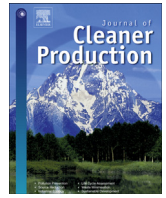




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# The effect of the Covid-19 on sharing economy activities

Mokter Hossain

Center for Entrepreneurship, College of Business and Economics, Qatar University, PO Box 2713, Doha, Qatar



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## ABSTRACT

Activities within the sharing economy (SE) are in a precarious situation due to the Covid-19 pandemic. Even though the SE is considered a disruptive phenomenon, especially in the accommodation and transport sectors, the Covid-19 has raised concerns about its survivability. Thousands of people have lost their jobs, the value of SE firms has dropped, and many service providers have no other option but to stop working. Understanding the effect of the Covid-19 pandemic on the SE sector is therefore essential. The objective of this study is therefore to examine the effect of the Covid-19 on sharing economy activities. We have used various publications—such as news articles, TV news items, YouTube videos, and blog posts—as data sources for this study purpose. Through content analysis, the study shows how the SE phenomenon is coping with the changing environment caused by the Covid-19. We analyzed the SE sector mainly from the perspective of four stakeholders: SE firms, service providers, service receivers (customers), and regulatory bodies. We explored the SE phenomenon based mainly on the following themes: anxiety, cancelation, job loss, income reduction, hygiene and safety, overcoming strategy, and outcomes. Based on the findings, we point out implications and avenues for future research.

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## 1. Introduction

The sharing economy (SE) has allowed travelers to organize their trips in new ways. They can book a room through Airbnb, travel in a car booked on Uber, eat food made by locals with Eat-With, move around a city with a shared bike, and enjoy local attractions with Vayable (Heo, 2016; Zhou et al., 2020), all at a lower price than they would conventionally pay (Hossain, 2020). Forecasts indicate that the global SE market is expected to grow from US\$15 billion in 2015 to US\$335 billion in 2025 (Narasimhan et al., 2018). However, the Covid-19 has radically affected the SE. While few businesses have avoided the unprecedented disruptions of the pandemic (de Sousa Jabbour et al., 2020), the SE sector has been particularly affected (Zenker and Kock, 2020) since the World Health Organization declared the novel coronavirus outbreak a public health emergency of international concern on January 30, 2020. However, the importance of sharing is gaining growing attention in the Covid-19 era (Mont et al., 2020), because many sectors, such as healthcare tourism (Kumar et al., 2020) and restaurants (Camilleri and Neuhofer, 2017) are closely related to the SE, especially in bigger cities. The Covid-19 encourages firms to embrace openness in sharing information (Chesbrough, 2020).

The SE is defined as “people coordinating the acquisition and distribution of a resource for a fee or other compensation” (Belk, 2014, p. 1597). Many economic, social, and technological factors have positioned the SE as a promising phenomenon (Mody et al., 2019). There are numerous sorts of SE activities, and grouping them under a single category would be unproductive (Hagi and Wright, 2019). The SE focuses on serving underutilized resources, thus promoting efficiency, community, and sustainability (Cheng et al., 2020; Geissinger et al., 2019), with the latter being a key concern for businesses (Muduli et al., 2020). Whether service providers—such as Uber drivers, Uber Eats delivery agents, and Airbnb hosts—should be considered employees, contractors, or workers is under serious debate. Sharing platforms consider service providers (e.g., Uber drivers and AirBnB hosts) as contractors, thus offloading the responsibility for insurance and social benefits (Hossain, 2020).

While many countries have taken extraordinary measures to curb the pandemic, some have been heavily criticized for mishandling many measures (Niewiadomski, 2020). Some governments have supported the incomes of workers by furloughing non-essential employees and compensating small business owners (Cowling et al., 2020), while others have not offered any financial support to people who lost income, such as in the SE sector, due to the Covid-19. Indeed, the Covid-19 has affected vulnerable groups disproportionately (Evelyn, 2020), and millions of people in the

E-mail address: [mokter@qu.edu.qa](mailto:mokter@qu.edu.qa).

global SE sector have lost their livelihoods. Some service providers may believe they should be treated as employees, but profits and social wellbeing are conflicting concerns in the SE (Curtis and Mont, 2020; Mont et al., 2020).

Firms want to maximize profits, while governments wish to optimize their citizens' wellbeing (Mi and Coffman, 2019). For example, many firms use the SE as a marketing gimmick to disguise their profit and exploitation motivations. The SE platforms like Uber, Airbnb, and Lyft play a significant role in hospitality and travel, and their businesses have been impacted around the world (Hossain, 2020). Activities such as lodging, eating out, hosting in-person conferences, and cruising, as well as the role of travel agencies and tour operators in organizing such activities, came to a standstill or were reduced significantly. The Covid-19 has had an adverse effect on service providers, customers, and society as a whole, but its full ramifications are still unknown. Indeed, the pandemic is forcing the SE sector to recalibrate. Studies are emerging about various business activities, such as supply chains (de Sousa Jabbour et al., 2020), immigrant workers (Sönmez et al., 2020), employee wellbeing (Tuzovic and Kabadayi, 2020), open innovation (Hossain, 2018), and business uncertainty during the pandemic (Sharma et al., 2020), among other areas. The SE differs from other businesses, because service providers, who own key resources like vehicles and properties, are not employees of the parent company. The Covid-19 has accelerated the demise of some industries but speeded up the advent of nascent industries (George et al., 2020). We need to know how the Covid-19 is affecting different business sectors especially the ones that are highly affected (Li-Ying and Nell, 2020) such as the SE sector (Verma and Gustafsson, 2020).

