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A model development of community-based and digital tourism village in Belakang Padang

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Abstract---This study aims to develop a community-based and digital tourism village model, then this model will be evaluated for its validity and applicability. The 4-D research methodology is employed as the research method. The subjects of this research are experts, tourism managers, and the community. The six schemes that are implemented yield the following results: 1. Tourist village; 2. Building community-based and digital tourism villages and business plans; 3. Establishing tour packages, which include tour packages for tourist destinations, 4); Community; 5); The official website for the digital tourism village; and 6); The vision and mission of the Belakang Padang District. The outcomes of the product category validation are reliable, applicable, and practical. It can be concluded that this model is feasible to be implemented to develop tourist villages.

Keywords---community-based, digital tourism village mode, validation, practicality.

Introduction

The tourist village is one of the travel industries that has emerged in the travel industry area. The city travel industries include a provincial experience in general, common landmarks, regular attractions, regional traditions, and exceptional elements that can all draw travelers for their benefits. (Joshi, 2012).

Typically, tourist cities grow in rural areas that have extraordinary attributes. The quality of the tourist city is the impeccable normal asset, the uniqueness of the city, the customs and culture of the local environment. These distinctive traits are the sign of a tourist destination that takes an uncommon interest in the operations of the travel sector. Additionally, tourist cities might persuade the local community in an indirect manner to preserve and conserve the city's natural environment and culture (Masitah, 2019). One of the tourist villages is a nature tourism village with features that allow people to explore the beauty of nature. This tourist village tries to invite visitors to return to nature and learn from it about how to coexist peacefully with it so that people can have a high awareness of the importance of nature. (Yusuf Adam Hilman, 2016).

The tourism sector can employ a big number of people, boost income and the economy, and significantly will provide a large contribution to a country. In particular for developing countries like Indonesia, this has prompted many countries to be interested in developing tourism as a development sector. As one of the largest industries in the world, tourism growth is anticipated to be able to strengthen the local economy and raise community welfare (Noor Rochman, 2016). Additionally, tourism is sustainable and can help to protect the environment, culture, and natural resources. According to Hadiwijoyo (2012), sustainable tourism is defined as tourism development that meets visitor demands while also focusing on sustainability, providing opportunities for the next generation to exploit and expand it in line with the social structure already in place.

Belakang Padang is the name of a district in Batam City (Hinterland) located outside of Batam Island and it is one of the tourist villages. This district is the largest sub-area in Batam because it comprises of 6 sub-regions with four cities, namely Pemping, Terong Island, Pecong, and Kasu, are found apart from this district, while Tanjung Sari and Sekanak Raya are located in Belakang Padang. Geographically, Belakang Padang is in a highly advantageous position. It is located between $103^{\circ}51' N$ and $13^{\circ}30' E$, with a total area of 581,548 Km² covers 69,120 Km² of land and 512,428 Km² of water. It used to be the Batam City's management center which residents regularly visited to deal with movement and authoritative issues. However due to due to geographical constraints, the center of government was relocated to Batam Island



Figure 1. Map of Belakang Padang District

As situation analysis, Belakang Padang has local wisdom in the form of archipelagic Malay culture that is still attached to the community which makes it suitable for developing historical and cultural tourism (heritage), typical as a water boundary area, traditional spinning top games, and marine tourism. Involving surrounding home industries such as seashell crafts as souvenirs for visitors. Moreover, this city also has potential in the macro-agricultural sectors of horticulture, fishing, and animal husbandry. The agricultural products of secondary crops in the Belakang Padang are cassava, sweet potato, corn, taro, and peanuts. Meanwhile, vegetable crops consist of chili, cucumber, eggplant, long beans, spinach, kale, mustard greens, bitter melon, tomato, chayote, and turiya. The potential of the fisheries sector consists of marine fisheries and marine aquaculture.

