

Sustainable Regional Development Through the Development of Smart Village and Smart Branding: A Case Study of Bangsri Village, Blora Regency

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Abstract—Tourism village development is one of the steps in village development that is now widely pursued, especially for villages with unique potential. However, sustainability is a challenge in the development of tourism villages. This research examines the factors that involved in sustainable regional development through smart village and smart branding. This concept is used because it can accelerate the development of tourism villages. A case study was conducted in Bangsri Village, Blora Regency, Central Java. The factors that involved in the development of smart village and smart branding in Bangsri Village mainly include the initiative and innovation of village leadership, support from local government, community awareness and participation, and tourism branding through the development of landmarks at the Noyo Gimbang View tourist attraction and intensive use of social media. The sustainable regional development strategy is formulated using the SWOT method and elaborated with tourism village development strategy, resulting the following strategy: development of cultural tourism potential, coordination with local government regarding the improvement of road accessibility and enhancement of available amenities, periodic assessment of tourism trends adjusted to village conditions, and empowerment of all community layers, as well as the establishment of regulations governing the management of tourism villages in the future.

Keywords—smart city, smart region, smart village, smart branding, sustainable development, tourism village

I. INTRODUCTION

Villages are an essential part of a country's social and economic system [1]. With the enactment of Law Number 6 of 2014 on Villages (Village Law), villages have significant authority through the recognition of their diversity and ancestral rights, as well as the management of Village Funds to improve village service facilities and meet basic needs

[2]. Villages have the potential to become centers for local economic development and the preservation of local wisdom. Development that begins in the village has become a national development priority through the “village builds” paradigm, which emphasizes the role of villages as bases, subjects, and arenas of development to independently build their villages [3].

Village development under the umbrella of village autonomy is still needed to improve living standards, alleviate poverty, and enhance community welfare [4]. The Village Law grants villages the authority to establish Village-Owned Enterprises (BUMDes) to engage in economic and/or public service activities, aiming to boost the village economy and public services, manage village potential, create markets and job opportunities, and increase village business and income [5]. BUMDes are a priority in the allocation of Village Funds, which are transferred annually through the Regency/City Budget (APBD) [6].

Technological advances have a significant and transformative impact on human life [7]. Not only affecting daily life, technological progress is also used as an instrument to accelerate regional development. In spatial aspects, the use of technology has a significant impact on globalization by eliminating barriers of time, distance, and information gaps [8]. Smart village is considered an alternative village development model suitable for environmental changes and rapid technological advances [9].

EU Action for Smart Villages defines the smart village concept as rural areas and communities that can build using their potential and explore new opportunities based on knowledge and networks by utilizing information and communication technology (ICT) [10]. Generally, the smart village concept is broken down into several dimensions representing various themes related to village development. Some experts formulate smart village dimensions by referring to the smart city dimensions that were first proposed and have been implemented in various cities, including smart economy, smart people, smart governance, smart mobility, smart environment, and smart living [11]. However, the smart city concept cannot be fully applied due to the homogeneity of residents and cultural locality [12]. The smart village dimensions are formulated to include smart governance, smart community, smart economy, and smart environment, with the possibility of adding smart branding for villages with specific potential [13].

The significant potential and opportunities in Indonesia's tourism sector have been widely captured to develop tourism villages based on local resources, both physical and cultural attractions [14]. According to dataindonesia.id [15], in 2023, the Ministry of Tourism and Creative Economy (Kemenparekraf) of Indonesia reported 4,674 tourism villages, with South Sulawesi Province having the highest number of tourism villages at 480. Tourism villages are seen as a form of sustainable tourism implementation due to community empowerment and environmental protection that prioritize local wisdom [16].

