

COVID-19 REPERCUSSIONS ON BANGLADESHI ON-DEMAND-FOOD DELIVERY, RESTAURANT, AND HOTEL INDUSTRY

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Abstract

The article's main objective was to explore the impact and consequences of the Novel Coronavirus (2019-nCoV) on Bangladesh's on-demand-food delivery (ODFD), restaurant and hospitality industry. Qualitative methodology was applied using focus group discussion on the online platform during the movement restriction period. We collected data from four informants, and they were chosen based on their professional relevance with the Food and Hospitality industry. Existing literature is also overviewed. This study found that COVID-19 significantly negatively impacts the industry. The informants provide the miserable scenario of the industry during this pandemic, besides suggesting possible strategies. This article discusses the impacts of COVID-19 on the ODFD, restaurant and hotel industry in Bangladesh in order to provide a better understanding to government and practitioners of why improving the management of response to infectious disease outbreaks is so critical for a country's economy, its society, and its place in the global community.

Keywords: *COVID-19, food, hotel, hospitality, online delivery, pandemic, economy, Bangladesh* [List not more than 5 keywords]

Introduction

Bangladesh is heavily populated. Currently, about 170 million people are here. The country's GDP has risen 6 to 7% over the past few years, but inflation remains steady due to frequent supply chain issues. The rise of the middle class is apparent in the dramatic rise in the number of workers in the informal sector. Although it is becoming a

developing economy, it has grown robust for two decades. Consumers' disposable income and personal savings are on the rise, encouraging spending with their friends and family and on restaurants. The country has also seen a rise in domestic travel and a noticeable growth in international arrivals, meaning demand for hotels in popular destinations. The industry is expected to be worth about 4.5 trillion BDT, and the Restaurant sector will account for 2.1% of the country's GDP by 2021 (The strategy watch, 2020).

Bangladesh hotels' performance is optimistic in South Asia, mainly because of their diversification and entry into the limited room supply industry. As an emerging tourism and service market, Bangladesh plans to expand its capabilities and grab the new scopes of the hospitality market by Vision 2021 (Planning Commission, 2012). One of the different types of services, "restaurant service", is leading and imperative as it deals with hygiene and nutrition (Traynor et al., 2022). Thus, this industry demands constant quality enhancement with top-notch customer service.

A great deal of changes has occurred in urban life. People go to restaurants to eat and seek comfort and entertainment. Thus, the need for high-quality service is quickly becoming prevalent in the dining experience, which includes diverse flavours, personal pleasure and a pleasant atmosphere. With lives getting busier daily, people have less chance to go out and eat or prepare meals at home, creating a demand for online food ordering (Chen & Hsieh, 2017). According to Pigatto et al. (2017), online food delivery services can be characterised as business platforms that provide order services, payment and monitoring of the process but are not in charge of preparing the food. In online retail sales, face-to-face interaction is being replaced by interaction through cell phone apps and internet-based communication tools such as e-mail, chat and SMS or the websites of companies, where customers can search, retrieve and place orders (Cai & Jun, 2003).

Marketing communication, such as advertising, is essential as it takes the lead in delivering the message to the target audience (Khaled et al., 2019). Food-delivery apps, for instance, provide the convenience of ordering food by comparing the menus of different restaurants and receiving fast delivery of meals at the desired location. To deliver compelling messages, marketers need to understand the consumption behaviour of prospective consumers (Puccinelli et al., 2009). Food vendors or restaurant owners support high-quality advertisements as they can directly appeal to those who want to order meals, making them much more effective (Song, 2019).

The vastness of the ODFD market is visible. In the next five years, demand for food delivery in Bangladesh is expected to rise 7-10 times more than at present. Hospitality experts predict the ODFD market will be ten times larger in the next decade. People use Users of Bangladeshi food start-ups like FoodPanda, Pathao, and Shohoz more frequently than in the past (Amit, 2020).

The enormous presence of Ready-Made Garments (RMG) and the textile industry in Bangladesh, along with foreign buyers, are primarily prime customers of hotels in Dhaka, Bangladesh's capital and central economic city. The Dhaka hotel market has experienced consistent growth of 7.13% in ARR over the last decade. During this period, the Compounded Annual Growth Rate (CAGR) of accommodated demand was 7.0%, whereas supply grew by 6.3%. With this inadequate supply, unbranded hotels capture the big market (The Bangladesh Rating Agency Limited, 2020).

Global trade, business, and education have all been disrupted due to the unprecedented COVID-19 pandemic (Hossain et al., 2020). Bangladesh is equally affected by this epidemic. Besides affecting the public health sector, coronavirus has also covered the country's economy, food security, food supply, trading activity, transportation system, and many more. Among these, the lockdown has worsened the food supply chain in Bangladesh and other developing countries (Xames, 2022).

As a highly populated country, Bangladesh had to confront tremendous hurdles in fighting against COVID-19. At that time, outdoor movement was prohibited from 10 pm. to 5 am. (unless in emergencies), all shops, bazaars, and malls were closed after 8 p.m., and meetings, rallies, and large gatherings were prohibited. The COVID-19 epidemic has severely impacted family and individual wages in Bangladesh. 13% of the population has lost jobs; lower and middle-income classes have significantly lost income. The pandemic has had a significant impact on practically every area of the economy, including a 16.93 per cent drop in exports, a 17 per cent drop in imports, and a 66 per cent drop in average revenue for all Small and Medium Enterprises (SMEs) in 2020 compared to 2019

(Xames, 2022). Bangladesh faced significant challenges in controlling the virus's spread as a lower-middle-income country.

