Design of Virtual Tourism In Ciwidey Area, Bandung District
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Abstract
The COVID-19 pandemic in 2020 significantly impacted various sectors, including tourism, leading to restrictions on community activities. This study focuses on the aftermath of the pandemic and explores virtual tourism as a recovery strategy. The authors propose a virtual tourism platform developed using the Multimedia Development Life Cycle, concentrating on the Ciwidey area with attractions like Kawah Putih and Situ Patengan. Qualitative methods were employed, including interviews and documentation studies involving industry, Academic and government representatives as informants. The Ciwidey area’s unique features, characterized by captivating landscapes, were harnessed for virtual tourism content. The author utilized a multimedia approach, incorporating video, text, photos, and sound on a web platform, prioritizing high-quality 360° x 180° videos and drone views. To ensure user satisfaction, the author conducted testing and evaluated navigation ease, cognitive content, information presentation, media integration, artistic aesthetics, and overall functionality. The website, stored on hosting, is accessible globally through the World Wide Web (WWW) in a responsive format, enhancing user experience across different devices. This innovative approach aims to revitalize the tourism sector by offering an engaging virtual experience, adapting to the changing landscape caused by the pandemic.

Keywords: Ecotourism, Sustainable Tourism, Community-Based Tourism

INTRODUCTION
The Ciwidey area is one popular tourist area in Bandung with a cool climate and a natural atmosphere supported by landscapes of plantations, rice fields, and mountains. Based on the results of interviews with the management of Kawah Putih, it was stated that Kawah Putih has a unique theme of recreation and education. In fulfilling the educational experience, the management of Kawah Putih prepares interpreters who are competent in flora and fauna. However, the educational tourism program has not run optimally due to inadequate facilities and infrastructure to support educational tourism. Therefore, Kawah Putih requires a non-personal interpretation program. Then, from the management of Situ Patengan, it was stated that the beauty of the landscape owned by Situ Patengan would be maximized if there were media capable of photographing the landscape from various points of view. The manager of Glamping Lakesite Rancabali also expressed a similar statement.

Thus, to overcome the economic impact of the Covid 19 pandemic and keep up with technological developments, it is necessary to develop tourism in tourist areas with a virtual tourism approach. The previous research focused on increasing destination information through virtual tourism (Bhowal, 2017; Buhalis, 2000, 2020; Djindjian, 2015; Guttentag, 2010; Jan, 2009); and Umafagur, 2016). Limited studies have been concerned about using virtual tourism to mitigate the impact of the COVID-19 outbreak on the tourism sector (Kotler, 2014; Sugihamertha, 2020).

The virtual tourism design approach in this study uses the Multimedia Development Life Cycle (MDLC) concept developed by Riyanto (2015) and Bassil (2012). The design of virtual tourism has various benefits, namely: 1) as an online promotion media, 2) to become an inspiration in the process of building a...
business/business, and 3) to create a product and service concept that can bridge the need for information and promotion amidst technological advances that are growing rapidly (Thomas, 2018). In addition, it is also useful for 4) providing a better experience by displaying video, text, and still images in interactive web content (Natsir, 2019; Mendes, 2010).

**LITERATURE REVIEW**

**Components of Tourism Product**

The definition of a popular tourism product was put forward by Middleton, who stated, “The tourist products are to be considered as an amalgam of three main components of attraction, facilities at the destination, and accessibility of the destination” (Middleton, 2005). This understanding explains that tourism products have three main variables: attractions, amenities, and accessibility.

**Multimedia Development Life Cycle (MDLC)**

Multimedia development consists of Concept, Design, Material Collection, Assembly, Testing, and Distribution, with the following explanation: 1) Concept is a phase in describing goals in detail and identifying application users. This stage is the stage to determine goals and identify users. In addition, the components in the concept include a) types of applications and b) application users (Riyanto, 2015); 2) The definition of design is designing application specifications regarding appearance and material specifications for the needs of making applications (Riyanto, 2015); 3) Material collecting is composed clip-art, animation, graphic video, and audio. This stage parallels the assembly stage (Riyanto, 2015); 4) Assembly is the phase of compiling media obtained in a container. Making projects is based on specification of design aspects (Riyanto, 2015); 5) Testing is the stage that runs the project by considering potential errors (Riyanto, 2015); and 6) The project will be produced in a storage medium by considering the storage capacity. This stage can also be used to evaluate the product to be produced (Rindarsih, 2020).

