Z1.4	20.5775	5.733	.780	.803
Z1.5	20.6197	5.096	.713	.809
Z1.6	20.6197	5.182	.681	.817

Sumber: Hasil Pengelolaan SPSS 16.0

Reliable test shows all indicators. Cronbach's Alpha results > 0.7 indicate all variables are reliable.

Uji Reliabilitas Pelayanan (X<sub>1</sub>)

## Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.876	.883	8

Sumber: Hasil Pengelolaan SPSS 16.0

Uji Reliabilitas Sarana Prasarana (X<sub>2</sub>)

## Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.928	.934	10

Sumber: Hasil Pengelolaan SPSS 16.0

Uji Reliabilitas Objek Daya Tarik Wisata (X<sub>3</sub>)

## Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.884	.890	10

Sumber: Hasil Pengelolaan SPSS 16.0

Uji Reliabilitas fasilitas (X<sub>4</sub>)

## Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.919	.922	10

Sumber: Hasil Pengelolaan SPSS 16.0

Uji Reliabilitas Community Based Tourism (Z)

## Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.850	.859	6

Sumber: Hasil Pengelolaan SPSS 16.0

Uji Reliabilitas Keputusan Berkunjung (Y)

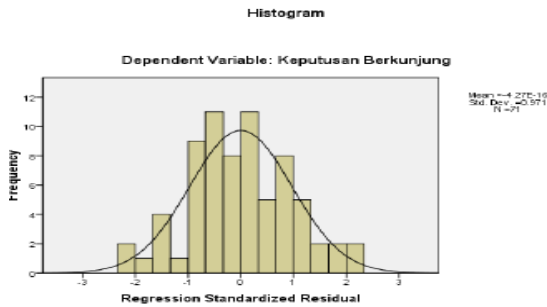
## Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.853	.864	8

Sumber: Hasil Pengelolaan SPSS 16.0

#### 4.3 Classical Assumption Tests

The data is normally distributed, there is no multicollinearity ( $VIF < 10$ ), and there is no heteroscedasticity.



		Regresi Linear Berganda	Regresi Moderasi
		Unstandardized Residual	Unstandardized Residual
N		71	71
Normal Parameters <sup>a</sup>	Mean	.0000000	.0000000
	Std. Deviation	3.05348598	1.38654012
Most Extreme Differences	Absolute	.060	.076
	Positive	.046	.076
	Negative	-.060	-.066
Kolmogorov-Smirnov Z		.506	.637
Asymp. Sig. (2-tailed)		.960	.812

a. Test distribution is Normal.

#### 4.4 Multiple Linear Regression Analysis

Table below summarizes the regression results for the influence of service quality, infrastructure, attraction, and facilities on visit decisions.

Variable	Coefficient	t-value	Sig.
Service Quality	0.245	2.807	0.006
Infrastructure	0.512	6.872	0.000
Tourist Attraction	0.478	5.706	0.000
Facilities	0.391	5.817	0.000

The findings show that:

- Service (X1) has a significant positive effect on the decision to visit ( $t = 2.807$ ; sig. 0.006).
- Infrastructure (X2) has a significant positive effect ( $t = 6.872$ ; sig. 0.000).
- Tourist attractions (X3) has a significant positive effect ( $t = 5.706$ ; sig. 0.000).
- Facilities (X4) has a significant positive effect ( $t = 5.817$ ; sig. 0.000).

All four variables simultaneously have a significant effect ( $F = 12.243$ ; sig. 0.000).

#### 4.5 Moderate Regresi Moderasi (MRA)

Moderation analysis was conducted by including interaction terms between CBT and all independent variables.

