



# Digital Promotion of Watu Gambir Tourism Village Towards Smart Village Destination in Karanganyar Regency

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**Abstract.** Indonesia is one of the countries with incredible tourism potential. Spread from east to west, there are many popular tourist attractions in the country. Regional tourism in Indonesia is also not only known by the locals, but also attracts foreign tourists. However, the tourism promotion strategy in the country today is not yet optimal. This is evident from the many new attractions in the area that have not yet been maximized. Tourists are considered to only know the popular tourist spots. Hence, it needs a platform that can sustain the popularity of tourist spots, one of which is the use of digital promotional media via smartphones. Because many smartphone users now reach 60% of Indonesia's total population, this effort could be an accurate strategy for the promotion of regional tourism. The purpose of this study is to analyze the marketing aspects and analyze the marketing tactics of Watu Gambir Tourism Village. The research approach was to create observations, interviews, documentation, SWOT research questionnaires, focus class discussions. The results of this study are (a) the market segment is 80% local and domestic tourists, (2) Watu Gambir product marketing strategy is saur-oriented strategy, so it is necessary to prepare and launch tour package products to attract tourists, and create media. good and creative promotion, which is digital promotion.

**Keywords:** Cashless · Tourism · Smart village

## 1 Introduction

Smart Village is a community-based initiative initiated to utilize information technology for rural communities. This initiative is an effort to enlighten and educate local communities by mobilizing the collective strength of communities from various tribes/ethnicities and professions to encourage the implementation of quality public service programs that are integrated with information and communication technology (ICT) in order to provide maximum benefits to rural communities. The presence of Smart Villages is needed as an effort to accelerate village development by increasing the intelligence, welfare, and harmony of local communities [1, 2].

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There are still many smart villages that do not have an information system that functions to visit tourist attractions in the smart village [3]. Digital-based village development is one of the requirements for a village to be called a smart village. And for ordering culinary or tourist places, they still use the alluring or manual method by coming first to the place you want to order. Based on the existing problems, it is proposed to create an application that can provide promotional tourism information and can order tourist and culinary attractions in the smart village [4, 5]. The development of increasingly advanced technology has touched various aspects of life, including the economic aspect. Technological developments that have touched the economic aspect can be seen from the emergence of the Automatic Teller Machine (ATM) making it easier for customers to withdraw money and make transfers without having to go to a bank, online-based businesses, to process transactions using chip-based and server-based or better known as transactions. non-cash. Technological developments have brought about a change in people's needs for a payment instrument that can meet speed, accuracy, and security in every electronic transaction [6]. In its development, the electronic payment system or commonly called non-cash is strongly influenced by advances in technological developments and changes in people's lifestyles. Stated in their research results that if GDP, money supply and money circulation increase, electronic money will also increase. Although a "cashless society" has several advantages, environmental and social activists have expressed concern that increasing overall consumption, increasing personal debt, reducing savings, and increasing excessive consumption can have disastrous impacts on society and the environment [7, 8]. In addition, several previous studies suggest that consumers will experience psychological problems when parting with cash on the grounds that the physical cash creates awareness that something of value is being transferred [9, 10]. However, because the money is transferred so that it can be used for a specific purpose there may be awareness that the money is being spent. Non-cash transactions that are used as one of the transaction systems give rise to a non-cash payment instrument called a card payment instrument (APMK). The products from APMK that are used by the public today are debit or ATM cards, credit cards and electronic money.

## 2 Research Methodology

The implementation method in this research is based on three problems, namely the field of production, management, and marketing. Data taken from a survey in Partners in this study were the community and government of Karang Village, Karangpandan District, Karanganyar Regency with a target during the socialization there were 30 participants present. The method of implementing a web-based tourism village promotion information system, which is based on mobile technology with the smart village concept in Karang Village, consists of 5 stages, namely the problem solution study stage, data collection stage, application development stage, launching and socialization stage of application application and evaluation stage. This web application is expected to assist in making decisions for determining the promotion of tour packages [11] (Fig. 1).



**Fig. 1.** Flowchart of research

## 2.1 Stage of Problem Solution Study

This stage aims to examine in more detail the problems and solutions that will be implemented with partners. Then prioritize which ones are urgent to be implemented first, which ones should be implemented later. And also make future plans for the sustainability of this program in order to get better results or outcomes.

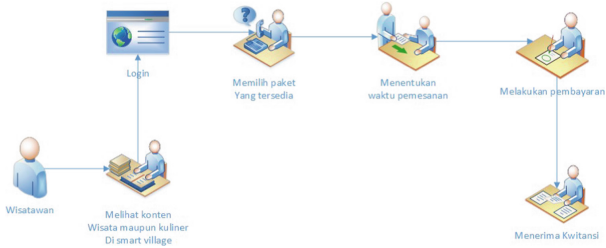
## 2.2 Data Collection Stage

This stage aims to obtain village data and Watu Gambir tourism data which will be used as input for the system or application to be developed. By conducting direct surveys and interviews with related parties/partners aimed at determining user requirements by collecting data such as population data and application feature displays by collecting data on facilities located at tourist sites, data on lodging places, data on local commodities that have the potential to be marketed and data used for promotions such as photos of tourist attractions etc. The data used are real and accurate data obtained from Karang Village Hall employees, village communities and tourist attractions managers [12, 13].

