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The Impact of COVID-19 Pandemic on Homestays and Optimism in Kepulauan Seribu on Tourism Future through Smart Tourism

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ABSTRACT

Tourism stakeholders must seek out innovative tactics to survive and thrive in the face of adversity. Switching to digital media and developing new digital inventions is thought to be the best option (Heliany, 2019; Irwan & Novianti, 2021). Based on this, we consider it important to see the impact of the COVID-19 pandemic on Kepulauan Seribu tourism and its relation to digital communication as an effort to minimize the impact of the pandemic which aims to see the optimism of homestay owners. This article provides an overview of the COVID-19 pandemic impact on tourism business owners of homestays in Kepulauan Seribu until 2021

Objectives: This article provides an overview of the COVID-19 pandemic impact on tourism business owners of homestays in Kepulauan Seribu until 2021. This study aims to measure the awareness level of health protocols and the decline in income for homestay owners. This study also aims to describe the future recovery opportunities through the readiness of digital communication towards smart-tourism in Kepulauan Seribu and the optimism of homestay owners in developing their homestays in the future.

Methodology: This study uses a quantitative descriptive approach. The collection of questionnaire data uses cluster sampling starting on June 23, 2021 until October 7, 2021 with a total of 308 respondents based on collected questionnaires. The study was carried out on 9 islands during the COVID-19 pandemic and under the policy of Restrictions towards Community Activities (abbreviated to PPKM) by Indonesia's government. The presentation of descriptive data analysis uses SPSS Version 24. To strengthen the analysis, in-depth interviews were carried out with key informants.

Finding: The results of data analysis show a 60% decrease in homestay income and the number of tourists during the COVID-19 pandemic. The biggest use of digital marketing is for imaging activity, followed by digital transaction activity, marketing, and receiving criticism and suggestions as only less than 50% of homestay owners have attended training. Although affected by the COVID-19 pandemic, homestay owners are optimistic to continue to develop the capacity of their homestay in the future.

Conclusion: The availability of infrastructure to support smart tourism is sufficient. The readiness of human resources in the form of skills in maximizing the use of digital communication for tourism still needs to be supported through continuous digital communication training programs and assistance by tourism-aware groups.

Keywords: COVID-19 pandemic; digital communication; Kepulauan Seribu; smart-tourism

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INTRODUCTION

One of the government's programs to increase the number of foreign tourists since 2016 is through the 10 New Bali Program. The government focuses on encouraging the development of infrastructure and amenities in 10 prime destinations, which consists of Lake Toba (North Sumatra), Belitung (Babel), Tanjung Lesung (Banten), Kepulauan Seribu (DKI Jakarta), Borobudur Temple (Central Java), Mount Bromo (East Java), Mandalika Lombok (NTB), Komodo Island (NTT), Wakatobi National Park (Southeast Sulawesi), and Morotai (North Maluku). This program is spearheaded to achieve the target of 20 million foreign tourist arrivals in 2019. The potential for foreign tourist arrivals to Kepulauan Seribu in DKI Jakarta province is quite promising because the entrance of foreign tourists to Indonesia through Bali is 40 percent, to Jakarta is 30 percent, to Batam, Bintan Riau Islands is 20 percent, and 10 percent through other entrances (www.cnnindonesia.com, 2018).

Previously, visits to tourist attractions at Kepulauan Seribu decreased from 797,218 to 777,008 people in 2017-2018, then decreased to 613,589 people in 2019. Meanwhile, the number of foreign tourists was 2,514 people or 0.41 percent compared to domestic tourists with 588,444 or 99.59% in 2019. On the other hand, the number of accommodation and tourist facilities in 2018, 2019, and 2020 is stable at 661 homestays, 56 resorts, and 7 restaurants (BPS, 2020).