The SE firms that once seemed unstoppable are now dropping in value, so a question arises about how SE can be reconsidered (Gössling and Michael Hall, 2019; Higgins-Desbiolles, 2020). Unfortunately, the SE is overlooked in crisis stimulus packages despite its significant economic contribution to many countries (Higgins-Desbiolles, 2020). This study therefore aims to examine the effect of the pandemic on the SE activities by pursuing the following two research questions:

- a. What is the effect of the Covid-19 on firms, service providers, consumers and regulatory bodies in the sharing economy?
- b. How are consumers, service providers, and firms in the sharing economy coping with the effects of the Covid-19?

We performed a content analysis of selected documents to find answers to these questions. The Covid-19 has raised concerns about the survival of the SE, with many people losing income and the SE firms losing value, so we explored the various facets of the SE to understand how the Covid-19 has affected this sector. The remainder of this paper is structured as follows: First, we review the extant literature on the SE. Section 3 then explains the research methods, including the data and its collection and analysis. Next, section 4 presents the results of this study, while we highlight some implications and future research avenues in the final section.

## 2. Literature review

The benefits of the SE abound, and scholars have studied its exponential growth (Dredge and Gyimóthy, 2015) in a range of industries, such as transportation (e.g., Uber), lodging (e.g., Airbnb), and household services (e.g., Care.com). Even though studies into the SE mainly focus on Uber and Airbnb, this is expanding into different fields. For example, Geissinger et al. (2020) identified 17 sectors and 47 subsectors for on-demand services, fashion, and food delivery, with 165 unique actors operating. The Covid-19 has

mostly affected these sectors adversely but occasionally favorably. For example, the SE meal-delivery businesses like Uber Eats have seen their business increased significantly. Meal sharing is also expanding rapidly, having been boosted by the Covid-19 (Mhlanga, 2020). In all cases, however, the Covid-19 has forced organizations to transform their business policies in line with the changing landscape (Dwivedi et al., 2020). Three phases have been broadly identified in the Covid-19 period: (a) reacting, such as through hoarding, rejecting, losing jobs, and practicing additional hygiene; (b) coping, such as through remote work, home quarantine, stress, and social distance measures; and (c) long-term planning, such as restoring consumption, establishing a new social identity, and finding stable jobs (Kirk and Rifkin, 2020). Sustainable businesses are essential for firms to survive especially in the Covid-19 crisis (Amankwah-Amoah, 2020; Lee and Trimi, 2020).

The SE is considered an opportunity to transform how business is done (Ritter and Schanz, 2019), and concerns about social embeddedness have positioned the SE as a good alternative for consumers (Hamari et al., 2016). Consequently, Airbnb and Uber emerged as serious competitors to the global hotel and taxi industries (Mody et al., 2019), and these large SE firms have created direct and indirect employment for millions around the world (Martin, 2016). The SE firms are rapidly increasing market share in the hospitality industry (Hossain, 2020). Thanks to lower cost and ease of use, the SE is a popular option among consumers, service providers, and entrepreneurs (Zhang et al., 2018). Even hotel chains can leverage their assets to integrate sharing platforms (Akbar and Tracogna, 2018). The SE expands consumption, but it may increase or decrease ownership depending on the type of the SE activity (Filippas et al., 2020). Surprisingly, Gyódi (2019) found that in major European cities, only a minority of Airbnb listings were truly SE. Like with the traditional hotel industry, location, property attributes, amenities, services, rental rules, and customer reviews play a significant role in sharing accommodation (Wang and Nicolau, 2017).

Customers have two major concerns with the SE: lack of trust and discrimination. Hosts may encounter challenges, such as risks, a lack of privacy, and stress (Zhang et al., 2019). As transactions usually take place remotely, trust is a key issue in the SE (Yang et al., 2019). While trust is frequently cited as an important element in the SE, the Covid-19 has forced us to consider this further. How customers react to the SE service failures is scarcely discussed, however (Shuqair et al., 2019). The SE requires trust between customers and hosts beyond the transaction stage (Yang et al., 2019), but the Covid-19 has created mistrust between different SE stakeholders. Moreover, Phua (2019) found diminished trust, along with customer service and technological challenges, to be the main issues for customers. The Covid-19 has affected many of the above and other concerns further.

Information asymmetries make it hard to assess the trustworthiness of the various parties in the SE (Abrate and Viglia, 2019), but online profiles and reviews from other guests play a significant role when booking a lodging through platforms like Airbnb (Cheng and Jin, 2019). One study found that personal reputation (40%), followed by storytelling narratives in profiles (8%), is strongly associated with host popularity (Mauri et al., 2018). Racial discrimination is a serious concern in the rapidly growing SE (Cheng and Foley, 2018). Indeed, a recent study of 1801 Airbnb hosts found that those with African-American-sounding names were 19% less likely to be accepted as guests than those with white-sounding names (Cui et al., 2020).

Despite the growing importance of the SE as an alternative means for consumption, studies are still at an embryonic stage (Kim et al., 2019). The SE is a growing research topic in various disciplines, however (Sainaghi et al., 2020), and the media have

reported the problems of customers, service providers, and the SE firms resulting from the Covid-19 (Zheng et al., 2020). Once considered a promising phenomenon, the SE is now under serious threat (Teubner and Flath, 2019), but academic studies on the effect of the Covid-19 on the SE are largely absent.