The Belakang Padang district undoubtedly has a lot of potentials, but existing circumstances indicate that there are still a lot of undeveloped tourist destination, slow technological progress, the physical potentials that do not meet the needs of tourist villages yet, the digitalization potential has not been taken into account, the cultural and non-physical potential of tourist villages is still not well-exposed, and tourism promotion which is still inadequate and not yet based on information technology. Furthermore, the absence of measures to establish tourism villages supports the previous situations. There is also a lack of public knowledge about tourist settlements. The level of tourist knowledge competence in the community is still poor. They lack competencies in how to manage homestays in a proper way.

Various strategies can be applied to address these issues such as building community-based and digital tourism villages that can actively contribute to expanding tourism, have economic value, increase the economy, facilitate tourist information, and be proactive in solving tourism issues in Indonesia. Tourism development must be supported by all aspects including physical and non-physical facilities availability such as lodging, accommodation facilities, hotels, villas, restaurants, travel agents, money changers, transportation equipment, and other infrastructure as well as tourism destinations. One of the challenges is the potential for environmental harm brought on by the operation and presence of these facilities.

The choice of the tourism industry movement to grow the industry is made in light of the potential of cities with ecological carrying capacity, long-standing traditions, innate local ways of life, and an emphasis on empowering the local community (Dwiridhotjahjono, Wibowo dan Nuryananda, 2019); (Prihasta dan Suswanta, 2020). The additional crucial factors in the effort to build a travel industry city comprise involvement or support of the surrounding area, the development of the rural nature of the travel industry's products, and investors. Moreover, by involving the village community will have a positive impact on the progress of village development. The key to empowering this community-based village community is the active participation of the local community toward developed activities in the village (Andi Ansar Firman. 2021).

The travel business is certainly not an easy task, especially in a situation that has a sensitive social and cultural climate. In the current era of digitalization, people's

behaviors are changing rapidly due to simple access to observing data in the travel industry. The area of the travel industry must be able to adapt quickly to the extraordinary climate and contests. Therefore, digitization is the best advancement since it allows innovation and data to expand swiftly to a point where actual elements reach a high degree, allowing for the achievement of a more modern age in accordance with the progression of events and mechanical time. Social media can be useful in helping to find information about tourist objects and can increase tourists' interest in traveling. (Abdurrahim, Zakky Zamrudi. 2020).

The digitalization of the travel industry has been inherent in the downstream area or the concept of objection with the purpose of paying attention to the peripheral visitor's displeasure is not yet ideal. The world has significantly changed due to the travel industry's ongoing advancement. Print and digital media are currently used to promote tourism attractions such as newspapers, posters, brochures, radio, television, and the official website (Edson Yahuda Putra. 2018). Travel interest among consumers may rise as a result of the growing impression that social media can be helpful in locating information about tourist sites (Abdurrahim, Zakky Zamrudi. 2020). The idea of an advanced tourist location refers to a destination that is innovative, has intriguing spots to share via online media, and becomes viral through web-based media (Kagungan, dan Rosalia, 2021).

Computerized transformation in general will embrace a wider range of advanced innovations and social change. It can be said to place more emphasis on the individual / people than on advanced innovation. The growing demand for quick administration by the public is what motivates the city to react to developments in computerization. In Indonesia, the computerization of the travel sector is moving very swiftly. The tourism sector in Indonesia also appears to be partially ready for the present, since many businesses involved in the sector have included computerized tourism in their action plans (Agoes, 2020).

According to previous issues, it is necessary to develop a tourist village with the community and digital concepts to provide solutions. Therefore, the development of a community-based and digital tourism village model for sustainable tourism is brought up in this study. This model is expected to be able to create a standardized tourist village based on digital technology, help tourists to find information about tourist destinations, and increase the competencies of the local community to manage tourism attractions. The purpose of this research is to create a community-based and digital tourism village model in the District of Belakang Padang, Batam, Indonesia.

Method

This research is development research so that the products resulting from this research are model books, guide books, and tour packages that meet the valid, practical, and effective criteria. The development model employed is a modified version of a 4-D development model from Thiagarajan, Semmel, and Semmel (1974) that comprises three stages: the definition stage, the design stage, and the

development stage. For its implementation, this research is carried out only to the stage of model validity and practicality.