The development of villages with the potential to become tourism villages can be accelerated with the implementation of smart village, primarily focusing on the smart branding dimension. Practically, smart branding is demonstrated through promotion or marketing efforts of tourist attractions using social media, emphasizing the uniqueness of the tourist attractions [17]. The use of ICT in the development of tourism villages can act as a tool and innovation that bridges tourist attractions and the availability of facilities [18]. The use of ICT in tourism village management also develops the rural community economy [13]. Accelerating village economic development can be achieved through the use of ICT to achieve sustainability [19].

To examine the implementation of sustainable regional development through the development of smart village and smart branding in Indonesia, an in-depth case study was conducted in Bangsri Village, Jepon Subdistrict, Blora Regency, Central Java Province. Currently, Bangsri Village has a flagship tourist attraction named “Noyo Gimbal View”, developed since 2022. The tourist attraction offers rural culinary tourism with a view of the rice fields combined with historical tourism. Noyo Gimbal or Naya Sentika is a hero

figure in Bangsri Village, so the tourist attraction is named after him, and a giant statue of Noyo Gimbal was built as a landmark. The promotion of Bangsri tourism village is actively done through Instagram at https://www.instagram.com/noyo_gimbal_view, currently followed by around 5,000 followers. The “Noyo Gimbal View” tourist attraction is managed by the Village-Owned Enterprise (BUMDes) “Maju Mapan” of Bangsri Village. The budget for the development of Bangsri tourism village is supported by Village Funds amounting to IDR 200 million and provincial financial aid (bankeuprov) amounting to IDR 100 million for the construction of the Noyo Gimbal statue [20]. In 2023, Bangsri Village was among the top 15 villages in the Nusantara Tourism Village Competition organized by the Ministry of Villages, Disadvantaged Regions, and Transmigration Republic of Indonesia for Category I: Very Disadvantaged/Disadvantaged/Developing.

Previous studies have examined the implementation of smart village in tourism village development. Study by [17] identifies efforts to implement the smart concept in the development of Boon Pring ecotourism village in Malang Regency through descriptive analysis of smart people, smart government, smart economy, smart environmental, and smart promotion dimensions. A similar study by [21] identifies the potential for smart village development in Rende tourism village, West Bandung Regency, based on smart village dimensions by [12], namely smart government, smart community, and smart environment. Both studies tend to describe the existing conditions in tourism village development related to the smart village concept and do not emphasize the sustainability concept crucial for tourism village development.

This research provides novelty in terms of in-depth analysis to identify factors behind the successful implementation of smart village and smart branding in Bangsri Village as a case study. These factors will form the basis for analyzing appropriate strategies for developing tourism villages through the implementation of smart village and smart branding as two important concepts in today's tourism village development. The study of sustainable development is also a focus in this research, especially through the selection of Bangsri Village as a case study, which has experienced ups and downs in efforts to develop tourism villages independently by the village community.

The sustainability of tourism village development is a challenge faced by all tourism village managers. This is due to the many parties involved and the fluctuating dynamics of village governance. Before Bangsri Village was developed into a tourism village with its main attraction being “Noyo Gimbal View”, in 2020, Bangsri Village developed Kampung Pelangi, a settlement with colorful houses and mural paintings, along with several entertainment facilities such as swimming pools, playgrounds, and culinary offerings. At that time, Bangsri Village, with its Kampung Pelangi, was able to generate Village Original Income (PADes) of IDR 70 million per month [22]. However, due to the Covid-19 pandemic and internal village conflicts, Kampung Pelangi management had to be halted, leaving the facilities neglected to this day.

The United Nations World Tourism Organization (UNWTO) proposed transformative policy directions to recover the impact of the Covid-19 pandemic on the global tourism sector, one of which is the development of tourism villages [23]. The risk of future disasters and the mission to preserve natural wealth for future generations show that the concept of sustainable development is essential in tourism village development. Identifying the factors that involved in the development of smart village and smart branding in Bangsri Village is necessary as a basis for formulating sustainable tourism village development strategies. Intelligent strategies that consider village conditions and characteristics towards optimal smart village development will be the focus and driver of sustainable development [24].

