

# Optimization Model of Tourism Android Application Based on Madura Local Wisdom as a Persuasive digitalization for Global Tourists

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## ABSTRACT

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Madura has natural, cultural, religious, and culinary attractions, this adds to the wealth of local wisdom of Madura to attract visitors from outside Madura. Bangkalan Regency itself has a lot of tourism, currently still under development by each village pokdarwis (kelompok sadar wisata) and assisted by the local tourism office, but this is not optimal. Such as tourism development through promotion and optimization has not been maximized. Looking at the background, the researcher wants to know, analyze, and dig deeply: 1) The Optimalization model of the application in Android destination-based traveler local wisdom as persuasive digitalization for tourism global, 2) Why optimization of application in Android destination-based traveler local wisdom as digitalization persuasive for the important tourism global development. The subjects are village tourism managers, village heads, and tourism offices. The objects of the optimization in application android destination-based traveler local wisdom as persuasive digitalization for tourism global. Data collection methods through observation, in-depth interviews, documentation, audio-visual materials, and literature. The case study approach and the validity use data triangulation, methods, and member checks. The results of the research: 1) produced an optimization model of local wisdom-based tourist destination in android applications as a persuasive digitalization for global tourists, 2) importance of a tourism android application, to introduce potential Natural Beach Tourism, introduce potential artificial beach tourism, introduce superior religious tourism, introduce superior cultural tourism, introduce superior culinary tourism, increase the creative economy through local wisdom-based tourism, and provide information on village tourism that has the potential to become a leading tourism in Base.

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## 1. Introduction

There are still many tours on the island of Madura that have not been managed properly by village tourism managers or by the tourism office, therefore the tours in the Madura islands are not yet known by the wider circle of local, regional, national and foreign

tourists. Referring to tourism regulations that are being encouraged to manage villages that have tourism potential both natural, beach, culinary, and cultural tourism, here the village government works with local communities to form pokdarwis (kelompok sadar wisata) in empowering local human resources in managing tourism potentials in their villages. It also collaborates with the local government to support and advance the district through tourism. Indeed, there are many obstacles faced in tourism management, the main obstacle is the budget in tourism development. In addition, human resources are less able to manage tourism potential that already exists in their villages. According to one of the pokdarwis who manages Tlango beach tourism,

"On this beach, if it is developed well, it will advance, because its human resources are less able to manage, so well, this is it, there is no significant progress". (The results of the interview of Mr. Zainudin as pok darwis beach tourism in Bangkalan, dated June 25, 2022).

In developing tourism well, it really needs quality human resources in the field of tourism, at least human resources must know the vision and mission of tourism in their district, have creative thinking in managing existing tourism, there is a strong will in advancing village tourism in order to prosper the people in their area, and of course can increase village and local income.

It is also important to know and really must be instilled in the human resources of tourism managers that the vision of tourism development is what is meant in article 2 in paragraph 3 letter (a) is the realization of Bangkalan as a tourism destination based on local wisdom, quality, competitiveness, and sustainability for the welfare of the community (PERDA Kabupaten Bangkalan No. 1 Tahun 2020a, 2020).

Bangkalan Regency which is connected to the Suramadu bridge access to exit Madura, this is very supportive in advancing tourism in Bangkalan district. Because Bangkalan is the gate or door of Madura that is closest to the Surabaya route, so if as the face of Madura, it is time for Bangkalan as a district that must quickly improve, especially in terms of tourism, namely how to manage tourism in Bangkalan such as natural tourism, beaches, culture, culinary to the maximum.

The sophistication of technology connected to the internet network must be utilized optimally by utilizing an android phone by introducing tours in Bangkalan through the android application. Introducing tourism in Bangkalan or Madura through digitalization-based android applications is very important in bringing the name of Bangkalan and Madura to the global area. So, Madura island is also known by tourists both at national and international levels. As it has happened to beach 9 of Sumenep regency there is often visited by foreign tourists because beach 9 is often used as a backrest for foreign ships.

From the observations made by researchers on June 23, 2022, there are only two android applications in optimal management of Madura tourism, one is the Tlango beach tourism android application, and the other is Madura tourism. Because when the application is clicked, the content of the features is limited and there are minimal descriptions and pictures of tours in Bangkalan itself and tours in Madura. When the researcher asked this to one of the pok darwis of Tlango beach, "there is an android application but only specifically for Tlango beach even though it is not complete in its presentation". When this android application already exists, researchers intend to invite the cooperation of pok darwis, village

tourism managers, and tourism offices to optimize the existence of the android application by being managed properly by offering various tourist features in Bangkalan and in Madura itself with tourist destinations in Bangkalan Madura can be popular and have its own attraction for global tourists.

Considering that Bangkalan has many tourism potentials such as natural tourism and religious tourism including Arosbaya limestone hill, Jaddih limestone hill, Bangkalan geger hill, Lambilangan lighthouse, siring kemuning beach, rongkang beach, nine beaches, lantern mah hills, labuhan mangrove education parks, tretan swimming pools, goa pote swimming pools, mata aer ibu tours, kokop waterfalls, sarimuna boat tours Syaichona Holil, Batu Raja Maintain Waterfall, Sumber Pocong Bath, Sunan Cendana Mosque, Tanjung Bumi Batik Center, Cow Frequency Stadium. Culinary tours in Bangkalan are Topak Ladde in Pasar Senen, Tajin Sobih, Serpang Rice, Madura Satay, Kokot Broth Soup, Sinjay Duck, Soto Mata Besapi (Agung, 2024).

