



## Impact of COVID-19 Pandemic on Micro, Small and Medium Restaurant Businesses in Thailand

---

Saruda Sunthornpan and Sadayo Hirata

EasyChair preprints are intended for rapid dissemination of research results and are integrated with the rest of EasyChair.

August 9, 2021

# Impact of COVID-19 pandemic on micro, small and medium restaurant businesses in Thailand

**Abstract**— The COVID-19 epidemic has intensified. It not only affects the health and well-being of people worldwide; it also affects almost all sectors of the global and Thai economies. Especially affected have been the tourism sector and related restaurant businesses. The major victims of the crisis are micro, small, and medium-sized enterprises (MSMEs). We would like to understand which MSMEs in the restaurant business have been affected by COVID-19 in Bangkok, Thailand. We collected data by enumeration over the telephone; the sample size was 100 respondents in the restaurant business. Business data were analyzed using descriptive statistics. Our results showed that most participating businesses have been severely affected and faced many problems during the crisis. Over 70% of participating businesses increase sales via delivery platforms, according to consumer behavior and business take other measures to survive. Nearly half of restaurant businesses expected business to return to normal more than nine months after the crisis because the business has difficulty recovering after a long impact, and many factors are involved.

**Keywords**— COVID-19, Restaurant business, Business analysis, MSMEs, Thailand

## I. INTRODUCTION

COVID-19 had a huge impact on both health and the global economy. The coronavirus pandemic (COVID-19) has a significant impact on the global economy. In 2020, global gross domestic product (GDP) decreased by 3.4% (1). The tourism industry and related industry are leading industries to be directly affected by that epidemic (2). The impact has been felt worldwide, including Thailand. As a result, the Thai economy may shrink by 5.4% this year. The restaurant business, airline business, and hotel business will face difficulty because the lockdown resulted in a decrease of over 60% in tourism.

Restaurant businesses are among of the most important businesses in the service sector and the economy of the country. The restaurant sector is made up of small to large players and has connections with many other players in the industry. In addition, the total value of the business represents 4.7% of the service sector's gross domestic product (GDP of the service sector).

This study recognizes the importance of restaurant businesses. We studied MSMEs in the restaurant business affected by COVID-19 in Bangkok, Thailand. In addition, the impact of COVID-19 will be researched deeply, for example, the degree of the impact of COVID-19, issues faced as a result

of COVID-19, measures already taken to address this issue, and the expected period for business to return to normal after the crisis. Business data were analyzed using descriptive statistics.

An adaptation guideline for restaurant operators in the highly competitive online age, they have to plan their business systematically, revise and adjust the plan to be more relevant to the market and customer behavior. Including updated knowledge, especially in the fields of technology and adaptation to changing social and market trends.

### A. The importance of global and Thai MSMEs

MSMEs are significant contributors to economic activity and employment in both high-income and developing countries. Thailand is a developing country with a driver economy by MSMEs. MSMEs represent the vast majority of firms and employ the bulk of the domestic workforce. Approximately 3.11 million companies are considered MSMEs, accounting for 99.53% of all companies. Moreover, MSMEs generate 12 million jobs, accounting for 69.48% of total employment. MSMEs also contributed enormously to Thailand's gross domestic product (GDP), accounting for 35% of the national GDP, or around 193 billion US dollars (3).

The service industry accounts for the highest percentage of GDP (41.8%). In addition, accommodation and food services accounted for 28.1% of total service industry GDP. The employment rate in the food and beverage service business is highest at 8.18%, and food and beverage service account for 10.75% of all businesses in the country (3).

In addition, food and beverage service business in Bangkok account for 41.87% of all food and beverage service business in Thailand (4).

### B. Impact of COVID-19 on economy

As of March 19, 2021, the number of COVID-19 infections had surpassed 120.92 million globally, with more than 2.6 million deaths and more than 98 million persons recovered (5). Besides the public health impacts, COVID-19 has a significant impact on the global economy, especially small businesses.

