PRIMARY RESEARCH

# Double-loop strategies of Uber, Lyft, and Didi during COVID-19

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**Abstract**

This paper explores the business strategies of car-sharing platforms between 2020 and 2021 during the COVID-19 pandemic. The study conducted a systematic review and adopted a double-loop learning approach; it analyzes 217 online articles concerning Uber, Lyft, and Didi to demonstrate Safety, Scan, System, and Internal Support as Single-loop strategies, and the other Spread and External Support to composite the Double-loop strategies. The findings suggest that developing safe riding experiences, identifying and reducing threats through technology, realigning culture/structure through financial/community support, and expanding delivery services are necessary strategies to combat the pandemic. These new normal would provide managerial and policy implications on how businesses in the sharing economy sector adapt to the radical and dynamic environments.

## INTRODUCTION

The Coronavirus disease 2019 (COVID-19) has become one of the most devastating diseases that have impacted the world economy and human health in the 21st century. The WHO reported more than 326 million COVID-19 confirmed cases worldwide as of January 18th, 2022.

Since the outbreak in March 2020, hundreds of nations have been locked down, thousands of flights canceled, millions of people infected, and billions of people's lives and jobs affected owing to this pandemic. While the health and medical industry thrived during the pandemic, most tech, tourism, and conventional industries declined.

In 2009, the launch of Uber and the concept of car-sharing and e-hailing were considered a radical innovations, which introduced the term Sharing Economy (SE) and gained popularity based on lowering travel costs, easing traffic congestion, and reducing emissions. The SE has also improved people's access to several services and products in the transportation, housing, finance, delivery, lifestyle,

and technology industry (Gazzola, 2018; Lin, Zhang, Yan, & Jiang, 2020). However, the radical innovation of SE was still affected by the radical disruption of the pandemic, and business owners are trying to find the right antidote within a short time.

Although previous literature focused on the radical innovations and strategies that businesses use to reach emerging customers and markets (Benner & Tushman, 2003; Brettel, Oswald, & Flatten, 2012; Shahbaz, Jam, Bibi, & Loganathan, 2016). There is a scarce of literature focusing on how SE industries adapt to sudden and radical environmental changes such as COVID-19 or Severe Acute Respiratory Syndrome (SARS).

To address this research gap and investigate the impact and strategies of SE during such crises, this paper adopts double-loop learning as a guideline to examine the business strategies of the three car-sharing firms (Uber, Lyft, and Didi) during the COVID-19 outbreak between 2020 to 2021. The perspective of double loop learning in adaptive

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management can help address the uncertainty about the processes influencing resource dynamics, as well as the elements of decision-making itself (Khan, Jam, Akbar, Khan, & Hijazi, 2011; Williams & Brown, 2018). What kind of uncertainty the car-sharing firms encounter during the pandemic, and what decisions were made when dealing with these uncertainties? This paper aims to answer these questions.

## Theoretical Background

The Double-loop learning theory Argyris (1977) in adaptive management entails the modification of business goals or decision-making rules in the light of experience. Unlike Single-loop learning which refers to the fact that the organization tries to solve the same problem and fails repeatedly and still does not change the solution or business goal, Double-loop learning points out that the way firms define problems and goals may itself be a source of the problems. Double-loop learning is corrective, instrumental, incremental, sequential, or improvement-oriented (Swieringa & Wierdsma, 1992). It occurs when an individual, group, or organization questions the values, assumptions, and policies that lead to action and helps managers spot and correct mistakes (Argyris, 1977). It could also facilitate changes in the workplace, including cultural changes (Ahmad & Waheed, 2015; Nyström et al., 2018). In terms of innovation, double-loop learning emphasizes constant experimentation, produces systematic rather than fragmented thinking, arouses the desire to think beyond the accepted limits of the problem, and poses questions about the "why" (Argyris, 1990; Lant & Mezias, 1992; Swieringa & Wierdsma, 1992; Waheed & Kaur, 2016) are all important processes necessary for radical innovation needed to combat the pandemic. The continuous process of redesign, realignment, and re-examination of business strategies in double-loop learning is also supported by the perspective of Dynamic Capabilities, as they address the need for businesses to sense, seize, and transform (Teece, Pisano, & Shuen, 1997; Waheed, Kaur, & Kumar, 2016). Enterprises need to foresee the future and implement strategic transformation. It is a process in which the company readjusts or reshapes its competitive advantages, increases its social value, and ultimately achieves a new corporate form. During turbulent economies and dynamic environmental changes, the ability of a business to react to these changes is crucial for survival and sustainability. Therefore, under the notion of double-loop learning and dynamic capabilities, the ability to analyze, foresee, and control transformation risks are critical to the business transformation for any firm in a dynamic environment.
As variants of Corona virus continued to evolve, from Al-

pha, Delta, to Omicron, we proposed the following research questions to guide this study as follows:

**RQ 1**. What single-loop strategies were adopted by the three car-sharing firms during COVID-19?
**RQ 2**. What double-loop strategies were adopted by the three car-sharing firms during COVID-19?

