

Assessing the COVID-19 Impacts on the Restaurant Industry in Developing Countries: Reviews & Lessons

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<u>ABSTRACT</u>

How did the small and medium-sized restaurants respond to the unprecedented challenge of COVID-19? What can we learn from the past and develop critical factors that help the restaurants to adapt to the "new normal"? In this paper, some frameworks for crisis management are first introduced. Next, we used the critical factors for success identified in the frameworks to analyse the responses of the restaurant industry in China, Vietnam, and Bangladesh by making Taiwan a successful comparison case. Lastly, some elements of business model innovation are introduced to help small and medium-sized restaurants in developing countries to adapt and grow in the Post-Pandemic era.

Introduction

During the four years of the COVID-19 global outbreak, beginning in December of 2019, the world saw many unprecedented challenges for every individual and institution. Fortunately, with various levels of structural and governmental measures, the development of vaccines, as well as the attenuation of the virus itself, COVID-19 became less intimidating and harmful to people. As many countries began to adapt to the "new normal", the impacts of COVID-19 did not simply disappear as people wished.

This massive pandemic left serious generational impacts in all dimensions, in every region of the world. The impact of COVID-19 will continue to threaten the populations' standard of living and well-being in the coming decades. Particularly, the consequences for small businesses are even more profound. Under strict quarantine and social distancing, countless small businesses in the food and service sectors as well as tourism were impacted the most, as they were forced to reduce or even completely close their operations during the early Pandemic era. This led to massive job losses, lower consumer spending, and a significant slowdown in economic growth for the service sector (Maital & Barzani, 2020). This coupled with challenges such as inflation, energy crisis, and rising costs of raw materials and labour, which further burdened small business owners as they tried to persist in the post pandemic era. Everything became a "new normal" for the small restaurant owners as well the customers in developing countries due to significant economic, social, and cultural shifts. To the consumers, their perception and habits have also changed dramatically due to the Pandemic with increased meal preparation at home, continued reliance on food delivery platforms, as well as being more cautious of food and environmental safety in restaurants (e.g., Foroudi et al., 2021; Byrd et al., 2021).

The food and service industry, particularly small restaurants in developing countries, are expected to undertake unprecedented challenges. Consequently, the in-depth innovations created by the Covid-19 pandemic are reshaping the future of the small restaurants in the industry. This paper places a specific focus on the restaurant industry in developing countries and analyses how restaurants responded to and were impacted by different COVID-19 policies in China, Vietnam, Bangladesh, through qualitative and quantitative analysis with the case study of Taiwan as a successful example for comparison. Business model innovations for restaurants in developing countries after the COVID-19 outbreak will be introduced after identifying the key factors that make the restaurant industry viable and thriving in the post-pandemic era.



Literature Review

Industry Overview During the Pandemic

The restaurant industry was impacted in a number of ways during the COVID-19 Pandemic. According to the publication from PopplestonAllen (2021), first and foremost, government policies such as lockdowns, curfews, and strict measures on restaurants changed customer behaviour to a great extent, where many people became more cautious about dining out or attending social events, leading to a decrease in demand for restaurant services beginning in March 2020. Furthermore, the Pandemic caused disruptions with supply chains as important ingredients and raw material were in short supply. In addition, during the outbreak of the Pandemic, many restaurant employees were unable or unwilling to work due to physical and mental health concerns, while working in person was the only choice for the restaurant industry. As a result, the supply chain and labour disruptions made it extremely difficult for restaurants to operate and forced some to close their stores starting from March 2020. The statistics from OpenTable in Table 1 shows how the global restaurant industry was severely impacted by the outbreak of the Pandemic. Table 1 compares year to year data on a daily basis from 2019 and 2020. It shows a drastic decline of online reservations, phone reservations, and walk-ins to global restaurants from 20% to 80% from March 9 - March 17, almost reaching 100% by March 21.

