

Analysis and Modelling of the Chinese Tourism Sector Response to the COVID-19 Pandemic (Ctrip Case Study)

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Author Details
Hrysenko Maryna ^{*1} , Pryiatelchuk Olena ² , Shvorak Liudmila ³ and Zayats Olena ⁴
Authors Affiliations
1Department of General Mathematics, Faculty of Mechanics and Mathematics Taras Shevchenko National University of Kyiv, Kyiv, Ukraine
2Department of International Business, Institute of International Relations Taras Shevchenko National University of Kyiv, Kyiv, Ukraine
3Department of World Economy and International Economic Relations, Institute of International Relations Taras Shevchenko National University of Kyiv, Kyiv, Ukraine
4Department of International Economic Relations, Uzhhorod National University, Uzhhorod, Ukraine
Corresponding Author*
HRYSENKO MARYNA
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Abstract: With the support of the original theory, through the tracking and analysis of the case enterprise Ctrip in the background of the COVID-19, this paper tries to summarize the tenacity composition of Chinese tourism enterprises, analyze the mechanism of its tenacity, and sort out the measures that Ctrip has won the recognition of users and the market, to provide reference for Chinese tourism enterprises to deal with the crisis in the future.

Keywords: tourism, public health crisis, COVID-19, Ctrip Travel Company.

INTRODUCTION

Tourism itself has the characteristics of cross region and enjoyment. Safety is the first factor for travelers to consider. If they perceive the risk of destination, it will affect travelers' travel choice. At the beginning of this century, the problem of tourism crisis began to get the attention of domestic scholars and has been a lot of research and discussion in the field of tourism security research (Wang Xinjian, Zheng Xiangmin, 2011). In 1994, the world tourism organization defined the tourism crisis as: "Any event that may threaten the normal operation and behavior of tourism related industries; any event that damages the overall reputation of the tourism destination in terms of safety, attraction and comfort by negatively affecting tourists' views on the tourism destination; in turn, any event that leads to the decline of local tourism and tourism economy and interrupts the continuity of local tourism and tourism business operation due to the reduction of tourists and expenditure". Gu Huimin (2007) believes in the research on tourism crisis management those unexpected emergencies affect the normal operation of the industry and have a negative psychological impact on both tourists and destination operators. Such events can be called tourism crisis. Such events are inevitable, diverse, and recurring. They may be natural disasters or man-made disasters. Even indirect factors such as economic fluctuations, exchange rate impact and technological change may affect tourism security and produce a crisis.

Pandemic of COVID-19 and Tourism

Epidemic of COVID-19 Became a Serious Reason for Developing and Implementing the Risk Management Policy Both in China and All Over the World.

On January 20, 2020, the COVID-19 was confirmed to be able to spread among people. The promulgation of a series of decrees made the

reduction of personnel mobility, home stay, isolation and "city closure" the main anti epidemic measures. The flow of people that the tourism industry depends on stopped abruptly. In addition to the cooperation of the anti epidemic policy, it is more people's panic.

Moreover, it began to spread all over the world. It took only 11 days to announce the conclusion of "global pandemic" from the risk level defined as "very high". From the beginning of March 2020 to the end of January 2021, more than 100 million cases have been diagnosed and 2.14 million cases have died in the world. The impact of the epidemic on the world in the future may be difficult to predict. From the economic level alone, it has far exceeded the financial crisis over the years. At the same time, people's thoughts and values, national culture and spirit, differences and cooperation between countries are being tortured.

In the face of the changing world situation, China has adopted the policy of "releasing input and preventing rebound inside", gradually liberalized control and restored the economy.

Ctrip Travel Company - case

Ctrip is the case enterprise of this study. It is one of the most profit-making enterprises at Chinese tourist market. Its case of crisis management could be interesting for the future forecasting and planning such kinds of ante crisis measures. The high viscosity, loyalty, repurchase rate brought by user satisfaction and the market value and P / E ratio of the long-term market are the final embodiment of whether the enterprise model, strategy and cultural positioning are suitable or not. In the epidemic response stage, in the face of the rapid outbreak of high order rejection, complex epidemic changes and highly uncertain future environment, Ctrip's blocking, and a series of measures have achieved the double growth of user satisfaction and Q2 financial report.

