EMBRACING DIGITALIZATION IN TOURISM: STRATEGIC APPROACHES FOR GLOBAL COMPETITIVENESS IN THE DIGITAL ECONOMY ERA

Rhena J1, Kraugusteeliana Kraugusteeliana2, Hamzar3
1,3Universitas Muhammadiyah Mamuju, Jl. Pattalundru No. 2, Mamuju, Sulawesi Barat, Indonesia
2Universitas Pembangunan Nasional Veteran Jakarta, Jl. RS. Fatmawati Raya, DKI Jakarta, Indonesia
Email: rhena.rr5@gmail.com

Abstract. The digital economy era has transformed various sectors, including tourism. Digital technology enables companies to operate more efficiently and reach global markets more easily. Digital transformation has become an urgent necessity for the tourism industry to remain competitive. This research aims to explore how a strategic approach to digitalization can be applied by tourism businesses to enhance their global competitiveness in the digital economy era. The research employs a literature review method with a qualitative approach. Data were collected from Google Scholar with publication dates ranging from 2011 to 2024. The study results indicate that digitalization has become imperative for tourism businesses in facing global dynamics in the current digital economy era. More than just the use of information technology, digitalization involves a comprehensive transformation of business processes, from marketing to the tourist experience at destinations. Successful examples of tourism digitalization in Indonesia, such as Wonderful Indonesia and online ticket booking platforms, demonstrate significant potential in enhancing global competitiveness and strengthening the local tourism industry.

Keywords: Digitalization, Tourism, Competitiveness, Digital Economy


Kata Kunci: Bisnis, Pariwisata, Daya Saing, Ekonomi Digital

INTRODUCTION

The revitalization of the economy through digital adaptation has swept across various industries, including the tourism sector. Digital technology innovation has paved the way for companies to enhance their operational efficiency and reach global markets more smoothly (Triwahyono et al., 2023). In this context, digital transformation is not just an option but a pressing necessity for the tourism industry to maintain its competitiveness amidst the constantly evolving market dynamics. In the contemporary era, there is a trend indicating that consumers are increasingly reliant on digital technology advancements when planning and booking their travels. Mobile applications, online booking platforms, and the ever-expanding presence of social media have become essential tools in consumer decision-making (Dwivedi et al., 2021). Thus, adapting to these behavioral patterns becomes crucial for tourism companies in their efforts to attract and retain customer loyalty in rapidly changing markets. The presence of the tourism industry on the global stage faces stiff challenges in an increasingly heated competition. Tourism destinations and related service providers must embrace innovation as the primary key to enhance their service standards, attracting travelers from various parts of the world. Amidst these dynamics, digital transformation becomes a vital element that can provide a competitive edge through improved operational efficiency and enriching customer experiences, thus opening doors to success in the rapidly changing global tourism landscape (C Vijayabanu & S Karthikeyan, 2021).

The digitalization development has brought significant implications for the tourism sector, opening doors to new breakthroughs such as the development of data-driven services, more intimate travel experience personalization, and the implementation of Artificial Intelligence (AI) technology to enhance service quality to customers (Chorna et al., 2024). By leveraging these technological advancements, companies in the tourism industry have the opportunity to offer more innovative and enjoyable solutions to their consumers, enriching travel experiences with intelligent and cutting-edge technology elements. In the context of the tourism industry, digital technology has proven its crucial role in enhancing operational efficiency through the automation of processes, more precise inventory management, and in-depth data analysis. With integration into such technology, tourism companies can minimize their operational costs, increase productivity, and ultimately optimize their profitability in the dynamic and competitive markets (Demsina Sinaga & A. Hermawan, 2023).

In the evolving digital era, the presence of the internet and digital technology has opened doors for the tourism industry to explore broader market potentials (Sciarelli et al., 2018). Through the realization and implementation of sophisticated digital marketing strategies and
integrated e-commerce platforms, tourism companies now have the capacity to attract the attention and interest of travelers from various parts of the world. The role of governments in advancing the digitalization of the tourism industry cannot be underestimated, with policy measures and initiatives aimed at promoting technological breakthroughs. Support provided includes the development of solid digital infrastructure, incentives for innovative businesses, and the establishment of regulations supporting the development of the digital ecosystem.

