Developing a Business Strategy for the Recovery of Micro, Small, and Medium-sized Food Service Enterprises Affected by the COVID-19 Pandemic Using Structural Equation Modelling

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Abstract

The COVID-19 outbreak has significantly affected the business activities of the national, regional, and global economies. In the Philippines, the government had to impose an Enhanced Community Quarantine (ECQ) to contain the spread of the virus. This domestic response caused immediate business closure and limitation of business operations, especially among Micro-, Small and Medium-sized Enterprises (MSMEs). The food service sector was among the severely impacted business sectors and was considered to face a high risk of closures and job disruptions. The aim of the study was to develop a business strategy that would potentially mitigate the challenges faced by the MSMEs of the foodservice sector. One hundred and sixty-four respondents answered the online questionnaire consisting of 35 questions regarding the factors that influence the recovery of the food service MSMEs amid the COVID-19 pandemic. The obtained results from the Structural Equation Modelling (SEM) identified that working capital, customer footfall, and cash reserves have a direct impact on business continuity. In addition, the developed business strategy and policy recommendations would enhance the resilience and business sustainability of the food service MSMEs.

Keywords
Business Strategy, COVID-19, Food Service Sector, MSMEs, and Structural Equation Modelling.

1. Introduction
An acute respiratory syndrome known as the novel coronavirus disease 2019 (COVID-19) emerged in late December of 2019 in Wuhan City, China. Soon after, COVID-19 cases were detected in various countries, becoming a global threat. As of March 29, 2020, over 177 countries were infected resulting in more than 722,435 patients and 33,997 deaths. Thus, causing the World Health Organization (WHO) to declare the coronavirus epidemic a pandemic (Sahu 2020). This COVID-19 outbreak has significantly affected the business activities of the national, regional, and global economies. In the Philippines particularly, the government had to impose an Enhanced Community Quarantine (ECQ) to contain the spread of the virus. This domestic response caused immediate business closure and limitation of business operations, including Micro, Small, and Medium-sized Enterprises (MSMEs). According to the study of the Asian Development Bank (2020), 65.9% of the Philippine MSMEs temporarily closed their business, 29.1% continued with limited operations, 4% remained fully open, and 1.1% have permanently shut down their business. As a result, the Philippines experienced a recession causing the country's GDP to drop to 16.5% in the second quarter of 2020 and having the lowest quarterly growth since 1981 (PSA 2020).

According to the Official Gazette of the Philippines, the Republic Act No. 6977 also known as the "Magna Carta for Micro, Small and Medium Enterprises" reads that MSMEs in the Philippines is defined as any enterprise engaged in industry, agri-business, and/or services that has an asset size of up to PhP 100 million and an employment size with

less than 200 employees. Considered as the backbone and economic drivers of the country, MSMEs represent 99.5% of all businesses and a recorded number of 995,745 in total. They are responsible for 40% of the county's Gross Domestic Product (GDP). MSMEs comprise different industry sectors that maintain the sustainable growth and coordination of business activities within the country (DTI 2019). The top industry sectors in 2019, as recorded by the Department of Trade and Industry are the Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles with 462,492 followed by the Accommodation and Food Service Activities with 144,024.

Prior to the COVID-19 outbreak, the food service sector thrived by an estimated $14.9 billion in 2019 (USDA Foreign Agricultural Service 2020). However, during the onset of the pandemic, the food service industry has dropped to less than $7 billion in prospects. According to the study of Asian Development Bank (2020), the food service and accommodation sector was ranked as the second most affected by the Enhanced Community Quarantine after the wholesale and retail trade sector. 17% of the total MSMEs that temporarily closed down came from the same sector. Categorized as enterprises that cut the operations by half, 89.9% of the food service and accommodation sector remained strictly less than 50% of the operations. The same sector accounted for 22.2% of the enterprises identified as permanently closed.

The findings of this study will contribute significantly to the benefit of the Food Service Sector of the MSMEs affected by the COVID-19 pandemic. The business strategy to be presented in this study will be able to identify the most efficient predictors of recovery to be applied in decision-making processes to enhance resilience and refine survival strategies for business sustainability. Thus, food service MSME owners and planners in Sampaloc- a district in Manila, the direct recipients of the study's output, can make risk-informed decisions for long-term business survival. The business strategy and the policy recommendations can also be used on enterprises with similar socioeconomic characteristics and gravity of impact. Moreover, the government can make informed decisions in amending policies concerned with responding to the impacts of the COVID-19 pandemic in businesses. Lastly, the study can make a significant contribution in encouraging future researchers to investigate wider and generalizable studies.

2. Literature Review
2.1. Socio-Economic Impacts of COVID-19 in the Philippines
Cited as a country being under "one of the world's longest lockdowns" by multiple global publications, the Philippines has suffered a continual economic loss since the first announcement of the Enhanced Community Quarantine (ECQ) in March 2020. Under such orders, 53.3 million of its population were strictly instructed to stay at home and non-essential businesses were mandated to temporarily close down to potentially alleviate the spread of the virus. Ultimately, MSMEs were more vulnerable to economic shocks as compared to other business sectors. Such reasons were fewer assets, limited cash reserves, as well as lower levels of productivity. Many others had difficulty maintaining positive cash flow (Asia-Pacific Economic Cooperation 2020). Therefore, when COVID-19 spread worldwide, MSMEs were forced to lay off their employees and shut down their businesses.

