



The Role of Strategic Management in Tourism Business Sustainability: A Case Study on Digital Economy-Based Tourist Destinations

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Abstract

This study explores the role of strategic management in supporting tourism business sustainability within digital economy-based destinations, focusing on Ciletuh-Palabuhanratu Geopark in West Java, Indonesia. The research aims to determine whether differences in the level of digital-based strategic management among tourism actors influence their sustainability performance. Using a quantitative approach, data were collected from 90 respondents categorized into three groups: low, moderate, and high digital strategy adopters. A one-way ANOVA test was conducted to examine whether significant differences existed in the economic, social, and environmental dimensions of sustainability among the groups. The results show a statistically significant difference in sustainability outcomes, with businesses in the "high" digital strategy group demonstrating the most favorable performance. Economic sustainability emerged as the most impacted dimension, driven by better revenue growth and operational efficiency. Social and environmental dimensions also improved through increased community engagement, visitor satisfaction, and adoption of eco-friendly practices. These findings indicate that digital-based strategic management not only enhances competitiveness but also strengthens long-term sustainability. The study further highlights the importance of stakeholder collaboration in maximizing the effectiveness of digital strategies. Strategic alignment between tourism actors, local government, and communities is essential to build inclusive and resilient destination ecosystems. By integrating strategic planning with digital innovation, tourism businesses can achieve sustainability that is both profitable and responsible. The results contribute to the growing discourse on digital transformation in tourism and offer practical insights for policymakers, tourism managers, and local stakeholders in digitally emerging destinations.

Keywords: *Strategic Management, Tourism Sustainability, Digital Transformation, Stakeholder Collaboration, Smart Tourism.*

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1. Introduction

Tourism has become a strategic sector in driving both national and regional economic development, especially in countries like Indonesia that are rich in natural and cultural resources. One of the major challenges in tourism development today lies in maintaining sustainability amidst digital transformation and changing tourist preferences. The sector must not only provide high-quality travel experiences but also sustain environmental integrity, empower local communities, and enhance competitiveness through digital technology adoption [1]. Digitalization of tourist destinations offers vast opportunities to improve promotional reach, operational efficiency, and real-time interaction with travelers. However, not all destinations have the capacity to design and implement effective digital strategies, which leads to significant disparities in competitiveness. In this regard, strategic management plays a vital role in guiding decision-making toward sustainability and digital transformation [2].

Ciletuh-Palabuhanratu Geopark, a UNESCO Global Geopark located in Sukabumi, West Java, is one of Indonesia's emerging nature-based tourism sites. Known for its geological diversity, rich biodiversity, and strong local culture, Ciletuh holds tremendous potential as a sustainable tourism destination. However, this potential is yet to be fully optimized, especially in terms of integrating digital economy practices to support sustainable tourism business development [3]. The geopark represents the need for integrated efforts that combine conservation, education, and economic growth for local communities. In practice, however, Ciletuh faces various challenges such as limited digital information access, underutilized promotional strategies, and unequal community involvement. This highlights the need for a strategic approach to managing all tourism elements in a sustainable way [4].

Implementing digital strategies such as social media marketing, online booking platforms, and visitor management systems is crucial to enhancing destination management. However, without sound managerial strategies, digital tools may become mere promotional instruments with little impact on community welfare or environmental preservation [5]. As a nature-based tourism area, Ciletuh requires development strategies that go beyond reacting to digital trends. Instead, it needs proactive strategies that build local capacity, support tourism business innovation, and manage environmental pressures effectively. Strategic management is essential to balance the economic, social, and ecological dimensions of sustainable tourism development [6].

An effective strategic management framework includes the formulation of a clear long-term vision and goals aligned with current and future challenges. In the era of the digital economy, this includes the digital transformation of tourism MSMEs, youth involvement in creative industries, and the implementation of data-driven monitoring systems. In Ciletuh's case, these strategies are highly relevant due to the dominance of local communities in the tourism sector [7]. This study is important because there is still a lack of research that specifically investigates the role of strategic management in digital economy-based destinations in Indonesia, particularly within geopark contexts. Ciletuh, with its great potential but underutilized digital infrastructure, provides a valuable case to explore how strategic management influences tourism business sustainability [8].

