

## **Technology-Based Tourism Development Mechanism in China with Events, Festivals and Fairs**

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Chapter Sixteen

**Technology-based Tourism Development Mechanism in China with Events,  
Festivals and Fairs**

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### **Abstract**

China is a tourism-focused country with numerous historical attractions like the great wall and terracotta warriors. This chapter aims to explore the role of technology-based tourism development mechanisms in China with the help of tourism events, festivals, and fairs. The chapter specifically focuses on tourism Apps development that may affect tourism events, festivals, and fairs and improve tourism and quality of life (TQOL). The scholars widely explore traditional tourism development strategies; however, the role of technology-based Apps in gathering social networks with events, festivals, and fairs catch limited attention to the researchers. The study identifies how China attracts tourists with technology applications

in the contemporary era. In this chapter, the perception of China is brought into the discussion. The chapter reveals that tourists' attitudes could be positive with the help of successful technology application in tourism festivals, events, and fairs in China, ensuring tourism and quality of life (TQOL).

**Keywords:** events, festivals, fairs, TQOL, technology, application, tourism, China

## **Introduction**

Tourism is a key strategy for economic development that is viewed as one of the world's largest sectors that can shape economic health (Samala et al., 2020). Tourism contributes to the economy by generating employment, earning foreign currencies, improving local infrastructure, and branding the country's image. Due to geographical location and cultural heritage, China is endowed with a lot of tourism opportunities. Leveraging these opportunities, China is attracting tourists from different parts of the world. Tourism is now considered the fastest-growing industry in China (Zhao & Liu, 2020). Every year, the government invests many amounts in developing tourism infrastructure and modernization of facilities. Government promotes tourism by relaxing visa requirements, improving private and public transportation, conserving natural resources, modernizing and developing hotels and accommodations, and improving customer service. But due to the omnipresence of technology, these traditional measures are no longer alone sufficient to attract new visitors and retain existing travelers. Like any other sector, tourism is also largely influenced by technology (Tussyadiah, 2020). Research is plenty on tourism development through the traditional way but is scantily using the technology. Technology has much to offer in tourism sectors ranging from ticket booking to trip plans to optimize the tour experience. Technology makes easier many travel-related activities. Nowadays, excursionists and tour marketers use various technology-based solutions for enhancing the travel experience. Few of them to mention are AI-based facial recognition for hassle-free check-ins, virtual reality (VR) for virtual hotel tours, travel experience, and booking interfaces, voice-based or text-based chatbots for enhanced customer experience, robots for taking care of front desk activities, room services and luggage check-ins, Google maps with a visual positioning system (VPS) for a live view of the position and landmarks, natural language processing based language translator as a local guide, and various optimization tools based on Maximum Likelihood Algorithm (Samala et al., 2020; Zeng et al., 2019).

Being a technological frontier, China has already paid attention to implement a technology-based mechanism for the development of the tourism sector. According to a report by Honghao (2019), Director of China Tourism Academy, China is focusing on improving the tourism industry, adopting digital technologies such as 5G, blockchain technology, artificial intelligence, Internet of Things, big data, cloud computing, VR/AR, modular construction, big health, 3D printing, and self-driving cars, etc. However, it is not clear how China attracts tourists with these technology applications in this contemporary era, how customers perceive the application of these technologies in the tourism industry, and how this trend promotes the quality of life (TQOL) in China. In this context, this chapter will explore the role of technology-based tourism development mechanisms in China with the help of tourism events, festivals, and fairs. The chapter specifically focuses on tourism Apps development that may affect tourism events, festivals, and fairs and improve tourism and quality of life (TQOL).

## **Various Tourism Spots in China**

China emerged in the global tourism market as a latecomer. China was closed to the outside world until its 'open-door policy in the 1970s. Later in 1986, China started considering tourism a tool for economic development, investing heavily in infrastructure and facilities development. This initiative led the country to attract a huge number of inbound tourists. Geographically and culturally, China is abundant with many tourism amenities, such as scenic landscapes, cultural traditions, and historical places. China's tourism spots can be classified into the following categories: world heritage sites (cultural, natural, mixed), theme parks, museums, and temple fairs.

