Smart Living Tourism: Safe and Comfort Natural Tourism Concept

Lustina Fajar Prastiwi¹, Sri Handayani², Sunil Kumar Chaudary³

Email : ¹lustina.prastiwi.fe@um.ac.id, ²p108625@siswa.ukm.edu.my, ³sunilcitd@gmail.com
Universitas Negeri Malang, Indonesia; Universiti Kebangsaan Malaysia, Malaysia; Nepal Institute for International Cooperation and Engagement, Nepal.
* Corresponding Author

Abstract
This research is a literacy study about smart living tourism in Indonesia. The aim is to find out the opportunities that smart living tourism has to develop through a review of existing literature. This study uses a descriptive and qualitative methodologies. Researchers try to uncover and understand something behind phenomena that have not been known before so that they can provide complex details about phenomena that are difficult to uncover in previous research. The result is smart living tourism Indonesia has a wide opportunity as a new nature tourism entity. With the existence the usage of websites, social media, and the internet can speed up marketing and increase consumer convenience in consuming this tourism commodity because it is easy and fast. What’s more, smart living tourism is very close to nature, adding to the variety of ways tourists can enjoy nature. The contribution of this article is to provide knowledge that the trend of mart living tourism is becoming quite promising as a way to increase income in the tourism sector by collaborating between lodging tourism and nature tourism.

This is an open access article under the CC-BY-SA license.

Introduction

In the midst of the current high interest in tourism, many innovations have emerged from existing opportunities. One of them is lodging tourism. Accommodation that has been a complement such as hotels, resorts or cottages. This commodity developed until glamour camping or glamping appeared. Glamping came up with the concept of a capsule hotel that aims to be a lodging or camping tour, but still provides a sense of security and comfort while enjoying the scenery outdoors (Ningrum & Mustika, 2019). Indonesia has many natural tourist destinations that will never end. The impact of the epidemic of COVID-19 in 2020 and 2021 has begun to rise with the opening of access to tourism and freedom for people to travel. Apart from lodging tours, glamping also provides a pleasant natural atmosphere because it is in a green...
open space. Usually, glamping sites are located in large hilly areas so that tourists can stay safely, comfortably and see the vast natural scenery.

In Indonesia, glamping tourism has been around since 2020. Environmentally friendly glamping is a new form of tourism in collaboration with the Tourism and Indonesian Creative Economy Agency and the private sector. This tour gives a new impression, lodging tourism that is very close to nature. On the other hand, this tour also has complete facilities such as comfortable cabins, clean bathroom, and superfast internet network, so tourists can rest comfortably. Throughout the Covid-19 period, the community was quite bored due to the activity restriction program and affected the space for people to move very narrowly, so this tourism innovation was enough to attract visitors.

Apart from innovative ideas, glamping in Indonesia is very close to potential users because it uses applications or websites provided by private companies so that potential customers have convenience and transparency in terms of ordering and payment. The concept of nature and flexibility brought by the smart living tourism company aims to provide consumers with good choices when traveling. The development of the internet in Indonesia has had an impact on shopping trend activities that were originally conventional to digital (Suryoko, et al. 2023).

Juarsa (2020), Matos, et al. (2019), Mello & Faxina (2021) dan Atiyat (2021) made innovations related to smart tourism with various supporting fields. What has been done is the use of technology in designing the use of smart living concepts for offices, smart city planning to support tourism, and the concept of tourism laboratories using the concept of smart tourism. As for this research taking the concept of nature and flexibility promoted by the smart living tourism company, it aims to provide choices for consumers to be able to travel with the sensation of being one with nature while sleeping in the middle of a hill or on the edge of a lake.

Smart tourism continues to be developed along with the high use of the internet and applications on smartphones as convenience in transactions and obtaining information (Li, 2017). Smart tourism seeks to improve new ecosystems so that new innovations, particularly those involving the application of technology, can be supported, and made easier smart tourism development. This research contributes to see how the application of the idea of intelligent living tourism is to realize the idea of environmentally friendly travel safe and comfortable. Therefore, the difference between this research and previous research is the innovation offered in technological developments to support tourism in the form of lodging with a smart living tourism approach.