### 3. Methods

#### 3.1. Research setting

This study has a global setting, so it is not attached to any particular region. It considers events, incidences, and decisions associated with the Covid-19 in the global SE sector. This study is explorative with a qualitative approach. Our data collection focuses on capturing the state of the SE amid the pandemic based on secondary data sources, which are widely used for high-quality research (Johnston, 2017). Indeed, secondary data is perhaps more appropriate for this study, because first-hand data could not provide comprehensive knowledge about the Covid-19's effect on the SE. Secondary data has been widely used in a range of disciplines, including strategic orientation (Shortell and Zajac, 1990), microfinancing (Zhao and Wry, 2016), tourism injury problems (Bentley and Page, 2008), sustainable tourism (Pereira and Mykletun, 2012), and management reaction to hotel performance (Xie et al., 2014), and it has several benefits for academic studies (Houston, 2004). It shows the real decisions being made by real decision-makers, having been collected in a less obstructive manner and not influenced by the biases of self-reporting. The biases related to the key informant sampling approach can therefore be avoided. Recent studies based on online comments to a newspaper article about the SE present a vivid exemplification of the importance of such data for studies (Cheng and Foley, 2018; Cheng et al., 2019).

#### 3.2. Data

The main data sources comprise articles in newspapers and the popular press, blog posts, and video clips. Through a comprehensive search, we collected as much information as possible about the ongoing Covid-19 pandemic's effects on the SE. When searching for relevant articles, we used the keywords shown in Table 1. We only included documents written in English that clearly discuss the SE and the Covid-19. The searches took place during March and April of 2020. Whenever we found an appropriate document, we added its title and a web link to a spreadsheet. After completing the collection process, we sorted the documents listed in the spreadsheet to see if any had been recorded twice. We found several such documents, so duplicates were removed from the list. We do not claim to cover all the relevant documents available on the internet, but we feel that our list is comprehensive enough to provide an insightful academic contribution about the Covid-19's effect on the

**Table 1**  
Overview of data sources and search keywords.

Source types	No. of documents	Collection sites	Searching keywords
Newspaper articles	123	Google search	"sharing economy and Covid-19", "sharing economy and coronavirus", "Uber and Covid-19", "Uber and coronavirus", "AirBnb and Covid-19", "AirBnb and coronavirus", etc
Popular press articles			
Blogs			
Video clips			
	26	YouTube	

SE. The final body of documents comprised 223 written documents and 26 videos, with the latter being viewed carefully and their main information being written down.

#### 3.3. Data analysis

All documents were downloaded as PDFs and saved in a temporary folder. Subsequently, these were combined into a single PDF document that was 1274 pages long. We applied content analysis and organized the diverse data, including coding information, into different categories (Soldatenko and Backer, 2019). Content analysis can contribute a new depth of understanding for a phenomenon that has received limited attention (Yousuf and Backer, 2015). This was conducted following the examples of some previous studies (Hossain, 2018; Shortell and Zajac, 1990). We uploaded our combined document to QDA Miner Lite, an effective program for qualitative data analysis. Although this is the free basic version, it is sufficient for coding and data-analysis purposes. We used a range of preselected codes and additional codes through open coding. The preselected codes included *anxiety*, *booking cancellation*, *job loss*, *salary cut*, *social distancing*, *hygiene*, and *health safety*. However, we also added additional codes before finishing the coding work, such as *backlash for SE firms*, *strategy*, *positive/negative outcomes of Covid-19*, *post-Covid-19 stage*, and so on. We read each document line by line and coded it accordingly. After completing this iterative coding process, we merged several codes into one to reduce the number of coding categories to a more reasonable level. We also took notes and memos wherever deemed necessary. Once the coding process was completed, we extracted the coded texts into Excel files and synthesized the findings in three categories: service receivers, service providers, and platforms. The results of this study are presented thematically in the following section.

### 4. Results

The Covid-19 has affected SE platforms, service providers, and service receivers (customers) along with governments. We present this section thematically to indicate the findings, which are also summarized in Table 2.

#### 4.1. Anxiety

The SE customers needed to cancel Airbnb accommodation bookings, and most people stopped using Uber's service. Consequently, these platforms struggled to keep customers and service providers, as well as their investors, happy. Thus, anxiety had a ripple effect through the different levels of the SE activity. Dissatisfied customers and service providers flooded social media with criticisms. For example, customers complained about having to prove they could not travel due to national safety measures in order to obtain a refund from the platforms. The number of guests staying

