Plan of Technology Used in Tourism after COVID-19

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Abstract: For the introduction of background, this part will be divided into the following four perspectives: fundamental state of our company, the development of tourism in the era of epidemic, the status of technology application in tourism and tourists’ expectation in tourism. According to our analysis, innovation in the tourism industry has been a necessary measure in the epidemic era, which is not only what our company needs to do, but also what the whole tourism industry needs. For our company, we have obvious advantages, such as loyal employees and customers who trust us, the innovative technology that we want to use has been developed and the price is reasonable, the two proposals proposed at present meet the needs of tourists, also the two proposals proposed by us are not widely used in the tourism market. I believe that these can be the pull factors in our development process.

Keywords: Tourism technology, Tourism after COVID19, Company plan.

1. Fundamental State of Our Company

Our company is a large tourism company focusing on domestic tourism in China. We mainly give tourism plans for popular tourism cities in China. Our main tourism mode is group tour, and there are different travel modes with different prices: There are economical and affordable types with shopping that are not liked by most tourists, there are high-priced types without shopping, there are in-depth tour groups that only travel in one city, and there are tour groups that visit in an area with many cities and so on. Our company's customer groups are also of a wide range of ages: the elderly, middle-aged and teenagers, and our tour groups have no restrictions on the age composition, including groups composed of similar age groups, groups composed of mixed age groups, and groups composed of parent-child family travel and honeymoon travel groups. At the same time, because our company provides more choices to customers, ranks best among Chinese tourism companies in service attitude and actively hold the corporate social responsibility so our company not only makes profits, but also wins a lot of wonderful reputation from customers. However, since the outbreak of the epidemic in 2020, people have fewer opportunities to travel due to policy restrictions and health problems, resulting in a loss of economic income of the company. However, during the pandemic, we did not reduce the treatment of our employees, but gave them more flexible working hours and better treatment.

2. Development of Tourism in The Era of Epidemic

The impact of the pandemic on tourism has been at two extremes. One is that people in areas with severe epidemics are unable to travel, and the other is that there are fewer and fewer opportunities for travel in the past two years, and people seize the opportunity to take revenge tourism. COVID-19 is a virus transmitted from person to person, which is characterized by a very fast transmission speed and a relatively high infection rate. In order to effectively protect people's health, since the outbreak of the epidemic in China during 2020, the Chinese central government has put forward a series of policies for epidemic control, and local governments also have formulated more stringent regulations and requirements according to the situation of each region. These are mainly reflected in restricting people's cross-regional mobility, that is, people moving across regions will be subject to different “isolation" requirements according to different situations, which leads to travel become difficult and tourism faces more and more unknown risks. For example, tourists are worried about whether they will get COVID-19, tourists may change their travel plans due to the outbreak of the epidemic in tourism destination and even cause financial loss to tourists. These unknowns have caused tourists to be unwilling or afraid to travel. According to data from China Travel website, nearly 100% of travel companies experienced negative economic growth from March 2020 to March 2022, and the listed travel companies' stocks are also “limit down”. Some travel companies have even gone bankrupt.

However, with the increasing popularizing rate of COVID-19 vaccines and the decline in the death rate of COVID-19, the tourism industry has slowly improved. According to the data provided by Ctrip (a Chinese ticketing company), the transaction rate of air tickets and train tickets in the first half of 2022 is four times of the first half of 2021, which shows that people are in need of tourism. However, according to the data, most of these ticket buyers are individuals or purchased by working companies but few travel companies purchase tickets. This mean that under the influence of the epidemic, tourists are not willing to choose travel companies to contract their travel, which also leads to the fact that the economy of travel companies is still not growing even though the tourism industry has a slowly improved. But according to a report by the Ministry of Culture and Tourism of the People’s Republic of China, there were also a small number of travel companies that saw economic growth in the fourth quarter of 2021, and these companies had one thing in common: they all applied technology to tourism.

Although tourism is in a bad state during the pandemic, many natural scenic spots have seen positive changes. For example, the lake in Jiuzhaigou Valley in China's Sichuan province has become clearer, and zoologists have found endangered creatures in northeast China's Greater XingAn Mountains, which also reflects that the reduction of tourists is a way to protect the environment.
3. Status of Technology Application in Tourism

With the development of artificial intelligence, there have been many products that can be brought into the scene in the market. For example, VR technology is used in games, which can make players experience the real scene of the game more immersive, so as to obtain a better game experience. Not only that, there are some technology products that can be remotely controlled and see the real scene, such as the "sweeping robot" can be operated on the phone through the APP, so that the robot can clean up and when the robot working, the user can also see the working status in real time. There are many similar technologies used in life. However, the current tourism market rarely uses a lot of artificial intelligence technology. Only The Palace Museum City in Beijing, China has launched an online 4D real scene viewing project. It can be seen that the current use of artificial intelligence technology in China's tourism market is not much.