## METHODOLOGY

This study applied a systematic review, which involves a critical and reproducible summary of the available publications on a particular topic or clinical question (Linares-Espinós et al., 2018). The review included searching and reviewing news articles and published journals on any business strategy for Uber, Lyft, and Didi during the COVID-19 period. Adapted from (Denyer & Tranfield, 2009), there are five steps to conduct a systematic review: research question formulation, sourcing of relevant literature, selection and evaluation, analysis and synthesis, and reporting and use of findings.

The search strategy was comprehensive, involving several combinations of keywords such as "Uber COVID-19, Lyft COVID-19, or Didi COVID-19" in Google search engines; The search met the following criteria: dealt with Uber, Lyft, or Didi; dealt with their marketing and business strategies relating to COVID-19; and included published articles, journal articles, or research articles between March 2020 and August 2021. Google's Safe search function was turned on to minimize irrelevant content and display the most relevant results. Using SEO quake, an SEO metrics tool, 648 online articles on Uber and COVID-19 ($n = 242$), Lyft and COVID-19 ($n = 226$), and Didi and COVID-19 ($n = 180$) were obtained. After filtering out unrelated content, 291 online articles on the marketing strategy and issues of Uber, Lyft, and Didi during COVID-19 between March 2020 and August 2021 were screened and categorized.

The process of analyzing data was performed following a data-reduction process Ridder (2014) and summarized into a case study. Then, a cross-case analysis was performed to identify common patterns and differences between the three car-sharing firms and compare them with the extant analyzed literature. The common patterns are assembled to illustrate the findings of this research.

## RESULTS AND DISCUSSIONS

Based on Uber, Lyft, and Didi's strategies during the Covid-19 outbreak between the year 2020 and 2021, this research proposes Safety, Scan, system, and Internal Support as their single-loop strategies, and Spread and External Support to composite the double-loop strategies.

## Single-Loop Strategies

During the pandemic, various health policies, as advised by WHO, were implemented to prevent the spread of the disease. Therefore, all three firms have taken preventive procedures to ensure the Safety of drivers and passengers. Uber and Lyft have temporarily shut down share and pool services to combat the spreading of Corona virus. Because ride-sharing involves strangers sitting side by side, and the spread of the Corona virus only takes minutes of exposure, Didi has started to install protective sheets in its ride-hailing vehicles between driver and passenger seats across China to reduce physical contact.

Strict hygiene implementations are enforced, and all drivers and passengers are required to wear masks during the ride. To Scan the identity and make sure no one is breaking the rule, Uber and Didi have asked their drivers to take selfies with the real-time ID check or selfie feature of the app. Before riding or driving a Lyft vehicle, drivers and passengers must declare they are symptom-free and follow CDC guidance, including wearing a face mask even if vaccinated. Though it is not real-time, they will need to take a selfie with a mask on before driving or riding with Lyft again. DiDi's engineering team also launched an in-app information hub to provide COVID-19-related resources for users and drivers. Hygiene supplies, including masks and sanitizers, are also being provided to drivers and drivers to make sure all riding experiences are safe and virus-free. These protocols, whether technological innovation or physical implementation, are all considered the scheme of Scan to identify threats and risks.

To ensure the safety of the delivery partners, a cashless payment system also became a solution for the three car-sharing firms to lower the risk of physical contact. For example, Uber's rides and Uber Eats' services accepted only contactless payment options such as credit/debit cards through their app or Google Play. For Didi, passengers in China can pay via WeChat pay or Alipay. To provide psychological peace of mind to drivers during the COVID-19 outbreak, providing financial support is another strategy for the three car-sharing firms to secure their fleet. Uber offers financial assistance to driver-partners taken off the road. Any driver or a delivery person diagnosed with COVID-19 or who is individually asked to self-isolate by a public health authority will receive financial assistance for up to 14 days while their account is suspended. Lyft also provides funds to drivers should they be diagnosed with COVID-19 or put under individual quarantine by a public health agency. A special aid Fund of up to $10 million dollars is also issued by Didi for drivers and delivery men affected by the virus. Ad-

ditional financial support has been implemented for drivers over 65 and a support fund with up to 28 days of earnings if a direct family member of the driver or delivery person is diagnosed with Covid-19

## Double-Loop Strategies

Although the single-loop strategies of Safety, Scan, System, and Internal Support are ways to minimize the risk of infection and ensure a virus-free riding experience, nevertheless, unfortunately, they did not positively contribute to the firm's financial performance. With a radical decline in the demand for car-sharing during the COVID-19 outbreak, Uber, Lyft, and Didi had to inevitably reduce their costs to survive. According to the Wall Street Journal, Uber laid off almost 10,000 employees on March 6th, March 18th, and May 18th 2020, and closed some offices worldwide. Lyft also announced its layoffs plan by reducing employee count by 17% (982 employees), furloughing an additional 288, and reducing executive leadership salaries by 30%, vice presidents by 20%, and all other employees by 10%, while Lyft board members would forgo 30% of their cash compensation for the second quarter of 2020.

