



# Evaluation of Tourism Business Activities and Multi-sectoral Income Optimization: Case in Pagaralam City, South Sumatra

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**Abstract.** The motivation behind this assessment study was to learn the variables that assistance or block the enhancement of nearby income in the travel industry area, both formal and casual, in Pagaralam City by deciding the utilization of room and the spatial construction of the district. This study is significant because it examined the state of Pagaralam, particularly its use of space and spatial structure, with the goal of increasing income in both the formal and informal sectors. Initial observation, data collection, data analysis, and drawing conclusions were the stages of the study. This study utilized the contextual analysis strategy. This kind of research used a combination of quantitative and qualitative methods. Methods used to collect data include: techniques for in-depth, semi-structured interviews, the selection of informants, and expert analysis. The Financial Ratio and BMC were the methods of data analysis that were utilized in this study. The results showed that the comparison average of LOSR in the tourism sector to total LOSR was 0,0040 for the 2019 period, 0,0020 for the 2020 period and 0,0046 for the 2021 period. The solution can be drawn for optimizing regional income through the creation of a comprehensive tourism with scientific modeling of GIS.

**Keywords:** BMC · LOSR · tourism · GIS

## 1 Introduction

The Covid-19 pandemic has impacted all aspects of life, especially for Indonesia. Many sectors have been affected by the Covid-19 pandemic, one of which is the economic sector. The economy as the driving wheel of people's lives is supported by various aspects, one of which is SMEs. Small and medium-sized organizations (SMEs) in Indonesia have been seriously impacted by the Coronavirus pandemic, especially in the travel industry. This sector is experiencing decline in both small and large entrepreneurs due to unstable income.

One area that is very likely to support the economy of a region is tourism. In improving the region's economy, of course independence from the surrounding community is essential so that the achievement targets that have been set can be achieved. The tourism

sector is now showing a very significant development, It is evident from the large number of individuals who consider traveling to be an essential need that must be satisfied.

The community and the government will benefit greatly from the growth of tourism in a region. However, the development will encounter a number of issues that make it challenging and even harmful to the community if it is not properly planned and managed. Endeavors to guarantee that travel industry can foster well and reasonably and carry advantages to people as well as limit the pessimistic effect that might emerge, the travel industry improvement should be gone before by a top to bottom review that is by leading examination on all wellsprings of help.

The intended resources consist of natural resources, cultural resources, and human resources. Kota Pagaralam is one of the most attractive tourist areas in Indonesia, Kota Pagaralam is part of the South Sumatra region. The main target of the community when visiting Pagaralam City is to travel. Based on the beauty of the landscape, it is hoped that Pagaralam City will have good income growth in the formal and informal sectors. The growth of the tourism industry contributes to an increase in Pagaralam City's LOSR resources in terms of hotel, entertainment, restaurant and hotel taxes retribution. The Realized Budget (RB) shows that Pagaralam Town is contributed by the tourism sector and it is also proven that the average LOSR contribution in Pagaralam Town's tourism sector over the past three years is not too high which is only 2.5%.

The writer's formulation of the problem that will be presented is based on the above description of the background, (1) how is the Utilization of Space and Structure of the City of Pagaralam implemented?; (2) which aspects of Kota Pagaralam's formal and informal sectors support or hinder regional natural income optimization?

