


## Digital Transformation Strategy to Increase the Competitive Advantage of the Hospitality Industry in Serang District, Banten

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Article Info	ABSTRACT
<p><b>Keywords:</b> digital transformation, competitive advantage, strategy, hospitality industry</p>	<p>This study aims to analyze the digital transformation design strategy in creating competitive advantage in the hotel industry in Serang Regency, Banten Province. The method used is a descriptive qualitative approach, with data collection techniques through in-depth interviews, observations, and documentation studies of six hotels operating in the research area. The results of the study indicate that the implementation of digital transformation in Serang Regency is still limited to the use of online reservation platforms and social media for promotion, while the integration of advanced technologies such as the Internet of Things (IoT), self-check-in systems, and application-based services is still minimal. SWOT analysis identifies strengths in the form of digital platform adoption and active promotion, as well as opportunities through government support for the tourism sector. However, the low digital competence of the workforce and limited technology investment are the main weaknesses. The digital transformation strategy that was developed includes digitalization of core services, improvement of technology infrastructure, human resource training, and optimization of digital marketing. These findings emphasize that the success of digital transformation in the hotel industry requires integration between technology, organizational culture, and visionary digital leadership. The implications of this study provide theoretical contributions to the digital transformation model in the tourism sector as well as practical recommendations for industry players and policy makers to accelerate the digitalization of local tourism.</p>
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### INTRODUCTION

The development of digital technology has brought fundamental changes to various industrial sectors, including the hospitality industry. Digital transformation is no longer an option, but a necessity to maintain competitiveness in an increasingly competitive market (Matt et al., 2015). This transformation involves the adoption of digital technology to improve business processes, enhance customer experience, and create new added value (Zhu, 2021; Jung et al., 2021). In the context of competitive advantage, Porter (2010) stated that advantage can be achieved through product and service differentiation and cost advantage. Meanwhile, David (2023) added that competitive advantage in the digital era depends on continuous innovation and rapid adaptation to technological changes. In the hospitality industry, digital service

differentiation such as the use of mobile applications, automatic check-in, and Internet of Things (IoT)-based services are key to maintaining customer loyalty (Bonfanti et al., 2023).

Hani (2023) stated that digital transformation in the hospitality sector not only focuses on front-end technologies such as digital marketing, but also includes back-end optimization, including customer data management and operational automation. Nikolskaya et al. (2021) emphasized the importance of organizational understanding of changes in consumer behavior due to digitalization, where customers demand fast, accessible, and personalized services. In Serang Regency, the potential for the hospitality industry is quite large, supported by the growth of industrial areas and tourist destinations in Banten. However, based on initial observations, most hotels in this area still rely on traditional systems in their operations. In fact, Reinartz et al. (2019) showed that digitalization of business processes can increase operational efficiency by up to 30% and significantly increase customer satisfaction.

An adaptive digital business model is needed in this era. According to Hanelt et al. (2021), companies that succeed in digital transformation are those that are able to integrate new technologies into a flexible business model that is responsive to market changes. Busulwa et al. (2022) confirm that in the service industry, digitalization is a major factor in increasing organizational agility. Furthermore, digital adaptation requires support from organizational culture and digital leadership (Kim & So, 2022). Digital leadership is able to drive rapid technology adoption and create an innovative work environment (Rahmasari, 2023).

Matt et al. (2015) proposed that digital transformation involves four main dimensions: the use of technology, changes in the value offered to customers, changes in organizational structure, and financial readiness to invest in innovation. These four dimensions will be the framework in this study to develop a digital transformation strategy for hotels in Serang Regency. In relation to service innovation, Jung et al.'s (2021) study found that the integration of technologies such as smart rooms, guest service applications, and augmented reality can significantly improve customer experience. Therefore, hotels in Serang Regency need to consider adopting such technologies to strengthen their competitiveness.

In addition, Verhoef (2021) emphasized that the success of digital transformation is highly dependent on the suitability of digital strategies to local characteristics and specific market needs. Thus, the strategies proposed in this study will consider the unique conditions of Serang Regency, including tourist profiles, technological infrastructure, and human resource readiness. Overall, this study aims to explore the conditions of digital transformation in the Serang Regency hospitality industry, identify potential competitive advantages through digitalization, and digital transformation strategies based on cutting-edge theories and local characteristics.

