



The Impact of Covid-19 pandemic on Uber's ridesharing activities

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Abstract

The recently hit Covid-19 pandemic has impacted the sharing economy platforms globally. The adversely affected ridesharing services by one such platform- Uber has been discussed in this research. For the current research, multiple information channels have been studied including the previous related literature. To validate the collected data, interviews are conducted with 2 Uber drivers and 4 Uber riders to analyze the overall impacts of Covid-19 on Uber riders and drivers. For analyzing the data, the Narrative Data Analysis method is used on the data collected in the form of statements by these interviewees. The reliability of data has been assured by cross-checking the results with the previous literature. A 9-themed framework including anxiety, cancellation, job loss, income reduction, social distance, hygiene and safety, backlash, overcoming strategy, and outcomes have been adopted to analyze these impacts on Uber drivers and Uber riders. Results show that there has been anxiety among riders for non-availability of Uber services and drivers due to the non-availability of work. As many people have lost their jobs due to the pandemic, the demand for Uber rides has fallen adversely. This has consequently impacted the income of Uber drivers. Many Uber riders have also been canceling their rides due to the fear of being contaminated by the coronavirus during the rides. Some riders have also been involved in backlashes with the drivers for not wearing masks properly or not sanitizing the vehicles. Thus, as an overcoming strategy, Uber ridesharing services keep a strict check on the formulated norms like wearing masks during rides, keeping distance with the riders, installation of separators between the front and back seat, and sanitization of cars before every ride. Thus, these norms have become an integral part of ridesharing now without which Uber rides seems to be impossible during the Covid-era.

Keywords/tags (subjects)

Uber, ridesharing, sharing economy, ride, Covid-19 pandemic

Miscellaneous (Confidential information)

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1 Introduction

1.1 Background

Due to the recent Covid-19 outbreak, many businesses have been affected adversely. As per the reports by Markets (2020), not only the start-ups but highly established businesses have also seen a downfall due to this pandemic. This effect can not only be seen in just one region but has been affected globally. Numerous sectors have been affected adversely ranging from the travel and transportation sectors to hotels and hospitality sectors; every sector has seen a tremendous downfall. The start-ups that had envisioned to grow remarkably during the year 2020 have also seen a downfall to such an extent that it seems they may never rise again. According to Donthu and Gustafsson (2020), not only start-ups but established companies could also not be saved from its adverse impacts. One such highly reputed company- *Uber Technologies* has also seen a fall in its profits due to the ongoing situation in many countries. Pepić (2018) described that Uber Technologies Inc. is a sharing economy platform that offers ridesharing and delivery services. The company belongs to the Transportation and Logistics industry, and the whole transportation industry has been adversely affected due to the Covid-19 pandemic globally.

In the U.S., with millions of Corona Virus deaths, Uber Technologies has witnessed sharply declining sales. The situations are even worse for other major countries that mostly share Uber's sale percentages. As noted in a report by Mazareanu (2020), India, which has a huge network of Uber cars, has also witnessed a sharp decline in its sales due to the total lockdown that was imposed for almost 2 months. Considering an average, 2 months' sale of Uber, the loss is quite high. Similar trends are seen in almost every country where Uber runs. These falling profit rates have also impacted many other major companies not only in the transportation sector but also in almost every sector in the world. The Transportation sector being grossly affected, Uber's rival- '*Ola*' has also witnessed similar trends. These situations have triggered a fall in market shares of the companies and overall low in the stocks can be seen globally.

Considering the current situation, Uber is not specifically facing a crisis but has been facing difficulty in maintaining its sales. The way how Uber will rise again from this crisis is yet to see when this pandemic ends but the current statistics by Markets (2020) determines Uber Technologies is certainly not in its best positions compared to its wide spectrum of the consumer base in numerous

countries around the globe. The current research focuses on analyzing the impact of Covid-19 on Uber's ridesharing activities.

1.2 Motivation for the Research

After the global crisis of 2008, this Covid-19 Pandemic has again hit the markets adversely (Markets, 2020). A wide group of people would be interested in reading more about how companies got affected due to this pandemic! Similarly, this topic motivated me, and Uber Technologies being one of the prime transportation companies all over the world, I chose to study the impact of the Covid-19 pandemic on Uber's ridesharing activities.

Societal motive

Not only me, but this study would also serve as an important piece of work for many researchers because it highlights how Uber Technologies got affected due to the pandemic and the terms in which it has affected its employees (Chakravarti, 2020). Knowing the ins and outs of a company's business model will certainly serve as fine research material for the learners in this field. These researches will aware the group of people about the way Uber Technologies works (Dudovskiy, 2018), how it is impacted due to the prevailing pandemic situation (Pant & Shende, 2020) and how has the company responded to this situation (Hossain, 2020).

Company motive

This research will be highly useful for studying the ridesharing activities and impact of Covid-19 on these activities by the 'Research and Development' departments of many sharing economy platforms (Hira et.al, 2017). Also, the conclusions made in this study will be helpful for such future researches in the Transportation sector. Besides, the findings of the current study can lead to making new policies or developing robust Sharing economy models in the future.

Personal motive

This research will enhance my knowledge base and applying my gained knowledge about certain concepts during this study will pave a way for my personal and professional growth during my

career in Business Administration. This recent topic would serve as a piece of research reference for the forthcoming students who wish to work on some similar topics.

1.3 Research Questions

The current research focuses on understanding the impact of the Covid-19 pandemic on Uber Technologies' ride-sharing services facilitated through Uber Pool (ridesharing, 2020). The problem statement for the research is stated as under:

Analyzing the impact of the Covid-19 pandemic on the ridesharing services provided by Uber Technologies Inc.

Studying the impact of Covid-19 on Uber's ridesharing services will need to study the Business Model of Uber, how the rides are allotted to drivers, and the way multiple people can share a common ride. Like one of the researches by Roy (2020), this study will analyze the possible impacts on its various value chain activities and entities like drivers and passengers. The ridesharing concepts will be studied in-depth and their reformulation of policies due to Covid-19 (Mahale, 2020), and the safety issues concerning this pandemic would also be studied to find out the ways the company is adopting to respond to this situation (safety measures, 2020).

This thesis will require studying what changes have this pandemic brought in the ridesharing activities and the actions the company is taking in response to this situation as noted in the research (actions, 2020). The Research questions for which the answers are to be found during this thesis is thus, formulated as:

1. How has the Covid-19 pandemic impacted Uber's ridesharing activities?
 - a. How has the Covid-19 pandemic impacted Uber drivers?
 - b. How has the Covid-19 pandemic impacted Uber riders?

To answer the questions of current research, qualitative methods of research will be employed. Diverse material related to the study will serve as a medium of qualitative data for the

research. Further, the collected data will be analyzed through the qualitative data analysis approach to find how Uber Technologies has been facing this pandemic that has halted their operations in many countries and how the services are being restored now in some by ensuring proper sanitation of the cars. This research will analyze the impacts of Covid-19 on the major components of Uber's Business Model by taking into account the instincts given by (impacts, 2020) and tends to find out how the pandemic has impacted the two most important consumers of Uber's ridesharing platform i.e. Uber drivers and Uber riders.

1.4 Structure of Thesis

The thesis report will be structured by beginning from Chapter-1 called "*Introduction*" including the background of the topic, motivation, problem statement, research questions, and objectives of the study. Chapter 2 called "*Literature Review*" includes the relevant studies concerning the topic to formulate the theoretical framework for carrying out the current research. Afterwards, Chapter -3 "*Methodology*" includes the research approaches and research methods for the current study. Further, in Chapter- 4 "*Impacts on Uber riders and drivers*", the findings and results for the impact of the Covid-19 pandemic are explained. Chapter -5 "*Discussions and Conclusions*" will present the summary of findings and the practical implications of this study, its limitations, recommendations, and future scope.

2 Literature Review

Uber Technologies, Inc. is an American Multinational Transportation Network (Pepić, 2018). This global brand in the transportation industry is studied widely by various researchers for its business model, pricing, revenue model, and current issues. These researchers have studied several different aspects of Uber Technologies. Hence, extensive material is available regarding the company at various platforms such as online Journals, Research libraries, and open resources in the form of research papers and analysis reports. For the current research, several research papers regarding Uber Technologies have been studied. Most of these researches are focused on the business model, value chain, revenue model, pricing model, ride-sharing, and sharing economy. During the Covid-19 pandemic, the ride-sharing services offered by Uber have been severely affected, and several kinds of research have been done recently related to the impact of Covid-19 on sharing economy platforms. The focus of the current research is on determining the

impact of Covid-19 on Uber's ridesharing activities. The following researches have been studied to get information about how Uber's ride-sharing services are affected. This literature review is attempted to get information about how Uber Technologies is impacted concerning its ride-sharing services due to the prevailing Covid-19 pandemic. These previous researches are used as a base to develop a framework to meet the research objectives of the current study.

2.1 Key concepts

The current section discusses the main concepts required to understand the operational system of Uber Technologies by learning about its Business Model in detail. Further, the value chain analysis of Uber's ridesharing services is studied from various previous researches to learn about the disruption in the value chain during the Covid-19 pandemic to understand the impact of this pandemic on the company's ridesharing services. After understanding the value chain of Uber, its revenue model and pricing model are studied in the pre-Covid-19 era to learn more about the results of these halted services. The way Uber earns profits and its success in the pre-Covid-19 era is discussed further. After understanding Uber's operations, revenue model, and pricing model, the impact of this pandemic on significant activities of Uber's ridesharing platform are studied. After studying the significant components of Uber Technologies' ridesharing services, the changes introduced in these ridesharing activities of Uber due to the Covid-19 pandemic are analyzed.

2.2 Uber's Sharing Economy

Sharing Economy is a platform that facilitates multiple users to create an account on an interface and exchange their products or services on that common platform in return for services or money (Pepić, 2018). Uber's ride-sharing economy is based on the two-way framework including riders and drivers who register themselves as users on Uber's Mobile App. The riders look for drivers with their cabs to commute and drivers on the other hand look for some riders to avail their cab services in return for money. Uber acts as a medium for connecting both parties.