Throughout 2020, the number of foreign tourists who entered Indonesia was only around 4.052 million people. It could be said that this figure is very concerning, because of the total, only about 25% of the number of tourists who entered Indonesia in 2019. To make it worse, the decline in foreign tourists has a direct impact on the occupancy of hotels in Indonesia. In January-February, the occupancy was still at 49.17% and 49.22%. However, in March 2020, it became 32.24%, and worsened when entering the month of April 2020, which was 12.67% (Kemenparekraf RI, 2021). The COVID-19 pandemic has prevented tourists from visiting the Kepulauan Seribu area as their arrival were also restricted. Kepulauan Seribu consists of general tourist islands (45 islands), historic islands (4 islands), and resort islands (10 islands). The COVID-19 pandemic and the containment measures imposed are seriously damaging the world economy. As a consequence of strict restrictions on business and social life, and the resulting economic downturn, tourism demand experienced a unique dramatic decline in 2020 (Plizáková, 2021). In the midst of this crisis, tourism scholars are turning their attention to the people in tourist destinations, looking at their safety and well-being and the costs they will incur due to the cessation of tourism activities (Qiu et al., 2020).

To cope with the effects of the COVID-19 pandemic, what can be done is to use and synergy communication channels between conventional and digital in creating messages for tourists (Alexieva, 2020). Tourism stakeholders must seek out innovative tactics to survive and thrive in the face of adversity. Switching to digital media and developing new digital inventions is thought to be the best option (Heliany, 2019; Irwan & Novianti, 2021). Based on this, we consider it important to see the impact of the COVID-19 pandemic on Kepulauan Seribu tourism and its relation to digital communication as an effort to minimize the impact of the pandemic which aims to see the optimism of homestay owners.

This study will describe of COVID-19 pandemic's impact on homestay owners in Kepulauan Seribu until the year 2021. This study also aims to measure the awareness level of health protocols and the decline in income for homestay owners and to describe the future recovery opportunities through the readiness of digital communication towards smart-tourism in

Kepulauan Seribu and the optimism of homestay owners in developing their homestay in the future.

LITERATURE REVIEW

Tourism and COVID-19 pandemic

The COVID-19 pandemic threatens 13 million workers in the tourism sector and 32.5 million workers who are indirectly related to the tourism sector (BPS, 2020). Empirical findings show that the tourism industry reacts negatively to new cases, death tolls, and acts of global fear. Also, government stringency towards health and economic support measures positively affects the tourism industry. Furthermore, the government's strict policies reduce the performance of the tourism industry (Koçak et al., 2022). There are dynamic government policies, such as the implementation of Large-Scale Social Restriction (abbreviated to PSBB in Indonesia) and Restrictions towards Public Activities (abbreviated to PPKM), the prohibition of ships from departing to Kepulauan Seribu from the port in Jakarta due to overcrowding of visitors during the holiday season, the application of antigen or PCR swab tests and restrictions on tourist visits. Tourism is particularly vulnerable to measures to ward off pandemics due to limited mobility and social distancing (Gössling et al., 2021). Recent reviews suggest crisis research and disaster management in tourism primarily focus on recovery after a crisis but offer little insight into communication during an ongoing global crisis such as the coronavirus pandemic (Hang et al., 2020).

The impact of the COVID-19 pandemic on the tourism sector includes a decrease in the number of tourists, the number of booking cancellations, a reduction in the number of employees, and also liquidity problems (Gössling et al., 2021). The risks of tourism work stem from the characteristics of not having a formal contract, receiving low wages, being self-employed, or operating a micro or small business (Sun et al., 2022)

Digital communication and smart-tourism

The application of ICT in tourism has brought drastic changes among tourism businesses, tourists, and the government, especially in terms of marketing tourism objects (Budiardjo, 2017). Through communication and information technology, its wide scale and reach help individuals in society to work more quickly and efficiently. Each is connected to a communication and information network. This is what later became the forerunner of the network society. One of the things that distinguishes the mass community from the networked community is the type of communication which is already mediated, one of which uses digital media (Dijk, 2006).

