Hilirization of Tourism of Central Bangka with Amazing Bateng Bilingual Application

**Diana Anggraeni [1],*, [iD], Bob Morison Sigalingging [1], [iD],
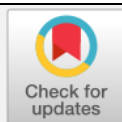and Ghiri Basuki Putra [2], [iD]**

[1] Department of English Literature, Faculty of Social and Political Sciences,
Universitas Bangka Belitung, 33172, Bangka, Bangka Belitung Islands Province, Indonesia
[2] Department of Electrical Engineering, Faculty of Engineering,
Universitas Bangka Belitung, 33172, Bangka, Bangka Belitung Islands Province, Indonesia
* Corresponding Author: dianaanggraeniubb@gmail.com

ARTICLE INFO

ABSTRACT

The positive response to the rise of the tourism sector is reflected in the idea of creating a bilingual tourism application called Amazing BaTeng, which serves as a practical tool to introduce and sell Central Bangka tourism to the national and international sectors. Downstream tourism is processing various tourism research findings that are significantly sought to penetrate the industrial scale. The tourism sector in Central Bangka Regency has now become one of the essential elements of local commodities. It is still developing in a more advanced direction to build the regional economy while introducing Bangka Belitung culture in the national and international arenas and the presence of the Industrial Revolution 4.0. This study aims to identify how the downstream of Central Bangka tourism with the Amazing BaTeng bilingual application affects the progress of tourism and foreign language digital literacy in Central Bangka, Bangka Belitung Islands Province, in the new normal.

1. Introduction

Tourism activities bring social, economic, and cultural influences that arise from tourist trips. Mason (1990), as cited in Pradana (2019), says that tourism is a temporary movement to some destination other than the place of work and residence. Tour trips are carried out for at least 24 hours and a maximum of 6 months with an orientation for fun, health, recreation, education, reward, prestige, and relaxation at tourist destinations. As a form of recreation, entertainment, and physical and psychological refreshment, tourists need to travel to several tourist destinations (McIntosh & Gupta, 1980, as cited in Pradana, 2019).

The visits of tourist groups to several tourist destinations have motivated tourism actors to build hotels, villas, restaurants, and travel to optimize tourism activities. Not a few are among the perpetrators of tourism forming organizations and fostering social networks among tourism organizations to achieve conformity from the sustainability of tourism activities. In other words, tourism as a social activity is influenced by various community organizations and has socio-cultural, economic, and political impacts on individuals, social groups, and society. The social aspect of tourism activities is the main focus of the sociology of tourism. The current COVID-19 pandemic requires the Indonesian people to adapt to a new normal. This pandemic has hit various vital sectors, so it has shaken people's lives stability. Today, tourism activities are developing widely and penetrating the lives of individuals and communities worldwide. The spread of tourism activities is increasingly expanding in urban areas, rural areas, mountains, beaches, to the outskirts of forests. Various forms of urban, rural, mountain, beach, and sea tourism activities are developing along with the distribution flow to various parts of the world. However, not all tour agents and prospective travel agents know about the trends and achievements of tourism progress in various regions. A mapping and basis for decision considerations are needed through tourism socialization actions to obtain optimal and effective outputs from tourism development. Tourism socialization is a socialization activity through description counseling general knowledge about tourism in the context of motivating, strengthening preparation, and opening the horizons of tour agents and prospective tour agents about various opportunities from tourism development.

Pradana (2019) states that tourism activities could be well-developed thanks to social interactions, behavior, and mobility in the tourism sector.

1.1. Tourism Interaction

The social form of tourism can be fostered thanks to the interaction between groups of tourism actors on an ongoing basis. Based on the motives, tourism interactions can be categorized as follows:

A. Economic and Business Motivated Interaction

Interaction with economic and business motives is an effort to establish social relations to gain economic profit. Economic and business-motivated interactions include agreements on the standardization of tourism commodity prices, market segments, and the tourism business agenda. The form of achievement from the interaction with economic and business motives is the most profitable for tourism activity actors, especially tourism business actors.

B. Culturally Motivated Interaction

Culturally motivated interaction is a form of effort to establish social relations, in which the cultural basis becomes the capital and goal in carrying out tourism activities. Cultural interaction aims to institute cultural value through cross-culture, socialization, enculturation, or learning. Forms of achievement from culturally motivated interactions

include cultural acculturation, cultural inculturation or institutional strengthening of a culture, and benefiting cultural practitioners through tourism activities.

C. Symbolic Interaction

Interactions that do not have a primary purpose involve a variety of symbols about tourism activities as an effort to establish social relations. Where these interaction activities do not significantly impact the institutional structure of tourism activities, the resulting form of symbolic interaction does not participate in producing agreements on the sale of tourism products and preserves culture. It harms many tourism actors in tourism activities. On a macro level, symbolic interaction in the tourism sector is synonymous with failed economic, political, or cultural interaction.

D. Political Motivated Interaction

Interactions with the primary goal of stealing authority and changing the state of tourism cunningly, such as through manipulative actions to benefit from tourism development. These interaction activities are expected to significantly impact the resilience of a social group in the tourism sector. The achievements of this type of interaction have a more negative connotation because they are synonymous with fraud and criminal practices from the mafia, where many tourist actors in tourism activities often feel disadvantaged.

1.2. Tourism Behavior

Tourism behavior is an active and dynamic attitude that tourism actors and tourists in tourist areas should carry out. Ideally, tourism actors respect tourists according to the hospitality business's provisions. Thus, tourists respect tourism actors by obeying travel rules and paying off travel bills, and giving tokens of thanks.

A. Tourism Mobility

Tourism mobility is referred to as the flow of travel activities, which can majorly affect changes in social structure and the maintenance of groups managing tourist destinations, tourist accommodation entrepreneurs, and the social environment. Tourism mobility has a specific pattern and occurs in line with conducive relationships between organizational network components in tourism activities.

B. Tourism Institutions

Tourism institutions are an organizing body for forms of tourism activity. Based on its function, tourism institutions establish operational standards of conformist tourism activities among tourism actors for every visit.