Android App Optimization, according to the Big Dictionary Indonesian (2022) Optimization is derived from the root word optimal which means best, highest, most profitable, make the best, make the highest, process optimization, way, act of optimizing (making the best, highest, and so on) so that optimization is an action, process, or methodology to make something (as a design, system, or decision) become more/completely perfect, functional, or more effective. According to (Winardi, 1999), optimization is a measure that causes the achievement of goals while when viewed from a business point of view, optimization is an effort to maximize activities so as to realize the desired or desired benefits (Rahayu et al., 2022).

Android is a Linux-based mobile device operating system that includes systems, middleware and applications (Supardi, 2014). Broadly speaking, the Android architecture consists of Applications and Widgets, Applications Frameworks, Libraries, Android Run Time and Linux Kernel (Supardi, 2014). Figure 1. Android architecture. Android application structure or application fundamentals, written in Java programming language. Java code is compiled along with the resource files required by the application". Where the process is packaged by a tool called apt tools into the Android package. So it generates a file with extension. Many mobile phones or smart smartphones and tablets use operating systems with different versions (Supardi, 2014). The higher the version, the more sophisticated and many features, the first telephone to have the Android operating system is HTC Dream which was released on October 22, 2008 Android SDK is a software for creating and developing android applications. Inside there are libraries, debuggers, android emulator, and other software needed to make an android application (Irawan, 2012). Android application development generally uses the Java programming language, although using other languages such as C language can also use the Android Native Development Kit. The Android SDK will always be updated according to the version of the Android operating system that has been officially released. Android Manifest file.xml required by every android application, this file is located in the root folder of the application. This file describes the global variables of the application package used, this file serves to describe what resources will be used by the project such as internet connection, sms, accessing gps, and others (Aribowo, 2015).

The optimization of the tourist android application is to function the application effectively or optimally to promote tourist objects in Bangkalan Madura. Of course, this is

interference from tourism managers, pokdarwis, and of course the local district tourism office (Sari et al., 2023).

Tourist Destinations, (Kotler, 2010), explained that tourist destinations are places with forms that have real boundaries or based on perception, either in the form of physical boundaries (islands), politically, or based on the market. Destination is a tourist destination in a certain area where the destination is intended to be visited by tourists with complete tourist packaging both from facilities and infrastructure, from tourist attractions, inns, culinary.

Local Wisdom, Haryati Soebadio (Wahyuningsih, 2014) argues that local wisdom is an identity / personality of the nation's culture that causes the nation to be able to absorb and process foreign cultures according to their own character and abilities. According to Rahyono, local wisdom is human intelligence possessed by certain ethnic groups obtained through community experience. That is, local wisdom is the result of certain communities through their experiences and not necessarily experienced by other communities. These values will be attached very strongly to certain communities and these values have gone through a long passage of time, throughout the existence of the community Local cultural wisdom in foreign languages is often conceptualized as local wisdom, local knowledge, or local genius). Local cultural wisdom can also be interpreted as a thought about life. This thinking is based on clear reason, good mind, and contains positive things. The wisdom of local culture can be translated as the work of reason, deep feelings, habits, forms of temperament, and encouragement for human glory. Mastery of local cultural wisdom will bring their souls more virtuous (Wahyuningsih, 2014).

Digitalization/Media Digital, digitalization is a term or terminology used to describe a process of media transition starting from the use of print, video or audio media into digital media with the aim of being able to archive documents in the form of digital transformation. According to Brennan and Kries, digitalization is digital communication and the impact of digital media on contemporary social life (Bagus Putu Wahyu Nirmala, 2020). Whereas according to the dictionary of Gartner.com terms, digitalization is the use of digital technology to change a business model and provide new revenue generation and value-generating opportunities, and this is a process of moving to digital business.

Persuasive Media, according to Werner J Severin and James W Tankard in Communication Theory, History, Methods and Applied in Mass Media (2011) mentions two definitions of persuasive communication, namely: 1) Persuasive communication is a communication process that aims to influence others to agree with the speaker. 2) Persuasive communication is a communication process that is persuading and inviting others to conform to the wishes of the speaker without any coercion. It can be concluded that the definition of persuasive communication is a communication process that uses persuasive words with the aim of influencing the listener according to the wishes of the speaker (Novianingsih, 2021).

Global Travellers, a tourist is a person who travels from his place of residence without settling in the place he goes to or only temporarily staying in the place he visits. The World Tourism Organization (WTO), refers to tourists as travelers who take short trips. According to this organization, tourists are people who travel to a foreign area or country and stay at least 24 hours or a maximum of six months in that place (Soekadijo, 1997).