According to Li et al. (2017) smart tourism represents a new direction of future research which implies a significant influence on tourist destinations, companies, as well as tourists themselves. The research emphasizes smart tourism as an individual tourism support system in the context of all-encompassing information and technology services. The ability to manage homestays such as marketing, reservations, customer complaint services, and the speed of their response, to fostering relationships with tourists requires a new approach, by utilizing digital communication such as information centers in the form of applications that can respond and provide information, systems homestay information (Adi Dharma et al., 2015), the collaboration of android smartphone technology with internet services in the form of an Android-based homestay reservation mobile application (Efendi & Dianta, 2016), promotional services and reservation applications in cloud computing (Umar & Sudrajat, 2017) a web-based

homestay management system (Parmadi et al., 2017) and the use of easier features such as Short Message Service or Whatsapp (Haq et al., 2018).

Smart tourism is the entire process of activity before, during, and after tourism activities are carried out based on digital technology that involves all relevant parties ranging from tourism business actors, tourism supporters, to the tourists themselves. The utilization of the internet medium for digital communication can involve many participants to interact and manage tourism activities without limiting the time before, during, and after tourism activities.

These include the collection, processing, and storage of big data in the amount and form of digital content ranging from text or narratives, photos, videos, and animations that are exchanged, and shared through digital platforms such as social media, websites, or dynamic applications. Digital technology in smart tourism is a form of tourism management intelligence engineering whose estuary will provide convenience, transparency, opportunities to collaborate and compete, and develop for all tourism stakeholders, including human resources and the tourism destination itself.

The purposes of this study are presented in the research framework of the following Figure 1:

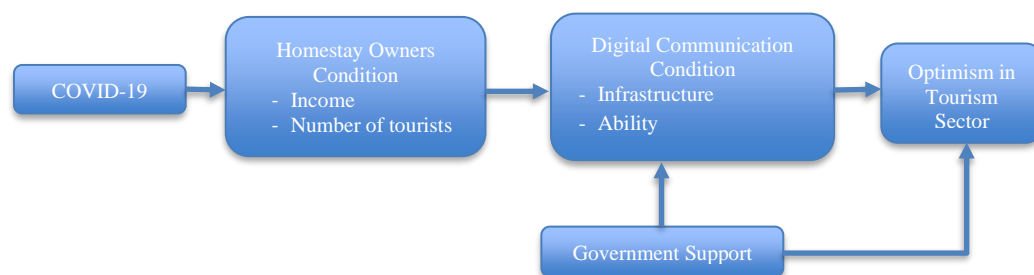


Figure 1. **Research Framework**

METHOD

This study uses a quantitative approach through a questionnaire survey to identify a sample and population, specifying the type of design, collecting and analyzing data, and presenting the results (Creswell, 2014), in addition to being strengthened by a qualitative approach through in-depth interviews. The population are the owners or managers of homestays in the village of Kepulauan Seribu tourism area. Based on Kepulauan Seribu Secretary's data, the population of homestays is 476 homestays. According to Creswell (2014), the data collection will also consider timing, weighting, mixing, and theoretical perspectives. Data collection for this study was carried out on 9 islands during the COVID-19 pandemic and the PPKM policy by Indonesia's government which began on June to October 2021. This study uses a questionnaire from 308 homestay owners (65% of the population) in Kepulauan Seribu. This sample amount already meets the sample size recommendation for descriptive research, which is at least 10% of the population element (Gay & Diehl, 1992). Data collections consists of two sub-districts namely South and North Seribu island (Table 1). While in-depth interviews were conducted on Tourism Aware Group (abbreviated to *Pokdarwis*) leaders and selected homestay owners from each sub-district. The cluster sampling technique based on the island was used as a sample in the study. Data analysis using statistics descriptive to describe the state or condition of a phenomenon (Holtzhausen et al., 2021), namely the impact of the COVID-19 pandemic on

homestay owners and perceptions related to the optimism of the tourism sector in Kepulauan Seribu, Indonesia.