China, jointly with Italy, is the home of the largest number of World Heritage Sites (55) declared by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) (UNESCO, 2021). Such heritages significantly impact the development of tourism of a country (Yang et al., 2010). According to UNESCO, heritages are classified into a cultural, natural, and mixed (cultural and natural) heritage (Yang et al., 2010). China has 37 social, 14 natural, and 4 diverse world heritage sites. Some of the most visited world heritage sites are The Great Wall, Forbidden City, Mukden Palace, Terra-Cotta Warrior, Sichuan Giant Panda Sanctuaries, Mount Huangshan, Potala Palace, etc. Theme parks and amusement parks are also attractive tourist attractions. China is the home of some top-performing theme parks. Some notable theme parks are the Chimelong Ocean Kingdom, Ocean Park in Hong Kong, Flying Kiss Theme Park in Wulong, Disneyland in Hong Kong, Songcheng Park in Hangzhou, Overseas China Town (OCT), Changzhou Dinosaur Park, Window of the World in Shenzhen, Guangzhou Changlong Holiday Resort, Beijing Happy Valley, Shenzhen Happy Valley, and Splendid China Folk Village. In addition to the above, China is also famous for its world-class modern museums. China's National Museum is the world's third most visited museum. Other museums include Hong Kong Science Museum, China Geological Museum, Shaanxi History Museum, Shanghai Museum, etc. They are an excellent source of knowledge about China and its history. China is also known for its temple gatherings, which taken place on the eve of the Chinese New Year Celebration. Visitors assume the chance to enjoy traditional folk performances, handicraft works, and local snacks at a temple fair. Some notable temple gatherings are Ditan Park Temple Fair, Longtan Park Temple Fair, Dongyue Temple gatherings, and Grand View Garden Temple Fair.

Based on the attraction regarding safety, cleanliness, sanitation, shopping, and transportation, the Chinese authority has been using a rating system to categorize the tourism spots. These are 1A, 2A, 3A, 4A, and 5A (the highest level). Visiting 5A and 4A spots are more worthwhile than 3A, 2A, and 1A. Few examples of 5A spots are Overseas Chinese Town in Shenzhen, The Great Wall, The Oriental Pearl TV Tower, and Shanghai Wildlife Park. Naturally, China is endowed with a lot of scenic spots. In addition, China has a rich cultural heritage. Together all of China has many great tourist spots to offer to tourists.

## **Tourism, Events, Fairs and Festivals in China**

Tourism fairs and festivals are exhibitions that cater to the travel and tourism sector. To obtain information and establish national and international travel arrangements, visitors may communicate with tour operators, travel agencies, hotels, and airlines. Tourism is important to countries because of its

economic and social advantages, and they invest heavily to gain a portion of this market. Therefore, fairs provide effective marketing and promotional prospects of tourism values and fascinate both leisure and business tourists to the destinations. They also enable governments to promote themselves internationally, contributing to intercultural exchange, and aid in the development of domestic and international tourism. Popular tourism exhibitions have a favorable impact on the destination's image while also providing economic and social advantages to the host city (Emir & Zencir, 2018).

China is a pioneer in organizing tourism fairs and festivals for its visitors from all over the world. Being one of the world's largest economies and a culturally diversified country, China has various traditional and cultural festivals to delight its visitors. While festivals are an important part of Chinese culture, most Chinese festivals in 2021 are centered on the lunar calendar and are rather intriguing. Several tourism festivals are organized in different regions to provide; thus, they offer a formal and large channel for tourists to get a lot of information about tour resources and local culture in one place. These traditional holidays will truly immerse you in Chinese culture. The Qingming (Tomb Sweeping) Festival, Lantern Festival, the Winter Solstice the Double Seven Festival are all yearly festivities. The festivals included here were chosen for their traditional Chinese flavor. Because they are observed according to the Chinese calendar, the dates frequently change from year to year.

In the context of events, festivals and fairs play a significant part in people's lives. It has substantial importance to countries because of its economic and social advantages, and they invest heavily to gain a portion of this market (Emir & Zencir, 2018). It is a fast-expanding global industry and an essential component of the service economy. Tourism has become a very powerful sector for growing local gross domestic product (GDP) in many countries (Zhang et al., 2021). The estimated domestic market value has surged tenfold in the last decade, reported by the China National Tourism Bureau and Shenwan Hongyuan Securities. Domestic tourism listed firms are quickly expanding in China and internationally as domestic tourists grow (Geng et al., 2021). In many ethnic areas of China, tourism in ethnic communities has become an important conduit for poverty alleviation and rural vitalization. Over the last several years, a significant amount of social capital has been spent in ethnic villages to grow tourism under the auspices of a government effort, resulting in various governance structures in ethnic village tourism (Qianlang et al., 2021). China is a wonderful tourist destination that conducts various tourism events, such as fairs, and supports various activities to increase interest in the resources they provide. Tourist fairs make a substantial contribution to all tourism stakeholders. Tourism fairs and festivals serve both entertainment and culture and economic and social development by allowing cultural value exchange in China.