The objectives of this research are: 1) To identify the factors that involved in the development of smart village and smart branding in Bangsri Village, and 2) To analyze

sustainable regional development strategies in the development of smart village and smart branding through a case study in Bangsri Village.

II. METHODS

This research is a case study research featuring two research questions characteristic of case study research, namely how and why [25]. The how question relates to how Bangsri Village prepares itself as a smart village and how the smart branding has been conducted, as well as why there are success factors that involved in the development of smart village and smart branding in the village. These research questions align with the first objective, while the second objective's research question is how the necessary strategies for forming sustainable regional development in the development of smart village and smart branding in the case study of Bangsri Village are determined.

Data collection was carried out through in-depth interviews and field observations. For the first objective, data collection techniques included field observations and in-depth interviews with tourism stakeholders in Bangsri Village, including the Village Head of Bangsri, the manager of BUMDes "Maju Mapan", and visiting tourists. The factors that involved in the development of smart village and smart branding in Bangsri Village refer to the dimensions of smart village according to [13], including smart governance, smart community, smart economy, smart environment, and smart branding.

For the second objective, data analysis was conducted descriptively using SWOT analysis to generate strategies for sustainable regional development in the development of smart village and smart branding in Bangsri Village. The appropriate strategies were systematically formulated based on internal and external factors to maximize strengths and opportunities while minimizing weaknesses and threats [26]. In developing these strategies, they were also elaborated with the tourism village development strategies according to the Coordinating Ministry of Maritime Affairs and Investment of the Republic of Indonesia in [27] to accommodate the development direction of Bangsri Village as a tourism village.

III. RESULTS AND DISCUSSION

A. Review of Sustainable Development Concept

Sustainable Development is a concept of development that has been widely promoted in the last decade. In September 2015, through the 70th United Nations General Assembly in New York, USA, 193 world leaders agreed on a new universal development agenda documented in "Transforming Our World: the 2030 Agenda for Sustainable Development", which is now better known as the Sustainable Development Goals (SDGs). The SDGs continue from the Millennium Development Goals (MDGs), a development agenda agreed upon by 189 countries in 2000, which ended its agenda period in 2015.

Unlike its predecessor, the MDGs, the SDGs have more universal targets [28]. This can be seen from the SDGs dimensions, which consist of social, economic, environmental, and institutional dimensions, translated into 17 goals with 169 targets. To balance these dimensions, the SDGs operate on five basic principles known as the 5Ps: 1) People, 2) Planet, 3) Prosperity, 4) Peace, and 5) Partnership. Additionally, the SDGs represent a much more comprehensive shared commitment compared to the MDGs. The goals emphasize not only the outcomes of development itself, which lead to improved welfare, but also aspects of justice, inclusivity, and the means of achieving these goals. The SDGs emphasize the fulfillment of human rights, non-discrimination, attention to marginalized and disabled people, and the importance of participation and collaboration of all development stakeholders: government, business, NGOs, academia, and the community [29].

The concept of sustainable development is not a concept that emerged suddenly but rather the result of a long debate between the need for development and the awareness of the importance of environmental protection [30]. The term sustainable development first appeared at the First Earth Summit in 1972 and remained a topic of debate for 40 years, being considered abstract (difficult to understand and measure) and perceived as a hindrance to development, particularly economic growth [29]. Eventually, the SDGs emerged with goals, targets, and indicators that made the concept of sustainable development more concrete. The most commonly used definition of sustainable development is the one popularized by the World Commission on Environment and Development (WCED) in 1987 through a report titled “Our Common Future”, also known as the Brundtland Report. This report defines sustainable development as a development process that meets the needs of the present without compromising the ability of future generations to meet their own needs [30].