Although artificial intelligence is not much used in Chinese tourism industry, the technology of big data has been applied comprehensively. For example, many scenic spots provide online reservation services in order to effectively limit the number of travelers, provide "place codes" to screen close contacts of COVID-19 in tourism and use big data to analyze "the number of people in scenic spots, number of tickets, hotel prices" for tourists so as to make more effective to travel. For example, Amadeus is a company that uses big data to analyze and it is also a company that has rebounded during the pandemic.

4. Tourists’ Expectation in Tourism

The impact of the epidemic has led to fewer and fewer opportunities to travel, and with the increase of people's quality of life, people have higher requirements for tourism, and there are also some changes in the mode of tourism. Different people travel for different purposes. For example, some people are willing to taste food, some people are willing to enjoy natural scenery, some people are willing to go some places according to the recommendation from bloggers, some people are willing to go to museums for cultural tourism, some people pay attention to the experience of travel and local people so as to feel the local customs, some people are willing to take photos of their travel and post them on social media, some people enjoy to make friends during travel, some people enjoy travel with family, some people have very high requirements for hotels and so on. And large group Tours may lead to the outbreak of the epidemic, so people are no longer willing to choose large group Tours. So they need is a travel model that meets their requirements.

All in all, according to the current situation, there are two problems to be solved at present: one is to solve the problem that people can not travel, and the other is to solve how to meet the tourism needs of tourists. As the manager of the company, it is my duty to help our company to solve problems. So we should use skills, know-how and experience to find solutions. I consider that we should start from the expectations of tourists, address the potential problems they worry about, and use technology to solve these problems.

5. Suggestions

There are two solutions for two different cases. In view of the serious epidemic areas, people are usually faced with the situation that they can not travel, but tourism as a way of life is essential for people, so we put forward a new way of tourism: “cloud tourism”. The other scenario is revenge tourism in low-risk areas, but with the improvement of people's living standards and the hard-won travel opportunities, the traditional way of group Tours is no longer accepted by today's Chinese tourists. Instead, they need a new way of traveling to give them the satisfaction of this hard-won opportunity: “customized tourism”. So this part will analyze the feasibility of these two suggestions.

5.1. Cloud Tourism

Here are three reasons to explain why develop it.

5.1.1. People is desire to travel during the pandemic

According to our survey about the cloud tourism of people in Zhengzhou, a city of China that deeply affected by the COVID-19. The survey results show that about 70 percent of people are eager to travel during the current pandemic. And nearly 90 percent of people understand cloud tourism, and around 30 percent of people are eager to participate in cloud tourism to meet their expectations for tourism. Examples like the people of Zhengzhou abound in China.

5.1.2. Intrinsic and extrinsic competitive advantage

Firstly, because our company has actively hold the corporate social responsibility and won a lot of good reputations so many customers are willing to trust us.

Secondly, there are different types of cloud tourism, the most basic is to use a mobile phone software, visit some destinations by the software and the software is free, but different scenic spots will have different prices, and the price is one percent of the ticket price of the scenic spot. This is not too demanding for the customer's equipments so it's easy to be accepted. And also means that the time and place of cloud tourism will not be limited. In addition, we will also introduce some value-added services to meet more needs of customers.

Take the The National Palace Museum as an example, when listening to the introduction of a historical event, you can participate in the process in the form of a story as the protagonist of the event. In addition, some theme activities will be held in some festivals to obtain some disguised or hidden attractions to travel. Also we will also introduce more advanced VR technology, that is, come to our company to use special equipment, which can make the above concept more immersive experience for customers. And according to the data of VR games, an experience time is between 45 minutes and 75 minutes, and the price is about 50 RMB for per time.

Of course, we will also launch multi-player projects to achieve publicity.

Thirdly, With the development of social media, we can use software such as Little Red Book and TikTok to promote our posters to customers, and provide a series of preferential activities and experience activities. For example, we send emails to customers with children to invite them to experience cloud tourism with their children, and provide different levels of discounts to our regular customers. At the same time, our company will randomly invite people to experience our products, which has achieved publicity effect, and if someone brings a friend or forwards it to their social media, we will also give gifts or discounts.