Five experts are involved as research subjects including model experts, vocational experts, tourism experts, and linguists. Then the developed model is then put to the test on a limited number of communities to determine its practicality. Questionnaires about validation and applicability as well as documentation are employed as research instruments. The instrument validation and product practicality can be seen in table 1.

Table 1. Product's instruments validation

No.	Instrument Name	Assesment Indicators
1	Expert's validation	Model books A guide book for building a tourist village and a business plan
2	Practicality Based on the Assessment of the Tour Manager	Tour Package Guide

Results and Discussions

The basic foundation for developing a model framework for a community-based and digital tourism village model for sustainable tourism based on the travel industry varies according to the local environment. Even the travel industry is said to have an extraordinary triggering energy, which makes the surrounding area undergo a transformation in a different light. The problems that usually occur comprise a lack of work aimed at promoting municipal tourism industries, inadequate public knowledge of tourist cities, dearth of regional information on the tourism business, and and a lack of work aimed at promoting municipal tourism industries. In the current era of digitalization, technolgy is required to support tourism development, including online tourism development and viral media transfers through web-based media (Ge, 2019). Technology can help tourists to find information about tourist attractions which may encourage more people to travel (Abdurrahim, Zakky Zamrudi. 2020). Additionally, a strategy for planning tourism development that is focused on empowering the local community is required, with the local people's involvement and participation being prioritized as the development's subject. In this study, the developed community-based and digital tourism village model developed adopts the sustainable tourism model, tourist village, community, and digitization as shown in table 2.

Table 2. Comparison with the previous model

(Yacob, Erida, dan Kasuma, 2020).	Permatasari, I., Widiati, I. A. P., & Suryani, L. P. (2019).	Community-based tourism village model	Safrudin Rais (2022)	Novelty
Tourism impact	Religious values	Development strategy	Tourist village	Establishing tour packages.
Local community	The living culture in the community	Destination selection	Building a community-based and digital tourism village and providing a business plan	Creating a scheme and business plan to build a community-based and digital tourism village
Rural tourism	Community	Development system	Establishing tour packages.	
Tourism visiting Intention	Sustainability and environmental quality	Excellent product of agroindustry	Community	
	Sustainable tourism development		Digital-based tourism village official website	
			Vision and mission of Belakang Padang District	

The location of the model development variables incorporates a number of pertinent studies, advantages and slices of the rural visiting intention tourism model, the tourism village development model, the community-based agro tourism model, earlier digital concepts. It is envisaged that the contribution of this finding is able to tourism problems in the region of Belakang Padang in accordance with visitor desires and current tourist demands. While the desired achievement is to establish a community-based and digital tourism village model for sustainable tourism, improve the quality of tourist attractions, and create a valid, practical, and effective model. The conceptual framework of the developed model is illustrated in Figure 2.

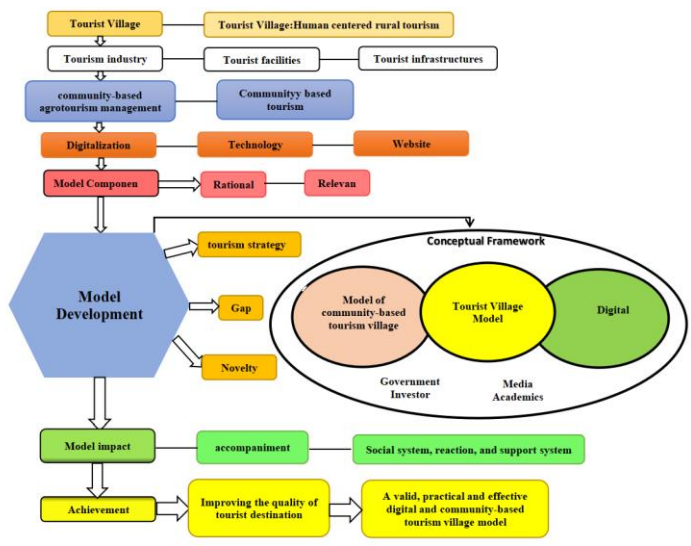


Figure 2. Conceptual Framework of Community-based and digital tourism village model

In detail, the community-based and digital tourism village model scheme consists of 1). Tourist village, 2). Building a community-based and digital tourism village as well as a business plan, 3). Establishing tour packages that consist of tour packages for tourist destinations, 4). Community, 5). Digital-based tourism village official website, 6). Vision and mission of Belakang Padang District. The schematic of the developed model can be seen in Figure 3.