The SDGs concept is considered the most ideal development concept to be implemented today, given the increasing population and the needs that must be met, as well as the environment that must be preserved. The SDGs concept aligns ecological sustainability, economic sustainability, and socio-political sustainability [31]. Indonesia is one of the countries in the world that contributes to the success of the implementation of the SDGs, guided by Pancasila [32]. In its development, particularly in Indonesia, the SDGs concept is not only applied to global or macro-scale development but is also being adapted to local-scale development, namely villages. Villages are the smallest unit in the government hierarchy in Indonesia and are one of the units that carry out massive development at the grassroots level. The Indonesian government, through “SDGs Desa”, has stipulated that village development in Indonesia must adhere to the SDGs Desa with the aim of accelerating the achievement of sustainable development goals. The implementation of SDGs Desa is regulated in the Regulation of the Minister of Villages, Development of Disadvantaged Regions, and Transmigration of the Republic of Indonesia Number 21 of 2020 concerning General Guidelines for Village Development and Community Empowerment [33].

B. Review of Smart Village and Smart Branding Concept

1. Smart Village

The concept of a smart village is intended to enhance the quality of governance and public services in rural areas [34]. A smart village integrates information technology into rural community life, resulting in continuity and benefits for both [12]. The smart village concept incorporates elements from the smart city model to be applied in rural areas or small towns [34]. It consists of four components: smart governance, smart community, smart economy, and smart environment [13]. To achieve a smart village, these four components must be integrated.

Smart governance is closely related to the use of information and communication technology (ICT) to improve public services and act as a shared medium between individuals and the government, fostering relationships and empowering community productivity [35]. Smart governance can be defined as the administration of government through the utilization of information technology, which enhances service delivery, performance, and productivity of village governments, making them more effective and transparent to the community. Smart governance serves as the initial foundation that drives all other elements [36]. It must be applied to three government functions: public policy, bureaucratic governance, and public service delivery.

Once smart governance is functioning effectively, it paves the way for the emergence of a smart community within the village. Village development and

community empowerment require a flexible and open-minded populace [12]. To increase community participation in various village development programs, residents must have a clear understanding of their roles within the village. They should view the development and utilization of technology as an opportunity to maximize their role, participation, and contribution to village development [12]. In the long term, the development and use of information technology are expected to enhance the community's capacity to leverage it in both social and personal contexts.

A smart economy is one effort to create an intelligent economy, promoting economic development through the digital creative industry [37]. A smart economy can be built through collaboration between the government and the community, involving innovation, research, and other elements. It can be divided into four areas: agglomeration and innovation, trade, transportation and logistics, and services [38]. Additionally, to foster economic growth, village potential should be developed by leveraging information and communication technology, both to expand consumer reach and facilitate easier transaction processes.

Developing smart governance, smart community, and smart economy can lead to the realization of a smart environment. In the context of a smart environment, rural settings encompass all elements that form the natural and social order distinguishing a village, not just its natural surroundings. With the digitalization concept, data collection and documentation can be used to apply information technology in the social sector. Various agricultural innovations, from farming pattern plans to enhancing farmers' capabilities to produce goods, can be utilized to implement technology and information in the natural order.

To realize a smart village, these four dimensions are interrelated. A village system will undoubtedly evolve when smart governance is implemented. Technological advancements in a village will encourage residents to understand and harness their potential to achieve a more effective system, thus forming a smart community. With the establishment of a smart community, villagers will be motivated to develop all potential resources, thereby fostering economic growth into a smart economy. A well-developed economy, as a result of a smart economy, can be achieved through proper management of natural resources.

2. Smart Branding

Smart city development that has an impact on economic profits is called smart branding [39]. Smart branding is an innovation for marketing the potential of an area to enhance its competitiveness. Branding itself is a concept developed to promote a product [40]. Smart branding aims to increase regional competitiveness by organizing the cityscape and promoting local potential on local, national, and international scales [41]. Smart branding is one of the critical dimensions in a smart city. This importance arises because, in addition to fulfilling its needs by leveraging local potential, a city must attract interest from both domestic and foreign communities, businesses, and investors to accelerate regional development. According to the 2021 Smart City Masterplan Guideline published by the Ministry of Communication and Information Technology, smart branding consists of three indicators: tourism branding, business branding, and city appearance branding.