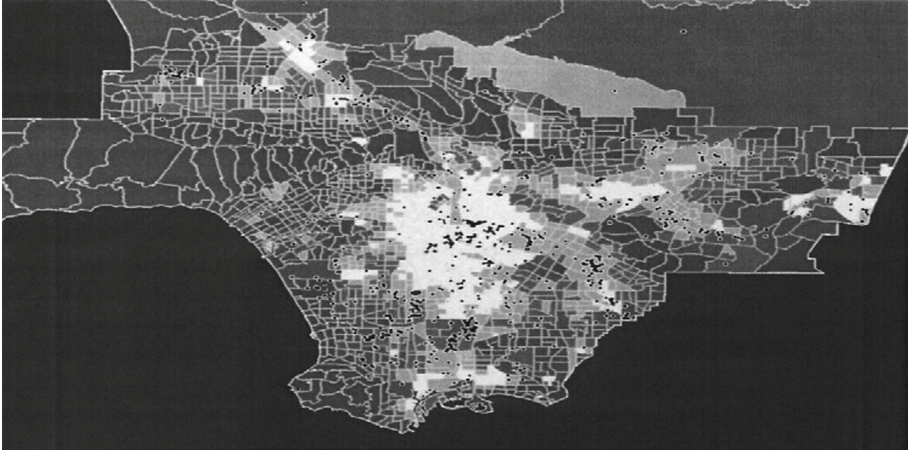
The scope of research proposed in this study is related to the Evaluation of Space Use and Regional Spatial Structure in the form of Geographical Information Systems. This research is limited to the administrative area of Kota Pagaralam Government. The tourism industry, which influences Pagaralam City Regional Finance Agency's management of local revenue, is the primary focus of this study. The objectives of this innovation assignment study are (1) to evaluate the City of Pagaralam Government's use of space and regional spatial structure; (2) Recognizing the aspects of Pagaralam City's formal and informal sectors that both help and hinder the optimization of the Tourism Sector District's natural income.

Seen from the background, the study's formulation of the problem and objectives demonstrate its significance because this study is able to review the condition of Kota Pagaralam, especially regarding the use of space and the structure of the region in order to be able to increase income in the formal and informal sectors. Subsequent paragraphs, however, are indented.

## **2 Literature Review**

### **2.1 Local Own-Source Revenue (LOSR)**

Local income in accordance with Law No. 28 of 2009 is a regional financial source extracted from the relevant region which consists of regional tax revenue, regional retribution revenue, revenue from the management of separate regional wealth and other legitimate regional income. Sources of district income according to the Law of the



**Fig. 1.** Example of GIS [3]

Republic of Indonesia No. 32 of 2004, namely local tax revenue; regional retaliation results; the results of regionally owned companies and separate regional wealth management results; other valid regional income [1]. The following items which are included in regional original income in the field of tourism are restaurant taxes; hotel tax; entertainment tax; compensation for tourism/sports venues; accommodation compensation, and villas.

## **2.2 Geographic Information System (GIS)**

Globally, GIS is a rapidly expanding system. GIS or in Indonesian called GIS (Geographical Information System) is not a system that only works to create maps, but is an analytical tool capable of solving spatial problems automatically, quickly and accurately, because it is made to collect, store, and study things and phenomena where the location of the object is important [2]. GIS is also a system/tool to create a digital map by inserting attribute data/information/table data from the map, so that from each map there is a link to its attribute data. Various types of attribute data can be created according to our needs such as area size, land cover type, population density, home/office address, if necessary the name of the village head and its RT can also be included in the attribute data (Fig. 1).

## **2.3 Business Model Canvas**

The Business Model Canvas (BMC) is a business model that aims to map a strategy for building a strong business out of nine blocks of activities, so that it can win the competition and be successful in the long term [4]. The BMC scheme is described as follows:

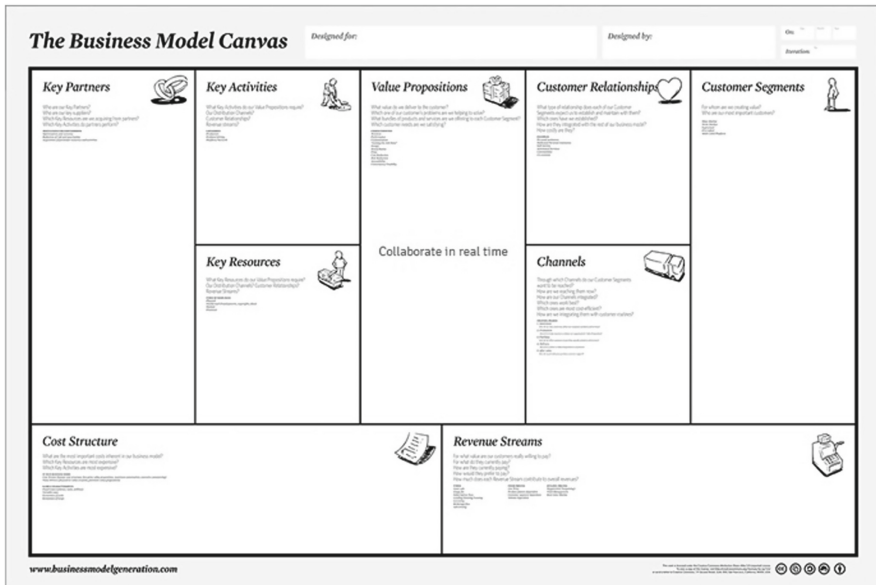


Fig. 2. Schematic of BMC [5]