## METHOD

This study focuses on exploring the digital transformation strategies carried out by the hotel industry in Serang Regency. This study uses a descriptive qualitative approach to obtain a comprehensive picture of the object and subject of the study. The data used in this study are data from interviews and observations which then become primary data. Then the data is

supplemented with the results of documentation and literature studies which become secondary data. Data acquisition techniques are carried out by interviews, field observations, documentation and literature studies. To obtain primary data, the researcher involved 6 informants, namely hotel managers located in tourist destinations in Serang Regency. To complete the interview data, the researcher also involved accompanying informants, namely the head of the Serang Regency tourism office and the head of the Serang Regency hotel management association. Data analysis was carried out using SWOT (Strengths, Weaknesses, Opportunities, Threats) and PESTEL (Political, Economic, Social, Technological, Environmental, Legal) analysis techniques. Data validity is strengthened by source triangulation and method triangulation techniques.

## RESULTS AND DISCUSSION

Serang Regency is one of the regencies in Banten Province that is a mainstay for tourism development because it has various tourist destinations ranging from beaches, waterfalls, tourist villages, cultural tourism, historical heritage and culinary tourism. Based on data obtained by researchers through the website of the Banten Province National Statistics Agency, the level of tourist visits to Serang Regency has increased every year, both domestic and foreign tourists. The hotel industry is one of the main supporting industries for development in the tourism sector. Based on statistical data from the Banten Province National Statistics Agency in 2025, there were at least 80 hotels, both starred and non-star hotels, located and running their businesses in the Serang Regency area with the following details:

**Table1** of number of hotels in Serang Regency 2025

Hotel Type	Number
Starred Hotels	23
Non-Starred Hotels and other Accommodations	57
	80

Source: BPS Data of Banten Province 2025

Based on the data in the table above, it can be seen that the number of starred hotels is 23 hotels and non-star hotels is 57 hotels. The large number of hotels that are predominantly located in coastal tourist destination areas makes competition in the hotel industry in Serang Regency increasingly tight. The right strategy is needed to survive in competitive competition. Every hotel must have a competitive advantage that can differentiate it from other hotels and other accommodation service providers. The following researchers present the results of data searches and interviews and observations to reveal digital transformation strategies in the hotel industry in Serang Regency to survive in competitive competition in accommodation services.

### Digital Transformation

Based on the results of direct observation and in-depth interviews with 6 hotel managers, including 3 starred hotels and 3 non-star hotels, researchers found that digital transformation in the hotel industry in Serang Regency showed positive developments, but was not yet fully optimal. This is shown through field findings which show that most of the

hotels that were the objects of the study have adopted basic technology, such as the use of the Online Travel Agency (OTA) platform for room reservations and the use of social media for promotional activities.

Researchers found that all hotels in Serang Regency have currently utilized online travel agent (OTA) platforms such as Traveloka, Tiket.com, or Booking.com. In addition to utilizing OTA, each hotel has utilized social media such as Instagram and Facebook as promotional media and digital marketing media. The results of the interview revealed that the effectiveness of using social media as a promotional media is felt to be more effective when compared to conventional media such as brochures or promotional media in the mass media. The hotel industry in Serang Regency has currently adopted non-cash payments with the use of QRIS and e-wallet applications.

Researchers found that the application of technology carried out by the hotel industry, especially for non-star hotels, is still limited to the use of social media and non-cash payments. The application of more advanced technologies, such as the Internet of Things (IoT), smart room management, or self-check-in services, is still very limited in star hotels. This finding shows that digital transformation is still in its early stages, and is still focused on the front-end aspects (promotion and sales) rather than comprehensive integration in hotel operations.

These results are in line with Reinartz et al.'s (2020) opinion that many service industries, including hospitality, first adopt technology to improve customer interactions before integrating technology into their core processes. Researchers found that the biggest obstacles to adopting digital transformation in Serang Regency were limited human resources, low digital literacy, and limited budget for investing in more sophisticated technology.

#### **Strategy to Achieve Competitive Advantage**

After revealing the conditions of digital transformation that exist and have been carried out in the hotel industry in Serang Regency, the researcher then explored the strategies of hotel managers in creating competitive advantages. The interview results show that hotels that implement digital technology in accommodation and promotion services make technology part of a strategy to create competitive advantages. Competitive advantages presented in services with the use of technology such as smart rooms and ease of transactions and reservations bring a unique experience for guests who stay. The following researchers present the results of the analysis to reveal strategies in creating competitive advantages:

##### **Product and Service Differentiation**

Based on the results of interviews and observations conducted by the researcher, the researcher found that the use of digital technology in services and promotions carried out by the hotel industry in Serang Regency by implementing various different strategies based on the level of hotel management's ability in implementing technology, both in terms of budget capabilities, HR capabilities and technological needs.