As an internationally recognized area, Ciletuh-Palabuhanratu Geopark is expected to become a model of sustainable digital tourism development. However, this requires the synergy of local governments, destination managers, tourism MSMEs, community groups, and the private sector in designing and implementing effective strategies. Strategic management serves as the main framework to facilitate such collaboration [9]. Previous studies have shown that the success of sustainable tourism destinations depends heavily on leadership quality, service innovation, and the integration of technology into daily operations. These aspects are relevant to be examined in Ciletuh through a holistic case study approach to assess how far such elements have been applied and their contribution to local tourism business sustainability [10].

One of the main indicators of successful strategic management in tourism is improved local community welfare through inclusive local economic growth. The digitalization of tourism MSMEs in Ciletuh could become a transformational tool for socio-economic development if combined with proper training, digital market access, and continuous business mentoring [11]. From the tourists' perspective, the perception of service quality, digital information access, and overall travel experience also play a crucial role in sustainability assessments. Therefore, this study also integrates consumer perception analysis as part of the evaluation of the implemented strategic approaches [12].

In terms of environmental sustainability, strategic management in geoparks like Ciletuh must consider carrying capacity, waste management, and geological site preservation. Strategy design based on participatory and data-driven policy becomes essential to balance development with conservation efforts [13]. This study aims to contribute both practically and theoretically to academics, tourism practitioners, and policymakers in developing strategic models for sustainable destination management. The focus on digital integration within strategic management opens new possibilities for tourism business innovation based on community empowerment [14].

Ultimately, the choice of Ciletuh-Palabuhanratu Geopark as a case study is not only based on its geographical uniqueness and potential but also on its complex management challenges. The formulation of long-term strategies grounded in data and multi-stakeholder collaboration is necessary. Hence, this research is expected to provide significant insight into the role of strategic management in the digital era for sustainable tourism development. In the digital era, where tourists increasingly rely on online platforms to make travel decisions, destination competitiveness is no longer defined solely by physical attraction but also by how destinations manage digital presence, online service quality, and engagement strategies. Ciletuh-Palabuhanratu Geopark, with its growing digital visibility yet uneven strategic implementation, stands as a compelling case to explore how digital economy principles can be effectively translated into strategic management practices. By investigating this interplay, the study contributes to the broader discourse on how destination sustainability can be reinforced through adaptive, inclusive, and innovation-driven management approaches.

2. Research Methods

This study adopts a quantitative approach using an associative-comparative research design. The aim is to determine whether there are significant differences in tourism business sustainability based on the level of digital-based strategic management practices among tourism actors in the Ciletuh-Palabuhanratu Geopark. The study also examines the extent to which the application of digital strategies contributes to the sustainability dimensions economic, social, and environmental within the destination. This approach is deemed appropriate for providing empirical, measurable comparisons across defined respondent groups. The population of this study includes tourism business actors in the Ciletuh-Palabuhanratu Geopark, such as homestay owners, tour managers, culinary businesses, transportation service providers, and tourism-supporting MSMEs. A purposive sampling method was employed to select respondents actively involved in digital strategic management. The

final sample consisted of 90 respondents categorized into three groups based on their level of digital strategy adoption: low, moderate, and high.

Data were collected using a structured questionnaire based on a five-point Likert scale. The questionnaire measured two main variables: tourism business sustainability (dependent variable) and the level of digital strategic management (independent variable). Sustainability was assessed through three key dimensions: economic (revenue growth, cost efficiency), social (community empowerment, visitor satisfaction), and environmental (conservation practices, waste management). Meanwhile, digital strategy included indicators such as technology adoption, service innovation, and digital promotion efforts.

Before deployment, the questionnaire was tested for validity and reliability through a pilot study involving 30 respondents outside the main sample. Validity testing used the Pearson Product-Moment correlation, and reliability was measured using Cronbach's Alpha. The results showed that all items had correlation values above 0.30 and reliability coefficients above 0.70, indicating that the instrument was both valid and reliable for use in this research. To analyze the data, the study employed One-Way ANOVA (Analysis of Variance) to examine whether there were statistically significant differences in tourism business sustainability across the three groups categorized by their digital strategy levels. Prior to the ANOVA test, data were examined for normality using the Kolmogorov-Smirnov test and for homogeneity using Levene's test. If these assumptions were met, ANOVA was conducted, followed by an LSD (Least Significant Difference) post-hoc test to determine which specific group comparisons yielded significant differences.