Interaction Variable	Coefficient	t-value	Sig.
Service Quality * CBT	0.182	3.114	0.003
Infrastructure * CBT	0.298	4.012	0.000
Attraction * CBT	0.251	3.447	0.001
Facilities * CBT	0.229	3.298	0.002

The results indicate that CBT significantly moderates all relationships between destination attributes and visit decisions. This means:

- Community involvement strengthens the positive effect of service quality, infrastructure, attractions, and facilities.
- The highest moderating effect occurs in Infrastructure \* CBT (0.298), showing that community participation is essential in maintaining the accessibility and availability of supporting infrastructure.



# TOURIST VISIT DECISION MODEL BASED ON COMMUNITY-BASED TOURISM (CBT) AT TOURISM DESTINATIONS

Husni Muharram Ritonga *et al*

These findings support previous research by Hermawan (2017) and Yaman & Mohd (2014), emphasizing that CBT improves service delivery, promotes sustainability, and enhances overall tourist experience.

## 4.6 Discussion

The findings of this study highlight several important points:

### 4.6.1 Service Quality

Good service quality encourages tourists to feel welcomed and appreciated. The significant influence of service quality aligns with Kotler's (2016) theory and is consistent with previous studies (Junensih & Ratnawili, 2021).

### 4.6.2 Infrastructure

Infrastructure is the strongest determinant of visiting decisions. Accessibility, road quality, and mobility ease are crucial components for beach tourism competitiveness.

### 4.6.3 Attractions

The attractiveness of natural landscapes, photo spots, and recreational areas remains the foundation of tourist motivation. Better management can enhance tourist satisfaction.

### 4.6.4 Facilities

Adequate facilities ensure comfort and increase the likelihood of repeat visits. This result is consistent with Tjiptono (2015).

### 4.6.5 Role of Community-Based Tourism

As a moderating variable, CBT significantly strengthens all relationships between destination attributes and visit decisions. This supports the argument that tourism should be community-led to ensure sustainability and equitable benefit distribution.

## 5. Conclusion and Recommendations

### 5.1 Conclusion

Based on the results of data analysis and discussion, several conclusions can be drawn regarding tourist visit decisions at Serambi Deli Beach, Deli Serdang Regency:

1. Service Quality significantly influences visit decisions.  
Good service provided by destination managers, vendors, and local operators contributes positively to tourist satisfaction and encourages them to choose Serambi Deli Beach as a recreational destination.
2. Infrastructure has the strongest influence on visit decisions.  
Accessibility, transportation routes, road conditions, and supporting infrastructure play a vital role in determining ease of mobility for tourists. Improved infrastructure significantly enhances destination competitiveness.
3. Tourist Attractions significantly influence visit decisions.  
Natural beauty, panoramic views, photo spots, and recreational features at Serambi Deli Beach remain key motivators for tourist visits.
4. Facilities significantly influence visit decisions.  
Although many facilities are functional, enhancing the capacity and quality of amenities such as toilets, gazebos, and parking areas can improve visitor comfort.
5. Community-Based Tourism (CBT) significantly moderates the relationship between all independent variables and visit decisions.  
CBT strengthens the effects of service quality, infrastructure, attractions, and facilities, showing that community involvement is critical in managing and developing tourism sustainably.

Overall, this study confirms that Serambi Deli Beach has strong tourism potential that can be optimized through improved services, enhanced facilities, and community empowerment initiatives.

## 5.2 Recommendations

Based on the findings, several practical recommendations are proposed:

1. **Improving Service Quality**  
Managers should provide training to tourism workers, food vendors, and service providers to ensure consistent, friendly, and informative service. Implementation of a standard operating procedure (SOP) for tourism services is recommended.
2. **Enhancing Infrastructure**  
Local government and tourism stakeholders should collaborate to improve road access, lighting, signage, and safety features. A long-term development plan is needed to support infrastructure upgrades.
3. **Strengthening Tourist Attractions**  
Efforts should be made to introduce new attractions, such as coastal education programs, cultural performances, and environmentally friendly recreational activities. Maintaining cleanliness and environmental sustainability is also crucial.
4. **Increasing Facility Capacity and Quality**  
To support visitor comfort, facilities should be upgraded and expanded. These include toilets, resting gazebos, food courts, garbage disposal systems, and standardized parking areas.
5. **Expanding Community-Based Tourism (CBT) Programs.** Stakeholders should empower local communities through:
  - Training programs
  - Tourism product development
  - Homestay management
  - Culinary and creative economy initiatives

Community engagement should be encouraged to promote a sense of ownership and ensure that tourism benefits are equally shared.