The definition of tourists according to (Pendit, 2002) is:

- 1) People who are traveling for fun, for personal use, for health purposes and so on.
- 2) People who are traveling for the purpose of attending meetings, conferences, deliberations, or in relations as representatives of various bodies/organizations (scientific, administrative, diplomatic, sports, religious, etc.).
- 3) People who are traveling for business purposes.
- 4) Government officials and military men and their families traveling to other countries.

The description above, global tourists are tourists who come from all directions, both locally, nationally and internationally to visit, enjoy tourism somewhere by staying overnight or vice versa by bringing their families to enjoy holidays or other affairs.

Innovation Diffusion Model, the Innovation Diffusion Model by Everett M. Rogers (Effendy, 2013), defines diffusion as the process by which an innovation is communicated through a certain channel within a certain period of time among the members of a social system. Diffusion is a special type of communication concerned with the dissemination of messages as new ideas. While communication is defined as the process by which the actors create information and exchange information with each other to achieve mutual understanding. In the message there is newness that gives the diffuse a special characteristic of uncertainty. The degree of uncertainty by a person can be reduced by obtaining information.

Therefore, the purpose of this study is that researchers want to know, analyze, and dig deeper about: 1) The optimization model of local wisdom-based tourist destination android applications as persuasive digitization for global tourists, 2) Why optimization of local wisdom-based tourist destination android applications as persuasive digitalization for global tourists is important to support the development of village tourism.

## 2. Method

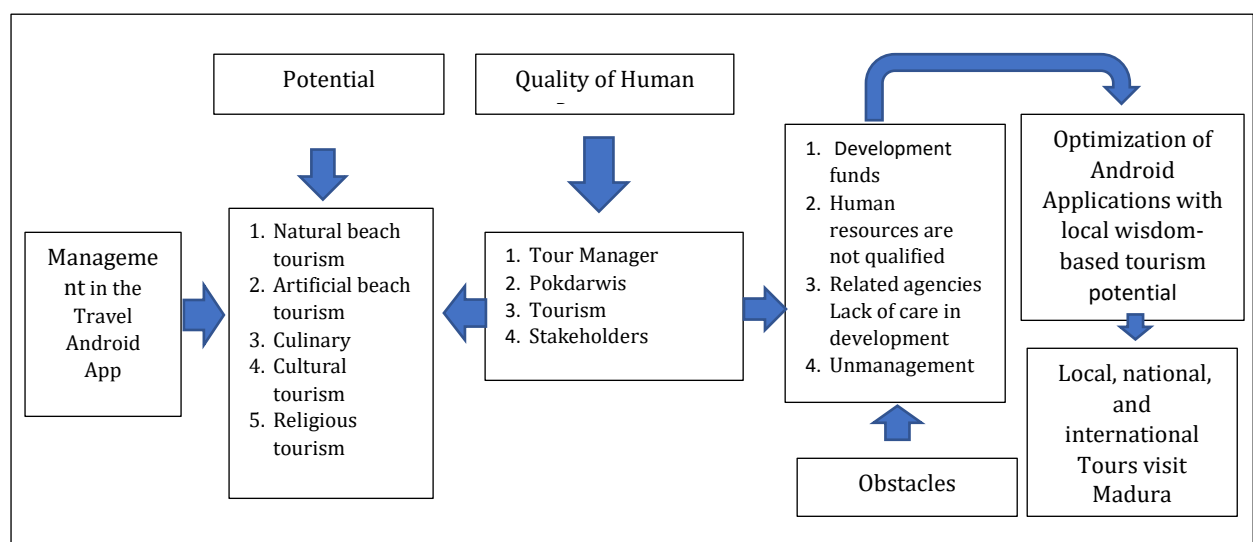
This research uses a constructivist paradigm, methodologically the research must be a natural setting (out of laboratory) to capture natural phenomena as they are and thoroughly without the intervention and manipulation of researchers (Bogdan and Biklen, 1982: 36) in (Wahyuningsih, 2013). This research uses qualitative methods with a Case Study approach. Case Studies include the study of a case in real life, in a contemporary context or setting (Yin, 2009) (Creswell, 1998) (Wahyuningsih, 2013). The researcher determined that this case study research method focuses more on the type of compound case study because there are several locations used as research taxis, namely the location of Tlangoh beach, artificial blue lake beach, and Sumenep beach tourism as a comparison beach tourism, Syaichona Cholil mosque, Mata Aer Ebu as religious tourism, tadjin sobeh culinary tourism, serpang rice, Goat satay as the leading culinary tourism of Bangkalan, karapan sapi tourism, cape bumi batik as cultural tourism in the leading category of the city of Bangkalan. Object and Subject of Research, The object of this study is the model of Android Application Optimization Model of Local Wisdom-Based Tourism Destinations as Persuasive Digitalization for Global Tourists, while the subject of research is tourism managers, pokdarwis, local tourism offices, related stakeholders, which is criterion by purposive sampling, namely sampling according to