Cetin (2017) had highlighted a new opportunity in the transportation industry with ride-sharing facilities provided by Uber Technologies. Through these services, there is a rise in the dynamic ride-sharing by other cab-rental services that were initially introduced by Uber and its competitor 'Lyft'. These ride-sharing facilities are quite efficient as it acts as an opportunity in the industry

because of its sustainability and popularity among the riders. This model facilitates the customers to share rides with others traveling to the same routes and thus pay less for the ride. Shokoohyar (2018) has highlighted the ride-sharing platforms from the driver's point of view and suggested that Uber seems to be more popular than its competitor – 'Lyft' based on job flexibility and work-life balance provided by Uber but also indicates that the drivers face poor job security in Uber. The fear of drivers turned into reality when Covid-19 hit globally leading to a complete lockdown in major cities of the world where Uber operates extensively. This situation intensified the job security issues of drivers as the company reduced the pay of most of its employees and even shed out many drivers due to unavailability of work during the period. Losing the jobs led to halted salaries and thus, critical situations for the drivers whose whole family depended on their income from Uber.

2.3 Uber's Ridesharing Model

Uber's mobile application acts as a two-sided marketplace for the riders and the drivers by acting as a medium between them through their digital app (Rahul, 2020). Uber marks a major share in the on-demand economy through its on-demand business model catering to customers' ride-sharing requests (Lahoti, 2019). Uber's business model (Koch, 2017) presents that it acts as a medium of connecting the riders requesting a ride with the drivers looking for rides through a digital application. The process of Uber's ridesharing service indicates these 4 participants:

1. **Taxi driver:** The person having a vehicle - car or bike of his own along with a valid driving license, and having a good internet connection can register as a driver for Uber. The concerned person needs to register himself as an Uber driver to get rides through Uber's mobile app. Training is provided to the drivers along with the necessary equipment to make full use of their registration as Uber drivers (Pathak, 2017).
2. **Passenger:** The customer looking for a ride gets connected with the Uber driver through Uber's mobile App. The passenger puts a request for a ride on the app and the taxi driver nearest to the passenger gets connected to him/her to facilitate the pick-drop service.
3. **Fare and payment:** The fare for the ride is determined by Uber's pricing algorithm and the estimated rate is displayed at the app for the rider's acceptance. If the passenger agrees to

take the ride at the specified rate, the payment is made through the passenger's debit or credit card online after the completion of the ride.

4. Profits: Uber makes profits on completing every ride irrespective of the type of ride i.e. shared or individual, through a bike, or car. A varied percentage for every ride depending on certain factors is then deducted from the payment made by the passenger and the rest amount is paid to the driver. In addition to it, Uber earns profits through the dynamic rising of prices at the time of hike in demand and imposes a cancellation fee for every canceled ride by the passenger or driver (Pathak, 2017).

Uber's ridesharing activities

Uber's ridesharing activities for booking a ride through Uber's mobile application include:

1. Passenger requests a ride: A person with Uber's mobile application registers himself as a user and at the time of need, requests a ride by determining his point of pickup and drop.
2. Driver accepts that ride: The mobile application automatically signals the nearest drivers about an available ride
3. Processing a ride: The driver willing to take that ride accepts the ride request, and confirms with the rider about him approaching the passenger's defined pickup.
4. Making payment: The payment is then made by the passenger to Uber's mobile app and further, the app takes the commission for the ride and pays the rest amount to the driver for the ride.

Graf (2017) has researched on sharing economy and has presented the effect these ride-sharing services have on public health as well as discussing its safety outcomes. During the currently prevailing Covid-19 pandemic, public health has become the most significant concern due to the proximity of persons coming in contact with each other during shared rides. Thus, certain changes in these ridesharing activities have been introduced recently to prepare for the current Covid-era.

2.4 Uber's Value Chain Analysis

Value chain analysis is a strategic analytical tool that specifies the components of the significant process of creating value, identifying the sources of the value, understanding the factors, and indicating the competitive advantage for a company. Uber's value can be identified through this analytical tool whose main activities are categorized into primary and supporting activities.

Venkatesh (2016) has discussed the long supply chain of Uber along with the pros of booking taxis from Smartphone applications.

2.4.1 Primary activities

The primary activities include all the major functions that are performed by Uber Technologies to maintain its competitive edge in the global transportation technology company (Dudovskiy, 2018). The main source of efficient operations of Uber Technologies is the mobile app which is highly equipped featuring high-end functions.

1. Uber inbound logistics: These operations include the procurement and storing of raw materials required for the functioning but as Uber works on a distinctive business model that operates on the vehicles owned or rented by the drivers, no maintenance of inventory is required. Also, the drivers cannot be regarded as employees of the company, rather they are the contractors who take the services of Uber's mobile app to fetch passengers. The basic requirement of raw materials in the case of Uber is the maintenance of its mobile application and the Internet connection. The drivers having their own cars and internet connection take the rides to their desired locations and make money. The physical offices of Uber need strong infrastructure and a smooth internet for its operations. Thus, the value is added through internet-based operations.
2. Uber operations: According to Dudovskiy (2018), the major Uber operations include Requesting a ride, accepting a Ride by the driver, and the last one being "Pay and go" which means after the completion of the ride, the fare for the ride gets deducted from the passenger's account.

3. Uber outbound logistics: This operation is concerned with the warehousing and distribution of its services. Uber operates on an internet-based business model that takes advantage of a mobile app to operate its functions of picking up dropping a passenger from one place to another. Thus, this is the delivery process provided by the company and in this case, the passengers are the parcels that are delivered and not the physical products. The distinctive nature of its business model is the major source of value for Uber globally.
4. Uber marketing and sales: The marketing is done through social media mainly and its other major source of marketing is word-of-mouth which tends to join the online community of people that are availing the services of the company and are recommending their services in their circle. Advertising is also done through print media and online advertisements to fetch customers. Potential customers of Uber are the routine customers who need the facilities of commuting to and from their offices or students to the educational institutes. Uber targets daily customers. Sales promotions events and experiences act as the primary marketing strategies of Uber which add value to its system. Cashless payments are also an add-on that the passengers like a lot and this adds value to its business model as well (ibid).
5. Uber services: The facilities provided by Uber are not limited to just dropping the passengers at the specified destination but also provide a facility for the passengers to rate the drivers on a scale of 1 to 5 to take the feedback of the driver. The grading system is based on features like the cleanliness of the vehicle, driver's attitude, ride, maintenance, conversation, and the overall experience of the rider so that the least maintained cars and the negative attitude driver's accounts can be deactivated to provide the passengers with utmost services. Every ride's real-time location is checked for the safety of the passengers and the drivers. Customers get to know about the estimated time before the ride reaches the location and in any case if the driver tends to follow a longer route instead of the shorter available route, the customers can file a complaint. Therefore, the company keeps a check on all these activities. These services add value to the business model (Dudovskiy, 2018).

2.4.2 Supporting activities

According to (Varvarina et al., n.D.), Uber's smooth operations depend highly on the supporting activities as well which include:

1. Firm infrastructure - Uber's supporting operations require work from many departments such as the legal department for its legal operations and paperwork, the accounts department to maintain the finances of sales and purchase, administration department to maintain the operations related to miscellaneous activities.
2. Human resources. The drivers and the employees in the different departments who handle the operations of connecting the drivers to passengers and maintaining accounts of the driver's rides, feedback, and the employees running many other operations at the back-end are the human resources of Uber which are managed by the various departments.
3. Technology development: The most important asset of Uber is its mobile application which needs to be up to date and maintained to avoid any inconvenience to the passengers. This technology-dependent source of value for Uber is responsible for the functioning of every operation.
4. Procurement - The inventory of drivers is the major type of raw material required for the company to render its operations. Other than that, the vendors for Uber and price negotiations also act as a source of raw material for smooth operations. The company needs to maintain all its department employees for efficient performance and imparting the best services to its riders (ibid).

2.5 Uber's Revenue Model

Yun et al. (2020) discussed the innovation in the car-sharing industry by putting forward the distinctive approach to Uber's business models. By providing information about the traditional cab rental business model and the innovative cab-sharing business model, the author has highlighted the pros of the car-sharing industry that use this innovative model. Wallsten (2015) suggested how Uber is changing the taxis and its competitive impact on the economy through its most popular ride-sharing services. Pathak (2017) presented the ideas about the value proposition created by Uber Technologies, and the benefits it gives to the riders and drivers as well. He has given insights into the nature of innovation offered by the company through its ride-sharing services and how this value proposition can be said to be unique and innovative with the use of Information Technology. Discussing more the revenue and profit drivers of Uber's ride-sharing or

car-pooling services, the author suggests how the company has innovatively facilitated the pickup and dropping off of more than one person on the same route to save their money as well as save fuel, and thus leading to sustainable utilization of resources. This research discusses the way innovative service is offered by the company and how the revenue is generated through its creative and unique approach. This is a successful method that can develop firm value propositions for the company due to its efficient process.

Lahoti (2019) presented that these value propositions for riders include on-demand ride bookings by the passengers, providing the Estimated Time of Arrivals (ETA), and real-time tracking of the cab before arriving and during the ride. Uber has efficiently reduced the waiting time for the passengers, has leveraged efficient pricing, provides cashless rides along with numerous riding options (ibid). Uber's value proposition to passengers can also be seen in its facility to schedule rides (Rahul, 2020). According to Lahoti (2019), the value propositions for the drivers include flexible working hours for the drivers, being a good source of income for the drivers, and the company's dynamic system that leads to lower idle time between rides.