### **Technology-based Tourism Development in China**

China is a fantastic example of a country that is developing its tourist industry through technology. Technology has aided in reducing expenses, improving operational efficiency, customer experience, and enhancing services. Improved bookings, guest service systems, and communication may benefit both companies and customers. By the way, tourism enterprises have intensely benefited from electronic labor to exchange expensive human endeavors. Technology-based tourism not only saves money on labor but also assists China in avoiding customer service concerns. The advanced technology and big

data statistics have progressively contributed to the tourism industry in recent years, inspiring more meaningful uses in the new tourist management model (Liu, 2021).

All facets of our daily lives and surroundings, including the effective operations of commercial enterprises and government/non-government organizations, are enhanced by modern technology. The level of living and quality of life and services will undoubtedly increase as travel technologies are utilized and implanted in the Chinese government's planned developmental aims to grow and modernize the Chinese tourism sector. The overall income generated by China's travel and tourism business is presently estimated to be around 3 trillion Yuan. As the industry grows, the country is well-positioned to overtake the United States of America as the world's second-largest tourist economy. The China National Tourism Administration announced a five-year tourism strategy for China. China's tourism industry has grown to the point that the number of visitors visiting the country each year has exceeded 6.7 billion (Hou, 2021).

Digital platforms can help visitors and local agents develop collaborative networks, emphasizing the value of discussion and the potential for continuous innovation (Tymoshchuk et al., 2021). These technologies are being used by an increasing number of Chinese tourism destinations, including theme parks, museums, galleries, and even zoos, to attract tourists. The Palace Museum is a pioneer in the application of these tools. The world-famous museum, also known as the Forbidden City, put on a multimedia show to bring its mute historical artifacts to life. Visitors felt like they were going around the iconic site during ancient times while wearing a VR helmet in a moving seat. In Changsha, Hunan Province, the intelligent robot tour guide was put to action in a picturesque location. Tourists are shown around by the robot, which also provides a quick overview of the gorgeous area. It could entertain guests by singing and dancing. Some hotels have also implemented cutting-edge technology, such as artificial intelligence and intelligent robotics. Guests may control the lighting, drapes, and television in their hotel room by speaking to a smart speaker. They can also inquire about dinner hours, order room service, and reserve a taxi.

They are capable of entertaining clients with singing and stories while keeping them company. Ctrip, Qunar, Fliggy, and Tuniu, among China's online travel agencies, have helped modernize travel by providing one-stop booking services for hotels, plane tickets, train tickets, and bookings to visit picturesque locations (Sang, 2018). In practically every aspect of China's tourist sector, cutting-edge technology has been creatively employed. Tourists may enjoy interesting, immersive, and engaging visual experiences thanks to technologies like artificial intelligence (AI), augmented reality (AR), and virtual reality (VR).

### **Artificial Intelligence (AI) in the Chinese Tourism Industry**

Artificial Intelligence (AI) is the imitation of natural human intelligence used to perform different human and other animals like image processing, language recognition, and processing, object detection with the help of built-in expert systems. Most definitions of artificial intelligence focus on it as a subfield of computer science or in terms of how machines can mimic human intelligence (Tussyadiah, 2020). The advent of technology is compelling AI in every field, with tourism is no exception. China has several

tourist attractions spots that can contribute a lot to its economy. The advent of technology based on AI is taking the world to new dimensions. Unlike the previous days when there were no road maps available, it was difficult for the tourist to explore locations in the visited area. But now China is providing its tourists with several apps like Google Maps, Baidu Maps, Autonavi Navigations is another good example of a car's GPS supplied by China. All these apps offer content in the English language to facilitate foreign customers in a better way. Traveling agencies in China are mingling AI and human services to provide their tourists the best of what they want. Things ranging from customized trips, online booking, online payment systems, keeping the record of travelers (keep records of customers in their internal control system so they can manage their next visit more appropriately by remembering their key requirements). Mioji is another tool used by travel agencies in China where tourist can plan their trip. Like they have to add their current city, the city they want to visit, their duration of the journey, the number of people, and their preferences regarding trip, they can get details of nearby hotels and attractions by simply entering these particulars and transportation in nanoseconds. In the past language was a barrier which was impeding tourist to travel.