Hotels that have sufficient budgets implement smart keys as part of their digital transformation to replace conventional keys. Not only smart keys, room facilities are also equipped with various other technologies such as smart TVs and digital service facilities. Thus

creating a new experience for guests who have never stayed with Smart room facilities. The uneven application of technology and only carried out by a few hotels creates differences in service and makes the service products presented superior to other hotels that only use social media and ease of reservation with the use of OTA.

Ease of service through the reservation process through OTA, promotion through social media and various information about hotel facilities both through social media and information facilities provided by OTA can make it easier for guests who will stay to obtain information on the number of rooms available and what service facilities are received according to the room price. So that guests can easily choose which hotel to use, what type of room according to their needs and budget available. This ease of service is part of the hotel's advantages that must be improved and maintained so as to create a competitive advantage.

The use of social media as a digital promotional medium is carried out by several hotels by utilizing guest reviews based on their stay experience and collaborating with local influencers to attract more guest interest is one of the strategies carried out by the hotel. Attractive promotional designs on social media and content that also includes guest reviews based on experience can increase guest interest and trust in choosing a particular hotel according to their interests. The design of visual communication carried out by hotels through social media certainly requires special skills for hotel social media managers. In addition, hotel social media managers who are more responsive to customer opinions make hotels superior compared to social media admins who are slow to respond. This will certainly increase guest trust in hotel services.

#### **Operational Efficiency and More Specific Market Focus**

Researchers found that the strategy of utilizing digital platforms in the form of social media as a promotional medium and utilizing online travel agents (OTA) as part of the ease of reservations made by a hotel is considered to reduce operational costs. Operational cost efficiency is felt by several hotels that no longer spend promotional costs in the form of printing brochures and paying for mass media for promotions. Then the researchers also found that digitalization carried out with digital transformation through smart rooms is considered to reduce operational costs because smart keys can limit electricity usage in unused room spaces. So that it can reduce the operational costs of the hotel itself.

Another operational efficiency that can be obtained by hotels that use technology in services is in the service evaluation pattern. Guests can provide direct responses both through hotel social media and customer assessment facilities in OTA. Thus, the hotel can immediately identify things that need to be fixed or improved in services or facilities. In addition, the use of digital media, both social media and online booking platforms through OTAs, produces data analysis. So that hotels that have data analytics capabilities will be able to identify and understand the specific needs of guests who will stay. So that the hotel can then create a primary target that will be targeted as prospective guests by providing needs according to the interests and interests of guests who will stay.

As stated by Porter (2010), competitive advantage can be achieved through differentiation, low costs, and market focus. The digitalization strategy for hotels in Serang

Regency aims to fulfill these three approaches simultaneously and gradually to create a competitive advantage.

#### **SWOT Analysis of Digital Transformation in the Hotel Industry**

Based on the results of interviews and observations, researchers found several factors that are strengths, weaknesses, opportunities and threats for the hotel industry in Serang Regency. Furthermore, to map the strategic conditions of the hotel industry in Serang Regency, a SWOT analysis study was conducted, with the following results:

##### **Strengths:**

- a. Utilization of OTA platforms for easy reservation services.
- b. Active use of social media for promotion.
- c. Strategic geographical position on the Banten tourism route.
- d. Ease of transactions by utilizing non-cash transactions

##### **Weaknesses:**

- a. Low digital competence of hotel staff.
- b. Minimal budget allocation for technology innovation.

##### **Opportunities:**

- a. Serang Regency Government Support in developing the tourism sector.
- b. Increasing domestic tourism trends and interest in nature and culture-based tourism.
- c. Opportunities for digital platform integration in local tourism marketing.

##### **Threats:**

- a. Competition from non-formal accommodation (homestays and guest houses).
- b. Changes in tourist behavior that are increasingly digital savvy.
- c. Relatively low purchasing power of local people.