**Literature Review**

The concept of smart living is the result of developing information and technology innovation (Serra, Neuhofer, & Ivars-Baidal, 2019). Smart tourism is the utilization of existing
opportunities as well as resources to improve experience in the field of tourism (Lee, Hunter, & Chung, 2020). Smart tourism as a solution offers a variety of businesses with scattered locations so that it can be an opportunity to open up many jobs. Smart Tourism is a direct extension of the concept of e-tourism (Serra, Neuhofer, & Ivars-Baidal, 2019). The tourism confluence content, services and IT tools can help tourists to extend the cognitive limits of their itineraries with depicted destination specifics and improve quality, etc. (Junior, Garcia, Morgado, & Filho, 2020). The goal smart tourism is to concentrate on growing tourist by merging ICT needs developments integrating Culture and innovation are being promoted to increase the quality of tourism services and tourism management and broaden the industry's scale to a wider audience extent (Lee & Hlee, 2021). Smart Living Tourism, which combines smart cities and smart tourism, is considered as a solution to increase resilience to current and future crises and can help increase the significant economic impact of tourism. One of the reasons is the convergence of many economic entities in a smart tourism city, which has the potential to provide positive economic effects both within the city itself and in the surrounding area. Convergence exists between smart cities and smart tourism. The convergence of many platforms and stakeholders generates the smart tourism ecosystem. The economic benefits of smart tourism cities can be felt regionally and across a broad spectrum of industries.

The concept of smart living tourism has more benefits including improving the quality of life and shaping personal welfare but the welfare of the population as a whole (Chang & Smith, 2023). This well-being is related to various aspects such as Well-being in terms of material, social, emotional, and health/safety. More specifically the impact of smart living can be classified in several aspects such as: 1) the economy by boosting the local economy and creating new job possibilities, increasing standard of living, investment contributions, creating new ventures, increasing tax receipts, increasing living costs, rising costs for products and services, real estate speculation, and so on; 2) sociocultural, such as social contacts, cultural exchanges, Preservation of cultural goods, increased leisure and entertainment activities, community welfare, loss of cultural identity as a result of violence and crime, tourism, and so on; 3) Environment, such as natural resource preservation, increased environmental awareness, better natural resource management, increased pollution, deterioration of the environment, waste management/disposal, and so on (Widjaja, Hery, & Tarigan, 2017).

Method

This is a qualitative study with a descriptive design. The study try to uncover and understand something behind phenomena that have not been known before so that they can provide complex details about phenomena that are difficult to uncover in previous research (Ningrum & Mustika, 2019). Data for this study were collected through literature studies from
both domestic and foreign journal articles. Literature study is carried out with the process of assessing, synthesizing, summarizing, and comparing the results of existing research and creating a literary work review which can then help a researcher to be able to identify objectives and describe the research process (Hanum, Suganda, Muljana, Endyana, & Rachmat, 2020). The results of this literature study were carried out as a basis and material for formulating what and how the notion of Smart Living Tourism, especially the Concept of Safe and Comfortable Nature Tourism.

The stages of the research carried out can be seen in Figure 1 below.

![Research Procedure](image)

According to Figure 1, the study was carried out by 1) Exploring general ideas about research 2) Reinforcing the research focus 3) Arranging and compiling the materials used in the research 4) Searching for and finding reading materials 5) Rearranging materials to make them good 6) Reviewing and making notes research 7) preparation of materials back 8) writing research results analyze [8]. Based on these steps, after filtering according to the focus of the study, there are 7 article titles that are the samples in this paper. The documentation approach was applied in this study’s investigation. The information gathered is in the form of photographs, texts, and the works of others related to what is meant in the problem formulation.

This library research does not only record data collected from various previous studies, but researchers are required to be able to process the data that has been collected using the stages of library research. The author chooses to use the library research method because in a study, data collection does not have to be collected directly, but research data is obtained from existing documents.
This research focuses on discovering various implementations of smart cities, their concepts and developments. This study uses secondary data, namely data obtained not from direct observation, but data obtained from previous research. Sources and source data are obtained from journals that are open access from Google Scholar. This study uses data analysis methods in the form of content analysis techniques. After the necessary data has been collected, data analysis is needed, namely concluding the findings of the data to get a precise and accurate result. The nature of this analysis is in the form of an in-depth discussion of a written or printed content in the mass media.

