

The Penta Helix Model in Tourism Development: The Case of Kuta, Bali After COVID-19

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Abstract

The onset of COVID-19 has significantly impacted the tourism sector, with Kuta, Bali, being one of the areas most affected. In this context, the Penta Helix collaboration emerges as a crucial approach to revitalize and develop tourism in Kuta. The primary objective of this study is to explore the role and synergy of the Penta Helix model in the recovery and development of tourism in Kuta, which faced a downturn due to the pandemic. Using a descriptive qualitative approach, the study conducted interviews with 10 individuals, selected through purposive sampling, who possess expertise in Kuta's tourism sector. The findings reveal that COVID-19 has had a detrimental effect on Kuta's economy, as well as on essential components such as attractions, amenities, accessibility, and ancillary services. The development of Kuta's tourism is supported by collective efforts, government-backed initiatives, and the availability of skilled human resources. However, the major obstacles to progress include the ongoing impacts of COVID-19, coastal erosion at Kuta Beach, and inadequate security measures in the area. While the Penta Helix stakeholders have carried out their roles, collaboration and synergy among them have not yet reached their full potential in addressing these challenges.

Keywords: *Penta Helix; Kuta; Tourism Development.*

Introduction

Indonesia is a country with great potential to develop its tourism sector. It is uniquely located geographically, offering many sociocultural and natural landscapes, including traditional cultures, historical sites, ancient temples, forests, mountains, oceans, and lakes (Rahmiati, Ismail, & Amin, 2021). The development of Indonesian tourism is inseparable from the collaboration between various stakeholders. The process of growing tourism in a region will improve through the cooperation of these actors. The development of the Indonesian tourism industry, which contributes to national economic growth, is strongly influenced by the role of the Penta Helix, consisting of the government, academia, business, community, and media (Hardianto, Sumartono, Muluk, & Wijaya, 2017). The involvement of the Penta Helix Model is essential, as it has implications for both economic impact and sustainability. Thus, the diversity of tourism potential acts as a catalyst for Penta Helix actors in developing both regional and national tourism industries (Novianti, 2020).

Tourism involves travel undertaken by individuals or groups who leave their usual place of residence for a temporary period to engage in recreational activities. It is supported by several components, including attractions, amenities, accessibility, and ancillary services (Febriana, Darmawan, & Wibowo, 2022). The primary goal of tourism activities is to provide extraordinary experiences; therefore, tourism providers or countries must facilitate these activities to gain competitive advantages. Tourism is an industry encompassing food and

beverage, culture, retail, transportation, accommodation, recreation, and sports, all of which support tourism needs (Rahmiati, Ismail, Amin, Simatupang, Larso, & Othman, 2019).

Bali, with its unique culture and people, combined with the harmonious natural attractions and the creativity of its residents, serves as a foundational asset for tourism development with a competitive advantage (Arianto, Pitana, Wiranatha, & Budiarsa, 2022). Bali boasts the most village tourism destinations in Indonesia. Sandiaga Uno, Minister of Tourism and Creative Economy, stated on CNBC Indonesia (2021) that Bali's tourism is the second-largest contributor to Indonesia's foreign exchange earnings, following the oil and gas sector. The influx of foreign tourists in Bali contributed significantly to foreign exchange earnings, which grew from 1.768 billion USD in 2012 to 3.578 billion USD in 2018 (Ginaya, Kumbara, Putra, & Sukiada, 2020; Novianti, 2020).

However, the uniqueness and complexity of Bali's tourism industry were threatened by the emergence of COVID-19, which had a negative multiplier effect across various sectors. The rapid spread of COVID-19 caused significant disruption to the global economy, including Indonesia's national economy. The sharp decline in foreign visitors, leading to a significant drop in tourism revenue, illustrates how deeply the tourism industry was impacted by the pandemic (Tauhid, Argubi, Ramadhoan, & Kamaluddin, 2020). Additionally, COVID-19 adversely affected tourism businesses, leading to a decline in MSME operations and a sharp disruption in employment (Sugihamretha, 2020). By 2020, Bali had already experienced a drastic fall in the number of international tourists, dropping by 82.96% from 1,069,473 foreign tourists to just 82.96% (Central Agency Statistics of Bali Province, 2021). The drop in tourist numbers resulted in the closure of many businesses in Bali, causing a financial loss of Rp9.7 trillion per month and an estimated total loss of Rp48.5 trillion between February and June 2020 (BBC News Indonesia, 2020). Furthermore, Vice Governor of Bali, Cokorda Artha Ardhana Sukawati, stated in *Kumparan Kanal Bali* (2020) that unemployment in Bali increased by 4.4%, affecting around 235,200 people out of a total population of 4.2 million by the end of 2020.