Many small and medium enterprises (SMEs) have faced shutdowns due to the COVID-19 outbreak (6). In Canada, 53% of restaurants are temporarily closed, and 18% are permanently closed (7). The United States has faced an economic crisis, and the country's GDP fell by 4.8% in the first quarter of 2020 (1).

People lost their jobs during the pandemic. The United States has suffered a loss of 14.7 million jobs and a 9.6% decline in employment. Some sectors were particularly hard hit, with employment in the hotels and motels sector declining by 38.6%, and employment in food services and drinking places declining by 25.6% from February to June 2020 (8). And business closure policies are associated with economically and statistically significant declines in employment and the number of small businesses operating in the hospitality industry (9). In the case of Pakistan, 31% of MSMEs have shut down completely, and 19% have partially closed and have tackled cash flow shortages by laying off 43% of employees and reducing staff salaries by 12% (10). In addition, nearly half of small businesses are facing reduced customer demand, and 33% are facing supply chain disruptions during the COVID-19 crisis (11).

Lower incomes and/or stricter investment policies account for SMEs' lack of cash flow that causes business failures during the COVID-19 epidemic. Banks also recognize that SMEs are at a higher risk in times of crisis. As a result, businesses face stricter conditions for credit application and approval (12). This includes inability to rapidly reshape business models to accommodate new routines and processes. Financial pressures and strains on business accompanying practicing social distancing and adhering to governments' new directives make SMEs failure more likely (6).

*C. COVID-19 in Thailand and laws or measures of the Thai government that apply during Covid-19*

On 30 Jan 2020, the first COVID patient was confirmed, Thailand entered an epidemic situation. On February 29, 2020, Thailand declared the coronavirus disease 2019 (COVID-19) a dangerous contagious disease as the number of infections continued to increase. On March 21, 2020, the Governor of Bangkok announced the closure of malls and risky areas around Bangkok. As a result, many businesses (including restaurants) were closed, and employees had to return to the provinces, causing the number of infections to spread to many parts of the country.

On April 10–20, 2020, a 24-hour ban on selling alcoholic beverages was announced. On April 30, 2020, the government took measures to relieve the opening of restaurants, markets, barber shops, retail businesses, and recreational sports (partial), and evaluated results every 14 days. By asking the public to cooperate by registering through the website Thai-cha-na.com, the government was able to track infected persons.

In Thailand, as of March 19, 2021, the number of infected people exceeded 27,500, with more than 90 deaths (13).

COVID-19 affects Thailand's overall economy: the GDP of MSMEs declined by 7.1% in the fourth quarter of 2020, with a 9.2% decrease compared to the previous quarter. Key business sectors saw a significant contraction; accommodation and restaurant businesses contracted by 35.2% and had the highest rate of layoffs (3).

II. METHODOLOGY

We collected data from MSMEs in Bangkok's restaurant business sector. The data were collected by telephone using a questionnaire, for various reasons, including the ability to collect information comprehensively and quickly because the company has a telephone number. This approach also saves money compared to collecting data by travel (14).

The questionnaire asks about the impact of COVID-19, issues faced as a result of COVID-19, measures already taken to address this issue, and the expected period for business to return to normal after the crisis. Before the questionnaire was used to collect data, it was evaluated by two experts and three restaurant owners. We collected data from February 22, 2021, to March 16, 2021, from 100 respondents working in Bangkok's restaurant sector. Business data were analyzed using descriptive statistics.

III. RESULTS

TABLE I. COMPOSITION OF SAMPLE

Composition of Sample	Percentage of Participants
Respondent	
Owner	19%
Director	10%
Manager	53%
Assistant Manager	10%
Others	14%
Business type	
Restaurant	84%
Café	7%
No-storefront business	6%
Business Form	
Single store	51%
Multiple store (Same kind of food)	46%
Multiple store (Difference food)	3%

We collected data using the telephone enumeration method and found that approximately 85% of the respondents were business owners or managers. They had the authority to make decisions for the business. Among business types in Bangkok, 84% are restaurants, followed by cafés (7%) and no-storefront businesses (6%). A majority of businesses are single stores (51%), followed by multiple stores that sell the same kind of food in each branch (46%) and multiple stores that sell different food in each branch (3%). The details are listed in Table 1.