**Table 2**  
Summary of findings.

Parties	Anxiety	Cancelation	Job loss	Income reduction	Social distance	Hygiene & safety	Backlash	Overcoming strategy	Outcomes
Platforms	<ul style="list-style-type: none"> <li>• Significant loss of customers</li> <li>• Devaluation of the company</li> <li>• Investor devaluation</li> <li>• Negative media coverage</li> <li>• Not sure about what is happening</li> <li>• Unexpected demand from service providers</li> <li>• Unexpected demand from service receivers</li> </ul>	<ul style="list-style-type: none"> <li>• No bookings</li> <li>• Booking cancelations</li> <li>• Confusion in refunding customers and service providers</li> </ul>	<ul style="list-style-type: none"> <li>• Major redundancy</li> <li>• Sudden sacking of many employees</li> <li>• Extra financial support for employees</li> </ul>	<ul style="list-style-type: none"> <li>• Salary reduction for employees</li> <li>• Redundancies to reduce costs</li> </ul>	<ul style="list-style-type: none"> <li>• How to ensure individuals maintain social distancing</li> <li>• Developing new ways to offer social distancing at the service point</li> </ul>	<ul style="list-style-type: none"> <li>• How to ensure the safety of employees</li> <li>• How to ensure the safety of service providers</li> <li>• How to ensure the safety of customers</li> </ul>	<ul style="list-style-type: none"> <li>• Criticism for not supporting employees, service providers, and customers</li> <li>• Furious investors</li> <li>• Service providers being ignored by SE firms</li> <li>• Customers being ignored by SE firms and service providers</li> <li>• Not providing clear guidelines to service providers and customers</li> </ul>	<ul style="list-style-type: none"> <li>• Secure extra funding to support service providers and compensate customers</li> <li>• Financial help for service providers and receivers</li> <li>• Provide items to the service providers to help maintain social distancing</li> <li>• Stop services in some cities</li> <li>• Seek state finance for the service providers</li> </ul>	<ul style="list-style-type: none"> <li>• Company devaluation</li> <li>• Unhappy service providers</li> <li>• Unhappy customers</li> <li>• Investor concerns</li> <li>• Significant business shrinkage</li> </ul>
Service providers	<ul style="list-style-type: none"> <li>• Reduced income</li> <li>• Fear of Covid-19's effect</li> <li>• Uncertainty about what is happening</li> <li>• Unpredictable future</li> </ul>	<ul style="list-style-type: none"> <li>• No bookings</li> <li>• Booking cancelations</li> <li>• Account suspension</li> </ul>	<ul style="list-style-type: none"> <li>• Willingly stop working</li> <li>• No new bookings</li> <li>• Platforms force service providers to stop working</li> </ul>	<ul style="list-style-type: none"> <li>• No income as no opportunity to serve customers</li> </ul>	<ul style="list-style-type: none"> <li>• Challenges to social distancing while providing services</li> </ul>	<ul style="list-style-type: none"> <li>• Fear of own and customer safety</li> <li>• How to ensure the safety of own selves and employees</li> <li>• How to ensure the safety of customers</li> </ul>	<ul style="list-style-type: none"> <li>• No support for cancelled services</li> <li>• Not serving the customers properly</li> <li>• Not maintaining social distancing per guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Stop providing services</li> <li>• Take extra care in cleaning, hygiene, and safety</li> <li>• Try to reassure customers</li> </ul>	<ul style="list-style-type: none"> <li>• Business and financial loss</li> <li>• Incur cost of resources without earning</li> <li>• Personal anxiety</li> <li>• Life changing decisions about careers</li> <li>• Search for long-term tenants</li> </ul>
Service receivers	<ul style="list-style-type: none"> <li>• Stop using service</li> <li>• Fear of Covid-19's effect</li> <li>• Difficulty getting Covid-19 tests</li> <li>• Uncertainty about what is happening</li> <li>• Unpredictable future</li> </ul>	<ul style="list-style-type: none"> <li>• Booking cancelations</li> <li>• No option to book services</li> <li>• Account suspension</li> </ul>	<ul style="list-style-type: none"> <li>• No or reduced income due to job loss</li> <li>• No need for SE services</li> </ul>	<ul style="list-style-type: none"> <li>• Customers cannot afford many SE services due to limited or no income</li> </ul>	<ul style="list-style-type: none"> <li>• Social distancing while receiving services</li> </ul>	<ul style="list-style-type: none"> <li>• Customers prefer not to use SE services during the pandemic</li> <li>• Customers cannot maintain safety precautions due to the pandemic</li> </ul>	<ul style="list-style-type: none"> <li>• Cancelled bookings</li> <li>• Not respecting contract with service providers</li> <li>• Not respecting social distancing guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Taking extra care with cleaning, hygiene, and safety</li> <li>• Stop taking SE services</li> <li>• Maintaining social distancing</li> </ul>	<ul style="list-style-type: none"> <li>• Travel disruption</li> <li>• Personal financial loss</li> <li>• Deprived of holiday</li> <li>• Mental stress</li> <li>• Using SE services as little as possible</li> </ul>
Rules and regulatory bodies	<ul style="list-style-type: none"> <li>• Inadequate Covid-19 testing centers</li> <li>• Extraordinary financial support for citizens</li> <li>• Unpredictable future</li> </ul>	<ul style="list-style-type: none"> <li>• Change existing regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Many unemployed citizens</li> <li>• Furlough plan development</li> </ul>	<ul style="list-style-type: none"> <li>• Need to provide extra financial support to citizen</li> </ul>	<ul style="list-style-type: none"> <li>• Changing social distancing guidelines</li> </ul>	<ul style="list-style-type: none"> <li>• Different safety measures in different contexts</li> <li>• Difficult to enforce safety directives</li> </ul>	<ul style="list-style-type: none"> <li>• Frequently changing guidelines</li> <li>• Lack of support for people in trouble due to Covid-19</li> </ul>	<ul style="list-style-type: none"> <li>• Financial support for service providers and receivers</li> <li>• Measures to regulate SE services</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to manage the SE sector</li> <li>• Paying citizens who have little or low income</li> </ul>

in the SE properties also decreased significantly, and those who did turn up were concerned with the Covid-19. Some SE services came to complete halt in various cities, and some customers had difficulty travelling, especially for urgent matters. Instead of refunding payments, SE platforms offered credit for future use, but customers wanted their money back. Service providers were also highly concerned. Many hosts treat it as their fulltime occupation and have multiple properties that are rented from property owners, so they are in highly vulnerable situations. The occupancy rate of SE properties was zero in many cities, as a host in Malaysia indicated: "Pre-Covid-19, it was rented 10 out of 30 days at RM200 (USD45) a night. Now, zero."

Another host lamented her anxiety as follows: "Since the beginning of the summer of 2018, it was fully booked via Airbnb, almost exclusively by foreign tourists, but 100 percent of the reservations for April, May and June have been canceled." Some hosts had been relying upon the income from Airbnb to meet their mortgage payments, but their income was zero as their mortgage debt grew. The following statement by a host says it all: "I have now two mortgages. I don't have any income, and I don't know when I'm going to be able to start doing Airbnb again."