Kuta, Badung, Bali, one of the villages most affected by COVID-19, boasts a rich variety of natural and socio-cultural attractions. Kuta covers an area of 7.23 km², divided into 13 banjars, home to 18,030 people (9,067 men and 8,963 women) (BPS Badung Regency, 2017). Kuta's tourism offerings can be categorized as (1) things to see, (2) things to do, and (3) things to buy. Kuta's beach tourism potential includes its long stretch of sea, white sands, and breathtaking sunset panoramas. Activities such as surfing, sunbathing, swimming, jogging, and photography are popular on the beach, while shopping along Kuta's beachfront is also a key attraction (Astawa, Suardani, & Suardani, 2019). Kuta offers various tourism attractions, including Kuta Beach, German Beach, and the Ground Zero Monument, among others. These attractions are supported by several industries, such as hotels, villas, restaurants, and shopping malls. However, the COVID-19 pandemic devastated the Kuta tourism sector, with a drastic decline in visitors of more than 50% in 2020, according to I Wayan Sirna, Chairman of the Kuta Beach Task Force (*Bisnis Bali*, 2020). The drop in tourist arrivals also led to increased unemployment in Kuta, as evidenced by 1,288 layoffs and 42,409 workers who were laid off but still tied to their companies without pay in Badung Regency between 2020 and 2021, most of whom were based in Kuta District, the tourism center of Badung Regency (*Radar Bali*, 2021).

In response to the pandemic and to restore tourism in Kuta, all actors within the Penta Helix model share responsibility for collaborating and synergizing with relevant stakeholders. The Penta Helix model is deemed appropriate because it involves cross-sector actors—governments, academia, business, community, and media—who can collaboratively address

and offer strategic solutions. In tourism, the Penta Helix collaboration model serves as an effort to foster innovation. This model involves mapping cross-stakeholder roles to assess the influence and contributions of each actor in tourism development. Developing tourist destinations requires strategies and support from various parties; therefore, the Penta Helix approach is essential in promoting these destinations. The government plays a role in creating regulations and policies for the development of Kuta's tourism during the pandemic. Educational institutions and academics are responsible for conducting research, social empowerment programs, and studies on the tourism development model in Kuta. The business sector plays a role in generating employment opportunities for locals and ensuring the implementation of health protocols during tourism activities. The community in Kuta plays a role in supporting and adhering to government policies during the COVID-19 pandemic, while the media plays an expanded role in promoting Kuta as a tourist destination (Halibas, Sibayan, & Maata, 2017; Pradhipta, Pusparani, & Nofiyanti, 2020; Purnomo, Aditya, Fathani, Salsabila, & Rachmawatie, 2021).

Based on the above background, the following research questions can be formulated:

1. What is the situation of Kuta's tourism during the pandemic?
2. What is the condition of the supporting components for Kuta's tourism development?
3. What roles have the Penta Helix stakeholders played in developing Kuta's tourism during the pandemic?
4. How has synergy been fostered between stakeholders in the development of Kuta's tourism during the pandemic?

Literature Review and Theoretical Framework

Tourism Development

Tourism development is a comprehensive effort to enhance and expand facilities and services for visitors by maximizing all types of non-tourism components that are directly or indirectly related to the tourism sector. The goal of tourism development is to benefit both visitors and local communities. The impact of developing tourism as an industry is that it can create opportunities for society. The development of tourist areas is carried out by reorganizing various potential natural resources in an integrated manner. This can contribute to improving community welfare and national development (Primadany, Mardiyono, & Riyanto, 2013; Setianada, 2015; Santosa, Saleh, & Hadi, 2015).

Components of Tourism Development

Chaerunissa and Yuniningsih (2020) stated that the components of tourism development consist of the 4A's: Attraction, Amenities, Accessibility, and Ancillary. The supporting elements for tourism development are as follows:

- *Attraction*

The Law of the Republic of Indonesia Number 10 of 2009 defines tourist attractions as anything that has uniqueness, beauty, and value in the form of a diversity of natural, cultural, or man-made products that serve as the destination for tourist visits.

- *Amenities*

Amenities refer to a variety of additional services that travelers require while visiting a destination, such as travel agencies, souvenir shops, handicraft outlets, places of worship, restaurants, tourist information offices, hospitals, money changers, banks, and others (Andrianto & Sugiana, 2016).