Inbound and outbound tourism in the country has been severely affected caused by the Covid-19 outbreak. Tour operators suffer significant financial losses and job cuts due to cancelling hotel flights and vacancies (Deb & Nafi, 2020). Restaurants, motels, and companies that sell non-essential commodities were all forced to close. The public transportation system was shut down. The pandemic of the coronavirus and consequent stay-at-home orders have had a significant impact on delivery services. The difficulty is exacerbated by the fact that the final distribution stage has experienced rapid expansion. The coronavirus pandemic and the rise of e-Commerce have exacerbated the costs and inefficiencies of the last-mile problem, resulting in a considerable increase in the number of parcels delivered each day (Ong et al., 2020).

The COVID-19 outbreak has caused severe stress on supply chains and last-mile deliveries. Many merchants and consumer firms had been compelled to offer home delivery, even if they did not previously understand the pandemic's impact on the last-mile delivery system and its future ramifications; food delivery, whether fresh products from grocers or prepared meals from restaurants, provides valuable instances.

According to interviews, food delivery businesses have slowed down across the board. However, the platforms are still operational: Food Panda, Pathao Foods, Uber Eats, and Shohoz Foods. An exception is Chal Dal, which was experiencing a sharp increase in its grocery delivery business at the time of writing. However, most restaurant-based food delivery businesses have been hit by the fact that people prefer cooking at home now. Most leading food delivery start-ups have also launched "contactless" delivery allowing users to pay using cards or mobile payments (Amit, 2020).

As the research aims to explore the impact and consequences of the Novel Coronavirus (2019-nCoV) on the ODFD, restaurant and hotel industry in Bangladesh through a qualitative method, the findings represent the descriptive scenery of occurred problems due to the pandemic on the on-demand-food delivery, restaurant and hotel industry. Besides, our findings depict possible strategies from the respondents' point of view for the stakeholders to take appropriate steps to deal with the present and future problems.

Literature Review

The COVID-19 pandemic has significantly reduced the need for on-demand restaurant and hospitality offerings around the globe. On the 7th of November 2020, 48,786,440 confirmed cases and 1,23,4839 deaths were reported globally. This infection was first reported in Wuhan, Hubei Province in China. This virus mutates highly and infects large populations rapidly. Covid infection also results in severe acute respiratory distress. This disease has affected about 219 different nations, which has contributed to a notable increase in the number of reported cases. The World Health Organization (WHO) proclaimed COVID-19 a global pandemic due to its spread worldwide.

The COVID-19 pandemic has led to widespread disruption in industrial sectors and has created distressing global economic and environmental conditions for businesses (Ivanov, 2021). The rising number of COVID-19 cases led to the closure of international, national, regional and even city boundaries (Butt, 2021). Such a situation led to a halt in production and other upstream supply chain activities, disrupting downstream activities such as retail and distribution (Karwasra et al., 2021). Disruption was also witnessed in the food supply chain sector, as supply chains of perishable products, fresh vegetables and fruits were significantly affected during the outbreak (Puram, 2021). Additional issues of safety and hygiene also came into the limelight because of the pandemic. As regards hygiene, literature underlines how, especially during the COVID-19 pandemic, customers have become increasingly attentive to social distancing and hygiene (Kazancoglu & Demir, 2021) since they are particularly concerned about the risk of having contact with contaminated food or infected delivery personnel (Francioni, 2022). As a result, online food purchasing increased drastically as a safe and secure means of food supply (Ekren et al., 2021).

The crisis affects the global economy in every industry, including transport, tourism, hospitality, and other sectors. Hospitality is the most concerned industry because of the restriction of human movement. Various events and conferences are being postponed and cancelled, which has put much downward pressure on travel and tourism

(Combs, 2020). International air travel has generated \$880 billion in losses for other airlines, according to OAG Aviation Worldwide. Many hotels are experiencing vacant lobbies (Djeebet, 2020).

More than 50% of individuals are not interested in visiting travel destinations as the behaviour of tourists has changed during the pandemic found in a Quantitative study in the USA (Gursoy & Chi, 2020). Worldwide GDP contributed by the travel and tourism sector has decreased, and employment and investment in the tourism industry have fallen drastically (Skare et al., 2020). A Qualitative Study in Malaysia presented that the aviation sector was harmed in sales as the number of passengers fell. Due to the pandemic, almost 10% of the staff lost their Malaysian hotel industry jobs (Karim et al., 2020). Passenger numbers fell by 52% in the U.K. aviation industry, and some airlines planned to minimise jobs (Bas & Sivaprasad, 2020). Mass cancellation of the tour programs in Ukraine has questioned the tour operators' financial stability and brand reputation (Rutynskyi & Kushniruk, 2020). Tourism in China is mainly affected because the tourism industry depends entirely on people's outgoing trends. As a result, there are substantial losses in the hotel, restaurant, and transport industries due to a customer shortage (Hoque et al., 2020).

Meanwhile, restaurants have an overall net profit margin of 3.6%. As a result, the industry's reliance on steady demand is firm. Low-margin firms constantly seek cost-cutting opportunities to ensure profitability in an economic climate where costs are a priority.