While layoff is inevitable, given the fact that car-sharing and ride-hailing services are being affected due to the fear of infection, Uber, Lyft, and Didi still have to find alternative solutions to generate revenues for long-term business development as the pandemic may be a "new normal." Hence, we add spread and External Support to composite the double-loop strategies.

spread refers to business or service expansion. Since there is an upsurge in demand for contactless delivery, following the third layoff on May 18th, 2020, Uber decided to acquire postmates, an American company that offers local delivery of restaurant-prepared meals and other goods, in an all-stock, $2.65 billion deal to boost Uber's delivery services and its current Uber Eats Food Delivery service. Didi completed a $US500 million fund raising round for its autonomous driving subsidiary, and in June 2020, it started on-demand logistics services in the Chinese cities of Chengdu (20 million population) and Hangzhou(10 million population). Lyft, on the other hand, does not have its own delivery service, so its strategy focuses on reducing costs such as supply, marketing, driver acquisition, and other incentives.

Several studies have investigated the relationship between corporate performance and layoffs. Chen, Mehrotra, Sivakumar, and Wayne (2001) found improved profit margin and labor productivity following layoffs and that a layoff decision is a rational response to ensure corporate survival.

Hellerstein, Kutzbach, and Neumark (2019) mentioned that local labor market networks increase reemployment following mass layoffs and that networks serve to markedly increase the probability of reemployment, specifically at neighbors' employers. Together with the stock price of Uber between January 2020 and June 2020 figure 1, these studies have demonstrated the importance of layoffs to ensure a firm's long-term survival. After Uber announced its second layoff on March 18, 2020, its stock price regained momentum and continued to rise. As Uber witnessed a growing demand for delivery service during the pandemic, we believe the layoff was one strategy to save costs to prepare for future mergers and acquisitions, which occurred in the deal between Uber and Postmates.
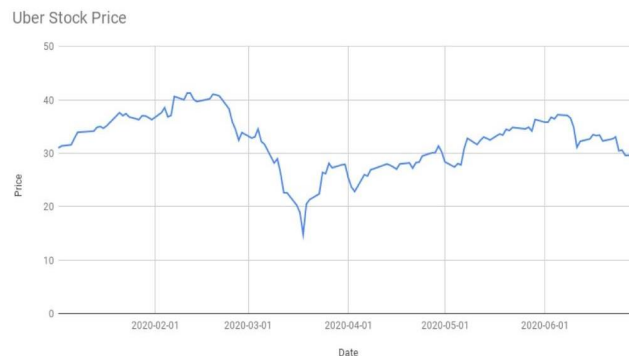


**FIGURE 1.** Uber stock price before and after the layoff

Nevertheless, as COVID-19 vaccines become available, getting as many people vaccinated is important. Therefore, providing External Support, especially free rides to vaccination sites, are the other double-loop strategy as it also ensures the safety of all drivers and passengers. And as more people are vaccinated, it helps reach the goal of herd immunity and bring everyone's life back to normal. On May 11th, 2021, U.S. President Joe Biden announced a partnership with Uber and Lyft to provide free rides to COVID-19 vaccination sites. As part of Biden's election campaign to help meet his target of 70% of U.S. adults getting at least one vaccine shot by July 4th, Uber and Lyft have implemented this initiative to help reach the White House's goal. Didi also launched its vaccine distribution plan, and a $10 million global fund was used to reduce the fees for passengers going to vaccination appointments in eleven countries where Didi operates. An additional "Didi Hero" program was created to provide free or discounted rides and meals to more than six million front line medical and healthcare workers globally.

Table 1 displays the number of articles relating to the strategies of Scan, Safety, System, Support, or spread of each firm. Out of 217 articles, 35% ($n = 75$) were about External Support, specifically related to how each firm provided free or discounted rides for people to get vaccinated. 29% ($n = 63$) were related to safety and how each firm implemented various hygiene protocols to ensure safe and virus-free riding experiences. 17% ($n = 37$) focused on Internal Support and specifically on financial support to the firm's drivers. 10% ($n = 21$) were about spread and business/service expansion of the three firms following layoffs. Last, 6% ($n = 12$) were related to the use of technology to reduce risk (i.e., cashless payment), and 4% ($n = 9$) were related to the use of technology to identify risk (i.e., real-time ID verification). Based on the above strategies conducted during the COVID-19 outbreak, we propose the conceptual framework of the single and double-loop strategies, as illustrated in figure 2.