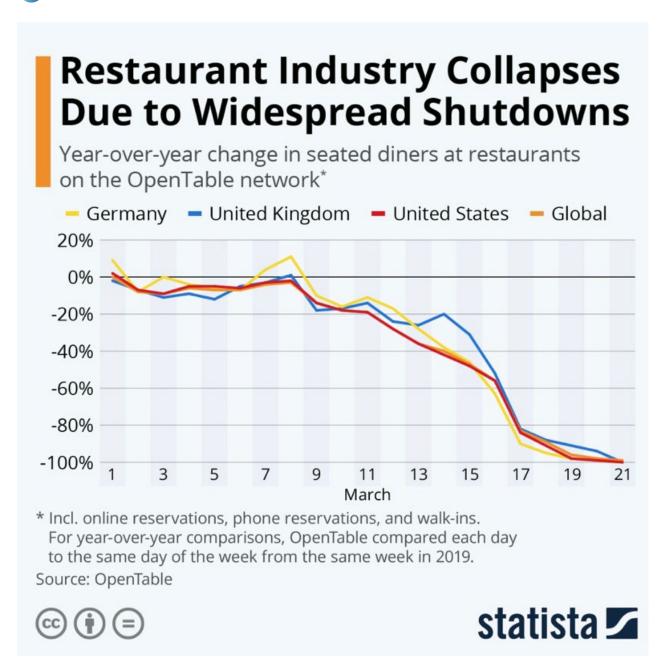


Figure 1: Year-over-year change in seated diners at restaurants on the OpenTable network Source: Opentable. (2023). *The restaurant industry, by the numbers*. State of the Restaurant Industry. https://www.opentable.com/state-of-industry

Transitioning to the second half of 2021, the labour market continues to reflect the COVID-19 lockdown's lasting effects on the restaurant industry. According to the Bureau of Labor Statistics (BLS), with the exception of a spike in February 2021, the restaurant industry continued to steadily expand employment in eating and drinking establishments starting in April 2021. The restaurant industry added a seasonally adjusted net 43,800 jobs in April, from 83,300 to 130,200.

However, April marked the fifth consecutive month of slowing job growth in the restaurant industry, and the net gain of 43,800 jobs was the smallest monthly gain since December 2020, when the industry shed more than 356,000 jobs.

Despite a slowdown in employment, industrial employment grew for the 16th straight month in April, and the slow but steady rebuilding of the restaurant industry is making progress, thanks to changes and compromises made by restaurant owners around the world in the face of the pandemic's massive reduction in restaurant eating.

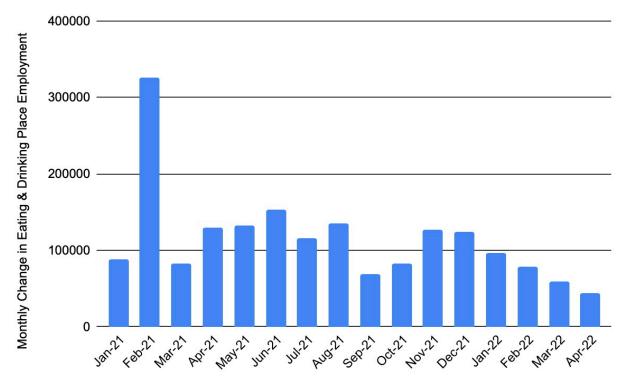


Figure 2: Monthly Change in Eating & Drinking Place Employment Sources: Bureau of Labor Statistics, National Restaurant Association, figures are seasonally adjusted and preliminary. Table recreated from *Total Restaurant Industry Jobs*. National Restaurant Association. (2022). https://restaurant.org/research-and-media/research/economists-notebook/economic-indicators/total-restaurant-industry-jobs/

Business Responses to Pandemic Across the Industry

To combat the negative effects brought by lockdowns during the Pandemic, restaurants have employed multiple strategies to survive. The most popular approach was the increased reliance on takeout and delivery services where many restaurants pivoted to only takeout and delivery business models to continue earning revenues while complying with government restrictions on in-house assemblies and social distancing. Some restaurants also partnered with professional food delivery services such as Uber Eats and DoorDash to provide faster and more convenient delivery options for customers (Meena & Kumar, 2022). For developing countries like India, the online food delivery industry grows 25-30 percent annually (Business Standard, 2020). The expected platform economy is \$30 billion by 2025 (NASSCOM, 2018). At the same time, in developed countries, the US's online food delivery sector grew at a steady 7.26% annually, expecting the overall industry to be valued at \$41504 million by 2025 (Statista, 2021). Some restaurants started to offer meal kits and groceries by collaboration with other businesses where they reached new customers and expanded their offerings by introducing meal kits and grocery items to help customers cook their favourite restaurant dishes at home during the Pandemic, also creating customers' brand loyalty to the restaurant. Lastly, as the global Pandemic situation alleviated in the summer of 2020, many restaurants restaurants implemented measures of safety



protocols such as social distancing, increased sanitation practices, and the use of personal protective equipment (PPE) such as plastic boards that separated the tables and other equipment that protected the customers and employee. Outdoor dining spaces were also a very popular choice during the summer where some restaurants even built dining spaces on the sidewalks and parking lots. Outdoor dining proved to be effective as the customer popularity proliferated when OpenTable (2023) data found that 82% of diners want restaurants to continue to increase outdoor seating.