In Indonesia, several tourist destinations and tourism companies have successfully implemented effective digitalization strategies. For example, Bali has adopted various digital initiatives to enhance tourism promotion and customer service. Travel companies like Traveloka and Tiket.com have also utilized digital technology to expand their market reach and improve user experiences (Islami et al., 2023). This success demonstrates the significant potential of digitalization in Indonesia's tourism industry. Referring to the above exposition, this research aims to understand more deeply how strategic approaches in digitalization can be conceptualized and effectively applied by tourism industry players, enabling them to optimize global potential in the increasingly interconnected and rapidly transforming economic realm.

METHOD

This research employed a literature review method with a qualitative approach to deeply understand the digitalization strategies of tourism businesses and their impact on global competitiveness in the digital economy era. Data were collected from Google Scholar with publication dates ranging from 2011 to 2024, using keywords such as "tourism business digitalization," "tourism digital strategies," "tourism global competitiveness," and "tourism digital economy." The initial search process yielded 56 articles. Subsequently, a rigorous selection based on relevance, quality, and contribution to the research topic was conducted. Selection criteria included the article's focus on digitalization strategies in the tourism industry, publication in reputable journals, as well as the content of empirical data and comprehensive analysis. After selection, 24 most relevant and high-quality articles were used as the primary sources in this study. Data from the selected articles were descriptively analyzed to identify main themes, trends, and significant findings related to the digitalization of tourism businesses. This descriptive analysis provided an overview of the strategies utilized by tourism businesses in leveraging digital technology and their impact on their global competitiveness. The results of the analysis were presented in the form of a descriptive narrative outlining the main research findings, focusing on the implications for the tourism industry and recommendations for the effective implementation of digitalization strategies. Figure 1 below encapsulates the adopted
The digitalization of the tourism business refers to the application of digital technology in various aspects of operations, marketing, and services within the tourism industry to enhance efficiency, accessibility, and customer experience (Barykin et al., 2021). This involves the use of online booking platforms, mobile applications, social media, and data analytics to understand consumer trends and optimize service offerings. By adopting technologies such as artificial intelligence, virtual reality, and augmented reality, tourism businesses can offer more personalized and immersive experiences to travelers (Talukder, 2024). Furthermore, digitalization enables tourist destinations and related companies to reach the global market more effectively, reduce operational costs, and increase their competitiveness in the digital economy era.

Tourism digital strategy refers to the plans and actions designed by companies or tourist destinations to leverage digital technology to enhance promotion, operations, and customer experience (Musliha & Adinugraha, 2022). This includes using digital marketing through social media, search engines, and content platforms to reach a wider audience and attract more tourists. Additionally, this strategy involves developing responsive websites and mobile applications to facilitate travelers in finding information, making bookings, and receiving services during their trips. Through data analytics practices, companies can understand consumer preferences and behaviors, allowing them to offer more personalized and relevant services (Aziz et al., 2023). The use of technologies such as virtual reality and augmented reality also enables potential tourists to get a more realistic view of destinations before they travel, increasing their interest and engagement. Global competitiveness in tourism refers to
the ability of a destination or tourism company to compete effectively in the international market by attracting and retaining tourists from around the world (Cronjé & du Plessis, 2020). This involves providing high-quality products and services that meet or exceed the expectations of global tourists, as well as the ability to adapt to constantly changing market trends and needs. Factors contributing to this competitiveness include innovation in tourism experiences, adequate infrastructure, security, ease of access, and effective promotion (Woyo & Slabbert, 2023). With strong global competitiveness, a destination or tourism company can increase its international market share, boost revenue, and support local economic growth through tourism.

The digital tourism economy refers to the tourism industry's ecosystem driven by digital technology, where transactions, marketing, and operations are conducted online to enhance efficiency and effectiveness (Yu et al., 2024). In this context, various digital platforms such as booking websites, mobile applications, social media, and data analytics tools play a crucial role in connecting tourism service providers with consumers. Digital technology allows tourists to search for information, compare prices, book services, and share their experiences easily (D. Wang & Fesenmaier, 2013). Additionally, the use of data analytics enables tourism companies to understand market trends and consumer behavior, allowing them to offer more personalized and relevant services. The digital tourism economy improves accessibility, promotes destinations more widely, and creates more satisfying experiences for tourists while increasing the competitiveness and economic growth of the tourism sector.