C. Tourism Contracts

A tourism contract is a form of agreement, proof of cooperation from tourism actors regarding tourism activities in an organization or between tourism organizations. A tourism contract is a form of transparency regarding the limits on the rights and obligations of tourism actors related to the agenda of tourism organizations in a particular field following the standardization set and known by the parties involved in the tourism sector. In another sense, tourism contracts can be understood as evidence of social ties from tourism actors regarding the conformity of activity related to institutional tasks, tourism needs, and the tourism environment for the continuity of tourism activities and the convenience of tourist visits.

D. Tourism Integration and Integrity

Tourism integration shows that each component of the tourism system is mutually correlated and supports each other between one component and another. This means that tourism integration is characterized by a tourism system that can run optimally. Tourism integrity is characterized by harmonization between each tourism component in carrying out their respective jobs and duties through understanding and tolerance between interested parties in the tourism sector. This means that tourism integrity is good determining factor for the duration of sustainability of tourism activities. Integration and tourism integrity can be emphasized as two aspects that every tourism organization strives for existential interests, increasing profits and succession of institutional missions to sustain tourism activities. The tourism sector is one of the sectors that has been significantly affected.

However, along with the government's optimism to revive Indonesia's economy amid the pandemic, the tourism sector is slowly starting to rise again in a new normal. The positive response to the revival of the tourism sector is reflected in the idea of producing a bilingual tourism application called Amazing Bateng, a practical tool to introduce and sell Central Bangka tourism nationally and internationally. This application is indirectly a part of the existence of the Industrial Revolution 4.0 and the beginning of the possible era of Society 5.0 in the Province of the Bangka Belitung Islands. The Industrial Revolution 4.0 invites the public to maximize the role and function of the internet in daily activities, while in the academic world, the Industrial Revolution 4.0 embraces interdisciplinary. The Industrial Revolution 4.0 invites several scientific fields to collaborate in creating new products or spawning internet-based product innovations according to the current situation.

For this reason, the dynamics and synergies of linguistics, tourism, and information technology will be exposed in this study which is predicted to collaborate well. Downstream brings research and innovation results closer to its users, including the general public, government, or industry. Downstream is reflected as processing research findings into a product that can reach all levels of society with the support of advanced and modern technology. On the other hand, the challenges of the times encourage every individual to adapt and innovate to create a more efficient life and be aware of the potential benefits of Industry 4.0. Schmidt et al. (2015) expressed the potential benefits of Industry 4.0, namely the realization of mass customization of a product. This critical information is whether it can formulate downstream that advances tourism while increasing digital literacy in foreign languages in Central Bangka Regency will be an issue that will be studied in this research. Thus, this study tries to identify the extent to which the downstream of Central Bangka tourism with the bilingual application Amazing BaTeng affects the progress of tourism and digital literacy in foreign languages in one area of the Bangka Belitung Islands Province during the new normal. Because during the COVID-19 pandemic, tourism was the sector that felt the most impact, namely the lack of tourist visitors, and even tourist attractions were not visited. With the application, it is hoped that it will be able to promote and introduce tourism in Central Bangka Regency and become a source of information about tourist destinations so that when the pandemic is over, tourists can be interested in visiting by looking at the information in this Amazing Bateng application. In Figure 1, you can see the Central Bangka Tourism Map, which shows tourist destinations in Central Bangka.

Figure 1. Central Bangka Tourism Map

This mobile application is a practical means to obtain complete information about tourism categories in Central Bangka Regency. Applications will be compiled in a bilingual format, namely Indonesian and English. As it develops, this application can be echoed to the international community and used as an initial reference before visiting tourist spots in Central Bangka, such as Bukit Angsa and Kolong Biru. Considering the urgency of developing tourism in the Province of the Bangka Belitung Islands in a more advanced direction, implementing the digitalization described will positively and significantly contribute to regional development. This study needs to limit the problem to get optimal and targeted results. The limits of the study are as follows:

1) Central Bangka tourist destinations' Profile provides data on supporting infrastructure facilities ranging from hotels, restaurants, travel agents, car rentals, and others in Central Bangka Regency.
2) Making the Amazing Bateng bilingual application as a tourism information system in Central Bangka for easy access to tourist information for local and foreign tourists through Android-based devices.

1.3. Research Objectives

This research aims to:

1) Identifying the extent to which the downstream of Central Bangka tourism with the bilingual application Amazing Bateng affects tourism progress and digital literacy in foreign languages in Central Bangka Regency, Bangka Belitung Islands Province, during the new normal.
2) Designing an information technology-based tourism information system in Central Bangka that can be accessed online via the Internet and Android-based devices.

2. Research Methodology

This research is descriptive, using a qualitative approach. Sutopo (2002) states that in qualitative (descriptive) research, the case study leads to a detailed and in-depth description of the condition portrait of what happened according to what is in the field of study. Nawawi (as cited in Abdurrahman, 1999) added that the data would be described based on the facts that appear as they are.

Application development will use the waterfall model, a classical model that is systematic and sequential in building software. This model is a "Linear Sequence Model" (Roger & Bruce, 2015), one of the system or application development models. This model is often called the "classical life cycle" or waterfall method. This model includes a generic model in software engineering. It was first introduced by Winston Royce around 1970, so it is often considered ancient, but it is the most widely used model in Software Engineering (SE).
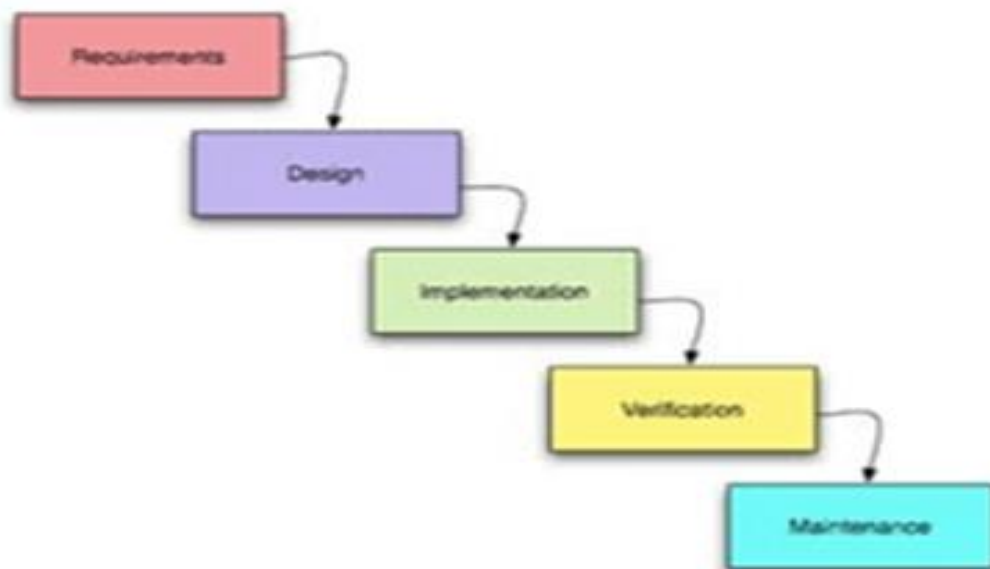
Figure 2. Waterfall Method