The ways Uber earns revenue

It can be noted in the research by Rahul (2020) that Uber's ridesharing platform facilitates multiple users to book their ride and the company itself earns revenue through many sources during these rides such as:

1. Trip Commission: Uber acts as a medium and connects the demanding passengers with the approaching drivers for a pick-up and drop and the company itself takes a commission of 15-30% for every ride whether individual or shared. When a passenger books a ride, the platform gives that ride to an accepting driver and deducts its commission from the paid amount by the passenger, and pays the remaining amount to the driver.
2. Surge pricing: Uber Technologies and many other similar ridesharing platforms take advantage of surge pricing to make extra profits during the time of high demand from the passengers. The company automatically increases the rates of the same rides to fulfill the demand for rides. This way, the riders agreeing to pay extra take their rides, and those who

intend to wait, don't look for rides at that moment leading to reducing the demand and balancing the supply (Singla, 2017).

3. Premium rides: Uber facilitates the premium rides to its passengers which include extra features like air-conditioned, comfortable rides, premium music playing, etc. Thus, passengers seeking the advantage of these features pay an extra amount thus, leading to the company making more profit (ibid).
4. Cancellation fee: If some users choose to cancel their rides due to some reason within the fixed period, the company imposes cancellation fees on their rides to earn a profit (Rahul, 2020).
5. Leasing to drivers: Persons who wish to work for Uber as drivers but cannot afford a vehicle, Uber assists them by leasing the cars whose installments get debited from the driver's account automatically. The drivers deposit security for the vehicle as well, this makes the company earn some profits.
6. Brand partnerships: Uber partners with many brands to promote their services by offering extra discounts and coupons to its users and thus, in return those brands pay a huge amount to Uber for these kinds of promotions.
7. New businesses: Uber Technologies' primary services are offering ridesharing services to the passengers and in addition to it, the company offers add-on services like optimal driver allocation to facilitate its customers with premium services. Uber Technologies has also been rendering its services in other sectors like Uber Eats in the food industry, freight, and delivery services in the delivering sector at different geographical locations of the world. This way Uber makes additional profits (ibid).
8. Multiple ride options: Uber Technologies offer multiple rides to its customers such as 2-wheeler ride i.e. bike, and different types of cars such as Mini, Micro, Premium cars in the form of Sedan, hatchback, SUV vehicles to cater to the needs of maximum people, which leads to making more revenue by the company (Ravenna, 2017).

9. Innovations: Uber Technologies has also upgraded its transportation services by offering innovative rides such as boats and helicopters at a few locations in the world to cater to its premium customers (Rahul, 2020).
10. Not owning any car: Uber makes use of the cars of the drivers only to commute people to different locations and does not own any car. Thus, Uber has no inventory to spend any expenses on its maintenance, etc. This way, Uber spends that intended sum of capital in some other sectors such as promotions and market research, etc. to make more profits.
11. Multiple drop-off points: Uber provides ridesharing services to its customers by offering multiple drop-off points to them, thus, earns from multiple customers on a single ride. This way, the company makes huge profits (ibid).

2.6 Uber's Pricing Model

Banerjee et. al (2016) discussed the nature of the pricing model of Uber and termed it as the dynamic model which offers a variety of taxis to cater to the distinctive requirements of the users. They have also discussed the pricing in ride-sharing platforms along with focusing on the optimal Price sharing model. The following table presents the various types of rides available for the users to choose from according to their requirements, comfort, and facilities.

Table 1. Rides of Uber (Extracted from Ravenna, 2017, p. 1)

| <i>Vehicle</i> | <i>Features</i> | <i>Pricing</i> |
|-----------------------|------------------------|-----------------------|
| UberX | Standard capacity | Economy |
| UberXL | Large groups | Moderate |
| UberBlack | Luxury | 35% higher fare |
| UberTaxi | Normal cars | Economy |
| Uber SUV | Large groups | Higher price |

Uber provides extensive vehicles to various customers ranging from economy to luxury and even moderately priced rides are also available. Customers can take the services based upon the amount they agree to pay to Uber. Those who want to take some additional services pay more so, Uber has a ride for everyone. Though the prices provided by Uber are nominal and most of the customers rely on the prices given by the Uber app as accurate precise estimations lead the customers to take advantage of the services and get to the location (Ravenna, 2017).

Normalized fares

There is a standard fare for every ride irrespective of the distance traveled to which the amount is added per kilometer of distance being traveled. An additional amount is added to the standard price based on the supply and demand of cabs which is calculated by its algorithms. Thus, during high demand, the prices are increased and during normal the month the prices are kept standard. Increased prices can go up to 7 to 8 times and the ones who are willing to pay does a high amount take the advantage of the taxi and others wait for the process to get down and this way the demand and supply are also adjusted (Ravenna, 2017).

Surge Pricing

To balance the rising demand for rides, prices for rides are increased. During the time with standard needs, Uber's App offers lower prices for the rides, and thus, there is a lesser waiting time for the passengers and the drivers, which leads to faster pickups and lesser time within the rides, leading to efficient commuting. In case of higher demand, the number of drivers remains the same though there arises a need for more drivers to cover extensive geographical areas around a city but because of the limited number of drivers, the pickups remain slower (Chao, 2019).

According to Currier (2017), during the time of need, Uber can increase the fares depending upon the situations as there are limited rights available to the passenger during peak times. Uber tends to increase its prices this hike high prices are acceptable to the riders and there is nothing illegal in that cause the dynamic pricing gets a kind of model based on an algorithm that tends to increase the prices to control the supply chain of Uber taxis and these rates are quite transparent according to the pricing model of Uber. The customers are required to agree to the hiked price on the app to take up taken evidence of the agreement between the customer and the Uber that they conform

to the hiked price and the company has proof to clarify if any customer files a complaint of charging more. The number of Uber rides available within the city is normal during the peak hours like office hours morning and evening time, the riders have to get to the job and have to come back so these hours are peak hours in which the demand for taxis get increased to higher levels but due to the limited amount of taxis available the company tends to increase the price this is also the company's policy to hike the price a little in case of other rush hours.

As per Gurley (2014), Surge pricing is done during the rush hours like rains, events in a city, festivals, or weekends to earn more during these prices and make a little more money even the drivers tend to follow the busy routes to get themselves benefitted through the policy of charging more than usual for the peak hours and highly congested areas this is the pricing model according to which Uber operates within hundreds of cities around the globe. Uber increases fares for some customers based on some situations that are operated based on certain factors like matching the demand and supply of cabs at a particular period.

2.7 Uber's ridesharing services in the Pre-Covid-19 era

Bonazzi and Poli (2014) proposed an alternative to the traditional taxi system with the business model followed for providing ride-sharing services. These car-pooling services are mostly adopted by those who need to travel short distances on daily basis for their work or students to study. Those who need to travel in a fixed pattern but need to save money mostly adopt this mode of transportation which is quite inexpensive and this business model also adds to the collaborative economy. The authors proposed and developed an alternative business model that is a perfect fit for the dynamic ride-sharing services offered by Uber Technologies using Action Design Research Methodology, which suggests that crowd-funding the initial capital for this business model can initiate the services in more cities.

Success of Uber

Virkus (2017) proposed the best practices adopted by ride-sharing companies such as Uber Technologies for their global expansion. The author concluded that such companies need gross capital to enter the global markets. As Uber has surplus resources, it has managed to grow globally but for startups, entering these price-sensitive and heavily subsidized new markets is difficult.

Thus, new companies tend to remain in the local market and may not expand globally in the initial years. A report (2020 Investor Presentation, 2020) discussed the situation of Uber Technologies today and where it is going in the future. This research discusses the mobility of this global leader and how it has transformed the industries and is on its path to profitability. These researches clarify the well-positioned global brand- Uber Technologies has a high brand value in the transportation and delivery industry. This is the reputation Uber Technologies, Inc. enjoys in the market that predicts its comeback in the industry after the Covid-19 pandemic ends.

2.8 Uber's Response to Covid-19

In the current era, Uber Technologies is facing troubles in keeping up its sales in its ridesharing platform but is adapting ways to provide safe rides to the clients by following the guidelines issued by the government. Uber's revenue was high before the Covid-19 pandemic as riders were using the facility but during the lockdown, all transportation services came to halt and in this critical situation, Uber promised to deliver essentials at that time by partnering with essential stores which also provided work to its drivers and other employees.

Guidance (2020) suggests the guidelines issued to prevent the spread of Covid-19 during sharing the taxis. These guidelines are beneficial for the customers as well as the drivers in controlling the spread of the virus and reduce its impact on others. In their report analysis, Raman and Ramachandran (2020) analyzed the ways to protect the workers in today's scenario. A few ways have been proposed such as providing occupational safety and health, adapting to the current work environment, securing livelihoods and income, and the policies of giving financial support to the sector.

Raj et. al (2020) have analyzed the way digital platforms are beneficial in elevating the survival rate of companies during the crisis by continuing access to customers. The researchers have discussed how businesses shut down during pandemic and the way Uber Technologies managed its supply and demand on its food delivery platform - "Uber Eats". The research focused on the most important role of digital media in the resilience of the business post-Covid-19 era. The successful application of Covid-19 guidelines on the "Uber Eats" determines its successful implementation on its ridesharing services as well.