**DISCUSSION**

In the face of global dynamics in today's digital economy, a strategic approach to digitalization in tourism businesses has become an imperative that cannot be ignored. Technology has emerged as a major driver of economic growth, compelling the tourism industry to adopt digital innovations to enhance its global competitiveness. This paper will detail the significance of digitalization in the context of tourism businesses, while highlighting concrete examples of successful tourism digitalization that have taken place in Indonesia. Digitalization in the context of tourism businesses refers to more than just the utilization of information technology; it involves a deep transformation of various business processes, covering aspects from marketing strategies to the experiences that tourists have at destinations. By leveraging the diverse digital platforms available, stakeholders in the tourism industry have the opportunity to improve their operational efficiency, enhance the visibility of tourist destinations, expand their market reach, and deepen interactions with tourists. With targeted
digitalization steps, tourism businesses can strengthen their competitiveness in a dynamically changing and increasingly connected global market (Mallick, 2023).

In Indonesia, examples of success in implementing digitalization in the tourism industry can be identified through several initiatives introduced by the government, private sector, and community. A notable example is the digital transformation efforts carried out by the Indonesian Ministry of Tourism and Creative Economy (Kemenparekraf) through the Wonderful Indonesia platform. These steps highlight a strong commitment to integrating technology to enhance the competitiveness of Indonesia's tourism sector and provide better experiences for visitors. Through the use of digital solutions, the government and private sector partners can increase the global visibility of Indonesian tourist destinations, improve information accessibility for tourists, and open new opportunities in sustainable tourism marketing and promotion (Rhama & Setiawan, 2020). However, alongside discussing successes, it is also crucial to address areas where challenges persist. For instance, despite these digital initiatives, Indonesia faces significant challenges in attracting international tourists compared to neighboring countries like Malaysia and Thailand. Factors contributing to this discrepancy may include insufficient international marketing strategies, infrastructure limitations in remote tourist areas, and gaps in tourism service quality and accessibility. While digitalization efforts have improved visibility and information access, overcoming these challenges requires comprehensive strategies that address infrastructural development, service standards, and targeted international promotion campaigns.

The Wonderful Indonesia platform serves as a comprehensive source of information about various tourist destinations across Indonesia. Not only does it provide details about available tourist attractions, but it also offers detailed information about accommodations, local culinary options, and activities that tourists can enjoy. With the ease of access provided by Wonderful Indonesia, travelers can plan their trips more efficiently, receive real-time updates about the conditions at their desired destinations, and interact with other tourists to share experiences and recommendations. This platform is an essential tool for travelers and plays a role in promoting the cultural diversity and natural beauty of Indonesia globally (Simanjuntak, 2019).

Additionally, the development of digitalization has been a major driver for the advancement of the local tourism industry. Another concrete example is the success of booking and accommodation applications such as Traveloka and Tiket.com, which have transformed the ticket and accommodation purchasing paradigm in Indonesia. These platforms provide easy access for both domestic and international tourists in planning their trips, significantly contributing to the redistribution of income to more remote and lesser-known tourist
destinations (Pramukty et al., 2024). By leveraging digital technology, these applications have opened doors to new economic opportunities in areas previously untouched by the main tourism flows and helped extend the economic benefits of the tourism industry. Moreover, digitalization opens opportunities for tourism industry players to optimize the use of data more effectively in designing more targeted marketing strategies and more personalized services for visitors. For example, utilizing data analytics to gain a deep understanding of tourists' preferences and behavior patterns allows tourist destinations to adapt their offerings more accurately (Y. Wang et al., 2018). Tourism players can enhance the quality of their services and strengthen the bond between tourists and destinations, creating more meaningful experiences for visitors and supporting sustainable growth in the tourism industry.