2.1. Requirement Analysis

a. Collecting data related to tourist destinations, infrastructure, facilities, infrastructure, and others is used in this Amazing Bateng, where the data taken can be in the form of images, videos, and profiles of tourist attractions that provide complete information about tourist destinations in Central Bangka. This data is collected directly at tourist sites to get more complete data.

b. Perform data collection and database system planning by requesting data from the Central Bangka Regency's tourism office and analyzing the tourist destinations database. The data collected becomes a database for this Amazing Bateng system.

c. Collecting information and data related to the system to be built, for example, tourist destination data, hotel data, transportation data and distance data from tourist sites, and Tourism Awareness Group data in Central Bangka.

d. Analyzing data requirements and creating tables needed for the system, as well as designing so that the data collected and built into a database can be accessed via the internet by the wider community and by the system admin so that the system can be used properly.

2.2. Design

a. Perform interface design for the system built where the system contains data about tourist destinations, Tourism Awareness Group, tourist maps of Central Bangka, and ease of use.

b. Designing a database structure that will be used on the Amazing Bateng system on websites and applications.

c. Designing information system interface website based on web and mobile applications.
d. Database design using MySQL for tourist destinations, infrastructure, facilities, infrastructure, and others to facilitate digital data storage so that access can use the internet.

2.3. Implementation
a. Creating an Amazing Bateng system based on websites and Android applications, where websites and applications are tested on the community and see responses and input so that improvements can be made and the system becomes better and more complete.
b. Digitizing tourist destination data from databases that have been built, starting from tourist destinations, infrastructure, facilities, infrastructure, and others.

2.4. Testing
a. Verify and experiment with the system.
   Seeing whether the Amazing Bateng system is running and whether there are still errors from the system, then checking the data and information stored is complete and accessible. Then look at access to the website www.amazingbateng.com and whether it is running and can be accessed using the internet network.
b. Create documentation
   Create a document from the Amazing Bateng system to see how it processes when people run and use it. Documents can be notes of improvement for future development.
c. Information system test
   Make information from system testing results to record errors that appear when run and repairs made to overcome these problems when they appear again.

2.5. Maintenance
   To request modifications and changes to the system that has been built as needed when used.

3. Results and Discussion
   The harmonization of each tourism component in the tourism sector characterizes tourism integrity. Tourism agencies organize various activities based on agreements and cooperation with tourism actors. Travel behavior is discussed and determined by the social form of tourism for tourist areas.
   The social form of tourism can be fostered thanks to the interaction between groups of tourism actors on an ongoing basis. It is influenced by tourism mobility related to network interests in tourism activities to a certain extent. According to Pradana (2019), Tourism mobility is the travel of tourism activities, which can significantly affect changes in social structure and the maintenance of groups managing tourist destinations, tourist inn entrepreneurs, and the social environment. Tourism mobility has a specific pattern and is sustainable with conducive relationships between organizational network components in tourism activities. The amazingbateng.com application contains essential information about destinations in Central Bangka Regency. It makes it easy for tourists who want to travel to Central Bangka so they are expected to provide comfort when traveling to Central Bangka.
   The Amazing Bateng application can be accessed at www.amazingbateng.com to provide access anywhere and anytime as long as an internet network exists. The amazingbateng.com application contains essential information about destinations in Central Bangka Regency. It

provides convenience for tourists when they want to travel to Central Bangka, so it is expected to provide comfort when traveling to Central Bangka.