Result and Discussion

In accordance with the steps taken, namely by searching for articles related to smart living tourism and filtering to classify the appropriate articles, seven (7) articles were obtained which would be used as the basis for appropriate smart living tourism. The following as seen in table 1 below.

<table>
<thead>
<tr>
<th>Critical Factors</th>
<th>Evidence in literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Smart living Tourism</td>
<td>Serra, Neuhofer, &amp; Ivars-Baidal (2019), Junior, Garcia, Morgado, &amp; Filho (2020); Lee &amp; Hlee (2021)</td>
</tr>
<tr>
<td>Acceptance and Use of Smart Technology</td>
<td>Widjaja, Hery, &amp; Tarigan (2017); Hanum, Suganda, Muljana, Endyana, &amp; Rachmat (2020)</td>
</tr>
<tr>
<td>Implementation of Smart Living Tourism to Improve the Quality of Life</td>
<td>Buhalis &amp; Amaranggana (2015); Diwyarthy, Pratama, &amp; Eddy (2023)</td>
</tr>
</tbody>
</table>

Table 1 is the main reference journal of this paper. The article becomes a source of analysis and the results are described by the researcher. This table contains 3 categories analyzed by researchers related to smart living tourism, including perceptions about smart living tourism, acceptance and use of smart technology, and implementation of smart living tourism to improve people’s quality of life. Based on the findings of seven article titles that are in accordance with the research objectives, an analysis is carried out based on three indicators, namely the perception of smart living tourism, the acceptance and use of smart technology, and the implementation of smart living tourism in improving the quality of life. The first indicator is based on research conducted by Serra, Neuhofer, & Ivars-Baidal (2019), Junior, Garcia, Morgado, & Filho (2020); Lee & Hlee (2021). The second indicator is based on research conducted by Widjaja, Hery, & Tarigan (2017); Hanum, Suganda, Muljana, Endyana, & Rachmat (2020), while...
the third indicator is based on research conducted by Buhalis & Amaranggana (2015); Diwyarthi, Pratama, & Eddy (2023).

Perseption of Smart living Tourism

a. Towards a conceptualization of smart tourists and their role within the smart destination scenario (Francisco Femenia-Serra, Barbara Neuhofer & Josep A. Ivars-Baida)

This article uses the literature review method and according to this study there is now a need for a framework to understand tourism in which ICTs have revolutionized entire sectors and altered tourist experiences and behavior. However, To date, research on smart tourism has been partial and has ignored the role of tourists from a holistic perspective, typically focusing on the adoption and use of specific technologies. On the other hand, the global interpretive framework in this case is lost in the intelligent context. To address these deficiencies, this paper makes contributions first, by providing a more in-depth conceptualization that characterizes intelligent travelers by describing their attitudes and behavioral patterns, Second, they must define their function in the intelligent destination scenario. This article concludes that travelers' roles in tourism intelligence should be important, and it asks for better strategic decision making. These findings provide some critique of implications for future research, Destination Management Organizations (DMOs), and businesses that operate in smart service environments, as well as potential research directions for areas that are yet in their infancy.

b. Residents’ Quality of Life in Smart Tourism Destinations: A Theoretical Approach, (Adalberto Santos-Júnior, Paulo Morgado, Fernando Almeida García, Luiz Mendes-Filho)

