



# Digital Innovation in the Tourism Industry: Some Evidence from Indonesia

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**Abstract.** While the pandemic placed extreme economic challenges, the tourism industry seeks disruptive adaptations by generating digital innovations that provide fertile ground in this global crisis. This article examines how digitalization has a subversive impact on the tourism and hospitality industries by exploiting information and communication technology (ICT). This study compares two cases that involve the best tourism villages in East Java and Yogyakarta. The results indicate that ICT is a driving force for innovation and greatly impacts the structure, processes, and organizational landscape. Secondly, every organization needs unique digital skills involving technical skills, creative skills, and leadership approaches. This study contributes to the stakeholder theory that seeks to understand how to generate economic value.

**Keywords:** Digital Innovation · Information and Communication Technology · Technical skill · Creative skill · Leadership approach

## 1 Introduction

Metaverse is a new conceptualization in digital tourism, which soon becomes the next disruptive technology by enabling immersive experiences in both virtual and physical environments [1]. The Indonesian tourism industry is rapidly adapting to the digital transformation and leveraging technology to attract more tourists and enhance their experience, which recently seeks to exploit information and communication technology, or ICT. Through ICT, the tourism and hospitality industries have provided consumers with access to more information than ever. This information can range from reviews of destinations and accommodations to real-time updates about the weather and local events. The ability to gather information and make informed decisions has never been easier, which has changed how we travel and experience hospitality [2].

Automation technologies and artificial intelligence help the tourism industry to decrease its fixed costs, enhance its resilience, and help to manage social distance [3]. Information and communication technology, or ICT, has become a driving force for innovation in recent years. Its impact on the structure, processes, and organizational landscape has been profound.

Social media's added value in tourism has posed many opportunities and challenges for shaping theoretical development [4]. Another impact of digitalization is changing

how we make travel arrangements. In the past, booking a trip or a hotel was time-consuming and often required multiple phone calls and visits to travel agents. However, destination management often struggles to respond to technological turbulence, which calls for further collaboration to enhance compelling destinations by adopting digital technologies [5]. The ability to interact with the hospitality industry in real-time has transformed how we experience hospitality, making it possible for us to have a more personalized and seamless experience. Future research should deal with consumers' trip planning and suppliers' management practices in the Metaverse tourism era [1].

This article examines how digitalization has a subversive impact on the tourism and hospitality industries by exploiting information and communication technology (ICT). This study compares two cases that involve the best tourism villages in East Java and Yogyakarta. The results indicate that ICT is a driving force for innovation and greatly impacts the structure, processes, and organizational landscape. Secondly, every organization needs unique digital skills involving technical skills, creative skills, and leadership approaches.

## 2 Research Method

This study adopts a qualitative method to understand individuals' and communities' experiences, perspectives, and attitudes. Unlike a quantitative method, which is based on statistical analysis and numerical data, qualitative research is centered around non-numerical data and the interpretation of human experiences and behaviors. The main goal of qualitative research is to gain a deep understanding of the experiences and perspectives of individuals and to provide rich, in-depth insights into a particular phenomenon or issue.

One of the key characteristics of qualitative research is its focus on using natural language and meaning-making processes. Qualitative researchers often use interviews, focus groups, observation, and document analysis methods to collect data. These methods allow researchers to understand the perspectives and experiences of individuals in a more holistic and nuanced way and to capture the rich detail and complexity of human behavior and experiences.

Another key characteristic of qualitative research is its inductive approach. Unlike a quantitative method, which starts with a hypothesis and tests it through data collection and analysis, qualitative research starts with an open-ended, exploratory approach. Researchers often do not have a clear idea of what they are looking for when they start a qualitative study, and they are open to discovering new and unexpected findings as they collect and analyze their data.