The Amazing Bateng application can be accessed at www.amazingbateng.com to provide access anywhere and anytime as long as an Internet network exists.
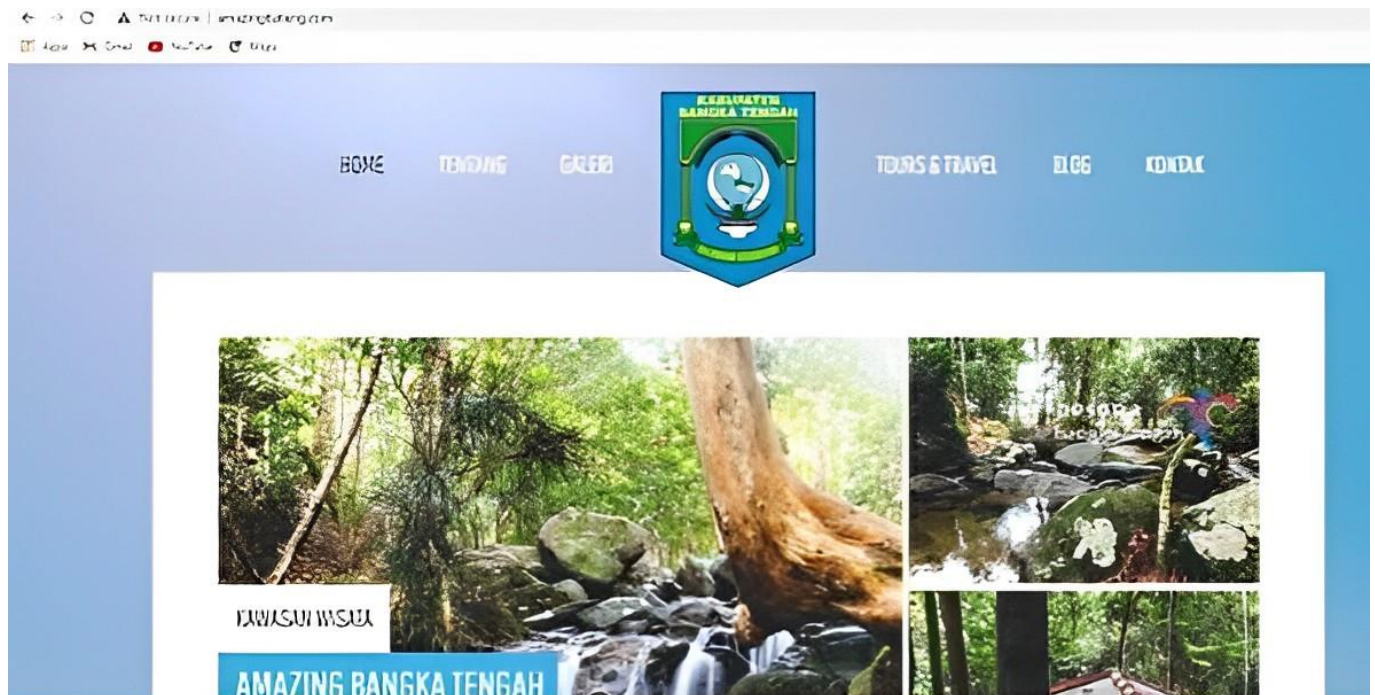
Figure 3. Main Menu amazingbateng.com

The Main Menu has a menu to make it easier to provide information for visitors by providing complete and exciting data. On the main menu, there are choices of Menus Hotel, Travel Destinations, Travel and Tours to provide information when traveling.
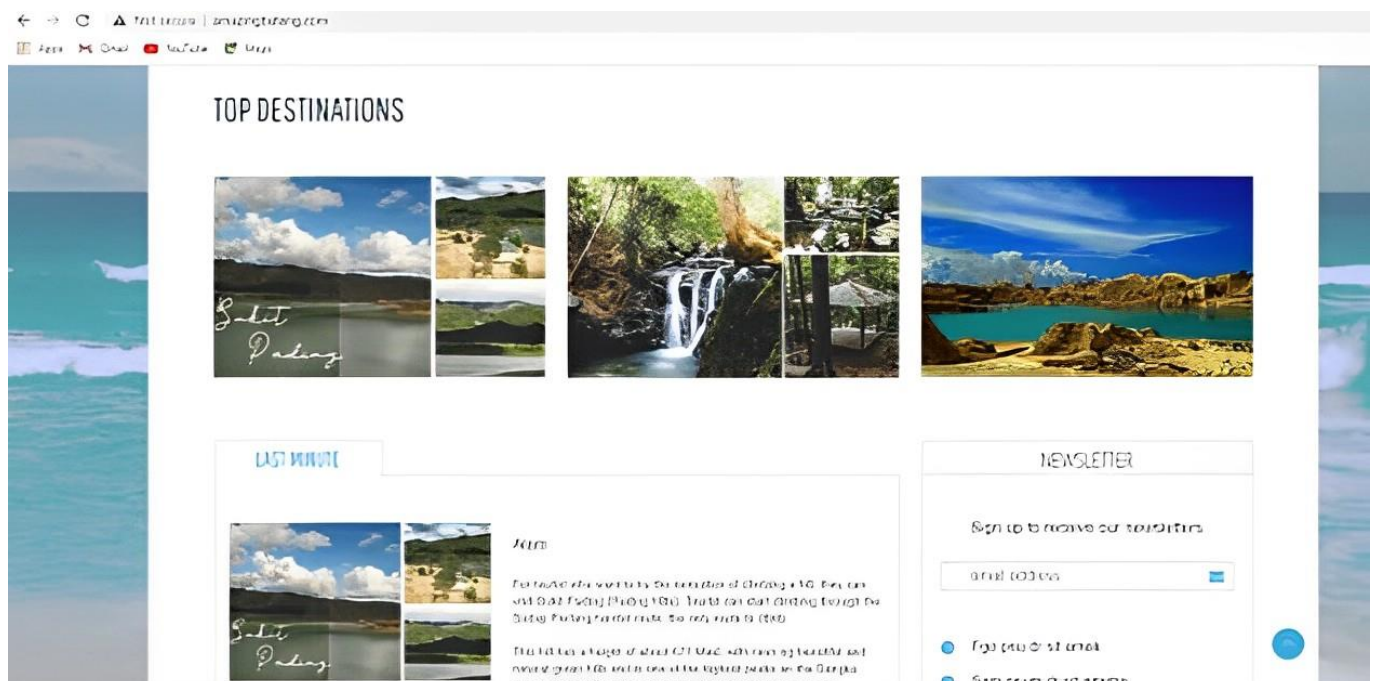