The COVID-19 outbreak has had an impact on restaurant businesses in Bangkok, especially MSMEs. The majority of restaurant businesses (51%) suffered a very serious impact, meaning that every dimension of their business was affected, representing 71–100% severity, followed by 23% of businesses that suffered a largely negative impact (51–75% severity), 24% of businesses that suffered a moderately negative impact (26–50% severity), and 2% of businesses that suffered a slightly negative impact (1–25% severity). The results are presented in Fig. 1. We found that more than half of single stores were severely affected by the coronavirus crisis. Multiple stores were less affected than single stores at the same impact level. Why is that? We can determine the answer from the problems that each store faces during crises in the next section.

### Degree of the impact of COVID-19

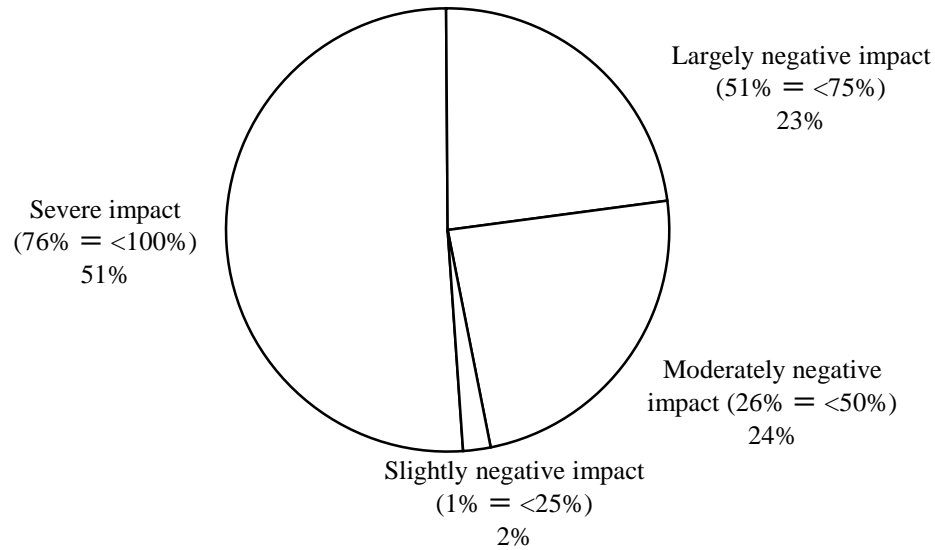


Fig 1. Degree of the impact of COVID-19

### Issues faced as a result of COVID-19

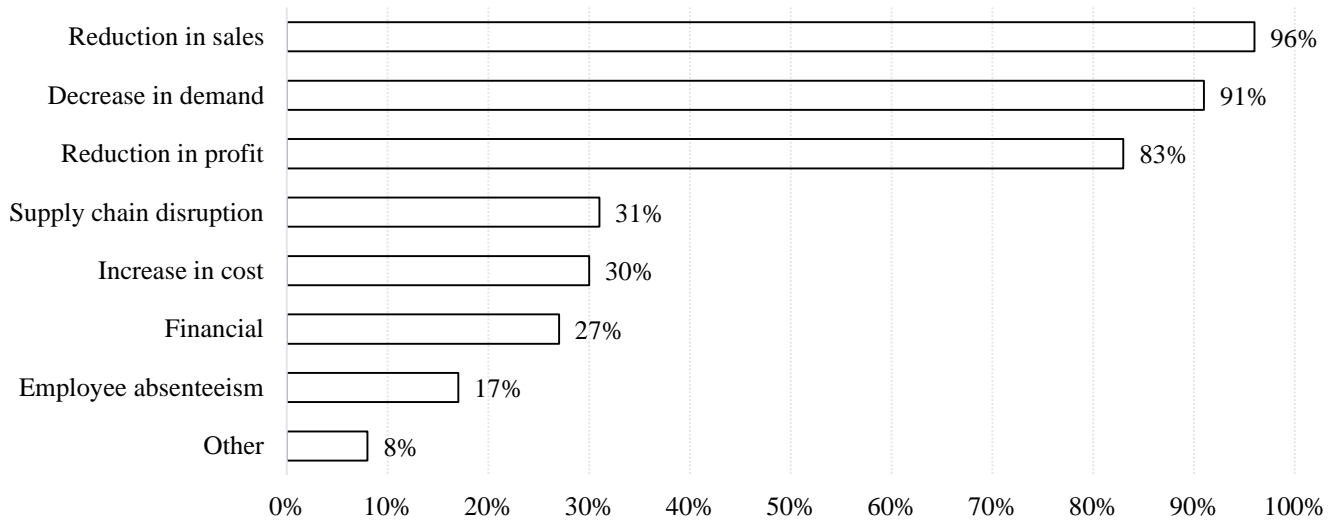


Fig 2. Issues faced as a result of COVID-19

We can see that the COVID-19 crisis has had a significant impact on the restaurant business. Businesses are faced with three main problems related to COVID-19: reduced sales (96%), decreased demand (91%), and reduced profit (83%). Businesses also face other problems, such as supply chain disruption (31%), increased costs (30%), financial problems (27%), employee absenteeism (17%), and other problems (8%). The details are shown in Fig 2.

We found that single stores were severely affected as they faced declining sales, demand, and profits more than were multiple stores. However, both categories of stores faced these problems; the main causes of decreased income and demand problems arising during COVID are lockdowns and people not

leaving their homes for fear of infection, and profits are reduced proportionally to sales. Businesses face fixed monthly costs; when expenditures are greater than income, they have to dip into profits to cover these expenditures. In addition, stores suffered supply chain disruptions as the country closed and suppliers closed their businesses. They cannot import raw materials or receive them on a delayed basis, it has a higher effect on the price of raw materials during crises, and stores need to cancel menus to reduce or cut raw material costs.

During the crisis, takeaway and delivery provided additional channels. This causes additional costs, such as packaging or charges/fees from the delivery platform. However, restaurants have taken measures to survive and overcome the crisis.