Fourth, our company has a strong organizational culture, so our employees not only have a strong cohesion, but also have a relatively high interest in participating in the innovation program proposed by the company. In addition, compared with the same type of companies, our company gives
employees the highest level of salary and welfare benefits. Especially during the epidemic, our company does not delay employees’ wages, but provides them with more medical subsidies, which makes employees more attached to the company and unwilling to leave. And at company meetings this quarter, many employees volunteered that the company could make some innovations to deal with the impact of the pandemic on tourism.

5.1.3. Mature development of artificial intelligence

At present, artificial intelligence has matured and been used in life but it is rarely used in the tourism industry. Also according to the survey of China National Tourism Administration, there are few companies that have launched cloud tourism plans at present. Due to the mature development of artificial intelligence, there are many companies that can provide technology, so it is a reliable scheme to combine artificial intelligence and tourism to create “cloud tourism”. According to our plan, cloud tourism only combines artificial intelligence and tourism, which is not a complex project. Moreover, the price of artificial intelligence is not very high, so to develop the cloud tourism will bring competitive advantages to our company.

5.2. Customized Tourism

Here are two viewpoints to explain why develop it.

5.2.1. Necessity and uniqueness

At present, tourism opportunities are rare, so the occurrence of "revenge tourism" is a common thing, and "customized tourism" is a measure to deal with the "revenge tourism" phenomenon. According to the Maslow’s Hierarchy of Needs and Alderfer’s ERG Theory, different groups of people have different needs, and each person has a different dominant need. So as the manager of the company, I propose that the company can launch small quality tour groups and provide them with customized travel plans to meet the needs of tourists. According to our survey from student in MUST, a large proportion of people have changed their choice of travel destinations in the modern era, that is, from wanting to go to those scenic spots to few people but beautiful or unique spots. Of course, some people are still willing to choose those famous scenic spots. This differentiation reflects that different groups of people need different travel plans. Of course, some tourists are keen to take photos or have a passion for food, which can not only promote the development of customized tourism, but also promote the development of some value-added services. In addition, "customized tourism" is different from "niche tourism". Niche tourism refers to a group of people who have the same interest or tourism purpose to travel, they can be friends or strangers, that is, they have the same tourism purpose. However, the people for “customized tourism” is not limited to them with the same interests. Therefore, in the period of severe epidemic, people could not go out under the control of policies, and traditional tourism was facing great challenges.

In this case, cloud tourism has become a solution full of possibilities.

Cloud tourism is a means to integrate the whole tourism process, resources and services based on Internet technology, and then provide users with digital tourism through interactive platforms, VR and other ways. An "online + offline" integration formed under the background of rapid development of cloud computing technology turns tourism into a form of digital tourism development. It allows users to experience various tourist attractions without going out. Therefore, in the period of serious epidemic, cloud tourism is a new idea, which has the flexibility that the traditional tourism model does not have.

Cloud tourism has great market potential. Cloud tourism has been selected as one of the top ten tourism events of the Ministry of Culture and Tourism of China and is a brand new market with multiple concerns. Our group made a survey in the school, and more than 30% [In figure2] of the respondents knew about cloud tourism and were willing to participate. This shows that in the current Internet era, many people are willing to try this new tourism model. As a new tourism model with good market prospects, our company can actively try to develop cloud tourism technology and become a pioneer in the cloud tourism industry.

Cloud tourism is not an unfeasible concept. There are many successful cases of cloud tourism in the world today, such as the Louvre, the Palace Museum, Dunhuang murals, etc. These are the first attempts made by the local government and have received good responses. As a private enterprise, we can contact and cooperate with local governments with tourism needs to help each other.

Cloud tourism brings many benefits to the company. First, it can make up for the company’s economic losses during the epidemic, enable tourism to continue in the epidemic, and...
bring economic benefits to the company. Secondly, cloud tourism relies on Internet technology, and the development of cloud tourism can improve the company's popularity and Internet influence. Third, the development of cloud tourism can contribute to the diversified development and strategic adjustment of the company. It can help traditional tourism companies innovate, transform and develop, and seek more opportunities in the new era. Finally, he can enable the company to establish closer cooperation with local governments.

Possible costs of developing cloud tourism technology: To develop cloud tourism, it is necessary to create a new department, which includes Internet technology research and personnel training. In addition, the development of cloud tourism also requires online publicity, which will generate a lot of advertising costs. Finally, the establishment of cloud tourism routes requires field visits and network model production costs.

I think cloud tourism is a new road full of opportunities and a corresponding solution under the severe epidemic situation. Our company can try to develop cloud tourism technology.

6.2. Challenges
We divided the challenges we will face into three main points of view: first, competition, second, technology, and finally, government support.