As the McKinsey&Company report on the restaurant industry shows, by the end of the first quarter of 2023, the global catering industry has rebounded and continued to experience growth (Stacey Haas et al., 2020). What is more noteworthy is that for developing countries, especially those with tourism as an important industry, such as Vietnam and Thailand, the restaurant and drinks industry is experiencing significant growth as a result of the reviving tourist economy in the last quarter of 2022 and the quarter of 2023. To a great extent, the restaurant industry during the post pandemic era continues to play a vital role in contributing to the local economy in developing countries. The restaurant industry is crucial and valuable in an economic system. The revenue of the global food service market is expected to grow 4.2 trillion US dollars in 2027, showing a compound annual growth rate of 2.7% from 2020 to 2027; however, for developing countries such as China alone, the annual sales value of the food service market has kept a compound annual growth rate of a staggering 10.1 percent from 2014 to 2019 (Li et al., (2021). Therefore, the restaurant industry has always been the major contributor to many developing economies besides manufacturing and technology. As an industry overall, restaurants provide employment opportunities and generate stable revenues for local communities and families in developing nations. Furthermore, restaurants often preserve the cultural tradition and heritage through the promotion of local cuisine to customers from all over the world. The stronger the restaurant is in a developing country, the better it is to preserve traditional food practices and promote cultural diversity, enhancing identity and pride in local communities. Last but not least, the restaurant industry in developing countries often consists of small and medium-sized enterprises (SMEs), which are often run by families, promoting employment opportunities and entrepreneurship in the development of future local communities. The change of customer behaviour to restaurants could only be viewed as temporary. Instead of losing hope in the future development of it, the restaurant industry would continue to contribute largely to local economies for developing countries. Innovations and improvements to the business models of the restaurants would allow restaurants in developing nations to thrive in the "new normal", or the post pandemic era.

Frameworks

Frameworks for crisis management and the analysis of the key factors of restaurant viability will be introduced in this section of the paper. Faulkner (2000) developed the first framework for crisis management in the hospitality industry, in which he suggested six generic stages that could be applied to all crises for the hospitality industry: pre-event, prodromal, emergency, immediate, recovery, and resolution. In addition, Ritchie (2003) further introduced models that consisted of three stages: crisis prevention planning, strategic implementation, and resolution. Though the frameworks proposed by Faulkner and Ritchie are comprehensive and informative, they are more applicable to large organisations and enterprises with higher operational, marketing and managerial capacities to not only implement but also modify due to their own needs (Gkoumas, 2020). Therefore, Gkoumas (2020) suggests one to develop more specific models for restaurant viability. The renovated frameworks should be more specific, corresponding to every country, region, and culture's political and socio-economic conditions (Gkoumas, 2020).



Case Studies

Analysing Taiwan as a Successful Case & Identifying Key Factors for Restaurant Viability During Crisis

By summarising the study done by Gkoumas (2020) on the COVID-19 crisis management of the Taiwanese government and the interviews conducted to local Taiwanese restaurant owners in the city of Tainan, a new framework specifically designed for small restaurant viability will be introduced in this section and be used as a comparison case againsst China, Vietnam, and Bangladesh.

Under the rapid outbreak of the COVID-19, numerous governments responded by shutting down restaurants and bars to contain the spread of the pandemic, which were also followed by lockdowns, curfews, and quarantines (Caroll, 2020; Cerullo, 2020; Graham-Harrison, 2020). Consequently, the impact of such strict policies on the viability of the economy, particularly the restaurant industry, was disastrous and put more burdens on small business owners, low-income households, and small tourism-related companies (Blake & Wadhwa, 2020).

The Taiwanese government, instead of forcing businesses to completely shut down during the outbreak, implemented other soft but effective measures such as mask-wearing, hand cleaning, social distancing, and temperature checks to control the situation (Gkoumas, 2020). The Taiwanese government was trying to find a balance between public safety and economic viability at the same time. To some extent, such soft measures proved to be successful as Taiwan only had 828 confirmed cases, 720 recovered cases, and a limited number of 7 deaths in nine months since the first reported incident of COVID-10 (Taiwan Centers for Disease Control, 2021). In particular, supporting the survival of domestic industries and local businesses was the Taiwanese government's main focus. It actively coordinated and cooperated with stakeholders and agencies by "adopting multidisciplinary approach and inter-departmental operational performance during a crisis" (Ritchie, 2004). In addition, the Taiwanese government also adopted relief plans such as financial aid, employment assistance, and tax breaks to support local small businesses such as restaurants (Department of Information Services, Executive Yuan, 2020).