## 3 Result and Discussion

One of the concepts being developed and being intensified by the local government is a tourist village. The concept of a tourist village is expected to provide a variety of tourist attractions so that not trapped in the style of mass tourism (mass tourism) because the village is the place where most of the tourist attractions are located certainly has potential local wisdom appointed and certainly different from other villages. Through the tourist village, tourism will be created capable of absorbing rural workers (pro-jobs), growing the village economy (pro growth) and as a tool to reduce poverty (pro poor). For that in this research, further analysis and planning are carried out on the Go-Tourism system/application that will be made in this research. Which includes web and mobile based system design, database design, data analysis and user interface design. From the results of the user interface mockup that has been made, an initial display test is carried out for partners, whether the design used already has a good User Interface (UI) and User Experience (UX) for the target partner. The next step is to create a database, the database functions as a place to store data that has been provided by village hall employees. The system that has been designed is then implemented using the php and java programming languages which will be made into web and mobile applications.

In the information system has a business process that is useful as an initial guideline in running an information system, according to its own language the understanding of the



**Fig. 2.** Flowchart of research

process is: “Business processes are activities carried out in a structured and interrelated manner to produce products or services or also to solve a problem”. Here are some business processes that are made to assist in the process of designing this information system in Fig. 2.

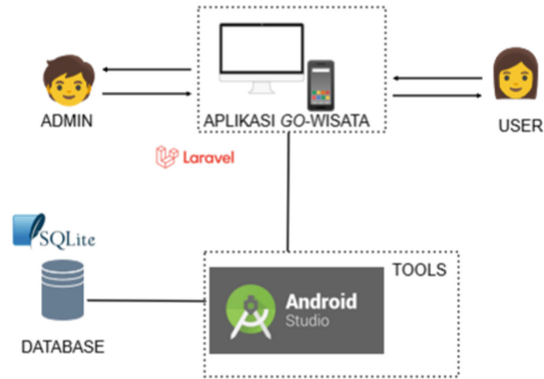
Admin is a village employee who is in charge of storing and managing village data such as population data and Watu Gambir tourism management employees who store data of visiting tourists, and promotion and marketing data. Admin uses a web-based application created using the CodeIgniter framework [14, 15].

According to the Final Project carried out by Cheril Mouren Lengkong, Rizal Sengeky and Brave Angkasa Sugiarto in 2019 “Web-Based Tourism Information System in Minahasa Regency”. This product creates a web-based tourism information system. Users and admins are required to register and login to enter the system and view or upload content. Tourists can only see information about tourism contained in the information system [16].

According to the Final Project carried out by Raysa Puteri Ardhiyani, Herry Mulyono in 2018 “Analysis and Design of a Web-Based Tourism Information System as a Promotional Media in Tebo Regency”. In this journal, the author makes a web-based tourism information system in Tebo Regency. Admin can only add information about tourism [17].

While the user uses a mobile-based application made using Android Studio. There are 2 levels of users here: (1) users are Karang village communities who have access as sellers in the go-shopping feature, owner in the go-booking and go-rent features, and (2) users are tourists or the general public who have access as customers in the features we call go-shopping, go-rent, go-booking, go-tourism, and go-payment.

From collecting data and requirements obtained from the village survey, then making an appropriate smart village model, then system design, analysis and design of the Go-Payment application that will be proposed in this study. Which includes data analysis, web and mobile-based system design, database design, user interface design. From the results of the user interface mockup that has been made, an initial display test is carried out for partners, whether the design used already has a good User Interface (UI) and User Experience (UX) for the target partner. The next step is to create a database, the database functions as a place to store data - data that has been provided by village hall employees. The system that has been designed is then implemented using a programming language that will be developed into web and mobile applications as shown in Fig. 3.



**Fig. 3.** Go-Payment application system design

The Payment application developed is one of the implementations of this fundamental research.

The product that will be produced from this final project is a web-based freelancer information system. This product will display published projects from companies/parties that need freelancers, then freelancers can look for projects that match their expertise in the system. Pricing in this system uses an auction system, so that the freelancer offers services and prices, then the company/project maker will choose the human resources and the desired price. The information system that will be created uses the PHP programming language that uses the Laravel framework.

The product that will be produced from this final project is a web-based smart village tourism promotion information system. This product will display promotional information about tourism and culinary in the smart village. Tourists who see the information and are interested in visiting it will order and pay for the packages that have been provided in the information system. After registering tourists can enjoy the tours and culinary that have been ordered. By applying the Laravel framework, this system can provide information about smart villages located in the Tawangmangu area, Karang, Karanganyar.

### 3.1 Actor

Actors contained in this system include:

#### 3.1.1 Admin1

Admin1 is an admin who acts as a super admin. Admin1 can add as well as remove admin2. Admin1 can receive incoming orders from users (tourists) who order, then admin verifies payments from users. If the payment has been made then admin1 will verify and forward the message to admin2.

### 3.1.2 Admin2

Admin2 functions to update news content as promotional media and verify the arrival of users to tourist or culinary places.