6.2.1. Competition
As far as we know, we refine the competition into three points.

First of all, as an enterprise, our most important and fundamental goal is to make profits. According to our investigation, we can find that for a successful enterprise, the most important thing is to have a certain sense of social responsibility. Corporate social responsibility refers to a kind of responsibility and attitude of an enterprise towards the society, and it is the social responsibility faced by the enterprise, which is reflected in the paid or unpaid contributions to the society.

The second is the competition between enterprises, and the common ones between enterprises are cooperation and competition. However, under our rigorous investigation and research, cloud tourism, as an emerging sector, has considerable development prospects. This is a more lucrative benefit for enterprises, and this is what we are worried about the malicious competition among enterprises. In order to create a favorable business environment, malicious competition among enterprises must be eliminated.

The last and most core point is the core competitiveness of an enterprise. Core competitiveness is the key to a business being profitable. We must have our own competitive advantages, so that we can maximize our interests in the competition among enterprises. However, this requires us to develop technology.

6.2.2. Technology
Regarding the challenges faced by the development of cloud tourism technology, we believe that there are three important factors. The first is research and development funding, the second is researchers, and the third is advocacy. For a new topic, the investment of research funds is indispensable, and at the same time, researchers must spend a lot of energy, but what we lack now is funds and talents. In the end, our subsequent investigation and research showed that in the face of the current situation where most people cannot go out due to the epidemic, we want to change the traditional way of travel. If we want to make money from this product, we must do a lot of public to let our customers know. And learn about our products.

6.2.3. Government policy support
As a large tourism organization, we have to cooperate with the government in many cases. Therefore, if we want to develop cloud tourism, we cannot do without the government's policy support. We need support from government policy.

7. Last Analysis and Challenges

7.1. Analysis

7.1.1. Revenge tourism
Due to the impact of the epidemic, people cannot go out freely, which has hit the development of tourism and related industries. However, with the passing of time, the situation of the epidemic gradually slows down and the restrictions are gradually relaxed, so that people's yearning for the outside world can be satisfied. Therefore, in order to make up for the regret of not being able to go out during the epidemic, people will travel more and more under the slowdown of the epidemic policy, which is revenge travel.

Generally speaking, revenge travel will bring abundant profits to the tourism and related industries, but the past experience tells us that the traditional travel methods have many shortcomings. For example, due to the large-scale travel behavior, many scenic spots will be crowded, which greatly reduces the travel experience of the tourists, so that they can not maintain the enthusiasm for travel, which will lead to the decrease of the enthusiasm of the tourists to travel, can not make them maintain interest for a long time, and reduce the future profits. To this end, we have made a new travel plan for tourists to choose from.

7.1.2. High-end customized travel
In order to continue to maintain tourists' interest in travel, we will address the reasons for tourists' decreased enthusiasm in the following aspects:

Excessive tourist flow will greatly affect the experience of tourists and even destroy the environment of the scenic spot to some extent. Therefore, our company will first explore new tourist attractions to provide more choices for tourists.

We will raise the threshold of our customized travel and shift our audience group to middle and high income groups. Although we sacrifice the income of low income groups, we will ensure the future income of middle and high income groups.

We will reduce the size of travel groups to further reduce the problem of overcrowding.

High-end customized Tours bring better experience to tourists, which can change tourists' bad impression of travel companies.

It can provide more job opportunities for local people.

7.1.3. Cost
Developing more scenic spots requires cooperation with relevant departments and there will be costs and expenses.

High-end customized Tours require more talent, as well as the hiring of local guides, which requires more expenses.

7.2. Challenges
We have identified four challenges for customized Tours: the pandemic, the difficulty of finding partners, tourists' stereotype of tour groups and their reliance on the Internet.
The first point is that during the epidemic period, people's travel is not convenient, which will pose a great challenge to our customized tour, because we need to consider not only the epidemic situation at the departure point of tourists, but also the epidemic prevention policies at our tourist destinations. This means that our company needs to put more effort into protecting the safety of our tourists and minimizing the impact of the pandemic on their travel. Here is a comparison of Chinese tourists before and after the outbreak, and we can see that there is a significant decline.

The second point is that it is difficult to find a partner, because the concept of customized tourism proposed by us is relatively new in China, so it has not been really practiced in the market. The primary purpose of cooperation between the two companies is to make profits, but we are related to tourism after all, so in the context of the epidemic, we want to find corresponding hotel and catering companies to cooperate with. It takes time to negotiate. In addition, because we are customized tourism, our target group is people who have high requirements for tourism, so when we choose partners, we must also ensure their excellent service attitude and quality. Take the hotel as an example. Maybe we need to find some good five-star hotels to enhance the tourists' accommodation experience. However, those companies usually have a strong sense of worry. The third point is the tourists' inherent impression of tour groups. According to my survey of people around me, most of them don’t like to travel with tour groups. I have also summarized two reasons why people do not like to travel with tour groups. First, tour groups will increase a lot of extra burden, for example, some irresponsible and bad quality tour groups will force tourists to buy some irrelevant products. Second, for young people, group Tours may make travel very tiring, and they want to control their own travel time. So how to break these original problems is also our customized tourism will encounter the problem.