The case of crisis management in Taiwan towards the restaurant industry will serve as a successful case to compare with other countries China, Vietnam, and Bangladesh in the next sections. Based on Gkoumas's interview series that focused on small, family-owned restaurants in the tourist areas of Tainan City in Taiwan during the Pandemic, multiple key factors for restaurant viability during major health crises such as COVID-19 are identified, serving as a comparison for other countries. To summarise, there are three factors that serve as the cornerstones for the success of Taiwan's restaurant industry against the COVID-19 outbreak, which are governmental preparedness, business compliance, and public consistency (Aristeidis Gkoumas, 2021). First and foremost, "leadership is required to provide direction to the industry: when a crisis occurs (Ritchie, 2003). Effective crisis management requires the government's involvement and proactive measures, as demonstrated by the experience of restaurateurs in Tainan who acknowledged the Taiwanese Government's successful containment of the COVID-19 outbreak with the aid of Taiwan's Centers for Disease Control. Moreover, the government's actions wouldn't succeed without the collaborations between enterprises and governments. During the outbreak, small businesses such as restaurants cooperated closely with local governments by implementing control measures of social distancing, hand sanitising, store sanitising, mask-wearing, temperature checks, helping governments to implement the measures in the community smoothly. Last but not least, from a Confucianist cultural standpoint, the collectivistic spirit encouraged the populations to put aside differences and potential conflicting interests to work and "fight" in these difficult times for the common good. Social cohesion and responsibility diffusion proved to be successful in leading to an effective and quick control of the COVID-19 outbreak situation in Taiwan by supporting the small and family-run restaurants.

A renovated and more comprehensive business model aimed to provide an illustrative paradigm for small restaurant businesses to survive during a pandemic (Gkoumas, 2021). By interconnecting seven aspects, namely speed, strategy, simplicity, surveillance, solidarity, support, and sharing, the model proposed to guarantee customer safety at

the same time of continuing economic sustainability for restaurants during crises like COVID-19. In the case of Taiwan, speed and strategy meant to be well prepared and when the first case of COVID-19 was reported in 2019 in Wuhan, China, the Taiwanese Government closed the border in an effective manner (Taiwan Ministry of Foreign Affairs, 2020). Additionally, in terms of internal strategy, the Taiwanese Government also designed the "Coronavirus Relief Plan" to support domestic businesses through financial aid, employment assistance, and tax breaks, which despite some complaints about the bureaucratic processes of application for the first two measures, the tax break proved to be very successful (Gkoumas, 2021). In addition, Taiwan also made the data as transparent as possible where it disseminated reliable, up-to-date, and consistent information about COVID-19 by cooperating with national and local media. To small business owners like restaurateurs, such prepared government measures gave them hope and relief of anxiety with enhanced trust. In Gkoumas's interview with different small restaurant owners in the city of Tainan in Taiwan, Ms Chen, a 44-year-old shrimp ball restaurateur who owns a restaurant near Confucius Temple in Tainan, expresses similar feelings of hope and reassurance.

In conclusion, Taiwan's successful control of the COVID outbreak allowed many small restaurants to survive during the difficult time. Two frameworks are apparent in the successful case of Taiwan. Firstly, the 7S model which consists of speed, strategy, simplicity, surveillance, solidarity, support, and sharing, comprehensively analyses how a government responds, protects, and recovers the country on a macro level, which contributes to the coping mechanism during a future pandemic crisis. Secondly, the next model focuses on the factors necessary for restaurant viability specifically, which will be used as a comparison standard for the cases of China, Vietnam, and Bangladesh. In the model, it is proposed that governmental preparedness, business compliance and public consistency are indispensable and intertwined together as they create social responsibility and solidarity between different stakeholders, organisations, businesses, and sectors in society.

Analysing the Case of China

In the past 20 years, China has been one of the most successful developing countries economically, significantly uplifting its status in the global economy. Overall, China has had an unprecedented growth rate constant 8% annually, becoming the top contributor to the global GDP growth (Lin, 2011). Furthermore, the annual sales value of the food service market had an annual growth rate of 10.1 percent from 2014-2019, contributing as one of the most important sectors of the Chinese economy (Foresight Industrial Research Institute, 2020). However, due to the Chinese government's strict implementation of disease containment efforts, the Chinese restaurant industry was devastated, and the sales decreased by 44.3% to CNY 602.6 billion (around \$86 billion) in the first quarter of 2020 (Zhang, 2020). Fortunately, starting from the second quarter, or May 2020, the restaurants across China have recovered to 70-80% of pre-Pandemic business with increased delivery orders due to innovations in technology (Global Times, 2020). Therefore, it's imperative to analyse the Chinese restaurant industry's response to the global COVID-19 outbreak by comparing and contrasting its situation with Taiwan to identify the common factors that fostered restaurant viability and identify further strategies to strengthen restaurant resilience.