The strategy of "stay-at-home" and social distancing by governments around the globe have crippled restaurant businesses during the pandemic. This led to abrupt restaurant and hotel closures. The hotel industry sought a \$150bn bailout (axios.com, 2020). Employers let go of many workers as people opted to eat at home rather than dine out. Several restaurant executives criticised the government's conservative policies (Bristol Cable, 2020). According to the American Hotel and Lodging Association, 24.3 million people lost jobs, and about 3.9 million in the U.S. alone during the pandemic. This recent pandemic has been more detrimental to the hotel industry than the 9/11 and 2008 recessions combined.

In Malaysia, 4% of hotel employees with immense unpaid leave were sacked as of March 2020. Precisely, Kuala Lumpur, with a sampling size of 17,826 employees, was the worst hit, with 542 workers (3%) being laid off, 3,641 (20%) being asked to go on unpaid leave and 2,880 (16%) receiving pay cuts. Separately, the MAH said RM75.69mil in losses were recorded by the local hotel industry from Jan 22 to March 20, with a total of 193,057 room cancellations recorded during the period as a result of the pandemic. The Malaysian Association of Hotels (MAH) has projected a revenue loss of RM560.72mil for just the movement control order (MCO) period, with occupancy rates projected to fall to a dismal 11% (Mahalingam, 2020). In Indonesia, the service industry saw a noticeable impact in 10 17 cities (The Jakarta Post, 2020).

When COVID-19 spread to significant supply chains, foreign buyers cancelled the orders, which hurt the workforce, causing a severe decline in employment (Islam et al., 2020) and indirectly impacting the hotel industry.

In Bangladesh context, about 5 million full-time and around 13 million part-time jobs in the tourism and hospitality industry. Most of the hospitality business in Dhaka is focused on commercial purposes (Figure 1). This sector will likely suffer further financial problems with a prolonged delay in recovery. Up to 25%, additional job loss is predicted.

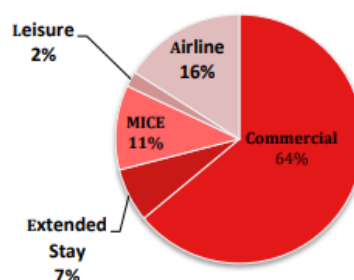


Figure 1: Dhaka Hotel Market Segmentation
Source: Chopra et al. (2015)

From an empirical perspective, Al Amin et al. (2021) corroborate the positive impact of food delivery hygiene on the continuance intention to use mobile food delivery applications during the COVID-19 pandemic. Moreover, Shim et al. (2021) find a positive relationship between hygiene and customers' purchase intention in coffee services.

Whereas literature corroborates that individuals are becoming increasingly interested in marketing messages based on safety and hygiene-centric language; therefore, it becomes fundamental to prioritise consumers' safety urges (Kazancoglu & Demir, 2021). In particular, ever more retailers are adopting automated delivery tools to minimise human contact (Shankar et al., 2021) and ensure high levels of hygiene (Francioni, 2022). Although coronaviruses are not frequent causes of food-borne disease, other viruses, such as hepatitis A and norovirus, have previously been associated with numerous food-borne disease outbreaks. Food delivery can be a root of contamination due to direct handling of the food or contaminated food contact surface, leading to a secondary source of contamination. In that case, Domino's Pizza has adopted the touchless transfer, is a retail technology allowing to avoid that food being touched by a human "from the moment it goes into the oven until it is delivered to the customer's doorstep" (Roggeveen & Sethuraman, 2020). In this respect, Online food delivery services guarantee different sanitation procedures, such as safety and hygiene measures in food processing, handling and delivery, contactless delivery, and electronic payments (Al Amin et al., 2021).

Restaurants have been forced to close for several months due to the different lockdown restrictions (Kumar & Shah, 2021). At once, these firms have also experienced a higher demand opportunity related to the possibility of serving their customers at home, thus delivering their products in an environment perceived by people as safer (Naeem, 2021; Roggeveen & Sethuraman, 2020). Against this background, online food delivery services have assumed a key role, thus representing, in particular during the lockdown periods, the only connection between restaurants and their customers. Literature defines online food delivery services (OFDS) as easy and convenient tools for customers to buy food online, thus avoiding physically going to the restaurant (Prasetyo et al., 2021). Notably, they represent a combination of the traditional Food Delivery (F.D.) concept (i.e. orders are taken by phone to a specific restaurant and delivered by the restaurant's rider) and the advent of digital tools (Seghezzi & Mangiaracina, 2021). Indeed, from this combination, a new business was originated, with restaurants able to expand their activity either by creating their firm-owned platforms (e.g. Restaurant-to-Consumer platforms; branded mobile apps) (Dirsehan & Cankat, 2021; Patsiotis et al., 2020) or by joining to third-party ones (e.g. Platform-to-Consumers, such as Glovo and Deliveroo) (Dirsehan & Cankat, 2021; Kapoor & Vij, 2018; Petit et al., 2022), which are "usually managed by independent companies that take orders from users, communicate with restaurants and carry out the food delivery activities using gig workers" (Troise et al., 2021). From the customers' perspective, the COVID-19 emergency approached new clients to these services who had never ordered food at home through online delivery services or had not felt the necessity of using them (Eat, 2020).

It is essential to get the current industry overview in this critical situation to take the necessary steps to combat COVID-19. Nazrul et al. (2018) described the influencing factors of the Bangladeshi restaurant's section, and Harun et al. (2013) identified the factors affecting customer hospitality in the fast food industry in Bangladesh. Wahib et al. (2015) proposed a conceptual framework of brand image as a combination of antecedents and moderators that create differential effects on customer response to customer-based brand equity in the hospitality industry in Bangladesh. However, to the best of the researcher's knowledge, there need to be comprehensive studies assessing the impact of COVID-19 on the food and hospitality industry. Filling up this gap is the motivation of this qualitative study.