Five years ago, Airbnb Superhost Diana Jeong left her job to become a fulltime host because she was expecting a baby this spring. She now has no source of income and feels that Airbnb has been very unfair to its hosts during the Covid-19 pandemic. She obviously did not expect a pandemic would upend her plan. Many hosts also believe that guests cancelled their bookings to receive a full refund, even if their reasons for cancelling were unrelated to the pandemic, and they feel that Airbnb did not consult with them in the decision-making process. For example, guests may have found a cheaper place while receiving a full refund for an existing booking. One host quit his job as a college professor to be an Airbnb host in South Philadelphia and bought a neighbor's property for the same purpose. He currently has no income whatsoever and the future for him is frightening. Another host with 50 units opted out of her business due to the Covid-19. In April 2020, over 4100 hosts deregistered their properties from the SE platform Minpaku, which features 25,000 properties across Japan. Some hosts are senior citizens with limited regular income, so they rent out rooms in their properties for supplemental income, but long-term renting is not an option for them. Some hosts claim that guests are abusing the system by requesting refunds after staying in a property. Some of them are contemplating to take legal action over this kind of malpractice.

Some SE drivers, meanwhile, have been told that their accounts have been suspended due to public health concerns. Passengers affected by the Covid-19 can also pass the virus to drivers, so many drivers have stopped working over fears of being infected. Some drivers are in dire situations, however, because they have no access to unemployment benefits, so they have no choice but to drive if they are to provide for their families. A particularly gruesome incidence occurred in London when a driver died after being exposed to repeated coughing from a female passenger, as the following final message from the formerly healthy Uber driver to his family indicates: "I am really scared ... pray for me."

Many single mothers are SE drivers, and their suffering seems unbearable. For example, Tina Raveneau, a single mom with a son, said, "getting sick would affect my ability to pay rent and feed my child. App companies have to at least ensure that if I pick up a rider who is infected and I need to go home and self-quarantine myself, that my bills will be paid." In the USA, 22% of Uber drivers are African American and therefore a vulnerable group in the USA. One rare driver, Jerome Gage, says he drives because: "Yeah, I'm working because people need us. They don't want to rely on public transportation." He feels that the demand for rides has dropped

significantly, and he spends his time mainly watching YouTube and Netflix while waiting for customers.

Another report argues that Uber is the primary source of income for many black drivers, so to support their families; they cannot afford to stop working. One driver posted this on *The Rideshare Guy* blog: "Sickness is not an option for me because not working is not an option. If I do get sick, I will have to continue to work or I will lose my ability to exist – it's not just income." Even though Uber offered payment to drivers affected by the Covid-19, many drivers do not know where to get the documents to claim this. Moreover, due to long queues in many cities, getting a the Covid-19 test can be a daunting task, as a driver named Chen expresses: "The other drivers I talked to don't understand how to get tested and how to get sick pay and the concern is they don't know who to go to. Uber does not make it clear." Each driver has his or her personal problems. For example, one driver with diabetes stopped driving as a precaution, while another driver could not stop, as he needed to achieve a minimum number of rides to keep the car he rented from a company. Thus, the SE service providers are grappling with balancing life and livelihood, staying healthy while maintaining a sustainable income.

According to Airbnb, closing services in some cities is not a business decision but rather a public health decision, as declared by the World Health Organization. Due to the rapid onset of the coronavirus crisis, most companies did not communicate well with their employees, service providers, and other external stakeholders. For example, Airbnb had to apologize to its service providers for miscommunication, as the following message from the Airbnb CEO indicates: "I deeply regret the way we communicated this decision, and I am sorry that we did not consult you — like partners should. We have heard from you and we know we have let you down. You deserve better from us." However, asking for documentary evidence to prove someone cannot travel due to the Covid-19 is unrealistic, because every country, state, or city may have different regulations. Confusing messaging from the platform increased the anxiety of service providers and customers. For example, one guest received the following message from Airbnb: "Your request to cancel was approved — and you will receive a full refund of \$0.00." Investors are also pressuring platforms, and to assuage them, Uber claims it has \$10 billion of unrestricted cash on hand.

#### 4.2. Booking cancellations

Booking cancellations took place across the world. AirDNA, an organization that tracks Airbnb bookings, found a 53% fall in US bookings between February 3 and April 13. A survey for Newsy, meanwhile, found that 27% of people are less likely to use car sharing post-Covid-19. Airbnb bookings were also blocked in some cities. Some hosts and customers struggled to understand financial matters such as cancellation fees and commissions. China's Didi and France's BlaBlaCar experienced the greatest fall in weekly app downloads, down 75% and 65%, respectively, between January 29, 2019 and March 7, 2020. Bookings in Beijing plummeted to 1655 in the first week of March from 40,000 in the first week of January 2020. Airbnb cancellations hit many hosts hard, and they struggled to understand what would happen with the commissions that Airbnb had received from bookings. After a backlash from various quarters, Airbnb set aside \$250 million to help pay hosts for missed and cancelled bookings, as reported by various media outlets including CNBC. Airbnb's Extenuating Circumstances Policy allows guests to cancel their bookings without charge. Moreover, it has created a \$10 million "Superhost Relief Fund" to support Superhosts who need to pay rents or mortgages. Airbnb has also promised to refund cancellations for bookings during the period from March 14 to May 31, 2020. However, not anyone who had booked for July or later was refunded. For example, Michael Carino's July booking did

not fall within the refund period, so the host will apply the usual cancellation policy. He is still in limbo about the booking refund. *"It's not fair to restrict this limited time frame,"* Carino said. Airbnb is giving guests worldwide the option to cancel reservations with a full refund, but how to claim the refund was initially unclear. Some hosts felt that customers should not get refunds, as one host expresses: *"I don't understand people whining about how they couldn't get their money back for their vacation. If you want flexibility, then go to a hotel. Almost all hotels will let you cancel as long as you cancel within two days. You're welcome to buy travel insurance too."* Some hosts have seen 100% cancellations for properties that are usually fully occupied.