Interpretation of the ANOVA results involved comparing the p-value to a significance level of $\alpha = 0.05$. If the p-value was less than 0.05, it indicated significant differences among the digital strategy groups in terms of tourism sustainability outcomes. Further analysis focused on identifying which dimensions of sustainability were most influenced by strategic digital practices. By applying ANOVA within the context of the Ciletuh-Palabuhanratu Geopark, this study aims to contribute both academically and practically to understanding how digital-based strategic management affects tourism sustainability. The findings are expected to inform policy recommendations and managerial practices for digital tourism development in rural and emerging destinations across Indonesia.

In order to measure the relationship between strategic management and tourism business sustainability, this study identifies two main variables: the independent variable (digital-based strategic management) and the dependent variable (tourism business sustainability). Each variable is operationalized into specific, measurable indicators to facilitate data collection and statistical analysis. The table below presents the variables, dimensions, and indicators used in the research:

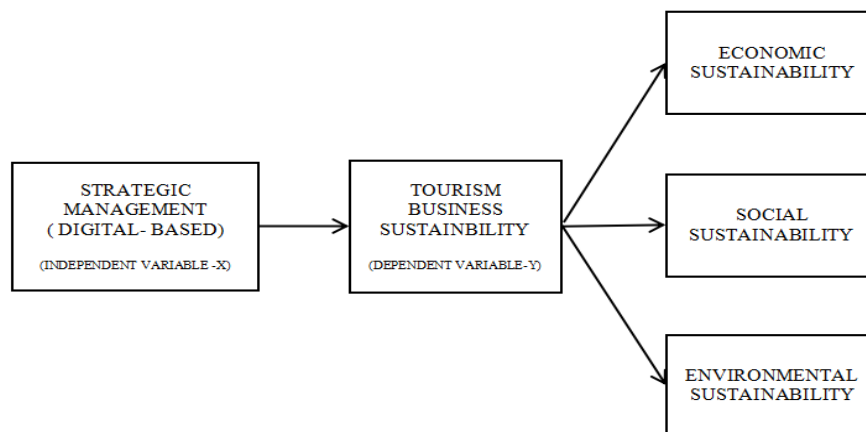


Figure 1. Conceptual Framework of the Research

Table 1. Research Variables and Indicators

Variable	Dimension	Indicator
Independent Variable		
Strategic Management Based on Digital Economy	Digital Technology Adoption	Use of websites, mobile apps, and digital tools in operations
	Digital Promotion	Use of social media, online advertising, SEO, digital branding
	Service Innovation	Online reservations, cashless payments, personalized digital services

Tourism Business Sustainability	Data-Driven Decision-Making	Utilization of visitor analytics and online feedback for strategy planning
	Dependent Variable	
	Economic Sustainability	Increased revenue, cost efficiency, business resilience
	Social Sustainability	Community involvement, local job creation, visitor satisfaction
	Environmental Sustainability	Waste reduction efforts, eco-friendly practices, environmental awareness

In this study, the data were analyzed using a One-Way ANOVA (Analysis of Variance) to determine whether there were statistically significant differences in the level of tourism business sustainability based on the categories of digital-based strategic management implementation. The ANOVA technique compares the average sustainability scores among three groups: low, medium, and high levels of digital strategy adoption. The F-ratio, which is the main output of ANOVA, is calculated by dividing the variance between groups by the variance within groups. These variances are derived from the sum of squares and the respective degrees of freedom for each group. If the resulting F-value is statistically significant (typically if the p-value is less than 0.05), it indicates that at least one group differs significantly from the others. This suggests that the degree of digital strategic management practiced by tourism actors has a measurable influence on how sustainable their businesses are, whether in economic, social, or environmental terms.

$$F = \frac{\text{Mean Square Between Groups (MSB)}}{\text{Mean Square Within Groups (MSW)}} = \frac{\frac{SSB}{df_b}}{\frac{SSW}{df_w}} \dots\dots\dots(1)$$

In this study, a one-way ANOVA (Analysis of Variance) is used to determine whether there are significant differences in the level of tourism business sustainability (Y) based on the categories of digital-based strategic management (X), which are grouped into low, medium, and high levels. The ANOVA compares the means of the sustainability scores across these three groups. The F-ratio is calculated by dividing the variance between groups (MSB) by the variance within groups (MSW). If the resulting F-value is statistically significant ($p < 0.05$), it indicates that at least one group differs significantly in terms of sustainability outcomes, implying that the level of digital strategic management has an impact on business sustainability in the tourism sector.