Smart branding aims, among other things, to enhance the attractiveness of tourist destinations to attract tourists. This is based on the importance of developing the image of a tourist attraction, which requires smart and sustainable strategies. Tourism branding involves the development and enhancement of tourist destinations that are appealing to visitors, the construction of tourism infrastructure to support visitor comfort (such as hotels, restaurants, etc.), and the cultivation of a hospitable culture for visitors, such as the availability of tour guides in tourist attractions or villages. Several other factors that influence tourism are the 5A components which consist of attractions, accommodation, accessibility, awareness and accommodation [42,43].

Tourism branding can be considered successful if the number of tourist visits increases compared to before the branding efforts.

Business branding includes several indicators, such as the development of platforms and the marketing of a comfortable and conducive trade ecosystem. This facilitates the community in buying and selling local products, such as the availability of a local marketplace. Another indicator is the development and marketing of easy and effective investment opportunities. This simplifies the process for investors to explore and analyze regional conditions in-depth to determine investment suitability, such as through the presence of a regional investment portal. The local business ecosystem also involves the development and marketing of products and services from the creative industries, such as crafts, fashion, digital products, culinary items, and more.

City appearance branding includes two essential indicators: reorganizing the cityscape by focusing on regional architectural values and developing city amenities. Reorganizing the cityscape to highlight regional architectural values is carried out by following dynamic urban planning principles, ensuring the city is orderly, clean, beautiful, and possesses internationally-class architecture. City amenities include the construction of boundary markers (edges), memorable landmarks for visitors, city navigation systems (signage), orderly streets (paths), and urban nodes such as public squares, city intersections, and other key points. These efforts collectively contribute to a well-rounded smart branding strategy, making the region more attractive and competitive in various sectors, thereby supporting sustainable regional development.

C. Factors Involved in the Development of Smart Village and Smart Branding

As a tourism village, Bangsri Village has developed its main attraction, “Noyo Gimbal View”, designed as an integrated tourist site with various facilities and affordable attractions. The entrance fee for Noyo Gimbal View is IDR 2,000 per person. Some of the attractions and facilities available at Noyo Gimbal View include a swimming pool, paddy field train ride, flying fox, fish pond, and rabbit garden. Amenities provided include a restaurant, pavilions, snack stalls, electric bicycle and mini car rentals, and a “rabbit train” transportation service that can take visitors from the surrounding area to the tourist site. Noyo Gimbal View operates daily from 9 AM to 9 PM. Visitors are predominantly local tourists from Blora Regency and its surroundings, with numbers reaching up to 8,000 visitors on holidays. The unique features of Noyo Gimbal View include the Noyo Gimbal statue as a landmark (Figure 1) and the picturesque view of the rice fields (Figure 2).



Figure 1. Landmark of Noyo Gimbal View



Figure 2. Rice field scenery

The success of Bangsri Village as a tourism village can be attributed to several factors based on the concepts of smart village and smart branding. Here are the key factors that involved in the development of smart village and smart branding in Bangsri Village:

1) Smart governance

The development of Bangsri Tourism Village, particularly Noyo Gimbal View, is a concrete example of the success of smart governance supported by cross-government collaboration. This initiative was initiated by the Head of Bangsri Village with the primary goal of improving the economic well-being of the village community. The use of Village Funds and Financial Assistance from the Central Java Provincial Government demonstrates how the village government has designed an effective long-term development strategy by optimizing existing resources. The collaboration between the village, district, and provincial governments not only supports infrastructure development but also creates a framework for sustainable project oversight and management.