This underscores that a strategic approach to digitalization in tourism businesses has a significant impact on enhancing global competitiveness in the digital economy era while providing a crucial foundation for the advancement of the tourism industry. Referring to examples of success such as Wonderful Indonesia and online ticket booking platforms, Indonesia has demonstrated great potential in adopting digital innovations to optimize the country's tourism potential. These steps drive economic growth in the tourism sector and create new opportunities for improving service quality, more satisfying tourist experiences, and more effective promotion of Indonesian tourist destinations in an increasingly connected global market. Investment in digitalization is key to strengthening Indonesia's position as a premier tourism destination on the global stage. It is important to emphasize that digitalization in the tourism industry not only provides significant benefits to industry players themselves but also has a broad positive impact on the economy. One noteworthy aspect is that digitalization opens doors to diverse new economic opportunities, such as the development of digital applications and platforms focused on travel experiences, personalized online tour guide services, and the use of Augmented Reality (AR) and Virtual Reality (VR) technologies to enhance visitor interactivity and satisfaction. Through the integration of these technologies in the tourism context, new job opportunities and investment prospects are created, leading to increased productivity and efficiency in the tourism industry, which in turn supports sustainable economic growth. Digitalization becomes a tool to enhance the competitiveness of the tourism industry and is key to driving inclusive economic growth (Gutierriz et al., 2023).

One tangible example of digital training programs supporting tourism SMEs is the program run by the Ministry of Tourism and Creative Economy of the Republic of Indonesia (Kemenparekraf). This program provides training in various fields, including digital marketing and online reservation management, for tourism SMEs in various tourist destinations across
Indonesia. For instance, in the Bali region, there are training programs conducted collaboratively by Kemenparekraf and several local non-profit organizations. Through these training sessions, small business owners, such as homestay operators, food stall owners, and souvenir shop owners, are equipped with the knowledge and skills necessary to leverage digital platforms like social media and online booking sites to enhance their business visibility and accessibility to both local and international tourists (Pasanchay & Schott, 2021). The establishment of such programs gives tourism SMEs a greater opportunity to grow and compete in the digital era, thereby contributing to local economic growth and better inclusion in the tourism industry.

Nevertheless, the presence of digitalization in the tourism industry also brings a number of challenges that require careful handling. One major challenge is the significant digital divide between urban and rural areas, as well as between technology-savvy generations and those unfamiliar with digital technologies (Onitsuka et al., 2018). This indicates the need for collective efforts to bridge this gap. One approach that can be taken is through increased investment in digital infrastructure, which includes wider and stronger internet networks in rural areas, as well as affordable accessibility for all societal layers. Additionally, there is a need for training and educational programs specifically designed to strengthen digital skills across all demographics, including training for older generations who may not be familiar with modern technology. These measures are expected to minimize the digital divide so that all parties can equally benefit from the advances in digitalization within the tourism industry. Furthermore, attention to data security is also critically important in the context of tourism digitalization today. As the use of digital platforms in the tourism industry expands, the amount of personal data collected and processed increases, creating an urgent need for adequate data protection (Bélanger & Crossler, 2011). It is crucial for the government and industry players to collaborate in developing effective and comprehensive regulatory frameworks to ensure that tourist and business data are securely handled and comply with prevailing privacy standards. These steps include formulating clear policies related to data collection, storage, and usage, as well as stringent enforcement against privacy violations. This is expected to create a safe and trustworthy digital environment for all stakeholders in the tourism industry, thereby enhancing public trust and supporting sustainable growth in this digital era.

By addressing various challenges and continually fostering innovation in tourism digitalization, Indonesia has great potential to strengthen its position in the global tourism industry. It is essential to recognize that challenges such as the digital divide, data protection, and service quality improvement remain key areas of focus that need to be addressed.
Nonetheless, by adopting a strategic approach that is inclusive and sustainable, Indonesia can optimize its tourism potential to provide broader economic and social benefits to society. Measures such as investing in equitable digital infrastructure, developing continuous training and education programs in technology, and establishing comprehensive regulatory frameworks to protect personal data are crucial. In this way, Indonesia can enhance its competitiveness in the global tourism industry while ensuring that the benefits of these advancements are felt by all layers of society. Table 1 below summarises the key findings resulting from the analysis of the research conducted.