consideration. Data Collection Techniques, this data collection technique is a tool or method that assists research in collecting data to complement and perfect the objectives of this study. By way of observation, namely conservation through some literature via the internet, and direct observation on tourism in Bangkalan to be included as an android application feature and see the comparison of beach tourism, especially those in Sumenep. In-depth Interview, researchers dig with several questions to informants who are research subjects by the research theme. Documentation, Researchers collect materials related to research such as documents or archives obtained from research sites both from natural, religious, cultural, and culinary tourism. There is even a lot of literature obtained from books related to tourism research with the theme of tourism digitalization. Audiovisual Materials, Researchers collect visual materials, as secondary information materials in the form of various types of photographic materials, namely photos, video films, slides, and recordings related to the subject, and the object of research on tourism in this village. Data Analysis Techniques, reducing data from the field, displaying data by categorizing then discussing it with late references, and drawing conclusions. Data Validity Techniques, Researchers in data validity use triangulation, including source triangulation, method triangulation, and member check, namely processes checking data obtained by researchers to data providers. Research location, relevant research occupation in natural tourism areas, religious tourism, cultural tourism, and artificial tourism, as well as culinary tourism. These tours are scattered in Bangkalan. Explain the systematic steps carried out in research activities. The methods discussed include research methodology, research subjects, instrument development, and data analysis techniques/statistical tests carried out. The research method describes the research stages in detail and clearly so that it can be referred to by other researchers (repeatable and reproducible). The research method carried out by researchers will have a positive impact. That is the optimization of Android applications on Tlangoh tours. The collection of data from various elements of informants who are members of this tourism development provides an increase in tourism in Tlangoh related to the spread of digitization, features, promotion, variations in the addition of game zones, and traditional food, all of which will be a special attraction for visitors.

### 3.Results and Discussion

From the research field, researchers get research results through observation, in-depth interviews, documentation, and audio-visual materials to support the purpose of this study, namely wanting to know, analyze, and explore the optimization of local wisdom-based tourist destination android applications as persuasive digitization for global tourists, to know, analyze, dig Optimization of local wisdom-based tourist destination android applications as persuasive digitalization for global tourists is important to support the development of village tourism in Madura, and to know, analyze, and explore the obstacles of village tourism managers and tourism offices in the development of digitalization-based village tourism.

#### Model optimization of local wisdom-based tourist destination android applications as persuasive digitization for global tourists



**Figure 1: Local wisdom-based travel destination android application optimization model as persuasive digitization for global travelers**

Source: Researchers' Processing Results

#### Model Description:

Lack of maximum functioning and management of local wisdom-based tourism android applications including natural beach tourism, artificial beach tourism, culinary tourism, cultural tourism, religious tourism because of the quality of human resources (human resources), the absence of development funds, lack of concern of related agencies in development, tourism management that is not well managed. So the existence of this research will obtain an android application optimization model by maximizing all the prominent tourism potential in the area and improving its management so that local, national, and international tourists come interested in enjoying village tourism in Bangkalan as the gateway to Madura.

#### Model Proposition:

- 1) The management of the local wisdom-based tourism android application by the manager will have a good promotional impact on local, national, and international tourists.

- 2) Madura tourism will be known globally if it maximizes the use of digitalization of tourism android applications in introducing Madura tourism.

**Optimization of local wisdom-based tourist destination in android applications as persuasive digitization for global tourists is important to support the development of village tourism in Bangkalan**

***Introducing potential Natural Beach Tourism in Bangkalan***

According to observations made in September 2022 and conversations conducted with researchers at the beach managers, Tlangoh Beach is among Bangkalan Regency's top natural tourist attractions. Tlangoh Village is home to Tlangoh Beach. The distance from the Tanjung Bumi highway is 500 meters. Tlangoh, a village in the north, has a 2-kilometer beach with white sand, gentle waves, and refreshing breezes. It is located right next to the Java Sea. Tlangoh beach tourism is one of the many potential selling points of the tourism products produced in this village that attract tourists from outside the area. Tlangoh Beach was established in 2019 in conjunction with PHE WMO; WMO subsequently provided funding and management for this beach.

This tour features an E-Tourism innovation system that can be accessed through the Tlangoh Beach Android application on the Play Store. You can reserve tickets, view Tlangoh Beach Tourism's profile, learn more about the food on Tlangoh Beach tours, and check out the possibility of souvenirs offered at beachside tourist destinations all through the application. There are Tlangoh village stalls lining the beach, offering a variety of menu items such as rice cakes, fruit rojak, fried foods, pop noodles, and pre-made foods and beverages. The amenities offered include a children's park, picture spots, and ATVs (all train vehicles) for Rp 20,000. The cost of the photo spot is Rp 5000,-(seat swing). For facilities, restrooms and prayer rooms are typically included.



Figure 1. Tlangoh Beach

Tlangoh Beach with many unique offers of traditional food from Tlangoh village is attractive to visitors from outside Bangkalan and global tourists. For international tourists, this will be an interesting first experience of traditional food served at Tlangoh Beach Bangkalan. In addition, visitors will enjoy the game media provided by Tlangoh Beach while enjoying Tlangoh Beach, for visitors it is an interesting experience, especially inviting family, and friends. The existence of this digitalization will have a good impact on advancing local tourism in the Bangkalan district through Android applications so that Tlangoh Beach can be known to tourists outside Madura and globally.