To analyse the restaurant industry holistically, there are three main integrated factors in summarising the management of restaurant-consumer interaction in the case of China. The first factor refers to the focus on the guest's risk perceptions and customer behaviour changes (Byrd et al., 2021). During and even after the Pandemic, customers may have higher risk perceptions about dining in restaurants; as a result, more takeouts from the restaurants are prevalent, though it varies in extent due to demographic and social factors in different regions of China. However, the common theme is that during the Pandemic, online reviews are shown to significantly influence potential consumers' behaviour in making safe dining decisions, as the online review scores are determined by different attributes such as service, experience, food, and place; safety is now embedded in them (Luo & Xu, 2021). In addition, to reduce the risk perceptions of customers, trust and transparency of the restaurants are also vital to guests' perception of the business and the dining decision making besides from the populations' trust in government reports (Yost & Cheng, 2021). The second element tells us that restaurant owners' responses to the Pandemic would also affect customers' visiting

motivation and intention. In particular, according to Kim et al. (2021)'s research findings of 86,507 small and mediumsized restaurants in China, delivery, service type, discount, and brand play integrated essential roles in maintaining their viability such as increasing sales revenues for restaurant businesses during and after the Pandemic. Therefore, innovations in delivery services, service, and improvements of brand image are required for many micro-restaurants to adapt to the "New Normal". Last but not least, the third factor focuses the stakeholder's perspective in restaurant survival during the Pandemic and adaptation after the Pandemic. Stakeholders in the context of small restaurants refer to any group that has an interest in the decision making and activity of the business, such as the owners, investors, full-time and part-time employees. In particular, as one essential group of stakeholders, employees' physical health and psychological distress are crucial. They often suffered the most during the Pandemic because the closure of the restaurants led them to unemployment and an urgent need to search for jobs in alternative industries (Bufquin et al., 2021). Thus, to improve the relationship between frontier stakeholder groups and restaurant viability, employee compliance processes (health and risk awareness, perceived utility, behavioural adaptation, and integration) could be considered for restaurants to reach COVID-19 safety measures in its internal structures (Hu et al., 2021).

By using the key factors of restaurant viability identified in the successful case of Taiwan, we can find similarities and differences between the emerging reaction themes in China. As identified earlier, governmental preparedness, business compliance and public consistency intertwined together and created a mutual social responsibility between different stakeholders, organisations, businesses, and sectors in Taiwanese society during the Pandemic. Similarly, in China, as identified by Li et al. (2021), themes such as pandemic prevention and control, government community support, and corporation social responsibility, though to different extent, are correlative to the key factors analysed in Taiwan, while some new factors such as marketing and management responses are summarised in the case of China, promoting several business model innovation strategies for small restaurants in the "new normal".

The first theme of "Pandemic prevention and control" could compare with "governmental preparedness" in Taiwan. China, as the country to discover the first case of COVID-19 in Wuhan, adopted a prompt, strict, and comprehensive reaction to contain the spread of the virus, also known as the "aggressive disease containment efforts", and closing restaurants was one of the policies implemented. Additionally, the National Health Commission (NHC) released procedures of crisis management, such as cleansing and disinfection of facilities, staff health management, and better preventing food contamination (Li et al., 2021). Such policies were similar to the government preparedness measures implemented in Taiwan, such as mask-wearing, hand cleaning, social distancing, and temperature checks to control the situation (Gkoumas, 2020). However, Taiwan focused more on the soft measures while China tended to be stricter and harsher. Most of the restaurants complied with those policies to meet the Chinese government's first-level public health emergency response mechanism requirement. In particular, Haidilao, one of the largest chain hot pot companies in China, set up headquarters in 24 cities that were equipped with logistics supply and food safety managers (Li et al., 2021). However, unlike Haidilao, most small and micro- restaurants began facing operational difficulties.

To solve those operational difficulties and alleviate the challenges faced by small restaurant owners and staff, government and community support, or social support in general involving civil society and other institutions, was regarded as one of the most crucial crisis recovery factors, which could compare to Taiwan's public consistency and governmental preparedness factors. Local governments implemented policies such as tax relief, credit extension, and funding support for national tourism businesses (De Sausmarez, 2004). In response, more policies such as reducing loan interest rates, reduction in rent for restaurant enterprises, and consumption coupons were introduced to foster consumption.

Moreover, more in-depth degrees of social cohesion was also demonstrated in the Corporation Social Responsibility (CSR) theme. According to Theodoulidis et al. (2017), perceived as a company's not-for-profit actions towards the market or the society, during the Pandemic, in China, a noteworthy positive relationship between restaurant philanthropic activities and consumer loyalty was discovered, according to Ding and Jiang (2021). For example, sectors in society, including restaurant enterprises, helped the government to contain the spread of the virus by creating foundations, donating funds and other medical necessities, and providing free meals for medical workers. Although



the government and various organisations have promoted various groups' cooperation out of the purpose of increasing customers' brand loyalty, compared with Taiwan, social cohesion was also identified in the case of China.