<table>
<thead>
<tr>
<th>No</th>
<th>Key Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strategic Approach to Digitalization in Tourism Business</td>
<td>a. Becomes imperative in facing global dynamics in the digital economy era. b. Technology serves as the primary driver of economic growth, and tourism must adopt digital innovation to enhance its competitiveness.</td>
</tr>
<tr>
<td>2</td>
<td>Digitalization of Tourism Business</td>
<td>a. Involves a comprehensive transformation of business processes, including marketing and tourist experiences at destinations. b. Utilizes digital platforms to enhance operational efficiency, destination visibility, and interaction with tourists.</td>
</tr>
<tr>
<td>3</td>
<td>Successful Examples of Digitalization in Indonesian Tourism</td>
<td>a. Digital transformation by the Ministry of Tourism and Creative Economy through the Wonderful Indonesia platform. b. Success of ticket and accommodation booking applications like Traveloka and Tiket.com. c. Utilization of data to develop personalized marketing strategies and services.</td>
</tr>
<tr>
<td>4</td>
<td>Impact of Tourism Digitalization</td>
<td>a. Offers new economic benefits, enhances inclusion, but also presents challenges.</td>
</tr>
<tr>
<td>5</td>
<td>Challenges in Tourism Digitalization</td>
<td>a. Digital divide, data security, and the need for investment in infrastructure and training.</td>
</tr>
<tr>
<td>6</td>
<td>Efforts to Address Challenges</td>
<td>a. Data protection, investment in digital infrastructure, and digital skills training.</td>
</tr>
<tr>
<td>7</td>
<td>Future Outlook</td>
<td>a. With an inclusive and innovative strategic approach, Indonesia can strengthen its tourism competitiveness globally. b. Indonesia's tourism potential can provide broader economic and social benefits to society.</td>
</tr>
</tbody>
</table>
CONCLUSION

Digitalization has become a necessity for tourism businesses to navigate the global dynamics in today's digital economy era. More than just the use of information technology, digitalization involves a comprehensive transformation of business processes, from marketing to the tourist experience at destinations. Successful examples of tourism digitalization in Indonesia, such as Wonderful Indonesia and online ticket booking platforms, demonstrate significant potential in enhancing global competitiveness and strengthening the local tourism industry.

RECOMMENDATIONS

Some recommendations based on the findings of this research include:

- Continue to foster digital innovation: It is crucial for the government, private sector, and communities to actively foster digital innovation within the tourism sector. This includes incentivizing the adoption of emerging technologies such as virtual reality (VR) for virtual tours, AI-driven personalized travel recommendations, and blockchain for transparent booking systems. These innovations will not only enhance visitor experiences but also keep Indonesian tourism competitive in the rapidly evolving digital economy.

- Strengthen digital inclusion: To bridge the digital divide, substantial investments should be made in upgrading digital infrastructure across urban and rural areas. This entails expanding reliable internet access, particularly in remote tourism destinations, and ensuring affordability of digital services. Concurrently, comprehensive training and educational programs must be implemented to empower all segments of society with essential digital skills, from basic digital literacy to advanced e-commerce capabilities.

- Enhance data protection: Collaborative efforts between governments and industry stakeholders are essential in developing robust regulatory frameworks that prioritize data protection and privacy for tourists and businesses. This involves establishing clear guidelines on data collection, storage, and usage within the tourism sector, ensuring compliance with international standards such as GDPR (General Data Protection Regulation), and fostering trust among global travelers.

- Focus on local economic development: Promoting the creation and utilization of local digital platforms and applications, including online tour guide services and booking platforms, can significantly boost revenue generation for small businesses and local communities in tourism destinations. By facilitating access to digital tools and resources,
Indonesia can empower local entrepreneurs to showcase their unique cultural offerings and attract a broader audience of domestic and international tourists.

By implementing these strategic recommendations, Indonesia can reinforce its position as a leading player in the global tourism industry while fostering inclusive economic growth and social development across the nation. These efforts not only contribute to enhancing visitor satisfaction but also create sustainable opportunities for local communities to thrive in the digital age.

REFERENCES