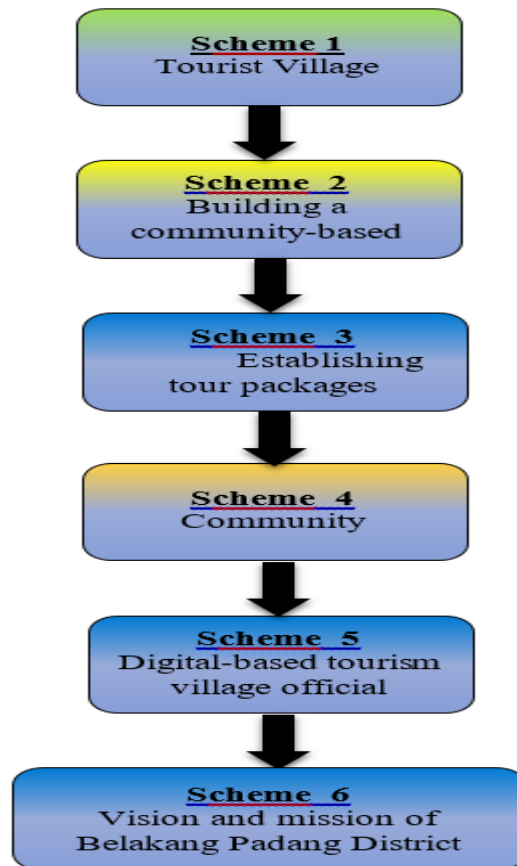


Figure 3. Scheme of the community-based and digital tourism village model

Validation Results

The Focus Group Discussion (FGD) activity is established to discuss the development of the tourism village model and research products, then the activity continued with validation by a validator consisting of 5 experts, namely model experts, evaluation experts, tourism practitioners, linguists and vocational experts, as follows:

The Validity of Model Book

Model Book

The validator's assessment of the model book includes several aspects such as schemes, model stages, content, and language. The results of the validators' brief assesment of the model book's validity is shown in table 3.

Table 3. Validation results of Model Books

No.	Aspects	Validator's appraisal					Ss	Aiken's V	Explanation
		V	V	V	V	V			
		1	2	3	4	5			
1	Rasional Model								
	Item 1	4	4	5	5	4	17	0,850	Valid
	Item 2	4	4	5	4	5	17	0,850	Valid
	Average score						17	0,850	Valid
2	Model Supporting Theory								
	Item 1	4	4	4	5	4	16	0,800	Valid
	Item 2	5	4	4	4	4	16	0,800	Valid
	Item 3	4	4	4	4	4	15	0,750	Valid
	Item 4	5	5	5	4	4	18	0,900	Valid
	Item 5	4	4	4	5	4	16	0,800	Valid
	Item 6	5	5	5	4	4	18	0,900	Valid
Average score						17	0,825	Valid	
3	Model Characteristic								
	Item 1	4	5	5	5	5	19	0,950	Valid
	Item 2	5	5	4	4	5	18	0,900	Valid
	Item 3	5	4	3	5	5	17	0,850	Valid
Average score						18	0,900	Valid	
4	Model Scheme								
	Item 1	5	5	4	4	5	18	0,900	Valid
	Item 2	4	3	4	5	4	15	0,750	Valid
	Item 3	5	5	4	4	5	18	0,900	Valid
	Item 4	5	5	5	4	4	18	0,900	Valid
Average score						17	0,863	Valid	
5	Social System								
	Item 1	4	5	4	5	4	17	0,850	Valid
	Item 2	4	4	5	4	5	17	0,850	Valid
	Item 3	5	4	5	4	4	17	0,850	Valid
	Item 4	4	5	4	5	4	17	0,850	Valid
Item 5	5	4	5	4	4	17	0,850	Valid	