Table 1. Population and Sample

| Area | Population | Sample | % Population |
|---------------------|------------|------------|--------------|
| South Seribu | | | |
| Tidung Island | 128 | 73 | 57 |
| Payung Island | 11 | 11 | 100 |
| Lancang Island | 10 | 10 | 100 |
| Pari Island | 112 | 79 | 71 |
| Untung Jawa Island | 42 | 22 | 52 |
| North Seribu | | | |
| Harapan Island | 113 | 66 | 58 |
| Kelapa Island | 14 | 14 | 100 |
| Pramuka | 43 | 30 | 70 |
| Sebira | 3 | 3 | 100 |
| Total | 476 | 308 | 65 |

Source: Researcher, 2022

RESULTS AND DISCUSSION

The Impact of COVID-19 Pandemic on The Conditions of Homestay Owners in Kepulauan Seribu

Kepulauan Seribu experienced a decline in tourism activity during the COVID-19 pandemic. The homestay owners in Kepulauan Seribu continue to survive and return to Kepulauan Seribu as a tourist destination visited by tourists. The impact of the pandemic on the condition of the Kepulauan Seribu homestay owners is measured using income indicators and the number of tourists (Gössling et al., 2021; Sun et al., 2022) based on conditions before and during the pandemic.

The income indicator is based on respondents' average income in the form of money from homestay rentals. The calculation of the decrease in homestay income in Kepulauan Seribu is calculated based on a comparison of monthly income before the COVID-19 pandemic and during the pandemic until October 2021, as shown in the table below:

Table 2. Impact of COVID-19 Pandemic on Income and Number of Tourists in Kepulauan Seribu

| Measurement | Income /month | | | Number of Tourists/month | | |
|----------------|--------------------------|--------------------------|---------|--------------------------|--------------------------|---------|
| | before COVID-19 Pandemic | during COVID-19 Pandemic | Gap (%) | before COVID-19 Pandemic | during COVID-19 Pandemic | Gap (%) |
| Minimum | 200000 | 100000 | -50 | 20 | 5 | -75 |
| Maximum | 90000000 | 10000000 | -89 | 260 | 30 | -88 |
| Mean | 2643092.11 | 1057547.17 | -60 | 45 | 18 | -60 |

From the results of data analysis, there was a 60% decrease in homestay income and the number of tourists during the COVID-19 pandemic. Before the pandemic, the average income from homestays was around Rp. 2,643,092 per month, decreased to Rp. 1,057,547 per month,

This is very dependent on government policies in dealing with the COVID-19 pandemic, such as restrictions to the closure of Kepulauan Seribu from tourists. The new coronavirus (COVID-

19, technically) is something new and something old. As usual, this pandemic has been an aggregate demand and aggregate supply shock that makes it difficult to handle with standard macroeconomic tools (Baldwin & Weder di Mauro, 2020). According to Fotiadis et al. (2021), the decline in tourist arrivals could range between 30.8% and 76.3% and will last at least until June 2021.

The number of local tourists decreased by 61% compared to the previous year. This significant decrease in the number of tourists has a very significant impact on economic conditions because tourism plays an important role in increasing state income, foreign exchange, and employment (egsa.geo.ugm.ac.id, 2021).

The coronavirus pandemic may unknowingly reshape the behavior of tourists and residents in important ways that future tourism research needs to examine (Zenker & Kock, 2020). The impact of the pandemic on the behavior of tourism actors is illustrated by the indicators of carrying out health protocols. This is an illustration of the extent to which tourism actors are aware of the importance of implementing health standards in carrying out tourism activities. As many as 74% of homestay owners answered that they had implemented health protocols, although they were not too strict. Most of them provide hand washing facilities with soap only because the examination of antigen or PCR test results is at the departure port and arrival dock when their tourists or guests come to the island.