This line of research began by looking at the concept of tourism as a form of observation. Based on this data, it can be evaluated using BMC and financial ratios on LOSR. The results of the assessment can be used as urban planning using the Geographical Information System (Fig. 2).

### 3 Research Method

The government of Pagaralam City conducted this study. The focus of this study is, among other legitimate provincial revenues, on provincial tax revenues, provincial levies, revenues from provincially owned companies and segregated provincial wealth management. Research financial document data provided by Pagaralam City.

Regional Finance Agency. The research design uses the case study method. Types of Research This type of research combines qualitative and quantitative methods. [6]. Methods of quantitative research are methodical scientific investigations of parts, phenomena, and their connections. Qualitative research methods are methods used to conduct research on the state of natural objects and make the researcher the main instrument [7]. The research stage of this innovation assignment begins with the following activities:

#### 3.1 Stage of Data Collection

This activity is conducted through Observation, Documentation, and Interviews. Observations are made with blank observations. Documentation is carried out by taking financial data at the regional Finance agency. Expert informants were questioned in depth and semi-structured during the interviews.

### 3.2 Stage of Data Analysis

Data analysis was conducted using the Business Model Canvas. This model is developed with the integration of spatial planning to determine the problem to be evaluated.

### 3.3 The Conclusion Stage

This stage is done by drawing conclusions from the results of data analysis. The results of this conclusion will be explicitly included in the targeted output. The technique and process of data collection in this study uses several techniques to collect data, among them (1) Interview In this study, the method of interviewing was a semi-structured interview [8]. Determining the subject to be interviewed and the location of the study using expert analysis techniques [9]; (2) Documentation, the documents used in this research are City Spatial Data, Realized Budget (RB); (3) Observation, observation is done by directly observing the research object. A data collection tool that can be used in conducting observations is to use an observation form with an open observation type [10].

### 3.4 Technical Data Analysis

**Geographic Information System (GIS).** GIS is a database system that has the unique capability of working with a set of work operations and spatial reference data (spatial). to put it another way, a geographic information system, also known as a gis, is an information system that was created to work with data representing spatial reference or coordinates. [11]. All basic geographic data is first converted to digital data, before being entered into the computer. There are two basic types of geographic data, namely spatial data and attribute data. information from GIS is displayed in the form of maps, tables, charts, pictures, graphs and calculation results (Fig. 3).

**Business Model Canvas.** The business model canvas (BMC), a business model, is made up of nine blocks of business activity areas. It works well because it maps out a plan for building a strong company that can beat the competition and stay in business for the long haul. As a model to evaluate [13]. Visually bmc can depict the relationship of each business component. The business model canvas has 9 model blocks that make up a business unit.

### 3.5 Interpretation Techniques and Drawing Research Conclusions

Techniques used in interpreting and drawing conclusions using coding techniques. The use of coding techniques to process qualitative data from interviews. The researcher uses the coding method to get a complete picture of the data using qualitative data analysis and methods for collecting and making inferences from the psychological analysis of the data. [14]. Email correspondence, field notes from participant observations, journals, documents, literature, artifacts, photographs, videos, websites, and interview transcripts are all examples of data formats. Coding is a step between collecting data and more general data analysis because of this. As a result, coding is a step between data collection and more general data analysis [15]. The three methods of coding used are as follows: selective coding, open coding, and axial coding.