According to the Asian Development Bank, the Philippines had the highest number of business closures and employee lay-offs among all countries in Southeast Asia, with 70.6% of its MSMEs forced to close down, and 66.2% had temporary employment cut downs (Shinozaki and Rao 2021). This resulted in a concerning unemployment rate of 17.7% in April 2020, the highest ever recorded, equivalent to 7.3 million jobless Filipinos (Philippine Statistics Authority 2020). Furthermore, the disruption of employment, whether through decreased earnings or complete job loss, mainly affects high-risk sectors including manufacturing, transportation, accommodation, food service, and leisure industries. This amounts to around 7.8 million out of the 10.9 million workers who are at risk of unemployment (International Labor Organization 2020).

2.2. The Philippine Food Service Industry during the COVID-19 Pandemic
Being among the most affected by the effects of the strict lockdown measures the food service sector has to take measures and comply with the protocols in order to reopen at 30% seating capacity. As economic recovery in the Philippines has gradually started at the end of 2020, the food service sector is expected to have positive but slow growth in 2021. Different recoveries however are expected on the type of operation. Full-service restaurants are expected to have a positive growth with a current value CAGR of 16% over the forecast period 2020 to 2025. On the other hand, limited-service restaurants are expected to see relatively slow but positive growth in the years 2020 to 2024 with a current CAGR value of 12% over the forecast period 2020 to 2025 (Euromonitor International 2021).

The effort of adapting to the trends helps in the continued growth of the food service sector. The rising demand for convenience among consumers encourages restaurant owners to adopt delivery services and launch novel products, services, formats, and technological tools. The commonly used strategies to attract target groups like the Millenials and Gen Z are employing technological innovation that includes delivery applications, self-ordering systems, cashless payment options, and table booking applications (Mordor Intelligence 2020; FAS GAIN: Philippines 2021). Due to the repercussions of the pandemic, many food service enterprises responded by implementing digital solutions. Many enterprises have adopted digital ordering and payment through mobile applications and contactless delivery (Lazarevska 2020). In addition, many businesses have innovated their marketing strategies with regards to the threatening effect of the pandemic on the survival of the economy (Wang et al. 2020). To drive sales, other businesses have offered rewards as another form of marketing opportunity using delivery applications (Brady 2020). Marketers look for options to increase impressions by promoting innovative products. Following the digital transformation through digital ordering, restaurants will be able to access consumer data on consumer behavior and preferences. With this, food service enterprises can devise personalized offers and develop new products that are agreeable to the preferences of the consumers.

2.3. Significant Causes of MSME Closures

A study conducted by MicroSave Consulting (2020) on the Impact of COVID-19 Pandemic on Micro, Small, and Medium Enterprises (MSMEs) identified that the causes of reduced income and business closure of MSMEs were reduced operating hours, low customer footfall, disrupted supply chain, the decline in the volume of sales per customer, and the unavailability of public transport which has increased the transportation cost and the cost of supplies. On the other hand, possible solutions to solve business closures of MSMEs were recommended in another article facilitated by MicroSave Consulting (2020). Such recommendations were: 1) extension of the emergency cash benefit to microenterprises for at least three months; 2) faster rollout of the national ID system linked to the database of MSMEs for faster distribution of cash assistance; 3) additional loan funds provided by government banks to cater MSMEs; 4) extended working capital to MSMEs for the resumption of business operations after the lockdown; and 5) financial institutions and MSMEs were to adopt digital transformation to deliver faster and cheaper services to serve their respective customers better. It was further recommended that the national government must provide loan guarantee funds to ease the flow of debt funds to accredited banks and that the Department of Trade and Industry (DTI) should promote relevant business practices to help MSMEs devise business continuity and risk management plans.

Despite the numerous business closures, others continued their restaurant operations even with the pandemic to ensure their employees are still able to take home their daily wages. Hence, in order to maintain everyone's safety during operations, restaurants were required to implement measures such as: (1) the installation of hand sanitizers at the entrance of the establishment, (2) the sanitation of common areas every 20 minutes, and (3) the taking of body temperature of both staff and customers upon entry (Salcedo 2020). ADB financial sector specialist, Shigehiro Shinozaki (2020), recommended that a more detailed budget allocation is needed for the most affected by the pandemic. There should be a redesign policy support, a different policy measure by firm size, a shift to digital transactions, assistance in the transition to work from home, the strengthening distribution of government support programs, and a periodical monitoring of MSME business conditions. Moreover, in an International Data Corporation (IDC) survey in the Asia Pacific region (2020), it was noted that businesses should digitalize to adapt to the market reality and remain competitive. Among the top benefits from digital transformation were improved profit margins, productivity, customer loyalty and retention, cost reductions, the ability to offer new products and services, and increased revenue.

Indeed, COVID-19 made a catastrophic impact on global and national economies. In particular, the micro, small, and medium-sized food service enterprises in the Philippines were put at great risk due to their sensitivity to external shocks such as financial crises and drastic changes in the business environment. They experienced abrupt supply chain disruptions, low customer demand, low productivity, and tightened financial conditions (Asian Development Bank 2021; MicroSave Consulting 2020; Asia-Pacific Economic Cooperation 2020). MSMEs including the food service sector were forced to adapt to the new normal by using different business measures such as operating with a skeletal workforce, implementing cost-cutting measures, and transitioning to the use of digital platforms (Navarro et al. 2020). Given that they would play a crucial role in the Philippines' economic recovery, public and private organizations acted quickly to curb the impact of economic disruption. The implementation of laws and programs (i.e., Bayanihan to Recover as One Act, Memorandum Circular 20-39, etc.) offered options to help businesses survive the pandemic.