The first response unique to China included specialised marketing using technology. With the aid of technologies, contactless deliveries allowed restaurants to gain cash flow during lock-down orders in China. By guaranteeing food safety, food delivery orders were provided with multi-function QR-codes where customers could order their meals, view a certain business's Pandemic prevention procedures and practices, and even watch live cooking videos or other disinfection store photos (CGTN, March 19, 2020). Furthermore, technologies such as the smart food cabinets are equipped with automatic disinfection systems to ensure food safety. In addition, various measures were strictly implemented, including checking the temperature of distribution personnel, ensuring that they wore masks and carrying out other disinfection procedures. Campaigns with the aid of technologies provided opportunities for small restaurants to run their businesses under the strict lock-downs in China while ensuring customer safety.

Finally, another response that was unique to China was from the management perspective - product line adjustment. Instead of delivering the fully-cooked dishes, restaurants started to innovate and sell raw material or semi-finished products for customers to finish the cooking stage by themselves as a way to reduce cost for the business and increase food safety during the hardest hit of the Pandemic (ChinAfrica & May, 2020). Such strategies were unique to China because the Chinese cuisine cooking process was often complicated and involved different procedures to prepare for the ingredients and tastes - cooking/frying was likely not the most time-consuming part. Consequently, customers could finish the simple frying process at home with cheaper price and more food safety compared to delivering a fully-cooked dish. In conclusion, re-factoring a service process for the restaurant industry was significant and changed kitchen facilities, cooking utensils, training personnels, and customer behaviours both in the short run and long run to adapt to the "new normal".

Analysing the Case of Vietnam

According to The World Bank, under the globalisation and economic reforms since 1986, Vietnam has grown from being one of the world's poorest nations to a middle-income economy in only one generation. The GDP per capita almost quadrupled from 2002-2021 (World Bank, 2023). However, with the expected shock of COVID-19, contact-intensive sectors such as hospitality, entertainment, retail, and low value-added manufacturing have experienced serious contraction in domestic and external demand, making small and medium-sized enterprises extremely vulnerable (Kroeger et al., 2021). In particular, though the foodservice industry as part of the contact-intensive sector contributed to the development of the Vietnamese economy in the previous years, this fastest-growing industry has been severely impacted (Thao Hoang & Javed Suleri, 2021).

In a research study conducted by Hoang and Suleri (2021), 117 volunteers participated in the sampling from different age groups. The purpose of the study was to identify the factors that have the biggest influence on customer satisfaction during their visit to a restaurant. Food quality was regarded as the most important element, referring to the food's appearance, taste, and freshness. Food quality is crucial because it not only determines if the customers will return to the restaurant but also affects the customers' perception of a place and a brand (Cited in Hoang & Javed, 2021). Furthermore, service quality and the physical environment ranked next, while restaurant cleanliness is only a small element, taking up 5% of the responses. Nevertheless, the global spread of COVID-19 completely changed the values of customer satisfaction when the study found out that cleanliness as one of the health factors ranked the highest among the elements that influence customer satisfaction during and after the Pandemic. According to Hoang and Suleri (2021), 46.2% of the respondents care a lot more about the restaurant's cleanliness during their visits, which includes checking the safety regulations in the restaurant and seeing if the physical layout of the restaurant meets the safety standards such as social distancing. Restaurant cleanliness and safety are the priority compared to other factors during and after the COVID-19. In response, during the period of social distancing, as identified in a case study of the city of Can Tho, Huynh et al. (2022) found that 92% of small restaurants in the area responded to the cleanliness factor by advising employees and customers to implement prevention measures (hand sanitising, checking body temperature,



wearing masks during work shifts and safety interact with guests), 82% agreeing to regularly clean the restaurant, 30% only serving customers in the locality with no infectious cases, and 70% even agreeing to temporarily suspend the business. To some extent, the change in restaurant-customer relations and behaviours is similar to Taiwan's successful case of business compliance as identified earlier, where businesses took measure of customers' and governments' needs and made changes to account for the "New Normal" to reassure people when they visit restaurants.