Owner's Ability to Manage Homestay with Digital Communication in the Kepulauan Seribu

Everything has gone digital, including communicating with others, conducting business transactions, and providing a source of income for some. As a result, learning ICT is critical, especially for business owners who want to improve their company's performance (Alecia & Layman, 2021). The ability of homestay owners with digital communication is a condition for homestay owners to carry out homestay management operations with activities in the form of imaging, marketing, transactions, and receiving feedback such as criticism and suggestions on homestays through digital communication. The results showed that imaging activity was the highest with 34%, then followed by digital transaction activity at 32%, marketing at 21%, and receiving criticism and suggestions at 13%. The ability to manage homestays such as marketing, reservations, customer complaint services, and the speed of their response, to fostering relationships with tourists requires a new approach, by utilizing digital communication such as information centers in the form of applications that can respond and provide information (Prastyo et al., 2014), systems homestay information (Adi Dharma et al., 2015), the collaboration of android smartphone technology with internet services in the form of an Android-based homestay reservation mobile application (Efendi & Dianta, 2016) promotional services and reservation applications in cloud computing (Umar & Sudrajat, 2017) a web-based homestay management system (Parmadi et al., 2017), and the use of easier features such as Short Message Service or Whatsapp (Haq et al., 2018).

The condition of infrastructure in Kepulauan Seribu that can be used for internet networks such as telecommunications provider networks, wireless fidelity networks, and cable networks that can be accessed at homestays. The internet network is an important infrastructure component of a country. The absence or limitation of the internet network can result in limited connectivity and access to information from one area to another. Especially for areas belonging to the outskirts such as rural areas and islands. This situation can lead to a digital divide between

individuals, households, businesses, community groups, or geographic areas (Ercikan et al., 2018; Mubah et al., 2017; Onitsuka et al., 2018).

Internet learning resources identify those who teach how to use digital communication for homestay owners. The top two dominants in the Kepulauan Seribu are the closest people, namely family with a percentage of 41.5%. This is related to the closeness and daily life of family members who interact, such as children belonging to the millennial group or generation Z who are more technological and digital literate than the previous generation. Then the next rank is self-study at 41.2%, related to the ease of access and the availability of communication tools and equipment in the Kepulauan Seribu Region which is quite good compared to other archipelagic regions. According to BPS data, households that control cellular phones in Kepulauan Seribu in 2020 were recorded at 59.36%. From the research results, the highest percentage of accessing the internet using a mobile/smartphone device is 85%.

From an in-depth interview with the Regent of Kepulauan Seribu, it is clear that the infrastructure is quite good in the small islands of Kepulauan Seribu. There are 13 tower units on the islands, allowing providers such as Telkomsel, XL, and Indosat to operate well-serving telecommunications and internet networks. The local government also cooperates with Telkom or Indihome in some islands so that a wireless fidelity network has been built from the North to South Kepulauan Seribu. There are about 87 online wireless fidelity points for banking and telecommunications purposes. This includes the basic needs inventoried for Kepulauan Seribu. Then there are 22 wireless fidelity points from the Kominfotik Service in 7 RWs on 3 islands, namely Lancang, Panggang, and Kelapa islands. There are also 65 hotspots belonging to the Sub-Department which are spread across government offices, official residences, and RPTRA. Wireless fidelity at school and RPTRA are free. There are no problems to use the internet. Even if there are obstacles, they are actually the same as obstacles in mainland areas, such as the signal is not good or not stable (Maja et al., 2020).

However, the availability of infrastructure has not been optimally utilized by the community. In Kepulauan Seribu, according to informants on Tidung Island and Lancang Island, free wireless fidelity or hotspots in government facilities such as offices and docks are often used by children to play online games together. According to Dhahir (2018), the Integrated Broadband Village Program, which was held for rural communities, was not very attractive to the public. This happens because they do not understand the use and designation of these ICT tools. According to Straubhaar et al. (2018) there is also a problem with the ability to use the internet effectively once people have it, some refer to it as the second digital divide, while others call it the knowledge gap.