However, to ensure MSME survival, these responses and business continuity programs must be complemented by strong government action (Balisacan 2020). Hence, securing a positive, resilient, and sustainable future for micro, small, and medium-sized enterprises, particularly in the food service sector.

Lifted from the literature reviews, the identified variables that affect the recovery, through the variable Business Continuity, of micro, small, and medium-sized food service enterprises amid the COVID-19 pandemic are the following: Working Capital, Cash Reserves, Volume of Sales, Cost Reduction, Government-Mandated Requirements, and Customer Footfall.

3. Methods

The researchers utilized Structural Equation Modelling to determine the factors that influence the recovery of MSMEs amid the COVID-19 pandemic. The minimum sample size required for this study is one hundred and fifty, as it is applicable to studies with models with seven or less constructs (Babin et al. 2018). An online survey was conducted with respondents from Micro, Small, and Medium food service enterprises in the National Capital Region, specifically in Sampaloc, Manila through emails and social media sites such as Facebook, Messenger, and Instagram.

The researchers utilized the IBM SPSS software to satisfy the following Statistical Assumptions of the Structural Equation Model: no multivariate outliers, no systematic missing data, sufficient sample size, and normality assumption using the estimation technique in terms of skewness and kurtosis. Transferring the data from IBM SPSS software to IBM AMOS, the researchers run the initial model to determine valuable measures of the study and identify factors that can improve the structural model. The researchers eliminated the non-significant indicators that did not meet the >0.5 cut-off in the Standardized Regression Weights. Similarly, using the Bias-Corrected Percentile Method and Regression Weights, the researchers identified the statistically significant latent variables through determining p-values with less than or equal to 0.05. The significant latent and indicators identified were used to develop the modified SEM model, specifically consisting of the following variables: Business Continuity (BC) with four constructs, Working Capital (WC) and Customer Footfall (CF) with two constructs each, and Cash Reserves (CaR) with a single construct. The final and modified model, equivalent to the Conceptual Framework, is presented in Figure 1.
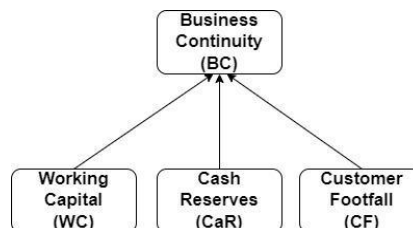

Figure 1. Conceptual Framework

4. Data Collection

One hundred and sixty-four respondents from the owners and managers of Micro, Small, and Medium food service enterprises in Sampaloc, Manila were gathered through online surveys. The identified variables were subjected to a Likert scale to quantify the data. The unit measurements: 4 for "Strongly Agree", 3 for "Agree", 2 for "Disagree", and 1 for "Strongly Disagree" were utilized to obtain simple and non-neutral responses and define the latent variables from the indicators or constructs presented in Table 1.

Table 1. The Construct and Measurement Items

Variable	Code	Constructs
	WC1	I am more confident to continue business operations if I have enough funds for daily operations.

Working Capital	WC4	I believe that regularly monitoring and recording funds that come in and out of the business can help the company survive (i.e. writing down the amount of money spent from purchases and money gained from selling).
Cash Reserves	CaR4	I am considering applying for loans from banks to help continue business operations.
Customer Footfall	CF1	I can guarantee that if the company follows the COVID-19 safety protocols, more customers will feel safe when entering the store.
	CF2	I believe that the use of social media (Facebook, Instagram, YouTube) can help in getting more customers.
Business Continuity	BC1	The company has the determination to cope with the COVID-19 pandemic
	BC2	The company has available resources (e.g., budget, staff, materials) to survive disasters, such as the pandemic, in the long run
	BC3	The company has sufficient knowledge on what to do during emergencies and has the ability to continue the business even during the pandemic
	BC4	Our company has effective and concrete plans that will ensure that the business is able to operate even during the pandemic.

5. Results and Discussion

5.1 Numerical Results

In this study, five indexes were evaluated to assess the overall model fit. Such indexes are Incremental Fit Index (IFI), Tucker Lewis Index (TLI), Comparative Fit Index (CFI), Adjusted Goodness of Fit Index (AGFI), and the Root Mean Square Error of Approximation (RMSEA). The parameter estimates and the corresponding minimum cut-off for each model fit index, are presented in Table 2.

The key advantage of using TLI, CFI, and RMSEA as fit indexes is their independence from the sample size. These indices are not significantly affected but rather yield better performance when conducting studies with a small sample size (Cangur and Ercan 2015). IFI and CFI values > 0.80 (Gefen et al. 2000) and a TLI value > 0.77 indicate that the model is fit (Lehotkay et al. 2014). Additionally, studies conducted by Ciftcioglu (2010) and Ramana et al. (2012) suggest that an RMSEA value of 0.14 indicates a satisfactory fitness of the model. Alongside these indexes is AGFI which can be regarded as one of the most popular indexes to test SEM fitness. According to Dewi (2018), the model remains acceptable by having an AGFI value > 0.78. All the observed values were greater than or equal to their respective minimum cut-off thus, considering all values acceptable.

Table 2. Model Fit

The goodness of fit measures of SEM	Parameter Estimates	Minimum Cut-off	Suggested by
Incremental Fit Index (IFI)	0.849	> 0.80	Gefen et al.
Tucker Lewis Index (TLI)	0.777	> 0.77	Lehotkay et al.
Comparative Fit Index (CFI)	0.845	> 0.80	Gefen et al.
Adjusted Goodness of Fit Index (AGFI)	0.782	> 0.78	Dewi

Root Mean Square Error of Approximation (RMSEA)	0.140	<0.05, or 0.8 to 0.14	Ciftcioglo; Ramana et al.