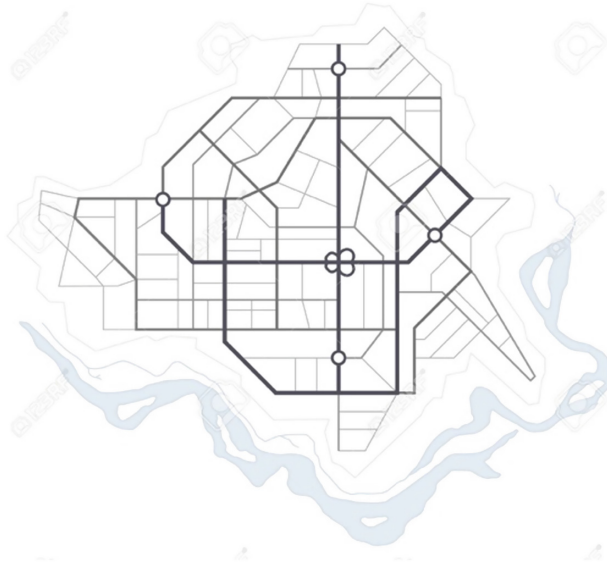


Fig. 3. Spatial Planning [12]

## 4 Result and Discussion

### 4.1 Results

**LOSR Analysis.** The results of this applied research data analysis show the results as in Table 1.

Table 1 shows that the LOSR realization research in Pagaram City is classified as good because it has an average of more than 100% of the set target. The percentage of realization in detail is 171.74% in 2019, 141.67 in 2020 and 109.97 in 2021.

When compared to other LOSR sources, the tourism industry's overall contribution to LOSR is still very small. Table 2 shows a comparison between the description of the LOSR in the tourism industry and the total LOSR, as well as a comparison between the details of the LOSR and the total LOSR.

Based on the display in Table 2, information is obtained that the average comparison with the total LOSR is 0.0040 in 2019, 0.0020 in 2020, and 0.0046 in 2021. This comparison shows a small contribution to the total LOSR.

**BMC Analysis.** In BMC analysis, this research can produce 9 related components in bmc. The components that can be analyzed are:

**Customer Segments.** The Customer Segment component refers to the users and users to be served in the program. Through the results of observation it is known that the tourism business that will be served are tourists. Tourists usually come from outside Pagaram City. This customer segment generally does not have a good understanding of information about the main destinations and tourist accommodation that can be chosen in Pagaram City.

**Table 1.** Realization of LOSR in the Tourism Sector

Description of Local Own-sources Revenue in the Tourism Sector	Percentage of Local Own-sorce Revenue Realization		
	2019	2020	2021
Hotel Tax	141,27%	171,48%	92,23%
Restaurant Tax	152,88%	155,99%	129,25%
Entertainment Tax	95,33%	140,17%	140,18%
Advertisement Tax	99,36%	153,99%	100,32%
Tax Average	122,21%	155,40%	115,49%
Retribution for Use of Regional Wealth	733,08%	157,77%	83,40%
Special Parking Retribution	91,25%	100,00%	133,33%
Retribution for Lodging/Villa	0,00%	0,00%	102,05%
Recreational and SportsPlace Retribution	111,65%	258,83%	107,98%
Retribution for Sales of Regional Business Production	120,80%	136,80%	101,00%
Average of Retribution	211,36%	130,68%	105,55%
Average of Local Own-source Revenue Realization	171,74%	141,67%	109,97%

Sources: Processed Data, 2022

**Table 2.** Comparison of LOSR acquisition in the tourism sector for the period 2019–2021

Description of LOSR	Comparasion of LOSR					
	2019		2020		2021	
Hotel Tax	0,2270	0,0082	0,1625	0,0029	0,1564	0,0065
Restaurant Tax	0,0842	0,0031	0,1182	0,0021	0,1096	0,0045
Entertainment Tax	0,0140	0,0005	0,0133	0,0002	0,0134	0,0006
Advertisement Tax	0,0593	0,0022	0,0973	0,0017	0,0851	0,0035
Retribution for Use of Regional Wealth	0,5048	0,0183	0,4435	0,0080	0,0884	0,0037
Special Parking Retribution	0,0302	0,0011	0,0455	0,0008	0,0407	0,0017
Retribution for Lodging/Villa	0,0000	0,0000	0,0000	0,0000	0,4045	0,0168
Recreational and SportsPlace Retribution	0,0666	0,0024	0,0981	0,0018	0,0870	0,0036
Retribution for Sales of Regional Business Production	0,0139	0,0005	0,0216	0,0004	0,0150	0,0006
Average Value	0,1111	0,0040	0,1111	0,0020	0,1111	0,0046

Sources: Processed Data, 2022

*Value Proposition.* This component can be interpreted as a product or solution to be delivered to the customer that has benefits or benefits. Good information about the tourism profile and accessibility will attract tourists because it will reduce misinformation for tourists. Tourists need software that can support their tourism activities starting from transportation, culinary, accommodation and the tourist destination itself.