#### 4.3. Job losses and salary cuts

Uber drivers have lower incomes and fear being affected by the Covid-19. According to a recent report, in the USA alone, the SE sector has created 6.23 million jobs with 78 million service providers, and 800 million people engage with it. A recent report states that 53% of 871 surveyed drivers are concerned about earnings having fallen by 67%. Many people also lost jobs in the SE sector across the world: Uber and Airbnb reduced their workforces by 14% (3700 employees) and 25% (1900 employees), respectively. Laid-off Airbnb employees in the US were given 14 weeks of base pay plus one additional week for every year at Airbnb. It also developed its Talent Directory, a public recruitment list, to help these employees find new jobs. Employees in the marketing and design section were reduced the most to bring down costs. The Airbnb founders also decided not to take a salary for six months, while the top executives took 50% pay cuts. Its redundant employees include 22 in-house secretaries and 80 design team members. Lyft, a rival to Uber in the USA, has slashed its workforce by 1000 employees (17%) and furloughed 288 more. Additionally, the remaining employees will only receive 70% of their salary during the crisis period. In general, Lyft engineers are highly paid with an average salary of \$263,000. The scooter-sharing startup Lime also laid off 13% of its workers (83 employees) on top of the 14% reduction in February 2020. A similar startup, Bird, laid off 30% (400 employees) of its total workforce in March 2020.

#### 4.4. Social distancing and safety

Different social distancing measures manifest around the world, such as 1 m, one and a half meters, 2 m, and so on. Regardless, it is impossible to maintain social distancing for many service providers and receivers. For example, drivers cannot maintain social distancing while in a car with passengers. According to Yaseen Asleem, the head of the United Private Hire Drivers Association: *"it is impossible to maintain a social distance of 2 m as drivers, but it is a mess because there are no clear guidelines."* One passenger took an Uber to a hospital, where he was confirmed to have the Covid-19. Consequently, Uber suspended the driver, and the same happened to many other drivers across the world. In China, the local ridesharing platform Didi initially installed protective plastic sheets in cars to separate drivers and passengers. Uber, meanwhile, is launching features in its app to check if drivers are wearing facemasks before starting a trip. It also wants to ensure passengers sit on the backseat and wear masks.

The SE providers and customers both have increased hygiene concerns. Ridesharing drivers are more careful because they encounter numerous customers. Drivers are advised to regularly disinfect cars, especially surfaces where passengers may have contact, as well as wash their hands, cover any coughs or sneezes, and stay home if they feel sick. Airbnb has also set cleaning protocols for hosts, having collaborated with a former US surgeon

general about training hosts about hygiene, such as having a 24-h gap between guests staying in an accommodation. The company has also listed a set of products for hosts to clean their properties with. Airbnb announced, *"We believe that enrolling in our enhanced cleaning initiative, with guidance and resources provided by Airbnb, is the best way for hosts to show guests that they take cleanliness and sanitization seriously."*

Passengers who do not know each other can no longer travel together using options like Uber Pool and Lyft Line. According to the founder and CEO of *The Rideshare Guy* website, individual drivers are responsible for cleaning their cars. However, riders have no knowledge of how clean a particular car may be. Some drivers do a great job when it comes to cleanliness, but others do not. Additionally, some drivers experience difficulty accessing the right cleaning materials and protective equipment in their localities.

Even though hotels are more reliable about cleaning, elevators and lobbies might alarm guests because many people use them throughout the day. Some suggests that riders should ensure that car air vents are set to fresh air rather than recirculation, while drivers should not help riders to load and offload luggage. Others suggest that home-sharing platforms should be regulated in the same way that real estate agencies and other housing services are regulated.

Uber is also helping drivers to perform delivery and other services, but even this is not entirely safe, even though it is likely safer than carrying passengers. For example, delivery drivers need to enter restaurants to collect orders, and this repeatedly puts them at risk of being infected. Uber has also mandated that all drivers and passengers wear facemasks, and it suggests changing gloves between customers. This means when a driver does 15 rides or deliveries a day, he needs 15 pairs of gloves. Social distancing, hygiene, and safety remain a serious concern in the SE.

#### 4.5. Backlash for SE firms, service providers, and customers

The backlash for the SE services comes from various sources. For example, critics argue that Airbnb has skewed the rental market and are pushing for stringent regulation, and it has been criticized for exacerbating housing shortages. In its defense, Airbnb claims it generates incomes that boost local communities. The SE platforms have managed to stave off regulation so far. These firms offload tax payments that can help cover workers when they cannot work, however, and the Covid-19 pandemic has prompted fresh criticism as the SE workers benefitted from government support. Upcoming new unemployment programs in the US aim to force these firms to contribute, so that drivers can claim benefits quickly. According to one host in San Francisco, Airbnb is forcing hosts to bear most of the cost of refunds, with them being given no say in the decision to effectively provide free travel insurance at the host's cost. Reports suggest that the SE firms like Uber and Airbnb are lobbying the US Government to secure unemployment benefits for their independent contractors and sole proprietors. Uber's CEO has also contacted 10 members of Congress. Similarly, three Airbnb co-founders have also talked with over a dozen members of Congress. A lobbying firm representing Lime and Bird circulated a presentation to members of Congress about the scooter industry. These companies are widely criticized for lobbying while evading tax.