### 3.1.3 User

Users are tourists or visitors who want to travel to smart villages. The user visits the website and sees the tourist and culinary attractions that are served, after that the user orders a culinary or tourist place and then pays it according to the amount of money listed on the website. After that the user will receive a confirmation message from admin1 that the transaction was successful or unsuccessful.

This Tourism Village Web application makes it easier for tourists to book travel tickets to flower gardens and lakes, reservations for camping ground, river tubing, lodging, restaurants and boats. This application also empowers village communities who have hotel or culinary businesses to promote their business. The role of the tourism office will greatly assist the process of digitizing tourist villages. The appearance of the application is as follows.

In implementing the user interface design on this information system using the Bootstrap 4 framework, then also using chart.js as a package for creating graphics, and Laravel Blade which is useful as a template engine for display in applications. The following is an implementation of the interface design/user interface that has been in accordance with the design.

The admin dashboard display on e-tourism application. The Tourism Admin Page Display is a display that is dedicated to the Tourism Admin to process ticket price data, rides, orders and others. The following is a view that is owned by the tourist admin view, it can be seen in Fig. 4 and Fig. 5.

The login page is the page used by the user to select and order camping equipment. Here is a picture of the implementation as in Fig. 6 and Fig. 7. Based on the results of developing this web-based application with the aim of increasing the promotion of tourist villages, especially during the pandemic, of course. The current digital role is important

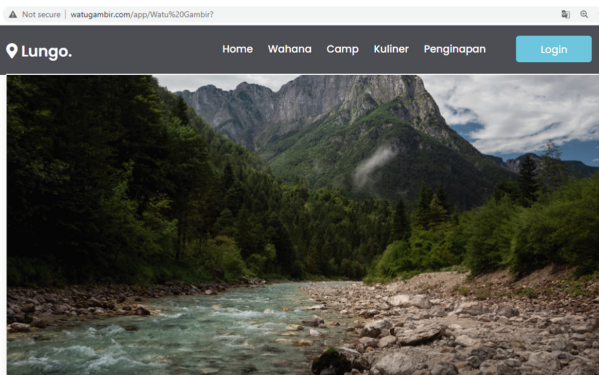


Fig. 4. Dashboard go-tourism.

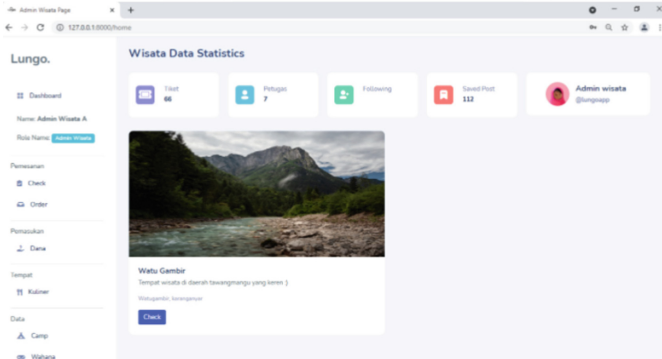


Fig. 5. Admin dashboard on the Go-payment application.



Fig. 6. Admin dashboard on the Go-payment application.

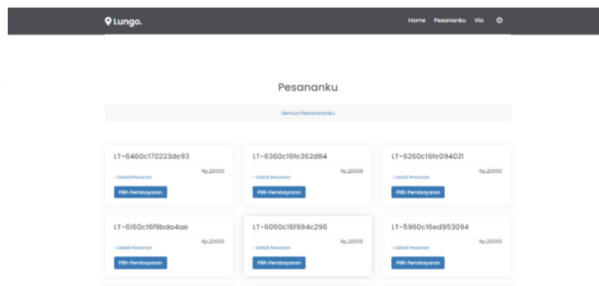
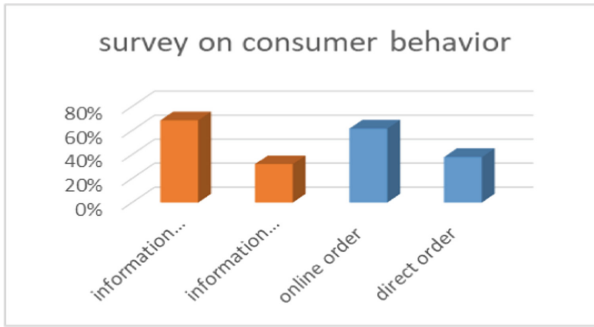


Fig. 7. Order recap menu.

to be applied by tourism village managers to make it easier to carry out a series of health protocols when carrying out tourism activities in tourist villages. So, tourism village managers must have basic skills to use various digital media before implementing them.

In order to support the usefulness and effectiveness of the promotions carried out, the researchers conducted a survey on customers about current customer habits related to information and ordering techniques (Fig. 8).



**Fig. 8.** Survey on customer behaviour.

## 4 Conclusions

A web-based information system as a promotional has been developed to promote tourism villages and system consists of five actors, namely customers, travel admins, culinary admins, lodging admins and super admins. This information system provides services and convenience to customers who want to book travel tickets, rides and others with ease.

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