To evaluate the measurement instrument, the two fundamental elements namely validity and reliability were tested using the Average Variance Extracted (AVE), Cronbach's Alpha, and Composite Reliability (CR). The Cronbach's alpha coefficients and the Composite Reliability of all factors are greater than their respective minimums of 0.7. (Taber 2018), indicating the internal consistency and reliability of the indicators. This analysis is further supported by the observed values of the factors' Average Variance Extracted (AVE), following an AVE of 0.5 or higher as a good rule of thumb (Hair et al. 2018). Hence, all values of the variables presented in Table 3 met the minimum cut-off for each measure.

Table 3. Construct Validity of the Model

Variable	N	Cronbach's α (Minimum of ≥ 0.7)	Average Variance Extracted (AVE) (Minimum of ≥ 0.5)	Composite Reliability (CR) (Minimum of ≥ 0.7)
Working Capital	2	0.724	0.591	0.743
Customer Footfall	2	0.812	0.664	0.798
Business Continuity	4	0.832	0.632	0.872
Overall	9	0.706	-	-

Figure 2 shows the modified Structural Equation Model, which shows the 4 latent variables mainly, Business Continuity with four constructs, Working Capital and Customer Footfall with 2 constructs each and Cash Reserves with a single construct.
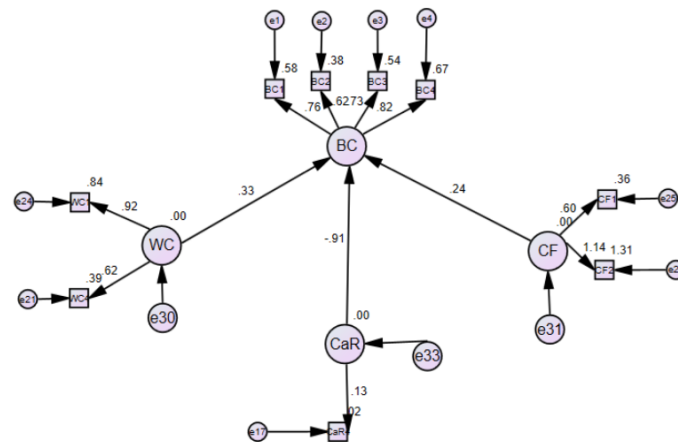

Figure 2. Modified Structural Equation Model

5.2 Discussion

Table 2 shows the goodness of fit measures, its corresponding parameter estimates, and the minimum cut-off for each model fit index. Following this table are the calculated fit indices using IBM SPSS Amos as the software for calculation. The fit indices are as follows; IFI = 0.849, TLI = 0.777, CFI = 0.845, and AGFI = 0.84. For RMSEA, the value of 0.14 was calculated. From this, it is observed that IFI, TLI, CFI, and AGFI values were greater than or equal to their respective minimum cut-off. Thus, considering all values acceptable. Moreover, the RMSEA value of 0.14 is also considered as acceptable. Moreover, all the significant variables meet the minimum values of the parameters to measure the construct validity and reliability of the model through the determined values for Cronbach's α, Average

Variance Extracted (AVE), and the Composite Reliability (CR), which proves the internal consistency and reliability of the indicators.

The results obtained from the modified SEM model in IBM SPSS Amos showed direct, indirect, and total effects between the causal relationships of the latent variables. Working Capital and Customer Footfall have direct effects on Business Continuity. Cash Reserves, on the other hand, have a negative direct effect towards Business Continuity. The p-values of the above-mentioned variables were statistically significant given that their values were 0.001, 0.000, and 0.005, respectively. Moreover, the highest direct effect towards Business Continuity was Working Capital with 0.327 total effects followed by Customer Footfall with 0.237 total effects.

5.3 Proposed Improvements

In this study, three out of six independent variables were proven to be insignificant. Thus, further studies may investigate other factors or variables that may affect Micro, Small, and Medium Enterprises during natural or biological disasters and may evaluate the relationships within the independent variables. Given that this study utilized Structural Equation Modelling (SEM) to obtain the results of the study, other statistical tools for data analysis such as SPSS, MatLab, MiniTab, Microsoft Excel, etc. may be used to further improve future studies.

Though there are varying recommendations when it comes to the adequate sample size for an SEM analysis, most references suggest a minimum sample size of 150 to 200 as < 100 may be considered too small and > 200 too large for models with less than 7 constructs (Hair et al. 2018; Kline 2005). However, studies are still encouraged to explore and use approximation techniques such as the Monte Carlo method to determine more appropriate sample size.

Due to the pandemic constraints, the procedure for conducting surveys was limited in the online setup. Hence, there may have been biases towards respondents only having access to the internet. This made the study limited to certain groups of individuals who have higher levels of education, computer literacy, and income. Future studies could conduct in-person surveys to ensure that it is distributed to different locations and may be provided by the respondents with concrete and defined answers. This way, eligible respondents, especially the micro-enterprise food service business, who have little to no internet presence may be included in the study. This would in turn provide the study a higher response rate and that the distribution of business classification and duration of operation would be similar in number. Additionally, this study was only able to measure respondents from Sampaloc, Manila. Thus, many aspects of the attributes such as perception of cash reserves, working capital, customer footfall, etc. may differ in other areas and countries. It is therefore recommended to consider the best attributes depending on the country or location the respondents are in. Conducting the study after the COVID-19 pandemic is also highly encouraged.