Based on the research objectives and the theoretical framework, this study proposes the following hypothesis: There is a significant difference in the level of tourism business sustainability among tourism actors in the Ciletuh-Palabuhanratu Geopark based on their level of digital-based strategic management. Specifically, it is expected that businesses that implement higher levels of digital strategic practices—such as technology adoption, digital promotion, and service innovation—will demonstrate higher sustainability outcomes in terms of economic performance, social contribution, and environmental responsibility. This hypothesis assumes that strategic management plays a key role in influencing business resilience, stakeholder engagement, and ecological awareness, and that its impact will vary depending on the degree to which digital strategies are applied.

3. Results and Discussion

3.1 Results

3.1.1 Significant Differences Based on Digital Strategy Levels

The results of the One-Way ANOVA test revealed that there were statistically significant differences in the level of tourism business sustainability among respondents grouped by their digital-based strategic management levels. The sample consisted of 90 tourism actors classified into three categories: low, moderate, and high. The test yielded an F-value of 6.314 and a p-value of 0.003, which is below the commonly accepted significance threshold of 0.05. These results indicate that the adoption of digital strategic management has a measurable effect on sustainability outcomes in the tourism sector.

This finding supports the hypothesis that strategic management practices—particularly those involving digital transformation—contribute to varying degrees of sustainability performance. Tourism businesses that employed more advanced digital strategies showed different sustainability levels compared to those with lower strategic digital engagement. This aligns with the idea that digitalization in tourism is not merely a supporting tool but a strategic driver that can shape business resilience, customer engagement, and long-term viability. The statistically significant F-value emphasizes that these differences are not due to random chance, but rather reflect the real influence of strategic digital management across tourism enterprises.

The respondents were selected using purposive sampling, targeting individuals who had interacted with digital promotional content from Sendys Swalayan. The results showed variation in consumer characteristics, allowing for a more comprehensive interpretation of behavioral patterns. Understanding the demographic makeup is

essential, as factors such as age and digital exposure often influence how consumers perceive and respond to marketing efforts. The following table presents a detailed breakdown of the respondent profile:

Table 2. ANOVA Test Results

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	152.73	2	76.365	6.314	0.003
Within Groups	648.90	87	7.459		
Total	801.63	89			

3.1.2 Higher Sustainability Scores in High Strategy Group

Further analysis using the LSD (Least Significant Difference) post-hoc test revealed that the "High" digital strategy group consistently achieved significantly higher sustainability scores compared to the "Moderate" and "Low" groups. This pattern was observed across all three dimensions of sustainability economic, social, and environmental. The mean differences between the high group and the others were statistically significant at the 0.05 level, indicating that the application of more advanced digital strategies is closely associated with improved business outcomes. The high group, on average, demonstrated stronger performance in revenue growth, operational efficiency, community engagement, customer satisfaction, and ecological awareness.

Table 3. Mean Sustainability Scores by Strategy Group

Strategy Level	Economic Sustainability	Social Sustainability	Environmental Sustainability
Low	65.2	62.5	60.3
Moderate	71.4	69.7	66.8
High	82.1	78.9	73.5



Figure 2. Bar Chart

These findings emphasize the value of investing in strategic digital management within the tourism sector. Tourism actors who integrated digital platforms such as online reservation systems, social media marketing, and digital payment options into their business operations were able to enhance their sustainability practices in a more comprehensive manner. Their ability to respond to market changes, attract tech-savvy travelers, and implement efficient business processes appears to give them a competitive edge. This reinforces the argument that digital adoption is not only a technological upgrade but a strategic imperative for long-term business sustainability in tourism destinations like Ciletuh-Palabuhanratu Geopark.