### Introducing potential artificial beach tourism in Bangkalan

Based on the team's observations and interviews conducted in October 2022, Bumdes Cempaka Biru Telaga Biru Village, Tanjungbumi District, Bangkalan Regency is the management of Pantai Biru, one of the Bumdes Business Units and a halal tourist destination. There are several rides inside, such as the Instagrammable Photo Spot, ATV Car, Flying Fox, Garbage Can, Place to Eat, and Mushola. There will be more rides in the future that are still in the planning stages.



Figure 2. Telaga Biru artificial beach

The location is in Telaga Biru Village, Tanjungbumi District, Regency. The operating hours are 0800–1600 daily. East Java Bangkalan. The cost of admission is 10,000 Rp. The blue beach is roughly 45 kilometers away from the city.

### Introducing the leading religious tourism in Bangkalan

#### 1) Syaichona Cholil Mosque

The results of observations and interviews with mosque managers in November 2022, the Syaichona Cholil Mosque located in Martajasah village, Bangkalan District, the mosque is most glorified by the people of Bangkalan. Not only the architectural building is very magnificent but also near the mosque. There is the tomb of a highly respected alim ulama, almost the entire community of Madura Island and this country. KH. Moch Cholil was a Waliullah and as a professor in Madura, Indonesia, and was also known as Waliullah. Travelers and pilgrims come to the renovated Syaichona Cholil Mosque not only to make a pilgrimage to the tomb but also to experience the prayer.



Figure 3. Syaichona Cholil Mosque

This mosque does give off an air of grandeur and luxury. Starting with the mosque's courtyard, interior, and particularly the imam's area. The interior and outside of the mosque are embellished with a variety of the finest calligraphy and carving models. The Master's tomb is located directly in front of the mosque, on the right side of the courtyard where women congregate to pray and engage in other acts of worship. As Thursday Legi approaches, a growing number of people from the neighborhood and beyond Madura Island travel to the mosque to make pilgrimages and offer prayers. The sound of pilgrims who come to perform prayers, read the Qur'an, and recite tahlil prayers creates a truly serene atmosphere inside the mosque. Due to the large number of pilgrims and visitors, parking rates are provided for each vehicle by the mosque and Pesarean management. If guests at the Syaichona Cholil Mosque are no longer concerned about the manager's provided public amenities. like restrooms, showers, locker rooms, and so forth. There is a supermarket and shopping area near the mosque where you can shop conveniently.

### 3) Mata Aer Ebu Religious Tourism

Visitors will be met with views of dozens of stairs that climb to the main entrance of this cemetery complex when they arrive at this location in Buduran village, Arosbaya Bangkalan district, according to observations made in November 2022 from online sources. There are rumors that a queen named Syarifah Ambami, who was married to Raden Praseno, the ruler of the Madura region, was buried in this cemetery. According to historical accounts, Raden Praseno was a king during the Mataram kingdom's heyday in Java and is better known as Cakraningrat I. In Gresik, Syarifah Ambami is still descended from Sunan Giri. A Madurese king named Cakraningrat I resided in Sampang Palace. In, he was crowned king of the Madura kingdom. The name of this cemetery has historically led to the formation of a spring that is also revered by the neighborhood. Many people believe that the spring beneath the hill, where the petition is located, can cure a variety of diseases and bring blessings. Therefore, it is not unexpected that many pilgrims who have visited the Queen Mother's tomb also head straight to the spring. In addition, even when the dry season arrives, this spring water never dries up or recedes. The shape of the tombs in this complex generally resembles a cross between Islam, Buddhism, and Hinduism.



Figure 4. Mata Aer Ebu Religious Tourism

1624 saw the reign of King Cakraningrat of Madura, who was commanded by Sultan Agung of Mataram. Sarifah Ambani, also known as the Queen Mother, chose to pray to God Almighty in meditation because she was frequently on duty. This allowed her to ask for her seven descendants to have the destiny of ruling Madura Island in the future. Her husband, King Cakraningrat, returned home, and she informed him of her impasse, which led to the seven descendants taking over the government of Madura Island. King Cakraningrat was unhappy to learn that her husband had gone back to his hermitage in the village of Buduran because he felt guilty and disappointed in her. Queen Mother never stopped crying until her entire home was covered in tears. How long before he passed away and was interred in his medical.

### **Introducing excellent cultural tourism in Bangkalan**

#### **1) Karapan Sapi Cultural Tourism**

The cows are paraded into and around the racecourse to the sounds of the saronen, a typical Madura gamelan orchestra. While displaying the beauty of vibrant clothing and accessories (ambhin), ease your tense muscles. All accessories and clothing are taken off following the parade. aside from the headgear (obet), which gives the cow courage and self-assurance. Then the race started.

The dust cloud lifted. Two cows with kaleles on them, which is a corresponding way for a jockey or saucier to ride quickly. Compete in a speed race with other cow pairs. While the jockey attempted to maintain control, Kaleles repeatedly leaped into the air, displaying his cunning. The audience's applause increased the race's intensity. That is the traditional games and cultural attractions of the Maduran people in East Java, also known as karapan sapi, which is sometimes written as cow frequency. It's unclear exactly when the Karmapan sapi was born. Sulaiman of Karapan Sapi in Madura claims that the Madurese people think cows are ruled by kings. Gadding Village, Manding District, Sumenep Regency is home to the female cow king. While Sapudi, an island east of Madura, is home to the bull king.