Figure 4. Menu of Popular Destinations

This section provides information on popular destinations that can be visited in Central Bangka and is presented excitingly.
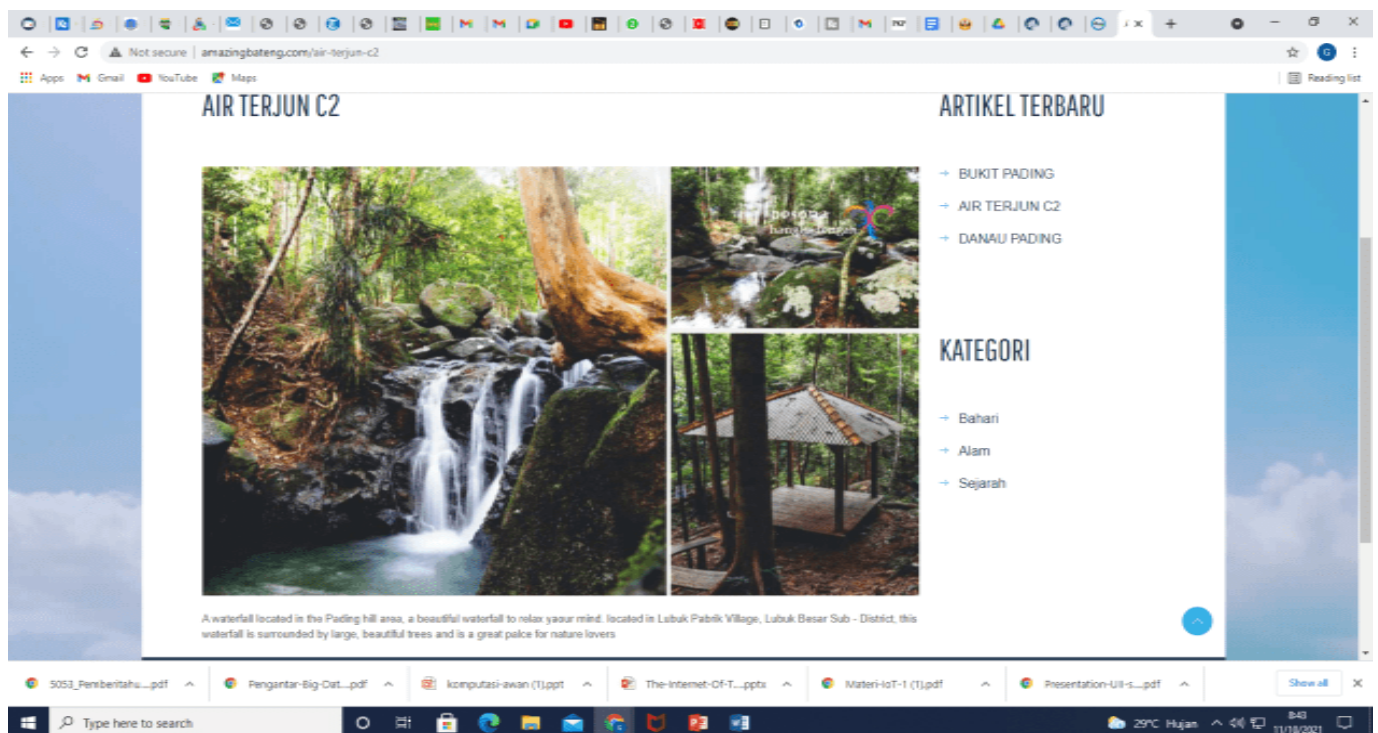

Figure 5. Detailed Menu for Tourist Destinations

This menu provides complete information about tourist destinations in the form of images and text to provide complete information for tourists.
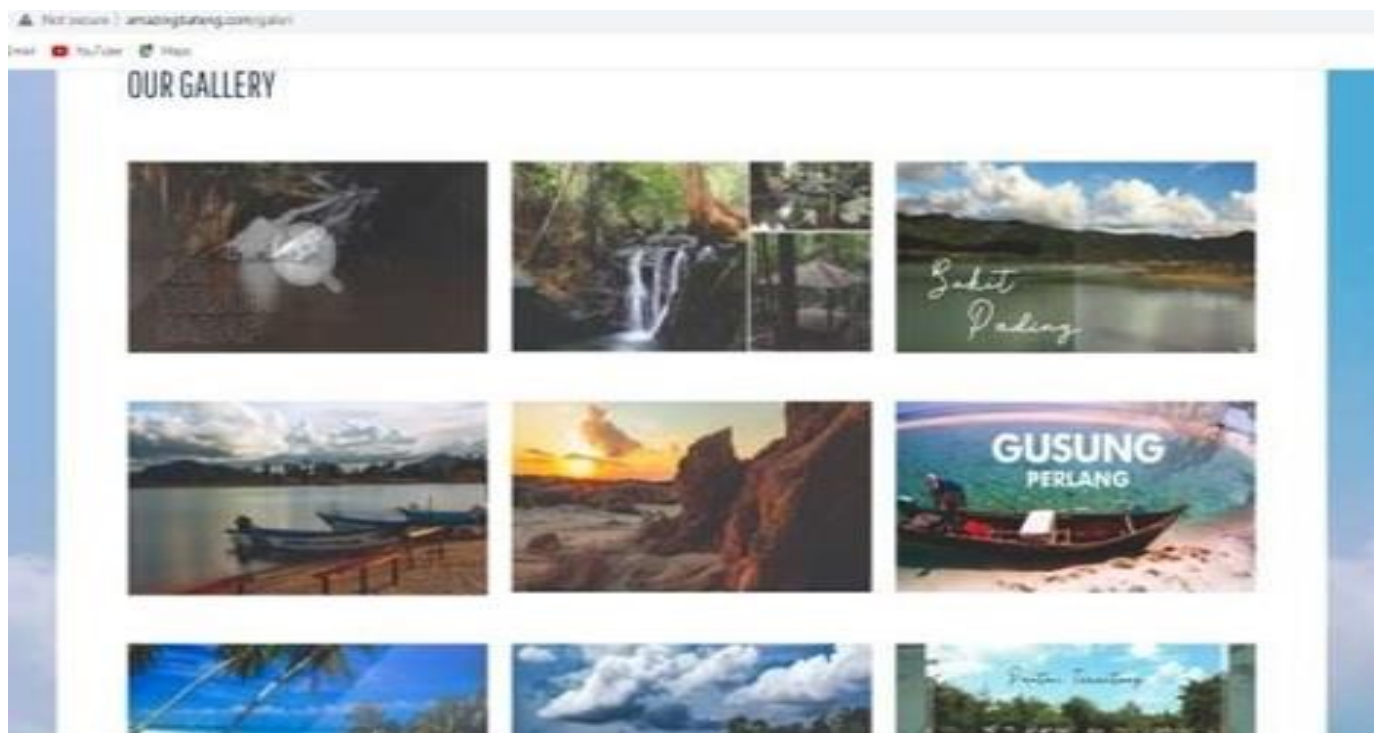