- *Accessibility*

Accessibility pertains to the level of ease with which tourists can reach a tourist destination, such as highways, railways, toll roads, terminals, railway stations, and others.

- *Ancillary*

Ancillary support is provided by business organizations, local governments, or tourist destination managers to facilitate tourism activities. This includes tourism communities, tourism associations, and tourism boards.

Penta Helix Model in the Tourism Sector

The Triple Helix and Quadruple Helix concepts were developed into the Penta Helix model, which incorporates several different helix elements to foster innovation (Renn, 2015; Calzada & Cobo, 2015). Penta Helix involves both government and non-government roles working simultaneously to achieve innovations for development across various sectors. It is a concept that includes five actors: government, academia, business, community, and media (Sudiana, Sule, Soemaryani, & Yunizar, 2020). This model emphasizes the role of innovation in technology and knowledge, along with effective service activities and promotions, through regulations that bring about changes via the implementation of sustainable innovations that impact overall social development. Tourism attractions will gain a competitive advantage if each of the involved elements can share skills, expertise, knowledge, and other resources that support the tourism development process. The Penta Helix collaboration model is also used to provide resilience and sustainability in the tourism industry to ensure it can withstand internal and external pressures (Pradhipta, Pusparani, & Nofiyanti, 2020; Kagungan, Duaji, & Meutia, 2021; Purnomo, Aditya, Fathani, Salsabila, & Rachmawatie, 2021).

The role of each Penta Helix component in the tourism industry during a pandemic is as follows:

1. *Government*

The government acts as a regulator and controller with the responsibility to develop the industry. It designs and determines the direction of policies, regulations, and strategies at both macro and micro levels; provides and develops tourism infrastructure and public facilities; encourages investment in the tourism sector; supports the development and protection of MSMEs in the tourism business sector; and promotes the CHSE (Clean, Health, Safety, Environment) certification process in tourist areas. The government also plays a role in coordinating stakeholders who contribute to the development of tourism potential.

2. *Academics*

Academics in the Penta Helix model serve as concept developers. Their responsibilities include evaluating the direction of tourism policies, regulations, and strategies through scientific studies; providing policy input based on conducted research; offering data and information related to the tourism sector; implementing training and development programs to create skilled human resources in tourism; and conducting tourism-based outreach to society. They are also responsible for preparing competent, skilled, and certified future leaders who will have an impact on the tourism industry.

3. *Business*

The business sector in the Penta Helix model acts as an enabler. The private sector is responsible for business operations that create added value and maintain sustainable growth. It can also enable the delivery of technology and infrastructure through Corporate Social Responsibility (CSR) and other programs. The business sector is also responsible for providing tourism services such as accommodation and transportation; offering goods or services to support tourism development; creating jobs for local communities as part of the

tourism industry; optimizing the use of technology in business operations; and adapting business operations to meet health standards in pandemic situations.

4. *Community*

The community acts as an accelerator. The community plays a role in monitoring the impact of tourism on society and culture around tourist areas; engaging in planning, decision-making, and evaluation processes; directly participating in the maintenance of tourist areas; preserving tourism by developing local culture or products; and maintaining and implementing health protocols in tourist areas.

5. *Media*

The media acts as an expander. The media plays a role in promoting tourism, distributing information, and enhancing the image of tourism for development.

Synergy

Umiyati and Tamrin (2021) defined synergy as the combination of several stakeholders to achieve better results. Good synergy between stakeholders and the participating community will reduce the level of conflict between Penta Helix actors in tourism development. This can be achieved through excellent communication, coordination, trust, and innovation among the related parties.

Research Methodology

This research uses a descriptive qualitative method to fully understand the phenomenon experienced by the object of the study, including behavior, perception, motivation, and action, in a descriptive form using words. The research focuses on Kuta, Bali, as one of the world's leading tourist destinations. In this study, the researchers collected data from interviewees representing the Penta Helix elements: government, academics, business, community, and media. The researchers interviewed 10 individuals, each representing one of the sectors.