	Item 6	4	4	4	5	5	17	0,850	Valid
	Average score						17	0,850	Valid
6	Reaction Principle								
	Item 1	4	4	5	4	4	16	0,800	Valid
	Item 2	4	5	4	4	4	16	0,800	Valid
	Item 3	4	5	4	5	4	17	0,850	Valid
	Item 4	4	4	5	4	5	17	0,850	Valid
	Item 5	4	5	4	4	4	16	0,800	Valid
	Item 6	5	4	4	4	5	17	0,850	Valid
	Average score						17	0,825	Valid
7	Support System								
	Item 1	5	3	5	4	4	16	0,800	Valid
	Item 2	5	4	4	5	4	17	0,850	Valid
	Item 3	4	5	5	5	3	17	0,850	Valid
	Item 4	5	5	5	4	5	19	0,950	Valid
	Average score						17	0,863	Valid

According to the model book's validation results, the total average score of the validators for the model book's evaluation, which is 0.863, is categorized as valid therefore it is allowed for progression to the limited trial stage. The validation results also can be seen in the graph illustrated in Figure 4.

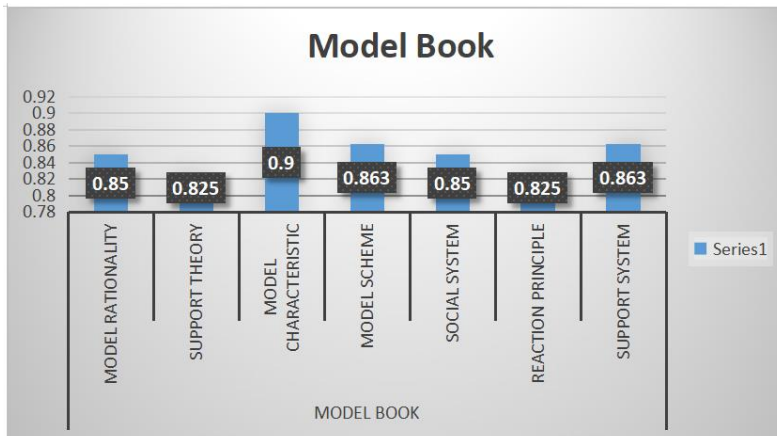


Figure 4. Validation Result of Model Book

The validity of the guidebook for establishing tourism villages and business plans

Guidebook for establishing tourism villages and business plans

The guidebook for establishing village tourism and business plans is subject to validation on a number of fronts, including writing style, language use, introduction, and content. The results of validators' brief assessment is presented in Table 4.

Table 4. Validation results of guidebook for establishing tourism village and business plans

	Aspects	Validator's appraisal					Ss	Aiken's V	Explanation
		V	V	V	V	V			
		1	2	3	4	5			
1	Writing Style								
	Item 1	4	3	3	5	5	15	0,750	Valid
	Item 2	3	4	5	4	5	16	0,800	Valid
	Item 3	4	4	5	5	5	18	0,900	Valid
	Item 4	5	4	4	5	5	18	0,900	Valid
	Item 5	4	5	5	5	5	19	0,950	Valid
	Item 6	5	4	5	5	5	19	0,950	Valid
	Average score						18	0,875	Valid
2	Use of Language								
	Item 1	5	5	5	4	5	19	0,950	Valid
	Item 2	5	5	3	5	5	18	0,900	Valid
	Item 3	5	5	5	5	4	19	0,950	Valid
	Average score						19	0,933	Valid
3	Introduction								
	Item 1	4	4	5	5	5	18	0,900	Valid
	Item 2	5	3	5	5	4	17	0,850	Valid
	Item 3	5	3	4	5	4	16	0,800	Valid
	Item 4	5	5	4	5	5	19	0,950	Valid
	Item 5	5	4	5	3	5	17	0,850	Valid
Item 6	4	5	5	4	4	17	0,850	Valid	
	Average score						17	0,867	Valid
4	Content								
	Item 1	4	5	5	5	5	19	0,950	Valid
	Item 2	5	4	4	4	4	16	0,800	Valid
	Item 3	3	5	4	5	4	16	0,800	Valid
	Item 4	4	3	5	5	4	16	0,800	Valid
	Item 5	4	4	5	4	4	16	0,800	Valid
	Item 6	5	4	4	4	5	17	0,850	Valid
	Item 7	4	5	5	4	4	17	0,850	Valid
	Item 8	4	4	5	4	4	16	0,800	Valid
	Item 9	4	4	5	5	4	17	0,850	Valid
	Item 10	4	5	4	5	4	17	0,850	Valid
	Average score						17	0,835	Valid