Penembahan Wlingi (Wirobroto), who began the cow-raising practices in Sapudi in the 14th century, was followed by his son Adipoday. Agriculture advanced during this period. Farmer pairs joyfully plow the fields while racing to the finish while mounted on salagas, or rakes. The word garaban originated from this, derived from the word garab, which signifies "fast work."

"Thus a fairy tale that mentions the origin of cow frequency from the word garaban, from agricultural work in rice fields evolved into cow frequency feasts," explained Sulaiman.

An alternative account highlights the significance of Kyai Pratanu, who utilized cow carapace to propagate Islam towards the close of the 16th century. However, the narrative in Sumenep connects him to the 17th-century Kudus missionary Sheikh Ahmad Baidawi (Prince Katandur). He taught people how to cultivate crops for an abundant harvest while he was promoting Islam. During friendship days, cow races are held as a way to show gratitude. Later on, this kirabah from Arabic became commonplace.

Apart from the various versions, cow racing then became a cultural attraction favored by the public. However, according to Sumintarsih in "The Meaning of Cows Often from the Perspective of Madurese: Socioeconomic and Cultural Studies", published in the book *Local Wisdom*, *karapan sapi* began to change in the 1970s. Its function shifted from its original purpose as entertainment, communication tools, and early markers of planting. The implementation of cow carapans began to be organized. Cows are often a marker of a person's status. "In this case, the cow has the status of a complaint animal, a race animal, it is no longer employed for agriculture, it is specifically a tool for satisfying its owner," according to Sumintarsih. *Karapan sapi* are of several kinds: often *keni* (small frequency), *king* often (large frequency), often *onjangan* (invitation frequency), often *residency* (residency level frequency), and often *jar-jaran* (training frequency).

Frequently *keni* from one sub-district or *kewedanaan*, followed by young, untrained cows. The winner can go on to follow the king, or as they are sometimes called, the state, in competition for the Regent Cup, which is held twice in the district capital. The king's frequent champions will take part in and fight for the esteemed President's Cup.

*Onjangan* is frequently held to honor holidays, anniversaries of Thanksgiving, and other occasions. Champions from four Maduran districts frequently attend residencies in Pamekasan City, which serves as the season's conclusion. However, race cows are frequently trained with *jars* before being lowered into the race.

For most Madurese, *karapan sapi* is not only limited to ordinary people's feasts or merely hereditary heritage but also as symbol of pride that raises the dignity and dignity of the Madurese. Because, the cows used for the match are very good quality cows that receive preferential treatment from their owners. *Karapan sapi* is usually suitable distinguished from the age of 3-4 months. Then from the age of 10 months cows begin to be trained, given herbs, massaged, and bathed. This continues to be done until the cow is ready to go down the rink. In *karapan sapi*, the self-esteem of the owners of cows is at stake. If they win, they get prizes and betting money. The price of winning cows can also soar. If you lose, the owner's self-esteem falls and loses a lot of money. Because, cow care is fairly expensive. Various ways have been done to achieve victory. Including hiring a shaman so that his cows survive the attacks of enemy *jampi-jampi*.



Figure 5. Karapan Sapi Cultural Tourism

The old Pakem, with rekeng, is claimed by the pengerap (owners or frequent participants) as the inheritance of the ancestors and the actual karapan sapi of Madura. Instead, the new version of pakem was initiated by animal lovers, scholars, and culturalists who wanted to restore the karapan sapi as it used to be without rekeng. The government has also repeatedly appealed for no violence in karapan sapi. After a period of dualism, now the karapan sapi competing for the President's Cup is held nonviolently. Karapan sapi is a unique performance that is still maintained today. This event has become an icon of Madura and a tourist attraction that attracts the attention of local and foreign tourists.



Figure 6. Karapan Sapi

## 2) Tanjung Bumi Bangkalan Batik Tour

One of the products of the country's culture that is well-known overseas is batik. There is a batik craft center in almost every part of this country, particularly on Java Island and its environs. The batik craft center is a popular destination for tourists from both domestic and foreign travel, as it offers a unique cultural experience. There are numerous batik craft centers on Madura Island, which is next to Java Island. One of them is a Telaga Biru batik craft center, which is situated in Bangkalan Regency, specifically in Tanjung Bumi District. Indeed, since a few decades ago, this tourist village has developed into a hub for batik traders and artisans.



Figure 7. Pembatik Tanjung Bumi



This village is the source of batik, which is known for its coastal batik motif and its bold use of colors like red. This is not the written batik found in the interior, which features serene, subdued patterns and hues. The fact that it is situated near the coast symbolizes the creative energy of the bold and outgoing batik artisans who work along the coast. The tourist village, known as Paseseh village, is located roughly 45 kilometers from Bangkalan's center for visitors who wish to come and observe the batik-making process firsthand.