The target market or consumers aimed at are local tourists, considering that Blora Regency is not a major regional tourism destination. The development of the Bangsri tourism village is currently focused on artificial attractions, such as recreational rides and restaurants, with various plans to add facilities and tourist attractions, such as vegetable and fruit-picking agro-tourism and a traditional crafts market. The sustainability of the Noyo Gimbal View tourist site is ensured through the establishment of the Articles of Association and Bylaws (AD/ART) and Standard Operating Procedures (SOP) for managing the Noyo Gimbal View tourist site.

The role of local government, particularly through the Youth, Sports, Culture, and Tourism Office (Dinporabudpar) and the Community and Village Empowerment Office (DPMD), is crucial in ensuring the effective management of Noyo Gimbal View. Through training, technical assistance, and promotion, the local government has helped to develop the capacity of village tourism managers and facilitated communication between the village government and investors.

Dinporabudpar Blora Regency provides training and assistance related to the management of tourism villages to village tourism managers, facilitates the distribution of Financial Assistance from the Central Java Provincial Education and Culture Office, and promotes the Bangsri tourism village through the Instagram account @pariwisata_blor.

Meanwhile, DPMD Blora Regency focuses more on village empowerment by assisting the performance of BUMDes (Village-Owned Enterprises) through financial management training, administration, and coordinating meetings for BUMDes managers throughout Blora Regency.

These steps align with the concept of smart governance, which emphasizes the importance of inter-agency collaboration and the utilization of information technology to create transparent and accountable governance [36]. With effective cooperation between government bodies, village development can proceed more efficiently and adapt to local needs and potentials.

2) Smart community

The active participation of the community in managing Noyo Gimbal View reflects the success of smart community initiatives. The village-owned enterprise (BUMDes) “Maju Mapan”, which serves as the primary manager of Noyo Gimbal View, involves local residents as workers and small business operators within the tourist area. This involvement demonstrates that the community is not merely a beneficiary of tourism development but also plays a crucial role as the main actor in the process. This aligns with the concept of a smart community, which promotes community empowerment through active participation and the use of technology to support local development [12].

The community's awareness of their important role in tourism management also indicates a high level of flexibility and adaptability, which are hallmark traits of a smart community. The residents of Bangsri collectively understand that the success of Noyo Gimbal View will directly impact their well-being. Therefore, they actively engage in various aspects of management, from service provision to the preservation of local culture. This empowerment not only enhances the quality of life for the residents but also strengthens social cohesion and community identity, which are essential aspects of developing an intelligent and sustainable village.

3) Smart economy

Economic development in Bangsri Village, particularly through Noyo Gimbal View, illustrates how a smart economy can be realized by utilizing local potential and effective cooperation with external parties. Bangsri Village has successfully maintained its economic independence by relying on local supplies to support tourism activities. For example, using agricultural products from the village as key materials in the tourist area not only reduces production costs but also strengthens the local economy. This aligns with the concept of a smart economy, which promotes the efficient use of local resources to create added value for the village community [37].

The supply chain of production materials processed in the Noyo Gimbal View tourist area is sought to come from within Bangsri Village, such as vegetables and fruits. There is a Family Welfare Program (PKK) garden in Bangsri Village planted with various types of vegetables, such as eggplant and chili (Figure 3), and a melon greenhouse is being built. This also serves as an agro-tourism attraction where visitors can experience harvesting commodities themselves at cheaper prices than the market and with fresher quality.



Figure 3. Vegetable garden of Bangsri Village's Family Welfare Program

Collaboration with private investors such as ASTRA and Bank Jateng also demonstrates that Bangsri Village is capable of attracting external investment, which is a crucial factor in strengthening the smart economy. This investment not only involves funding but also the development of additional facilities that enhance the tourist appeal. Through this collaboration, the village has been able to develop a sustainable creative economy sector while increasing its competitiveness in the regional tourism market. This shows that the smart economy in Bangsri Village is driven not only by local innovation but also by strategic partnerships that expand economic opportunities for the community.