This second article uses a systematic literature review method using the Scopus database using the keywords "tourism and quality of life" and "smart places (smart cities and smart destinations) and quality of life". According to the studies reviewed, the quality of life of residents in smart places can be quantified using objective and subjective well-being indices. However, the findings of the reviewed papers show that many tourism studies focus on subjective well-being to assess local residents’ quality of life. The Bottom-up Spillover Theory, which asserts that individual contentment with particular quality of life characteristics increases community satisfaction in general, lends support to this analytical approach. To a significant part, the subjective nature of It is made possible by the concept of quality of life simple to explain what this concept genuinely means for inhabitants using subjective metrics. The degree of contentment with the qualities of well-being (material, socio-cultural, environmental, and political), as well as the impact of tourism and ICT, can be used to quantify the standard of living in smart tourist's locations. Objective indicators are valuable because they enhance subjective data and enable comparisons with other destinations and locales. The evaluation of occupant satisfaction with the quality of life is a good indicator that destination managers should consider, both for boosting tourism development offerings and assistance, as well as other issues.
associated with the destination. In smart tourism destinations, ICTs play a cross-sectoral role, encouraging local residents to have a more positive impression of their quality of life and tourism activities and urban infrastructure that promotes the development of human and social capital while also creating environments that support economic activity.

c. **Smart Tourism City (Sunyoung Hlee)**

   This article is a literature review on the concept of a smart tourism city. Many researchers have defined the concept of a smart city, but the commonly stated attributes of a smart city are that it leads to increased efficiency, sustainability, environmental friendliness, and improved quality of life/visit for residents/tourists through connectivity via information communication technology (ICT). Tourism has also advanced technologically, financially, and socially as a result of the convergence of ICT and tourism. Smart tourism has stressed establishing a symbiotic relationship between tourists and citizens as well as producing economic and social value. Based on the convergence of tourism and technology, a smart tourist city achieves economic, social, cultural, and environmental sustainability.

   Based on the three studies referenced in the first indicator, it can be concluded that smart living tourism is an application of advances in information and communication technology that continues to grow, especially in supporting the improvement of tourism. The implications of the perception of smart living tourism can provide an overview of the quality of life of tourists through objective and subjective welfare indices. In addition, the existence of smart living tourism also affects urban infrastructure development that encourages the development of human and social capital while creating an environment that supports economic activities. In the context of sustainable development, smart living tourism supports a symbiotic relationship between tourists and residents and generates economic and social value. Based on the convergence of tourism and technology, smart tourist cities achieve economic, social, cultural and environmental sustainability.

**Acceptance and Use of Smart Technology**

a. **Enhancing the Tourism Potential of Lake Toba Through the Concept of Smart Tourism: Applications and Challenges (Andree E. Widjaja; Hery dan Riswan E Tarigan)**

   This article uses a literature review. Literature study shows that information and communication technology, through the notion of smart tourism, can be utilized to help raise the value of tourism in a tourism region. In keeping with the government's plan of establishing KEKP and BOPKPDT, the authors propose that the government adopt the concept of smart tourism as soon as feasible in order to improve the tourism potential of the Lake Toba region. Smart tourism might include providing visitor information and services, managing tickets, monitoring nature/environment around Lake Toba, and monitoring of plants/animals around Lake Toba and other supporting facilities. In addition, the authors have identified factors that are directly
related to the successful implementation of the smart tourism ecosystem along with possible challenges that may be faced.

b. **The Concept of Smart Tourism as an Implementation of Digitalization in the Tourism Sector**  
   *(Fauziah Hanum, Dadang Suganda, Eng. Budi Muljana, Cipta Endyana, Heryadi Rachmat)*

This article uses a descriptive method with literature studies from articles in domestic and foreign journals. The result of the article review is that the application of technology to tourism activities changes the consumer experience and produces creative tourism business models. The application of Smart tourism allows tourists to communicate and engage more effectively, and it refers to the establishment of a smart tourism industry. This intelligent tourism activity can also help and assist city development. By adapting the notion of smart tourism to the demands of tourists before, during, and after their trips, the industry or field gains competitive value in the eyes of tourists. Furthermore, the application of the smart tourism concept can result in a better tourist experience, people's welfare, increased effectiveness, competitiveness, business goals, and overall competitive sustainability. The advancement of technology (in the form of applications) makes it easier and more enjoyable for tourists because they feel free to choose and arrange what they want, and it benefits the industry (both destinations, hotels, restaurants/culinary, and other fields) because it can reduce promotion costs and speed up the transaction process. This is a pleasant advantage for all parties. By utilizing technology that can be in the form of applications, Augmented Reality (AR), and Near Field Communication (NFC) in the concept of Smart Living Tourism.