Still, now artificial intelligence makes it possible to communicate which local Chinese are not aware of the English language. With artificial machine devices like WT2 (smart earphone translator), travelers can communicate with them and obliterate the language gap. Recently, China has developed facial security check-in at their airports. This is again another step towards improving the quality of life provided to the tourist. They don't have to wait in long lines and queues for security check now. The Chinese government is enforcing AI importance everywhere. In China, the instrumental value of artificial intelligence and "intelligence" as an important direction of social governance in destinations have been highly valued by governments at all levels (Davenport et al., 2020). There are in-site installed voice guides in different locations working as tour guides, inform the tourist about vintage history, etc. Digital marketing through AI is enabling the agencies to do promotions by incorporating more details.

### **Use of Robotics in the Tourism Industry**

Robots become a force to be reckoned with as piloted advancements. Their utilization is getting progressively far-reaching, and they are viewed as arising innovations in the travel industry. In China, to tackle bulky check in and out for travelers, the Hangzhou government began from the front work area of the hotel. It dispatched a "hotel registration in 30 s" administration. Vacationers can look at in and check rapidly without anyone else with just three stages, sweep and analyze ID cards, discover, arrange and affirm registration, make room cards. Both the registration experience of travelers and the productivity of administration are improved. With specialized help, the robot persistently adjusts and assesses application situations. In 2018, Alibaba's first automated lodging, "Fly Zoo Hotel", arrived in Hangzhou (Lo et al., 2019). Albeit full-robot lodgings like this may, in any case, be uncommon today, hotels throughout the planet have carried out smart robotization in some client-situated activities, for example, programmed registration, individual virtual colleagues, and feast conveyance robots. For sightseers, robots in travel scenes can give more definite and helpful administrations, yet robots themselves are likewise a fascination.



Robots have steadily gotten comfortable to individuals going in China, as the nation is making a beeline for its travel industry 3.0. A wide scope of bleeding-edge advances has been inventively applied in pretty much all aspects of China's travel industry. A developing number of China's vacation destinations, including amusement parks, exhibition halls, displays, and even zoos, apply those innovations to draw in guests. In April, an intelligent local robot escort was put to use in a beautiful region in Changsha, Hunan Area. The robot named Yoyo showed sightseers around and gave a short presentation for the picturesque spot. It could sing and move to delight guests. Also, because of voice acknowledgment programming, it could even answer inquiries from travelers. Cutting-edge transportation administrations give vacationers in China a lovelier and effective travel insight. The overhauled high-velocity rail line network empowers vacationers to go to distant spots for less cash and time.

What is more, the facial acknowledgment frameworks utilized at an expanding number of air terminals and rail line stations help accelerate security screening and ticket checks for voyagers. When discussing the disintegration and danger of artificial consciousness to individuals, a few analysts will utilize the expression "human-driven" to depict the deficiency of natural worth. Characteristic worth doesn't fill any need, so its impact on moral decisions is significant. Albeit the ebb and flow level of innovation is still at the phase of feeble artificial brainpower and just stays at straightforward specialized help, it is important to keep a levelheaded mentality and get ready for research on robot morals-related frameworks. Automation does not simply mean replacing the workforce with machines but integrating machines into an autonomous system that can complete a process without workforce assistance (Liu, 2019).

### **Mobile Apps in Chinese Tourism Industry**

Tourism Mobile apps assist with travel planning, ticket bookings, cab booking, accommodation bookings, route mapping, etc. Apps are transforming the way we travel, and China is at the forefront of this trend. Tourists may make their trip to China a lot simpler by downloading these apps ahead of time. In recent years, diverse information and communication technologies have increased the smart city idea of the tourist business (ICT). The amount of travel sale services via mobile internet is growing rapidly in the tourist business. Researchers and travel industry experts are already noticing disparities in usability between travel websites and travel apps as the mobile channel becomes more prevalent in the tourism business (Xu et al., 2014). The online travel industry is getting increasingly competitive, and customer demand is diversifying. As a result, online travel marketing strategy and product line diversifying have grown popular (Jia et al., 2016). Digital platforms can help visitors and local agents develop collaborative networks, emphasizing the value of discussion and the potential for constant improvements. As a result, digital media may assist travelers in co-creating their most valuable experiences with other visitors, influencing the success of a tourism location (Tymoshchuk et al., 2021). End-users can arrange their trip route using a variety of commercially available smartphone applications. On the other hand, existing mobile applications have various flaws, such as not being adaptive to every city's sustainable infrastructure. Apps can sometimes be limited in trip booking, with just static trip task scheduling and no dynamic geo-location-based job rescheduling (Krishnamurthi et al., 2021).