*Channels.* Channels will explain how to deliver the Value Proposition to consumers. In this case, the information user is a tourist. The dissemination of GIS facilities and use can be done through YouTube and social media owned by the community and local government.

*Customer Relations.* The relationship that is expected to be established with tourists is an emotional relationship through display on GIS and clarity of coordinates. Through good geographic information and common urban spatial proposals, it will be a good tourism experience for users that in the long run will increase the income of various sectors.

*Revenue Streams.* The income channel that will be generated from customers who will travel is more tourists, more people need information about the geography of Pagaralam City. Through high tourist visits then hopefully the economy of Pagaralam City will improve.

*Keys Resources.* The resources needed to produce Value Propositions are to collaborate outside the Pagarlam City Government, namely with the private sector, universities and human resource training owned by the Pagarlam City Government.

*Keys Activities.* This component contains activities that support the creation of institutional cooperation, provide human resources Value Propositions. The possible actions, as determined by the outcomes of interviews and observations, are to establish to manage and implement the design of the main activities.

*Major Partners.* Key Partners describes partners and suppliers who play a role in the process of creating a product or solution. In this component, the city government needs to collaborate with other parties that have the capabilities and technology related to GIS manufacturing.

*Cost Structure.* The cost structure that arises during the production process of this product if collaboration between universities is carried out is relatively minimal and does not even incur costs. This is because universities need partners to implement knowledge for their students and the City Government can act as a beneficiary

## **4.2 Discussion**

According to the aforementioned data analysis, the tourism industry's contribution to LOSR results is not significant. This is because the nominal income is small. The reason for the tourism sector's lack of acceptance of LOSR is due to the lack of proper management. In addition, the fencealam city also does not have a geographic information system



that tourists can use to obtain adequate information. Information in tourism, especially top destinations is very important. This is also supported by a study conducted by [16] with the purpose of the study so that tourists can easily obtain tourism information in the city of Bandung, a web-based geographic information system was created using Google Maps API and PHP. GIS in tourism has benefits as a channel that provides comprehensive information about an area. Research with almost identical results was conducted by [17]. The study revealed that GIS is used to manage tourism promotion in sub-Saharan Africa. BMC as an assessment tool in business can be used as an approach in strategy implementation at Mt. Merbabu National Park. The same thing was also stated in the results of the study conducted by [18]. Tourism management analyzed by BMC in this study results in an analysis of 9 components that can be used as a reference for tourism development. Other researchers who have used BMC as an evaluation model are [19]. This research was conducted to design an E-platform for sailing tourism. This applied study's findings are supported by those of the previous study.

The geographic information system is an effort to solve the problem of disinformation related to a region [20]. GIS can be a solution to optimize income in the tourism sector. The same research that has been done by GIS can be a solution to optimize income in the tourism sector. A similar study was conducted by [21] The result of the study is that GIS can be used to facilitate access to tourist accommodation. Based on the discussion in this study, GIS is a solution that can be applied as an effort to optimize tourism sector income and use urban spatial planning in Pagaralam Town.

## 5 Conclusion

Through fund analysis and discussion review, it can be concluded that efforts to utilize space and regional space planning have been implemented by the Pagaralam City Government. Nevertheless, the acceptance of LOSR in the tourism sector in Pagaralam Town is still not optimal due to the absence of GIS. Pagarlam City Government has the opportunity to improve management by using GIS in collaboration with universities as an information solution for leading tourist destinations. Through GIS applications, it is hoped that the government will be able to take advantage of spatial planning and urban tourism areas more optimally. Implications of future studies are expected to increase the acceptance of Pagaralam City's LOSR.

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