Methods and Materials

This research implemented a qualitative technique. Besides, we consider this study an exploratory investigation which comprises "an attempt to determine whether or not a phenomenon exists" (Dane, 1990, p. 7). Structured focus

group discussion, literature review, document analysis, and in-depth interviews were applied to achieve research objectives. The review drew on various data sources, including books, journal articles, government documents, policy reports, and conference papers. Journal article searches were done in the Library Catalogue, reference lists of retrieved articles and textbooks, and electronic literature databases, such as google scholar, ScienceDirect, Emerald and Scopus.

We used a structured focus group discussion that was conducted with four stakeholders. Due to movement restrictions, the interview was conducted by Zoom and lasted about 60 minutes. Before starting the discussion session, the respondents were assured that their independence and privacy would not be revealed and would be kept confidential. To do so, the respondents were categorised by different symbolic codes. They are a managing director of an online food delivery start-up (F), the managing director of a hotel (H), and two restaurant owners (R1, R2). Additionally, to confirm the saturation of the data by triangulation, we took interviewed one faculty member who tech hospitality management of a private university (U), a representative from the consumer forum (C) and a hotel association (A) as they all involve with the food and restaurant industry.

The session was recorded, and some points were written down for further justification. Along with the discussion, we observed the attitudes and expressions of the respondents as well as collected documents from themselves for more justifications of the information. Later, the recorded interviews were transcribed into the text line by line and rechecked for proper accuracy.

Results

In this section, we show the analysis of the responses we received from our respondents through qualitative analysis. Mainly, we show how COVID-19 impacts food, restaurants and online food delivery business by providing future directions. Based on the current information, some businesses are directly impacted by this outbreak; food and hospitality are among them. We asked the respondents about their overview of the current scenario. An opinion from a respondent is given below:

Due to the lockdown and movement restrictions, my staff cannot come to work, although we provide premises for some staff. The overhead is getting high depending on the cuisine (R1). People are concerned about the infection caused by outside food, and they are not comfortable going out (C).

However, the respondents (F, H) explain the nature of their business and relate with the outbreak impact...

Online food delivery service depends on two things. One is the availability of a restaurant, and the other is the availability of a deliveryman or rider. Unfortunately, only 2000/3000 restaurants are now open out of 10000 in Dhaka (F). The hotel business mainly depends on the in-house guest. Right now, we are in survival mode (H).

The supply chain is very crucial for the food and restaurant business. Due to governmental movement restriction measures, the delivery of goods needs to be improved.

The supply chain collapses miserably. The raw materials cannot come from the market. If there is no supply, how can we deliver? (R2) People are protesting, providing obstructed delivery of the foods (A).

What are the strategies the industry players are following? What precautions are the restaurant's food delivery partners taking regarding food delivery and its packaging?

Trust is a big issue. The concerned bodies have to try their best to ensure safety. The standard of the procedure is changing. Although the business condition could be better, to maintain the livelihood of loyal staff, restaurants and hotels, take innovative strategies. The following comment is relevant here:

We are ensuring hygiene by checking the temperature of riders and putting on masks and hand sanitisers. We are giving discounts to save our business and adding healthcare products to the portfolio to survive the livelihood of poor staff (F). To mitigate such risks, we are equipping drivers with hand sanitisers and encouraging their vehicles to be disinfected regularly.

They also share the latest guidance with their contracted drivers and delivery personnel (R2). We are focusing on delivering catering services in the factory and corporate houses. Providing discount or offer will not work for my industry; while the government is plaguing social distancing, how can we provide an offering to enter a hotel? It will work out differently than other businesses. We are focusing on takeaway service besides negotiating staff's salary and rent (R1).

Business owners become more conscious about creating awareness among customers. One respondent agreed about this statement. *To be safe, customers should immediately put the foods into their pots after delivery (R2).*

Interestingly, one informant proposes a strategy which can be an effective short-term solution for the business during this crisis. *Anyone who wants to donate can use hotels to give food to needy people so that all parties are win-win situation (A).*

Next, we asked the respondents, "What is the possible long-term impact?". The respondent answered that *Job creation would be narrowed (F)*. However, another informant focuses on social changes related to the source of income of employees. *In the hotel, the frontline employees get two types of income: the basic salary and the service charge. Reducing the number of clients will impact in lifestyle of the employee. The staff who get 40000BDT monthly he/she can afford the gym and other amenities, but if the income reduces dramatically, the lifestyle will be changed (H).* Below opinions mentioned below support the above issues.

It is a lifestyle change, a cultural change. We have to accept it (R1). Unemployment will rise (R2). In America, a minimum of 30% of employees will be a layoff. In Bangladesh, 2.5 crores indirectly impact by the restaurant business., 1.5 million directly involved and will be impacted (U).

Corporations will be minimising their cost, budget, and investment. One informant opined that *companies would ban travel and use a cutting-cost model. If the topline is slow, it will impact the downline due to decreasing inflow (A).*

When the overall activities stumbled, the earnings also be influenced. *The pandemic also has a disposable impact on end-users income (C).*

The respondents are asked about their preparedness for the future based on the lesson from the COVID-19 outbreak.

The business world would be different after this pandemic, and there could be many changes in the deterrent context.