Apps are transforming the way we travel in China. Before traveling to China, download these apps to make things a lot simpler. It can help to overcome linguistic barriers and acquire a tourist’s bearings more quickly.










No.	App Store Name	Icons
1	<b>VPN</b>	   
2	<b>Baidu Translate</b>	
3	<b>WeChat</b>	
4	<b>WeChat pay/Alipay</b>	
5	<b>DiDi</b>	    
6	<b>Baidu Map</b>	
7	<b>Mobike</b>	
8	<b>Meituan</b>	
9	<b>Taobao</b>	

Figure 1: Different apps and their logos used in China

In China, using a VPN is required since Google apps cannot be used without one. Baidu Convert is one of the greatest language-learning applications available. It will save you time if you cannot understand menus, signs or cannot translate the name of a tourist destination into Chinese. WeChat is China’s most popular messaging app, offering features such as text, voice, and video chatting, photo and video sharing, food ordering, travel and hotel booking, and more. WeChat pay/Alipay is the most popular smartphone-based app which connects with bank card help to make very easy payment. If any tourist finds themselves in a situation where there are no cabs available, DiDi is the app to use. It’s essentially the Chinese equivalent of Uber and can be a good alternative when the metro is closed and the buses aren’t running. The most popular map app is Baidu Maps, which is more accurate, up-to-date, and dependable for navigating China. The applications will show you the best routes to get you to your destination. Mobike is a bike-sharing software that allows users to navigate the city without being trapped in traffic. Meituan is a well-known online food delivery service. Ordering different dishes may be handy, quick, and typically less expensive than visiting a restaurant because restaurants frequently provide fantastic discounts and coupons to their clients. Taobao is China’s largest and most dependable e-commerce website, where practically any goods may be purchased. It’s linked to Alipay, which makes it simple to make a payment quickly and effortlessly. Since the travel and tourist business is developing, there is a significant need for apps in this sector. The perfect smartphone app should please end-users while also growing China’s tourism industry. It provides substantial benefits and adjustments for both company owners and visitors in China.

### Social Networking Sites (SNSs) to Support Tourism Fairs in China

Social networking sites (SNSs) are user communication-based platforms that can play an essential role in exchanging electronic word-of-mouth (eWOM) between travelers (Luo & Zhong, 2015). Individuals are using different digital platforms as a social network, which might include a strategic

choice of information and self-related photographs, in which they create their social network profile. However, the influence of SNS use and online social support in tourism has been examined scarcely in previous studies. SNS helps satisfy tourism's social demands by creating a mobile and networked community that is a complicated link to face-to-face connection, media communication, co-existence, digital closeness, physical and virtual mobility. It has been established that smart technology and SNSs have been used in tourism at every stage, from seeing a dream to recollection (Morrison, 2019). The findings of (Shen et al., 2020) study show that SNSs influence and effective communication mediums due to the function and features. The number of people using SNSs demonstrates the popularity of SNSs. In 2018, the number of SM users globally estimated at 2.65 billion, with a predicted growth of nearly 3.1 billion in 2021 (Statista, 2019). SNSs have altered tourism decision-making.

To organize any event in China, each tourism firm must realize that Western social media apps such as Twitter, Facebook, YouTube, etc., are forbidden. However, several alternative SNS's are accessible for SM marketing in China, including WeChat, QQ, Weibo, Douyin, Tencent video, Youku, Xiaohongshu, Douban, Meituan, Toutiao, Figgy(Feizhu), Qunar, and a few dating apps, including Tantan, MoMo, Tinder, etc. People in China spend considerable time on social media platforms, especially WeChat, in their daily lives. In comparison to western texting apps, WeChat provides far better features. It has over 1 billion active monthly users. It is part of moments offers an opportunity to all the companies, including tourism organizations, to post an ad in moments section similar to Facebook newsfeed. It is a useful tool to support tourism fairs. Sina Weibo was introduced in 2009 as a microblogging network in China. Videos, photos, and gifs can be uploaded here. They may also follow a person to read and share posts. Chinese people use Weibo to get information, to share life, and the opportunities to interact with others. These things have made Weibo an unbelievably successful social media marketing channel in China to support tourism fairs.