**METHODS**

This research contains problems that are social and dynamic. The research process and understanding of research problems are investigated with research procedures that produce descriptive data and are field research (Moleong, 2012, p. 6). The descriptive data resulted in findings of virtual tourism patterns in Bandung. From the results of the descriptive data, the researcher seeks to describe the results of the research or the findings studied, which are then described in the form of virtual tourism products. The following are the steps in analyzing research data: 1) Data Reduction: Data reduction in this activity is an activity of summarizing, selecting, and sorting out the main things related to the research theme and looking for patterns according to research interests. The reduced data can provide detailed and clear descriptions and facilitate researchers in collecting data and finding facts in the field. 2) Display: Presented in the form of explanations, charts, graphs, and other evidence that shows the relationship between categories or the like. Making data with this method is expected to facilitate researchers in planning further activities; and 3) Conclusion: After presenting the data, it will produce temporary conclusions that answer the research questions. When researchers receive revisions from supervisors and informants, initial conclusions will be supported by valid and consistent evidence. Then, the conclusion is expected to produce credible writing or charts.

Sources of information for primary data selected by researchers are respondents who have more knowledge about tourism in Bandung. The informants were divided into government, industry, and academic respondents. The author limits the locus to match the virtual tourism character in the Ciwidey Region, Bandung Regency. The author researched at 1) Kawah Putih, 2) Situ Patengan, and 3) Glamping Lakesite Rancabali. Data collection techniques used in this study were: 1) Interview: Interviews are used as a data collection technique to find in-depth problems from respondents (Maryadi, 2010, p. 44). The interviews conducted in this study were conducted with community members, academics, and local government respondents using structured questions. The instruments used in the interview method are interview guides and interview recording tools. The informant determined the place for the interview; 2) Documentation Study: A documentation study is a collection method in qualitative research by viewing or analyzing documents made to describe a subject (Herdiansyah, 2011, p. 143). Documentation studies were carried out to support data from informants.

**RESULT**

The tourist attractions of Kawah Putih, Situ Patengan, and Glamping Lakeside Rancabali are unique and can support virtual tourism. These tourist attractions are included in natural tourist attractions that have the beauty of the overall natural scenery of an area. The activities available at this tourist spot are sightseeing and
taking pictures. Landscape conditions and locations that are easily accessible to the public can be used to take pre-wedding and commercial photos. It can be said that the virtual tourism used in this product is a sightseeing activity that offers a different experience for tourists.

Kawah Putih, Situ Patengan, and Glamping Lakeside Rancabali have good ratings regarding tourist facilities. From the availability sub-assessment, aspects of the facilities are in complete condition, starting from parking lots, places to eat and drink, souvenir shops, information centers, counters, security posts, cleaning facilities, toilets, lockers/storage of goods, and signage. Meanwhile, Wifi facilities are not yet available. Meanwhile, the quality sub-assessment is also a good assessment. Regarding infrastructure, the tourist attractions of Kawah Putih, Situ Patengan, and Glamping Lakeside Rancabali have a good rating. From the availability sub-assessment, infrastructure aspects are in complete condition, starting from Clean Water Facilities, Electrical Networks, Cellular Communication Networks, and Waste Disposal Systems. Meanwhile, the quality sub-assessment is also a good assessment.

The availability of restaurants and accommodation in the Ciwidey area is complete, and various types are available. This indicates that the Ciwidey area is a tourism destination in Bandung Regency. In terms of accommodation, the quality of the road from the point of arrival to tourist attractions is in very good condition. State, provincial, and district roads are of good quality. Arrival points for tourists using public transportation are Husein Sastranegara Airport (40 km), Bandung Station (40 km), and Leuwu Panjang Terminal (19 km)—availability of public transport from the point of arrival in good condition and quality too. The uniqueness of these three tourist attractions can be a big motivation to visit there, especially if conservation measures have been implemented to maintain the cleanliness and natural character of the environment. Virtual tourism can be carried out at these tourist attractions, considering that these tourist attractions are already popular and managers must conserve the area. Especially during the COVID-19 Virus pandemic, virtual tourism can be applied as a modern marketing tool and support the new normal.

Preparation of virtual tourism in the Ciwidey area, Bandung regency are:
1. Homepage
   On the home page, 5 sections will be presented on one page consisting of 1) navigation, 2) headers, 3) general information about virtual tourism, 4) brief information, and 5) footers.
   a. Navigation: The recommended navigation in this study is the navigation pane or navigation bar. This navigation feature includes a logo on the upper left side and a tourist attractions menu. The font used is the Rubik type.