2.9 Impact of Covid-19 pandemic on Uber's ridesharing activities

The impact of the Covid-19 pandemic on ridesharing activities by Uber Technologies Inc. can be understood by studying how the Covid-19 pandemic has affected its ridesharing activities. From the previous research by Hossain (2020), it is found that the impact of the current Covid-19 pandemic on sharing economy can be significantly analyzed from the perspective of service providers and service receivers based on the 9 varied themes including anxiety, cancellation, job loss, income reduction, social distance, hygiene and safety, backlash, overcoming strategy and outcomes. These 9 mentioned themes have significant concerns with the Covid-19 pandemic. Hence, the impacts of Covid-19 on drivers and riders can be identified in terms of these most probable 9 different themes:

1. **Anxiety:** Due to the sudden occurrence of the pandemic, the consumers of the sharing economy platforms became anxious about how things will go next. Uber being a sharing economy platform connecting the Uber riders with the Uber drivers to commute to various locations, the users became confused because of the instantly imposed lockdown at most of the cities of the world. Thus, the impacts of the disrupted Uber rides can be well recognized for both the drivers and riders in terms of their anxiety at different levels.
2. **Cancellation:** Due to the strict guidelines by the government of various countries, the lockdown led to the complete withdrawal of cab sharing services along with other kinds of movement of vehicles on roads. This further followed a series of ride cancellations which adversely impacted the scheduled plans of commuting of the riders and the drivers as well. These ride cancellations created chaos in the lives of both types of users due to the non-availability of rides. Thus, cancellation is a good theme on the basis of which the impact of the pandemic on Uber's consumers can be analyzed.
3. **Job loss:** Due to the Covid-19 pandemic, many companies had to fire their employees to balance their finances in a difficult situation which led to difficulties in meeting the expenses for many people. This job loss scenario could be seen for both the riders who used to go to their jobs regularly through cabs and for those Uber drivers whose job was to carry these riders to their desired places. Besides, the 'work from the home' feature for major companies led to the non-requirement of cabs to commute, which further added to the adversities of job

loss for the Uber drivers. Hence, job loss is an important theme based on which the impacts of the Covi-19 pandemic can be analyzed.

4. **Income reduction:** Most common people faced a financial crunch during the lockdown period when their jobs and salaries were adversely impacted. Due to the loss of jobs or work-from-home facilities by many companies, employees were offered a reduced pay. The situations of reduced income could be witnessed for both the drivers and the riders. Thus, the effect of the pandemic on the consumers of Uber can be understood based on this factor adequately.
5. **Social distance:** Social distancing has been one of the major guidelines issued by the Health departments to safeguard one from the coronavirus, hence; social distance has been taken as a major concern for identifying the impacts of Covid-19 on the public. As Uber ridesharing involves sharing a cab with the drivers and other co-passengers, social distancing has been difficult. Witnessing this concern, social distance can become a great factor in analyzing the impacts of this pandemic on Uber drivers and Uber riders.
6. **Hygiene and safety:** As cleanliness and sanitization are essential to curb the spread of Covid-19, the significant factors of hygiene and safety can lay a foundation in identifying the impacts of this pandemic on the consumers of Uber. Based on the levels of sanitizations being carried by Uber and other sharing platforms along with the approaches for making this happen, can act as an important theme in identifying the effects incurred on the process of Uber ridesharing from the perspective of both drivers and riders.
7. **Backlash:** Due to the confusion that occurred in the minds of people because of the sudden outbreak of the virus and strictly imposed a lockdown for 2 months, many backlashes also occurred between the drivers, company, and the riders. These types of situations can be well-justified because no one knew what is happening and what should be done to safeguard one's family in addition to feeding them in times of the pandemic. The job loss and income reduction along with the anxiety that occurred due to this scenario added to the backlashes. Besides, frequently changing guidelines by the Health departments and government added to perplexing situations being faced by the consumers of Uber i.e. riders and drivers. Hence, backlash being a result of the factors like anxiety, job loss, and income reduction, can itself be

considered a strong factor for defining the impacts of the Covid-19 pandemic on the Uber drivers and Uber riders.

8. **Overcoming strategy:** Due to the perplexed state of mind of people, frequent policies and precautionary measures were tried to be issued as soon as possible by the Health departments of specific countries. These issued guidelines were set as a base to develop the overcoming strategies to curb the ongoing situations. Thus, the measures taken by the consumers of Uber in terms of ensuring their safety acted as their overcoming strategy to safeguard themselves from the spread of the virus. Hence, the specific kind of overcoming strategy of Uber riders and Uber drivers specifically can become an important factor in determining the impact of the Covid-19 on Uber drivers and Uber riders.
9. **Outcomes:** The outcomes of the Covid-19 pandemic and the lockdown imposed in the light of this pandemic can be set as a significant base for analyzing the impact of this pandemic on the activities of Uber. Ridesharing being one of the most affected services of sharing economy platform can be well-analyzed for knowing the certain impacts of the pandemic and the ongoing situations based on the outcomes of this pandemic on the lives and activities of the Uber drivers and Uber riders.

2.10 Theoretical Framework

The above literature acts as a foundation for this research as it has imparted insights into the sharing economy model, working business model of Uber, its value chain activities, pricing model, and revenue model. Much required information has been gained about how hard the company is hit by the Covid-19 pandemic and the ways of responding to this critical situation. After the deep study of the literature review, it can be concluded that 3 important points noted during the literature review can lead to developing the framework for the study:

1. After understanding the participants of Uber's ridesharing model and its significant ridesharing activities, it can be predicted that the impact of Covid-19 on its two major components – Taxi drivers and Passengers, can collectively lead to analyzing the impact of this pandemic on its ridesharing activities.

2. Being one of the most important processes of Uber's ridesharing services, any sort of disturbance in its value chain process can impact its ridesharing activities adversely.
3. Analyzing the impacts of the Covid-19 pandemic on the Uber drivers and Uber riders in terms of the 9 varied themes studied during the literature review can lead to analyzing the impacts of Covid-19 on Uber's ridesharing activities.

Hence, taking the study by Hossain (2020) as a base, the proposed framework for the current study takes into account the impact of this pandemic on two major parties involved in Uber's ridesharing model – Uber Drivers and Uber riders, based on these 9 corresponding themes. The below-mentioned table summarizes these impacts separately, hence, it depicts the framework for the empirical study of the current research. Further, all these findings will be followed by the discussion of every theme in detail for concluding the impacts of this pandemic on Uber's ridesharing activities.

Table 2. Framework for the empirical study (Extracted from Hossain, 2020, p. 4)

| Themes / Parties | Uber Drivers | Uber Riders |
|-------------------------|---------------------|--------------------|
| Anxiety | | |
| Cancellation | | |
| Job loss | | |
| Income reduction | | |
| Social Distance | | |
| Hygiene and safety | | |
| Backlash | | |
| Overcoming strategy | | |
| Outcomes | | |

The impacts of the Covid-19 on Uber Technologies can thus, be analyzed by studying the Pre-Covid-19 scenario and how far the world is changed now, along with the impact of this pandemic on the livelihoods of riders, drivers, and company. Thus, to carry out this research, disruption in value chain activities of Uber operations is analyzed by specifically focusing on the Uber Pool,

which is the ridesharing service offered by Uber Technologies Inc. (supply chain, 2015). Besides, the impact of the changes introduced in the value chain activities of Uber as studied by Venkatesh (2016) will be studied.

Henceforth, the developed framework will determine the impact of the Covid-19 pandemic on Uber's ridesharing activities in the "*Impacts on Uber riders and drivers*" Chapter based on the 9-themed structure for Uber riders and Uber drivers.

3 Methodology

3.1 Research Approach

According to Grover (2015), the research approach outlines how a research is carried out. This methodology used for carrying out the study lays a path to achieve the objectives of the research. It is essential to select an appropriate research approach to fulfill the pre-defined objectives, and the selected approach justifies why and how this research will lead to meeting those goals. This research methodology leads to answering the pre-defined questions of the study and must be capable of accurately finding the results. The research approach used in the current research is defined below.

Selection of appropriate research methodology

With the objective of understanding the challenges faced by Uber drivers and riders due to the disrupted ridesharing services for a period, it was vital to know the feelings and experiences of people who were most affected. Thus, after studying different research approaches by BRM (n.D.), and understanding the kind of data required for this research, the qualitative research methods were found to be the best option. The research by Glaser and Strauss (1967), makes it evident that the current research needed to collect extensive data from the limited audience in a short period, thus, qualitative data seemed to be the best-suited form of data. Hence, the qualitative methods of data collection have been used in the current research which takes into account the interview transcripts, text documents, and videos from reliable sources.

3.2 Data Collection

The aim of the research was to conclude the effects of the Covid-19 pandemic on Uber's ride-sharing activities, thus, there arose a need to gather extensive information on how this pandemic had changed the routine activities of Uber's ridesharing platform. This could only be done by getting the most reliable information from the two most important participants of these activities i.e. the drivers and the riders because these were the most affected parties due to the halted services.

The process of data collection began from gathering the secondary data. This data includes the text documents in the form of various research theories, research papers, high-indexed journals, books, and blogs of different authors which were studied along with the company's annual reports. The other medium of data includes the information from the related business magazine, newspapers, and various scholarly articles available in the e-library. The other type of data was extracted in the form of videos of the statements given by the CEO of Uber Technologies and other officials (NDTV, 2020) which acts as a base for letting the customers know the current status of its facilities and the newly enforced Covid-19 guidelines (NDTV video, 2020). The research papers about the sharing economy and ride-sharing services in Uber Technologies were also studied thoroughly for gathering extensive information about ride-sharing activities. The free sources of access as well as some sources requiring signup for taking the access along with the e-library of the JAMK University also act as the sources of information.

The primary data was gathered through two types of interviews. Two of the author's acquaintances who rides Uber cab have been interviewed on the phone to get the required information. They act as the most appropriate candidates to get insights into the actual conditions being faced by the Uber drivers, how the company had been helping them, and the extent to which the newly announced guidelines were being enforced. These interviews were conducted at zoom meetings and the interview was recorded for further analysis. These questions were related to the current status of ridesharing and new laws related to Covid-19. The 4 of the Uber riders were also questioned regarding the transformed way of commuting during the pandemic. Thus, another type of interview was conducted with the normal commuters of Uber who tend to utilize the ridesharing services by the company to know their experiences of the transformed way of commuting.

The secondary information was thus gathered from the primary qualitative data provided by Uber drivers and riders who had experienced it or the ones who were responsible for giving the statements i.e. the high officials of Uber. Thus, the secondary qualitative data provided by the primary source of information assured its reliability and validity as per the study by Bhatia (2018). Thus, on the basis of a study by Haregu (2012), the structured data was collected in the form of stories of the interviewees and other Uber drivers available on the blogs and various journals describing the status of ridesharing services. The data collection methods used during the research include Observation and Interviews.