### Measures already taken to address this issue

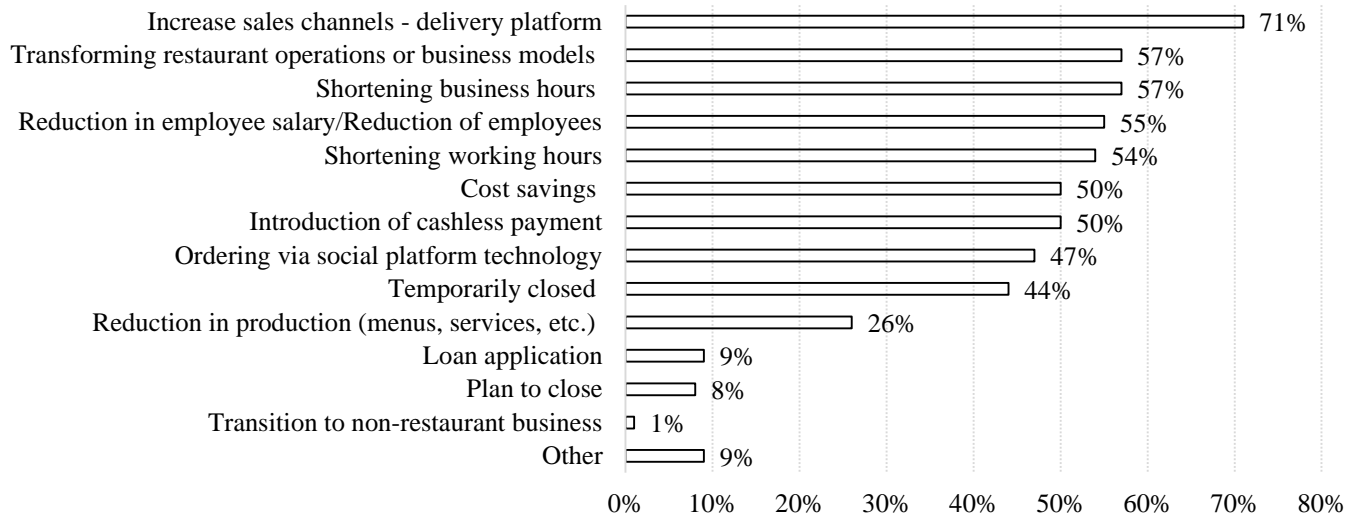


Fig 3. Measures already taken to address this issue

Restaurant businesses have faced many issues during the COVID-19 crisis. They have coped by increasing sales channels via delivery (71%) to increase income. Following the transformation of business operations or business models (57%), businesses have switched their business model to takeaway (temporary) to maintain their income in the face of government decrees prohibiting consumers from eating in the restaurant and shortening business hours (57%). Reduced employee salaries/reduction of employees (55%); shortened working hours (54%); cost savings (50%); introduction of cashless payment (50%); ordering via social platform technology (47%) such as Line official, Facebook, etc.; temporary closures (44%); reduction of menu/service (26%); loan applications (9%); and some permanent closures (8%); transition to non-restaurant business (1%); and other measures (9%) were among the responses by businesses. The details are shown in Fig 3.

We found that in times of crisis, businesses faced declining sales and demand, as well as limitations on eating in restaurants. As a result, businesses are increasingly selling food via delivery or social media channels that depend on customer behavior in online age. There are two types of delivery: delivery of food to consumers by their employees to reduce the cost/fees paid to service providers, and, second, delivery of food to consumers through delivery platform providers such as Grab, Lineman, Food Panda, etc., which have the advantage of being able to reach more consumers and offer them discounts.

In addition to increasing sales channels, businesses need to reduce fixed and variable costs. Single stores have reduced staff numbers and differ from multiple stores that do not reduce staff but will reduce working hours or switch from hiring employees on a monthly basis to daily employees. Additionally, businesses have to cut other expenses to reduce the rental costs of the premises. Especially in the department store area, it is necessary to reduce rental costs until the epidemic is resolved.

Measures for reducing production costs in business include negotiating raw material prices with partners, finding cheaper raw materials, reducing number of menu items using expensive raw materials from abroad, stocking up on necessary raw materials, and creating new menus from existing raw materials. For multiple stores, shared kitchen management systems should be used to reduce unit costs because of the large amount of raw materials purchased and to save on costs of utilities and other consumable items in the store. Additional measures to help businesses survive are as follows. The restaurant business can expand its customer base by presenting and selling simple menus or inexpensive set menus as options for customers.

At the same time, it is necessary to maintain the quality of products and services that are suitable for price, along with finding ways to increase sales using marketing strategies. Besides cost and liquidity management, to build customer confidence in the cleanliness and safety of the facilities so as to prevent the spread of COVID-19, it is imperative that staff always wipe and clean tables and equipment, that they wear masks, and that alcohol gel is available for customers.