6. Conclusion

This study used Structural Equation modeling to determine if the independent variables Working Capital, Cash Reserves, Volume of Sales, Cost Reduction, Government-Mandated Requirements, and Customer Footfall have a significant impact on the dependent variable Business Continuity. Only three are identified to be significant and have a direct impact on Business Continuity. These variables are (1) Working Capital wherein business owners are more confident to continue operations when they have sufficient funds for daily business activities and by monitoring and recording funds that come in and out of the company. (2) Customer Footfall may be increased by having the establishment follow the COVID-19 safety protocols and by using social media platforms such as Facebook, Instagram, and YouTube to interact with their customers. (3) Cash Reserves with a negative direct impact which implies that food enterprises are not considering applying for loans from banks and other lending institutions to maintain business continuity.

In line with the identified significant factors that affect the continuity of MSMEs in the Philippines during the COVID-19 pandemic, the following are the strategies developed that could mitigate the challenges faced by businesses amid unprecedented crises.

Working Capital
Financial Security
  1. Achieving Financial Flexibility
      This can be supported by the study of Madeira et al. (2020) wherein food business owners participated in the analysis of their strategies during the pandemic. One of the critical actions of owners was setting aside

emergency funds. It also showed that companies with less than five years of activity tend to create such funds to sustain the business, while companies with more years of activity try to maintain the emergency fund to be prepared when faced with another crisis. According to Alrabadi et al. (2021), working capital with retained earnings is pivotal to all businesses, especially small businesses. In fact, it was also proven that economic slowdown, such as the pandemic, can be addressed by solid working capital management since it is linked with the risk and profitability of the company.

2. Maintaining Financial Balance
A study conducted by Craven et al. (2020) recommended that companies should stabilize funds by optimizing receivables and bills. In fact, the observed companies in the study also modeled their financials with immediate stabilization to survive the crisis. In another study, Dastoli (2020) stressed that the ability to prioritize critical matters is valuable to small businesses. It was also suggested to convert fixed costs to variable costs, if possible.

Cash Flow Management
1. Encouraging Higher Financial Literacy
A study conducted by Guliman and Uy (2019) demonstrated that Filipino micro and small entrepreneurs need to advance their financial knowledge and literacy. This is important as their level of financial knowledge influences their capability to make the right decisions (Haavig 2019). Likewise, the recommendation is supported by Burchi et al. (2021) who stated that financial literacy highlights a strong relationship with entrepreneurship, thus policymakers should consider investing more in economic and entrepreneurial training.

2. Making Use of Computerized Accounting Systems
Haavig (2019) stated in their study that business owners who do not utilize Computerized Accounting Systems may find it difficult to manage cash and spend unnecessary amounts of time and resources in regulating funds. This method is recommended because Computerized Accounting Systems can considerably improve the efficiency of accounting, can grant flexibility in managing records, and is generally a more secure method. The digitalization of cash flow management helps business owners enhance the reliability of their financial statements, which would allow them to easily identify and follow up on unusual transactions (Wolfing and Moorman 2017).

Cash Reserves
1. Adapting the Concept of the Paycheck Protection Program
In the study of Karkaplan (2021), it was found that firms find PPP loans preferable to a conventional small business bank loan given that it saves them from additional paperwork costs. Nonetheless, it is believed that PPP credits complement conventional bank loans. Since PPP loans act as subsidies to improve the creditworthiness of the borrowing firms, conventional bank loans would find these firms to be attractive candidates. This, therefore, allows businesses to be eligible to access conventional bank loans afterward. The Paycheck Protection Program has not only increased the resources of the PPP borrowers but has also enriched the banks through the better performance of the borrowing firms. Overall, the PPP loans have benefitted both small businesses and banks. The study by Colak and Oztekin (2021) affirms the findings of the study that applying for loans from banks is the last priority of MSMEs in the foodservice sector. Thereby, adapting the concept of the Paycheck Protection Program (PPP) would be of benefit to the struggling businesses in the Philippines, including the micro-, small, and medium-sized food service enterprises.

2. Participating in Financial Literacy Trainings
A study by the Philippine Institute of Development Studies (2012) stated that despite the availability of funds for lending, MSMEs are unable to access external funds due to poor credit history, poor business plans, insufficient collaterals, insufficient sales, and inadequate financial statements. Taking into consideration the fact that banks continue to impose stringent conditions when applying for loans (e.g., minimum loan requirement), MSMEs, including the foodservice sector, resort to internal funding rather than external finance. Hence, to increase the food MSMEs' competitive growth, the researchers recommend encouraging these businesses to participate in financial literacy training. By doing this, firms could improve their management capabilities and rework their approach towards current financial issues.

3. Promoting the Following Disciplines in Lending Operations: Reassurance, Transparency, Simplicity, and Speed

It is also recommended by the researchers that banks and other lending institutions must promote the following disciplines: reassurance, transparency, simplicity, and speed. Customers care about having knowledgeable and accessible lending institutions who can confidently guide and assure them of their business loan decisions. Transparency must be enhanced by providing accurate and unambiguous information about pricing. As for simplicity, applications should have clear steps and straightforward guidelines which can be easily understood. For speed, banks and other financial institutions must rapidly move to keep up with customers' needs (Madan et al. 2019).