1. Observation: The current situation of Uber's ridesharing services was keenly observed by being in the social group of commuters without participating in the scenario to get information about the driver's state.
2. Interview: One-on-one questions were asked to 2 drivers and 4 riders. These answers were recorded and transcribed which were further organized appropriately to conclude the impacts. These questions could be categorized as the '*ideal type*' questions that seek the opinion of the interviewee about what was being done and what else could be done in the current situation. The questions were answered based on the experiences, opinions, feelings, reflections, and knowledge of the interviewees, which makes them a reliable source of data collection. The input questions sets as a base for the interview in terms of defining how the drivers were informed and what they did! These recorded and transcribed interviews as per the study by Canary (2019) become the source of reliable data. The feedback on the above questions was accumulated and transcribed for validation according to a study by (Austin & Sutton, 2015).

3.3 Data Analysis

Data analysis means interpreting and finding the proper ways to analyze the collected data. During this process, the assigning of frameworks and theories associated with the data is done and are explained as per the instructions by Haregu (2012). During this research, qualitative data analysis was done to interpret the qualitative data collected to understand and interpret the situations from the experiences of the Uber drivers, and the interpretation of data was done following the study by Austin and Sutton (2015). This process identified the nature of the research concerning the frameworks adopted to precisely and accurately interpret the data.

After studying diverse qualitative data analysis methods determined by Miles & Huberman (1984), Narrative Analysis was found to be the best-suited method. The Narrative analysis includes re-framing and re-arranging the statements given by a particular person based on the nature of the statements such that the experiences of the person in conversation give some reliable information. This gathered information is then re-fabricated into an organized form.

Process of Data Preparation and Data Analysis

According to the study by Bhatia (2018), the process of data preparation and data analysis for the current research was used to find the answers to the pre-determined questions. Thematic analysis steps followed in the current study includes familiarizing with the data, defining if the collected data aligns with the research objectives, developing the suitable framework, and lastly, the identification of connections and patterns by identifying how one component influences other.

The answers by the riders and drivers were accumulated to summarize the insights of how the ridesharing activities have been transformed during the pandemic. This information suggests the extent to which the new guidelines (guidelines, 2020) issued by the government have been impacting the Uber drivers and Uber riders for ensuring their safety during the ride. This way the reliable information could be extracted from the people providing and utilizing these services. The gathered data was analyzed by taking the notes, organizing them into a specific manner in the form of documents. Further, the data was studied, explored, and reviewed. Afterwards, the compiled data was arranged in a cohesive order.

For analyzing this collected data, firstly, the data was arranged, organized according to the category of data like text, images, and video. Further, the organized data was encoded according to the nature of the different forms of collected data like observations, interviews and text, images, videos. The encoded data was thus validated for its accuracy and reliability based on analyzing if the sources from which the data was collected are reliable. Thus, the analysis process was finally concluded for the results by following the procedure given by Question Pro (n.D.)

These qualitative interviews were then analyzed according to the study by Rucker (2016). The transcripts of the interviews were developed and are thus, analyzed as per the instructions given

by Canary (2019). The process started by firstly reading the transcripts, annotating the transcript by labeling the related relevant words and phrases. After organizing, the categorization and conceptualization of the transcripts were done. Further, the data was segmented by connecting it with the 9 pre-defined themes like anxiety, cancelation, job loss, etc. These segments of data were then analyzed and the results were written by analyzing the impacts for the involved parties – Uber drivers and Uber riders. Thus, the impacts of the Covid-19 pandemic on Uber's ridesharing activities have been analyzed separately on Uber drivers and Uber riders in the next chapter along with their discussion concerning each pre-defined theme.

3.4 Verification of findings

Taherdoost and Hamed (2016) suggest that it is vital to verify and authenticate the methods of data collection, data analysis, research methodology, and the findings of the study. To comply with the reliability of the findings for the current research, the authenticated data has been extracted from reliable sources of information for identifying the impact of the Covid-19 pandemic on Uber riders and Uber drivers. Moreover, the transportation sector has a huge share of the sharing economy (Markets, 2020) in the transportation and logistics industry. Hence, the business research and marketing-related websites have been researched for the latest updates. Besides the recently published researches in the form of research papers, review papers, thesis, and other academic studies have been studied. This type of collected data acts as a reliable source of information.

Different studies by various authors about the impacted sharing economy platforms have been studied to validate the outcomes gathered from these researches. By concluding from the widely done researches, it is found that these companies had to change their policies and systems to ensure the recently arisen safety concern. Besides, there had been a gross change in the process of bookings. Concerning Uber's ridesharing activities, certain recent Academic research papers have acted as a source of reliable information. The frameworks and conclusions made by these researches have helped to develop a foundation for constructing the new framework and finding the impact of this pandemic on Uber's ridesharing activities.

The responses of the interviews act as a reliable source of information because of their heartfelt experiences. Further, Uber's blogs and social media posts act as the most reliable source of

information and these platforms have been actively informing about the current status. Many interviews and video statements by Uber's CEO (NDTV, 2020) can also be termed as a reliable source of information, so much data has been accumulated through those also. This kind of diverse research available online acts as a relevant source of information because this has been approved by many diverse authors as well.

Validation methods

The validity for the current research is done through the following 4 ways according to Stumpfegger (2017).

1. **Internal validity:** The *internal validity* can be authenticated in terms of the collected data that has been gathered precisely through the interviews with the Uber drivers and Uber riders. Besides, the facts have been studied from the authenticated previous researches in June 2020, July 2020, August 2020, and September 2020. The collection of data had been a continuous process to stay in line with the latest updates. For ascertaining factual information, literature from various research platforms has been studied and the facts have been compared to authenticate the gathered information. The official website of Uber Technologies (uber, n.D.) has been the greatest source of information, which is supposed to be the most reliable way of extracting information about its ridesharing services.
2. **External validity:** The *external validity* of the collected data can be authenticated in terms of its utilization in finding results for other similar systems. Therefore, the impacts of the Covid-19 pandemic on Uber's ridesharing services can set as a base for studying these critical situations that are being faced by other ridesharing platforms and organizations like 'Ola' and 'Lyft', which happens to be Uber's biggest competitors as well. Some of the facts accumulated during the study remain similar for these other platforms as well. Thus, most of the situations that occurred, and the common practices that are being taken care of by Uber Technologies remain similar for other platforms as well.
3. **Reliability:** According to Joppe (2000), it is vital to carry out authenticated and reliable research otherwise the objective of doing any research is a failure. Thus, for ensuring the *reliability* of the carried out research, various researchers by diverse authors are studied. Hence, a variety of sources have been trusted to present the facts. Besides, the qualitative methods of data

collection have been studied well before applying to ascertain the right kind of effort is being put to extract the data. To ensure that the found information is correct, the extent of enforced guidelines are crossed-checked with one of the author's acquaintances which ascertains the correctness of the policies being implemented at the company's end. As all the reliable sources of information have been used to fabricate the research, other researchers can also conduct the same kind of research for other similar platforms can also do. This ensures the reliability of the collected data for the current research.

4. **Objectivity:** Various data analysis methods for getting the results and findings have been studied to find the best data analysis method for the current research (ibid). As most of the data collected are in the form of diverse text and transcript of the interviews, the most suitable data analysis method is found to be Narrative Analysis according to the study by Schilling (2006).

4 Impacts on Uber riders and drivers

Based on the 9-themed framework, the results of the conducted interviews with Uber riders and drivers have been accumulated that will conclude the impacts of Covid-19 pandemic on Uber riders and drivers according to the defined objectives.

Anxiety

The anxiety of Uber riders and drivers can be witnessed through their experiences about the disrupted ridesharing services for an interval of 2 months. This anxiety could be seen in terms of unclear guidelines, fear of Covid-19, disrupted services, stress due to jobs and routine tasks. Riders were seen missing the smooth-riding with Uber pool which could save them some money through its cheaper rides.

Riders' perspective

One of the interviewed Uber riders describes Uber's decision of disrupting its ridesharing services as the right choice made by the company in the light of the safety of the travelers because public health is most important. They could be seen stating that witnessing the increased fear of being contracting the virus while using the shared mediums of cab hire, they try to manage to commute

themselves, and only if some emergency arises, they take the Uber rides. One of the riders stated, *"I will not go outside until it is very important"*. Another Uber rider describes that there is a huge impact of the pandemic on Uber's ridesharing services because he hardly remembers last time taking the ride and it has been a year now. His anxiety can be well judged by his statement that he managed to go to the workstation by his own vehicle during the period of disrupted services. Another Uber rider says that she witnessed initial anxiety after getting the news of disrupted ridesharing services but got settled a bit when the guidelines were issued. She had the option of working from home, so she managed all her work from the comfort of her home and need not have to go out in a cab. She adds if she had to go that would be difficult for her to go by Uber because she doesn't have a car.

Another Uber rider says that she feels that this pandemic has affected everything and so is the case with Uber as it has become difficult for the riders. She says drivers were offered fewer rides for the period of disrupted services and thus, must have faced monetary losses. Most of her work could be done by foot but for longer distances, she herself has taken Uber because one can rely on Uber's safety measures which is not the case with public transport. She adds, *"Only individual Uber ride is preferable in case of emergency but carpooling is no longer possible."* These statements depict the anxiety of Uber riders in terms of not being able to take Uber rides conveniently which is a rather cheaper option for commuting but riders are currently facing the fear of being contracting the coronavirus if they use the same car several other persons have been using.