When predicting the operating revenue in the first quarter of 2020, Ctrip has made preparations for a year-on-year decline of half and a loss of about 1.8 billion. Finally, the actual revenue in the first quarter was 4.7 billion, a year-on-year decrease of 42%. If the compensation of 1.2 billion was "basically leveled", it exceeded the expected level. In the second quarter, the domestic epidemic was basically controlled, and the Qingming and May Day holidays were ushered in. Finally, the net operating income was 3.2 billion, the net loss narrowed by 91% and the operating loss rate narrowed by 10% month on month. The business highlights are mainly in the following two aspects: first, good achievements have been made in domestic business and Gaoxing Hotel: accommodation reservation revenue increased by 9%, domestic air ticket reservation recovered by 100% year-on-year, short-distance travel reservation increased by 20% year-on-year, business travel management revenue increased by 29%, the number of Gaoxing hotels distributed by Ctrip group increased by more than 10% month-on-month, and the number of hotel reserved rooms increased significantly month-on-month. The number of nights between Gaoxing hotels increased by double digits year-on-year. Second, it has also performed well in terms of content, technological innovation and drainage: in the live broadcasting room where Mr. Liang Jianzhang personally brought goods, the performance of 1.7 billion yuan Gmv is not bad. With the blessing of personal IP, it has gained more than 100 million people's cumulative viewing, the efficiency of Online customer service instant messaging system has

increased three times compared with last year, and the investment in product development has increased by 6% month on month, In the strategic cooperation with jd.com, it has obtained 8 million enterprise users and nearly 400 million quality users. It can be said that Ctrip completed the counter attack in the second quarter, leading the global tourism industry.

Crisis Response Mechanism

In the resilience performance of the case enterprise, organizational leadership, organizational culture, organizational learning and organizational resources are important resilience elements. Organizational leadership is like the neck force of the organization to lead the direction, organizational culture is like the waist force of the organization to act firmly, organizational resources are like the physical strength of the organization to maintain development, and organizational learning is like the brain force of the organization to adhere to innovation. These factors lay the foundation of enterprise resilience. At the same time, enterprises also need innovative methods and actions, rapid decision-making actions at critical moments, and enterprise leaders to take the lead to the front line when the crisis comes. With these specific strategies and actions, resilience can be promoted. Only by taking resilience as the basis and premise and strategy and action as the guarantee and result, can we finally become a resilient organization and achieve the strategic goal of the enterprise.

C.I. Organization Culture Culture is the logic that affects the bottom thinking of people and organizations. It is the remote control that affects the decisions of people and organizations at critical moments. Ctrip's organizational culture is reflected in continuous attention to lasting construction and firm implementation at critical moments. People are the foundation of all cultures, the core of the transmission and implementation of all products, systems and ideas, and the most stable certainty for enterprises to resist all uncertain factors. For enterprises, the people they face are not only users, partners, but also internal employees. Attention is not to seek help when the crisis occurs, nor to share in the good times of the enterprise, but the consistent attitude of the enterprise. It regards everyone in the enterprise chain as the basis of the enterprise's life and the community of destiny for the development of the enterprise. Such a concept should not only be established at the top level of the enterprise, but also build a consensus at every level of the enterprise. Only through internal and external recognition can we ensure that the action is not deformed and the communication is not out of shape at the critical moment.

Enterprise resilience elements		Crisis response strategy	
Organizational leadership	Firm strategy, strengthen implementation, unite the team and set an example	Early stage of epidemic	Protect the interests of customers, stabilize salaries, protect employees, and quickly develop online systems
Organizational culture	Values, enterprise spirit, institutional culture	Outbreak period	Start the guarantee fund for major disasters, start the partner guarantee plan, etc
Organizational learning	Inherit experience and maintain innovation	Normalization of epidemic situation	Epidemic store care plan, online public welfare courses, boss live broadcast, etc
Organizational resources	Brand resources, capital resources, human resources, information resources, relationship resources		

C.2. Organizational leadership is like the compass of an enterprise, pointing out the direction in a vague environment; Organizational leadership is also like the sea setting needle of an enterprise, stabilizing people's hearts in the storm. The biggest characteristic of the crisis is uncertainty. Enterprises and organizations cannot predict the time, type and scale of the crisis. The moment of crisis and disaster is the moment when the direction of the enterprise is unclear and rough. At this time, only the organizational leaders have the courage to take responsibility can promote the unity of the upper and lower levels to resist the crisis, and only taking the lead can win trust and follow.

In the outbreak stage, Ctrip also encountered a large number of customer unsubscribes and cash flow problems. In the face of employees, Liang Jianzhang, chairman of Ctrip's board of directors, and the senior management team started zero salary and half salary measures, abandoning their own earnings to protect employees' wages; In the face of partners, a series of measures such as Ctrip's refund of early fees, reduction of store tasks, advance refund fees in the early stage and loan support in the later stage are also practical actions to give up its own interests to solve the difficulties of partners and ensure the survival of partners. The courage to take responsibility at these critical moments not only preserves the advantageous resources of the enterprise, but also enhances the confidence of employees and partners. At this time, the rare confidence is the greatest internal force to resist the crisis.