Customer Footfall
Compliance with COVID-19 Safety Protocols
1. Continuing the Implementation of Crisis Management Procedures

    On November 5, 2021, the Philippines relaxed the restrictions on public movements to spur economic recovery. Indoor restaurants are allowed to operate at half capacity while outdoor establishments can operate at 70 percent capacity (Calonzo 2021). Nevertheless, food establishments must remain vigilant and exhibit strict compliance with COVID-19 protocols to help improve the country's economic recovery (Nepomuceno 2020). Therefore, the researchers suggest that food MSMEs must still implement the following crisis management procedures: hand sanitizing, wearing gloves and masks, checking of customer and staff body temperatures, and environmental disinfection. In addition, social distancing must still be observed across the establishment. Cooperation with external parties (e.g., government, customers, and suppliers) should be the most vital and frequently performed activity since this is the fundamental factor influencing the resilience capacity of food enterprises (Li et al. 2021).
2. Promoting Safety Involvement Among Employees

    According to Hu et al. (2021), managers must actively engage their employees, especially in ensuring the smooth implementation of COVID-19 safety measures. Therefore, the researchers suggest creating a healthy workspace by carrying out consistent training and evaluation of employee compliance with preventive safety standards. Not only will employee engagement reduce the risk of transmission within the business premises, but it will also lead to increased productivity and a healthier bottom line (Chanana and Sangeeta 2020). Furthermore, good human resource management will support the continuity and recovery of the business as it is a critical factor in sustaining its vitality, survival, and profitability (Osbourne and Hammoud 2017).

Customer Engagement through the use of Social Media
1. Online Promotions

    Utilizing social media platforms will allow business owners to virtually connect with their customers and other possible audiences. The researchers suggest that businesses may start marketing their products on social platforms such as Facebook, Instagram, and Twitter as they may be extremely useful when a business owner seeks to reach a larger audience to advertise their products and market the business. This suggestion is supported by a study conducted by Irnawati in 2021 which revealed that MSMEs who market their products on social media by posting on their account pages was an effective strategy in business survival during the pandemic. Another study by Parahiyanti and Prasasti (2021) stated that social media is useful to build awareness and serves as a reminder to the customers and other potential consumers that the products still exist.
2. Using Color Psychology

    Color Psychology has been used in marketing as it affects the emotions of the consumers. According to Khattak et al. (2018), food businesses prefer to use the color red as it affects metabolism and the color yellow to catch the customers' attention, motivate them to eat, and increase appetite. The researchers suggest that MSMEs consider using these colors when selecting a theme in their physical store and in their social media pages as these colors may aid in attracting customers. A survey conducted by Parahiyanti and Prasasti (2021) revealed that businesses that utilize color psychology attract customers to visit the business' profile.
3. Posting Intellectual Information on Social Media

    Besides posting publicity material on social media to promote products, the researchers propose that businesses provide product information in the form of "did you know?" posts and other related educational information correlated to the product. Stanko et al. (2019) emphasized that there is numerous marketing content that can be used by sellers which include relational, behavioral, emotional, sensory, and intellectual. The study revealed that intellectual posts are the most effective in promoting brand awareness and which could then aid in increasing sales.

References

Aldaba, R., Small and medium enterprises' (SMEs) access to finance: Philippines. *Philippine Institute for Development Studies*, Available: https://dirp4.pids.gov.ph/ris/dps/pidsdps1205.pdf, 2012.

Alrabadi, D., Salamat, W., and Hatamleh, A., Does working capital management affect the profitability of small and medium sized enterprises in Jordan?, *International Journal of Economics and Finance Studies*, vol.13, no. 1, Available: https://sobiad.info/index.php/ijefs/article/view/498, 2021.

Anderson, R. E., Babin, B. J., Black, W. C., and Hair, J. F., Jr, Multivariate Data Analysis (8th edition) [E-book]. Cengage Learning EMEA, 2018.

Asia Pacific Economic Cooperation, Supporting msmes' digitalization amid covid-19, Available: https://www.apec.org/Publications/2019/11/2019-APEC-Economic-Policy-Report, 2020.
    Asian Development Bank, How smes can bounce back from the covid-19 crisis, Available: https://development.asia/policy-brief/how-smes-can-bounceback-covid-19-crisis, 2020.

Asian Development Bank, The covid-19 impact on philippine business: key findings from the enterprise survey, Available: https://www.adb.org/publications/covid-19-impactphilippine-business, 2020.

Balisacan, R., Government assistance to vulnerable MSMEs during the pandemic, Available: https://www.bworldonline.com/government-assistance-to-vulnerablemsmes-during-the-pandemic/, 2020.

Brady, C., 5 Innovative ways restaurants can drive sales during COVID-19, Available: https://www.qsrmagazine.com/outside-insights/5- innovative-ways-restaurants-can-drive-sales-during-covid-19, 2020.

Calonzo, A., Philippines eases curbs in capital, allows kids in malls. Available: https://www.bloomberg.com/news/articles/2021-11-04/philippines-easesvirus-restrictions-in-manila-capital-region, 2021.

Cangur, S., and Ercan, I., Comparison of model fit indices used in Structural Equation Modeling under Multivariate Normality. *Journal of Modern Applied Statistical Methods.* vol. 14, no. 1, p. 152-167, Available: https://digitalcommons.wayne.edu/jmasm/vol14/iss1/14/, 2015.

Chanana, N., and Sangeeta., Employee engagement practices during Covid-19 lockdown. *Journal of Public Affairs*, Available: https://doi.org/10.1002/pa.2508, 2020.