Drivers' perspective

Due to the disrupted ridesharing services by numerous Sharing Economy platforms including Uber Technologies, high levels of anxiety were seen in the drivers because of the uncertainty in their work arisen due to the announcement of canceled ridesharing services in most of the countries of the world in which Uber operates. Uber drivers are the most impacted individuals due to the Covid-19 pandemic. They have witnessed adverse times due to the strict lockdown imposed in most of the countries in the world. Statements, experiences, and sentiments of two such Uber drivers depict their state of mind due to the situation.

An Uber driver from Canada who is in the services for 1 and a half years says in March 2020, he was doing his job when he got the news of lockdown. It was the normal travel time and suddenly the panic was created and everything stopped. The fear of Covid-19 was so high that nothing could be thought of doing at the moment. Another Uber driver from Denver, Colorado, the U.S. who has been working as an Uber driver for 3 years shares his experiences of disrupted Uber pool services which have impacted him severely along with other Uber drivers. He says though the other services of Uber were continued and only ridesharing of multiple people was discontinued but the most profitable rides were no longer there and are still not resumed due to the pandemic. He shares as the services have been normalized now, he sometimes takes 20-25 rides in a day, leading to meeting nearly 30 people in a day, which is a risky situation for drivers like him who are exposed to the virus during the long work hours.

Cancellation

There have been several ride cancellations in the initial period of disrupted services when ridesharing by Uber was resumed. Though the guidelines by governments were issued instantly after the announcement of lockdowns in various countries, there was a lot of miscommunication and chaos regarding these preventive measures which lead the individuals to not book any rides with Uber or even canceling their cabs last moment. A lot of booking cancellations were witnessed due to one reason or the other. Some users even uninstalled Uber's App in the wake of the lockdown which was supposed to go on till an undefined time. The drivers faced losses in terms of losing the rides because when the lockdown was lifted, users were still in dilemma to go by cab or not.

Riders' perspective

The riders have commented on the possible reasons for ride cancellations that the drivers are not concerned about safety and masks. One of the Uber riders says the demand for Uber rides has been good because people need to go out. As soon as the booking was set normal after the disrupted period, the demand for Uber rides began to rise but she believes the bookings are still very less compared to the previous era. The other rider believes that the cancellations from the rider's side could be due to the riders' wish to avoid the areas that are highly impacted by Covid-19. He also says *"Money is not important but safety is."*

One of the riders from Chandigarh, India, thinks that riders may have been canceling their rides due to the fear of being quarantined. Another rider comments that the personal ride is safer in any case. *“What if the driver or rider is contaminated with the virus, so, it is better to cancel rides because we never know who has got the symptoms of Covid-19. Every unknown person is risky and now even the cabs are not affordable”*, she explains.

Drivers’ perspective

One of the drivers’ says that many drivers have been quitting the services because they don’t find these services profitable and they cannot rely on Uber’s services. Hence, they also look for some other jobs at different places. Another driver says that last year, he discontinued these services for 3 months i.e. March 2020 to May 2020 as the profitable rides carrying 2-3 riders in a single ride were canceled, it became difficult for him to manage his expenses. Drivers are also seen canceling the rides because of some shorter rides requiring to cover larger distances to pick up the rider. Such rides seem least profitable to him. He also explains that last year, during 6-8 hours in a day, he sometimes got only 3-4 rides. Hence, that was the worst year for work. He also shares that many drivers work for different cab hiring companies as well, and thus, if they get better rides on those platforms, they cancel their Uber rides because *“riding for 20 minutes or 15 miles to pick up a rider for a small ride is not profitable enough”*, he adds.

Job loss

The impact of the Covid-19 can be seen on the individuals who have lost their jobs due to this pandemic. This has resulted in financial troubles for both the Uber drivers and Uber riders because the individuals who used to go to their work by cabs did not require to take cabs anymore and many of the Uber drivers had either left their job or had been fired by the company. Many companies have made the job convenient for their employees through the work-from-home option, which is opted by most of the individuals as it saves their expenses of going to their offices compared to the pre-Covid era.

Riders’ perspective

The riders stated that they do not feel the need for Uber rides now because of the fear of infections and this danger seems more severe than any other reason to go out. One of the riders

says that the time is gone when there was a gesture - '*sharing is caring*' but now sharing is a threat. He also adds that people still avoid ridesharing and so does he; thus, the demand for Uber rides has taken a steep fall in the transportation industry and very few rides are available in even most of the busiest areas of the towns. He says that he hasn't seen any of his contacts taking rides, so believes that the demand is really low. People take rides only when they have to go to some domestic destination, which has eventually decreased in the pandemic. Another rider says that undoubtedly, the taxi was a better option and she herself used to take the cab because she did not have to look for the parking space and found the cabs comfortable but it is not a suitable option now. The demand for Uber rides depends entirely upon the situation as people used to prefer taking a cab whenever required but now are more conscious of their choices and avoid taking the rides.

Drivers' perspective

One of the drivers shares that he started looking for other job options to make for his reduced income stream and the fear of job loss. As the government has instructed people to not come out of their houses, so it was difficult to experience such a scenario when no one was coming out and Uber cab drivers were getting no rides as a result. He describes the whole period as a bad experience. He shares that he was able to continue his job again after the period of disrupted services and resumed his job in September 2020. He thinks this job is not much profitable and had been very doubtful regarding if he will be able to earn well for his hard work again. Some drivers even reported the suspension of their accounts which was a big shock for them. Another driver says that as the bars, cinemas were closed, Uber drivers faced a financial crunch and he himself resumed the services in May 2020 only when the company compensated them with different opportunities of work by making them achieve their goals in terms of the number of rides, say 20-30 rides, to which they were offered some bonus amount.

Income reduction

Many people have reduced their expenses due to cut in salaries which have consequently impacted the pocket of Uber drivers. People are now spending to their limits due to the gross impact on their incomes. Thus, they travel less and find cheaper ways to commute rather than

opting for Uber's ridesharing services which is an expensive medium these days besides the risk factor of getting contaminated with the virus.

Riders' perspective

The riders feel that the individual cab is expensive now, so people avoid taking cabs most of the time and look for other options. Their statements depict that the need for Uber rides is getting lower these days making the Uber drivers suffer in terms of reduced rides. This has severely impacted the income of drivers because their income is totally dependent on the number of rides they get per day. Some riders feel most of the people are working from home and are not working regularly, so they don't require cabs as before but state that the drivers don't have an option to work from home and thus, keep working at reduced salaries.

Drivers' perspective

Uber drivers have also faced financial problems due to the reduction in their income which happened because of enormous ride cancellations and discontinued Uber Pool rides. The drivers have been witnessing lesser demand for Uber rides because people tend to use their own vehicles instead. They did not see any other opportunities for work during that period because everything was closed. One of the drivers stated that normally he looks for rides with long distances but continued to get shorter and less profitable rides to earn some extra amount. He also told that his income was reduced to less than 1/4th as he used to earn nearly 200 USD a day which was reduced to 50 USD with difficulty. Another driver says that witnessing the decreased number of rides, he discontinued his work and worked in a grocery store to meet his expenses as his income stream was decreased severely. He adds that sometimes during peak hours, the demand for rides suddenly increases. This makes the company hike prices for rides, and he himself grabs this opportunity to earn some extra amount. He shares that sometimes this way they earn \$10-20 which a direct profit to them.

Social distancing

Social distancing is one of the major precautions in the time of Covid-19. Though the norms for social distancing were instructed at the earliest, the differences in these measures including 1 meter, 1.5 meters, and 2 meters remained confusing for the individuals. Moreover, it is difficult

for the drivers to maintain this distance in between their passengers even if the passenger sits at the back seat. An application is also planned to be launched by Uber to keep a check on riders and drivers wearing the mask.

Riders' perspective

A rider says that good driver practices are necessary because following these measures, makes the riders satisfied with having safer rides because of the sanitization and social distancing while commuting an Uber cab in the time of emergency. Some cases were also witnessed where the rider takes an Uber cab to a hospital where he is found positive for Covid-19. These cases lead to the firing of Uber drivers by the company. Another rider feels there is no way to ensure safety and if there is any system that can check and provide a certificate of negative Covid-19 to the drivers or self-driven cars, that must be introduced.

Drivers' perspective

Social distancing is the need of the hour but maintaining distance in cabs is witnessed as one of the major problems for both the riders and the drivers because of the limited space in the cars. It has been seen that drivers are aware of the necessity of social distancing and have installed separators in between the front and back seats of their cars, and have been practicing distancing to the best possible extent. An Uber driver says that he ensures social distancing through his installed separator in the car seats and always follows the 2-meter distancing norm. The drivers have been following the rules adequately by proper sanitization of their cars before every new ride, which is a completely new thing to be done. Another driver says that the ridesharing has been transformed now as the riders are not allowed anymore to sit on the front seat with the driver. The precautionary measures like putting masks every time or opening the windows if 2-3 passengers are there in the same cab have been employed. He himself insists his riders avoid shaking hands and opens the windows for fresh air during the rides. He also describes that if there is a single rider, he tells him/her to sit on the right side of the back seat to assure the maximum distance. This way they described how the whole system has changed!

Safety and hygiene

Sanitization of the Uber vehicles before every new ride is one of the major guidelines issued by the Health centers in different countries. Uber has also provided their drivers the sanitizers and disinfectants to ascertain the rules be followed.

Riders' perspective

The riders' concerns about safety and hygiene have represented different scenarios. One of the riders says that the drivers are more careful now and wear masks properly. She thinks everyone needs to balance their job and hence have to spend some time sanitizing the cab every time. Good hygienic practices need to be followed for everyone's safety. Another rider believes it is difficult to share a cab with an unknown person and he wants to avoid this stressful situation and hence, doesn't feel the need for taking cabs. He also says that no driver can be trusted for social distancing or sanitization as no one can assure if they wear their masks properly every time or not. They also meet many people during the day which increases the risk of contamination. On the other hand, some of the riders say that the drivers are conscious of sanitization. One of the riders also determines that she really appreciates their efforts. She says if she could give them feedback, she will give 9.9 to them on the merit scale for their efforts.