Many of these firms have high levels of liquidity, yet they do not intend to provide sick pay to their service providers. For example, such benefits may have only costed 2.7 cents per hour of paid work. Uber is yet to decide on halting its services, yet many people criticize Uber for not shutting down their services to prevent the spread of coronavirus, despite drivers in the USA and UK dying after working during the pandemic. Airbnb, however, eventually refunded and supported hosts in some way. Other rival platforms, such

as Vrbo, have faced blowback from customers due to their refusal to give refunds. The SE firms are under immense pressure to pay service providers benefits, such as paid sick leave. Both Uber and Lyft are facing lawsuits in California that allege they have misclassified their drivers as contractors. Airbnb charges 3% of the price of a hosting to guests, who also pay a variable service fee, but Uber charges a 25% commission to drivers on the cost of trips. Many feel this is outrageous, especially during the Covid-19 crisis.

#### 4.6. Overcoming strategy

The Covid-19 has prompted firms and service providers to think about their services differently, and many have adopted strategies to mitigate the effects of the Covid-19. Accommodation hosts are considering finding long-term tenants and focusing on domestic rather than foreign guests. For example, one host who manages 60 Airbnb apartments expressed the following: *“before the crisis, our clients were 90 to 95 per cent foreigners. We had very few French people booking our apartments.”* Airbnb has revealed that it will emphasize long-term stays, and the demand for this has increased recently. It aims to refocus its core business by reducing its reliance on hotel-style accommodations. Uber, however, believes there will be a surge in travel activity in the post-Covid-19 period. People are increasingly exploring holiday destinations closer to their homes, as the Airbnb CEO Chesky indicated in a note to employees: *“People will want options that are closer to home, safer, and more affordable.”* The SE firms will experience difficulty exercising control over safety rules and protocols to minimize coronavirus spread. Airbnb postponed its plan to go public and instead secured a billion-dollar debt deal from two equity firms and a further billion dollars in loans from institutional investors to tackle the coronavirus crisis.

Uber is thinking of introducing travel insurance for the safety of drivers and passengers. It has created an internal team to deal with local and national health officials to facilitate healthcare for its contractors. Travel insurance seems an important aspect to consider, especially in the current crisis period, as one customer expresses: *“It’s because Airbnb can’t be bothered to offer travel insurance (even via a third party). They just make it sound like their policies make it unnecessary (which isn’t the case).”* Many customers may buy separate travel insurance to protect themselves from unexpected disruptions.

Stimulus packages have enabled states to offer unemployment insurance to service providers for the first time. In the USA, unemployment payments combined with a \$600 weekly top-up from the Federal Government have alleviated the stress of many drivers. However, many service providers had to wait a long time because many states needed to update their rules, procedures, and portals. To support efforts to curb the Covid-19 pandemic, Airbnb has offered frontline workers—such as doctors, nurses, and technicians—free stays in Airbnb accommodation. US legislation also now allows hosts to receive small business grants and small business loans. According to one driver in the USA, however, people consider government assistance a last resort because they want to work. However, people have been compelled during this crisis to apply for government assistance. According to Airbnb, many guests have shown gratitude to hosts for their flexibility and been willing to support them financially. Airbnb is creating a channel for guests to send notes and make financial contributions to their hosts. According to one expert, Airbnb customers are very forgiving as they like the company, and the firm benefits from this perception.

#### 4.7. Outcomes of the Covid-19

Many people are happy to see the demise of home sharing, and some feel that residents in popular areas will enjoy a better quality

of life. More long-term tenants will result in less noise and more locally focused shops and amenities. There has been a recent upsurge in adverts for long-term tenants in city centers and touristic areas. Many of these include nicely folded towels and set kitchen tables, having been previously used exclusively for the SE purposes, and long-term tenants can now rent at a lower price. Some people believe that these SE platforms ousted long-term tenants from localities by exploiting housing for greater profit through short-term lets. Indeed, there is a causal relationship between the rise of home sharing and the exodus of long-term residents from neighborhoods, especially in touristic cities.

Some experts believe people may now favor traditional hotels over home-sharing because of hygiene standards. One expert points out: *“They simply can’t guarantee a deep clean on a host-to-host basis after every guest.”* Other experts point out that people will prefer service apartments over sharing accommodation and hotels due to hygiene and social distancing, even after the Covid-19 crisis. Many cities may have less revenue, because hotels are major taxpayers. In big cities and touristic areas, there will be more long-term tenants renting at a lower price, yet some experts believe that sharing services will bounce back and ultimately flourish again. Some large platforms, such as Uber and Airbnb, will have more difficulty going public now, however. Working remotely is becoming the new normal, and there has been a surge in platforms for online meetings and collaborative working. Local municipalities will also pursue new strategies for short-term letting.

The SE plays a direct role in national economies. However, service providers without a financial safety net are in a precarious condition. In 2018, Morningstar valued Airbnb’s market capital at \$53–65 billion, more than that of Marriot (\$46 billion), the world’s largest hotel company. Airbnb is currently valued at \$26 billion. The Covid-19 pandemic may also cause a 9.7% contraction in global GDP. Car sales have plummeted significantly, and firms are now selling cars online. Platforms like Airbnb and Uber may become businesses that are more responsible improving health insurance, travel insurance, the status of service providers, and cooperation with local municipalities.