The last point is the current reliance on the Internet. The purpose of customized tourism we propose is to provide customers with the best travel experience, which also means that we need to respond to various needs of tourists, so we need to use the Internet when searching for information. Therefore, if we fail to coordinate within the company, some websites will publish some inaccurate information on the Internet. It will bring losses to travel agencies and tourists.

8. Conclusion

According to our analysis, innovation in the tourism industry has been a necessary measure in the epidemic era, which is not only what our company needs to do, but also what the whole tourism industry needs.

For our company, we have obvious advantages, such as loyal employees and customers who trust us, the innovative technology that we want to use has been developed and the price is reasonable, the two proposals proposed at present meet the needs of tourists, also the two proposals proposed by us are not widely used in the tourism market. I believe that these can be the pull factors in our development process.

But we cannot ignore the obstacles that may arise in the process of implementing innovative solutions. For example, in the development of cloud tourism, there may be technical problems, our solution is followed by other companies and appears in the market with a lower price. When launching customized tourism, many customers are reluctant to try new plans, customized tourism needs more and more professional staff, and the tourism destination does not meet expectations.

The most important point is one that was missing from our previous analysis: cost. Although our company made a lot of profits before, during the epidemic period, we had a series of fixed expenses such as employee salaries, company rent, and taxes paid to the government, which resulted in insufficient funds for the company to develop new projects. And both proposals require a certain amount of capital investment. For "cloud tourism", the first thing is to find a reliable technology company willing to cooperate. In this process, we need to spend a certain amount of money, and when signing a cooperation contract with them, we need to pay them a deposit to obtain technical support. In addition, the purchase of technical equipment to provide customer experience and the recruitment of new technical staff and logistics customer service to solve the problems in the operation process also require capital investment. It also takes money to advertise. What cannot be ignored is that our company wants to promote cloud tourism with the advantage of "low price", so it is not a short-term process to make back the money. For customized travel, there are also many places to invest money. For example, we need to make field visits to popular tourist destinations to know whether the selected destinations meet the needs of customers. We need some professional personnel or form cooperation with some local businesses. For example, tourists with the main purpose of taking photos need to be provided with photographer and post service, tourists with the main purpose of tasting food need accurate food experience report and evaluation, tourists with the purpose of experiencing local customs need to have good communication with local residents. Tourists whose main purpose is to enjoy the hotel need to have the report given by the hotel evaluator and so on. All these require our company to provide professional staff or cooperate with local businesses in advance, which requires time and money to prepare.

So for intrinsic and extrinsic competitive advantage that our company possessed. We should grasp this opportunity, uses the right management style, and continues to actively assume the corporate social responsibility. In this process, we should treat our employees fairly, strengthen our organizational culture, and appropriately allocate work content, so as to create a healthy and stable internal environment. At the same time, we also need to create unique programs and promotions to meet the needs of customers.

For the biggest problem of all: cost. I think there are viable solutions. First, we can use our wonderful reputation to make loans to banks, and seize the policy support given by our country to encourage innovation to obtain certain funds. Secondly, in the past two years, not only the development of tourism has entered a bottleneck period, but also the development of the hotel industry and the catering industry has entered a bottleneck period. We can cooperate with some high-quality hotels and catering companies, start cooperation with a lower capital, and continue to strengthen cooperation to obtain benefits, so as to obtain a win-win or multi-win situation.

Third, as a listed company, we should increase the publicity of the new plan, so that more shareholders are willing to invest in our company and more people are willing to buy our shares. Fourth, we can expand the business scope of our company, such as providing more types of tourism products, or attracting customers for additional consumption, so as to diversify the industrial structure of our company. In this way, we can not only make more profits, but also prevent
our company from losing money again when encountering uncontrollable emergencies in the future. The parent-child family travel mentioned in the supplementary part is a group with a complex consumption structure, which also confirms that diversifying the industrial structure is a feasible plan.

From the comprehensive analysis of advantages, disadvantages and costs, the solutions of "cloud tourism" and "customized tourism" proposed by us are feasible, but they need time and money. However, our company has a certain foundation and the status of the tourism industry is constantly improving. Therefore, I believe that as long as we actively practice our plan and constantly correct and improve the problems, our company will surely achieve success.

References