Drivers' perspective

Due to the utmost requirement of practicing safety and hygiene regimes by the drivers of cabs, they seem to be much aware of ensuring proper sanitization of their cars. They also keep the bottles of sanitizers handy and keep using them to sanitize their hands and most touching parts of their vehicles. Though it is witnessed as a tough routine to follow by the drivers, they understand the need of putting an extra amount of time into ensuring sanitization to their riders as well. One of the drivers says practicing hygiene is essential to make the customers feel that they are safe. He describes that he sanitizes his car properly in front of the rider when they come to make sure they are satisfied. Another driver shares that he ensures the proper cleansing of the seat belts, windows, and door handles. He also offers hand sanitizer to his riders and ensures sanitizing his own hands if in case he has touched the bag or suitcase of any rider.

Backlashes

Different types of backlashes could be witnessed during this chaotic period when no guidelines were clear when the disrupted services were resumed. Both the parties - riders and drivers blame each other for their actions which lead to tense situations among them.

Riders' perspective

One of the riders believes the backlashes are mostly from the customers' sides as they don't wear masks properly but the drivers are more serious about their job and fear getting complained by the riders. Another rider expresses his perspective by saying, *"What if someone visits the hospital and gets positive. There are a huge gap and trust is required to be maintained between the parties which seems difficult in the prevailing pandemic."* Riders are seen saying that it falls on the riders because they fail to be wise during the rides as drivers are patient with their riders. They suggest that there is no flexibility in pricing for the drivers and this can make the drivers disruptive.

Drivers' perspective

The drivers describe that clashes or backlashes have certainly occurred among the drivers and riders due to certain types of misunderstanding and vague guidelines that were spread across Uber's network of people. Though the terms and norms concerning social distancing and sanitization were cleared soon, some discrepancies or issues still arose among people that lead to backlashes. One of the drivers says backlashes occur with the riders due to the changed system of ridesharing that requires certain precautions like wearing the masks, maintain distance, and sanitizing the vehicle properly. He thinks it is very challenging to cope up with backlashes as it is very difficult to sanitize every nook and corner of the car, window, seats, and doors. Another driver shares that he certainly urges his riders to follow the precautionary measures properly and avoid shaking hands with the drivers, patting their backs, or talking to them in a friendly manner because it is important for their as well as the riders' own safety. He also expects his riders to wear their masks during every moment of the ride to avoid the backlashes between the riders and the drivers.

Overcoming strategy

In the light of the prevailing Covid-19 pandemic, the concerning parties of Uber's ridesharing services i.e. Uber's Sharing Economy platform, riders, and drivers; everyone is working in their own possible way to get safe during these adverse times.

Riders' perspective

The riders describe that it is a good experience of riding with the new norms now because the rides are safe, windows, doors are wiped properly, masks are worn and sanitization is done. Some other riders think that sitting in the same place as the other person was, does not seem to be a hygienic option during the current time. They also comment that the riders should not be allowed to touch anything in the cab and appraise the move of cashless payments taken by the company.

Drivers' perspective

The global pandemic has uprooted many industries including the transportation industry which has witnessed adverse impacts due to the disturbance in the value chain of sharing economy platforms like Uber. Consequently, the companies had to come forward with reciprocating strategies to cancel out the adverse impacts on their reputation and profits. Besides, the Uber drivers also had to employ some type of overcoming strategies to ascertain the safety of their riders. The drivers are also seen expecting their riders to give some tip because they work really hard and struggle to follow all the rules and if they get any help from riders in terms of good behavior or tip that would be a great gesture. Some drivers share that the company has been helping their drivers by giving them a chance to earn extra money through surge pricing and bonuses for completing daily or weekly targets of the number of rides. The company has also been extending a hand to help the drivers by giving them free of cost cleansing wipes and sanitizers which can be collected by them from their offices.

Outcomes

Cab booking systems have transformed a lot because now it takes much longer to sanitize the cars and it is a repeated process for every new ride. People avoid ridesharing and public transports now. The Covid-19 pandemic has impacted every person in different ways.

Riders' perspective

Riders feel that people have become more conscious about safety and hygiene. They describe that they can no longer take out the mask or have conversations with the drivers. They feel that they have to manage their commuting in the budget now and try to use the cabs for utter necessity. One of the riders says that there have been many restrictions now regarding wearing masks, not taking more than 2 people in a cab, ensuring the safety norms by keeping a safe distance between people, and the rider sitting on the front seat is not allowed anymore. All these restrictions have grossly impacted the booking system. She comments that the custom of driving is completely changed now.

Drivers' perspective

The drivers have been facing a financial crunch because of the decreased work opportunities and it has impacted their long-term plans as well. Another rider describes that as the Uber pool services were discontinued but other services were running during the period, he resumed his work after 3 months. Though his driver's account was working properly even during that period, he had not to face any issues related to resuming the work except that his driving license was expired which took him just a few minutes to update the latest copies of documents and he could resume the work instantly from where he left at same ratings he had earned in the past years. He adds that earlier, he used to work full time i.e. 8-10 hours a day but he did not work full time the last year, and even now, he is doing 6-8 hours of duty though the necessary precautionary norms are taken adequately the fear of getting contaminated is still there.

The above-found results have been summarized in the below table according to the impacts of these 9-themes on Uber drivers and Uber riders.

Table 3: Empirical Findings (Drawn by the author)

| Themes / Parties | Uber Drivers | Uber Riders |
|----------------------------|--|---|
| <i>Anxiety</i> | <ul style="list-style-type: none"> • Fear of Covid-19 • Anxiety due to new norms • Uncertainty of resuming services • Unpredictable future | <ul style="list-style-type: none"> • Canceled cheaper Uber Pool • Stopped using services • Uninstalled Uber App • Uncertainty about the future of ridesharing |
| <i>Cancellation</i> | <ul style="list-style-type: none"> • Loss of rides • Booking cancellations • Decreased demand for rides • Decreased income | <ul style="list-style-type: none"> • Decreased need for cabs • Booking cancellations • No option to book Uber Pool |
| <i>Job loss</i> | <ul style="list-style-type: none"> • Lost jobs as Uber drivers • Left Uber ridesharing services • Reduced income | <ul style="list-style-type: none"> • Lost jobs • Work from home • Reduced need for cabs • Limited commuting |
| <i>Income reduction</i> | <ul style="list-style-type: none"> • Reduced or no income • No new rides, no bookings | <ul style="list-style-type: none"> • Jobs at reduced pay • Limited need for cabs |
| <i>Social Distance</i> | <ul style="list-style-type: none"> • Challenges to maintaining social distancing during rides | <ul style="list-style-type: none"> • Challenges to maintaining social distancing while receiving the services |
| <i>Hygiene and safety</i> | <ul style="list-style-type: none"> • Difficulty in ensuring the safety of riders • Difficulty in sanitizing vehicles every time • Difficulty in wearing masks every moment | <ul style="list-style-type: none"> • Safety doubts during rides • Fear of being contaminated with the virus during rides • Doubts regarding whether the driver has sanitized the car properly • Prefer own vehicles |
| <i>Backlash</i> | <ul style="list-style-type: none"> • Not ensuring safety and hygiene for the customers • No support system for canceled rides by the riders | <ul style="list-style-type: none"> • Arguments concerning safety and hygiene • Not following social distancing adequately • Canceled bookings |
| <i>Overcoming strategy</i> | <ul style="list-style-type: none"> • Installed separators • Ensuring social distancing and sanitization • Wear masks every moment during the rides | <ul style="list-style-type: none"> • Stopped taking Uber cabs • Extra cautious for safety and hygiene during rides • Wear masks, sanitizing hands, and ensuring social distancing |
| <i>Outcomes</i> | <ul style="list-style-type: none"> • Reduced demand for rides • Fewer bookings • Canceled rides • Low income • Search new jobs • Anxiety due to unpredictable future | <ul style="list-style-type: none"> • Reduced need for Uber cabs • Reduced cab bookings • Stressed due to reduced income or job loss • Expensive commuting |

5 Discussions and Conclusions

In the previous chapter, the impact of Covid-19 on ridesharing activities has been analyzed by identifying the effects of the disrupted ridesharing services. The impact of this transformed way of rides on the Uber riders and drivers has been analyzed on the basis of 9 predefined themes. Therefore, the main research question of the study- *“Analyzing the impact of the Covid-19 pandemic on Uber’s ridesharing activities”*, has been answered by focusing on its two main parties – *“Uber riders”* and *“Uber drivers”*. The individual impacts of this pandemic on these entities have been analyzed in the previous chapter, which has successfully answered the intended research questions of the study.

5.1 Answers to research questions

To answer research question number 1 –*“How has the Covid-19 pandemic impacted the Uber riders”*, the findings show that a huge number of Uber riders have remained anxious about the ongoing announcements, cancellation of services, and proposed guidelines regarding ridesharing services. Most of the people have been facing issues related to their daily commuting while going and coming back from their offices. They have also realized the significance of Uber Pool services in their routine which had been an economic way of riding. Since this type of ridesharing allowed them to share their rides with other people, disruption of these services has severely impacted their monthly expenses due to otherwise expensive means of transportation.

Riders have also faced troubles in booking rides and have paid an extra amount because of the limited number of drivers available in a particular area. They have also shared their fears of traveling in the same vehicle that has been used for commuting by several other individuals in the time of the pandemic. The mixed views about drivers’ practicing social distancing and sanitization routines have been identified; some have described the drivers as being patient with their riders to ensure their safety and some have pointed out them being least concerned about the safety of the riders. A few riders have also shared their concern about drivers being adversely impacted due to their loss of a job or reduced income. On the other hand, a few riders have described their concerns about the backlashes that have occurred between the riders and drivers due to challenging tasks of ensuring the safety of both of them. The pandemic has impacted all and thus, everyone has become aware of the current scenario which is not expected to end soon. Thus, the

riders have adapted the overcoming strategies for themselves to ascertain their safety during rides and hence, seem to be following the new protocols of ridesharing.