   ![Figure 1. Navigation](Source: research data, 2023)
   The picture above shows that the menu is a choice of tourist attractions: 1) patent lakes, 2) glamping lakeside, and 3) white crater. If the cursor is directed there, a bar containing the profile, 360 photos, 360 videos and drone view will appear.

   b. Headers: The author uses the header section to display photos that represent (1) virtual tourism, (2) Kawah Putih, (3) Situ Patengan, and (4) Glamping Lakeside Rancabali. The letters used are the same as before.

   ![Figure 2. Header Visualization](Source: research data, 2023)

   c. General Information: The author uses the general information section to place images/photos, which, when clicked, will go to a general explanation page regarding virtual tourism. Then, if the user clicks on the logo section, the user will be presented with YouTube media regarding virtual tourism.
d. Brief Information: The author uses a brief information section on tourist attractions by presenting pictures/photos and writings that represent tourist attractions. In that section are three tourist attractions: Kawah Putih, Situ Patengan, and Glamping Lakeside Rancabali. In that section, there is also an explore menu, which will go to the video media page, photos, and drone view of each tourist spot if the user clicks on it.

Figure 3. General Information  
Source: research data, 2023

![General Information](image)

Brief Information: The author uses a brief information section on tourist attractions by presenting pictures/photos and writings that represent tourist attractions. In that section are three tourist attractions: Kawah Putih, Situ Patengan, and Glamping Lakeside Rancabali. In that section, there is also an explore menu, which will go to the video media page, photos, and drone view of each tourist spot if the user clicks on it.

Figure 4. Brief Information  
Source: research data, 2023

![Brief Information](image)

Brief Information: The author uses a brief information section on tourist attractions by presenting pictures/photos and writings that represent tourist attractions. In that section are three tourist attractions: Kawah Putih, Situ Patengan, and Glamping Lakeside Rancabali. In that section, there is also an explore menu, which will go to the video media page, photos, and drone view of each tourist spot if the user clicks on it.

Figure 5. Footers  
Source: research data, 2023

Footers: In the footer section, the author uses it to provide information about the website maker, which consists of addresses, contacts, and links.

2. Tourist Information Page  

On the tourist attractions page, there are 5 sections, namely (1) navigation, (2) general information, (3) detailed information, (4) virtual tourism media sites and (5) footer. The navigation section and footer are generally the same as the home page. The following is an explanation beyond the navigation and footer sections.

a. Brief Information: The author uses the general information section of tourist attractions to describe tourist attractions from the manager’s point of view. Components in the description of tourist attractions include descriptions of the landscape, developing myths, and a brief history of tourist attractions.

![Tourist Information Page](image)  

Figure 6. Brief Information  
Source: research data, 2023

Brief Information: The author uses the general information section of tourist attractions to describe tourist attractions from the manager’s point of view. Components in the description of tourist attractions include descriptions of the landscape, developing myths, and a brief history of tourist attractions.
b. Detail Information: The author uses the detailed information section of tourist attractions to provide detailed information on each tourist spot from the manager's point of view. The tourist information component includes location, Google Maps, operating hours, tourist activities, and facilities.

Figure 7. Detail Information
Source: research data, 2023

c. Virtual Tourism Media: The author uses the virtual tourism media section to place shapes according to their use. Four shapes represent the intended page: home, 360 video, 360 photo, and drone view. The Shapes home is used to return to the home page and 360 videos, 360 photos, and drone views.

Figure 8. Virtual Tourism Media
Source: research data, 2023

CONCLUSION
Tourist attractions in the Ciwidey area, Bandung Regency, have unique natural landscapes and are supported by qualified facilities and infrastructure to support tourist attractions. Ease of access is also a factor that adds value to an area as a tourist destination. The author converts the uniqueness of the Ciwidey area into the material in preparation for virtual tourism. The author uses video, text, photo, and sound media to deliver technical information. The author chooses the web as an intermediary for storing video, text, photos, and sound. The author gives more value to the quality of videos and photos with specifications of 360° x 180° and a drone view. The author uses an interactive multimedia approach that combines or synergizes media elements such as audio, text, graphics, and design. The author has also conducted a testing process consisting of components for ease of navigation, cognition content, information presentation, media integration, artistic and aesthetics, and overall function. This website is stored on hosting so that it can be accessed by all internet users in the World Wide Web (WWW) format. Responsive features on the website are also activated so that users can enjoy website content via laptop devices.

REFERENCES