Results and Discussions

Kuta is a village that consists of 13 Banjars, including: Banjar Pelasa, Banjar Temacun, Banjar Pemamoran, Banjar Pengabetan, Banjar Pering, Banjar Pande Mas, Banjar Jaba Jero, Banjar Buni, Banjar Tegal, Banjar Tebasari, Banjar Anyar, Banjar Segara, and Banjar Abianbase. Kuta is famous for its tourist destinations, offering a variety of complex tourism activities such as Kuta Beach, German Beach, Sekeh Beach, art shops selling souvenirs and local products, Patasari Mangrove Forest, and the Bali Bomb Monument. In addition to being supported by various hospitality accommodations, Kuta also benefits from road access that facilitates mobility for tourists and tourism industry actors. Kuta experienced a tourism downturn, which led to an economic slump for two years and two months. The decrease in hotel occupancy rates to 60% resulted in 30% of employees being laid off or hired on a shift basis.

The Condition of the Supporting Components of Kuta Tourism Development

Attraction

Some interviewees agreed that Kuta offers a variety of tourist attractions, both natural and man-made, with a level of uniqueness and complexity that differentiates it from other regions in Bali, and even Indonesia. The condition and situation of the waves are quite favorable, making it suitable for surfing activities. As a result, many domestic and international tourists are eager to experience surfing at Kuta Beach. In addition to serving as a community space, Kuta Beach also serves as a site for the conservation of protected animals, including sea turtles. Ngurah

Tresna, a key figure in environmental conservation, established the Bali Sea Turtle Society on Kuta Beach.

Artificial tourism is also a significant part of the Kuta tourism segment, which initially relied solely on natural tourism and has since expanded to include entertainment and business activities. This expansion has increased Kuta's appeal as a tourist area with a range of interconnected and complementary destinations. With proper management, this can positively impact the welfare of local communities, who are key actors in Kuta's tourism industry.

Amenity

Amenities are supporting components that facilitate human activities and are crucial for the tourism sector. Various types of accommodations, such as hotels and guesthouses, are available for tourists visiting Kuta. In addition to residential facilities, Kuta is also home to souvenir shopping centers and art shops selling various types of local handicrafts. The availability of internet access is also a key factor in the development of tourism, as it serves as a communication tool, provides access to information, offers a source of knowledge, supports business operations, provides entertainment, and acts as a promotional tool.

Accessibility

Accessibility is a crucial support system for tourism, as easy access ensures smooth mobility for tourists. There are multiple access routes that make it easy for tourists to visit Kuta, which positively impacts Kuta's tourism industry. However, one member of the Provincial Legislative Council of Badung Regency mentioned, "The road is adequate, but the capacity of the road, with the number of vehicles entering Kuta, is much higher than the road capacity, which often causes congestion." The development in the area has been massive, but there has been no update to the infrastructure that exists in Kuta. Renewing access is necessary to support community activities and facilitate tourism. There are many improvements needed, such as the commitment of all stakeholders to providing pedestrian infrastructure, integration of pedestrian paths, building arrangements, and transportation systems, and the creation of comprehensive references for planning, providing, and utilizing pedestrian infrastructure.

Ancillary

Ancillary services are additional services provided by the government or other organizations to support the needs of tourists. Infrastructure development continues to be a priority for the government to support tourism activities. The Governor of Bali plans to build three new seaports, enabling crossings from Sunrise Seaport in Sanur, Sampalan in Nusa Penida, and Bias Munjul in Nusa Lembongan. Additionally, a cruise ship port is located in Benoa Port, allowing large cruise ships to dock and carry thousands of passengers. The government, as a regulator, also creates policies that regulate activities in all sectors. An open border policy has been established to promote Bali's tourism, which is expected to positively impact the influx of both foreign and local tourists. The national government, through provincial and village governments, also encourages the implementation of health protocols during the pandemic.

The Role That Has Been Carried Out by Penta Helix Stakeholders in Developing Kuta Tourism

The spirit of survival is crucial during a pandemic. The motivation of Kuta's community is a driving factor in the recovery of tourism activities, helping them become resilient. Assistance from the central and village governments can also be a supporting factor in the development of Kuta's tourism. This assistance may take the form of repairing tourist attractions that were

damaged during the pandemic. The renovation of these attractions is carried out as part of the readiness to meet the needs of future tourists when conditions return to normal. Additionally, human resource factors are important drivers of tourism development, as people are the key actors directly involved in the entire process of tourism activities.

The government plays a role as a regulator in providing and developing infrastructure and facilities for tourism development. Various policies and concepts are developed in collaboration with relevant stakeholders to add value to tourist destinations. The government also acts as a liaison between these stakeholders. For example, the process of structuring and developing Kuta Beach through the SAMIGITA (Seminyak, Legian, Kuta) project is underway.

Academics support tourism in Kuta through research and community service. Academics contribute to community service by providing training and education to improve the knowledge and skills of tourism industry actors, such as offering English courses.