### 2.1 Case I. Ketapanrame

Ketapanrame Village is a small village located in the Mojokerto district of East Java, Indonesia. It is known for its rich cultural heritage, traditional way of life, stunning natural beauty, and tranquil atmosphere. Overall, Ketapanrame Village is a charming and peaceful destination that offers visitors a glimpse into the traditional way of life of the Indonesian people.

One of the main attractions of Ketapangrame Village is its traditional dancing, known as Bantengan. Bantengan or Bull Art, is a traditional performing art from Indonesia that combines elements of dance, martial arts, and magical spells. This art form has a long and rich history in the country and is known for its dynamic and powerful performances that showcase the skills and strength of the performers.

The natural beauty of Ketapangrame Village is also a major attraction for visitors. Lush green rice fields and rolling hills surround the area. Visitors can take a leisurely walk through the rice fields or explore the nearby hills for a chance to experience the area's breathtaking scenery and peaceful atmosphere.

## 2.2 Case II. Tumpeng Menoreh

Tumpeng Menoreh at Kebun The Nglingga Kulon Progo is a cafe and eatery located on a peak in the Kulon Progo region of Indonesia. It is known for its breathtaking views of the Menoreh mountain and valley, which can be enjoyed from the tiered outdoor decks that are a hallmark of the cafe.

Visitors to Kebun The Nglingga Kulon Progo are treated to panoramic vistas of the surrounding landscape, characterized by rolling hills and lush green tea fields. The tiered outdoor decks provide the perfect place to relax and take in the views, and the cafe also serves a variety of delicious food and drinks that are sure to satisfy even the most discerning palate.

In addition to its stunning views and delicious food, Kebun The Nglingga Kulon Progo is also known for its commitment to sustainability and environmentally friendly practices. The cafe uses locally sourced ingredients and serves food and drinks from fresh, organic produce grown in the nearby tea fields.

## 3 Findings

The tourism destination transforms digitalization by

1. by gaining support from the government

E-tourism: Indonesia Government is investing in digital platforms and mobile applications to promote its tourism industry. The government has launched several digital platforms, such as Indonesia Tourist Information and E-commerce (ITIC) and Wonderful Indonesia, to provide comprehensive information about the country's tourist attractions and facilitate online bookings and purchases of tourism packages. The best way to get a promotion is to get involved in a national project. Both cases demonstrate their performance by achieving some national and local awards.

2. by working together with a local bank in a digital partnership

Ketapangrame promotes cashless transactions and digital payments with support from a local bank. The restaurants are now accepting digital payments, including e-wallets and mobile banking, making it easier and more convenient for tourists to manage their expenses. However, the managers need to make a great effort to encourage the tenants

and users to use cashless transactions. Through management intervention, cashless transactions have revolutionized in Ketapanrame the way users pay for goods and services. They offer convenience, security, and efficiency and are rapidly becoming consumers' preferred payment method. With the continued advancement of technology and digitalization, cashless transactions will likely become even more prevalent in the years to come.

### 3. By generating virtual Tours.

Ketapanrame and Tumpeng Menoreh are leveraging virtual reality technology to give tourists a preview of what they can expect during their trip. Virtual tours are now available in Ketapanrame, providing a 360-degree view of the attractions, accommodations, and activities. Creating a virtual tour was a challenging task. However, with the right tools and techniques, they develop an interactive and engaging virtual tour allowing users to explore and experience the location of the tourism area. The first challenge begins with defining the tourism space's purpose, its target audience, and what features to include. Ketapanrame presents endogenous animals, while Tumpeng Menoreh explores natural resources. The next challenge is identifying technical skills, budgets, and features.

### 4. by Exploiting Social Media

Both organizations leverage social media platforms to promote the tourism industry and engage with tourists. Both cases demonstrate several official social media accounts that showcase the country's natural beauty, cultural heritage, and tourist attractions. Tourism boards and travel companies are being used to promote destinations and attractions to a broader audience. Social media allows them to showcase a destination's beauty, culture, and unique experiences, encouraging people to visit.