Figure 6. Tourism Profile

While in **Figure 6** is a tourism profile to provide all data on tourist destinations in Central Bangka, which are presented in attractive images to make people want to visit.
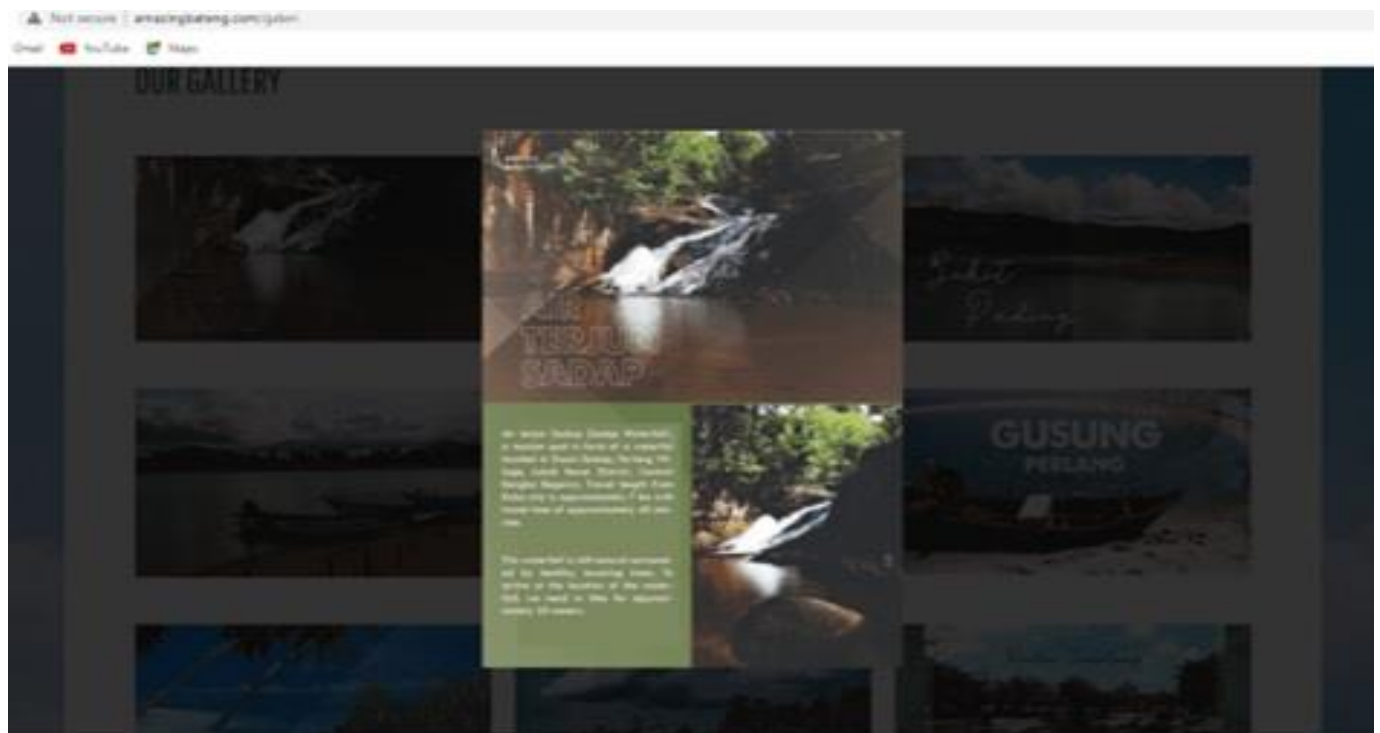

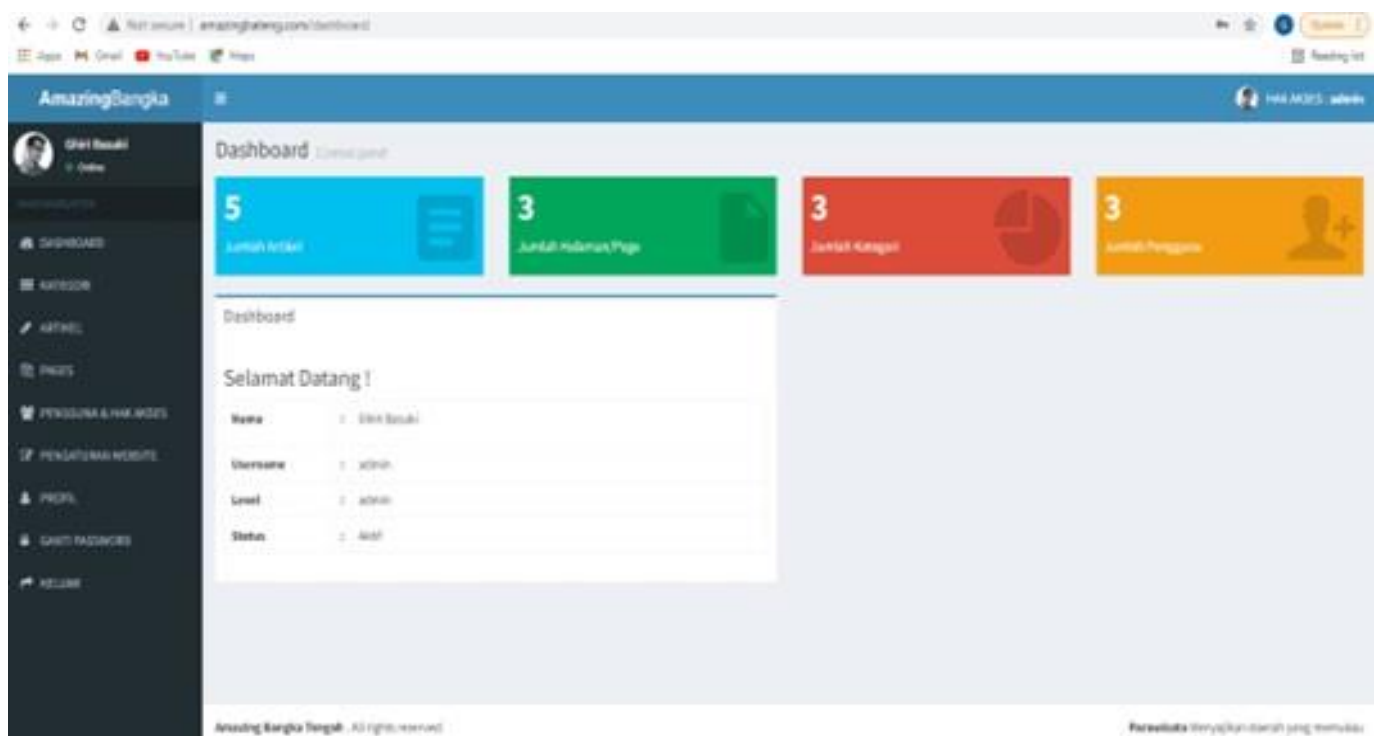**Figure 7. Tourist Destination Information in English**