The second indicator emphasises the acceptance and use of technology in supporting tourism development. The utilisation of technology can provide benefits for tourism managers and visiting tourists. On the side of tourism managers, the application of technology can provide improved services in the form of providing information and visitor services, ticket management, nature/environment monitoring and plant/animal monitoring. Meanwhile, on the tourist side, it can provide convenience and delight tourists because they feel free to choose and manage what they want through applications that can be used. In addition, the application of technology also provides benefits for other parties who participate in providing facilities in tourist attractions such as the food and craft industry. The existence of new technology that provides information, can be used by the industry to find out the wants and needs of tourists which can then be provided and adjusted by the food and craft industry. This means that the application and acceptance of technology in supporting tourism development has a broad impact on almost all sectors.

**Implementation of Smart Living Tourism to Improve the Quality of Life**  

a. **Smart Tourism Destinations Enhancing Tourism Experience Through Personalization of Services** *(Dimitrios Buhalis and Aditya Amaranggana)*
This article uses a qualitative approach by conducting in-depth interviews with 13 informants. Implementing the concept of intelligence on The Internet of Things (IoT) is believed important to potentially improve the tourist experience through advanced feedback, greater access to real-time information, and improved customer service. This research also discovered a number of customized services for tourists anticipate being provided in Smart Tourism Destinations in order to improve their trip experience, which are categorized as follows: (1) Prior to Travel: To assist with the planning stage by providing all real-time related information based on user profiles in order to make more educated judgments. (2) During the Trip: Improved access to real-time information to assist travelers in entering locations, customized live services, and feedback loops in real-time; and (3) Post Trip: Prolonged participation in order to recall the event, as well as an adequate feedback system that allows travelers to review their holistic tourism experience. Thus, Smart Travel Destinations are very important in offering personalized services to their tourists by considering several aspects, namely access to time information to collect user data, instant feedback to help express opinions on the services offered, dynamic platforms that allow various stakeholders exchange data to promote service integration; and the ability to precisely predict what visitors want through historical data (pattern analysis) to formulate distinctive service and dynamic recommender systems.

Following the discovery of several potential insights from the development of Smart Tourism Destinations. Because Smart Tourism Destinations have the potential to become an enabling environment by empowering individuals with disabilities through procedures that automatically adapt the device to the user’s personal needs, it is critical to solicit their perspectives and expectations on such developments.

b. Tourist Perspective Towards Glamping Accommodation in The Era of Industry 4.0 and Society 5.0 (Ni Desak Made Santi Diwyarthi, I Wayan Adi Pratama, I Wayan Tagel Eddy)

This article uses a quantitative approach in answering research problems. The results of the study, namely the correlation coefficient between the attribute correlation coefficient and the glamping attribute level in Bali, the most important attribute group for domestic tourists while choosing glamping lodging, is 0.763. This attribute area contains advertising that are judged appealing, have a large number of followers, and promos for visitors put out by notable singers. Based on the value of the attribute correlation coefficient and the glamping attribute level in Bali, the second major attribute group for domestic tourists while choosing glamping lodging in Bali has a correlation coefficient of R 0.695. This attribute group includes courteous waiters, quick and accurate work, reasonable food pricing, a variety of foods, and guaranteed quality. The third essential characteristic group for domestic tourists while choosing glamping lodging in Bali, based on attribute correlation coefficient values and glamping attribute levels, The correlation coefficient is 0.303. Complete glamping is included in this attribute category.
conveniences as well as lovely vistas. The attribute group that is less essential for domestic tourists while choosing glamping lodging in Bali has a correlation coefficient of -0.707 based on the value of the attribute correlation coefficient and the glamping attribute level in Bali. Glamping cleanliness, entertaining activities, and glamping pricing are all part of this attribute group. Tourist preference for glamping accommodation business in Bali wants glamping to be advertised in a visually appealing manner, with a high number of followers (a huge number of followers and promoted by prominent artists).

The implementation of smart living tourism to support quality of life can be applied as part of tourism promotion. The purpose of travelling is very important to support part of the quality of holiday. So, tourists will certainly consider the facilities offered by tourist attractions and their surroundings in supporting these goals. Therefore, it is necessary to have an attractive offer by involving influencers or other public figures to support the attraction of tourists to the facilities needed while on vacation. For this reason, the concept of smart living tourism is the answer to the needs of tourists while on holiday.