4) Smart environment

The development of Noyo Gimbal View as an agro-tourism and family destination requires careful environmental management, especially since the area is built on productive agricultural land. The change in land use reduces the agricultural area, necessitating the implementation of effective environmental strategies to minimize negative impacts [13]. Tourism development must be balanced with efforts in environmental rehabilitation and conservation to maintain ecosystem balance. Additionally, the use of open areas requires shaded trees to reduce heat and enhance visitor comfort, particularly during the dry season. Tree planting helps in microclimate management, which is part of the smart environment principle that balances development and conservation [13].

Although a waste sorting system has been implemented at Noyo Gimbal View, the high usage of plastics remains a significant issue. Reducing plastic use and increasing education on waste management are crucial for mitigating environmental impacts. The waste sorting system provided by the Environmental Service (DLH) of Blora Regency (Figure 4), which includes categories for hazardous (B3), non-organic, and organic waste, is effective, but with high visitor numbers, the integration of green technologies such as recycling and rainwater management needs to be enhanced for better operational efficiency and environmental protection [13].



Figure 4. Trash bins

5) Smart branding

Noyo Gimbal View offers a primary attraction as an integrated and affordable family tourism destination, enhancing its image with the construction of the Noyo Gimbal statue, considered a heroic figure in Bangsri Village. This landmark not only serves as a symbol of the area's identity but also as an open space allowing visitors to cycle, play with mini cars, and attend various events such as flea markets and animal shows. These facilities provide significant advantages for Noyo Gimbal View compared to other tourist destinations in Bloro Regency, offering diverse and accessible attractions for various visitor groups.

Marketing for Noyo Gimbal View is actively conducted through the Instagram account @noyo_gimbal_view (Figure 5), which has over 8,000 followers. Social media is used to showcase information about tourist attractions with creative content such as photos and videos, attracting tourists' attention. However, to enhance the experience for out-of-town visitors, there are shortcomings that need to be addressed, such as the lack of adequate signage directing visitors to Noyo Gimbal View. Improving informational facilities like route maps and adding directional signs on main roads will greatly assist in making access easier for visitors from outside the area, while also supporting growth in visits and overall visitor satisfaction.

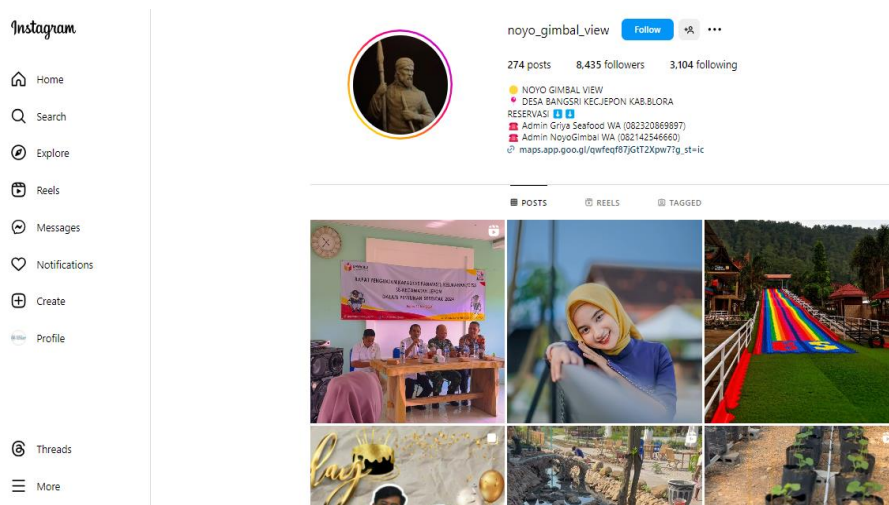


Figure 5. Display of Noyo Gimbal View’s Instagram profile (per June 13th, 2024)
 Source: https://www.instagram.com/noyo_gimbal_view