3.1.3 Economic Dimension as the Most Affected Area

Among the three sustainability dimensions assessed in this study, the economic sustainability dimension displayed the most substantial differences across the digital strategy groups. Businesses that implemented higher levels of digital-based strategic management demonstrated more significant outcomes in terms of revenue growth, profit margins, cost efficiency, and business continuity. The mean score for the high strategy group in this dimension was 82.1, compared to 71.4 in the moderate group and 65.2 in the low group. This indicates that the integration of digital tools such as online booking systems, cashless payments, and data-driven decision-making has a tangible impact on economic performance within the tourism sector.

Table 4. Average Sustainability Scores by Dimension and Strategy Group

Dimension	Low	Moderate	High	Average
Economic Sustainability	65.2	71.4	82.1	72.9
Social Sustainability	62.5	69.7	78.9	70.4
Environmental Sustainability	60.3	66.8	73.5	66.9

The post-hoc analysis confirmed that these differences were statistically significant between all three groups. Tourism actors in the high digital strategy category showed more proactive and agile business behaviors, particularly in adapting to market fluctuations and customer demands. Their ability to utilize technology not only streamlined operational activities but also opened broader access to digital markets. These findings suggest that economic sustainability is the dimension most directly and rapidly influenced by strategic digital interventions, reinforcing the notion that economic resilience in tourism is strongly linked to how effectively businesses adopt and manage digital solutions.

3.2 Discussion

3.2.1 The Strategic Role of Digital Management in Driving Business Sustainability

In the current digital era, strategic management in tourism is no longer limited to traditional planning and resource allocation. It now requires the integration of digital technologies to ensure business adaptability and long-term sustainability. Digital-based strategic management allows tourism businesses to respond more effectively to market dynamics, traveler expectations, and global trends. As Buhalis and Sinarta [15] highlight, real-time co-creation enabled by digital platforms transforms the strategic landscape of tourism by engaging customers and stakeholders in shaping experiences and services. This shift from passive to participatory strategy implementation has become a critical element of sustainable competitive advantage.

Digital management strategies in tourism are not merely operational tools; they are embedded within the organization's vision and mission for sustainability. According to Li et al. [16], digital transformation enhances sustainable performance when it is aligned with strategic objectives. Their study demonstrated that firms with strong digital alignment achieved better environmental and social outcomes, not just economic ones. This suggests that digital technologies can serve as mediators that bridge the gap between business goals and sustainable practices, creating an ecosystem that supports long-term value creation for both businesses and local communities.

Furthermore, the effectiveness of strategic management in tourism SMEs is significantly elevated when digitalization is incorporated into decision-making frameworks. Mariani and Borghi [17] argue that digital tools allow for more informed and timely strategic decisions, especially in uncertain environments. For example, the use of analytics and predictive models enables tourism businesses to anticipate demand shifts, tailor products, and allocate resources more efficiently. These capabilities are essential for sustainability, particularly in destinations where resources are limited and environmental pressures are high, as is the case in many nature-based locations like Ciletuh-Palabuhanratu Geopark.

The role of digital technologies also extends to enhancing organizational resilience—a core component of sustainability. Chatterjee et al. [18] found that tourism firms with strong digital capabilities were better equipped to withstand disruptions such as economic shocks or global pandemics. Strategic digital management fosters flexibility and innovation, which are essential for building long-term sustainability frameworks. In this context, technology adoption is not merely a technical upgrade but a deliberate strategic move that strengthens a business's ability to endure and adapt to change.

Finally, as Buhalis [19] emphasizes, technology enables the evolution from basic information-sharing systems to comprehensive smart tourism experiences. These experiences are co-created, data-driven, and embedded in broader sustainability goals. Strategic management, therefore, must evolve to include digital intelligence, stakeholder engagement, and environmental awareness as central pillars. The evidence from this study aligns

with this broader theoretical framework, suggesting that digital-based strategic management is not just beneficial but essential for tourism business sustainability in digitally evolving destinations.