For food and hospitality businesses, there is a need to explore and adopt new business models. For example, the online food delivery model has gained popularity in North America. In Canada, the online food delivery market is expected to be worth \$2.2 billion in 2020 and grow to \$3.1 billion in 2024, representing an average annual growth of 8.5 per cent. Businesses in this sector must explore and, if applicable, adopt new service-based models. An agile workforce always encouraged to acquire new skills will be crucial to successfully adopting these new models. Moreover, Cloud Kitchen can be a solution, gaining popularity in Western countries (U).

Below are opinions from informants who described the benefits of cloud kitchens. *It involves low overhead and fixed costs and is convenient for new entrepreneurs (H). It is like co-space sharing. The restaurant or start-up owners do not need to set up a kitchen with a considerable investment; they book the ready-made kitchen place and use it with others. We aim to set up 20 cloud kitchens within 2020 (A).*

Other informants emphasised production efficiency, outsourced chef and skill upgrading.

We reduced delivery costs by 100% the previous year. Efficiency is essential, and we must be operationally efficient without harming the end users (F). We should empower home chefs so that they can cook from their house without travelling and earning. In reality, those in this sector doing business out of Dhaka need to be more careful about safety issues (R2). For workers, we must invest in developing up-skilling programs and make them readily available for those in vulnerable occupations.

Additionally, a skills mapping exercise is required to identify gaps that can be addressed systemically via well-funded programs. For example, we should ensure that workers in the Food and hospitality sector have easy and affordable access to programs that enhance their digital skills. These programs will enable them to use technology solutions effectively. These programs will further help mitigate future external shocks' impact on the sector (R1).

Next, we raised the question, "How can we make more synergy?".

One respondent is looking for governmental support – *stimulation from the government. Subsidising utility bills from the government could be helpful(F). We have to think for the better good. How can we develop this and figure out the things to Subsidise? Raw materials price also, if implemented, will assist us. Big hotels get financial support from banks, but restaurants do not get favourable support. The government will provide a 9% loan with a 4.5% subsidiary (U).*

(H and A) warned that Incentives can be helpful, but they are still determining how much they will influence. Only when the airport opens the hotel business will pick up (H). It can be prolonged. We need a proper strategy to combat this giant. If 30 days continue with zero business, 70% cafe business will be closed permanently. It is a timely call to call this an essential sector. It is a clueless situation (A).

(R2) requested coordination. We have to sacrifice altogether. Strength the association. In Bangladesh, hotels are controlled by Bangladesh International Hotel Association (BIHA), but the Bangladesh Chamber of Commerce & Industry (BCCI) controls restaurants; we need to be on board due to the mismatch in the cuisine list. The thought process of the new generation is different from that of the previous generation, and we are no competitors anymore. Have to work coordinated (R1). The hospitality sector must collaborate because, with collaboration, hundreds of employees will retain their jobs all around the country (H).

All the owners and stakeholders have to be in harmony and united. The below informants provide opinions on that issue.

In Bangladesh, bound travel is minimal and unlikely in India. The situation is unpredictable. Somehow, we must survive for the next six months without a layoff. Restaurant owners have to be organised, registered with authority and ensure safety. Sometimes, we cannot raise our voices as we need to be better organised (A).

A respondent's view was to follow the other countries, while another informant opposed it.

Singapore, Malaysia, Thailand, and China are managing very well. They ensure the smooth delivery of products. We can follow them (F). Simply following other developing countries is not wise, as their governmental support is more significant than ours (U).

The findings clearly show that the food and hospitality industry is impacted by multi-phase (Figure 1).