QQ is Tencent's another instant messaging software that offers numerous services to users and advertisers, similar to WeChat. Tencent Video is likewise an excellent platform to reach a wide range of people like YouTube. The target audience can be reached by using several methods via Tencent Video and related advertising tools. Xiao-Hong-Shu is another e-commerce site with a variety of elements often seen in social media. Douban is also an SNS focusing on self-expression and a way of living. Users commonly talk about books, films, music, and events on it. This app may be particularly powerful in utilizing word-of-mouth marketing which is important for tourism fairs. Toutiao is a news dissemination application that aims to provide information of all types with complicated algorithms. In the Chinese landscape of social media, Douyin has become a force to consider. With 400 active users per month and an average time of 52 minutes per user per day makes it a wonderful SNS to support tourism fairs. Tourism fairs have also been supported by dating apps like Momo, Tantan, Tinder, etc. These are instant messaging apps while traveling apps like C-trip, Figgy, Qunar, etc., are also useful advertising tools.

### **Tourism and Quality of Life (TQOL) in China**

Tourism is one of the largest industries. Tourism has a significant positive impact on the well-being of both tourists and hosts. The research found that people derive overall life satisfaction from non-leisure

and leisure life (Neal et al., 2004). Traveling/tourism provides an excellent source of leisure life satisfaction. Traveling helps tourists experience a new culture, environment, and people and provides a memorable experience, thus increasing overall life satisfaction. On the other hand, tourism also affects the host's economy through generating employments, attracting foreign investments, mobilizing business activity, increasing property value, and developing infrastructure (Liang & Hui, 2016), thereby influencing the quality of life (QOL) of residents (Uysal et al., 2016). Quality of life entails a set of subjective and objective features that shape people's lives (Stiglitz et al., 2009). Particular dimensions represent the people's assessments of their lives in general or in specific categories such as family, work, and financial circumstances (Stiglitz et al., 2009). It is a cognitive exercise measured by emotional contents such as feelings and perceptions about life (Ridderstaat et al., 2014). On the other hand, objective features are characterized by the instrumental value of the conditions and resources—tourism chips in both dimensions of QOL. Residents get opportunities to meet new people from a new culture, share knowledge and experience, and have more contacts, who may become good friends (Liang & Hui, 2016). Furthermore, cultural tourism based on heritage, historical place, nature, local artifacts uphold the image and identity of the destinations (Xie, 2006). This experience helps develop emotional well-being and enhances the QOL of residents (Neal et al., 2004). Finally, the economic benefits of tourism are well established in the literature. Tourism fuels the growth of the local economy, creating employment, generating revenue, and contributing to GDP (Li, 2002; Uysal et al., 2016).

China is one of the biggest tourist destinations. Following the Travel & Tourism Competitiveness Report 2017 of the World Economic Forum (WEF) of 2017, China ranked 13<sup>th</sup> in 2019 rose from 71<sup>th</sup> in 2007 (Zhao & Liu, 2020). According to United Nations World Tourism Organization (UNWTO) (2020), China is the fourth most visited country globally for the last couple of years. As many as 66 million international tourists visited China in 2019 and spent nearly 39 billion USD, the 11th highest tourists' expenditure in the world (United Nations World Tourism Organization, 2019). The number of domestic tourists is also remarkable. According to the Ministry of Culture and Tourism (2019), there were 6 billion registered domestic trips that indicate a greater impact of domestic tourism on the Chinese economy. The country's tourism industry earned \$935 billion in revenue in 2019. According to China Tourism Academy (2020), the tourism sector contributed to 11.05% of total GDP and accounted for 10.31% of employment of the whole country. China earns substantial foreign currency from tourism and is benefitted from other tourism-related economic activities. Many idle places and historical sites have become vibrant and moneymakers. Tourists mostly consume services from transportation, shopping, accommodation, catering, entertainment, and sightseeing, thus contributing to the development of sectors related to these services (Liu & Li, 2019). Tourism plays a key role in developing the quality of life of tourists (domestic and inbound) and hosts. Tourism provides leisure life satisfaction to the tourists by offering a memorable experience. It contributes to developing the quality of life in China through increased economic activities and promoting emotional well-being.