Figure 8. System Admin Page Display

Figure 7 is the main view for the system admin in managing Amazing Bateng to update data regularly and maintain the system when there are problems and for future system development.
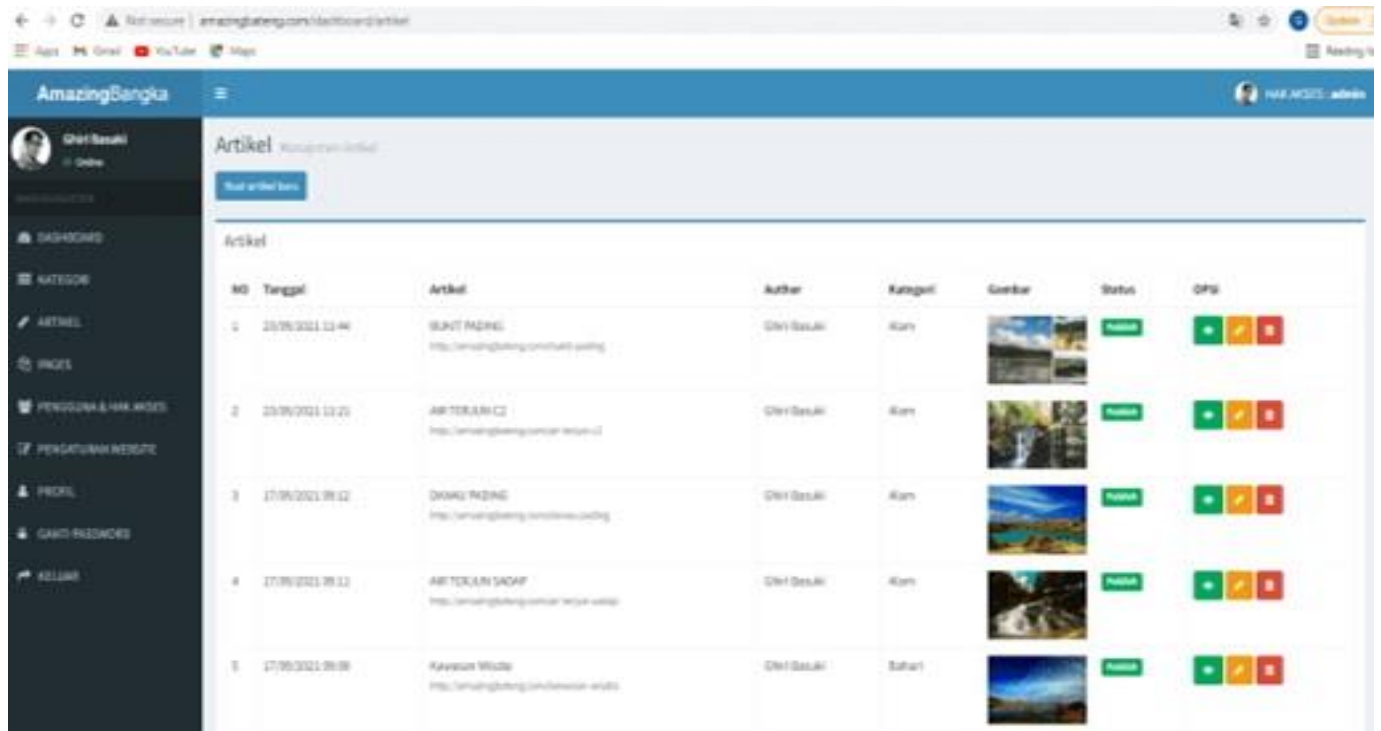
Figure 9. Menu for Editing Articles