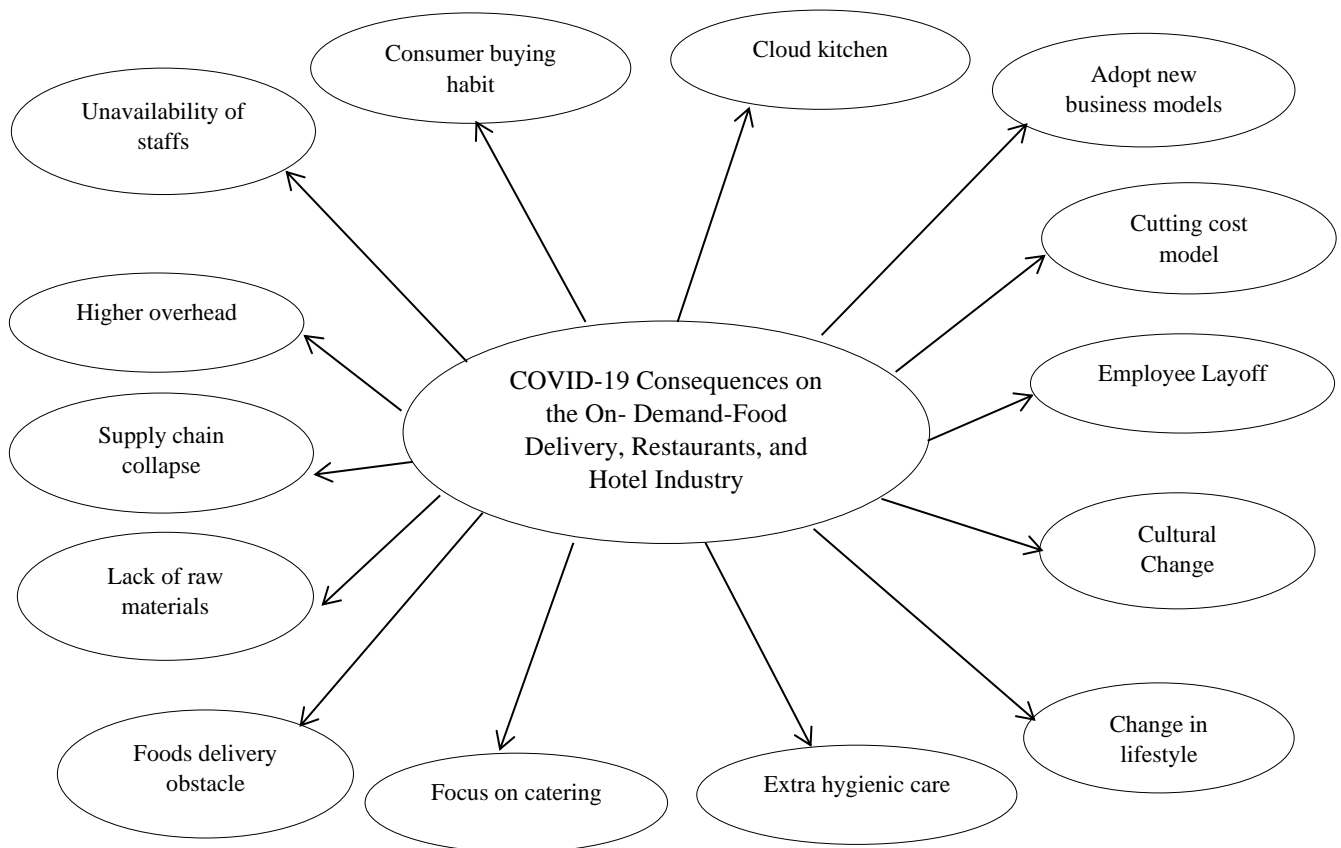


Figure 1: COVID-19 Consequences on the On- Demand-Food Delivery, Restaurants, and Hotel Industry

Discussion

This study contributes to the body of knowledge on the hospitality industry, resilience building, and crisis management during an outbreak in the context of a developing country. Policymakers, government and restaurant and hotel industry stakeholders can take insights from this study to prepare themselves for an unexpected situation. The findings of the present study provide several recommendations for the ODFD, restaurant, and hotel industries;

-Takeout deliveries have become a survival strategy but gaining popularity due to changing consumer behaviour, with more people preferring takeout food. Such as to maintain a positive cash flow, businesses can focus on promotion for takeout deliveries, mailing existing customers by using a database and adopting a digital payment system.

-Compared to full-service restaurants, limited-service fares better as more of its business is takeaway. The interviews found that the epidemic less impacts food delivery due to the home delivery policy, and No-contact delivery services will increasingly be the most preferred option. We have already observed many creative food delivery methods, such as uncrewed aerial vehicle (UAV) delivery provided by JD.com.

-Supply chain collapse as the delivery of raw materials is disturbed. It is high time to redesign the supply chain with resilience. Supply chain stabilisation through monitoring the suppliers for potential impacts and risk assessment. Consider considering alternative suppliers to develop a tier-2 supplier base.

-The lifestyle of the people will be changed due to lower income levels. Many people have cooking skills in sub-continental cultures, and it is the right time to empower them with a cloud kitchen, which can benefit economic development.

-Forming a high-power “cross-functional Crisis Management Team” is timely demand for each organisation that focuses mainly on employees, financial stress-testing and contingency plan, supply-chain monitoring, marketing and sales and other relevant issues.

-Organisations should maintain sufficient liquidity for the rainy days.

Conclusion

Restaurant and food operators, major food producers, and large retail firms are feeling the effects of COVID-19. Social distancing, and school lockdowns, have caused many businesses to close across Asia, Europe, and the rest of the world. Restaurants have instituted new safety measures and standard operating procedures to eradicate people's concerns, and staff have taken extra precautions to preserve the status quo. Stakeholders have called on governments to provide funding and guidance to the business. With immense uncertainty, the whole industry needs long-term planning to survive until it becomes routine.

This research offers several future research directions. The current conceptual study opens the pave to conduct empirical research using the proposed framework through data collection. Quantitative studies using longitudinal data could provide more valuable insights. Another researcher can replicate this study in their local context, and a mixed method study can get in-depth and quantitative insights into this context. Moreover, including additional constructs with this proposed framework can provide exciting findings. Apart from the hospitality industry, other industries can be further explored considering the study's model.

References

Al Amin, M., Arefin, M. S., Alam, M. R., Ahammad, T., & Hoque, M. R. (2021). Using mobile food delivery applications during COVID-19 pandemic: An extended model of planned behaviour. *Journal of Food Products Marketing*, 27(2), 105–126.