This time, the Madura Island Team had the chance to meet and converse with a batik craftsman in the village area of the Telaga Biru batik craft center. We were taken directly to the home of this Tanjung Bumi batik craftsman with the help of the village chief. We had the unique chance to witness the creation of Tanjung Bumi's written batik firsthand after getting to know the batik artisans. Additionally, there aren't many differences between the method used to make batik and that of other regions. Created on an elongated piece of fabric, the artisans spent a night meticulously and patiently carving by hand.



Figure 8. Batik Tanjung Bumi

Tanjung Bumi, or batik, has a long history. It all began with the abundance of mothers in coastal areas who needed something to pass the time until their husbands returned from ocean sailing. Unlike written batik from other regions, this batik has unique qualities that set it apart. Tanjung Bumi batik undoubtedly contains a bird motif, and the color red is used to great effect to convey the essence of the people who live along the coast, particularly on Madura Island. Visiting some local craftsmen will allow you to directly witness this. increasing the abundance of Tanjung Bumi batik motifs—there are nearly a thousand different kinds of motifs overall.

A variety of motifs, including wood grain, ramo, peruper, and rongterong. The Gentongan batik type is the predominant variety of batik fabrics. The word Gentong, or a large place that is frequently used to hold water, is the source of the name Gentongan batik.

Wearers of this style of Gentongan batik are imbued with an air of authority due to its unique pattern and color, strong character, and vivid hues. If the price being offered for this kind of Gentongan batik exceeds Rp 2,000,000, it is acceptable; you can obtain the price by purchasing it directly from the craftsman. If you're on a tight budget but still want to write in batik on Tanjung Bumi, batik is also reasonably priced. The Gentongan batik that is sold in stores and online ranges in price from Rp. 60,000 to Rp. 1,000,000, with motifs and colors that are likewise uninteresting.

The length and degree of difficulty of the batik-making process have an impact on the value offered in terms of price. Gentongan Batik is of the highest caliber, particularly when it comes to coloring. Starting to create patterns, dying, and soaking batik in barrels takes up to a year. Batik is allowed to soak in a barrel before being kept in a locked, special room. There are just three craftsmen who can make Gentongan batik in the Tanjung Bumi batik craft center village area, according to Mr. Fauzi, the head of the local village. Therefore, not every local craftsman is able to create Gentongan batik. A myth that is going around the neighborhood claims that when the process of lifting.

Regretfully, some batik artisans in the central area claim that the local government has yet to give this issue any particular attention. Even though Tanjung Bumi batik is of excellent quality and is very popular overseas. It is hoped that as more people visit Tanjung Bumi Batik Cultural Attractions, the local government will become more adept at overseeing one of these ancestors' cultural legacies.

With the existence of cow race tourism and Tanjung Bumi batik tourism, visitors will be more familiar with the identity of Bangkalan Madura district, that in Bangkalan there is a cow race culture with various peculiarities. Tourists will also be more familiar with the practice of batik in Tanjung Bumi sub-district, which is the only batik center in Bangkalan district. This is a special attraction for visitors because knowing it will increase knowledge about cultural tourism references in Madura.

### **Introducing the leading culinary tourism in Bangkalan**

#### **1. Tajin Sobeh Culinary Tour**

Tajhin Sobih or Bubur Sobih, also known as Tajhin Sobih, is one of Bangkalan Regency's culinary traditions. belongs to the small village of Sobih Village, which is situated in the Bangkalan District. The reason Tajin Sobih is called such is because the majority of these vendors actually originate from Sobih Village. Older mothers typically sell Tajhin Sobih by carrying it around on their heads. The first thing that comes to mind when you see Tajin Sobih is Bubur Sum Sum. consists of fillings in a variety of colors and shapes that are made from wheat flour and glutinous rice flour.



Figure 9. Tajin Sobih

There are three colors of filling in each portion of Tajin Sobih, namely pink, brown and white. The three variants of Tajin Sobih contents are placed in small panic-pots that are put together in a large container made of woven bamboo. On top of this colorful Tajin filling is then doused with brown sugar that has been cooked thickly. The mixture of brown sugar on top of Tajhin Sobih is what makes it taste very sweet and still tastes savory on the tongue. Actually, not only providing Tajin Sobih, usually also sold other traditional foods such as

Lopes and Cetter. Lopes and Cetter are made from glutinous rice flour and rice flour which are shaped round and elongated. Lopes and Cetter are also splashed with brown sugar on top just like Tajin Sobih. Besides being sold by going around the village, Tajhin Sobih sellers can also be found in several areas in Bangkalan City. Usually, Tajhin Sobih sellers often sell at Pasar Senen Bangkalan, located towards the Syaichona Cholil Bangkalan Mosque. Tajhin Sobih seller place in Burneh Bangkalan sub-district. The meaning of tajin itself in Indonesian means porridge, so tajin so big can be interpreted as porridge sobih. Because the naming of tajin sobih refers to the name of the area of origin, so it can be classified as a type of food tajin sobih is also one of the Madurese specialties whose name refers to the area of origin of its manufacture, namely in Sobih Village, Burneh District, Bangkalan (Pebri et al., 2023)