The business sector, or business owners, are directly involved in providing products and services. They strive to increase employment for the local community, both directly and indirectly. Direct collaboration occurs when local people are hired as workers in hotels, while indirect cooperation happens when business owners provide job opportunities to the surrounding community, such as laundry services. Hotel business owners have also ensured the provision of various tools and facilities that support health protocols. Standard procedures during the pandemic, such as CHSE certification, the provision of sinks, and continuous appeals to implement health protocols, have been put in place by hotels to ensure the comfort and safety of tourists.

The community plays a role in promoting tourism attractions through events, such as those organized by the Bali Sea Turtle Society. Community activities that protect the environment, as a crucial element of tourism, can also be carried out. The media supports tourism by advancing digitalization. The media serves as a promotional tool through constructive and factual reporting. It plays a significant role in disseminating information, as both international and domestic tourists rely on the media to stay informed about the situation in the tourist areas they plan to visit. The media acts as a tool to spread information and promotes constructive, factual news to build a positive image of Kuta.

Synergy

Through good collaboration, all tourism development processes will be more structured and systematic. Each Penta Helix actor has their own role but must also work in synergy. Integration, coordination, and communication are essential to creating connectivity between Penta Helix stakeholders. Through good coordination and communication, all actors will fulfill their roles clearly and avoid miscommunication. While the communication process has been developed, clear regulations for Penta Helix stakeholders still need to be expanded. The actors in Kuta still need to improve the effectiveness of their coordination.

Government - Academics

During the pandemic, the form of cooperation between the government and academics was to provide space for academics to conduct various studies on Kuta's tourism development. Academics play a role in producing studies that support the government's efforts in developing Kuta tourism. Through the research conducted by academics, the government receives valuable input on tourism-related issues. Academics, with their expertise in analysis, provide studies

from an academic perspective.

Government - Business Sector

The cooperation between the government and the business sector during the pandemic focused on encouraging business owners to prioritize local communities for employment. This strategy has a positive impact on the welfare of the local population. Additionally, the government has created regulations that support business owners in their operations during the pandemic, providing regulatory relief to ease the burden of doing business.

Government - Community

The collaboration between the local government and the community needs to be improved to ensure the sustainability of tourism in Kuta, Bali.

Government - Media

Cooperation between the government and the media involves factual reporting. The media seeks direct sources from the government that have access to accurate and factual information, ensuring news reports are reliable and informative.

Academics - Community

The academic cooperation with the community involves granting academics permission to conduct research related to tourism development. While collaboration has already taken place, there is a need for more intensive training and community empowerment programs.

Academics - Media

Academics and the media cooperate in the process of reporting on education and community service efforts. The media plays a role in providing opportunities for academics to practice fieldwork.

Business Sector - Community

Encouraging the CHSE certification process and implementing health protocols in the business environment are key priorities for both the business sector and the community to ensure the safety and comfort of tourists during their visit.

Business Sector - Media

Collaboration between the business sector and the media is continuously being improved to enhance the benefits to the tourism sector.

Community - Media

The community and media work together to promote a positive image of tourism development. For example, the Plastic Bag community initiative was published by the media to raise citizens' awareness about environmental preservation and attract more visitors. Constructive journalism applies positive psychological techniques to produce news that is productive, engaging, and accurate while adhering to basic journalism principles. It takes a public-oriented approach, addresses problems, and adds a solution-oriented perspective (Wulandari and Fajar, 2022).

Conclusion

This research has presented data and information regarding the perceptions of Penta Helix stakeholders about the condition of Kuta tourism during the pandemic. Based on the results, it

can be concluded that:

1. The COVID-19 pandemic had a very negative impact on Kuta's tourism sector. The emergence of COVID-19 led to a decline in Kuta's economy due to the decrease in the number of international and domestic tourists visiting Kuta. In addition, unemployment also increased as a result of the massive layoffs that affected most of Kuta's tourism industry actors.
2. The supporting components for tourism in Kuta include attractions, amenities, accessibility, and ancillary services.
3. The role of Penta Helix stakeholders in the development of Kuta tourism during the pandemic has been carried out well, but improvements are still needed. Synergy has been created through integration, communication, and coordination between actors collaborating to develop Kuta tourism.

Recommendations

1. The willingness to build effective strategies for developing the tourism industry through communication should be improved.
2. The quality of human and natural resources must be developed.
3. All stakeholders must leverage their uniqueness and capabilities to ensure the sustainability of tourism.

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