From the validation results of the guidebook for establishing village tourism and business plan, it can be seen that the total average score from validators is defined as the valid category with the score is 0.835 so the next process will be limited trials. The overall result for this validation is also presented in a graph in figure 5.

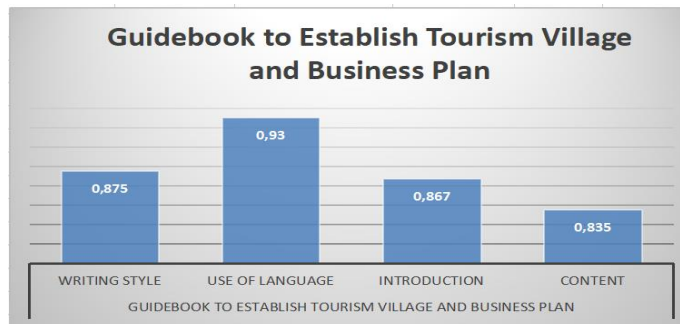


Figure 5. Validation results of guidebook for establishing tourism village and business plans

The Validity of Package Tour Guidebook

Tour Package Guidebook

The validator's assessment of the tour package guide book covers several aspects such as the writing style, language use, introduction, and content aspects. The results of a quick assessment of the validity of this guidebook is presented in table 5.

Table 5. Validation Results of Tour Package Guidebook

No.	Aspects	Validator's appraisal					Ss	Aiken's v	Explanation
		V	V	V	V	V			
		1	2	3	4	5			
1	Writing Style								
	Item 1	4	5	4	4	4	16	0,800	Valid
	Item 2	4	4	4	5	4	16	0,800	Valid
	Item 3	4	5	4	3	4	15	0,750	Valid
	Item 4	4	4	4	4	5	16	0,800	Valid
	Item 5	4	5	4	4	5	17	0,850	Valid
	Item 6	4	4	4	5	4	16	0,800	Valid
Average score						16	0,800	Valid	
2	Use of Language								
	Item 1	4	5	4	5	4	17	0,850	Valid
	Item 2	5	4	4	5	4	17	0,850	Valid
	Item 3	4	4	5	4	4	16	0,800	Valid
Average score						17	0,833	Valid	
3	Introduction								
	Item 1	4	5	4	4	5	17	0,850	Valid
	Item 2	4	5	5	4	4	17	0,850	Valid
	Item 3	4	5	5	4	4	17	0,850	Valid
	Item 4	5	4	4	4	5	17	0,850	Valid
	Item 5	4	4	5	4	4	16	0,800	Valid
	Item 6	4	4	5	4	4	16	0,800	Valid
Item 7	5	4	4	4	4	16	0,800	Valid	
Average score						17	0,829	Valid	
4	Content								
	Item 1	4	4	4	5	4	16	0,800	Valid
	Item 2	4	5	4	4	4	16	0,800	Valid
	Item 3	4	4	5	4	4	16	0,800	Valid
	Item 4	4	4	5	4	4	16	0,800	Valid
	Item 5	5	4	4	4	5	17	0,850	Valid
	Item 6	4	4	5	3	5	16	0,800	Valid
	Item 7	5	3	5	4	5	17	0,850	Valid
	Item 8	5	4	4	4	5	17	0,850	Valid
Item 9	4	4	5	4	4	16	0,800	Valid	
Average score						16	0,817	Valid	

According to validation results of the package tour guidebook, it can be concluded that the total average score from validators is defined as the valid category with the score is 0.817 so the next process will be limited trials. The overall result for this validation is also presented in a graph in figure 6.