C.3. Innovative abilities of organizational learning. Limited processing time is a major feature of facing the crisis, and the uncertainty of real-time changes in the environment makes there is no fixed scheme and method for dealing with the crisis. Innovation and dynamic management ability are the dual cores of dealing with crisis, and innovation is also the premise and foundation of dynamic management ability. If you blindly stick to the rules, it is equivalent to stifling the creativity of the enterprise and making the enterprise have no ability to cope with the challenge, which is equivalent to being caught in the face of the crisis. Therefore, in the face of crisis, only by adhering to the

principle, but changing the way, moving with the trend and changing randomly, can we quickly and quickly force the problem.

D. Digital transformation of the organization

As an OTA enterprise, Ctrip has a natural digital attribute, which is also a unique advantage different from traditional tourism enterprises in the time zone of the crisis. The construction of enterprise digitization has become the background of the times, the competitive conditions of enterprises and the common needs of service users. The change of technology brings infinite possibilities, and the development of the times will only roll forward. Enterprises will face many unknowns in the future, but the transformation of digitization is an urgent need and indisputable fact. In terms of the background of the times, China's four decades of reform and opening up, from agriculture and industry to today's information industry, has developed with each passing day. The 2020 world digital economy conference was held in Ningbo. It can be said that in the information age, China's 5g, artificial intelligence and other technologies have been the world's leading. In such a background, digital transformation is no longer the choice of enterprises, but the only way out. Information technology and network technology mean a faster, linkage and transparent business environment, and also bring the improvement of user needs. During the COVID-19, the online economy rose instead of falling. "Cloud tourism" and "online live broadcasting" are new windows for service Tourism without going out of the home. As the representative of Ota, Ctrip has advantages in digitization, but it has done enough work in local innovation and rapid response: the rapid launch of self-service unsubscribe channel, the launch of global emergency rescue platform, and the innovation of live pre-sale mode. The launch and operation of all projects not only represent the digital level of Ctrip hardware and system, but also the embodiment of Ctrip people's digital thinking.

The Monte Carlo method (Pritsker, 1997; Sun & Hong, 2010) was used to mathematically model the consequences for supply and demand of travel company Ctrip, which is an example of a crisis management company affected by COVID-19 shocks. Such analysis

made it possible to form different mathematical scenarios of tourism market (Italo Arbulú & Razumova & Rey-Maqueira, 2021) as well as understand and quantify the potential consequences of crisis management. This experience may be interesting for future forecasting and planning of pre-crisis measures. By analyzing all indicators of growth and development of Ctrip in different scenarios it is possible to resume that its resilience factors release the ability to cope with contradictions at different stages of the crisis.

CONCLUSION

This paper demonstrates the elements of enterprise resilience in different stages of crisis and the action mechanism of each element on enterprise action, market feedback and enterprise strategy. In the study of resilience, it is a basic consensus that resilience is a kind of ability that can resist the impact of crisis and make the organization rebound. At the same time, the role of resilience is a dynamic process, which changes with the changes of internal and external environment. The elements of resilience include not only tangible organizational assets, human capital, social network, but also intangible organizational culture, leadership practice, information management, etc. in the practice of crisis response, whether all elements work at the same time or focus in different periods. At the same time, through what channels do the elements of resilience act on the market to complete the strategy? After combing all the performances of the growth and development of enterprises in this case and their response to the epidemic and recovery of the epidemic, we come to the conclusion: only by keeping the innovation ability of enterprises can they face all unknown crises and changes; in the stage of crisis outbreak and normalization, the corporate culture and leadership action in the elements of resilience are more important respectively; resilience factors release their ability to deal with the contradictions in different stages of the crisis. Appropriate measures can form positive market feedback and help achieve the strategy. Taking this study as an example, from the initial stage of the epidemic to the outbreak stage, the comprehensive and concentrated outbreak of the crisis, panic and bullshit are the main characteristics of this stage, which requires

extremely rapid response and concerted resistance. At this time, it cannot be solved by the strength of a few people, and there is no space for meetings, discussions and hierarchical communication. A long-term and firm corporate culture will condense the strength of all people and form an instant consensus on attitude. Correct and rapid actions are easier to win users and the market in special times.

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