### **Tourism Development through Smart Cities in China**

A smart city is an urban area that uses different types of electronic data collection sensors to supply information used to manage assets and resources efficiently. Urban communities throughout the planet progressively perceive the smart travel industry city idea and related procedures as methods for

upgrading manageable conditions. Especially for urban communities confronting inhabitants' negative insights towards the travel industry, shrewd the travel industry city engages a city to meet people's high expectations by making urban spaces that inhabitants and guests can partake in together. China takes advantage of this trend-setting innovation in the remarkable expansion of its data, which consistently cooperates with the biologic world and empowers its travel business to anticipate travelers' social advantages. A brilliant city to centers around friendly and social life and it might improve metropolitan social cooperation.

Given that the travel industry in China is profoundly identified with social marvels, the idea of 'savvy' has been adjusted to the setting of the travel industry. As another popular expression in China, 'savvy innovation' has been altogether changing how guests consider perusing sites. PDAs and versatile applications are abused for settling on different travel choices, like transportation, convenience, and exercises accessible at an ideal travel industry objective. The travel industry exercises in China dependent on shrewd innovation, savvy the travel industry, is a social marvel. The brilliant travel industry experience addresses innovative intervened encounters that consolidate personalization, setting mindfulness and ongoing observing. China's travel industry is a social and financial wonder that includes the development of individuals to places outside their typical climate for individual or expert purposes, and the principal reason for voyaging is for social inundation. At the start of the 1990s, the travel industry got one of the elective types of the travel industry, gone against to mass the travel industry. Travelers show a proactive approach and make encounters effectively while voyaging. Subsequently, travelers' heterogeneous inclinations have drawn consideration from objections, and the objective urban communities try to give tweaked top-notch travel encounters. Since the Web impacts the circulation of the travel industry data and deals, the travel industry is looking for fruitful e-the travel industry systems by creating sites, electronic trade, and related administration. The adoption of these e-businesses is flourishing China's tourism industry. China can develop its tourism by forcefully pushing the urban communities to the new travel industry plan forward with the huge advancement of intelligent innovation. It demonstrates another travel industry supported by incorporated endeavors to gather and examine information extricated from different sources in the mix with the utilization of cutting-edge data advances to change go encounters to make them more enhanced, productive, and supportable. In this regard, innovation can change how guests settle on various voyages, like transportation, convenience, and exercises accessible at an ideal travel industry objective.

### **Recent Challenge in the Tourism Industry in China due to COVID-19**

All industries have suffered insecurity since the COVID-19 breakout in late 2019, but this situation is most noticeable in the tourism and hotel industries. Being an industry dependent on human mobility and close cooperation, the hospitality and tourism business is the co-creator and key recipient of the pandemic and related consequences (AIEST, 2020). The crises nearly caused the shutdown of all industries, including restaurants, hotels, airlines, and drastically changing everything in China and the whole world. Especially in the hotel and tourism sector, almost all companies lost earnings. In his report under COVID-19 on the Chinese tourist market in early 2020, Koe (2020) indicates that cafes and lodging are empty since they do not have customers. As travelers are absent, the transportation companies face major disasters. International tourist operations are also declining substantially in China,

damaging the tourism industry and travel companies involved in outbound tourism suffering losses. Tourist attractions, restaurants, and sports events were suspended for all international and domestic travelers and till now just partially opened, resulting in a huge loss to this industry.

The COVID-19 wreaked havoc on China's hotel industry first and foremost. As the first nation afflicted by health crises in China, its hotel business has faced severe hurdles (China Tourism Research Institute, 2020; Zhang et al., 2020). For survival, many hoteliers, especially the owners of individual hotels, have transferred their property or suspended the business operation temporarily. Mounting evidence indicated that the pandemic is appeared to be on the verge. Tourists became cautious and began to cancel nonessential trip arrangements. For example, Dossen revealed that it got more than 40% of hotel cancellation messages (Wu ,2020). Zhang's research on 498 hotels found that OCC's total percentage has plunged by 89% during 14 and 28 January and, afterward, stayed about 10% until the end of February. In important cities, the hotel profits per accessible accommodation declined by over 85% yearly during February (Zhang et al., 2020). The hotel industry has been forced to experience its worst outcomes in recent history due to border closures, lockdown measures, and travel restrictions. Economic losses and hotel shutdowns seem to be too prevalent and caused insecurity which most had not encountered before.