- American Hotel and Lodging Association. (2020). Covid-19's Impact on the Hotel Industry. Retrieved from <https://www.ahla.com/covid-19s-impact-hotel-industry>
- Amit, S. (2020). The future of on-demand food delivery and COVID-19. Retrieved from <https://tbsnews.net/panorama/future-demand-food-delivery-and-covid-19-54274>
- Amit, S. A. J. I. D. (2020). Coronavirus and the Bangladesh economy: Navigating the Black Swan event of 2020. Dhaka Tribune. Retrieved from <https://tbsnews.net/panorama/future-demand-food-delivery-and-covid-19-54274>
- Axios. (2020). Hotel industry seeks \$150 billion coronavirus relief. Retrieved from <https://www.axios.com/2020/03/17/hotel-industry-150-billion-coronavirus-relief>
- Bas, T., & Sivaprasad, S. (2020). The impact of the COVID-19 pandemic crisis on the travel and tourism sector: U.K. evidence. SSRN Electronic Journal, 1-19.
- Butt, A. S. (2021). Strategies to mitigate the impact of COVID-19 on supply chain disruptions: a multiple case analysis of buyers and distributors. The International Journal of Logistics Management. <https://doi.org/10.1108/IJLM-11-2020-0455>
- Cai, S., & Jun, M. (2003). Internet users' perceptions of online service quality: a comparison of online buyers and information searchers. *Managing Service Quality: An International Journal*, 13(6), 504-519.
- Chen, H., & Hsieh, Y. (2017). The driving success factors of the online food ordering system—empirical evidence from the UTAUT model. Retrieved from <https://www.semanticscholar.org/paper/The-Driving-Success-Factors-of-the-Online-Food-from-%E9%99%B3%E6%83%A0%E5%B1%8F-Chen/4145bef1699c2509ed8679cddbc937414ec5657>
- Chopra, D., Thapar, R., & Mann, S. S. (2015). In Focus: Bangladesh the Dark Horse. www.hvs.com
- Combs, L. (2020). COVID-19 Implications on the Hospitality Industry. Retrieved from <https://www.hlb.global/covid-19-implications-on-the-hospitality-industry/>
- Dane, F. C. (1990). *Research methods*. Pacific Grove, Calif: Brooks/Cole.
- Deb, S. K., & Nafi, S. M. (2020). Impact of Covid-19 pandemic on tourism: Recovery proposal for future tourism. *GeoJournal of Tourism and Geosites*, 33(4), 1486-1492.
- Dirsehan, T., & Cankat, E. (2021). Role of mobile food-ordering applications in developing restaurants' brand satisfaction and loyalty in the pandemic period. *Journal of Retailing and Consumer Services*, 62, 102608.
- Djeebet, H. (2020). What is the Impact of COVID-19 on the Global Hospitality Industry? Retrieved from: <https://www.hospitalitynet.org/opinion/4098062.html>
- Ekren, B. Y., Mangla, S. K., Turhanlar, E. E., Kazancoglu, Y., & Li, G. (2021). Lateral inventory share-based models for IoT-enabled E-commerce sustainable food supply networks. *Computers & Operations Research*, 130, 105237.
- Eugene, M. (2020). Hotel sector hit by Covid-19. Retrieved from: <https://www.thestar.com.my/business/business-news/2020/03/26/hotel-sector-hit-by-covid-19>
- Francioni, B., Curina, I., Hegner, S. M., & Cioppi, M. (2022). Predictors of continuance intention of online food delivery services: gender as moderator. *International Journal of Retail & Distribution Management*, (ahead-of-print).
- Gursoy, D., & Chi, C. G. (2020). Effects of COVID-19 pandemic on hospitality industry: a review of the current situations and a research agenda. *Journal of Hospitality Marketing & Management*, 29(5), 527-529.
- Hossain, M. I., Polas, M. R. H., Rahman, M. M., Islam, T., & Jamadar, Y. (2020). An exploration of the COVID-19 pandemic and its consequences on the FMCG industry in Bangladesh. *Journal of Management Info*, 7(3), 145-155.
- Hoque, A., Shikha, F. A., Hasanat, M. W., Arif, I., & Hamid, A. B. A. (2020). The effect of Coronavirus (COVID-19) on the tourism industry in China. *Asian Journal of Multidisciplinary Studies*, 3(1), 52-58.
- Ipolitics (2020). The impact of COVID-19 on the restaurant industry. Retrieved from <https://ipolitics.ca/2020/03/26/the-impact-of-covid-19-on-the-restaurant-industry/>
- Islam, S., Islam, R., Mannan, F., Rahman, S., & Islam, T. (2020). COVID-19 pandemic: An analysis of the healthcare, social and economic challenges in Bangladesh. *Progress in Disaster Science*, 8, 100135.
- Ivanov, D. (2021). Lean resilience: AURA (Active Usage of Resilience Assets) framework for post-COVID-19 supply chain management. *The International Journal of Logistics Management*, 33(4), 1196-1217. <https://doi.org/10.1108/IJLM-11-2020-0448>
- Kant, R., & Jaiswal, D. (2017). The impact of perceived service quality dimensions on customer satisfaction. *International Journal of Bank Marketing*, 35(3), 411-430. <https://doi.org/10.1108/IJBM-04-2016-0051>
- Kapoor, A. P., & Vij, M. (2018). Technology at the dinner table: Ordering food online through mobile apps. *Journal of Retailing and Consumer Services*, 43, 342-35
- Karim, W., Haque, A., Anis, Z., & Ulfy, M. A. (2020). The movement control order (MCO) for the COVID-19 crisis and its impact on the tourism and hospitality sector in Malaysia. *International Tourism and Hospitality Journal*, 3(2), 1-7.
- Karwasra, K., Soni, G., Mangla, S. K., & Kazancoglu, Y. (2021). Assessing dairy supply chain vulnerability during the Covid-19 pandemic. *International Journal of Logistics Research and Applications*, 1-19.