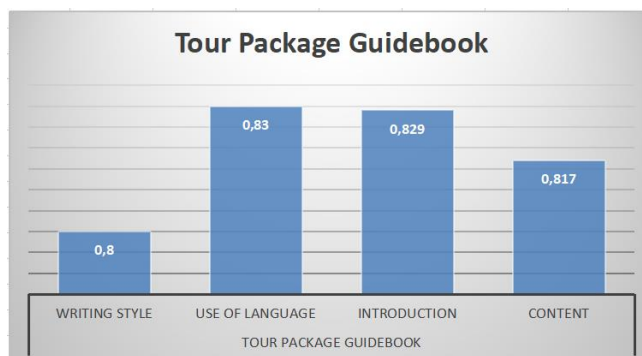


Figure 6. Validation results of tour package guidebook

Product's Practicality from Tourist Managers/Tour Guides Perceptions

In terms of the product's practicality, the perception of three managers/tour guides as the subject test is considered in this assessment. If the tourist village model can be applied in the field with little or no modification, it is deemed practicable. Table 7 shows the results from this assessment.

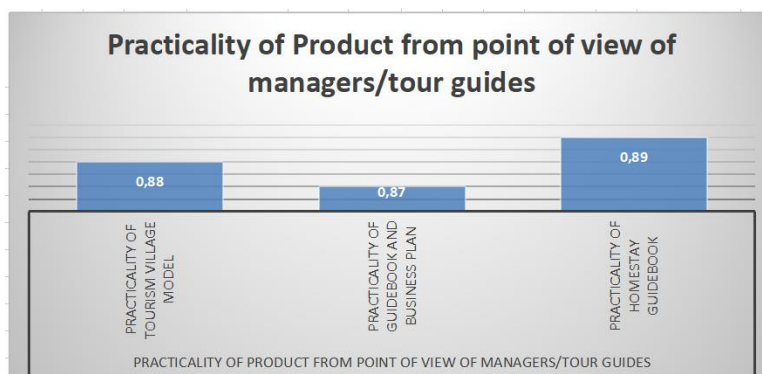


Figure 7. Practicality test results from managers/ tour guides

Practicality of Model Book

If the expert or practitioner claims that the tourist village model book can be used in the tourism sector with little to no revision therefore it is deemed to be practical. The model book has an average practicality score of 0.88. This score is considered practical and categorized in the "practical" classification. If there are some recommendations coming from managers so the practical test will be revised.

Practicality of Guidebook

The guidebook to establish a tourism village and business plan can be considered practical if there are statements from experts stating that this book can be used in the tourism sector with small revisions or without it at all. From the test result, it can be seen that the practicality of this book is considered practical with the score is 0.87.

Practicality of Tour Package Guidebook

The package tour guidebook is defined as a practical category if experts state that this guidebook can be utilized in the tourism sector with small revision or not at all. The average score of this assesment is 0.89 and also can be categorized practical.

Conclusions

According to the findings of the development of a community-based and digital tourism village in the Belakang Padang District, Batam, Indonesia, the model's scheme is comprised of the following, 1). Tourism village, 2. Building community-based and digital tourism villages and business plans, 3. Establishing tour packages, which include tour packages for tourist destinations, 4. Community, 5. The official website for the digital tourism village, 6. Vision and mission of Belakang Padang District. Furthermore, the validation results of several assessments that have been carried out such as community-based and digital tourism village model book products, the guide book for establishing tourist villages and business plans, and the tour package guide book are considered practical. In terms of the product's practicality, the perception received from managers/tour guides is also considered in this assessment. The findings indicate that the model is valid and practical so that it is feasible to use.

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