### Expected period for business to get back to normal business after a crisis

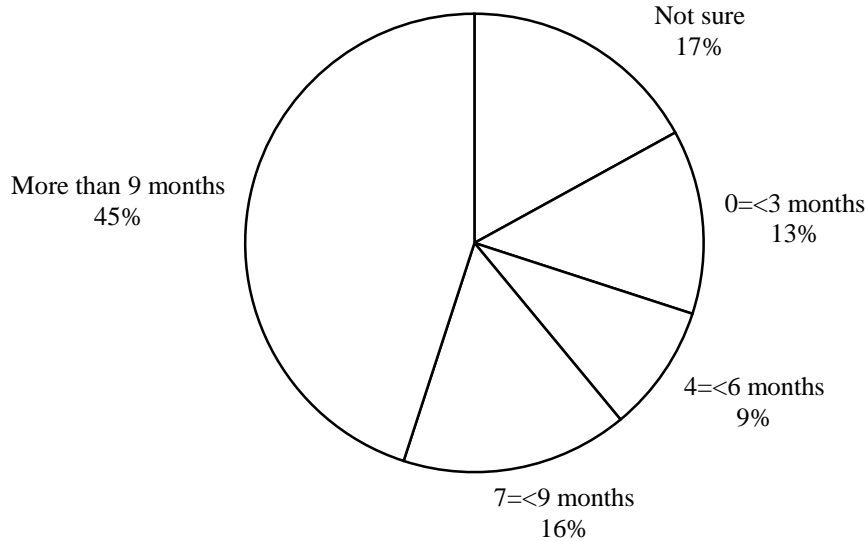


Fig 4. Expected period for business to get back to normal after the crisis

Thailand is facing the COVID crisis, and a new cluster is emerging. Nearly half of restaurant businesses expected that business would return to normal more than nine months after the crisis, and responses from both types of businesses were very seriously affected by the crisis. 16% of businesses expected business to return to normal seven to nine months after the crisis. 9% of businesses expected business to return to normal four to six months after the crisis, and most businesses reported a moderately negative impact. 13% of businesses expected business to return to normal zero to nine months after the crisis, and 17% of businesses were unable to predict when business would return to normal because internal and external factors that affected business operations needed to be observed. Interviewees said that it would depend on disease control, comprehensive vaccination, consideration for foreign tourists, and the domestic economy.

#### IV. RECOMMENDATION/SUGGESTION

Based on the findings of the present study, restaurant faced many issues and they cope with many measures to make their business survive during crisis. Also, restaurant must deal with liquidity and cash flow problems. In the next stage, restaurant operators in an intensely competitive and technology era require systematic business planning, review, and adaptation of their plans to be in line with the market.

For example, businesses can analyze market opportunities through SWOT analysis to assess strengths, weaknesses, opportunities, and threat in terms of capital, location, skills/experience of owners, cooks and waiters, quality of ingredients used, ability to find raw material sources, competitors, the economy, etc.

In particular, entrepreneurs who have been in business for many years need to review the business situation because of the possibility that something that was the hallmark of their past

business may lead to bad results for their contemporary business. Changes in various environmental factors are presently occurring. Includes updated knowledge, especially in the fields of technology and social dynamic that will be useful to the restaurant business and adaptation to changing social and market trends.

This topic requires development and further development, which will reduce the risk of doing business and help the business become more successful.

#### V. CONCLUSION

The COVID-19 epidemic has intensified. It not only affects the health and well-being of people worldwide; it also affects almost all sectors of the global and Thai economies. Especially affected have been the tourism sector and restaurant businesses.

This study found that 51% of restaurant businesses had suffered a very serious impact. The three main problems such businesses have faced as a result of COVID-19 are reduction in sales (96%), decreased demand (91%), and reduced profit (83%). These issues were followed by supply chain disruption (31%), increased costs (30%), financial problems (27%), employee absenteeism (17%), and other factors (8%).

However, restaurants have been taking measures to survive and overcome the crisis. Increasing sales and reducing costs to maintain liquidity cash flow will be urgently required for restaurants to keep their businesses.

This study found that 71% of restaurants increased sales channels via delivery to increase income, according to customer behavior. It can be seen that consumers connect to online in many ways, increasing the trend of ordering food delivery. This includes searching for a restaurant, checking promotion, or reviewing from other customers (via online media channels such as websites, applications, or various platforms). Ordering

food delivery has increasingly played a role. Restaurant business must keep abreast of changing consumer behavior. This category was followed by transformation of business operations or business models (57%), shortened business hours (57%), reducing employee salaries/number of employees (55%), shortened working hours (54%), cost savings (50%), introduction of cashless payment (50%), ordering via social platform technology (47%), temporary closures (44%), reduction of menu service (26%), loan applications (9%), plans to close the business permanently (8%), transition to non-restaurant business (1%), and other measures (9%).

In addition, restaurant businesses have to plan their business systematically, revise and adjust the plan to be more relevant to the market and customer behavior. Including updated knowledge and adaptation to changing social and market trends.