The ability to create content is a skill in utilizing digital media in the form of digital content production in the form of: text, photos, videos, and animations. Business actors, especially small and medium enterprises, have quite low ICT literacy. The number of business actors who are not familiar with computer equipment is still more than 50%. Even though many of them already have smartphones that are connected to the internet, the sites accessed are more social media. They access it as a means of entertainment and leisure time. As a result, their internet access has not been able to increase productivity (Widyastuti et al., 2016).

The ability to create content for homestay owners indicates an opportunity to compete with other tourist destinations through promotion or digital marketing of Kepulauan Seribu with other tourist destinations. Social media can help a destination stay competitive if it provides engaging content, uses creativity, and supports and motivates interactive communication

(Živković et al., 2016). The results showed that the ability of homestay owners to create digital content was the most dominant in creating text, with 52%. Followed by content in the form of photos 33%. For moving content features in the form of videos, 14% and animated content are also available, although only 1% as shown in the following Figure 2:

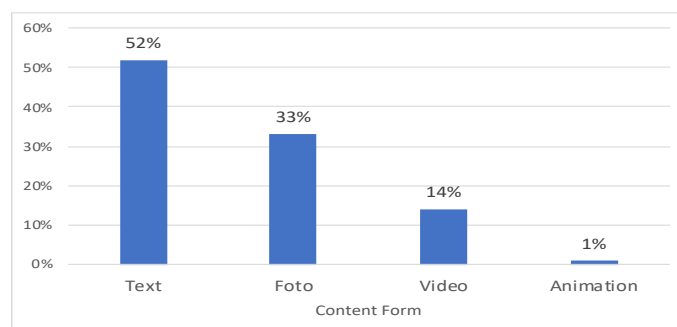


Figure 2. Homestay owners' ability to create content

Optimism in Kepulauan Seribu on Tourism Future through Smart-Tourism

The response from the government is important in dealing with the pandemic, especially in the tourism sector. Social protection programs and entrepreneurship can be used so that business actors can run their businesses (Sun et al., 2022). According to the Regent of Kepulauan Seribu, his government in 2021 has distributed national economic recovery funds (PEN) to tourism actors in Kepulauan Seribu. However, those who get it are only those who have complete legal coverage, such as resorts operating in Kepulauan Seribu. Aid funds can reach Rp. 70 million per resort. Meanwhile, for homestays, there are administrative legality requirements. Therefore, it is difficult to get the funds. Sharma & Nicolau (2020) stated that some economic assistance may have been distributed to companies experiencing difficulties at the time of their study, but anticipate that the magnitude of the crisis may require additional assistance in the coming weeks and months to keep certain industry segments from collapsing.

Apart from money, support from the central and regional governments is also in the form of training. The training carried out included management training, entrepreneurship, and the use of digital media. Unfortunately, this training is only felt by less than 50% of homestay owners in Kepulauan Seribu (Figure 3). In positivist construction, this training activity has an impact on the skills of homestay managers and can be a form of more community empowerment (Tukamushaba & Okech, 2011), especially for homestay business actors in Kepulauan Seribu.