Corresponding to research question 2- *“How has the Covid-19 pandemic impacted the Uber drivers”*, findings show that the Uber drivers have been impacted adversely due to the prevailing conditions in terms of the uncertainty of the future. They have been witnessed as most stressed individuals whose income solely depends on the number of rides they take per day, but due to the limited number of ride bookings due to the Covid-19 pandemic, their income has reduced extensively. Some of the drivers have been fired by the company and some of them have left their jobs as Uber drivers to join some other jobs ensuring their financial security. As the income of drivers has been reduced, they have been facing financial problems to meet their expenses, to which the company has supported their drivers by introducing new bonus schemes. The drivers have been informed about the weekly or monthly bonus systems introduced by the company which tends to give them some extra amount on completing a target of say, 20 or 30 rides. This bonus has been helping them to earn some extra money besides the surge pricing being offered by the company on taking rides from the busiest areas and during the peak hours. These two systems have been supporting them to gain some extra profits during this current time of adversity.

The drivers have also shared their concerns regarding the ride cancellations done by the riders leading to their losses. They have also raised their troubles regarding the extra time and effort they put to sanitize their cars and remain in their masks every moment for the safety of their riders. Hence, they also expect some decent amount as tips from their riders to support them. Though the drivers have been trying very hard to ensure their riders the safer rides, some backlashes do occur among them due to the uncertain times and stress prevailing in their minds. The drivers have adopted every possible strategy to win the trust of their riders and for their own safety such as installing separators between the front and back seats of their vehicles, wearing masks every moment during the rides, ensuring social distancing with their riders, and timely sanitization of their hands as well as vehicles. The world has now changed drastically and this is the new normal everyone is attempting to embrace. The one-on-one interview conducted with one of the Uber drivers during this research also indicates that the company is extensively

following the Covid-19 guidelines issued and thus, justifies how it is ready for the new normal. These efficient implications of the policies also suggest that the rides are now safer.

5.2 Assessment of the results in the light of earlier literature

To support the conclusions for *Research question 1* further, the previous related researches have been studied for ensuring the authenticity and reliability of the results found during the current research. Uber has always been known for its reputation in the market and the positive impression in the minds of the customers. Thus, assuring this positive image is vital for the company during today's Covid-era, and for this; the company is spreading the true information and the facts to its users through different platforms. This ascertains the safe rides by the company as well as enhances the company's reputation in the minds of its users. Besides, early and efficient application of the Covid-19 guidelines issued by the Health departments has led to maintaining the trust of users in safer rides provided by Uber. The impact of this pandemic on the transportation sector explained by Deloitte (2020) shows that it was difficult to keep the transportation sectors operational because of the rising adversity due to Covid-19. Besides, Zhang and Hayashi (2020) have indicated that there has been a sudden change in revenue in the transportation sectors which has declined abruptly because of the limited non-essential travels.

Uber Technologies, Inc. extended its hand to help some of its drivers by paying them some amount per month for the period of lockdown. Uber also announced a relief package of 250 Million to help its drivers and even planned to raise another 250 Million through donations from its employees and customers in India besides its CSR funds (Uber India Team, 2020). The drivers seem reluctant to resume their services after the lockdown because of the additional expenditure they have to make for disinfectants to sanitize the vehicles during the low business days (PTI, 2020). For this reason, the drivers also demanded financial help from the government according to one of the newspapers (ANI, 2020). Uber and other ridesharing platforms also announced to make the sanitizers available to its drivers to ascertain the sanitized vehicles in light of passengers' safety.

After the lockdown has been lifted and the ridesharing services are going towards the new normal, the ride-sharing market is expected to grow in 2021. This can be predicted because of the need for

mobility as people have to get to their work and move out for chores. For this reason, there would be a need for cabs just like they used to be in the pre-Covid era. Thus, the situations are going back to normal with all the necessary precautions (Markets, 2020). Demand for Uber cabs got low during lockdown but are picking up its pace as the situation is approaching towards new normal by following all the necessary precautions. As the company is adapting to these precautionary measures, the travelers also seem to be acceptable to these situations, though the fear remains deep inside them according to the report by Harikumar (2020). Uber has witnessed a sharp fall in sales during the lockdowns imposed in major cities of the world. All the operations were halted at once. Now as few countries are into their unlock periods, the ride-sharing companies sense the hope of getting back to normal by ascertaining all the sanitization guidelines given by the government. Through the normal situations don't seem to be as frequent as these were during the pre-Covid era and organizations seem to have accepted this and are trying their best to overcome the losses in every possible way (Globe newswire, 2020).

The results for *research question 2* are in line with the previous literature. For instance, Taumar (2020) signifies that as the Covid-19 hit Uber, the company responded to the situation in different ways and decided to lay off its 6700 employees around the globe along with shutting down 45 offices globally to meet its expenses. Shared mobility has been impacted and is witnessing a decline in trips. Uber has been doing 70% lesser trips and drivers have presented their situation of not getting enough rides and they avoid going to highly affected areas. Through a survey, it was found that 81% of drivers have reported a decrease in demand, people's preference to opt for cab hiring services saw a fall of 15% and are spending 21% lesser on these rides as per the reports by (Future bridge, 2020).

The accounts of many drivers were also suspended. Uber has also partnered with several grocery delivery businesses in the light of the current need of people i.e. essential goods. This move by Uber has also attempted to give its drivers some rides by delivering the goods at certain locations around several cities (Livemint, 2020). The CEO of Uber has also ascertained that they are leveraging every possible way for assuring safe rides for both the drivers and riders. The cutting-edge technology adopted by Uber has been enhanced to implement the selfie system adequately. This introduced selfie tech system for drivers ensures the drivers are wearing masks for their own and passengers' safety. Etherington (2016) has suggested another effective system followed by

the company that involves the drivers to be sharing their selfies with the masks on with the riders before commencing the rides to promote the necessity of wearing masks.

5.3 Limitations and Recommendations for Future Research

For the current study, it has been tried to get the most reliable information to supplement the results found in previous related researches. For this reason, plenty of literature has been studied in the form of news articles, published posts, blogs, researches, and statements by officials of the company. This significantly diverse data has been studied deeply and information from these has been analyzed to the best possible extent but each of the previous research included some of the repeated data from already existing literature which has led to the gathering of repeated and information from all these sources at the end. Consequently, even after trying hard to gather every bit of important information from the literature and primary research methods, some of the important information might have left out.

Many types of researches related to the Transportation and Logistics sector have been identified as an important source of secondary data for the research in the beginning but due to the nature of these researches, most of the concerned data was found to be insignificant in terms of ridesharing systems at the end. Similarly, the major part of data collected regarding the impact of Covid-19 on Sharing Economy platforms was found to be related to Hotel Booking or Cab Booking systems which was found to be irrelevant with respect to Uber's ridesharing activities while cross-checking the concluded results. Hence, very few sources could serve the purpose of testing the reliability of collected data while discussing the results.

Many of the available sources of information were also found to be either locked for viewing or the paid versions of the text viewing were available. Consequently, some of the results may have been affected due to the non-availability or non-accessibility of data from diverse platforms. Moreover, there was less information related to the actual levels of safety and hygiene during and before every ride because this information was totally dependent on the statements of the drivers and no other means can be employed to authenticate the reliability of these statements. No information could be gathered on the training systems that have been employed to guide the drivers about the sanitization practices.

Though it has been tried in the best possible way to find and analyze the impacts of the Covid-19 pandemic on Uber's ridesharing activities, the developed framework might not be sufficient to extensively analyze these impacts and hence, there arises a scope of future research in various other avenues. The current research can be widened by taking into account the impact of Covid-19 on Uber's other sharing economy platforms such as Uber Eats and Uber Freight to identify how well the other platforms of Uber are performing in the current era and to what extent these platforms will be able to get back to its original position in their specific markets after Covid-19 pandemic gets over. The study can also be extended by taking into consideration the crisis management approach by such Sharing Economy platforms and investigating more about the interlinked communication channels for spreading the current information to its users.

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Appendices

Appendix 1. Questions for the Interview with Uber drivers

Interviewee: Acquaintances of the author

1. How did you react to Uber's decision of disrupting its ride-sharing services when the Covid-19 pandemic was declared?
2. To what extent you got affected due to the disrupted services?
3. How did you cope up with the situation?
4. How had your income stream been affected due to the disrupted services?
5. How have the ride-sharing services been changed now?
6. What are your thoughts about possible reasons for ride cancelations by drivers in the current era?
7. How were you able to continue your job after the period of disrupted services?
8. How has the company been helping its drivers during the pandemic?
9. How has your 'Driver Account' on Uber's ride-sharing platform been affected during the entire period of disrupted services?
10. How have your opportunities of work been affected during the period of disrupted services?
11. How do you ensure social distancing during the rides?
12. What practices do you follow to assure your customers a safe and hygienic ride?
13. How do you cope up with backlashes due to canceled services?
14. How do you expect your riders to support you in assuring safe drives?
15. How has this pandemic affected your long term plans?

Appendix 2. Questions for the interview with Uber riders

Interviewee: Acquaintances of the author

1. How did you feel about the disrupted ridesharing services by Uber due to the Covid-19 pandemic?
2. How did you manage your daily commuting during the period of disrupted services?
3. How has the current ride-booking systems transformed?
4. What are your thoughts about the demand for Uber rides in the market?
5. How have your ride-booking needs been impacted compared to the pre-Covid era?
6. What are your views about the drivers ensuring social distancing during the rides?
7. How well do you think the drivers maintain safety and hygiene?
8. How do you see backlashes between the Uber drivers and riders in the current era?
9. What are the possible reasons for riders canceling the rides in the Covid-era?
10. How safe do you think are your rides now?
11. What does the term- "new normal" mean to you in terms of ridesharing?