Nearly half of the expected post-crisis period of more than nine months for business to return to normal depends on internal and external factors. If the situation is prolonged and/or the spread of this virus is widespread, business is unlikely to recover quickly. In the future, entrepreneurs will have to revisit their strengths and weaknesses to cope with many challenging problems.

#### ACKNOWLEDGMENT

This work was supported from Shibaura Institute of Technology.

#### REFERENCES

- [1] A.K. Kohl, B. Key, J. Elflein, A. Puri Mirza, P. Sapun, and J. Cherowbrier, Global COVID-19 crisis index, June 2020: A focus on the U.S. economy, Mar. 2020, Accessed on: Mar. 19, 2021. [Online]. Available:<https://www.statista.com/statistics/1117538/coronavirus-crisis-level>
- [2] T. Bucak, and S. Yiğit, "The future of the chef occupation and the food and beverage sector after the COVID-19 outbreak: Opinions of Turkish chefs," *Int. J. Hosp. Manag.*, vol. 92, pp. 1-8, Jan 2021.
- [3] The Office of Small and Medium Enterprises Promotion (OSMEP), "White Paper on MSME 2020," Research and Risk-Warning Analysis Division, Department of Industrial Promotion, Ministry of Industry, Thailand, pp. 1–96, September 2020.
- [4] The Office of Small and Medium Enterprises Promotion (OSMEP), Dashboard SME Big Data, Research and Risk-Warning Analysis Division, Department of Industrial Promotion, Ministry of Industry, Thailand, 2020. Accessed on: Mar. 19, 2021. [Online]. Available:<https://sme.go.th/th/page.php?modulekey=348>
- [5] World Health Organization (WHO), WHO Coronavirus (COVID-19) Dashboard, World Health Organization, Geneva, Switzerland 2021. Accessed on: Mar. 19, 2021. [Online]. Available: <https://covid19.who.int>
- [6] J. Amankwah Amoah, Z. Khan, and G. Wood, "COVID-19 and business failures: The paradoxes of experience, scale, and scope for theory and practice," *Eur. Manag. J.*, vol. 39, pp. 1–6, April 2021.
- [7] S. Nilkuha, "Impact of COVID-19 worsens restaurant business," Department of International Trade Promotion in Toronto, Ministry of Commerce, Thailand, pp. 1–2, Jan 2020.
- [8] US Bureau of Labor Statistics (BLS), Employment projections in a pandemic environment, Monthly Labor Review, US Bureau of Labor Statistics, Division of Information and Marketing Services, United State, February 2021, Accessed on: Mar. 19, 2021. [Online]. Available:<https://www.bls.gov/opub/mlr/2021/article/employment-projections-in-a-pandemic-environment.htm>
- [9] A. Huang, C. Makridis, M. Baker, M. Medeiros, and Z. Guo, "Understanding the impact of COVID-19 intervention policies on the hospitality labor market," *Int. J. Hosp. Manag.*, vol. 91, pp. 1–9, October 2020.
- [10] M. Shafi, J. Liu, and W. Ren, "Impact of COVID-19 pandemic on micro, small, and medium-sized enterprises operating in Pakistan," *Research in Globalization*, vol. 2, pp. 1–14, December 2020.
- [11] National Small Business Association (NSBA), "COVID-19 Small Business Impact Poll," pp. 1–11, March 2020.
- [12] F. Eggers, "Masters of disasters? Challenges and opportunities for SMEs in times of crisis," *J. Bus. Res.*, vol. 116, pp. 199–208, August 2020.
- [13] Department of disease control, Corona Virus Disease (COVID-19): Thailand situation, Department of disease control, Ministry of public health, Thailand, 2021, Accessed on: Mar. 19, 2021. [Online]. Available:<https://ddc.moph.go.th/viralpneumonia/eng/index.php>
- [14] D.E. Leeuw, Data quality in mail, telephone and face to face surveys. TT-Publikaties, Vrije Universiteit Amsterdam, pp. 1–183, 1992.