3.2.2 Economic Sustainability as a Key Indicator of Digital Strategy Impact

Economic sustainability emerged as the most sensitive dimension to the application of digital strategic management in this study. Businesses that actively integrated digital tools and platforms into their core operations experienced measurable improvements in revenue generation, cost efficiency, and market responsiveness. These findings are consistent with Gretzel et al. [20], who argue that digital transformation in tourism facilitates smart operational management, allowing businesses to optimize resource use and increase profitability. In destinations like Ciletuh-Palabuhanratu Geopark, where competition and environmental limitations coexist, this becomes a major determinant of business viability.

Strategic digital adoption supports real-time responsiveness to customer needs and demand fluctuations, two factors that directly impact business revenues. Zeng and Gerritsen [21] highlight that when tourism businesses align their digital strategies with destination goals, they experience greater agility in adapting products, setting prices, and enhancing value propositions. The businesses categorized in the "high" digital strategy group in this study demonstrated these characteristics, utilizing online booking platforms, digital marketing, and cashless payment systems to attract and retain visitors more effectively than their lower-tier counterparts.

The role of digitalization in improving financial outcomes also depends on the development of strategic capabilities within the business. Kraus et al. [22] found that small tourism enterprises that possessed both technical tools and the strategic mindset to use them effectively reported higher economic performance. In this study, the businesses in the high digital strategy group were not only equipped with digital tools but also showed proactive use of data analytics, customer relationship systems, and pricing optimization, which resulted in superior economic results.

Furthermore, digital ecosystems foster new forms of business model innovation that contribute to sustained economic growth in the tourism sector. Shin et al. [23] explain that businesses embedded in digital networks—such as local marketplaces, tourism platforms, and social commerce—gain access to broader markets and diversified income streams. This network effect was visible in the Ciletuh context, where some high-performing businesses partnered with digital travel agencies and content creators, enhancing both visibility and conversion rates.

Finally, digital strategy plays a bridging role between operational efficiency and long-term financial sustainability. According to Sigala [24], when tourism businesses adopt digital models not only for marketing but also for service delivery and feedback integration, they achieve greater financial resilience. This aligns with the findings of this study, where economic sustainability was not only improved through revenue metrics, but also through businesses' ability to anticipate trends, reduce waste, and manage costs more strategically. Hence, economic sustainability serves as the clearest and most immediate indicator of the impact of digital strategic management in tourism destinations.

3.2.3 Social and Environmental Benefits of Strategic Digital Adoption

Beyond economic gains, this study highlights the positive influence of digital strategic management on social and environmental sustainability dimensions. Digital platforms empower tourism businesses to enhance stakeholder engagement, promote inclusive participation, and facilitate community development. Garay and Font [25] assert that tourism firms adopting digital tools for social responsibility tend to foster stronger bonds with local communities, which enhances both their reputation and social impact. In the context of Ciletuh-Palabuhanratu Geopark, digital channels have become essential in amplifying the voice of community-based tourism actors.

Digital engagement also promotes social value co-creation, particularly in rural and underdeveloped tourism regions. Moreno-Gil and Martín-Santana [26] found that digital platforms help bridge the gap between tourists and local service providers by enabling storytelling, feedback loops, and customer-led promotion. This creates a sense of shared value and mutual respect, strengthening social cohesion. In this study, businesses that utilized social media and online review systems received more positive visitor feedback and saw improvements in community trust and involvement.

On the environmental front, strategic digital adoption allows for more sustainable practices, such as reducing paper usage through e-ticketing, optimizing transportation via booking algorithms, and promoting awareness of conservation ethics through digital campaigns. Giampiccoli and Mtapuri [27] emphasize that digital tools can serve as educational channels for eco-tourism practices, encouraging both providers and visitors to adopt environmentally responsible behaviors. Businesses in the high digital group in this study were more likely to incorporate such practices into their daily operations.

Digitalization also influences tourist behavior in ways that support sustainability. Dwivedi et al. [28] explain that the visibility of sustainable practices online such as green certifications, clean energy use, or plastic-free policies

affects traveler decision-making and promotes responsible tourism choices. As such, digital strategies are not only operational but behavioral tools that shift mindsets toward sustainability. This was evident in Ciletuh, where businesses that advertised eco-friendly policies online attracted more conscientious travelers.