- Kazancoglu, I., & Demir, B. (2021). Analysing flow experience on repurchase intention in e-retailing during COVID-19. *International Journal of Retail & Distribution Management*, 49(11), 1571-1593.
- Khaled, A. S., Ahmed, S., Tabash, M. I., Al-Homaidi, E. A., & Hossain, M. I. (2019). The Impact of Technological and Marketing Innovations on Retailing Industry: Evidence of India. *Journal of Reviews on Global Economics*, 8, 948-957.
- Kumar, S., & Shah, A. (2021). Revisiting food delivery apps during COVID-19 pandemic? Investigating the role of emotions. *Journal of Retailing and Consumer Services*, 62, 102595.
- Naeem, M. (2021). Do social media platforms develop consumer panic buying during the fear of the Covid-19 pandemic? *Journal of Retailing and Consumer Services*, 58, 102226.
- Ong, T. S., Teh, B. H., Kasbun, N. F., Mahroeian, H., & Hossain, M. I. (2020). Electronic commerce adoption among Malaysian SMEs. *Journal of Critical Reviews*, 7(19), 555-565.
- Patsiotis, A., Atik, M., & Perrea, T. (2020). The influence of m-marketing tools on consumer buying process: evidence from the mining sector. *International Journal of Retail & Distribution Management*, 48(10), 1037-1056. <https://doi.org/10.1108/IJRDM-06-2018-0109>
- Petit, O., Javornik, A., & Velasco, C. (2022). We eat first with our (digital) Eyes: Enhancing mental simulation of eating experiences via visual-enabling technologies. *Journal of Retailing*, 98(2), 277-293.
- Pigatto, G., Machado, J. G. D. C. F., dos Santos Negreti, A., & Machado, L. M. (2017). Have you chosen your request? Analysis of online food delivery companies in Brazil. *British Food Journal*, 119(3), 639-657. Retrieved from: <https://doi.org/10.1108/BFJ-05-2016-0207>
- Prasetyo, Y. T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M. N., Persada, S. F., ... & Redi, A. A. N. P. (2021). Factors affecting customer satisfaction and loyalty in online food delivery service during the COVID-19 pandemic: Its relation with open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 76.
- Puccinelli, N. M., Goodstein, R. C., Grewal, D., Price, R., Raghubir, P., & Stewart, D. (2009). Customer experience management in retailing: understanding the buying process. *Journal of Retailing*, 85(1), 15-30.
- Puram, P., Gurumurthy, A., Narmetta, M., & Mor, R. S. (2021). Last-mile challenges in on-demand food delivery during COVID-19: understanding the riders' perspective using a grounded theory approach. *The International Journal of Logistics Management*. 33 (3), 901-925. <https://doi.org/10.1108/IJLM-01-2021-0024>
- Roggeveen, A. L., & Sethuraman, R. (2020). Customer-interfacing retail technologies in 2020 & beyond An integrative framework and research directions. *Journal of Retailing*, 96(3), 299-309.
- Rutynskiy, M., & Kushniruk, H. (2020). The impact of quarantine due to COVID-19 pandemic on the tourism industry in Lviv (Ukraine). *Problems and Perspectives in Management*, 18(2), 194.
- Seghezzi, A., Winkenbach, M., & Mangiaracina, R. (2021). On-demand food delivery: a systematic literature review. *The International Journal of Logistics Management*. 32(4), 1334-1355. <https://doi.org/10.1108/IJLM-03-2020-0150>
- Shankar, V., Kalyanam, K., Setia, P., Golmohammadi, A., Tirunillai, S., Douglass, T., ... & Shim, J., Moon, J., Song, M., & Lee, W. S. (2021). Antecedents of purchase intention at Starbucks in the context of the COVID-19 pandemic. *Sustainability*, 13(4), 1758.
- Škare, M., Soriano, D. R., & Porada-Rochoń, M. (2021). Impact of COVID-19 on the travel and tourism industry. *Technological Forecasting and Social Change*, 163, 120469.
- Song, H., Wang, J., & Han, H. (2019). Effect of image, satisfaction, trust, love, and respect on loyalty formation for name-brand coffee shops. *International Journal of Hospitality Management*, 79, 50-59.
- The Bangladesh Rating Agency Limited (2020). Possible scenarios and impact of COVID-19. Retrieved from https://www.ioe-emp.org/fileadmin/user_upload/COVID-19/20200326_BEF_Study_Impact_of_COVID-19_and_Measures-Bangladesh.pdf
- The Bristol Cable (2020). Impacts of the coronavirus pandemic on restaurant and food service businesses. Retrieved from: <https://thebristolcable.org/2020/03/bristol-coronavirus-businesses-impact-food-restaurants-pubs-governmentthrew-us-under-bus/>
- The Jakarta Post (2020). Food & Beverage industry hit hardest by COVID-19: Report. Retrieved from: <https://www.thejakartapost.com/news/2020/03/27/food-beverage-industry-hit-hardest-by-covid-19-report.html>
- The strategy watch (2020). An Overview of the Restaurant Industry in Bangladesh. Retrieved from: <http://www.thestrategywatch.com/restaurant-industry-bangladesh/>
- Traynor, M., Bernard, S., Moreo, A., & O'Neill, S. (2022). Investigating the emergence of third-party online food delivery in the U.S. restaurant industry: A grounded theory approach. *International Journal of Hospitality Management*, 107, 103299.
- Troise, C., O'Driscoll, A., Tani, M., & Prisco, A. (2020). Online food delivery services and behavioural intention—a test of an integrated TAM and TPB framework. *British Food Journal*. 123 (2), 664-683. <https://doi.org/10.1108/BFJ-05-2020-0418>
- Waddoups, R. (2021). How technology is changing retail. *Journal of Retailing*, 97(1), 13-27.
- Xames, D., Tasnim, F., Mim, T. I., & Kiron, A. (2022). COVID-19 and food supply chain disruptions in Bangladesh: impacts and strategies. *International journal of research in industrial engineering*, 11(2), 155-164