Finally, ICT has profoundly impacted the organizational landscape, enabling organizations to connect with customers, employees, and partners in new and innovative ways. Organizations can reach new audiences through digital platforms, gather valuable insights, and engage with stakeholders in real-time. This has transformed how organizations interact with their customers, enabling them to build stronger relationships and create more value for their stakeholders.

## 4 Discussion

Every organization needs unique digital skills to stay ahead of the curve and remain competitive in a rapidly evolving digital landscape. This involves both technical skills and creative skills and a leadership approach focused on driving innovation and leveraging technology to create value for stakeholders. In this article, we explore the different types of digital skills that organizations need to thrive in the digital age.

One of the most significant impacts of ICT is how it has transformed organizations' structure. In the past, organizations relied on traditional hierarchical structures with clear lines of authority and decision-making processes. Today, the rise of ICT has made it possible for organizations to adopt flatter and more decentralized structures, allowing employees to collaborate more easily and making it possible for organizations to respond to changes more quickly. This has resulted in a more agile and responsive organizational

landscape, where employees are empowered to drive innovation and bring new ideas to the table.

Another impact of ICT is how it has changed the processes of organizations. The rise of digital tools and platforms has enabled organizations to automate many of their operations, reducing the time and resources required to complete tasks. This has allowed organizations to become more efficient, making it possible to focus on more strategic initiatives.

First, technical skills are essential for organizations to utilize technology effectively and drive innovation. This includes software development, data analysis, and network management. Technical skills are critical for organizations to implement new technologies, automate processes, and develop innovative solutions to business challenges.

Second, creative skills are also important in today's digital landscape. With the rise of digital technologies, organizations can reach new audiences and engage with their stakeholders in new and innovative ways. Creative skills, such as design, storytelling, and marketing, are essential for organizations to develop compelling content, build strong brand identities, and reach their target audiences.

Finally, a leadership approach focused on driving innovation and leveraging technology is crucial for organizations to stay ahead of the curve. This involves a willingness to embrace new technologies, a focus on continuous improvement, and a commitment to staying ahead of industry trends. A leadership approach focused on innovation, and digital transformation can help organizations build a more sustainable future for themselves and their stakeholders.

## **5 Research Limitation**

The results of qualitative research are often presented in narrative form, with detailed descriptions and interpretations of the experiences and perspectives of individuals. This data type can generate new insights and theories and provide detailed, in-depth descriptions of complex phenomena. Qualitative research is a valuable method that provides a deep and nuanced understanding of human experiences, perspectives, and attitudes. It is a powerful tool for exploring complex phenomena and generating new insights. It can provide detailed, in-depth descriptions of human behavior and experiences that are not possible through other research methods. Whether you are a researcher, a student, or a practitioner in any field, understanding the principles and methods of qualitative research can help you better to understand the complexities of human behavior and experiences and to make informed decisions based on the insights and data you collect.

## **6 Conclusion**

The tourism industry needs unique digital skills to thrive in today's rapidly evolving digital landscape. This involves combining technical skills, creative skills, and a leadership approach focused on driving innovation and leveraging technology to create value for stakeholders. By embracing digitalization and developing the right digital skills, organizations can transform their operations, reach new audiences, and build a more sustainable future for themselves and their stakeholders.

ICT has become a driving force for innovation, and its impact on the structure, processes, and organizational landscape has been nothing short of profound. Every organization needs unique digital skills to thrive in this rapidly evolving landscape. This involves technical skills, creative skills, and a leadership approach focused on driving innovation and leveraging technology to create value for stakeholders. By embracing digitalization, organizations can transform their operations, reach new audiences, and build a more sustainable future for themselves and their stakeholders.

In conclusion, the impact of digitalization on the tourism and hospitality industries has been subversive. Through the exploitation of information and communication technology, we have gathered more information, made travel arrangements more conveniently, and interacted with the hospitality industry in real-time. As we continue to embrace digitalization, we can expect to see even more transformative changes in the years to come.

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