## 5.3. Recommendations for Future Research

Future studies could:

- Include larger sample sizes
- Explore additional variables (e.g., digital promotion, destination image)
- Employ qualitative methods to gain deeper insights into community perspectives

## REFERENCES

- Ayu, L. (2019). *The influence of attraction, accessibility, and facilities on visiting decisions at Muarareja Indah Beach, Tegal City* (Undergraduate thesis).
- Christine, A. (2019). *Analisis Pengaruh Kualitas Pelayanan, Sarana Prasarana, Objek Dan Daya Tarik Wisata Alam, Citra Wisata, Dan Kenyamanan Terhadap Keputusan Berkunjung Di Taman Wisata Madiun Umbul Square* (Doctoral dissertation, Universitas Muhammadiyah Ponorogo).



## TOURIST VISIT DECISION MODEL BASED ON COMMUNITY-BASED TOURISM (CBT) AT TOURISM DESTINATIONS

Husni Muharram Ritonga **et al**

Hary Hermawan (2017 ) Pengaruh Daya Tarik Wisata, Keselamatan, dan Sarana Wisata terhadap Kepuasan Serta Dampaknya Terhadap Loyalitas Wisatawan: Studi Community Based Tourism di Gunung Api Purba Nglanggeran May 2017 DOI:10.36276/mws.v15i1.57 Project: Pengembangan Destinasi Wisata Pada Tingkat Tapak Lahan.

Hermawan, H. (2017). The influence of tourism attraction, safety, and tourism facilities on satisfaction and its impact on visitor loyalty: A study of Community-Based Tourism at Gunung Api Purba.

Nelvi Sugenti. (2020). The influence of attraction, service, accessibility, and infrastructure on tourist decisions to visit tourism objects in Padang, West Sumatra.

Purbasari, N., & Asnawi, M. (2014). *Criteria for developing tourism based on Community-Based Tourism*.

Ritonga, H. M., Sanny, A., Rizky, M. C., & Sihombing, A. J. (2024, September). Factors affecting the effectiveness of tourism promotion in kwala serapuh village, langkat. In *Proceeding International Seminar of Islamic Studies* (No. 1, pp. 2553-2559).

Ritonga, H. M. (2023). Potential And Strategy For Natural Tourism Development (Case Study Of Kwala Serapuh Village, Langkat). *PROSIDING UNIVERSITAS DHARMAWANGSA*, 3(1), 804-811.

Ritonga, H. M., Indrawan, M. I., & Sari, D. S. (2021). Hubungan Kualitas Pelayanan Terhadap Kepuasan Wisatawan Serta Dampaknya Dengan Loyalitas Wisatawan: Studi Pada Desa Kota Pari, Kecamatan Pantai Cermin, Kabupaten Serdang Bedagai. In *Scenario (Seminar of Social Sciences Engineering and Humaniora)* (pp. 319-326).

Ritonga, H. M. (2019). *POTENTIAL AND STRATEGY FOR NATURAL TOURISM (CASE STUDY OF KWALA SERAPUH VILLAGE, LANGKAT)*. 804–811.

Sanny, A., Ritonga, H. M., & Putri, I. F. (2023). *Digital Marketing Strategy and Sales of Household Products in Pari Urban Village: A Case Study*. 7 (2), 246–254.

Sugiyono, 2016. *Metode Penelitian Kualitatif, Kuantitatif dan R&D*. Bandung: Alfabeta.