The concept of smart living tourism offers a variety of services that integrate technology but still accommodate safety and comfort. Smart living tourism promotes a combination of technology and branding to increase market engagement with consumers. This method is considered effective enough to reduce sponsorship costs because most of them prioritize internet connections and social media to expand the market area easily and inexpensively. The use of the internet in smart living tourism accelerates the rotation of ideas, models and trends in living tourism.

Smart Living Tourism which is developing in Indonesia emphasizes comfort and safety for visitors who want a holiday that blends with nature. This option is quite attractive due to the high nature tourism trend due to massive branding on social media and supported by good government programs. Smart Living Tourism is an additional tool as well as a support for the existence of a tourism place, but now this commodity has turned into a new entity in tourism options that prioritizes smart living tourism so that business owners not only provide exclusive lodging facilities but also offer attractive natural tourism at the same time.

The Indonesian government's policy in responding to technological developments in the tourism sector is contained in the preparation of master plans and Quickwin smart cities for 100 districts / cities implemented since 2017. The selection of the 100 districts/cities is expected to be a role model in the implementation of smart cities for other regions. The programme implemented is the Movement Towards 100 smart cities initiated by the Ministry of Communication and Information in collaboration with several other ministries. In realising the programme, there are six pillars of smart city development in priority tourist areas, namely
Smart environment. Smart economy, smart branding, smart government, smart society, and smart living.

![Smart City Pillars](image)

Source: Muliarto (2015)
Figure 2. Smart City Pillars

Smart living tourism requires the participation of various parties in realising the concept. Tripel Helix can be a solution in the development and foundation of smart living tourism by involving the government, the business world, and academics. The government can provide legal protection, not provide burdensome taxes, and support the realisation of a society that plays an active role in using technology such as cashless. From the academic side, it will produce useful research to encourage an increase in the capacity of the community in accepting new things in travelling. Meanwhile, the business world can encourage collaboration between the business world and the community to create cooperation and empowerment of MSMEs. Therefore, the importance of tourism aspects by adjusting technological developments will encourage all aspects to participate in improving the quality of holidays for tourists.

The concept of smart living tourism in Indonesia with the systematic application of technology has not been applied massively. This means that only a few lodging places or tourist attractions with excellent predicates are applying, and even then it is still limited to a few facilities. Thus, this research contributes ideas to apply technology in the development and improvement of tourism in Indonesia. Previous research only discussed smart city planning and smart economy, but did not discuss other important things included in the smart city pillar, namely smart living.
Conclusion

Efforts to maximize Indonesian tourism can be carried out through smart living tourism which is also a new tourism alternative for Indonesian tourism that prioritizes nature and tourist comfort. The concept of smart tourism with a focus on safety, comfort and natural preservation can be a good solution for sustainable tourism development. This research is a literacy study about smart living tourism in Indonesia. The aim is to find out the opportunities that must be developed by smart living tourism through a review of existing literature. This research uses descriptive and qualitative methodologies. Researchers try to uncover and understand something behind a phenomenon that was not previously known so that they can provide complex details about phenomena that are difficult to uncover in previous research. The research results show that intelligent use of technology can improve the tourist experience by providing accurate and relevant information, facilitating access, and increasing security. Strict environmental monitoring and sound waste management can help preserve nature and prevent environmental damage from tourism. In addition, the involvement of local communities in tourism development will create sustainable social and economic benefits. Thus, the successful development of tourism between lodging tourism and nature tourism can increase the offer of nature-based tourism. Therefore, the Triple Helix concept stated in the research can be a solution in the development and foundation of smart living tourism by involving the government, the business world and academia.

References


Li, Y. (2017). Individuals’ Motivations to Adopt Smart Technologies for Tourism - Discrepancy Between Initial and Post Adoption. International Conference on Distributed, Ambient, and Pervasive Interactions, 77-92. doi:https://doi.org/10.1007/978-3-319-58697-7_6