Based on the SWOT analysis and mapping of digital transformation strategies to create competitive advantages in the hospitality industry in Serang Regency, researchers can find several strategies that include the following aspects.:

1. Digitalization of Reservation and Check-in Services
2. Improvement of Technology Infrastructure
3. Strengthening HR Competence
4. Optimization of Digital Marketing
5. Integration of Digital Payment Systems

In addition to using SWOT analysis to determine external factors that influence development, external factors of the hotel that can support and inhibit include political, economic, social, developing technology, legal / legal and regulatory, and environmental factors or later known as (PESTLE). The following researchers present the factors contained in the external hotel that are included in the PESTLE Analysis.

- a. Political Aspect, in the political aspect, researchers found that political stability is an inseparable part of hotel development in an area. Political stability can create a sense of security and comfort for guests who will stay and choose hotel facilities according to their needs.
- b. Economic Aspect, in this aspect, researchers see that economic growth can also increase people's purchasing power so that it can increase the number of guests staying

and increase hotel occupancy. Economic stability can also increase technology investment made by hotel management so that digital transformation can be carried out according to the needs of the hotel.

- c. Social Aspect. Changes in consumer patterns and behavior towards digital make digital transformation a necessity in the hotel industry.

Technological Aspect, influences the use and development of digital transformation carried out by the hotel. The availability of access to technology and ICT infrastructure in Serang Regency, even to remote villages, makes technological development not a barrier. The main obstacles are human resources that are still less competent and the low budget for technology investment funds.

- d. Legal aspects or regulations can help the development of digital transformation and hotel efforts to create competitive advantages. Regional regulations that favor tourism development will certainly have an impact on the hotel industry. Easy regulations or permits for organizing accommodation services make competition in accommodation services stronger and more open. So that every hotel must be able to improve itself in order to survive in the competition of the hotel industry.

- e. Environmental aspects, researchers see that digital transformation through the presence of smart rooms can save energy more effectively. In addition, a more modern drainage system and waste management are one of the factors in the presence of competitive advantages in the hotel industry in Serang Regency.

Researchers see that this strategy requires the hotel industry in Serang Regency not only to adopt technology in products and services, but also to make comprehensive changes in the structure and culture of the hotel organization. So that it can create competitive advantages and optimal guest service to generate guest satisfaction which can then increase occupancy at the hotel itself. The findings of this study strengthen the study of Hani (2023) that digital transformation increases service efficiency and improves customer experience. The speed of digital innovation is an important determinant of the success of the modern hotel business. However, weak digital leadership is a challenge for the hotel industry in Serang Regency. The hotel industry in Serang Regency based on research results shows that there is still a lack of transformational leadership in driving change. Therefore, systematic efforts are needed to encourage the adoption of technology more comprehensively and strategically.

## CONCLUSION

The results of the study indicate that digital transformation in the hotel industry in Serang Regency is still in its early stages with limited technology implementation in promotion and reservation aspects. Although most hotels have utilized social media and OTA platforms, the use of more complex digital technologies, such as automated check-in systems, mobile application-based services, or customer management system integration, has not been implemented comprehensively. The expected competitive advantages of the digital transformation process include service differentiation, operational efficiency, and focus on certain market segments, especially domestic and local tourists. An effective digitalization

strategy requires not only technology adoption, but also changes in organizational structure, human resource competencies, and financial readiness. The results of the SWOT analysis recommend a digital transformation strategy based on internal strengths and external opportunities, as well as anticipating existing weaknesses and threats. These strategies include strengthening digital infrastructure, digitizing core services, HR training, and optimizing digital marketing and payment methods. This study emphasizes that the success of digital transformation depends on the integration of technology, organizational culture, and digital leadership. Without the presence of visionary digital leadership, the transformation process will be slow and unstrategic. This study expands on the application of the digital transformation model developed by Matt et al. (2015) into the context of the hospitality industry in developing areas. This confirms that dimensions such as use of technology, structured change, value creation, and financial readiness can be used as a basis for analysis in designing digital strategies in the tourism sector. For hotel industry players in Serang Regency, the results of this study are a strategic basis in designing a gradual digital transformation roadmap. This study emphasizes the importance of HR training, collaboration with technology partners, and sustainable digital investment planning. The local government through the Tourism Office can take on the role of a facilitator of digital transformation by providing training, supporting regulations, and incentives for hotels that innovate digitally. Collaborative initiatives between the government and the private sector are needed to make digital transformation a major driver of the competitiveness of the local tourism industry.

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