

5G Technology Transformation In Tourism

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Abstract

The transformation of 5G technology has significantly impacted various aspects, including the tourism industry. With much higher speed and capacity than previous technologies, 5G enables the creation of more immersive and connected tourism experiences. Purpose This study explores the impact of implementing 5G technology on the tourist experience in certain destinations. Specific objectives include: Explain changes in the traveller experience following the implementation of 5G technology. Identify factors influencing traveller perception and satisfaction related to applying 5G technology. Analyse the challenges and opportunities of adopting 5G technology in the tourism sector. This research method uses a descriptive qualitative approach and SWOT analysis.

Keywords: Technology, Tourism, 5G.

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1. Introduction

Tourism is an industry that is starting to grow in every country, including Indonesia. Tourism Is an industry that has a role in displaying the image and identity of a country to attract many people to carry out tourism activities in their country (Pradani, G. 2017). Tourism as a global phenomenon has become a basic need of hundreds of millions of people. As a basic necessity, travel should be part of human rights and must be respected and protected. This has led to several international organisations, such as the United Nations, the World Bank, and the World Tourism Organization (WTO), recognising that tourism is an integral part of people's lives, especially regarding social and economic activities. (Pradini, G.2023). Tourism is a growing industry, Pradini & Alya (2022). Tourism is currently one of the industries in demand by many people and is also developing rapidly. Indonesia is an archipelagic country with diversity ranging from landscapes and cultures. Therefore, Indonesia has tremendous and abundant tourism potential, with natural resources owned up to the culture of each region that has its own social and cultural values. Increasingly, with modern lifestyles, people are spending much time outdoors. Some people often prefer to buy ready-made food because of

its practicality Ananda, A., & Pradini, G. (2022). This tourism activity has economic implications for the community, such as increasing income, business opportunities, and growing job opportunities Pradini et al. (2022). As a sector based heavily on local potential, tourism has excellent potential to continue developing Kausar et al. (2014).

The transformation of 5G technology has significantly impacted various aspects, including the tourism industry. With much higher speed and capacity than previous technologies, 5G enables the creation of more immersive and connected tourism experiences. In addition, implementing 5G also opens up new opportunities in marketing, customer service, and tourism destination management. However, this transformation also faces high implementation costs and infrastructure limitations. Therefore, the SWOT review will help comprehensively understand the strengths, weaknesses, opportunities, and threats related to the role of 5G technology in tourism transformation. Thus, the background of the transformation of 5G technology in tourism includes aspects of positive impacts and challenges that need to be overcome to harness the full potential of this technology.

The impact of 5G implementation on tourist experience, learning innovation, tourism marketing, and digital transformation of 5G technology (1) Enables the use of augmented reality (AR) and virtual reality (VR) in learning, which opens up new opportunities in subject matter delivery. In addition, SWOT analysis can be used to evaluate the implementation of 5G technology in the tourism sector; (2) The development of cellular network technology from 1G to 5G shows a significant acceleration, where 5G technology is expected to provide better changes in the digital world, including in tourism transformation; (3) The implementation of the 5G network is also likely to provide benefits to the community, such as high speed, low latency, and good connection quality; (4) In addition, today's digital trends also include the adoption of 5G networks and digital transformation in various fields, including tourism; and (5) Thus, the discussion on the transformation of 5G technology in tourism covers multiple aspects that are relevant and important to understand.

The first theory that can be taken from the search results is that 5G technology can positively impact the transformation of tourism. With much higher speed and capacity than previous technologies, 5G enables the creation of more immersive and connected tourism experiences. Implementing 5G also opens up new opportunities in marketing, customer service, and tourism destination management. However, this transformation also faces high implementation costs and infrastructure limitations. Therefore, a SWOT review can help comprehensively understand the strengths, weaknesses, opportunities, and threats related to the role of 5G technology in tourism transformation. Thus, 5G technology can be a crucial driver in tourism transformation and benefit the tourism industry and society.

2. Research Methods

Purpose This study explores the impact of implementing 5G technology on the tourist experience in certain destinations. Specific objectives include: Explain changes in the traveller experience following the implementation of 5G technology. Identify factors influencing traveller perception and satisfaction related to applying 5G technology. Analyse the challenges and opportunities of adopting 5G technology in the tourism sector.

This research uses a qualitative approach, with case studies as the research design. Data was collected through in-depth interviews with tourists, destination managers, and related

parties and direct observation of tourist interactions with 5G technology in these destinations.

3. Results and discussion

Strengths. The extremely high speed of the internet allows for a more immersive and interactive tourism experience. Facilitate the implementation of augmented reality (AR) and virtual reality (VR) technology in tourism. Improve connectivity between devices in tourist destinations so that information is more integrated.

Weaknesses. Requires expensive 5G infrastructure to build in tourist destinations. There are still limited devices and applications compatible with 5G. Big cities' 5G networks still need to be narrower and more comprehensive.

Opportunities. Creating new travel experiences that are more interactive and engaging with the latest technology. Encouraging tourism startup collaboration with 5G service providers for application development. Opening market opportunities for tourism products and services based on 5G technology.

Threats. User data security risks if hackers compromise 5G networks. Tourism human resources need to be prepared to utilise 5G technology. High dependence on 5G networks so that network disruptions can hamper operations.

That's a simple SWOT analysis regarding applying 5G technology in industry tourism. Digital transformation through 5G certainly opens up development opportunities.

4. Conclusion

5G technology has the potential to revolutionise travel experiences to be more interactive and immersive with very high data transfer rates. This encourages innovation in digital-based tourism products and services.

The application of 5G in the tourism sector still faces challenges regarding infrastructure availability, device compatibility, and HR talents who master the technology. It requires the cooperation of various parties to overcome it.

5G can trigger collaboration between network providers, digital startups, tourism organisers, and other stakeholders to develop a shared tourism ecosystem.

Data security risks and network disruptions must be considered to avoid over-reliance on 5G networks still in development.

The government is expected to facilitate the implementation of 5G for tourism through supportive policies, such as incentives for 5G infrastructure development in strategic tourist destinations.

This is the conclusion of the analysis of the transformation of 5G technology in tourism. This technology is predicted to be increasingly in demand to create more sophisticated tourist experiences.

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