Ciftcioglu, A., Exploring the role of perceived external prestige in employee's emotional appeal: evidence from a textile firm, *Business and Economics Research Journal*, vol. 1, no. 4, pp. 85, Available: https://ideas.repec.org/a/ris/buecrj/0005.html, 2010.

Colak, G., and Oztekin, O., The impact of COVID-19 pandemic on bank lending around the world, *Journal of Banking and Finance,* vol. 133, Available: https://doi.org/10.1016/j.jbankfin.2021.106207, 2021.

COVID-19 labour market impact in the Philippines: Assessment and national policy responses, *International Labour Organization.* https://www.ilo.org/manila/publications/WCMS_762209/lang--en/index.html, 2020.

Craven, M., Liu, L., Mysore, M., and Wilson, M., COVID-19: implications for business. *McKinsey and Company*, Available: https://www.mckinsey.com/business-functions/risk-and-resilience/our-insights/covid-19-implications-for-business, 2021.

Dastoli, C., Covid-19 and cash flow management, *Strategic Finance*, vol. 101, no. 12, pp. 19-20, Available: https://www.proquest.com/scholarly-journals/covid-19-cash-flow-management/docview/2411180303/se-2?accountid=203424, 2020.

Dewi, T.K., Validation of the Indonesian version of champion's health belief model scale for breast self-examination. *Psychology Research and Behavior Management,* vol. 11, pp. 433–438, Available: https://www.dovepress.com/validation-of-the-indonesian-version-of-champions-health-belief-model--peer-reviewed-fulltext-article-PRBM, 2018.

Euromonitor International, Limited-service restaurants in the philippines. Available: https://0-www.portal.euromonitor.com.ustlib.ust.edu.ph/portal/Analysis/Tab, February 2021.

Euromonitor International. Full-service restaurants in the philippines. Available: https://0-www.portal.euromonitor.com.ustlib.ust.edu.ph/portal/Analysis/Tab, February 2021.

Food Export USA, FAS gain report: philippines - food service - hotel restaurant institutional, Available: https://test1.foodexport.org/exportinsights/market-and-country-profiles/philippines-countryprofile/philippines/philippines-fas-gain-report-philippines---food-service---hotelrestaurant-institutional, 2021.

Gefen, D., Straub, D., and Boudreau, M. C., Structural equation modeling and regression: guidelines for research practice. *Communications of the Association for Information Systems*, vol. 4, https://doi.org/10.17705/1cais.00407, 2020.

Gulliman, S. O., and Uy, A. O., The curious case of Filipino micro-entrepreneurs' financial sophistication and the triple bottom line. *DLSU Business and Economics Review,* vol. 28, no. 3, pp. 1-10, Available: https://www.dlsu.edu.ph/wp-content/uploads/2019/10/1-guliman-041519.pdf, 2019.

Haavig, M., Cash management strategies to improve the sustainability of small tavern businesses, *Walden Dissertations and Doctoral Studies Collection.* 2019.

Hu, X., Yan, H., Casey, T., and Wu, C.-H., Creating a safe haven during the crisis: how organizations can achieve deep compliance with covid-19 safety measures in the hospitality industry, *International Journal of Hospitality Management*, vol. 92, Available: https://doi.org/10.1016/j.ijhm.2020.102662, 2021.

Irnawati, A. Food Sales Strategy by MSMEs During the Covid-19 Pandemic in the Jabodetabek Region, *International Journal of Innovative Science and Research Technology,* vol. 6, no. 8, pp. 1125-1128, Available: https://www.ijisrt.com/food-sales-strategy-by-msmes-during-the-covid19-pandemic-in-the-jabodetabek-region, 2021.

Karkaplan, M., This time is really different: the multiplier effect of the paycheck protection program (PPP) on small business bank loans, Available: https://doi.org/10.1016/j.jbankfin.2021.106223, 2021.

Khattak, S., Ali, H., Khan, Y., and Shah, M., Color psychology in marketing, *Journal of Business & Tourism*, vol. 4, no. 1, pp. 183–190, Available: https://doi.org/10.34260/jbt.v4i1.99, 2021.

Kline, R. B., *Principles and Practice of Structural Equation Modeling,* 2nd Edition, Guilford Press, 2005.

Lazarevska, B., How covid-19 has accelerated digital transformation in the restaurant industry, Available: https://www.futureplatforms.com/how-covid-19-has-accelerated-digital-transformation-in-the-restaurant-industry/, October 2020.

Lehotkay, R., Devi, T., Raju, M.V.R., Bada, P.K., Nuti, S., Kempf, N., and Carminati, G., Factor validity and reliability of the aberrant behavior checklist-community (abc-c) in an Indian population with intellectual disability, *Journal of Intellectual Disability Research*, vol. 59, no. 3, pp. 208-214, Available: https://doi.org/10.1111/jir.12128, 2014.

Li, B., Zhong, Y., Zhang, T., and Hua, N., Transcending the COVID-19 crisis: business resilience and innovation of the restaurant industry in China, *Journal of Hospitality and Tourist Management,* vol. 49, pp. 44-53, Available: https://doi.org/10.1016/j.jhtm.2021.08.024, 2021.

Madan, A., Kapoor, A., and Singh, R., Competing on customer experience in us mortgage, Available: https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/competing-on-customer-experience-in-us-mortgage, 2019.

Madeira, A., Palrão, T., and Mendes, A. S., The impact of the pandemic crisis on the restaurant business. consequences of the pandemic within the restaurant business, *Sustainability,* vol. 13, no. 1, pp. 40, Available: https://doi.org/10.3390/su13010040, 2020.