Other than the business compliance element, the case of Vietnam could also compare to the case of Taiwan from other responses to the Pandemic such as government preparedness and social cohesion. According to Bui et al. (2021), community engagement is another effective public health strategy that protects people from pandemics such as COVID-19 and continues to support small businesses in the restaurant industry under lockdowns, travel restrictions, and social distancing. In addition, Vietnam's community engagement strategy is similar to Taiwan's government preparedness and social cohesion because the tourism industry was severely impacted during the spread of the Pandemic, leading to more challenges for small restaurant businesses. Consequently, the Vietnamese government responded by introducing similar relief measures to small businesses in the hospitality industry just as the case of Taiwan and China. Specifically, according to Kroeger et al. (2021), the Vietnamese government imposed key fiscal and monetary policy measures to support businesses in response to COVID-19. For example, corporate income tax (CIT) was introduced for micro and small businesses to alleviate business difficulties amid the COVID-19 pandemic, which greatly supported the survival of many small restaurants during the quarantine and lockdowns. In addition, some other cost cuts included an up-to-10 percent cut in electricity prices for industrial and service enterprises and businesses for 3 months and other cuts in various fees and charges (water resources, construction project evaluations, road tolls, seaport charges, aviation service charges, road maintenance fees). On a macro level, more monetary policies also supported the firms, including but were not limited to: three times of policy rates cut, credit package, exempt/reduced interest rate for existing loans, and zero-interest-rate loans for affected firms that maintain employees on payroll offered by Vietnam Social Policy Bank (VPSM), while special policies on small businesses were limited.

Besides the comparison with Taiwan, Vietnam developed additional recovery solutions for food and beverage businesses for tourism. Numerous food and culture festivals and events were organised to foster community bonding and small restaurant viabilities (Huynh et al., 2022). In particular, the Ninh Kieu Lantern Night in Can Tho, the tourism promotion conference at the VITM Hanoi International Tourism Fair and ITE Ho Chi Minh City International Tourism Fair in August and September all involved multiple societal sectors' support, including the restaurant industry and the Department of Culture, Sports, and Tourism, demonstrated another form of social cohesion and community engagement to revive the tourism thus the restaurant industry in Vietnam in the Post-Pandemic Era. Lastly, the Department of Information and Communications promoted such events and Vietnam as a "safe - friendly - quality tourist destination" on social applications and mass media (Huynh et al., 2022).

Analysing the Case of Bangladesh

In Bangladesh, the first COVID-19 case was detected on March 8th, 2020. In response, the government quickly started a countrywide lockdown, including holidays of educational institutions, factories, shopping malls, and business enterprises such as small restaurant businesses to contain the spreading of the virus. Up until July 4th, 2020, Bangladesh had a total of 159679 confirmed cases and 1997 deaths (Qamruzzaman, 2020). As for this developing country, every sector of society has changed dramatically. Small businesses are proven to be crucial to the Bangladesh economy, where 90% of businesses are small enterprises, 80% of current employees work in small businesses, and 75% of gross domestic product composite with small businesses (Qamruzzaman, 2020). Moreover, there was a particularly adverse impact on the hospitality industry, where the small restaurant businesses belong to, because people were told and regulated by the government to avoid gatherings, especially restaurants, as the virus could be easily spread via foods and drinks (Sardar et al., 2022).



By summarising the research done by Sardar et al. (2022), key factors that influenced the restaurants' responses were identified by a qualitative sampling approach. To summarise the finding, the effects of COVID-19 on the restaurant business could be analysed from four dimensions: economic factors, social factors, technological factors, and political factors. In terms of economic factors, the study found out that the restaurants lost most of their economic strength after long periods of quarantine. The demand has dramatically decreased but the operating cost has increased. Employees were underpaid, and restaurant owners were forced to close down the business.

Social factors led to more changes in the attitude and behaviour of the customers in the Bangladesh restaurant industry. For example, customers began to demand measures when dining in, such as asking for hand sanitizer, requesting the staff to wear masks, and making sure that the tables were arranged with social distance. All of which suggest that there has been an urgent need for Bangladeshi small restaurants to reskill their employees (Sardar et al., 2022). To some extent, the social factors could be compared to the business compliance factor in the successful case of Taiwan. Similar to the case of China, technological innovations in the restaurant industry also progressed during the COVID-19 in Bangladesh. Not only online orders and app-based food delivery services became more and more popular, many restaurants also started to use artificial intelligence and robotics in their business operations. Of course, though, it inevitably pressured the small restaurant owners to innovate with new strategies, too.

However, the case of Bangladesh differed from the key factors of the successful case of Taiwan in government preparedness. Though the Bangladesh government did introduce regulations and policies to control the virus, such interventions' effectiveness have not been maximised due to lack of proper monitoring and inadequate decision-making (Sardar et al., 2022). As highlighted by one of the respondents in the study, "the government only thinks about the industrialists. As we are small, we are out of consideration." Such situations were elaborated in more detail when another respondent said "local administration only forced us to strictly follow the health protocols, social distancing and hygiene. But we rarely get any financial assistance from them during the Pandemic." As a result, the lack of government preparedness during the Pandemic led to a longer period of lockdown and instability, causing more small and medium-sized restaurants to shut down and destroy the industry's overall economic strength in Bangladesh.