D. Analysis of Sustainable Regional Development Strategies through Smart Village and Smart Branding Development

The sustainable regional development strategy through the development of a smart village and smart branding, particularly in Bangsri Village, is analyzed using the SWOT method. The strategy is formulated based on the factors mentioned above and elaborated with the tourism village development strategy according to the Coordinating Ministry for Maritime Affairs and Investment of the Republic of Indonesia, consisting of the 3A's (Attraction, Accessibility, Amenities) and BAS (Branding, Advertising, Selling). The sustainable regional development strategy through the development of a smart village and smart branding is presented in Table 1.

Table 1.
Sustainable development strategies through smart village and smart branding development

Internal and External Factors	Strength	Weakness
	<ol style="list-style-type: none"> Potential for diverse tourist attractions (nature, culture, creativity) Strong branding as an affordable family-friendly destination Aware and participative community 	<ol style="list-style-type: none"> Inaccessible road network Lack of public transportation Focused more on developing attractions rather than a comprehensive tourism village
Opportunity	Promote the development of other potential attractions, especially cultural tourism	<ol style="list-style-type: none"> Coordinate with local government to improve road accessibility Provide amenities such as guest houses managed by local residents
Threat	<ol style="list-style-type: none"> Regularly review tourism trends and adapt to the village's conditions Engage in communication and empower all community layers 	Establish regulations for the future management of the tourism village

Source: Author's analysis (2024)

For aggressive strategy (strength-opportunity), efforts are made to promote the development of other potential attractions, particularly cultural tourism. Bangsri Village has unique traditional cultural wealth, such as the "Gas Deso" tradition, a thanksgiving ritual after the harvest season, and piggy bank crafts by local artisans. This is especially appealing to out-of-town tourists who are interested in the indigenous culture of Blora. This strategy also relates to the effort to develop Bangsri Village as a comprehensive tourism village, not just focusing on developing attractions at Noyo Gimbal View, by providing amenities such as guest houses managed by local residents. This can offer a new experience for tourists to live close to the village community. However, this strategy requires a long time and fundamental guidance because it demands a change in the mindset of the community in participating to support the development of the tourism village.

For turn-around strategy (weakness-opportunity), coordination with local government regarding road improvements, including the installation of street lights, is expected as the Noyo Gimbal View tourist site continues to develop. The road network to the tourist site is still considered poor with a lack of street lighting, making the roads dark and dangerous

for drivers at night. This also relates to the lack of public transportation in Blora Regency, so most visitors use private vehicles.

For diversification strategy (strength-threat), it is necessary to conduct regular tourism trend studies to understand tourist interests and adjust to the village conditions to achieve sustainable tourism. With previous conflict issues in the management of Kampung Pelangi, the village government needs to establish communication and empower all community layers to regain community trust. The plan includes opening a weekly Pasar Krempyeng in Kampung Pelangi, offering traditional crafts and snacks.

For defensive strategy (weakness-threat), regulations at the village or village head level regarding the management of tourism villages in Bangsri Village need to be established. Many village development programs are unsustainable due to political impacts, such as changes in village leadership. Therefore, it is necessary to establish legally binding regulations to ensure the continued management of the tourism village in the future.

IV. CONCLUSION

The factors that involved in the development of a smart village and smart branding in Bangsri Village are primarily the initiative and innovation of the village head's leadership, support from the local government, community awareness and participation, and tourism branding through the construction of landmarks at the Noyo Gimbal View tourist site and intensive use of social media as a promotional tool. The sustainable regional development strategy through the development of a smart village and smart branding in Bangsri Village includes the development of cultural tourism potential, coordination with the local government regarding road accessibility improvements and enhancement of available amenities, regular analysis of tourism trends and adaptation to village conditions, community empowerment, and the establishment of regulations governing the management of the tourism village in the future. These factors and strategies are the key to the successful development of a smart village and smart branding in the village.

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