**TABLE 1.** Number of articles relating to the Strategies of Scan, Safety, System, Support, or Spread

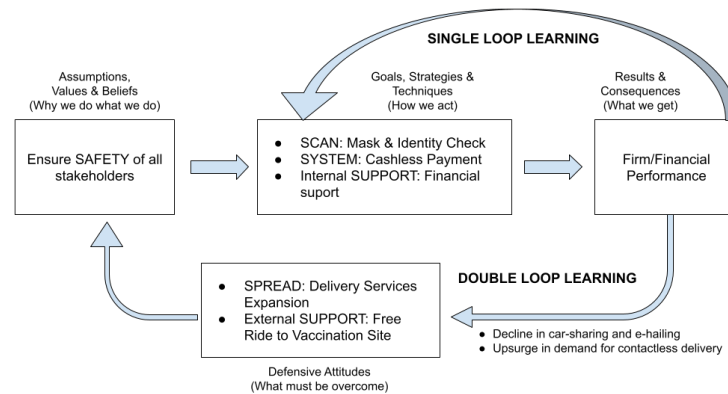|  | **Single-Loop Strategies** | | | | **Double-Loop Strategies** | | |
|---|---|---|---|---|---|---|---|
|  | **Scan** | **Safety** | **System** | **Internal Support** | **External Support** | **Spread** | **Total** |
| Uber | 4 | 31 | 7 | 11 | 38 | 13 | 104 |
| Lyft | 0 | 18 | 3 | 7 | 29 | 1 | 58 |
| Didi | 5 | 14 | 2 | 19 | 8 | 7 | 55 |
| Total | 9 (4%) | 63(29%) | 12(6%) | 37(17%) | 75(35%) | 21(10%) | 217 |

**FIGURE 2.** Conceptual framework: Single-loop and double-loop strategies of the three car-sharing firms

## CONCLUSION

This research aims to discover the business strategies of the three car-sharing firms (Uber, Lyft, and Didi) to combat COVID-19 outbreak during 2020 and 2021. With systematic review and the perspective of Double-loop learning theory, the analysis of 291 online articles demonstrates Safety, Scan, System, and Internal support as Single-loop strategies, and the other spread and External Support to composite the Double-loop strategies.

Results and managerial implications show that providing a virus-free safe-riding experience is the top and initial priority for the three car-sharing firms during the pandemic. Various health implementations such as providing hygiene kits, installing partitions or protective sheets between drivers and passengers, enforcing wearing masks, and using the latest real-time ID verification technology to ensure that drivers have worn their masks, have become the necessities to prevent the spread of the virus for the three giants. Using cashless payment also reduces physical contact and the risk of infection during the ride. Furthermore, providing financial support to drivers diagnosed with COVID-19 or put under individual quarantine by a public health agency is another way to provide psychological peace of mind and secure the workforce, as drivers are the main assets of the three car-sharing firms.

However, as car-sharing and e-hailing continued to decline during the pandemic, firms need to take necessary actions to ensure business continuity. While layoff is inevitable, given that Uber and Lyft have all laid off some of their em-

ployees, it is a strategy for the necessary business transformation due to the declining demand for car-sharing and e-hailing services. spread is another double-loop strategy after a firm confirms a new service or business expansion during or after the pandemic. Uber's acquisition of Postmates and Didi's expansion into delivery service are examples of spread to generate revenues in light of the pandemic. Finally, to help more people reach herd immunity, providing free or discounted rides to vaccination sites is another strategy to enhance Safety.

## LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This study has limitations. First, owing to time constraints and limited research articles concerning the recent COVID-19 outbreak, several articles chosen for this study came from news articles and Uber, Lyft, and Didi company websites. Future studies can examine non-research articles regarding Uber, Ola, Grab, Lyft, and Didi to allow more in-depth analysis to strengthen the "S" single and double-loop strategies. Second, an early study on dynamic capabilities did not consider that a pandemic lifestyle may become a new normal. Moreover, there is a scarcity of research on how businesses should react to this sudden and interrupted lifestyle for sustainability. Therefore, future research can include a quantitative analysis of various industry cases to strengthen the idea of the double-loop strategies. We hope this study and the perspective of Uber, Lyft, and Didi's double-loop strategies can attract further attention from practitioners and researchers.

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