On 28 March 2020, China shortly blocked its borders with foreign nationals to prevent a 2<sup>nd</sup> COVID-19 outbreak. Since then, many countries took the same actions and restricted foreign flights. Several countries, including Europe and the USA, have suspended trading and tourism with China due to concerns about the viral spread (Al Jazeera., 2020). Owing to the cancellation of flights from and to China due to COVID-19, the airline sector is badly affected (World Economic Forum., 2020). The Cruise lines also have had minimal passengers since the pandemic began (The New York Times, 2020). Though the local airline has started its domestic flight operations, international flights are still limited, affecting its business. The traveling restrictions include COVID Test, and Quarantine problems still affect tourism as travelers have to quarantine their expenses. Days of quarantine are also different, leading to the cancellation of many tours. This pandemic has caused the tourism sector to increase and remain competitive in innovativeness. Relaxing limitations on traveling and vaccination delivery aren't sufficient for travelers to return. Trust, safety, and comfort are the challenges that will be important to revitalize tourism, and contribution to generating peace by the hospitality industry will be vital.

### **Conclusion and Strategies to Overcome the Situation**

The tourism sector has to establish a framework to understand and execute disaster management strategy in the context of COVID-19 and for the increasingly catastrophe-driven world (Chan et al., 2019). A complete view of a pandemic scenario and ideas for handling it in each step is provided in several frameworks. Based on wider research in the tourist and hospitality industry regarding disaster management, Faulkner (2001, p. 144) suggested a standard method broadly used to examine and develop tourist disaster management. This framework identifies three components - the catastrophe phase, the reaction aspects, and the key aspects of the disaster management techniques. Effective business catastrophe management techniques may reduce risk and speed up the recovery.

### ***Human resource strategy***

High-performing personnel must be regarded as great assets for the company during catastrophes; those people help businesses to regain their performance once the pandemic has been calmed down. Businesses should thus endeavor to retain this personnel during the pandemic. It also creates an opportunity to teach employees online, assist the growth of employees, encourage employees to take a yearly vacation, and minimize working days and hours (McKercher & TRINET, 2020).

### ***Communication and leadership strategy***

With a proper assessment of pandemics, tourist firms should prepare themselves for various circumstances and efficiently adapt to anti-pandemic policies. In communication, the COVID-19 scenario demands innovation that can make information sharing and decision-making smooth and responsive (Moorhouse, 2020). Companies must build an effective remote control and management system for deploying personnel and holding meetings using a mixture of online office technology, tools, and platforms.

### ***Strategies for service delivery***

In times of crisis, the restoration of consumer trust is necessary. Interestingly, numerous hotel and airline brands started free cancellation and reservation support during the pandemic, offered prolonged membership in the loyalty program, and boosted membership perks to reassure clients (Sun et al., 2020). The tourism industry must adopt stringent hygiene and sanitation steps to ensure the housing environment for customers, including comprehensive disinfection, food hygiene control, the distribution of masks, the delivery of online medical services, health checkups, and closure of laundries, gymnasiums, and other public places and amenities. Enhanced smart contactless service delivery (including self-check-in, face-scanning, remote control, voice control, robots for room service, and zero-second check-out).

### ***CSR strategies***

The significant growth in the number of infected people during the pandemic's peak caused a lack of hospital wards. Hospital expansions were required to confine and treat infected individuals. For the returned non-local employees, some hotels in large cities were designated as quarantine stations. Meanwhile, because of the global spread of COVID-19, arriving tourists were subjected to the same quarantine requirements. Hotels near major international airports acted as quarantine stations for coming travelers to prevent infection transmission. This is a great strategy to keep up the business in hard times.

### ***Financial strategy***

The Tourism industry should promote the events through proper channels to revive their operations and cover their financial losses. Moreover, tourist companies should pay attention to regulations published by relevant government organizations and solicit monetary support from them (Sun et al., 2020). In addition, the municipal council must subsidize businesses, especially hotels that acted as hospital expansions, medical personnel lodging, and quarantine stations during the pandemic.

### ***Standard operating procedure for crisis management***

To improve effective crisis management skills to combat the pandemic, the tourism industry needs to build a responsive and efficient Standard Operating Procedure. McKinsey and the company (2020) noted a renewed confidence in Chinese customers and a peculiar increased interest in environmentally friendly products through numerous stages of the COVID-19 pandemic.

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