Finally, strategic digital management contributes to building environmental stewardship as part of entrepreneurial identity. According to Yachin [29], rural tourism entrepreneurs who integrate digital strategies with environmental values tend to internalize sustainability as a core business philosophy. This alignment between digital innovation and environmental responsibility ensures that sustainability is not just a marketing message, but a lived and practiced value within the business model. Therefore, digital adoption, when guided by strategic intent, offers a powerful pathway for strengthening the social and ecological dimensions of tourism sustainability.

3.2.4 The Need for Strategic Alignment between Stakeholders in Tourism

The successful implementation of sustainable digital strategies in tourism is not solely dependent on individual businesses but also on the extent of collaboration among key stakeholders. In the case of destinations like Ciletuh-Palabuhanratu Geopark, where various actors ranging from local governments and tourism operators to community groups operate concurrently, the lack of strategic alignment can lead to fragmented development. Nunkoo and Ramkissoon [30] argue that stakeholder perceptions and their support for tourism initiatives are critical determinants of long-term sustainability outcomes. Without mutual understanding and collaboration, digital transformation efforts risk being isolated and ineffective.

Strategic alignment ensures that tourism development is guided by a common vision that integrates economic, social, and environmental priorities. Hall [31] emphasizes the need for multi-stakeholder collaboration in constructing sustainable tourism models, noting that aligned strategies create synergy, minimize conflict, and maximize resource utilization. In this study, digital adoption appeared most effective in cases where businesses collaborated with local tourism offices and community-based organizations. These collaborative frameworks allowed for the pooling of knowledge, consistent messaging, and shared investment in digital infrastructure.

From a governance perspective, destination management organizations (DMOs) play a vital role in facilitating coordination and ensuring that digital strategies support the overall sustainability goals of the region. Wang and Xiang [32] highlight that in smart tourism destinations, strategic planning must involve cross-sectoral engagement, where public, private, and community actors contribute to shared digital platforms, policymaking, and innovation. Ciletuh's potential as a digital destination would be best realized through the alignment of regional policies, stakeholder roles, and strategic objectives centered on sustainability.

Moreover, effective stakeholder engagement strengthens the destination's resilience, especially in responding to external shocks such as environmental disasters or global crises. Becken and Nguyen [33] found that destinations with high levels of participatory planning and stakeholder integration were more agile and adaptive in the face of uncertainty. In this context, strategic alignment goes beyond planning—it becomes an enabler of innovation, risk mitigation, and shared accountability in sustainability performance.

Lastly, Bramwell and Lane [34] caution that governance without collaboration risks becoming top-down and disconnected from ground realities. Sustainable tourism requires not only policy coherence but also an open, ongoing dialogue between all actors. This study reinforces that the success of digital strategic management in tourism businesses is significantly influenced by the surrounding institutional and social ecosystem. Thus, creating frameworks that encourage inclusive participation and shared leadership is fundamental to achieving a truly sustainable and digitally empowered tourism destination.

4. Conclusion

This study concludes that strategic management particularly when enhanced with digital technologies plays a crucial role in supporting the sustainability of tourism businesses in digital economy-based destinations. The results of the ANOVA analysis revealed significant differences in sustainability performance among tourism actors based on their level of digital strategy adoption. Businesses that actively applied digital tools and strategic planning demonstrated superior sustainability outcomes, especially in economic performance.

The economic sustainability dimension was the most impacted, indicating that digital strategies directly influence revenue growth, cost control, and overall business efficiency. This finding reinforces the notion that digital transformation is not only an innovation trend but also a strategic necessity in strengthening financial resilience and competitiveness in rural and emerging tourism destinations.

Social and environmental dimensions also benefited from strategic digital adoption. Businesses with stronger digital capabilities were more effective in engaging communities, managing visitor satisfaction, and adopting eco-friendly practices. These outcomes emphasize that digital strategies can support not only profitability but also inclusivity and environmental responsibility, which are critical components of sustainable tourism.

Finally, the study underscores the importance of stakeholder alignment in ensuring the success of digital strategic management. Collaboration between government bodies, business operators, and local communities is essential

to create cohesive, adaptive, and future-oriented tourism systems. Strategic alignment ensures that the use of digital technologies does not occur in silos but becomes part of an integrated approach to achieving long-term sustainability goals.

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