Business Model Innovation

Based on thorough research and analysis of the restaurant industry in Taiwan, China, Vietnam, and Bangladesh, four areas of business model innovation for small and medium-sized restaurants are identified, including digitalization, physical store layout improvement, and product line adjustment. The purpose of the business model innovation is to foster the sustainable development of the small and medium-sized restaurants and serve as a reference for their owners in developing countries to adapt to the "new normal".

Digitalization

Digitalization could help small restaurant owners to manage their operations and supply chains (Bai, Quayson, 2021). In particular, digital payment, or the adaptation of mobile money, is critical for small business owners in the post-pandemic era. The first reason is because physical distancing is likely to exist in the near future, thus fostering the continued growth of online delivery, and digitised mobile payment service is the key to provide a convenient shopping experience for customers. In addition, by digitalization, mobile money will enable small restaurant businesses to collect accounts receivable directly from customers and use mobile phones to pay suppliers directly without having to shut down or leave their premises for hours. It will bridge non-bank inclusive finance, reduce the risk of carrying cash, and enable small businesses to obtain loans from mobile money platforms (Bai, Quayson, 2021). Furthermore, digitalization of the restaurant also means the implementation of robot aids, upgrade of semi-automated kitchens, and utilisation of social media account that teaches customers how to cook at home, share new products and updates of



the restaurants, all of which help the restaurants to assure the customers in terms of safety and continue to expand customer loyalty (Li et al., 2021).

Store Layout Improvement

Before the Pandemic, the physical layout of many small restaurants was to maximise customer capacity; however, in the post-pandemic era, the physical layout of restaurants should also be improved. From a business perspective, being able to effectively place a table in a given area, or adequately implement security measures, is critical (Contardo & Costa, 2022). In the post-pandemic era, social distancing that customers feel when dining in makes the experience more relaxed and safe. Therefore, increased spacing between tables and breaking up larger rooms into smaller sections are crucial. Additionally, it would be ideal for customers to have greater access to seeing the cooking and cleaning processes. For example, cutlery, glassware, and plates could be cleaned at the tableside for customer assurance. Other appetisers, salads could be prepared in open kitchen settings. Surprisingly, as one finding identified in Contardo and Costa's research, the installation of plexiglass divisions with consideration of the customer's sense of sitting in the restaurant layout design can increase the capacity by nearly 30%.

Product Line Adjustment

During the COVID-19 Pandemic, one of the most successful management responses has been the product line adjustment, where many restaurants developed semi-finished products for customers to cook at home, while all the raw materials, seasonings, and instructions are carefully prepared and sold by the restaurants in packages. Meanwhile, such innovations continue to exist and expand on its popularity even during the post-pandemic era. As Li et al. (2021) found, re-factoring the service could help restaurants prevent the pandemic in the long run, cut down costs, and diversify its sources of revenues/customers. As identified in ChinAfrica & May (2020), the future business model for restaurants in the "new normal" lies in continued managerial innovations. Traditional dining-in service should intertwine and complement with the expansion of takeaway business, launch of semi-cooked dishes, and the distribution of products on e-commerce and social media platforms.

Conclusion

This paper explores the impacts of the restaurant industry by the COVID-19 Pandemic in various developing countries in Asia, including China, Vietnam, and Bangladesh, as well as a successful comparison case of Taiwan based on different frameworks. Although the frameworks for crisis management in the hospitality industry proposed by Faulkner (2000) and Ritchie (2003) are comprehensive, they are more entitled to large organisations and enterprises with high operational capacity. Therefore, by carefully analysing each country's responses, particularly from the case of Taiwan, we found three common factors that contributed to the successes of small and medium-sized restaurants in the restaurant industry when they combated the lockdown and post-Pandemic era: government preparedness, business compliance, and social cohesion, corresponding to every country, region, and culture's political and socio-economic conditions, as suggested by Gkoumas (2020). Additionally, every country had special elements that contributed to its success, such as the social cohesion in Taiwan, progressive technological adaptations in China and Bangladesh as well as Vietnam's emphasis on reviving the tourism industry (culture festivals) to boost the entire hospitality industry. However, lack of government preparedness such as the case of Bangladesh inevitably slowed the process of recovery in some developing countries. Overall, by comparing developing countries such as China, Vietnam, and even the successful case of Taiwan, it is evident that the situation of small and medium-sized restaurants in developing countries is much more devastating under the pandemic, with most restaurants in developing countries shutting down or facing severe operational challenges. Lastly, this paper identifies elements, including digitalization, physical store layout



improvement, technological innovation, and food delivery service expansion for future business model innovation for small and medium-sized restaurant businesses in developing countries to adapt to the "new normal".

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