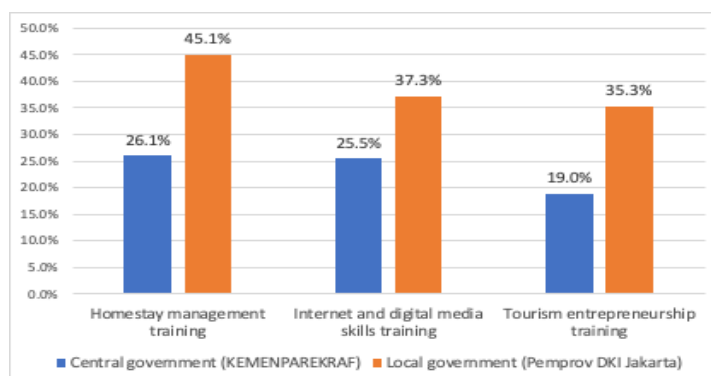


Figure 3. Government support for homestay owner in Kepulauan Seribu

The optimism of homestay owners is reflected in the conditions to increase the homestay availability or capacity to the need for lodging from tourists in the future. The data generated are respondents' answers based on scores from alternative space uses in the form of constructing new buildings, making the top floor, functioning as a residential room, and inviting relatives or neighbors to function as part of the room as lodging. Optimism towards tourism can be seen in future plans for the development of homestays as shown in the following Figure 2:

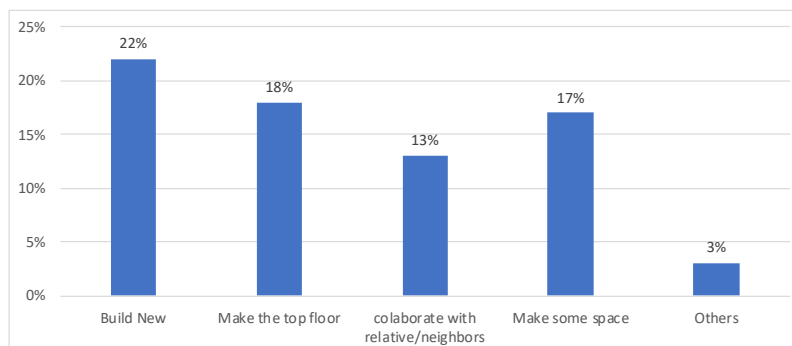


Figure 4. Percentage of plans to increase homestay capacity

From the diagram of the study results, for the development of homestays, homestay owners in Kepulauan Seribu prefer to develop homestays with 17% making some space, 13% inviting relatives or neighbors to use their rooms as lodging, 1% making the upper floor as lodging, and only 22% building new homestays. If it is assumed that the total reaches 70% of the respondents who want to develop their homestay. While the rest who answered that it was not necessary or sufficient with existing homestays were 27%.

Although there are still problems related to the legal aspect, homestay owners were quite optimistic about increasing the capacity of homestays in Kepulauan Seribu considering there was only 27% who do not want to add a new homestay. While the rest want to increase the capacity of the homestay by adding a new one, increasing the top floor (second level), using some of the space, and inviting neighbors or relatives to use their house for homestays. The next challenge is how to issue legality, financing to build or renovate that requires funds along with concepts or designs and management that are in accordance with current needs.

CONCLUSION

The COVID-19 pandemic, followed by a series of regulations from the Indonesian government, resulted in a 60% income and the number of tourists to decrease. The ability of homestay owners with digital communication is a condition for homestay owners to carry out homestay management operations with activities in the form of imaging, marketing, transactions, and receiving feedback such as criticism and suggestions on homestays through digital communication. The results show that imaging activity was the highest with 34%, then followed by digital transaction activity at 32%, marketing 21%, and receiving criticism and suggestions 13%. The ability of homestay owners to create digital content was the most dominant in creating text with 52%. Carrying out imaging activities dominates the digital communication readiness of tourism business actors in Kepulauan Seribu, DKI Jakarta Province, in managing homestays with digital communication. Meanwhile, for the readiness to create digital communication content, the dominant form is still in the form of text. Despite being affected by the COVID-19

pandemic, homestay owners' optimism towards the future of tourism in Kepulauan Seribu can be seen in their plans to continue to increase the capacity of their homestays.

Smart tourism is quite ready to run in Kepulauan Seribu as the infrastructure is already available. Nevertheless, the ability or skill of human resources is still needed to be improved because only less than 50% who have attended training. To increase readiness in creating digital content, a continuous digital communication training program is needed. Assistance from digital communication experts who live on inhabited islands is also needed if tourism actors are less skilled or by training members of local community groups such as Tourism Aware Groups (*Pokdarwis*).

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