## 5. Discussion

This study gives an overall picture of the SE during the Covid-19 crisis. Even though the Covid-19 has affected all sectors, it has particularly affected the SE sector harshly, whose service providers are among the most vulnerable. The once-unstoppable SE firms have been significantly devalued, and many may need to wind up their operations or merge with other firms. Customers have also lost some money and missed opportunities to travel, but their exposure is less than that of service providers. We provide theoretical and practical implications as follows.

### 5.1. Theoretical implications

Considering the Covid-19 as an unusual crisis, this study indicates a range of theoretical implications. It extends our knowledge on the Covid-19 in the SE literature given that so far there are no such studies present in the current SE literature. The SE is an integral part of millions of people across the world and the Covid-19 hit the SE activities severely (Brammer et al., 2020). The study contributes to discourse about the impact of the Covid-19 related to the SE activities and thereby contributes to the broad business and management areas (Verma and Gustafsson, 2020). To minimize the adverse effect of the Covid-19 on the SE, developing insurance policies, treating service providers more like employees, and implementing safety measures are necessary so that SE does not receive backlash for their guileful business practices. The results elucidate



the state of SE in the Covid-19 crisis. Many SE firms have started training programs on hygiene and safety. However, we lack of knowledge in terms of hygiene and safety. Even though there are studies on crisis management (Pearson and Clair, 1998), this study highlights the SE activities so that scholars can extend our knowledge on the SE. Sharing platforms have received criticism from various quarters that gives the growing importance of academic exploration. The SE firms have been criticized for miscommunicating with their providers and receivers and not taking their opinions on board when taking decisions. Developing proper communication channels between different parties is therefore crucial, and responsibility for this lies mainly with the SE firms. Longer-term implications of the Covid-19 is still unknown since many things are changing in the SE sector due to the pandemic.

## 5.2. Practical implications

The SE firms are highly criticized for many reasons, and the Covid-19 has intensified the criticism further, prompting the SE firms to rethink their business strategies. They need to have policies that protect their key stakeholders. However, they are expected to remain dominant in their respective industries. Even though customers may be disgruntled with the platforms, they do not have any better options for their future travel plans; so many people will continue using sharing services in future. Many platforms rapidly became large and extremely profitable, and their service providers were earning more than they expected without much difficulty. However, they did not heed issues that other firms and service providers have to consider, such as tax, safety, risk, hygiene, and so on. A key concern for service providers is balancing health and livelihood. Without income, they cannot support their families, but working during the Covid-19 pandemic may put them at risk.

It is apparent that city authorities will impose stringent rules on the SE services, so they can gain more tax revenues. Moreover, safety and hygiene issues will become more prominent in the future. Service providers may need to provide cleaning demonstrations to potential customers to convince them of their emphasis on hygiene. The Covid-19 is also making insurance, especially for drivers and passengers, imperative. Moreover, governments may force sharing platforms to treat their contractors (service providers) as some sort of employees, so they do not suffer financially in a crisis period.

Many drivers have long gaps between one trip and another, and they spend this time on unproductive purposes like watching movies and YouTube videos. It would be interesting to come up with business ideas for drivers to use this waiting time for productive purposes. It seems there is an industry standard for certain actions, and it is difficult to judge who is right and who is not. For example, who should be blamed for a booking cancellation due to the Covid-19? Should it be the customer, service provider, or platform? It seems each party blames the other, so it is time to establish some guidelines for such unanticipated situations.

No other industry has experienced such massive job losses and drops in income. Some mechanisms are therefore needed to safeguard incomes for service providers. Social distancing is also a key issue in sharing services, such as coming up with car designs that can shield drivers and passengers from viral transmission. Sharing platforms have received criticism from various quarters. The larger platforms will likely take corrective measures to convince their critics that they are not greedy profit-obsessed firms that do not consider the wellbeing of people and communities. They have already taken some steps in this direction, including long- and short-term strategies to help cope with the Covid-19 crisis and the period afterwards.

## 6. Limitations and future research avenues

There are some limitations to this study, and the findings of this study lead to suggested avenues for future research. We collected resources for this study from different online sources, and even though a large body of documents was analyzed, many documents repeated similar information. Despite comprehensively searching different online sources, some important documents may have been left out.

There is a range of future research opportunities. For example, guidelines need to be established for the SE service providers and receivers to ensure the former benefit fairly from their endeavors. The SE firms evade tax, unlike traditional equivalents like taxi services, so scholars could suggest appropriate tax policies for the SE firms. How the SE firms can improve their communication channels to achieve a better understanding for making consensus decisions warrants further study. Future studies could also explore various elements of anxiety caused by the Covid-19. The effect of the Covid-19 on the SE has also provided the opportunity to explore how this industry can survive and flourish through this crisis. Cancellations of accommodation-sharing bookings have never happened on such a massive scale, and there is no knowledge about how to tackle such an issue. There was no safety net for many people who lost their livelihood in the SE sector, so future research may suggest mechanisms for bringing them into the social benefits system. The Covid-19 has also highlighted the need for social distancing, hygiene, and safety, but how we achieve this for the wellbeing of people needs future exploration. An interesting research avenue is to connect the SE concept with the circular economy since both are significant for sustainability (Jabbour et al., 2019).

Sharing firms are very profit-oriented and often disregard the wellbeing of employees, customers, and society. The Covid-19 has brought some positive outcomes, however, in that it has compelled various stakeholders to improve their sharing services and develop them into a mature industry, and future studies may explore various ways to do this.

## CRedit authorship contribution statement

**Mokter Hossain:** It is a sole authored paper. Therefore, there is no any conflict of authorship.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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