Nasi Serpang is its name. Serpang Rice sellers often sell their sales on the side of the main road. One of them is three points in the center of Bangkalan City on the side of Jalan Panglima Sudirman. Jl. Ki Lemah Duwur and Jl. Trunojoyo. Serpang rice consists of warm rice, salted eggs, clams, beef jerky, soun noodles, shrimp cob pepes, tofu, and cowhide crackers mixed with coconut milk sauce. Peanut and shrimp peek and the last one is sambel trasi which adds delicious. One of the characteristics of Serpang Rice is the banana leaf package. Serpang is actually the name of a hamlet in Sabiyan Village, Arosbaya District, a suburb about ten kilometers north of the Bangkalan government center. So it can be guessed, that the origin of Serpang rice comes from Serpang Hamlet which is passed down from generation to generation. Until now, Serpang Rice has become the main economic support for residents in the hamlet. Serpang rice is a dish that is like a side dish. Each pack contains a fist of fluffy rice with various side dishes.



Figure 9. Tajin Sobih

The contents of serpang rice are clam fried chili sauce, shrimp rem peyek, fried empal, sik-usik soup which is cowhided crackers with thick coconut milk sauce. There are also cob pepes, salted eggs, and serundeng, the price of serpang rice is quite expensive, which is Rp. 15 thousand per portion. dengan nasi serpang, makanan tradisional Bangkalan, telah menjadi daya tarik bagi komunitas yang mencari pengalaman kuliner yang unik. Bagi mereka yang ingin menikmati cita rasa khas Madura, Warung Makan Nasi Serpang di pinggir jalan utama telah menjadi tempat favorit (Maimunah et al., 2024).



### **Improving the creative economy through local wisdom-based tourism in Bangkalan**

The promotion of village tourism spread throughout Indonesia is a good thing for the independence of a village in a district-level area, they get budget input from their village tourism management they can expose and explore the potentials of villages, especially tourist attractions both natural and man-made tourism. According to the observations of researchers, the existence of village tourism is very lifting the economy of the local community in the village. As well as food vendors who were originally quiet, are now centralized in tourist areas to sell food with the peculiarities of their respective regions such as rice cakes, sweet rojak, and ice drinks, as well as snacks served in tourist attractions both processed raw and cooked. What is served raw, researchers observe in tourist attractions is rengginang food from glutinous rice mixed with processed fish and even shrimp, and crackers from cassava formed lengthwise which are usually eaten with petis.

The local economy is significantly impacted by tourism related to culture, religion, food, and the outdoors, particularly beaches. Upon recognizing this, the tourism office collaborated with Madurese tourism observers and tour managers to enhance district tourism promotion via social media, mass media, and Android applications, wherein optimization of management was imperative. For Bangkalan tourism to be more valuable than Sembilan beach tourism in Sumenep, it needs to be more than just a well-known brand with positive media representation. When researchers met with Mr. Suhlan, the manager of Sembilan Beach, in December 2022, he stated that since most visitors to the beach are from far away, we need to make accommodations for cottages.

Researchers found that the manager of Sembilan Beach in Sumenep made very good points about the promotion of tourism through an Android application that offers all the amenities, particularly beachside accommodations that allow for fish grills, beach tents, and banana boats. This researcher believes that widespread awareness of the standards for promoting beach tourism is important.

### **Providing information on prominent, potential, and superior village tourism in Bangkalan**

According to Bangkalan Regional Regulation No. 01 of 2020, concerning the 2035 tourism development master plan, Bangkalan district tourism attractions (DTWK) are grouped into 3 types: natural tourism attraction is a tourist attraction in the form of natural diversity and uniqueness, cultural tourism attraction is a tourist attraction in the form of creation, taste, human charities as cultural creatures, Man-made tourist attraction or special interest tourist attraction is a tourist attraction that is an artificial creation and other human activities outside the realm of tourism and culture. In the regional regulation, tours in Bangkalan are also categorized into prominent, potential, and superior categories of tourism. Researchers here only cover potential tourism village categories such as the existence of natural Tlangoh beach, and artificial blue lake beach. There is another excellent tourism category, namely religious tourism, namely Syaichona Cholil Mosque tourism, and Mata aer Ebu tourism. As for the leading cultural tourism, there is especially karapan sapi tourism always used as a presidential cup event every year so that the Madurese people remain enthusiastic about preserving cow carapan culture from generations, and Bangkalan's leading culinary tours also have tajhin sobeh tourism, serpang rice, goat satay, sinjay duck. Potential and excellent tours are worthy of being known by tourists from national and international levels.

#### 4. Conclusion

The first research objective is to produce an Android application optimization model for local wisdom-based tourist destinations as persuasive digitalization for global tourists. The contribution of this model to the development of tourism in Bangkalan is so that tourism in Bangkalan, both natural tourism, cultural tourism, culinary tourism, and religious tourism can be recognized by domestic tourists and global tourists. The second research objective is to the importance of the tourism android application to introduce the potential of Natural Beach Tourism in Bangkalan, the potential of artificial beach tourism in Bangkalan, superior religious tourism in Bangkalan, introduce superior cultural tourism in Bangkalan, introduce superior culinary tourism in Bangkalan, improve the creative economy through local wisdom-based tourism in Bangkalan, and provide village tourism information that has the potential to become superior tourism in Bangkalan.

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