Figure 9 is a display for adding new articles to the Amazing Bateng application to provide convenience in managing the Amazing Bateng system.
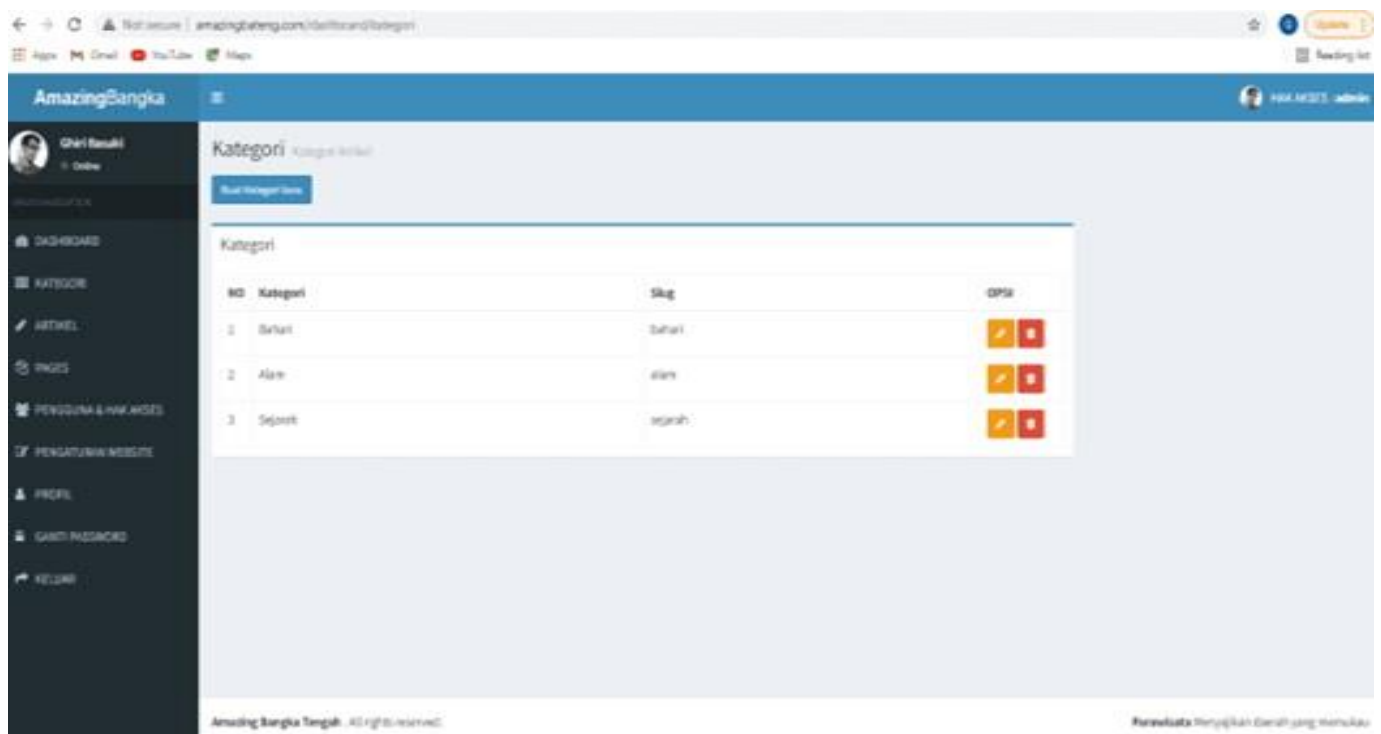

Figure 10. Menu for Category Edit

The category edit page menu is a page for admins when they want to add menus and categories from the Amazing Bateng application.

Figure 11. Android Application Display

This application will also be based on Android so that it can be used on Android-based smartphones to facilitate the use of the Amazing Bateng application. Because almost most people already have an Android-based smartphone and can use it, it will be easier to use this Amazing Bateng application.

In **Figure 11**, you can see the display of the Amazing Bateng application on an Android-based smartphone with menu menus that have been adapted to tourist destinations in Central Bangka, which consist of marine tourism, nature tourism, cultural and historical tourism, ex-mining tours, hotels, and Central Bangka tourism maps. With this mobile application, tourists can access this Amazing Bateng application through an Android-based smartphone making it easier to get complete information about tourist destinations in Central Bangka anywhere and anytime as long as they are connected to the internet. This Amazing Bateng application can support tourism in Central Bangka because there are currently many Android and Internet users, so this Amazing Bateng application can become a bridge to people outside Bangka to introduce tourist destinations in Central Bangka. The use of English in Amazing Bateng is intended to promote this application internationally and to increase its value of this application. It is necessary to introduce this application widely so that more people can access information about tourist destinations in Central Bangka.

4. Conclusion

The Amazing Bateng application has a complete database of Central Bangka tourist destinations and provides interesting images to provide an experience for tourists and convenience in traveling in central Bangka. Modern tourism management has used information technology, especially the Internet and Android-based smartphones so that the government can master tourism management and find out about future tourism development.

The main purpose of this Amazing Bateng application is that tourists get convenience when traveling in Bangka Belitung and get complete information about existing tourist destinations.

OPEN ACCESS

This application is also expected to help Central Bangka tourism during the COVID-19 pandemic and welcome the Industry 4.0 era, where everyone must be able to master the field of information technology expertise.

The development of this application must be carried out to improve, provide complete information, and support tourism in Central Bangka. Promotion and introduction of this application must also be carried out on an ongoing basis so that more people are familiar with tourist destinations in Central Bangka and are expected to be interested in visiting Central Bangka Regency.

5. Acknowledgment

The author would like to thank Universitas Bangka Belitung through the University Level Lecturer Research scheme, which has provided research funds to complete this research.

6. Declaration of Conflicting Interests

The author has declared no potential conflicts of interest concerning this article's research, authorship, and/or publication.

References

Abdurrahman, D. (1999). *Metode Penelitian Sejarah*. Jakarta: Logos Wacana Ilmu.

Pradana, G. Y. K. (2019). *Sosiologi Pariwisata*. Denpasar, Indonesia: STPBI Press.

Roger, S. P., & Bruce, R. M. (2015). Software Engineering: A Practitioner's Approach. McGraw-Hill Education.

Schmidt, R., Möhring, M., Härting, R. C., Reichstein, C., Neumaier, P., & Jozinović, P. (2015). Industry 4.0-potentials for creating smart products: empirical research results. In *Business Information Systems: 18th International Conference, BIS 2015, Poznań, Poland, June 24-26, 2015, Proceedings 18* (pp. 16-27). Springer International Publishing.

Sutopo, H. B. (2002). *Metodologi Penelitian Kualitatif*. Surakarta, Indonesia: Sebelas Maret University Press.

About the Author

1. **Diana Anggraeni** obtained her Doctoral degree from Universitas Padjadjaran, Indonesia, in 2018. The author is an Assistant Professor at the Department of English Literature, Faculty of Social and Political Sciences, Universitas Bangka Belitung, Indonesia.
   E-Mail: dianaanggraeniubb@gmail.com

2. **Bob Morison Sigalingging** obtained his Master's degree from Universitas Sebelas Maret, Indonesia, in 2014. The author is an Assistant Professor at the Department of English Literature, Faculty of Social and Political Sciences, Universitas Bangka Belitung, Indonesia.
   E-Mail: bob-morison@ubb.ac.id

OPEN ACCESS

3. **Ghiri Basuki Putra** obtained his Master's degree from Universitas Indonesia in 2006. The author is an Assistant Professor at the Department of Electrical Engineering, Faculty of Engineering, Universitas Bangka Belitung, Indonesia.
   E-Mail: ghiri_basuki@ubb.ac.id