Mapa, D., GDP growth rate drops by 16.5 percent in the second quarter of 2020; the lowest starting 1981 series, Available: https://psa.gov.ph/content/gdpgrowth-rate-drops-165-percent-second-quarter-2020-lowest-starting-1981series, August 2020.

MicroSave Consulting, Impact of covid-19 pandemic on micro, small, and medium enterprises (MSMEs), Available: https://www.microsave.net/wp-content/uploads/2020/08/Impact-ofCOVID-19-on-Micro-Small-and-Medium-Enterprises-MSMEs-1.pdf, 2020.

Navarro, A. A. E., Pomoy, A. R. C., and Resurreccion, E.I.I.R., Distancing from confusion in Philippine labor law compliance during the covid-19 pandemic, Available: https://www.lexology.com/library/detail.aspx?g=68d8920b-91e4-4965-afea-f37efc55f646, April 2020.

Nepomuceno, P., Better safe than sorry: following health protocols is the key, Available: https://www.pna.gov.ph/articles/1113396, 2020.

Official Gazette of the Republic of the Philippines, Republic Act no. 9501, Available: https://www.officialgazette.gov.ph/2008/05/23/republic-act-no-9501/, March 2021.

Osborne, S., and Hammoud, M. S., Effective employee engagement in the workplace, *International Journal of Applied Management and Technology,* vol. 16, no. 1, pp. 50-67, Available: https://doi.org/10.5590/ijamt.2017.16.1.04, 2017.

Park, C.Y., and Shinozaki, S., Navigating Covid-19 in Asia and the Pacific, pp. 108-110. Available: https://www.adb.org/publications/navigating-covid-19-asia-and-pacific, 2020.

Parahiyanti, C. R., and Prasasti, A., Engage your customers during the pandemic: The impact of social media-Instagram usage to micro-small medium enterprises (MSMEs) in Indonesia, *International Journal of Multicultural and Multireligious Understanding*, vol. 8, no. 6, pp. 328-335, Available: https://ijmmu.com/index.php/ijmmu/article/view/2711/2341, 2021.

Philippine Statistics Authority, Employment situation in April 2020, Available: https://psa.gov.ph/statistics/survey/labor-and-employment/labor-force-survey/title/Employment%20Situation%20in%20April%202020, November 2020.

Mordor Intelligence, Philippines foodservice market – growth, trends, covid-19 impact, and forecasts, Available: https://www.mordorintelligence.com/industry-reports/philippines-foodservice-market, 2020.

Department of Trade and Industry, 2019 MSME statistics, Available: https://www.dti.gov.ph/resources/msme-statistics/, Accessed on March 14, 2021.

Ramana, D., Rao, K., Kumar J., Evaluation of performance metrics of leagile supply chain through fuzzy MCDM, *Decision Science Letters*, vol. 2, no. 3, pp. 211-222, Available: http://m.growingscience.com/dsl/Vol2/dsl_2013_14.pdf, 2013.

Sahu, P., Closure of universities due to coronavirus disease 2019 (COVID-19): impact on education and mental health of students and academic staff, *Cureus,* vol. 12, no. 4, Available: https://doi.org/10.7759/cureus.7541, 2020.

Salcedo, M., Restaurants stay strong amid covid-19, Available: https://business.inquirer.net/292601/restaurants-stay-strong-amid-covid-19, March 2020.

Shinozaki, S. and Rao, L., COVID-19 Impact on Micro, Small, and Medium-Sized Enterprises under. Asian Development Bank. https://www.adb.org/publications/covid-19-impact-msme-under-lockdown-evidence-rapid-survey-philippines, April 23, 2021.

Singian, R., Food service - hotel restaurant institutional, Available: https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Food%20Service%20%20Hotel%20Restaurant%20Institutional_Manila_Philippines_09-30-2019, September 2020.

Srinivasan, G., Arcelus, F.J., and Pakkala, T.P.M., A retailer's decision process when anticipating a vendor's temporary discount offer, *Computers and Industrial Engineering,* vol. 57, pp. 253-260, https://doi.org/10.1016/j.cie.2008.11.018, 2009.

Stanko, M.A. Ortega, B.I.H., Castillo, F.J.M., Rishika, R., and Franco. J., Using social media to connect with your loyal customers, *Harvard Business Review*, Available: https://hbr.org/2019/12/using-social-media-to-connect-with-your-most-loyal-customers, 2019.

Taber, K. S., The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education,* vol. 48, pp. 1273-1296, Available: https://doi.org/10.1007/s11165-016-9602-2, 2018.

UNDP., MSME Sector is key to COVID-19 inclusive recovery for PH. Available: https://www.ph.undp.org/content/philippines/en/home/presscenter/pressreleases/202-/msme-sector-is-key-to-covid-19-inclusive-recovery-for-ph.html, September 2020.

Wang, Y., Hong, A., Li, X., and Gao, J., Marketing innovations during a global crisis: A study of China firms' response to COVID-19. *Journal of Business Research,* vol. 116, pp. 214–220, Available: https://doi.org/10.1016/j.jbusres.2020.05.029, 2020.

Wölfing, D., and Moormann, J., Cash management in transition: From cash management to cash process. *Journal of Payments Strategy and Systems,* vol. 11, no. 4, pp. 343-354. Available: https://www.researchgate.net/publication/332963596_Cash_management_in_transition_From_cash_management_to_cash_process_management, 2017.

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